



Technical Package Cover Page

This file contains the following documents:

1. Summary of application (in plain language)
 - English
 - Alternative Language (Spanish)
 2. First notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
 - English
 - Alternative Language (Spanish)
 3. Second notice (NAPD-Notice of Preliminary Decision)
 - English
 - Alternative Language (Spanish)
 4. Application materials *
 5. Draft permit *
 6. Technical summary or fact sheet *
-



Portada de Paquete Técnico

Este archivo contiene los siguientes documentos:

1. Resumen de la solicitud (en lenguaje sencillo)
 - Inglés
 - Idioma alternativo (español)
2. Primer aviso (NORI, Aviso de Recepción de Solicitud e Intención de Obtener un Permiso)
 - Inglés
 - Idioma alternativo (español)
3. Segundo aviso (NAPD, Aviso de Decisión Preliminar)
 - Inglés
 - Idioma alternativo (español)
4. Materiales de la solicitud **
5. Proyecto de permiso **
6. Resumen técnico u hoja de datos **

DOMESTIC 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.

Comal Independent School District (CN600249825) operates Spring Branch Middle School WWTP (RN102077542), a wastewater treatment plant serving the school. The facility is located at 21053 SH 46 W, in Spring Branch, Comal County, Texas 78070. The facility disposes of 13,000 gallons of treated wastewater per day through a subsurface area drip dispersal system. This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain BOD5, total suspended solids, and E. coli. Domestic sewage is treated by a bar screen, an equalization basin, an aeration basin, a final clarifier, an aerobic sludge digester, and a chlorine contact chamber.

AGUAS RESIDUALES DOMESTICAS /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.

El Distrito Escolar Independiente de Comal (CN600249825) opera la WWTP de la escuela secundaria Spring Branch (RN102077542), una planta de tratamiento de aguas residuales que presta servicio a la escuela. La instalación está ubicada en 21053 SH 46 W, en Spring Branch, condado de Comal, Texas 78070. La instalación elimina 13,000 galones de aguas residuales tratadas por día a través de un sistema de dispersión por goteo en el subsuelo. Este permiso no autorizará una descarga de contaminantes al agua del estado.

Se espera que las descargas de la instalación contengan BOD5, sólidos suspendidos totales y E. coli. Las aguas residuales domésticas son tratadas mediante una rejilla de barras, un estanque de ecualización, un estanque de aireación, un clarificador final, un digester aeróbico de lodos y una cámara de contacto de cloro.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



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

PERMIT NO. WQ0013812003

APPLICATION. Comal Independent School District, 1404 Interstate 35 North, New Braunfels, Texas 78130, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Land Application Permit (TLAP) No. WQ0013812003 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 13,000 gallons per day via public access subsurface drip irrigation system with a minimum area of 130,000 square feet. The domestic wastewater treatment facility and disposal area are located at 21053 State Highway 46 West, near the city of Spring Branch, in Comal County, Texas 78070. TCEQ received this application on January 13, 2025. The permit application will be available for viewing and copying at Comal School District, Administration Building, 1404 Interstate 35 North, New Braunfels, in Comal 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=-98.436666,29.798333&level=18>

ALTERNATIVE LANGUAGE NOTICE. Alternative language notice in Spanish is available at:

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications>.

El aviso de idioma alternativo en español está disponible en

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications>.

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

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ will hold a public meeting if the Executive Director determines that there is a significant degree of public

interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

OPPORTUNITY FOR A CONTESTED CASE HEARING. After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a response to all relevant and material, or significant public comments. **Unless the application is directly referred for a contested case hearing, the response to comments, and the Executive Director's decision on the application, will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application.** If comments are received, the mailing will also provide instructions for requesting reconsideration of the Executive Director's decision and for requesting a contested case hearing. A contested case hearing is a legal proceeding similar to a civil trial in state district court.

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

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

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

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

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

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

AGENCY CONTACTS AND INFORMATION. All public comments and requests must be submitted either electronically at <https://www14.tceq.texas.gov/epic/eComment/>, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Please be aware that any contact information you provide, including your name, phone number, email address and physical address will become part of the agency's public record. For more information about this permit application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at www.tceq.texas.gov/goto/pep. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from Comal Independent School District at the address stated above or by calling Mr. Trent DeWaters, Director of Facilities Maintenance, at 830-221-2637.

Issuance Date: March 11, 2025

Comisión de Calidad Ambiental del Estado de Texas



AVISO DE RECIBO DE LA SOLICITUD E INTENCION DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA RENOVACION

PERMISO NO. WQ0013812003

SOLICITUD. Distrito Escolar Independiente de Comal, 1404 North Interstate Highway 35, New Braunfels, Texas 78130 ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) para renovar el Permiso No.WQ0013812003 de disposición de aguas residuales para autorizar la disposición de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 13,000 galones por día por medio de sistema de dispersión por goteo en el subsuelo de acceso público con un área mínima de 130,000 pies cuadrados. La planta de tratamiento de aguas domésticos residuales y el área de disposición están ubicados en 21053 State Highway 46 West, Spring Branch en el Condado de Comal, Texas. La TCEQ recibió esta solicitud el día 13 de enero de 2025. La solicitud para el permiso estará disponible para leerla y copiarla en Comal School District edificio administrativo, 1404 Interstate 35 North, New Braunfels, en Condado de Comala antes de la fecha de publicación de este aviso en el periódico. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.436666,29.798333&level=18>

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar un borrador del permiso y emitirá una Decisión Preliminar sobre la solicitud. **El aviso de la solicitud y la decisión preliminar serán publicados y enviado a los que están en la lista de correo de las personas a lo largo del condado que desean recibir los avisos y los que están en la lista de correo que desean recibir avisos de esta solicitud. El aviso dará la fecha límite para someter comentarios públicos.**

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar **comentarios públicos o pedir una reunión pública sobre esta solicitud.** El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos

los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso.** Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, USTED DEBE INCLUIR EN SU SOLICITUD LOS SIGUIENTES DATOS: su nombre, dirección, y número de teléfono; el nombre del solicitante y número del permiso; la ubicación y distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general; una lista de todas las cuestiones de hecho en disputa que usted presente durante el período de comentarios; y la declaración "[Yo/nosotros] solicito/solicitamos una audiencia de caso impugnado". Si presenta la petición para una audiencia de caso impugnado de parte de un grupo o asociación, debe identificar una persona que representa al grupo para recibir correspondencia en el futuro; identificar el nombre y la dirección de un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; proveer la información indicada anteriormente con respecto a la ubicación del miembro afectado y su distancia de la planta o actividad propuesta; explicar cómo y porqué el miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios. Si ciertos criterios se cumplen, la TCEQ puede actuar sobre una solicitud para renovar un permiso sin proveer una oportunidad de una audiencia administrativa de lo contencioso.

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas de correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado específico. Si desea que se agregue su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

CONTACTOS E INFORMACIÓN A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía <http://www14.tceq.texas.gov/epic/eComment/> o por escrito dirigidos a la **Comisión de Texas de Calidad Ambiental, Oficial de la Secretaría (Office of Chief Clerk), MC-105, P.O. Box 13087, Austin, Texas 78711-3087.** Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Para obtener más información acerca de esta solicitud de permiso o el proceso de permisos, llame al programa de educación pública de la TCEQ, gratis, al 1-800-687-4040. Si desea información en Español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional del Comal Independent School District a la dirección indicada arriba o llamando a Trent DeWaters al 830-221-2637.

Fecha de emisión: 11 de marzo de 2025

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



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

RENEWAL

PERMIT NO. WQ0013812003

APPLICATION AND PRELIMINARY DECISION. Comal Independent School District, 1404 Interstate 35 North, New Braunfels, Texas 78130, has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of TCEQ Permit No. WQ0013812003 which authorizes the disposal of treated domestic wastewater at a daily average flow not to exceed 13,000 gallons per day via public access subsurface area drip dispersal system with a minimum area of 130,000 square feet. This permit will not authorize a discharge of pollutants into waters in the State. TCEQ received this application on January 13, 2025.

The wastewater treatment facility and disposal site are located at 21053 State Highway 46 West, in Comal County, Texas 78070. The wastewater treatment facility and disposal site are located in the drainage basin of Upper Cibolo Creek in Segment No. 1908 of the San Antonio River Basin. 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 exact location, refer to application. <https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.436666,29.798333&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 Comal School District, Administration Building, 1404 Interstate 35 North, New Braunfels, in Comal 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>.

ALTERNATIVE LANGUAGE NOTICE. Alternative language notice in Spanish is available at <https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices>. El aviso de idioma alternativo en español está disponible en <https://www.tceq.texas.gov/permitting/wastewater/plain-language-summaries-and-public-notices>.

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

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 Comal Independent School District at the address stated above or by calling Mr. Trent DeWaters, Director of Facilities Maintenance, at 830-221-2637.

Issuance Date: July 28, 2025

Comisión De Calidad Ambiental Del Estado De Texas



AVISO DE LA SOLICITUD Y DECISIÓN PRELIMINAR PARA EL PERMISO DEL SISTEMA DE ELIMINACION DE DESCARGAS DE CONTAMINANTES DE TEXAS (TPDES) PARA AGUAS RESIDUALES MUNICIPALES

RENOVACIÓN

PERMISO NO. WQ0013812003

SOLICITUD Y DECISIÓN PRELIMINAR. Distrito Escolar Independiente de Comal, 1404 Interstate Highway 35 North, New Braunfels, Texas 78130, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) una renovación para autorizar Permiso No. WQ0013812003 que autoriza la disposición de aguas residuales domésticas tratadas con un caudal promedio diario que no exceda los 13,000 galones por día mediante un sistema de dispersión por goteo subterráneo de acceso público, con una superficie mínima de 130,000 pie cuadrado. Este permiso no autorizará una descarga de contaminantes a las aguas del estado. La TCEQ recibió esta solicitud el 13 de enero de 2025.

La planta está ubicada en 21053 State Highway 46 West en el Condado de Comal, Texas. El efluente tratado es descargado al Upper Cibolo Creek en el Segmento No. 1908 de la Cuenca del Río San Antonio. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.436666,29.798333&level=18>

El Director Ejecutivo de la TCEQ ha completado la revisión técnica de la solicitud y ha preparado un borrador del permiso. El borrador del permiso, si es aprobado, establecería las condiciones bajo las cuales la instalación debe operar. El Director Ejecutivo ha tomado una decisión preliminar que si este permiso es emitido, cumple con todos los requisitos normativos y legales. La solicitud del permiso, la decisión preliminar del Director Ejecutivo y el borrador del permiso están disponibles para leer y copiar en Distrito Escolar de Comal, Edificio Administrativo, 1404 Interstate 35 North, New Braunfels en el Condado de Comal, Texas. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: <https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>.

AVISO DE IDIOMA ALTERNATIVO. El aviso de idioma alternativo en español está disponible en <https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>.

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar **comentarios públicos o pedir una reunión pública sobre esta solicitud.** El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todos los comentarios públicos esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud. Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso.** Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, USTED DEBE INCLUIR EN SU SOLICITUD LOS SIGUIENTES DATOS: su nombre, dirección, y número de teléfono; el nombre del solicitante y número del permiso; la ubicación y distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general; una lista de todas las cuestiones de hecho en disputa que usted presente durante el período de comentarios; y la declaración "[Yo/nosotros] solicito/solicitamos una audiencia de caso impugnado". Si presenta la petición para una audiencia de caso impugnado de parte de un grupo o asociación, debe identificar una persona que representa al grupo para recibir correspondencia en el futuro; identificar el nombre y la dirección de un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; proveer la información indicada anteriormente con respecto a la ubicación del miembro afectado y su distancia de la planta o actividad propuesta; explicar cómo y por qué el miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios. Si ciertos criterios se cumplen, la TCEQ puede actuar sobre una solicitud para renovar un permiso para descargar aguas residuales sin proveer una oportunidad de una audiencia administrativa de lo contencioso.

ACCIÓN DEL DIRECTOR EJECUTIVO. El Director Ejecutivo puede emitir una aprobación final de la solicitud a menos que exista un pedido antes del plazo de vencimiento de una audiencia administrativa de lo contencioso o se ha presentado un pedido de reconsideración. Si un pedido ha llegado antes del plazo de vencimiento de la audiencia o el pedido de reconsideración ha sido presentado, el Director Ejecutivo no emitirá una aprobación final sobre el permiso y enviará la solicitud y el pedido a los Comisionados de la TECQ para consideración en una reunión programada de la Comisión.

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas de correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado específico. Si desea que se agregue su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

Todos los comentarios escritos del público y los pedidos una reunión deben ser presentados durante los 30 días después de la publicación del aviso a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 or por el internet a www.tceq.texas.gov/about/comments.html. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia.

CONTACTOS E INFORMACIÓN DE LA AGENCIA. Los comentarios y solicitudes públicas deben enviarse electrónicamente a <https://www14.tceq.texas.gov/epic/eComment/>, o por escrito a Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Cualquier información personal que envíe a la TCEQ pasará a formar parte del registro de la agencia; esto incluye las direcciones de correo electrónico. Para obtener más información sobre esta solicitud de permiso o el proceso de permisos, llame al Programa de Educación Pública de la TCEQ, sin cargo, al 1-800-687-4040 o visite su sitio web en www.tceq.texas.gov/goto/pep. Si desea información en español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional del Distrito Escolar de Comal a la dirección indicada arriba o llamando a Mr. Trent DeWaters al 830-221-2637.

Fecha de emisión: 28 de julio de 2025



PERMIT NO. WQ0013812003

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

This is a renewal of Permit No.
WQ0013812003 issued
May 8, 2015.

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

Comal Independent School District

whose mailing address is

1404 Interstate 35 North
New Braunfels, Texas 78130

Nature of Business Producing Waste: Domestic wastewater treatment operation, SIC Code 8211.

General Description and Location of Waste Disposal System:

Description: The Spring Branch Middle School Wastewater Treatment Facility consists of an activated sludge process plant using the extended aeration mode. Treatment units include a bar screen, a flow equalization basin, an aeration basin, a final clarifier, an aerobic sludge digester and a chlorine contact chamber. The permittee is authorized to dispose of treated domestic wastewater effluent at a daily average flow not to exceed 0.013 million gallons per day (MGD) via public access subsurface area drip dispersal system with a minimum area of 130,000 square feet. The permittee is required to provide at least three days of temporary storage for times when the facility is out of service due to an emergency or for scheduled maintenance. Application rates shall not exceed 0.1 gallons per square foot per day. The permittee will maintain Bermuda grass and rye grass on the disposal site.

Location: The wastewater treatment facility and disposal site are located at 21053 State Highway 46 West, in Comal County, Texas 78070. (See Attachment A.)

Drainage Area: The wastewater treatment facility and disposal site are located in the drainage basin of Upper Cibolo Creek in Segment No. 1908 of the San Antonio 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, **ten 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 – 0.013 MGD from the treatment system

Quality: The following effluent limitations shall be required:

<u>Parameter</u>	<u>Effluent Concentrations</u> (Not to Exceed)			
	<u>Daily Average</u> mg/l	<u>7-Day Average</u> mg/l	<u>Daily Maximum</u> mg/	<u>Single Grab</u> mg/l
Biochemical Oxygen Demand (5-day)	20	30	45	65
Total Suspended Solids	20	30	45	65
<i>E. coli</i> , CFU or MPN/ 100 ml	126	N/A	N/A	399

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.

B. Monitoring Requirements:

<u>Parameter</u>	<u>Monitoring Frequency</u>	<u>Sample Type</u>
Flow	Five/week	Instantaneous
Biochemical Oxygen Demand (5-day)	One/week	Grab
Total Suspended Solids	One/week	Grab
pH	One/month	Grab
Total Chlorine Residual	Five/week	Grab
<i>E. coli</i>	1/quarter	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.

TCEQ Revision 06/2020

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 13) 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 13) 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)(2)(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 on 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 sewage sludge 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. Biosolids shall be injected below the surface of the land.
- ii. No significant amount of the biosolids shall be present on the land surface within one hour after biosolids are 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 biosolids 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, or 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 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 biosolids 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 treatment activities.
 - b. The location, by street address, and specific latitude and longitude, of each site on which sludge is applied.
 - c. The number of acres in each site on which bulk sludge is applied.
 - d. The date and time sludge is 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 13) 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 meets 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 s 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 13) 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 13) 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 13) 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. Toxicity Characteristic Leaching Procedure (TCLP) results.
3. Annual sludge 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 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 13) 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.

TCEQ Revision 06/2020

SPECIAL PROVISIONS:

1. This permit is granted subject to the policy of the Commission to encourage the development of areawide 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 areawide 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 areawide 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 C facility must be operated by a chief operator or an operator holding a Class C 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.

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. Effluent shall not be applied for irrigation during rainfall events or when the ground is frozen or saturated.
5. According to the requirements of 30 TAC § 222.81(a), the permittee shall locate the subsurface area drip dispersal system a minimum horizontal distance of 100 feet from surface waters in the state. The permittee shall locate the subsurface area drip dispersal system a minimum horizontal distance of 500 feet from public water wells, springs, or other similar sources of public drinking water and 150 feet from private water wells as described in 30 TAC § 309.13(c)(1). The permittee shall not locate a subsurface area drip dispersal system within a floodway according to the requirements of 30 TAC § 222.81(d).
6. The permittee will maintain the Bermuda grass and rye grass on the disposal site. Application rates to the subsurface irrigation site shall not exceed 0.1 gallons per square foot per day. The permittee is responsible for providing equipment for determining application rates and maintaining accurate records of the volume of effluent applied. According to the requirements of 30 TAC § 222.161(d), the permittee shall maintain records documenting all activities associated with maintaining the vegetative cover, like planting, over-seeding, mowing height, fertilizing, and harvesting. These records shall be maintained for a minimum

of three years and be made available to TCEQ staff upon request.

7. Based on the requirements of 30 TAC § 222.151, the subsurface area drip dispersal system shall be designed and managed so as to prevent seepage or percolation out of the root zone, other than leaching in the amount required to maintain the health of the vegetative cover. Surfacing and ponding is prohibited. Creating a condition at the treatment facility or the drip dispersal zones that contributes to vector attraction or odor is prohibited.
8. Subsurface irrigation practices shall be designed and managed so as to prevent ponding and surfacing of effluent, contamination of ground and surface water, and the occurrence of nuisance conditions in the area. To promote effluent and nutrient uptake by the crop, and to prevent pathways for effluent surfacing, Bermuda grass and rye grass shall be established and well maintained in the irrigation area throughout the year.
9. The subsurface drip irrigation system shall consist of a sufficient number of different dispersal zones. The minimum depth of soil above the drip irrigation lines shall be at least six inches, and the minimum depth of soil below the drip irrigation lines shall consist of at least twelve inches of usable soil. In the event of effluent surfacing due to damage to the drip irrigation lines, effluent application shall be shut off to the drip irrigation zone and public access to the zone shall be restricted.
10. The permittee shall design and install temporary storage that equals at least three days of the design flow of the facility for times when the subsurface area drip dispersal system is out of service due to an emergency or scheduled maintenance. In addition, the permittee shall pump and haul wastewater from the facility to prevent the discharge of treated or untreated wastewater if complete shutdown of the wastewater treatment facility becomes necessary or if the storage capacity is exceeded.
11. Permanent transmission lines shall be installed from the treatment system to each drip irrigation zone of the subsurface drip irrigation system. According to 30 TAC § 222.153, the permittee shall flush the subsurface area drip dispersal system from the dispersal zone and return the flush water to a point preceding the treatment system at least once every two months.
12. Irrigation with effluent shall be accomplished only when the area specified is not in use.
13. For any area where treated effluent is stored or where there exist hose bibs or faucets, the permittee shall erect adequate signs stating that the irrigation water is from a non-potable water supply. 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.
14. According to 30 TAC § 222.163, Closure Requirements, the permittee shall close the system under the standards set forth in this section.
15. According to the requirements of 30 TAC § 222.43, the permittee shall notify the TCEQ Regional Office (MC Region 13) for each of the following activities:
 - a. At least 30 days prior to the date the field layout and/or construction startup is scheduled to begin for the proposed subsurface drip irrigation system.

- b. At least 30 days prior to the date that construction is projected to be complete.
 - c. Within 30 days after operation of the proposed subsurface drip irrigation system.
 - d. If soils are imported, at least 30 days prior to completion of the soil importing project.
16. According to the requirements of 30 TAC § 222.45, the permittee shall submit a copy of the issued permit to the health department with jurisdiction in the area where the system is located before commencing operation of the proposed subsurface drip irrigation system. The permittee shall retain proof of delivery for the duration of the permit.
17. 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).
18. Each drip field (zone) shall be dosed a minimum of three (3) times in a 24-hour period with like intervening rest periods.
19. The permittee shall maintain a minimum rootable soil depth of 12 inches below the drip irrigation lines. At least a six-inch layer of soil shall be maintained over the drip lines. If imported soils are used, the permittee shall submit no later than 90 days prior to construction to the TCEQ Water Quality Assessment Team (MC 150) and the Wastewater Permitting Section (MC 148) of the Water Quality Division a plan for review/revision and approval describing how the imported soils will be incorporated into the native soils and how soil erosion will be prevented in the affected areas.
20. Bermuda grass and ryegrass must be established in the drip zones (fields) prior to the application of effluent.
21. The permittee shall use cultural practices to promote and maintain the health and propagation of the Bermuda grass and ryegrass crops and avoid plant lodging. The permittee shall harvest the crops (cut and remove it from the field) at least twice 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.
22. Drip irrigation lines shall be installed on the contour, and lateral slopes of the tubing shall not exceed one percent. The permittee can apply for a variance to this provision by providing justification in the detailed design criteria per 30 TAC Chapter 222 indicating how uneven application of effluent due to back draining will be avoided. The permittee shall notify the TCEQ Regional Office (MC Region 13) 30 days prior to installation of the drip lines.
23. Runon from upslope areas of the drip fields shall be diverted by the use of berms or other diversions.
24. Each zone shall have at least one soil moisture-sensing devices placed at 12 inches below the depth of the drip lines that will automatically shut off irrigation to that zone when the soil becomes saturated. The devices shall be located on the downgradient side of each zone and be spaced a minimum of 50 feet apart. The soil moisture monitoring devices, including a map of the monitoring device locations, shall be included with the dispersal zone design and submitted with the engineering report required by 222 TAC Subchapter D.

25. Stones larger than eight inches in diameter and within 12 inches of the drip lines shall be removed from the drip field (zone).
26. The physical condition of the land application fields shall be monitored on a weekly basis. Any area with problems such as surface runoff, surficial erosion, or stressed or damaged vegetation, etc., shall be recorded in a field log kept onsite. Corrective measures will be implemented within 24 hours of discovery.
27. 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 2.984 acres with no fewer than 10 to 15 subsamples representing each composite sample. For analysis and reporting, subsamples shall be composited by like sampling depth, type of crop, and soil type. 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	Obtained from the SAR water saturated paste extract	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	mg/kg (dry weight basis)
Plant-available: Potassium (K) Calcium (Ca) Magnesium (Mg) Sodium (Na) Sulfur (S)	May be determined in the same Mehlich III extract with inductively coupled plasma	5 (K) 10 (Ca) 5 (Mg) 10 (Na) 1 (S)	mg/kg (dry weight basis)
Water-soluble: Sodium (Na) Calcium (Ca) Magnesium (Mg)	Obtained from the SAR water saturated paste extract	1 (Na) 1 (Ca) 1 (Mg)	Water soluble constituents are reported in mg/L
Sodium Adsorption Ratio (SAR)	$\text{SAR} = \frac{\text{Na}}{\sqrt{\frac{(\text{Ca} + \text{Mg})}{2}}}$		<p>Express concentrations of Na, Ca and Mg in the water saturated paste extract in milliequivalents/liter (meq/L) to calculate the SAR. The SAR value is unit less.</p> <p>If the SAR is greater than 10, amendments (e.g., gypsum) shall be added to the soil to adjust the SAR to less than 10.</p>
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 13), 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.

28. The facility is located within the Edwards Aquifer Contributing Zone per 30 TAC §213.22 and is subject to all requirements of that chapter.
29. The permittee shall comply with the buffer zone requirements of 30 TAC §222.81, specifically regarding water wells and waters in the state. The permittee must locate the subsurface area drip dispersal system 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 as described in §309.13(c)(1); and 100 feet from surface waters in the state.
30. The wastewater treatment plant unit must be located in accordance with 30 TAC §290.41(c)(1)(B) and 30 TAC §309.13(c).
31. The permittee shall notify the TCEQ Regional Office (MC Region 13) 30 days before any of the following activities begin in accordance with 30 TAC §222.43: construction start up, drip system field layout, completion of any soil amendments, operation of the subsurface drip system, or completion of the subsurface project.
32. Any recharge features uncovered by construction and operational activities shall be addressed in an updated and certified Recharge Feature Plan (RFP). The RFP will include the best management practices implemented that will prevent impact to recharge features from wastewater application and prevent groundwater contamination. The updated certified RFP will be submitted to the TCEQ Water Quality Assessment Team (MC-150) and the TCEQ Regional Office (MC Region 13).
33. The applicant will construct berms or swales that will prevent, or divert, stormwater from entering all subsurface wastewater application areas.
34. Based on the letter dated June 14, 2010, the applicant developed a Seeps/Springs Monitoring Plan and submitted the plan to the TCEQ Water Quality Assessment Team (MC 150). The TCEQ Water Quality Assessment Team approved the plan on October 1, 2010. The permittee shall comply with the approved plan including:
 - a. Quarterly, an inspection will be conducted in the irrigation field and in the area immediately downgradient of the irrigation field to identify any seeps or springs that might be evident. Quarterly inspections shall continue for the life of the system. The coordinates of any identified seeps or springs will be recorded on a base map, and if sufficient water is flowing, a grab sample will be collected from at least one seep or spring using appropriate sampling equipment and containers. If possible, field checks will occur with three days of a 0.5 inch or greater rain event.

- b. The samples from any identified seeps or springs will be properly containerized and transported to an approved laboratory for subsequent analysis. Sample collection paperwork, including chain-of-custody forms, will be properly completed and transported with the samples. The individual responsible for sample collection will record the following information in a sample collection log or field book and keep the information for five years for TCEQ review:
 - i. Project name
 - ii. Date and time of sample collection
 - iii. Sampler's name
 - iv. Station/sample identifier
 - v. Location (coordinates and description)
 - vi. Sample matrix
 - vii. Sampling method
 - viii. Sample type (e.g., grab, composite)
 - ix. Sample depth
 - x. Sample description
 - xi. Quality collection
 - xii. Containers collected
 - xiii. Container used
 - xiv. Weather condition
 - xv. Comments
 - c. The water sample will be analyzed for the following parameters:
 - i. Complete nitrogen series ($\text{NO}_3 + \text{NO}_2\text{-N}$, Total Kjeldahl Nitrogen, Ammonia-Nitrogen, reported separately)
 - ii. Total Phosphorous
 - iii. Ortho-phosphate
 - iv. Specific conductivity
 - v. Chlorides
 - vi. Fecal Coliform
 - d. The permittee shall submit the data, including laboratory reports, and a map showing the locations of any seeps/springs that were sampled per the Seeps/Springs Monitoring Plan to the Water Quality Assessment Team (MC-150) of the Water Quality Division, the TCEQ Region 13 (San Antonio) Office, and the Compliance Monitoring Section (MC-224) during the month of September of each year for review. If no seeps/springs were identified during a particular quarter, that information shall be included in the annual report. Seeps/springs monitoring shall continue for the life of the system.
35. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.
36. A certified operator shall inspect the facility daily and maintain at the plant site a record of these inspections. These records shall be available at the plant site for inspection by authorized representatives of the commission for at least three years.

During this daily inspection the proper operation and maintenance of the wastewater treatment facility shall be checked and daily flow measurements shall be recorded before application of effluent to the land and sampling and analysis of the effluent shall be

performed according to the conditions of the permit and properly recorded.

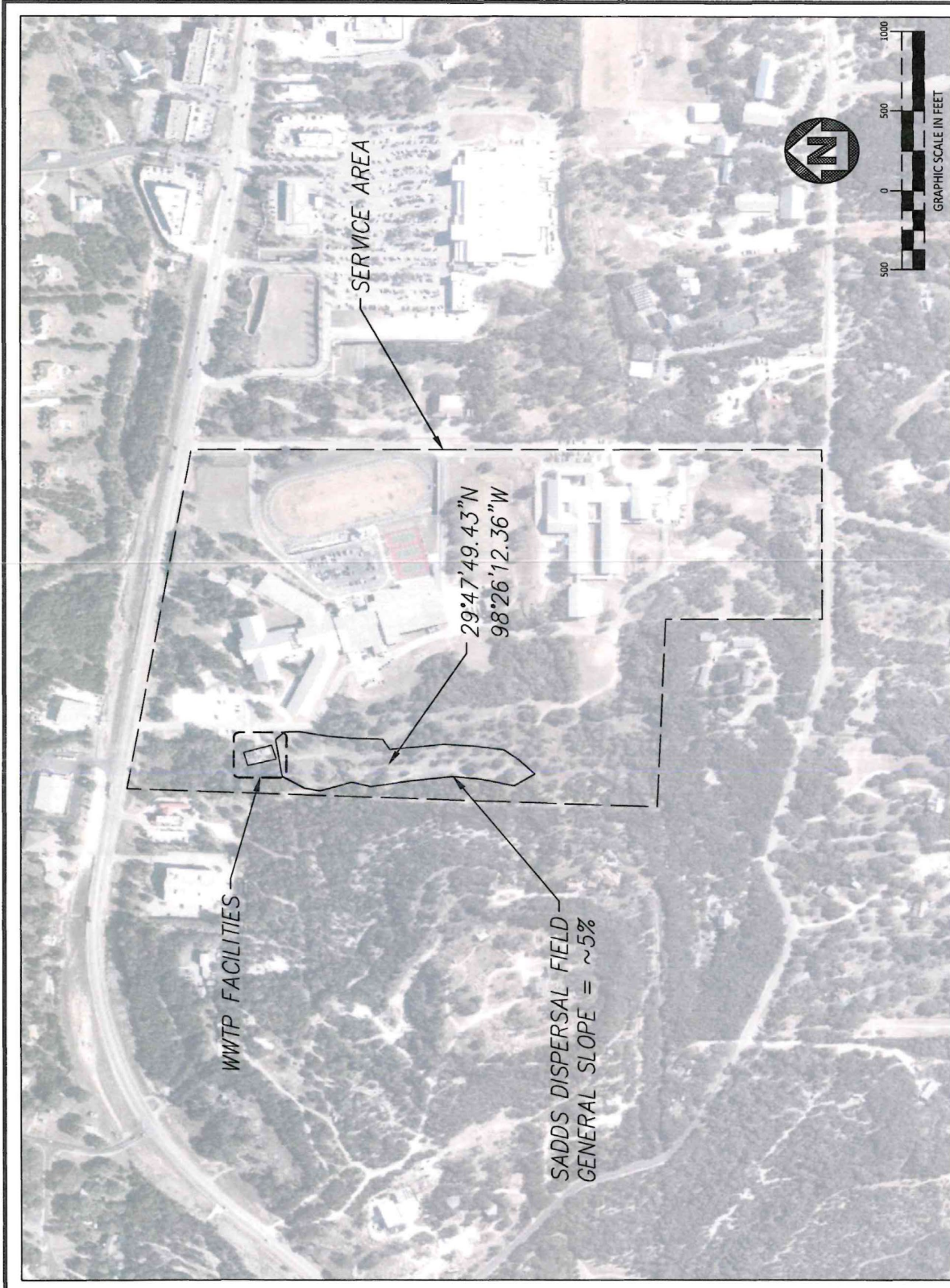
37. The wastewater generated from the restaurant kitchen shall be routed through a grease trap. The grease trap shall be sized to provide adequate detention time at peak loads to allow the wastewater to cool down and the grease to separate. The grease trap shall be inspected at least once per month and shall be cleaned when necessary, but not less than once per year. If grease from the restaurant starts appearing at the treatment plant, the grease trap shall be cleaned out at a higher frequency. A record shall be maintained of all grease removed from the grease trap. The records will include the following information:

- a. Volume of grease disposed
- b. Date of disposal
- c. Location of disposal site

The above records shall be maintained on a monthly basis and be available for inspection by authorized representatives of the Commission for at least three years.

38. In accordance with 30 TAC § 319.9, a permittee that has at least twelve months of uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEQ Wastewater Permitting Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all of the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is protective of human health and the environment, the permittee may be given a less frequent measurement schedule. For this permit, one/quarter may be reduced to one/6 months. A violation of any bacteria limit by a facility that has been granted a less frequent measurement schedule will require the permittee to return to the standard frequency schedule and submit written notice to the TCEQ Wastewater Permitting Section (MC 148). The permittee may not apply for another reduction in measurement frequency for at least 24 months from the date of the last violation. The Executive Director may establish a more frequent measurement schedule if necessary to protect human health or the environment.

Attachment A – Site Map
TCEQ Permit No. WQ0013812003
Comal Independent School District



SPRING BRANCH MIDDLE SCHOOL WWTP



118 McKinney St. • P.O. Box 606 • Farmersville, Texas 75442
TEL: 972.784.7777
(TXENG FIRM F-1114)

TECHNICAL SUMMARY AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

DESCRIPTION OF APPLICATION

Applicant:	Comal Independent School District TCEQ Permit No. WQ0013812003
Regulated Activity:	Domestic Wastewater Permit
Type of Application:	Renewal
Request:	Renewal with no changes
Authority:	Texas Water Code (TWC) § 26.027; 30 Texas Administrative Code (TAC) Chapters 222, 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 **ten years from the date of issuance**, according to 30 TAC § 305.127(1)(C)(ii)(III), Conditions to be Determined for Individual Permits.

REASON FOR PROJECT PROPOSED

Comal Independent School District has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of Permit No. WQ0013812003 to authorize the disposal of treated domestic wastewater at a daily average flow not to exceed 0.013 million gallons per day (MGD) via public access subsurface area drip dispersal system with a minimum area of 130,000 square feet. The existing wastewater treatment facility serves the Spring Branch Middle School.

PROJECT DESCRIPTION AND LOCATION

The Spring Branch Middle School Wastewater Treatment Facility consists of an activated sludge process plant using the extended aeration mode. Treatment units include a bar screen, a flow equalization basin, aeration basin, final clarifier, aerobic sludge digester, and a chlorine contact chamber. The facility is in operation

Sludge generated from the treatment facility is hauled by a registered transporter to the City of Lockhart and Guadalupe-Blanco River Authority Wastewater Treatment Facility, Permit No. WQ0010210002, Caldwell County, to be digested, dewatered and then disposed of with the bulk of the sludge from the plant accepting the sludge. The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

The wastewater treatment facility and disposal site are located at 21053 State Highway 46 West, in Comal County, Texas 78070.

The wastewater treatment facility and disposal site are located in the drainage basin of Upper

Comal Independent School District
Permit No. WQ0013812003
Technical Summary and Executive Director's Preliminary Decision

Cibolo Creek in Segment No. 1908 of the San Antonio River Basin. No discharge of pollutants into water in the State is authorized by this permit.

SUMMARY OF EFFLUENT DATA

The following is a summary of the applicant's effluent monitoring data for the period August 2022 through July 2024. The average of Daily Average value is computed by the averaging of all 30-day average values for the reporting period for each parameter: flow, five-day biochemical oxygen demand (BOD₅), and total suspended solids (TSS).

<u>Parameter</u>	<u>Average of Daily Average</u>
Flow, MGD	0.005
BOD ₅ , mg/l	8.3
TSS, mg/l	6.1

DRAFT PERMIT CONDITIONS

The draft permit authorizes the disposal of treated domestic wastewater effluent at a daily average flow not to exceed 0.013 MGD via public access subsurface area drip dispersal system with a minimum area of 130,000 square feet. The permittee is required to provide at least three days of temporary storage for times when the facility is out of service due to an emergency or for scheduled maintenance. Application rates shall not exceed 0.1 gallons per square foot per day. The permittee will maintain Bermuda grass and rye grass on the disposal site.

The effluent limitations in the draft permit, based on a daily average, are 20 mg/l BOD₅, 20 mg/l TSS, and 126 colony forming units (CFU) or most probable number (MPN) of *E. coli* per 100 ml. 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 draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, *Sludge Use, Disposal and Transportation*. Sludge generated from the treatment facility is hauled by a registered transporter to the City of Lockhart and Guadalupe-Blanco River Authority Wastewater Treatment Facility, Permit No. WQ0010210002, Caldwell County, to be digested, dewatered and then disposed of with the bulk of the sludge from the plant accepting the sludge. The draft permit also 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

See the next section for additional changes based on the existing permit.

SUMMARY OF CHANGES FROM EXISTING PERMIT

Effluent limitations and monitoring requirements in the draft permit remain the same as the existing permit effluent limitations and monitoring requirements.

The Sludge Provisions, Special Provisions and Standard Provisions have been revised in the draft permit.

SECTION IV, REQUIREMENTS APPLYING TO SLUDGE OR BIOSOLIDS TRANSPORTED TO ANOTHER FACILITY FOR FURTHER PROCESSING, has been added to the Sludge Provisions of the draft permit to allow the transportation of sludge or biosolids to another facility.

Certain accidental discharges or spills of treated or untreated wastewater from wastewater treatment facilities or collection systems owned or operated by a local government may be reported on a monthly basis in accordance with 30 TAC § 305.132.

The draft permit includes all updates based on the 30 TAC § 312 rule change effective April 23, 2020.

Special Provision 4 in the current permit has been removed, as this is already covered under Special Provision 7.

Special Provision 4 in the draft permit now includes a requirement restricting effluent irrigation during rainfall events or when the ground is frozen or saturated.

Special Provision 14 in the current permit has been removed in the draft permit because the permittee owns the land where the permitted land application site is located.

Special Provision 22 in the current permit (now Special Provision 21 in the draft permit) has been updated to require harvesting (cutting and removing) of crops from the fields at least twice during the year.

Special Provision 25 in the current permit (now Special Provision 24 in the draft permit) has been updated to require placement of soil moisture-sensing devices on the downgradient sides of each zone, spaced a minimum of 50 feet apart, and to require a map of the monitoring device locations to be included with the dispersal zone design and submitted with the engineering report required by 30 TAC Chapter 222, Subchapter D.

Special Provision 27 in the current permit (now Special Provision 26 in the draft permit) has been updated to require corrective action measures for surface runoff, surficial erosion, or stressed or damaged vegetation with 24 hours of discovery.

Special Provision 28 in the current permit has been removed in the draft permit, since this provision is identical to Special Provision 27.

Special Provision 29 in the current permit (now Special Provision 27 in the draft permit) has been updated. Soil samples shall now be composed of no fewer than 10 to 15 subsamples for each composite sample, and be sampled individually from 0-6 inches, 6-18 inches, and 18-30 inches below ground level. Analysis is also now required for Water-Soluble Sodium, Calcium, and Magnesium and Sodium Adsorption Ratio. Results of the annual soil sample analysis are due by the end of September of each sampling year.

Special Provision 34 in the current permit (now Special Provision 32 in the draft permit) now requires the Recharge Feature Plan (RFP) to be updated and certified following the uncovering of any recharge features from construction and operational activities.

Comal Independent School District
Permit No. WQ0013812003
Technical Summary and Executive Director's Preliminary Decision

Special Provision 36 (c) in the current permit (now Special Provision 34 (c) in the draft permit) has been updated to now include Fecal Coliform as a parameter for water sampling analysis.

Special Provision 36 (d) in the current permit (now Special Provision 34 (d) in the draft permit) has been updated with regard to information required for the annual Seeps/Springs Monitoring Plan.

Special Provision 39 in the current permit (now Special Provision 37 in the draft permit) has been updated to the current language for grease traps.

BASIS FOR DRAFT PERMIT

The following items were considered in developing the draft permit:

1. Application submitted with letter dated January 13, 2025 and additional information submitted with letter dated April 10, 2025.
2. Existing TCEQ permit: Permit No. WQ0013812003 issued May 8, 2015.
3. 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, 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

Comal Independent School District
Permit No. WQ0013812003
Technical Summary and Executive Director's Preliminary Decision

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 Kellie Crouch at (512) 239-2435.

Kellie Crouch

Kellie Crouch
Land Application Team
Water Quality Assessment Section (MC 150)

May 16, 2025

Date



Comal Independent School District

**Spring Branch Middle School
Wastewater Permit Renewal Application**

December 2024



ADMINISTRATIVE **REPORT**



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: Comal Independent School District

PERMIT NUMBER (If new, leave blank): WQ00 13812003

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 checked="" type="checkbox"/>	Affected Landowners Map	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SPIF	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Landowner Disk or Labels	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Core Data Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Buffer Zone Map	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Public Involvement Plan Form	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Flow Diagram	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Technical Report 1.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Site Drawing	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Technical Report 1.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Original Photographs	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 2.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Design Calculations	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 2.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Solids Management Plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 3.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Water Balance	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Worksheet 3.1	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>			
Worksheet 7.0	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	\$315.00 <input checked="" 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: 1000040977
Check/Money Order Amount: \$315.00
Name Printed on Check: Comal Independent School District

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 Wastewater 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

- | | |
|---|---|
| <input type="checkbox"/> New | |
| <input type="checkbox"/> Major Amendment <u>with</u> Renewal | <input type="checkbox"/> Minor Amendment <u>with</u> Renewal |
| <input type="checkbox"/> Major Amendment <u>without</u> Renewal | <input type="checkbox"/> Minor Amendment <u>without</u> Renewal |
| <input checked="" type="checkbox"/> Renewal without changes | <input type="checkbox"/> Minor Modification of permit |

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

f. **For existing permits:**

Permit Number: WQ00 13812003

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

Expiration Date: March 1, 2025

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

Comal Independent School District

(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: 600249825

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

Prefix: Mr.

Last Name, First Name: Mulroney, Malcolm

Title: Chief Operations Officer

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. Appendix A

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: Mr.

Last Name, First Name: Wootton, Cody

Title: EIT

Credential: Click to enter text.

Organization Name: Dunaway

Mailing Address: 118 McKinney Street

City, State, Zip Code: Farmersville, TX 75442

Phone No.: 972-784-7777

E-mail Address: cwootton@dunaway.com

Check one or both: ☒ Administrative Contact ☐ Technical Contact

B. Prefix: Mr.

Last Name, First Name: Campbell, Bradley

Title: Plant Supervisor

Credential: WWTP Operator C

Organization Name: Comal Independent School District

Mailing Address: 1404 IH 35 N

City, State, Zip Code: New Braunfels, TX 78130

Phone No.: 830-708-6458

E-mail Address: bradley.campbell@comalisd.org

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: Mr.

Last Name, First Name: Campbell, Bradley

Title: Plant Supervisor

Credential: WWTP Operator C

Organization Name: Comal Independent School District

Mailing Address: 1404 IH 35 N

City, State, Zip Code: New Braunfels, TX 78130

Phone No.: 830-7086458

E-mail Address: bradley.campbell@comalisd.org

B. Prefix: Mr. Last Name, First Name: DeWaters, Trent
Title: Director of Facilities Maintenance Credential: [Click to enter text.](#)
Organization Name: Comal Independent School District
Mailing Address: 1404 IH 35 N City, State, Zip Code: New Braunfels, TX 78130
Phone No.: 830-221-2637 E-mail Address: trent.dewaters@comalisd.org

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: Mr. Last Name, First Name: DeWaters, Trent
Title: Director of Facilities Maintenance Credential: [Click to enter text.](#)
Organization Name: Comal Independent School District
Mailing Address: 1404 IH 35 N City, State, Zip Code: New Braunfels, TX 78130
Phone No.: 830-221-2637 E-mail Address: trent.dewaters@comalisd.org

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: Mr. Last Name, First Name: Campbell, Bradley
Title: Plant Supervisor Credential: WWTP Operator C
Organization Name: Comal Independent School District
Mailing Address: 1404 IH 35 N City, State, Zip Code: New Braunfels, TX 78130
Phone No.: 830-708-6458 E-mail Address: bradley.campbell@comalisd.org

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Mr. Last Name, First Name: DeWaters, Trent
Title: Director of Facilities Maintenance Credential: [Click to enter text.](#)
Organization Name: Comal Independent School District
Mailing Address: 1404 IH 35 N City, State, Zip Code: New Braunfels, TX 78130
Phone No.: 830-221-2637 E-mail Address: trent.dewaters@comalisd.org

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: Mr.

Last Name, First Name: DeWaters, Trent

Title: Director of Facilities Maintenance

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

Organization Name: Comal Independent School District

Mailing Address: 1404 IH 35 N

City, State, Zip Code: New Braunfels, TX 78130

Phone No.: 830-221-2637

E-mail Address: trent.dewaters@comalisd.org

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: Comal School District Administration

Location within the building: [Click to enter text.](#)

Physical Address of Building: 1404 IH 35 N

City: New Braunfels

County: Comal

Contact (Last Name, First Name): Stanford, Steve

Phone No.: 830-885-1791 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? Spanish

F. Plain Language Summary Template

Complete the Plain Language Summary (TCEQ Form 20972) and include as an attachment.

Attachment: Appendix B

G. Public Involvement Plan Form

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

Attachment: N/A

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

A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. RN 102077542

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):

Spring Branch Middle School

C. Owner of treatment facility: Comal Independent School District

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: Comal Independent School District

Mailing Address: 1404 I 35 Frontage Rd. City, State, Zip Code: New Braunfels, TX 78130

Phone No.: 830-885-1791 E-mail Address: Click to enter text.

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: Comal Independent School District

Mailing Address: 1404 I 35 Frontage Rd.

City, State, Zip Code: New Braunfels, TX 78130

Phone No.: 830-885-1791

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

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: [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.](#)

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

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

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

☐ Yes ☐ No

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

- ☐ Authorization granted ☐ Authorization pending

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

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

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

Section 11. TLAP Disposal Information (Instructions Page 32)

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

☒ Yes ☐ No

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

[Click to enter text.](#)

- B. City nearest the disposal site: Spring Branch

- C. County in which the disposal site is located: Comal

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

Into a SADDs system to nearby fields

- E. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: Upper Cibolo Creek (segment 1908 of San Antonio River Basin)

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.

[Click to enter text.](#)

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.

Appendix C

☐ 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: WQ0013812003

Applicant: Comal Independent School District

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.

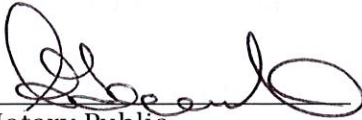
I further certify that I am authorized under 30 Texas Administrative Code § 305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

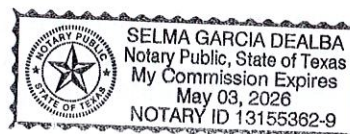
Signatory name (typed or printed): Malcolm Mulroney

Signatory title: Chief Operations Officer

Signature:  Date: 10/29/2024
(Use blue ink)

Subscribed and Sworn to before me by the said Malcolm Mulroney
on this 29 day of October, 20 24.
My commission expires on the 3 day of May, 20 24.


Notary Public



[SEAL]

Comal
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 in which format the landowners list is submitted:
- ☐ USB Drive ☐ Four sets of labels
- D. Provide the source of the landowners' names and mailing addresses: [Click to enter text.](#)
- E. As required by *Texas Water Code § 5.115*, is any permanent school fund land affected by this application?
- ☐ Yes ☐ No

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

Click to enter text.

Section 2. Original Photographs (Instructions Page 38)

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

- ☐ At least one original photograph of the new or expanded treatment unit location
- ☐ At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.
- ☐ At least one photograph of the existing/proposed effluent disposal site
- ☐ A plot plan or map showing the location and direction of each photograph

Section 3. Buffer Zone Map (Instructions Page 38)

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

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

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

- ☐ Ownership
- ☐ Restrictive easement
- ☐ Nuisance odor control
- ☐ Variance

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

- ☐ Yes
- ☐ No

DOMESTIC WASTEWATER PERMIT APPLICATION

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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

Attachment: N/A

WATER QUALITY PERMIT

PAYMENT SUBMITTAL FORM

Use this form to submit the Application Fee, if the mailing the payment.

- Complete items 1 through 5 below.
- Staple the check or money order in the space provided at the bottom of this document.
- **Do Not mail this form with the application form.**
- Do not mail this form to the same address as the application.
- Do not submit a copy of the application with this form as it could cause duplicate permit entries.

Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
P.O. Box 13088
Austin, Texas 78711-3088

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, Texas 78753

Fee Code: WQP **Waste Permit No: WQ0013812003**

1. Check or Money Order Number: [Click to enter text.](#)
2. Check or Money Order Amount: [Click to enter text.](#)
3. Date of Check or Money Order: [Click to enter text.](#)
4. Name on Check or Money Order: [Click to enter text.](#)
5. APPLICATION INFORMATION

Name of Project or Site: Spring Branch Middle School

Physical Address of Project or Site: 21053 SH 46 W, Spring Branch, TX 78070-6125

If the check is for more than one application, attach a list which includes the name of each Project or Site (RE) and Physical Address, exactly as provided on the application.

Staple Check or Money Order in This Space

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

Landowners Labels or USB Drive attached ☒ N/A ☐ Yes
(See instructions for landowner requirements)

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)*

Plain Language Summary ☒ Yes

TECHNICAL **REPORT**



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 43)

A. Existing/Interim I Phase

Design Flow (MGD): 0.013

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.

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): 0.013

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.

D. Current Operating Phase

Provide the startup date of the facility: Existing, 1996

Section 2. Treatment Process (Instructions Page 43)

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.**

Facility consists of an activated sludge process plant using extended aeration mode. Treatment units include a bar screen, an equalization basin, an aeration basin, a final clarifier, an aerobic sludge digester, and a chlorine contact chamber.

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)
Dosing Tank	1	40' x 12' x 12'2"
Equalization basin	1	4' x 12' x 11'2"
Aeration basin	1	20' x 12' x 11'2"
Clarifier	1	10' diameter x 11'2"
Aerobic sludge digester	1	6' x 12' x 11'2"
Chlorine contact chamber	1	2' x 12' x 11'2"

C. Process Flow Diagram

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

Attachment: Appendix D

Section 3. Site Information and Drawing (Instructions Page 44)

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

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

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

- Latitude: 29.797237
- Longitude: -98.436761

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

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

Attachment: Appendix E

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

Spring Branch Middle School students and faculty sewage services

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 45)

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 45)

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 45)

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: 07/17/1996

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

Click to enter text.

B. Buffer zones

Have the buffer zone requirements been met?

☒ Yes ☐ No

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

Click to enter text.

C. Other actions required by the current permit

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

☐ Yes ☒ No

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

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 50)

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	1	1	1	Grab	12/27/2024
Total Suspended Solids, mg/l	7	7	1	Grab	12/27/2024
Ammonia Nitrogen, mg/l	80.8	80.8	1	Grab	12/27/2024
Nitrate Nitrogen, mg/l	23.3	23.3	1	Grab	12/27/2024
Total Kjeldahl Nitrogen, mg/l	80	80	1	Grab	12/27/2024
Sulfate, mg/l	180	180	1	Grab	12/27/2024
Chloride, mg/l	103	103	1	Grab	12/27/2024
Total Phosphorus, mg/l	9.26	9.26	1	Grab	12/27/2024
pH, standard units	7.5	8.2	24	Grab	8/22-7/24
Dissolved Oxygen*, mg/l	N/A	N/A	N/A	N/A	N/A
Chlorine Residual, mg/l	1.4	1.8	24	Grab	8/22-7/24
<i>E.coli</i> (CFU/100ml) freshwater	1	1	1	Grab	12/27/2024
Enterococci (CFU/100ml) saltwater	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	688	688	1	Grab	12/27/2024
Electrical Conductivity, μ mohs/cm, †	1,341	1,341	1	Grab	12/27/2024
Oil & Grease, mg/l	N/A	N/A	N/A	N/A	N/A
Alkalinity (CaCO ₃)*, mg/l	N/A	N/A	N/A	N/A	N/A

*TPDES permits only

†TLAP permits only

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	N/A	N/A	N/A	N/A	N/A
pH, standard units	N/A	N/A	N/A	N/A	N/A
Fluoride, mg/l	N/A	N/A	N/A	N/A	N/A
Aluminum, mg/l	N/A	N/A	N/A	N/A	N/A
Alkalinity (CaCO ₃), mg/l	N/A	N/A	N/A	N/A	N/A

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: Bradley CampbellFacility Operator's License Classification and Level: CFacility Operator's License Number: WW0049414

Section 9. Sludge and Biosolids Management and Disposal (Instructions Page 51)

A. WWTP's 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 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. Biosolids Management

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

all 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
Disposal in Landfill	Off-site Third-Party Handler or Preparer	Bulk	1500-2500 gal	Class B: PSRP Aerobic Digestion	Option 9: Subsurface injection
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: GBRA FM 20 Plant

TCEQ permit or registration number: W0010210002

County where disposal site is located: Caldwell

E. Transportation method

Method of transportation (truck, train, pipe, other): Truck

Name of the hauler: Weidner Septic

Hauler registration number: 20801

Sludge is transported as a:

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

Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 53)

A. Beneficial use authorization

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

☐ Yes ☒ No

If yes, are you requesting to continue this authorization to land apply sewage sludge 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 checked="" type="checkbox"/> No
Marketing and Distribution of sludge	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Sludge Surface Disposal or Sludge Monofill	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Temporary storage in sludge lagoons	<input type="checkbox"/> Yes	<input checked="" 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 Page 55)

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 56)

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: Malcolm Mulroney

Title: Chief Operations Officer

Signature: 

Date: 10/29/2024

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 57)

A. Justification of permit need

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

[Click to enter text.](#)

B. Regionalization of facilities

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

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

1. *Municipally incorporated areas*

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

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

☐ Yes ☐ No ☐ Not Applicable

If yes, within the city limits of: [Click to enter text.](#)

If yes, attach correspondence from the city.

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

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

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

2. *Utility CCN areas*

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

☐ Yes ☐ No

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

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

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

3. *Nearby WWTPs or collection systems*

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

☐ Yes ☐ No

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

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

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

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

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

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

Section 2. Proposed Organic Loading (Instructions Page 59)

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 BOD ₅ 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 59)

A. Existing/Interim I Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: [Click to enter text.](#)

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

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

Dissolved Oxygen, mg/l: [Click to enter text.](#)

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

B. Interim II Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: [Click to enter text.](#)

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

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

Dissolved Oxygen, mg/l: [Click to enter text.](#)

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

C. Final Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: [Click to enter text.](#)

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

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

Dissolved Oxygen, mg/l: [Click to enter text.](#)

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

D. Disinfection Method

Identify the proposed method of disinfection.

- ☐ Chlorine: [Click to enter text.](#) mg/l after [Click to enter text.](#) minutes detention time at peak flow

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

- ☐ Ultraviolet Light: [Click to enter text.](#) seconds contact time at peak flow
- ☐ Other: [Click to enter text.](#)

Section 4. Design Calculations (Instructions Page 59)

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

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

Section 5. Facility Site (Instructions Page 60)

A. 100-year floodplain

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

- ☐ Yes ☐ No

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

[Click to enter text.](#)

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

[Click to enter text.](#)

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

☐ Yes ☐ No

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

☐ Yes ☐ No

If **yes**, provide the permit number: [Click to enter text.](#)

If **no**, provide the approximate date you anticipate submitting your application to the Corps: [Click to enter text.](#)

B. Wind rose

Attach a wind rose: [Click to enter text.](#)

Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 60)

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 61)

Attach a solids management plan to the application.

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

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

- Treatment units and processes dimensions and capacities

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

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

DOMESTIC WASTEWATER PERMIT APPLICATION

WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

Section 1. Domestic Drinking Water Supply (Instructions Page 64)

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 64)

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 64)

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 65)

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 66)

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 66)

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 66)

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 66)

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 68)

Identify the method of land disposal:

- | | |
|---|---|
| <input type="checkbox"/> Surface application | <input type="checkbox"/> Subsurface application |
| <input type="checkbox"/> Irrigation | <input type="checkbox"/> Subsurface soils absorption |
| <input type="checkbox"/> Drip irrigation system | <input checked="" 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: RN102077542

Section 2. Land Application Site(s) (Instructions Page 68)

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 and Rye grass	2.984	13000	Y

Section 3. Storage and Evaporation Lagoons/Ponds (Instructions Page 68)

Table 3.0(2) – Storage and Evaporation Ponds

Pond Number	Surface Area (acres)	Storage Volume (acre-feet)	Dimensions	Liner Type
Welded Steel Tank	0.05	0.123	40' x 12' x 11'2"	

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

Attachment: N/A

Section 4. Flood and Runoff Protection (Instructions Page 68)

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:

FEMA's National Flood Hazard Layer (NFHL) Viewer

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

Typical open field grading/landscaping

Section 5. Annual Cropping Plan (Instructions Page 68)

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

- 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 69)

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

- 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
1	Domestic	Y	Cased	Meets buffer & Cased

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
2	Public Supply	Y	Cased	Meets buffer & Cased
3	Domestic	Y	Cased	Meets buffer & Cased
4	Domestic	Y	Cased	Meets buffer & Cased
5	Domestic	N	Plugged	Plugged
6	Public Supply	Y	Cased	Cased, owned by WWTP owner
7	Public Supply	Y	Cased	Meets buffer & Cased
8	Public Supply	Y	Cased	Meets buffer & Cased
9	Public Supply	Y	Cased	Meets buffer & Cased

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

Attachment: [Appendix G](#)

Section 7. Groundwater Quality (Instructions Page 69)

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

Attachment: [Appendix H](#)

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 70)

A. Soil map

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

Attachment: [Appendix I](#)

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: [Appendix J](#)

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 (in)	Permeability (µm/s)	Available Water Capacity (cm/cm)	Curve Number
BtD	5-20	9.0	0.11	80
BtG	8-19	9.0	0.13	80

Section 9. Effluent Monitoring Data (Instructions Page 71)

Is the facility in operation?

☒ Yes ☐ No

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

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

Table 3.0(5) – Effluent Monitoring Data

Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	pH	Chlorine Residual mg/l	Acres irrigated
Jul 2024	0.001276	5	5	7.1	1.4	2.984
Jun 2024	0.001748	4	5	6.8	1.3	2.984
May 2024	0.005542	25	3	7.7	1.8	2.984
Apr 2024	0.006220	16	7	7.8	1.8	2.984
Mar 2024	0.005210	17	5	7.2	1.6	2.984
Feb 2024	0.006069	13	8	7.9	1.3	2.984
Jan 2024	0.007277	8	7	7.6	1.2	2.984
Dec 2023	0.003355	10	9	7.6	1.4	2.984
Nov 2023	0.007344	7	5	7.6	1.2	2.984
Oct 2023	0.007752	7	4	7.4	1.2	2.984
Sept 2023	0.007050	18	4	7.7	1.3	2.984
Aug 2023	0.003039	3	3	6.6	1.3	2.984

Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	pH	Chlorine Residual mg/l	Acres irrigated
July 2023	0.001487	3	6	6.7	1.4	2.984
Jun 2023	0.001803	<3	2	7.6	1.3	2.984
May 2023	0.007955	11	2	7.8	1.2	2.984
Apr 2023	0.005787	14	4	7.6	1.3	2.984
Mar 2023	0.004429	8	3	7.3	1.4	2.984
Feb 2023	0.005675	5	5	7.5	1.3	2.984
Jan 2023	0.005358	4	6	7.1	1.4	2.984
Dec 2022	0.006371	5	12	7.8	1.3	2.984
Nov 2022	0.002970	4	17	7.7	1.4	2.984
Oct 2022	0.003723	3	9	7.6	1.3	2.984
Sept 2022	0.003920	4	9	7.6	1.3	2.984
Aug 2022	0.002152	2	7	8.2	1.4	2.984

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 72)

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

A. Irrigation

Area under irrigation, in acres: [Click to enter text.](#)

Design application frequency:

hours/day [Click to enter text.](#) And days/week [Click to enter text.](#)

Land grade (slope):

average percent (%): [Click to enter text.](#)

maximum percent (%): [Click to enter text.](#)

Design application rate in acre-feet/acre/year: [Click to enter text.](#)

Design total nitrogen loading rate, in lbs N/acre/year: [Click to enter text.](#)

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

Method of application: [Click to enter text.](#)

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

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

B. Evaporation ponds

Daily average effluent flow into ponds, in gallons per day: [Click to enter text.](#)

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

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

C. Evapotranspiration beds

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

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

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

Void ratio of soil in the beds: [Click to enter text.](#)

Storage volume within the beds, in acre-feet: [Click to enter text.](#)

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

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

D. Overland flow

Area used for application, in acres: [Click to enter text.](#)

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

Design application rate, in gpm/foot of slope width: [Click to enter text.](#)

Slope length, in feet: [Click to enter text.](#)

Design 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 73)

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 74)

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 74)

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 75)

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 75)

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 75)

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 76)

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 76)

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 76)

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 78)

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

Grab ☐ Composite ☐

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

Table 4.0(1) – Toxics Analysis

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

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

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Endosulfan II (beta)				0.02
Endosulfan Sulfate				0.1
Endrin				0.02
Ethylbenzene				10
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
Lead				0.5
Malathion				0.1
Mercury				0.005
Methoxychlor				2
Methyl Ethyl Ketone				50
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
Pentachlorophenol				5
Phenanthrene				10

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

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

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

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

Section 2. Priority Pollutants

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

Grab ☐ Composite ☐

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

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

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

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

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

Table 4.0(2)B – Volatile Compounds

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

Table 4.0(2)C – Acid Compounds

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

Table 4.0(2)D – Base/Neutral Compounds

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

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

Table 4.0(2)E - Pesticides

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

* For PCBs, if all are non-detects, enter the highest non-detect preceded by a "<".

Section 3. Dioxin/Furan Compounds

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

- ☐ 2,4,5-trichlorophenoxy acetic acid
Common Name 2,4,5-T, CASRN 93-76-5
- ☐ 2-(2,4,5-trichlorophenoxy) propanoic acid
Common Name Silvex or 2,4,5-TP, CASRN 93-72-1
- ☐ 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate
Common Name Erbon, CASRN 136-25-4
- ☐ 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate
Common Name Ronnel, CASRN 299-84-3
- ☐ 2,4,5-trichlorophenol
Common Name TCP, CASRN 95-95-4
- ☐ hexachlorophene
Common Name HCP, CASRN 70-30-4

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

[Click to enter text.](#)

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

☐ Yes ☐ No

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

[Click to enter text.](#)

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

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

Grab ☐ Composite ☐

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

Table 4.0(2)F – Dioxin/Furan Compounds

Compound	Toxic 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 instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Required Tests (Instructions Page 88)

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 89)

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: 0

Average Daily Flows, in MGD: 0

Significant IUs - non-categorical:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Other IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

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 90)

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
N/A				

D. Industrial user interruptions

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

☐ Yes ☒ No

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

Click to enter text.

Section 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 90)

A. General information

Company Name: N/A

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).

N/A

C. Product and service information

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

N/A

D. Flow rate information

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

Process Wastewater:

Discharge, in gallons/day: N/A

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

Discharge, in gallons/day: N/A

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the 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: N/A

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

Category: N/A

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

Category: N/A

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

Category: N/A

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

Category: N/A

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 _____

RN102077542
Authorized: 07/17/1996

Section 1. General Information (Instructions Page 92)

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)

APPENDIX A

CORE DATA FORM



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 type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input checked="" 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 600249825		RN 102077542

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)					
<input 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>			
Comal Independent School District							
7. TX SOS/CPA Filing Number		8. TX State Tax ID (11 digits)		9. Federal Tax ID (9 digits) 74-6001777	10. DUNS Number (if applicable) 010541498		
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 checked="" type="checkbox"/> Other		<input type="checkbox"/> Sole Proprietorship		<input type="checkbox"/> Other:			
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 checked="" 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 checked="" 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:	1404 IH 35 N						
	City	New Braunfels	State	TX	ZIP	78130	ZIP + 4
16. Country Mailing Information (if outside USA)				17. E-Mail Address (if applicable)			
				trent.dewaters@comalisd.org			

18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)
(830) 885-1791		() -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected, a new permit application is also required.)								
<input 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.)								
SPRING BRANCH MIDDLE SCHOOL								
23. Street Address of the Regulated Entity: (No PO Boxes)	21053 SH 46 W							
	City	Spring Branch	State	TX	ZIP	78070	ZIP + 4	6125
24. County	Comal							

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

25. Description to Physical Location:									
26. Nearest City					State				Nearest ZIP Code
<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:		29.79785			28. Longitude (W) In Decimal:		-98.43511		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds				
29°	47'	52.26"N	98°	26'	6.396"W				
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)			
8211	1542								
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)									
Middle School									
34. Mailing Address:	21053 SH 46 W								
	City	Spring Branch	State	TX	ZIP	78070	ZIP + 4	6125	
35. E-Mail Address:									
36. Telephone Number			37. Extension or Code			38. Fax Number (if applicable)			
(830) 221-2989						() -			

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:
	WQ0013812003			

SECTION IV: Preparer Information

40. Name:	Cody Wootton, EIT	41. Title:	Graduate Engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(972) 784-7777		() -	cwootton@dunaway.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:	Comal ISD	Job Title:	Chief operations officer
Name (In Print):	Malcolm Mulroney	Phone:	(830) 221 2150
Signature:		Date:	10/29/2024.

APPENDIX B

PLAIN LANGUAGE SUMMARY

DOMESTIC 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.

Comal Independent School District (CN600249825) operates Spring Branch Middle School WWTP (RN102077542), a wastewater treatment plant serving the school. The facility is located at 21053 SH 46 W, in Spring Branch, Comal County, Texas 78070. The facility disposes of 13,000 gallons of treated wastewater per day through a subsurface area drip dispersal system. This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain BOD5, total suspended solids, and E. coli. Domestic sewage is treated by a bar screen, an equalization basin, an aeration basin, a final clarifier, an aerobic sludge digester, and a chlorine contact chamber.

AGUAS RESIDUALES DOMESTICAS /AGUAS PLUVIALES

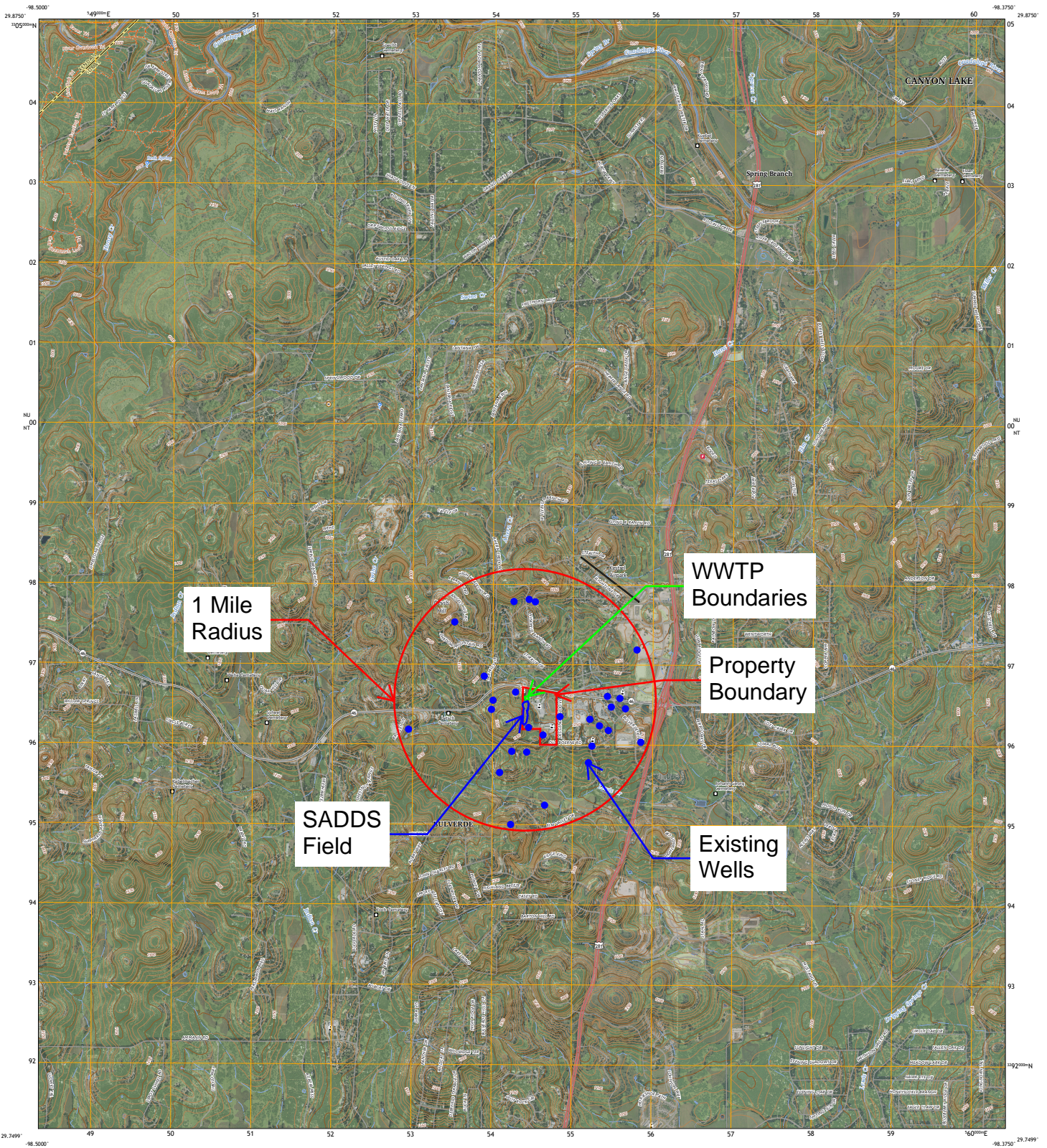
El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar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

El Distrito Escolar Independiente de Comal (CN600249825) opera la WWTP de la escuela secundaria Spring Branch (RN102077542), una planta de tratamiento de aguas residuales que presta servicio a la escuela. La instalación está ubicada en 21053 SH 46 W, en Spring Branch, condado de Comal, Texas 78070. La instalación elimina 13,000 galones de aguas residuales tratadas por día a través de un sistema de dispersión por goteo en el subsuelo. Este permiso no autorizará una descarga de contaminantes al agua del estado.

Se espera que las descargas de la instalación contengan BOD5, sólidos suspendidos totales y E. coli. Las aguas residuales domésticas son tratadas mediante una rejilla de barras, un estanque de ecualización, un estanque de aireación, un clarificador final, un digester aeróbico de lodos y una cámara de contacto de cloro.

APPENDIX C

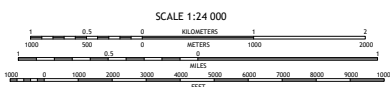
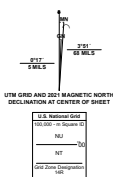
USGS TOPO MAP



Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84) Projection and
100-meter grid interval Transverse Mercator, Zone 14T
Data is provided by The National Map (TNM), is the best available at the time of map
generation, and includes data content from supporting themes of Elevation,
Hydrography, Geographic Names, Boundaries, Transportation, Structures, Land Cover,
and Orthophotography. Refer to associated Federal Geographic Data Committee (FGDC)
Metadata for additional source data information.

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. Temporal changes may have occurred since these data
were collected and some data may no longer represent actual surface conditions.
Learn About The National Map: <https://nationalmap.gov>

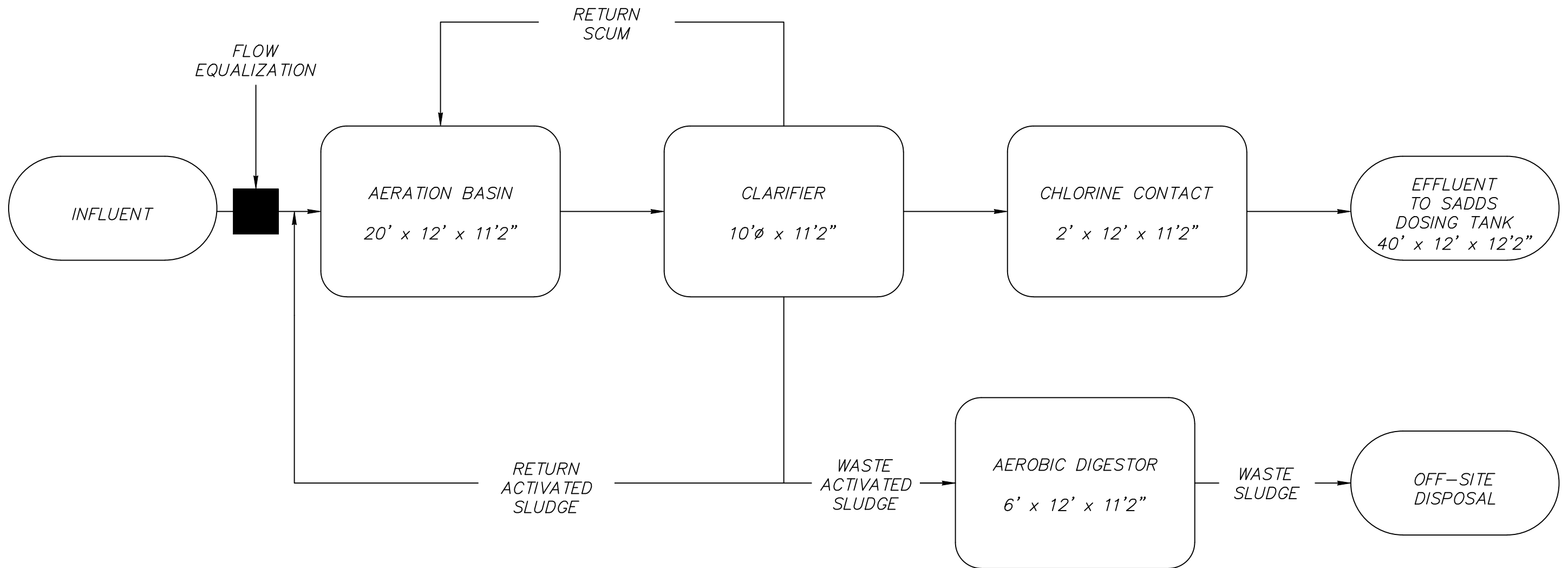


7.5-MINUTE TOPO, TX
2024

APPENDIX D

PROCESS FLOW DIAGRAM

PLOTTED BY: Cody Wootton ON: Tuesday, September 03, 2024 AT: 4:24 PM FILEPATH: P:\012300\012320\001\Civil\CAD\Exhibits\Process Flow Diagram.dwg



APPENDIX E

SITE DRAWING



118 McKinney St. • P.O. Box 606 • Farmersville, Texas 75442
TEL: 972.784.7777
(TXENG FIRM F-1114)

SPRING BRANCH MIDDLE SCHOOL WWTP

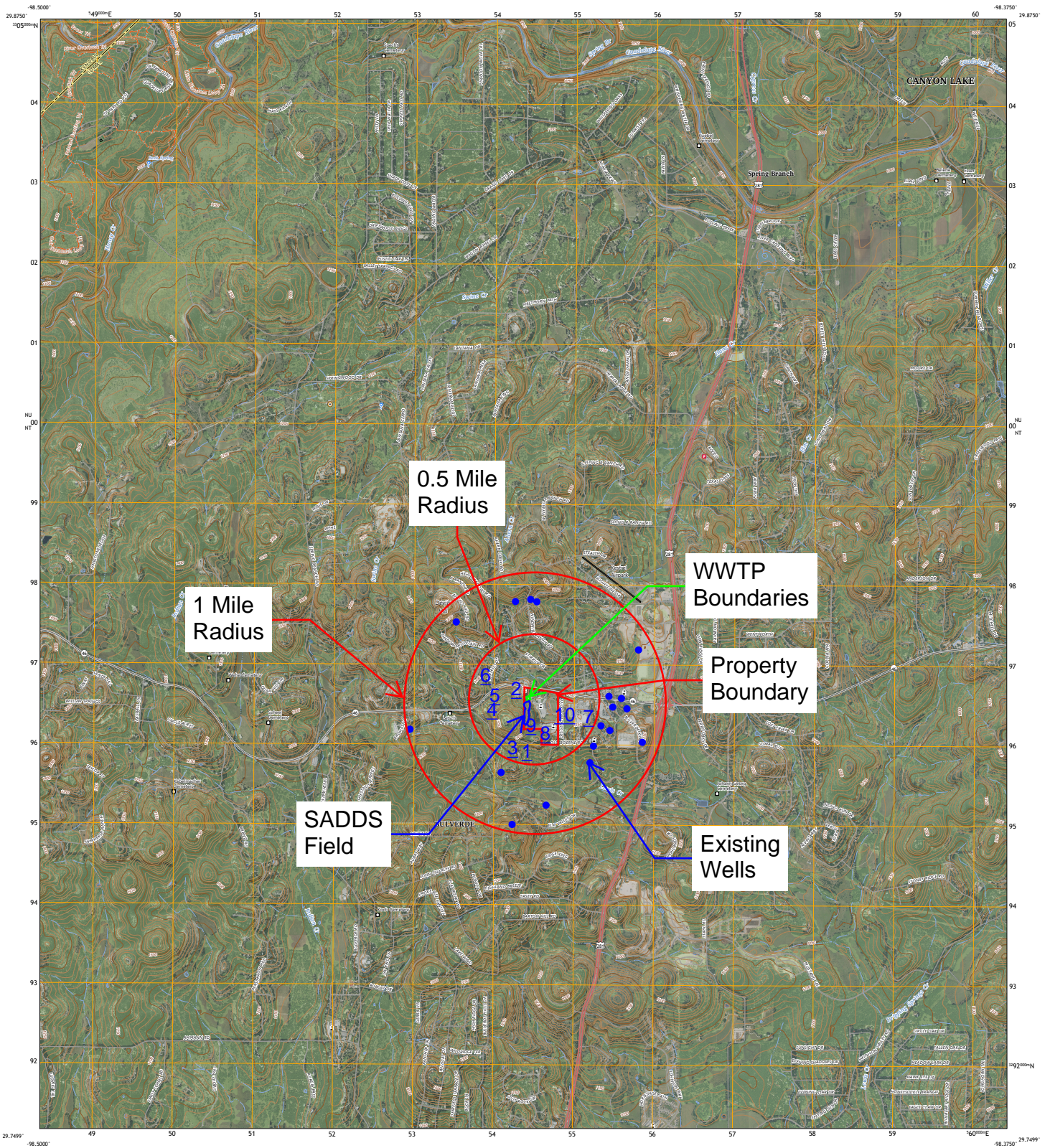
APPENDIX F

ANNUAL CROPPING PLAN

The total 130,000 square foot field which is used as the SADDs dispersal field will grow only Bermuda grass year round, overseeded with Rye every fall. The grasses grown will be cut via landscape maintenance and not harvested for any use. The grasses will be mowed to around 1-1½ inches when they reach around 2½-3 inches. This occurs weekly during growing season and monthly during off-season. The Rye is moderately salt-tolerant, while the Bermuda is very salt tolerant. This mix of grasses allows for both salt tolerance and cold weather tolerance. The field does not require fertilization or supplemental watering. Attached is a soil map showing the entirety of the field.

APPENDIX G

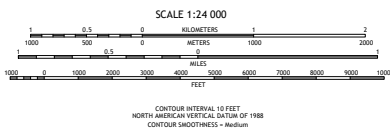
WELL MAP & INFORMATION



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84) Projection and
100-meter grid interval Transverse Mercator, Zone 14T
Data is provided by The National Map (TNM), is the best available at the time of map
generation, and includes data content from supporting themes of Elevation,
Hydrography, Geographic Names, Boundaries, Transportation, Structures, Land Cover,
and Orthophotography. Refer to associated Federal Geographic Data Committee (FGDC)
Metadata for additional source data information.

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. Temporal changes may have occurred since these data
were collected and some data may no longer represent actual surface conditions.

Learn About The National Map: <https://nationalmap.gov>



QUADRANGLE LOCATION	
Archer	Smiley
Bulverde	Del Core

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

Map ID	Well Reports								
	Well Report Tracking Number	Well Type	Water Use	County	Owner	Depth (ft)	Latitude (DD)	Longitude (DD)	Well Street
1	1973	New Well	Domestic	Comal	steve kirchoff	580	29.79333	-98.4375	1295 old berney rd
2	140334	New Well	Public Supply	Comal	Emerald Rainbow Play Place	530	29.79945	-98.43833	21155 Hwy 46 West
3	298622	New Well	Domestic	Comal	David Stanush	485	29.79333	-98.43972	1451 Old Boerne Rd.
4	476572	New Well	Domestic	Comal	Lextor LLC	550	29.79722	-98.44194	1850 Old Boerne Road
5	615024	New Well	Domestic	Comal	Dwayne Hart	501	29.79812	-98.44158	21477 State Hwy 46 W
	TWDB Database								
	State Well Number	Well Type	Water Use	County	Owner	Depth (ft)	Latitude (DD)	Longitude (DD)	Elevation (ft)
6	6813502 - Scanned Documents	Withdrawal of Water	Public Supply	Comal	SAWS Oakland Estates	500	29.80222	-98.44333	1308
7	6813517 - Scanned Documents	Withdrawal of Water	Public Supply	Comal	Cedar Hill Day Camp Well #1	470	29.79695	-98.42917	1232
8	6813519 - Scanned Documents	Withdrawal of Water	Public Supply	Comal	CISD-Seay Spring Middle School-Well #1	504	29.79445	-98.43445	1267
9	6813520 - Scanned Documents	Withdrawal of Water	Public Supply	Comal	CISD-Seay Spring Middle School-Well #2	503	29.79556	-98.43667	1269
10	6813521 - Scanned Documents	Withdrawal of Water	Public Supply	Comal	Hill Country Christian Church (Well #1)	490	29.79639	-98.4325	1229

Well Reports

Well City	Well Zip Code	Date of Well Completion	Map ID
Boerne	78666	6-Aug-01	1
Bulverde	78163	9-Apr-08	2
Bulverde	78163	26-Jul-12	3
Bulverde	78163	5-Apr-18	4
Spring branch	78070	2-Aug-22	5

TWDB Database

Water Level Observation Type	Water Quality Available	Aquifer Code Name	
Miscellaneous Measurements	Y	218GLRS - Glen Rose Limestone	6
Miscellaneous Measurements	N	218GLRS - Glen Rose Limestone	7
Miscellaneous Measurements	N	218HSCC - Hensell Sand and Cow Creek Limestone	8
Miscellaneous Measurements	N	218HSCC - Hensell Sand and Cow Creek Limestone	9
Miscellaneous Measurements	N	218HSCC - Hensell Sand and Cow Creek Limestone	10

STATE OF TEXAS WELL REPORT for Tracking #1973

Owner: **steve kirchoff**

Owner Well #: **No Data**

Address: **1295 old berney rd
berney, TX 78666**

Grid #: **68-13-5**

Well Location: **1295 old berney rd
berney, TX 78666**

Latitude: **29° 47' 36" N**

Longitude: **098° 26' 15" W**

Well County: **Comal**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **8/1/2001**

Drilling End Date: **8/6/2001**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	280
	7	280	580

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	360	32

Seal Method: **Pressure**

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

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **160**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **tape**

Surface Completion: **Surface Sleeve Installed**

Water Level: **350 ft. below land surface on 2001-08-06** Measurement Method: **Unknown**

Packers: **1 rubber 360**

Type of Pump: **Submersible**

Pump Depth (ft.): **441**

Well Tests: **Jetted**

Yield: 20 GPM with 100 ft. drawdown after 3 hours

Water Quality:

Strata Depth (ft.)	Water Type
500-580	sweet

Chemical Analysis Made: **No**

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: **S.W. Owen Drilling Co.**
P.O. Box 2150
San Marcos, TX 78667

Driller Name: **S.W. Owen** License Number: **1589**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	top soil
1	60	white lime
60	310	gray lime
310	350	blue shale
350	500	gray lime
500	580	brown lime

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5	new	pvc	0-360 sch 40

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #140334

Owner:	Emerald Rainbow Play Place	Owner Well #:	6815703
Address:	c/o 14855 Blanco Ste 309 San Antonio, TX 78216	Grid #:	68-13-5
Well Location:	21155 Hwy 46 West Bulverde, TX 78163	Latitude:	29° 47' 58" N
Well County:	Comal	Longitude:	098° 26' 18" W
		Elevation:	1253 ft. above sea level
Type of Work:	New Well	Proposed Use:	Public Supply

Drilling Start Date: **4/4/2008**

Drilling End Date: **4/9/2008**

Plans Approved by TCEQ - **YES**

Borehole:

<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
10	0	530
6.75	0	530

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
0	380	82PortlandCment

Seal Method: **Pressure**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **150**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **estimated**

Surface Completion: **Surface Slab Installed**

Water Level: **340 ft. below land surface on 2008-04-08** Measurement Method: **Unknown**

Packers: **2 @ 380'**

Type of Pump: **Submersible**

Well Tests: **Pump** Yield: **7 GPM with 90 ft. drawdown after 36 hours**

Water Quality:

Strata Depth (ft.)	Water Type
No Data	No Data

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which
contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **TR Drilling & Service LLC**

**P.O. Box 733
Boerne, TX 78006**

Driller Name: **Johnathen Puhrmann**

License Number: **57994**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	3	Caliche
3	8	Tan yellow rock
8	13	Yellow rock & red clay
13	33	Yellow rock & shale
33	74	Grey rock & shale
74	86	Yellow rock
86	111	Grey rock & shale
111	218	Yellow rock little porous
218	314	Grey rock & shale
314	382	Yellow red rock
382	443	Grey rock & shale
443	482	Tan rock
482	504	Grey brown rock
504	515	Grey rock & shale
515	530	Grey shale

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
6 N	SDR 17	PVC	0-380
6 N	Sch 40	PVC Perf.	380-520

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #298622

Owner:	David Stanush	Owner Well #:	No Data
Address:	1451 Old Boerne Road Bulverde, TX 78163	Grid #:	68-13-5
Well Location:	1451 Old Boerne Rd. Bulverde, TX 78163	Latitude:	29° 47' 36" N
Well County:	Comal	Longitude:	098° 26' 23" W
		Elevation:	1248 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 7/19/2012 Drilling End Date: 7/26/2012

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	10	0	485

Drilling Method: Air Rotary

Borehole Completion: Open Hole

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	260	2 3/4 yds cemen

Seal Method: Gravity

Sealed By: TR Drilling & Service

Distance to Property Line (ft.): No Data

Distance to Septic Field or other
concentrated contamination (ft.): 150

Distance to Septic Tank (ft.): No Data

Method of Verification: Estimated

Surface Completion: Surface Slab Installed

Water Level:	No Data on 2012-07-26	Measurement Method:	Unknown
Packers:	2 packers = 0 - 260'		
Type of Pump:	Submersible		
Well Tests:	Estimated	No Test Data Specified	

Water Quality:

Strata Depth (ft.)	Water Type
No Data	No Data

Chemical Analysis Made: **No**Did the driller knowingly penetrate any strata which
contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **TR Drilling & Service LLC****PO Box 733
Boerne, TX 78006**Driller Name: **Kenneth Lee Schuchardt Jr**License Number: **50287**Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	17	White limestone & calichie
17	56	Grey limestone
56	64	Yellow & orange limestone
64	92	Speckled grey limestone
92	125	Grey limestone & glassy brown
125	182	Lt. tannish grey limestone
182	240	Lt. grey & brownish grey limestone
240	249	Beige & cream color limestone
249	264	Lt greenish grey & tan limestone w/trace of clay
264	310	Grey & beige limestone
310	325	Brownish grey, beige & glassy limestone
325	342	White, beige & grey & glassy limestone
342	370	White, beige, tan & glassy limestone
370	395	Med grey limestone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
6 N SCH 40	PVC	0 - 485	

395	430	Grey, white limestone glassy & trace of yellow clay
430	460	Brown limestone
460	471	Grey & brown limestone
471	485	Grey limestone w/trace of shale

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #476572

Owner:	Lextor LLC	Owner Well #:	No Data
Address:	20540 State Hwy 46 West, Ste 115 Spring Branch, TX 78070	Grid #:	68-13-5
Well Location:	1850 Old Boerne Road Bulverde, TX 78163	Latitude:	29° 47' 50" N
Well County:	Comal	Longitude:	098° 26' 31" W
		Elevation:	1308 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **4/5/2018**

Drilling End Date: **4/5/2018**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	550

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	2	Quik Crete 1 Bags/Sacks
	2	90	Benseal 6 Bags/Sacks
	90	100	2 Quik Crete & 2 Hole Plug 4 Bags/Sacks

Seal Method: **Tremie**

Distance to Property Line (ft.): **50**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **50**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **Tape Measure**

Surface Completion: **Surface Slab Installed**

Surface Completion by Driller

Water Level: **No Data**

Packers: **2 Rubber Cones at 100 ft.
2 Rubber Cones at 410 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **520**

Well Tests: **No Test Data Specified**

Water Quality:

Strata Depth (ft.)	Water Type
430 - 550	Cow Creek

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: **Puddle Jumper Well Company**
PO Box 204
Bulverde, TX 78163

Driller Name: **Joe Alan Wiebush**

License Number: **56053**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	24	Brown L/S & Red Clay
24	85	Gray & Brown L/S w/Gray Shale
85	120	Gray & Yellow L/S
120	175	Gray L/S & Gray Shale
175	210	Brown L/S
210	235	Brown & Gray L/S
235	287	Brown & L. Brown L/S
287	365	Tan & Cream L/S {Cave @ 365' - Lost Returns}
365	410	No Returns L/S {Cave @ 405'}
410	460	No Returns Soft L/S
460	550	No Returns L/S (Water)

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR 17	0	430
4.5	Screen	New Plastic (PVC)	SDR 17 0.32	430	530
4.5	Blank	New Plastic (PVC)	SDR 17	530	550

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #615024

Owner:	Dwayne Hart	Owner Well #:	CTGCD510b)C -sbwws525
Address:	7910 Teak Lane San Antonio, TX 78209	Grid #:	68-13-5
Well Location:	21477 State Hwy 46 W Spring branch, TX 78070	Latitude:	29° 47' 53.23" N
Well County:	Comal	Longitude:	098° 26' 29.7" W
		Elevation:	1290 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **8/1/2022**

Drilling End Date: **8/2/2022**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	11	0	3
	9	3	501

Drilling Method: **Air 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:	200	501	Gravel	3/8

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	200	Cement 42 Bags/Sacks

Seal Method: **Tremie**

Distance to Property Line (ft.): **50**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **150**

Distance to Septic Tank (ft.): **100**

Method of Verification: **No Data**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **Submersible**

Pump Depth (ft.): **480**

Well Tests: **Jetted** **Yield: 5 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
360 - 400	Reef
440 - 500	CowCreek

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: **Spring Branch Water Well Service**

**8567 US HIGHWAY 281 N
Spring Branch, TX 78070**

Driller Name: **Ernest V Haack IV**

License Number: **59587**

Comments: **3 yards of gravel used**

Report Amended on 9/28/2023 by Request #40479

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	10	Tan Limestone
10	70	Gray Limestone/Shale
70	80	Tan
80	85	Gray
85	95	Tan Breaks
95	160	Gray/Tan
160	190	Tan
190	220	Gray
220	280	Tan
280	340	Tan
340	360	Breaks Red Clay hard tan
360	400	Tan Limestone
400	440	Gray Shale/Limestone
440	495	Tan Limestone
495	501	Gray Limestone
501	501	TD

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	-2	380
4.5	Perforated or Slotted	New Plastic (PVC)	0.035	380	400
4.5	Blank	New Plastic (PVC)	SDR17	400	440
4.5	Perforated or Slotted	New Plastic (PVC)	0.035	440	500

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**

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

State Well Number	6813502
County	Comal
River Basin	Guadalupe
Groundwater Management Area	9
Regional Water Planning Area	L - South Central Texas
Groundwater Conservation District	Comal Trinity GCD
Latitude (decimal degrees)	29.8022222
Latitude (degrees minutes seconds)	29° 48' 08" N
Longitude (decimal degrees)	-98.4433333
Longitude (degrees minutes seconds)	098° 26' 36" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	218GLRS - Glen Rose Limestone
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1308
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	500
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	6/28/1985
Drilling Method	Air Rotary
Borehole Completion	Open Hole

Well Type	Withdrawal of Water
Well Use	Public Supply
Water Level Observation	Miscellaneous Measurements
Water Quality Available	Yes
Pump	Submersible
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	Slurry
Surface Completion	
Owner	SAWS Oakland Estates
Driller	T M Johnson
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	G0460166A
Groundwater Conservation District Well Number	
Owner Well Number	Oakland Estates well #1 (119 WP 1)
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Water Development Board
Created Date	12/12/1995
Last Update Date	4/18/2018

Remarks	
---------	--

Casing						
Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
7.625	Blank	Steel			0	163
6	Open Hole				163	500

Well Tests				
Test Date	Test Type	Yield (gallons per minute)	Drawdown (ft.)	Test Hours
6/28/1985	Jetted	125		72

Lithology

Top Depth (ft.)	Bottom Depth (ft.)	Description
0	1	Top soil
1	4	White lime
4	9	Yellow lime
9	126	Gray and brown lime
126	345	Gray and yellow lime
345	359	Brown lime
359	500	No samples

Annular Seal Range

Annular Seal Material	Amount	Unit	Top Depth (ft.)	Bottom Depth (ft.)
Cement & Sand Mix	81	Cubic Feet	0	163

Borehole

Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
10.625	0	163
6.75	163	500

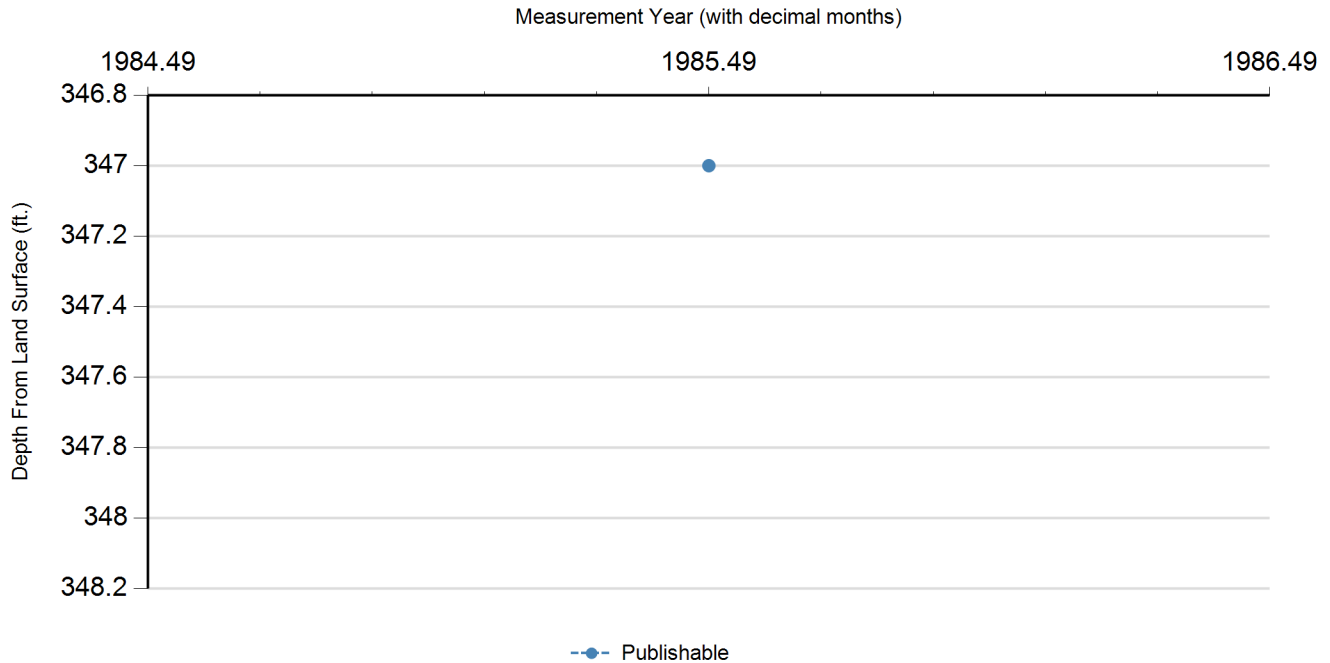
Plugged Back - No Data

Filter Pack - No Data

Packers

Packer Type	Depth (ft.)
Baker cement	160

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	6/28/1985		347		961	1	Registered Water Well Driller	Unknown		

Code Descriptions

Status Code	Status Description
P	Publishable

Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
68-13-502

Water Quality Analysis

Sample Date: 6/3/1999 **Sample Time:** 1130 **Sample Number:** 1 **Collection Entity:** Bexar Metropolitan Water District

Sampled Aquifer: Glen Rose Limestone

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		284	mg/L as CaCO ₃	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO ₃)		267	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	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		27.8	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		325.83	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		85	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.12	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		95.4	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		11.2	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		6.8	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	2	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.21	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		281	mg/L as CaCO ₃	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)		2	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		3.8	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		10.5	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	<	1	ug/L	
01065	NICKEL, DISSOLVED (UG/L AS NI)		4.6	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO ₃)		4.74	mg/L as NO ₃	

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
68-13-502**

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.07	mg/L as N	
00608	NITROGEN, AMMONIA, DISSOLVED (MG/L AS N)		0.028	mg/L as N	
00623	NITROGEN, KJELDAHL, DISSOLVED (MG/L AS N)		0.056	mg/L as N	
00090	OXIDATION REDUCTION POTENTIAL (ORP), MILLIVOLTS		134.8	MV	
00400	PH (STANDARD UNITS), FIELD		6.79	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.04	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		0.97	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)		10.2	mg/L as SIO2	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.18		
00932	SODIUM, CALCULATED, PERCENT		5	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		6.98	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		582	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		369	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		13.3	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		24.7	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		314	mg/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		4.4	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		6.7	ug/L	

Water Quality Analysis

Sample Date: 6/7/2002 **Sample Time:** 1200 **Sample Number:** 1 **Collection Entity:** Bexar Metropolitan Water District

Sampled Aquifer: Glen Rose Limestone

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		286	mg/L as CaCO ₃	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO ₃)		280	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	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		27.9	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		341.7	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)	<	50	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.0544	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS Ca)		98.6	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		12	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		1.68	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		1.65	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.21	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		292	mg/L as CaCO ₃	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)		1.07	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		2.42	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		11.2	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)		1.54	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	<	1	ug/L	
01065	NICKEL, DISSOLVED (UG/L AS NI)		3.98	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO ₃)		6.95	mg/L as NO ₃	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.57	mg/L as N	

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
68-13-502**

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00400	PH (STANDARD UNITS), FIELD		6.98	SU	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		0.82	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)		11.1	mg/L as SI02	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.16		
00932	SODIUM, CALCULATED, PERCENT		4	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		6.44	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		605	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		391	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		15	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		22.7	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		330	mg/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		1.63	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		78.7	ug/L	

Water Quality Analysis

Sample Date: 6/18/2003 **Sample Time:** 1015 **Sample Number:** 1 **Collection Entity:** Bexar Metropolitan Water District

Sampled Aquifer: Glen Rose Limestone

Analyzed Lab: LCRA - Lower Colorado River Authority

Reliability: Sampled using TWDB protocols

Collection Remarks: pH meter not calibrated

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CaCO3		200	mg/L as CaCO3	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)		288	mg/L as CaCO3	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	4	ug/L	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		26.6	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		351.46	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)	<	50	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.0696	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		103	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		10.7	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		2.54	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		4.34	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.2	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		303	mg/L as CaCO3	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)		1.73	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		2.93	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		11.1	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)		1.57	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	<	1	ug/L	
01065	NICKEL, DISSOLVED (UG/L AS NI)		2.2	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		5.36	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.21	mg/L as N	

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
68-13-502**

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00400	PH (STANDARD UNITS), FIELD		7	SU	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		0.93	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)		10.9	mg/L as SI02	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.17		
00932	SODIUM, CALCULATED, PERCENT		4	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		6.68	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		620	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		423	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		15.5	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		22	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		337	mg/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		1.87	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		45.1	ug/L	

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
68-13-502**

Water Quality Analysis

Sample Date: 7/22/2003 **Sample Time:** 1207 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Glen Rose Limestone

Analyzed Lab: LCRA - Lower Colorado River Authority

Reliability: Sampled using TWDB protocols

Collection Remarks: FOWH, 247 GPM

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)		285	mg/L as CaCO3	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	4	ug/L	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		27.9	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		347.8	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		56.9	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.0532	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		99.3	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		10.6	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)		3.09	ug/L	
82081	DELTA CARBON 13 C13/C12 PER MIL		-9	0/00	
50791	DEUTERIUM, EXPRESSED AS PERMIL VSMOW		-31.5	0/00	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.2	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		292	mg/L as CaCO3	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)		1.08	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		2.64	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		10.8	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)		1.22	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	<	1	ug/L	
01065	NICKEL, DISSOLVED (UG/L AS NI)		2.68	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		5.62	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.27	mg/L as N	
50790	OXYGEN-18, EXPRESSED AS PERMIL VSMOW		-4.6	0/00	

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
68-13-502**

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00400	PH (STANDARD UNITS), FIELD		7.31	SU	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		0.93	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)		11.1	mg/L as SI02	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.17		
00932	SODIUM, CALCULATED, PERCENT		4	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		6.5	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		277	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		393	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		14	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)		330	mg/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		1.45	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		28.2	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/gwdbbrpt.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.

Water Quality Field Data Sheet

SWN:	<u>N/A</u>
County :	<u>COMAL</u>
Aquifer :	<u>LOWER TRINITY</u>

Name: B.M.W.D.
Address: 180 RANCHERS CIRCLE
BULVERDE, TX.
owners well # W/P #1

Sample No. BM-3111-1999
Date: JUNE 3, 1999
By : ROGER P.

Bottle 1		Bottle 2		Bottle 3		Bottle 4		Bottle 5		Bottle 6		Bottle 7		Total Sub-Samples	
500 ml	Anions	1 liter	Cations	250 ml	Nitrate	1 liter	Radioactivity							All filtered unless other wise stipulated	
		2 ml	0.5 ml	HNO3	H2SO4	2 ml	HNO								
		(Nitric)	(Sulfuric)	(Nitric)											
		Remark													
Water level	LSD													Starting ph	6.92 @26.2
Temperature(00010)														14.2 ml. of 0.02N to	
														50 ml. of Sample	
Specific Cond.(00094)														Ending ph	4.50 @ 29.0
ph (00400)	6.79														
Eh (00090)	134.8 mv.														
Phenol ALK (82244)															
Total ALK (39086)															
Carbonate (00452)	0 meq/l														
Bicarbonate(00453)	5.68 meq/l														
Total Cations(+)	<i>Not analyzed</i>														
Total Anions(-)															
Total Hardness(00900)	282														
Dissolved Solids	315														

Sampling point DISCHARGE(FAUCET)									
Time:	1110	1115	1120	ml	ph				
					1				
ph:	6.55	6.75	6.79		2				
					3				
Temperature:	23.1	24.4	24.7		4				
					5				
Eh			134.8		6				
					7				
Conductivity:	583	585	582		8				
	other notes				9				
Pumping since	1000 Lift	SUBMERSIBLE			10				
Latitude	N/A	Power	ELECTRIC		11				
Longitude	N/A	Gpm	125		12				
					13				
					14				
					14.2				
					4.5				



FINAL ANALYSIS REPORT

LAB ID: 9907893

SAMPLE DESCRIPTION: Groundwater

COMPANY: TX Water Dev. Board

SAMPLE DATE: 06/03/99

ACCT NO:

SAMPLE TIME: 1130

REQUISITION No.: R11041

DATE RECEIVED: 06/04/99

LOCATION ID: BM-3111-1999

REPORT DATE: 06/23/99

PARAMETER	RESULTS	UNITS	STORET #	PQL in WATER	DATE ANALYZED
Bromide	0.12	mg/L	71870	0.02	06/15/99
Chloride	11.2	mg/L	00941	1.5	06/15/99
Fluoride	0.21	mg/L	00950	0.01	06/15/99
Nit., nitri/nitra-AFA	1.070	mg/L	00630	0.010	06/08/99
Nitrogen, Kjeldahl	0.056	mg/L	00623	0.040	06/08/99
Nitrogen, ammonia	<0.040	mg/L	00608	0.040	06/07/99
Phosphorus, Total	<0.040	mg/L	00665	0.040	06/08/99
Silica	10.20	mg/L	00955	0.50	06/07/99
Sulfate	13.30	mg/L	00946	1.50	06/15/99
Alkalinity, Total	267	mg/L	00410	1	06/07/99
Alkalinity, Phenol.	0	mg/L	00415	0	06/07/99
Boron, Dissolved	85.00	ug/L	01020	50.00	06/10/99
Cobalt, Diss. ICPMS	<1.0	ug/L	01035	1.0	06/08/99
Iron, Dissolved	<50.00	ug/L	01046	50.00	06/10/99
Lithium, Diss. ICPMS	3.8	ug/L	01130	2.0	06/08/99
Molybdenum Dis ICPMS	<1.0	ug/L	01060	1.0	06/08/99
Potassium, Dissolved	0.97	mg/L	00935	0.20	06/10/99
Strontium, Dissolved	369.00	ug/L	01080	20.00	06/10/99
Vanadium, Diss ICPMS	4.4	ug/L	01085	1.0	06/08/99
Aluminum, Dis. ICPMS	<4.0	ug/L	01106	4.0	06/08/99
Arsenic, Diss. ICPMS	<2.0	ug/L	01000	2.0	06/08/99
Barium, Diss. ICPMS	27.8	ug/L	01005	1.0	06/08/99
Cadmium, Diss. ICPMS	<1.0	ug/L	01025	1.0	06/08/99
Calcium, Dissolved	95.40	mg/L	00915	0.20	06/22/99
Chromium, Diss ICPMS	6.8	ug/L	01030	1.0	06/08/99
Copper, Diss. ICPMS	<2.0	ug/L	01040	2.0	06/08/99
Lead, Diss. ICPMS	2.0	ug/L	01049	1.0	06/08/99
Magnesium, Dissolved	10.50	mg/L	00925	0.20	06/10/99
Manganese, Dis ICPMS	<1.0	ug/L	01056	1.0	06/08/99
Nickel, Diss. ICPMS	4.6	ug/L	01065	1.0	06/08/99
Selenium, Dis. ICPMS	<4.0	ug/L	01145	4.0	06/08/99
Sodium, Dissolved	6.98	mg/L	00930	0.20	06/10/99
Antimony, Dis. ICPMS	<1.0	ug/L	01095	1.0	06/08/99
Beryllium, Dis ICPMS	<1.0	ug/L	01010	1.0	06/08/99
Thallium, Diss ICPMS	<1.0	ug/L	01057	1.0	06/08/99
Zinc, Diss. ICPMS	6.7	ug/L	01090	2.0	06/08/99

2002FY

TWDB Water Quality Field Data Sheet

State Well Number: 68-13-508

Name: BEXAR METRO WATER

Sample ID Number: BM-1423-02

County: BEXAR

Address: 2055 W. MALONE

Date: 6-7-02

County Code: 029

SAN ANTONIO TX, 78225

Sampler(s): M. APAEZ

Aquifer Code: TRINITY

218 Hsc

Phone Number: (210) 357-5706

Aquifer Id: 28

Attention: ROGER PLACENCIA

Well Name or #: 119 W.P. #1

CIRCLE EACH SAMPLE FRACTION COLLECTED:

1	2	3	5
500ml (filtered)	500ml (filtered)	250ml (filtered)	
Anions / Total Alk.	Cations	Nitrate	
Ice	Nitric (HNO3)	Ice + H2SO4	

Proper preservation requires adding enough of the correct acid to each sample fraction to bring the pH below 2.0.

Time In: 1130

Time Out: 1220

W. L. depth from LSD (ft.): 500

W.L. remark:

M.P. =

Pumping Since: 1130

Sampling Point: F.A.W

Well Use: PUBLIC

FIELD G.P.S. readings

Lift: SUBMERSIBLE

Latitude:

Power: ELECTRIC

Longitude:

Sample Time: 1200

Filter pressure: hand pump / time

Water Quality Stabilization Parameters Table

(at least 3 readings at five minute intervals)

Time:	1135	1140	1145						
pH:	6.95	6.98	6.98						
Celsius Temp. (00010)	22.8	22.7	22.7						
Conductivity (µS/cm):	604	605	605						

Notes:

Data Entered By Sampler into Database:

yes / no

Calibration Verification Readings

pH	7.00	7.00
	4 or 10	10.01
SLP = 53.7		
Conductivity	500	500
	1000	1001
	2000	
	5000	

Field Alkalinity Titration:

7.04 Start pH 4.5 End pH

50.0 mL Sample Size

mL Acid added for Phenol (> 8.3)

14.3 mL Acid added for Total (8.3 - 4.5)

Items below calculated from: mL acid added x 20 = Alkalinity

Phenol Alkalinity (83244): mg/L

Total Alkalinity (35088): 286 mg/L

Items Below Calculated Later From Results:

Dissolved Solids (mg/L): 330

Hardness (as CaCO3): 292

Balanced: V

LCRA Environmental Laboratory Services

Date: 27-Jun-02

CLIENT: Texas Water Development Board
Lab Order: 0206103 **File No:** 20140
Project: TWDB FY02
Lab ID: 0206103-10

Client Sample ID: 68-13-508
Collection Date: 6/7/02 12:00:00 PM
Matrix: GROUNDWATER

Analyses	Storet	Result	PQL	Qual	Units	DF	BatchID	Date Analyzed
ICP METALS DISSOLVED		E200.7	Analyst: MLP					
Calcium		98.6	0.20		mg/L	1	R14721B	6/18/02 8:16:00 PM
Magnesium		11.2	0.20		mg/L	1	R14721B	6/18/02 8:16:00 PM
Potassium		0.82	0.20		mg/L	1	R14721B	6/18/02 8:16:00 PM
Sodium		6.44	0.70		mg/L	1	R14721B	6/18/02 8:16:00 PM
ICP METALS DISSOLVED		E200.7	Analyst: MLP					
Boron		ND	50		µg/L	1	R14665B	6/18/02 8:16:00 PM
Iron		ND	50		µg/L	1	R14665B	6/18/02 8:16:00 PM
Strontium		391	20		µg/L	1	R14665B	6/18/02 8:16:00 PM
ICPMS DISSOLVED METALS		E200.8	Analyst: SW					
Aluminum		ND	4.00		µg/L	1	R14656B	6/18/02
Antimony		ND	1.00		µg/L	1	R14656B	6/18/02
Arsenic		ND	2.00		µg/L	1	R14656B	6/18/02
Barium		27.9	1.00		µg/L	1	R14656B	6/18/02
Beryllium		ND	1.00		µg/L	1	R14656B	6/18/02
Cadmium		ND	1.00		µg/L	1	R14656B	6/18/02
Chromium		1.68	1.00		µg/L	1	R14656B	6/18/02
Cobalt		ND	1.00		µg/L	1	R14656B	6/18/02
Copper		1.65	1.00		µg/L	1	R14656B	6/18/02
Lead		1.07	1.00		µg/L	1	R14656B	6/18/02
Lithium		2.42	2.00		µg/L	1	R14656B	6/18/02
Manganese		1.54	1.00		µg/L	1	R14656B	6/18/02
Molybdenum		ND	1.00		µg/L	1	R14656B	6/18/02
Nickel		3.98	1.00		µg/L	1	R14656B	6/18/02
Selenium		ND	4.00		µg/L	1	R14656B	6/18/02
Thallium		ND	1.00		µg/L	1	R14656B	6/18/02
Vanadium		1.63	1.00		µg/L	1	R14656B	6/18/02
Zinc		78.7	4.00		µg/L	1	R14656B	6/18/02
CATION/ANION BALANCES		CALCULATION	Analyst: AMJ					
Cation/Anion Balance		Balanced		Date		1	R14778	6/26/02
ANIONS BY ION CHROMATOGRAPHY, DISSOLVE E300			Analyst: WR					
Bromide Dissolved		0.05	0.02		mg/L	1	R14737C	6/21/02 11:43:32 PM
Chloride Dissolved		12.0	1.00		mg/L	1	R14737C	6/21/02 11:43:32 PM

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

LCRA Environmental Laboratory Services

Date: 27-Jun-02

CLIENT: Texas Water Development Board
Lab Order: 0206103 **File No:** 20140
Project: TWDB FY02
Lab ID: 0206103-10

Client Sample ID: 68-13-508

Collection Date: 6/7/02 12:00:00 PM
Matrix: GROUNDWATER

Analyses	Storet	Result	PQL	Qual	Units	DF	BatchID	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY, DISSOLVE E300								
Fluoride Dissolved		0.21	0.01		mg/L	1	R14737C	6/21/02 11:43:32 PM
Sulfate Dissolved		15.0	1.00		mg/L	1	R14737C	6/21/02 11:43:32 PM
ALKALINITY								
			M2320 B					Analyst: CMM
Alkalinity, Phenolphthalein		ND	0		mg/L CaCO	1	R14632	6/17/02
Alkalinity, Total (As CaCO3)		280	2		mg/L CaCO	1	R14632	6/17/02
NITRATE AND NITRITE								
			E353.2					Analyst: WM
Nitrogen, Nitrate & Nitrite		1.57	0.02		mg/L	1	R14649B	6/17/02
SILICA								
			E370.1					Analyst: WM
Silica, Dissolved (as SiO2)		11.1	0.50		mg/L	1	R14587D	6/12/02

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

2003FY

TWDB Water Quality Field Data Sheet

Newly Invented Well

State Well Number: 6813508

County: Comal

County Code: 0891

Aquifer Code: 218HSC

Aquifer Id: 28

Name: Bexar Metro Water District

Address: 2055 W. Mulberry

San Antonio Tx, 78225

Phone Number: (210) 357-5706

Attention: Roger Placencia

Well Name or #: 119 WPT1 Bexar Metro

Sample ID Number: 1415

Date: 6-18-03

Sampler(s): M. A. 2

Calibration Verification Readings

pH 7 = 6.35

4 or 10 = 4.24

SLP = 59.2 7.38 =

Conductivity 500 = 509

1000 = 1007

2000 =

5000 =

CIRCLE EACH SAMPLE FRACTION COLLECTED:

1	2	3	4	5
500ml (filtered)	500ml (filtered)	250ml (filtered)		
Anions / Total Alk.	Cations	Nitrate		
Ice	Nitric (HNO3)	Ice + H2SO4		

Proper preservation requires adding enough of the correct acid to each sample fraction to bring the pH below 2.0.

Time In: 9:35

Time Out: 1:00

W. L. depth from LSD (ft.): 500

W.L. remark: M.P. =

Pumping Since: 945

Sampling Point: FAW

Well Use: Public

FIELD G.P.S. readings

Lift: Turbine

Latitude: 29° 48' 07. "

Power: Electric

Longitude: 98° 26' 35. "

Casing Type:

Casing Size: "

Sample Time: 1015

Filter pressure: hand pump / line

Water Quality Stabilization Parameters Table

(at least 3 readings at five minute intervals)

Time:	9:55	10:00	10:05						
pH:	6.31	6.32	6.32	7.0	disturbed	pH			
Celsius Temp. (00010)	22.0	22.0	22.0						
Conductivity (uS/cm):	619	621	620						

Notes:

pH meter not calibrated

Field Alkalinity Titration:

7.36 Start pH 4.55 End pH

50.0 mL Sample Size

mL Acid added for Phenol (> 8.3)

10 mL Acid added for Total (8.3 - 4.5)

Items below calculated from: mL acid added x 20 = Alkalinity

Phenol Alkalinity (83244): mg/L

Total Alkalinity (39066): 200 mg/L 4,258

Items Below Calculated Later From Results:

Dissolved Solids (mg/L): 337

Hardness (as CaCO3): 308

Balanced: ✓

Data Entered By Sampler Into Database

yes / no

* Top of bottle broke off the lab.

LCRA Environmental Laboratory Services

Date: 10-Jul-03

CLIENT: Texas Water Development Board
Lab Order: 0306281 **File No:** 25108
Project: TWDB FY03
Lab ID: 0306281-05

Client Sample ID: 68-13-508
Collection Date: 6/18/2003 10:15:00 AM
Matrix: GROUNDWATER

Analyses	Storet	Result	Qual	PQL	Units	DF	Batch ID	Date Analyzed
ICP METALS DISSOLVED		E200.7		Analyst: MLP				
Calcium		103		0.20	mg/L	1	20412	6/25/2003 6:48:51 PM
Magnesium		11.1		0.20	mg/L	1	20412	6/25/2003 6:48:51 PM
Potassium		0.93		0.20	mg/L	1	20412	6/25/2003 6:48:51 PM
Sodium		6.68		0.70	mg/L	1	20412	6/25/2003 6:48:51 PM
ICP METALS DISSOLVED		E200.7		Analyst: MLP				
Boron		ND		50	µg/L	1	20415	6/25/2003 6:48:51 PM
Iron		ND		50	µg/L	1	20415	6/25/2003 6:48:51 PM
Strontium		423		20	µg/L	1	20415	6/25/2003 6:48:51 PM
ICPMS DISSOLVED METALS		E200.8		Analyst: SW				
Aluminum		ND		4.00	µg/L	1	20384	6/25/2003
Antimony		ND		1.00	µg/L	1	20384	6/25/2003
Arsenic		ND		2.00	µg/L	1	20384	6/25/2003
Barium		26.6		1.00	µg/L	1	20384	6/25/2003
Beryllium		ND		1.00	µg/L	1	20384	6/25/2003
Cadmium		ND		1.00	µg/L	1	20384	6/25/2003
Chromium		2.54		1.00	µg/L	1	20384	6/25/2003
Cobalt		ND		1.00	µg/L	1	20384	6/25/2003
Copper		4.34		1.00	µg/L	1	20384	6/25/2003
Lead		1.73		1.00	µg/L	1	20384	6/25/2003
Lithium		2.93		2.00	µg/L	1	20384	6/25/2003
Manganese		1.57		1.00	µg/L	1	20384	6/25/2003
Molybdenum		ND		1.00	µg/L	1	20384	6/25/2003
Nickel		2.20		1.00	µg/L	1	20384	6/25/2003
Selenium		ND		4.00	µg/L	1	20384	6/25/2003
Thallium		ND		1.00	µg/L	1	20384	6/25/2003
Vanadium		1.87		1.00	µg/L	1	20384	6/25/2003
Zinc		45.1		4.00	µg/L	1	20384	6/25/2003
CATION/ANION BALANCES		CALCULATION		Analyst: WM				
Cation/Anion Balance		Balanced		0	Date	1	20588	7/8/2003
ANIONS BY ION CHROMATOGRAPHY, DISSOLVE		E300		Analyst: WR				
Bromide Dissolved		0.07		0.02	mg/L	1	20574	7/7/2003 8:37:30 PM
Chloride Dissolved		10.7		1.00	mg/L	1	20574	7/7/2003 8:37:30 PM
Fluoride Dissolved		0.20		0.01	mg/L	1	20574	7/7/2003 8:37:30 PM
Sulfate Dissolved		15.5		1.00	mg/L	1	20574	7/7/2003 8:37:30 PM
ALKALINITY		M2320 B		Analyst: CMM				
Alkalinity, Phenolphthalein		ND		0	mg/L CaCO3	1	20365	6/24/2003
Alkalinity, Total (As CaCO3)		288		2	mg/L CaCO3	1	20365	6/24/2003

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit

LCRA Environmental Laboratory Services

Date: 10-Jul-03

CLIENT: Texas Water Development Board
Lab Order: 0306281 **File No:** 25108
Project: TWDB FY03
Lab ID: 0306281-05

Client Sample ID: 68-13-508
Collection Date: 6/18/2003 10:15:00 AM
Matrix: GROUNDWATER

Analyses	Storet	Result	Qual	PQL	Units	DF	Batch ID	Date Analyzed
NITRATE AND NITRITE			E353.2					Analyst: WM
Nitrogen, Nitrate & Nitrite		1.21		0.02	mg/L	1	20411	6/26/2003
SILICA			E370.1					Analyst: WM
Silica, Dissolved (as SiO ₂)		10.9		0.50	mg/L	1	20376	6/25/2003

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

TWDB Water Quality Field Data Sheet

New Well:

yes / no

Send Results To: Owner / Lessee

Type of Sample: LCRA / HACH

State Well Number:

68435087

Owner's Name:

Bexar Westwater District

Sample Number:

3020

County:

Cornell

Lessee's Name:

Roger Placencia

Date:

7/22/03

County Code:

091

Attention:

San Antonio TX 78255

Sampler(s):

D. Coker

Aquifer Code:

218 HSCC

Mailing Address:

2055 W. Maloune

Aquifer Id:

28

Well Number:

Bellville Hills 4074241

Daily Meter Calibration:

pH

7

4 or 10

6.29

Add enough of the proper acid to each bottle that is preserved to drop the pH to 2.

11/9 and 1

1 (on ice)	2	3 (on ice)	4 (on ice)	5
500ml (filtered)	500ml (filtered)	250ml (filtered)	1L	1L
Anions / Total Alkalinity	1.5 Cations	1.0 Nitrate/Nitrite	Tritium Dating	Cation 14
no preservative	1.5 ml Nitric (HNO3)	0.5 ml Sulfuric (H2SO4)	No preservative	4.5 ml NaOH
				6

Time In:

Time Out:

1 - 500 ml
Oxy 18, Deuterium
Carbon 13

W. L. depth from LSD (ft.):

W. L. remark:

Pumping Since:

11:30

Sampling Point:

EC04 / 297 GPM

Well Use:

PS

Latitude:

294608

N

Lift:

5

Longitude:

0982636

W

Power:

E

Elevation:

(1281)

ft.

Sample Time:

1207

Filter pressure:

hand line

W. Q. Stabilization Parameters Table

Time:	1135	1140	1146	1151	1156	1201	1206
pH:	6.25	6.40	6.81	7.05	7.63	7.65	7.31
Temperature:	23.7	23.3	23.4	23.5	22.6	23.2	23.2
Conductivity:	516	438	330	655	488	402	277
Conductivity Temperature:							

Final Readings:

Items Below Calculated Later From Results:	
Total Hardness:	292
Calculated TDS (mg/L):	330

Field Alkalinity Titration:	
Start pH	10.00
End pH	4.00
50 ml. Sample Size	
ml. Acid added for Total	
ml. Acid added for Phenol	
Items below calculated from ml. acid added data:	
Field Total Alkalinity:	0.0 mg/L
Field Phenol Alkalinity:	0.0 mg/L

Notes:

No Alk

pH meter acting
up. Read 0.60

LCRA Environmental Laboratory Services

Date: 19-Aug-03

CLIENT: Texas Water Development Board
Lab Order: 0307327 **File No:** 25558
Project: TWDB FY03
Lab ID: 0307327-02

Client Sample ID: 68-13-508
Collection Date: 7/22/2003 12:07:00 PM
Matrix: GROUNDWATER

Analyses	Storet	Result	Qual	PQL	Units	DF	Batch ID	Date Analyzed
ICP METALS DISSOLVED								
		E200.7						Analyst: MLP
Calcium		99.3		0.20	mg/L	1	21089	8/7/2003 7:01:12 PM
Magnesium		10.8		0.20	mg/L	1	21089	8/7/2003 7:01:12 PM
Potassium		0.93		0.20	mg/L	1	21089	8/7/2003 7:01:12 PM
Sodium		6.50		0.70	mg/L	1	21089	8/7/2003 7:01:12 PM
ICP METALS DISSOLVED								
		E200.7						Analyst: MLP
Boron		57		50	µg/L	1	21091	8/7/2003 7:01:12 PM
Iron		ND		50	µg/L	1	21091	8/7/2003 7:01:12 PM
Strontium		393		20	µg/L	1	21091	8/7/2003 7:01:12 PM
ICPMS DISSOLVED METALS								
		E200.8						Analyst: SW
Aluminum		ND		4.00	µg/L	1	21154	8/12/2003
Antimony		ND		1.00	µg/L	1	21154	8/12/2003
Arsenic		ND		2.00	µg/L	1	21154	8/12/2003
Barium		27.9		1.00	µg/L	1	21154	8/12/2003
Beryllium		ND		1.00	µg/L	1	21154	8/12/2003
Cadmium		ND		1.00	µg/L	1	21154	8/12/2003
Chromium		ND		1.00	µg/L	1	21154	8/12/2003
Cobalt		ND		1.00	µg/L	1	21154	8/12/2003
Copper		3.09		1.00	µg/L	1	21154	8/12/2003
Lead		1.08		1.00	µg/L	1	21154	8/12/2003
Lithium		2.64		2.00	µg/L	1	21154	8/12/2003
Manganese		1.22		1.00	µg/L	1	21154	8/12/2003
Molybdenum		ND		1.00	µg/L	1	21154	8/12/2003
Nickel		2.68		1.00	µg/L	1	21154	8/12/2003
Selenium		ND		4.00	µg/L	1	21154	8/12/2003
Thallium		ND		1.00	µg/L	1	21154	8/12/2003
Vanadium		1.45		1.00	µg/L	1	21154	8/12/2003
Zinc		28.2		4.00	µg/L	1	21154	8/12/2003
CATION/ANION BALANCES								
		CALCULATION						Analyst: WM
Cation/Anion Balance		Balanced		0	Date	1	21159	8/13/2003
ANIONS BY ION CHROMATOGRAPHY, DISSOLVE								
		E300						Analyst: WM
Bromide Dissolved		0.05		0.02	mg/L	1	21152	8/11/2003 8:16:57 PM
Chloride Dissolved		10.6		1.00	mg/L	1	21152	8/11/2003 8:16:57 PM
Fluoride Dissolved		0.20		0.01	mg/L	1	21152	8/11/2003 8:16:57 PM
Sulfate Dissolved		14.0		1.00	mg/L	1	21152	8/11/2003 8:16:57 PM
ALKALINITY								
		M2320 B						Analyst: CMM
Alkalinity, Phenolphthalein		ND		0	mg/L CaCO ₃	1	20938	7/31/2003
Alkalinity, Total (As CaCO ₃)		285		2	mg/L CaCO ₃	1	20938	7/31/2003

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 I Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit

LCRA Environmental Laboratory Services

Date: 19-Aug-03

CLIENT: Texas Water Development Board
Lab Order: 0307327 **File No:** 25558
Project: TWDB FY03
Lab ID: 0307327-02

Client Sample ID: 68-13-508
Collection Date: 7/22/2003 12:07:00 PM
Matrix: GROUNDWATER

Analyses	Storet	Result	Qual	PQL	Units	DF	Batch ID	Date Analyzed
NITRATE AND NITRITE				E353.2				Analyst: WM
Nitrogen, Nitrate & Nitrite		1.27		0.02	mg/L	1	20892	7/28/2003
SILICA				E370.1				Analyst: WM
Silica, Dissolved (as SiO2)		11.1		0.50	mg/L	1	20950	7/31/2003

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside accepted recovery limits		

STABLE CARBON, HYDROGEN AND OXYGEN ISOTOPE ANALYSES FOR THE TEXAS
WATER DEVELOPMENT BOARD.

ATTN: DR. ALI CHOWDHURY.

CONTRACT #03-0483-0478

Conrad Co.

SAMPLE		$\delta^{13}\text{C}_{\text{PDB}}$	$\delta\text{D}_{\text{SMOW}}$	$\delta^{18}\text{O}_{\text{SMOW}}$
3019-68-20-405	7/22/03	-2.9, -3.4	-30, -30	-4.6
3020-68-13-508	"	-9.0	-32, -31	-4.6
3021-68-21-201	7/22/03	-2.1, -2.5	-32, -32	-4.8
3022-68-34-803	"	-7.6	-30, -30	-4.3, -4.4
3023-69-07-106	7/23/03	-6.8	-38, -38	-5.6, -5.6
3024-68-17-802	"	-6.9	-29, -30	-4.0, -4.0
3025-68-11-404	7/23/03	-0.5, -0.4	-35, -34	-5.2
3026-68-19-323	7/24/03	-3.2	-30, -30	-4.5
3027-68-19-303	7/24/03	-4.3	-29, -30	-4.4
3028-68-19-316	"	-1.6	-28, -29	-4.5
3029-68-11-810	7/25/03	-3.9	-30, -30	-4.3, -4.2
3030-69-24-504	7/28/03	-8.1	-36, -36	-5.4
3031-68-25-507	7/28/03	-3.1	-32, -34	-4.7, -4.8
3032-68-19-506	7/29/03	-9.0, -9.2	-28, -28	-4.8
3033-68-19-612	7/29/03	-3.4	-30, -30	-4.7
3034-68-11-809	"	-1.8	-34, -34	-5.0, -4.9
3035-68-21-103	7/29/03	-4.9	-33, -33	-4.8

CSL Ref#EJ69

Page two

State Well No. 68 13 502 Previous Well No. County Comal 091
River Basin Guadalupe 18 Zone 1 Lat. 29 48 09 Long. 098 26 26 Source of Coord. 1
Owner's Well No. 1 Location 1/4, 1.4, Section, Block , Survey

Address _____ Tenant/Oper. _____

Date Drilled 06281985 Depth 500 Source of Depth Datum ☒ Altitude 1250 Source of Alt. Datum ☒
Aquifer Glen Rose 218GLRS Well Type ☒ User 618626

Date

--	--	--	--	--	--

 Mess.

--	--	--	--	--	--

 •

--	--

Aquifer Glen Rose
Well No. 68-13-50

Original copy to be
forwarded to the
Department of Water Resources
P. O. Box 13087
Austin, Texas 78711

State of Texas
WATER WELL REPORT

Texas Water Well Drillers Board
P. O. Box 13087
Austin, Texas 78711

ATTENTION OWNER: Confidentiality-Privilege Notice on Reverse Side

OWNER Gordon B. Sutton Address P. O. Box 16310 San Antonio, Tx. 78216
(Name) (Street or RFD) (City) (State) (Zip)
LOCATION OF WELL: Comal 2.5 miles in North direction from Bulverde
(County) (Miles) (Direction) (Town)
Oakland Estates

☐ Legal description:

Section No. _____ Block No. _____ Township _____

Abstract No. _____ Survey Name _____

Distance and direction from two intersecting section or survey lines _____

☒ See attached map.

TYPE OF WORK (Check):
☐ Deepening
☐ Plugging

4) PROPOSED USE (Check):
☐ Domestic ☐ Industrial ☒ Public Supply
☐ Irrigation ☐ Test Well ☐ Other _____

5) DRILLING METHOD (Check):
☐ Mud Rotary ☐ Air Hammer ☐ Driven ☐ Bored
☒ Air Rotary ☐ Cable Tool ☐ Jetted ☐ Other _____

WELL LOG:

6-28-85

DIAMETER OF HOLE		
Dia. (in.)	From (ft.)	To (ft.)
<u>10 5/8</u>	<u>Surface</u>	<u>163</u>
<u>6 3/4</u>	<u>163</u>	<u>500</u>

7) BOREHOLE COMPLETION:

☒ Open Hole ☐ Straight Wall ☐ Underreamed
☐ Gravel Packed ☐ Other _____
If Gravel Packed give interval . . . from _____ ft. to _____ ft.

8) CASING, BLANK PIPE, AND WELL SCREEN DATA:

	Dia. (in.)	New or Used	Steel, Plastic, etc. Perf., Slotted, etc. Screen Mfg., if commercial	Setting (ft.)		Gage Casing Screen
				From	To	
<u>1 top soil</u>						
<u>4 white lime</u>						
<u>9 yellow lime</u>						
<u>126 gray and brown lime</u>						
<u>126 - 345 gray and yellow lime</u>						
<u>345 - 359 brown lime</u>						
<u>359 - 500 no samples</u>						
<u>one foot cave at 357, very broken from 375 to 381 and 400 to 406</u>						
<u>no large amount of water below 406</u>						

CEMENTING DATA

Cemented from 0 ft. to 163 ft.
Method used 81 cubic feet of 50% cement sand
Cemented by slurry poured from top in dry
annulus (Company or Individual)

9) WATER LEVEL:

Static level 347 ft. below land surface Date 6-28-85
Artesian flow _____ gpm. Date _____

10) PACKERS: Type Depth

Baker cement basket at 160'

11) TYPE PUMP: Goulds submersible 70J10 s#159

☐ Turbine ☐ Jet ☒ Submersible ☐ Cylinder
☐ Other 10hp 230V 3ph s#200022

Depth to pump bowls, cylinder, jet, etc., 430 on 2" galv.

12) WELL TESTS:

☐ Type Test: ☐ Pump ☐ Bailer ☒ Jetted ☐ Estimated
Yield: 125 gpm with ? ft. drawdown after 72 hrs.

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief.

WELL NAME T. M. Johnson Water Well Driller's License No. 857
(Type or Print)
ADDRESS P.O. Box 925 Castroville, Tx. 78009
(Street or RFD) (City) (State) (Zip)

(Signed) T. M. Johnson (Licensed Water Well Driller) (Registered Driller Trainee)
Attach electric log, chemical analysis, and other pertinent information, if available.

For TDWR use only
Well No. 68-13-58
Located on map Yes D65



Texas Water Development Board
Well Schedule



State Well Number: **68-13-502** Previous Well Number: County: **Comal** **91**

Latitude (dms): **294808** Longitude (dms): **982636** Coordinate Accuracy: **Global Positioning System - GPS**

River Basin: **Guadalupe River** GMA: **9** RWPA: **L** GCD:

Owner: **Bexar MWD (Oakland Estates) #1 Quercuse** Driller: **T M Johnson** Aquifer ID: **Trinity**

Aquifer Code: **218GLRS**

Depth (ft): **500**

Elevation (ft): **1308**

**GLEN ROSE
LIMESTONE**

Source of Depth: **Driller's Log**

Source of Elevation: **Digital Elevation
Model -DEM**

Date Drilled: **06/28/1985** Well Type: **Withdrawal of Water**

Type of Lift: **Submersible Pump** Power: **Electric Motor** Horsepower: **10.0**

Construction: **Air Rotary** Completion: **Open Hole**

Casing Material: **Steel** Screen Material:

CASING INTERVALS:			
Casing/Blank Pipe (C)			
Well Screen/Slotted Zone (S)			
Open Hole (O)			
	Dia. (in.)	Top (ft.)	Bottom (ft.)
C	7	0	163
O	6	163	500

WATER USE

Primary: **Public Supply** Secondary: Tertiary:

Water Levels: **Miscellaneous Measurements** Water Quality: **N**

1 measurement
1985
-347

Other Data: Logs: **D**

REMARKS:

Owners Oakland Estates well #1. PWS
ID #0460166A. Estimated yield 125
GPM in 1985. Cemented from 0 to 163
feet.

Reporting Agency: **TWDB or Predecessor
Agency**

Date Collected or Reported: **12/12/1995**

Recorded by: D.R. Jones

update

State Well No. 68 13 502 Previous Well No. County Comal 091
River Basin Guadalupe 18 Zone 1 Lat. 29 48 09 Long. 098 26 26 Source of Coord. 1
Owner's Well No. 1 Location 1/4, 1.4, Section , Block , Survey

Owner	OAKLAND ESTATES	Driller	T m Johnson

Address _____ Tenant/Oper. _____

Date Drilled 06281985 Depth 500 Source of Depth Datum ☒ Altitude 1250 Source of Alt. Datum m

Aquifer Glen Rose 218GLRS Well Type W User 618626

Well Construction Const. Method Air Rotary ☒ A Casing Material Steel ☒ S

Completion Open ☒ Screen Material ☐
Lift Data Pump Mfr. Goulds Type Sub m ☒ No. Stages

Bowls Diam. _____ in. Setting 430 ft. Column Diam. 2 in.

Motor Mfr. _____ Fuel or Power Elec. ☒ Horsepower

Yield Flow _____ GPM Pump 125 GPM Meas. (Rept.) Est. driller Date 6/85

Performance Test Date _____ Length of Test _____ Production _____ GPM _____

Static Level ——— ft. Pumping Level ——— ft. Drawdown ——— ft. Sp.Cap. ——— GPM/ft.

Quality (Remarks) _____

Water Use Primary P.S. ☒ Secondary ☐ Tertiary ☐

Other Data Available Water Level ☒ M Water Quality ☒ N Logs ☒ D ☐ ☐ ☐ ☐ ☐ ☐ Other Data ☐ ☐ ☐ ☐ ☐ ☐

Date

06	28
----	----

 1985 Meas.

347	.		
-----	---	--	--

driller

Water Date

--	--

--	--	--	--

 Meas.

--	--	--	--

 •

--	--

Date						Meas.					•			
------	--	--	--	--	--	-------	--	--	--	--	---	--	--	--

Recorded By Phil N. TIVRCC Date Record Collected or Updated 12 12 1995

(20 max) Reporting Agency 01

Remarks

Aquifer Glen Rose
Well No. 68-13-502

Original copy by
sent mail to the
Department of Water Resources
P. O. Box 13087
Austin, Texas 78711

State of Texas
WATER WELL REPORT

Texas Water Well Drillers Board
P. O. Box 13087
Austin, Texas 78711

ATTENTION OWNER: Confidentiality/Privilege Notice on Reverse Side

OWNER Gordon B. Sutton Address P. O. Box 16310 San Antonio, Tx. 78216
(Name) (Street or RFD) (City) (State) (Zip)

LOCATION OF WELL:
County Comal 2.5 miles in North direction from Bulverde
(Town) (N.E., S.W., etc.)

Oakland Estates

☐ Legal description:

Section No. _____ Block No. _____ Township _____

Abstract No. _____ Survey Name _____

Distance and direction from two intersecting section or survey lines _____

☒ See attached map.

TYPE OF WORK (Check):

☐ Deepening
☐ Plugging

4) PROPOSED USE (Check):

☐ Domestic ☐ Industrial ☒ Public Supply
☐ Irrigation ☐ Test Well ☐ Other _____

5) DRILLING METHOD (Check):

☐ Mud Rotary ☐ Air Hammer ☐ Driven ☐ Bored
☒ Air Rotary ☐ Cable Tool ☐ Jetted ☐ Other _____

WELL LOG:

6-28-85

DIAMETER OF HOLE

Dia. (in.) From (ft.) To (ft.)

10 5/8	Surface	163
6 3/4	163	500

7) BOREHOLE COMPLETION:

☒ Open Hole ☐ Straight Wall ☐ Underreamed
☐ Gravel Packed ☐ Other _____

If Gravel Packed give interval . . . from _____ ft. to _____ ft.

8) CASING, BLANK PIPE, AND WELL SCREEN DATA:

	To (ft.)	Description and color of formation material	Dia. (in.)	New or Used	Steel, Plastic, etc. Perf., Slotted, etc. Screen Mfg., if commercial	Setting (ft.)		Gage Casing Screen
						From	To	
1		top soil						
1	4	white lime						
1	9	yellow lime						
1	126	gray and brown lime						
126	345	gray and yellow lime						
345	359	brown lime						
359	500	no samples						
one foot cave at 357, very broken from 375 to 381 and 400 to 406								
no large amount of water below 406								

CEMENTING DATA

Cemented from 0 ft. to 163 ft.

Method used 81 cubic feet of 50% cement sand slurry poured from top in dry

Cemented by anulas (Company or Individual)

9) WATER LEVEL:

Static level 347 ft. below land surface Date 6-28-85

Artesian flow _____ gpm. Date _____

10) PACKERS: Type Depth

Baker cement basket at 160'

11) TYPE PUMP: Goulds submergible 70J10 s#1591

☐ Turbine ☐ Jet ☒ Submersible ☐ Cylinder
☐ Other 10hp 230V 3ph s#200022

Depth to pump bowls, cylinder, jet, etc., 430 on 2" galv.

12) WELL TESTS:

RECEIVED
JUL 11 1985

DEPT. OF
WATER RESOURCES

(Use reverse side if necessary)

13) WATER QUALITY:

Did you knowingly penetrate any strata which contained undesirable

TWDB Water Quality Field Data Sheet

New Well: yes / no 502
State Well Number: 68-13-502
County: Comal
County Code: 091
Aquifer Code: 218 HSCC
Aquifer Id: 28
Send Results To: Owner / Lessee
Owner's Name: Bexar Met Water District
Lessee's Name: Roger Placencia
Mailing Address: 2055 W. Malou
San Antonio, TX 78225
Well Number: Bolton Hills, 107 WPH
119 WPH

Type of Sample: LCRA / HACH
Sample Number: 3020
Date: 7/22/03
Sampler(s): D. Coker

1 (on ice)	2	3 (on ice)	4 (on ice)	5
500ml (filtered)	500ml (filtered)	250ml (filtered)	1 L	1 L
Anions / Total Alkalinity	15 Cations	1.0 Nitrate/Nitrite	Tritium Dating	Carbon 14
no preservative	1/4 Nitric (HNO3)	0.5 ml Sulfuric (H2SO4)	No preservative	4-5 ml NaOH

Add enough of the proper acid to each bottle that is preserved to drop the pH to 2.

Daily Meter Calibration:
 pH 7 6.29
 4 or 10 10.01
 Conductivity 500
1000
2000
5000

Field Alkalinity Titration:
 Start pH None
 50 ml. Sample Size None
 ml. Acid added for Total None
 ml. Acid added for Phenol None
 Items below calculated from ml. acid added data:
 Field Total Alkalinity: 0.0 mg/L
 Field Phenol Alkalinity: 0.0 mg/L

Notes: no Alk,
pH meter acting
up. Could not

W. Q. Stabilization Parameters Table
 Time: 11:35 11:40 11:46 11:51 well 11:56 12:01 12:06
 pH: 6.25 6.40 6.81 7.05 sub 7.63 7.15 7.31
 Temperature: 23.7 23.3 23.4 23.5 down 22.6 23.2 23.2
 Conductivity: 516 438 330 655 488 402 277
 Conductivity Temperature:

Final Readings:
 Items Below Calculated Later From Results:
 Total Hardness: 292
 Calculated TDS (mg/L): 330

LCRA Environmental Laboratory Services

Date: 19-Aug-03

CLIENT: Texas Water Development Board
Lab Order: 0307327 **File No:** 25558
Project: TWDB FY03
Lab ID: 0307327-02

Client Sample ID: 68-13-308 **502**
Collection Date: 7/22/2003 12:07:00 PM
Matrix: GROUNDWATER

Analyses	Storet	Result	Qual	PQL	Units	DF	Batch ID	Date Analyzed
----------	--------	--------	------	-----	-------	----	----------	---------------

ICP METALS DISSOLVED

E200.7

Analyst: MLP

Calcium	99.3	0.20	mg/L	1	21089	8/7/2003 7:01:12 PM
Magnesium	10.8	0.20	mg/L	1	21089	8/7/2003 7:01:12 PM
Potassium	0.93	0.20	mg/L	1	21089	8/7/2003 7:01:12 PM
Sodium	6.50	0.70	mg/L	1	21089	8/7/2003 7:01:12 PM

ICP METALS DISSOLVED

E200.7

Analyst: MLP

Boron	57	50	µg/L	1	21091	8/7/2003 7:01:12 PM
Iron	ND	50	µg/L	1	21091	8/7/2003 7:01:12 PM
Strontium	393	20	µg/L	1	21091	8/7/2003 7:01:12 PM

ICPMS DISSOLVED METALS

E200.8

Analyst: SW

Aluminum	ND	4.00	µg/L	1	21154	8/12/2003
Antimony	ND	1.00	µg/L	1	21154	8/12/2003
Arsenic	ND	2.00	µg/L	1	21154	8/12/2003
Barium	27.9	1.00	µg/L	1	21154	8/12/2003
Beryllium	ND	1.00	µg/L	1	21154	8/12/2003
Cadmium	ND	1.00	µg/L	1	21154	8/12/2003
Chromium	ND	1.00	µg/L	1	21154	8/12/2003
Cobalt	ND	1.00	µg/L	1	21154	8/12/2003
Copper	3.09	1.00	µg/L	1	21154	8/12/2003
Lead	1.08	1.00	µg/L	1	21154	8/12/2003
Lithium	2.64	2.00	µg/L	1	21154	8/12/2003
Manganese	1.22	1.00	µg/L	1	21154	8/12/2003
Molybdenum	ND	1.00	µg/L	1	21154	8/12/2003
Nickel	2.68	1.00	µg/L	1	21154	8/12/2003
Selenium	ND	4.00	µg/L	1	21154	8/12/2003
Thallium	ND	1.00	µg/L	1	21154	8/12/2003
Vanadium	1.45	1.00	µg/L	1	21154	8/12/2003
Zinc	28.2	4.00	µg/L	1	21154	8/12/2003

CATION/ANION BALANCES

CALCULATION

Analyst: WM

Cation/Anion Balance	Balanced	0	Date	1	21159	8/13/2003
----------------------	----------	---	------	---	-------	-----------

ANIONS BY ION CHROMATOGRAPHY, DISSOLVE

E300

Analyst: WM

Bromide Dissolved	0.05	0.02	mg/L	1	21152	8/11/2003 8:16:57 PM
Chloride Dissolved	10.6	1.00	mg/L	1	21152	8/11/2003 8:16:57 PM
Fluoride Dissolved	0.20	0.01	mg/L	1	21152	8/11/2003 8:16:57 PM
Sulfate Dissolved	14.0	1.00	mg/L	1	21152	8/11/2003 8:16:57 PM

ALKALINITY

M2320 B

Analyst: CMM

Alkalinity, Phenolphthalein	ND	0	mg/L CaCO3	1	20938	7/31/2003
Alkalinity, Total (As CaCO3)	285	2	mg/L CaCO3	1	20938	7/31/2003

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside accepted recovery limits		

LCRA Environmental Laboratory Services

Date: 19-Aug-03

CLIENT: Texas Water Development Board
Lab Order: 0307327 **File No:** 25558
Project: TWDB FY03
Lab ID: 0307327-02

Client Sample ID: 68-13-~~508~~ 502
Collection Date: 7/22/2003 12:07:00 PM
Matrix: GROUNDWATER

Analyses	Storet	Result	Qual	PQL	Units	DF	Batch ID	Date Analyzed
----------	--------	--------	------	-----	-------	----	----------	---------------

NITRATE AND NITRITE

Nitrogen, Nitrate & Nitrite

E353.2

1.27

0.02

mg/L

1

20892

Analyst: WM
7/28/2003

SILICA

Silica, Dissolved (as SiO₂)

E370.1

11.1

0.50

mg/L

1

20950

Analyst: WM
7/31/2003

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

STABLE CARBON, HYDROGEN AND OXYGEN ISOTOPE ANALYSES FOR THE TEXAS
WATER DEVELOPMENT BOARD. ATTN: DR. ALI CHOWDHURY.

CONTRACT #03-0483-0478

Conna Co.

SAMPLE	$\delta^{13}\text{C}_{\text{PDB}}$	$\delta\text{D}_{\text{SMOW}}$	$\delta^{18}\text{O}_{\text{SMOW}}$
3019-68-20-405 <i>7/22/03</i>	-2.9, -3.4	-30, -30	-4.6
<u>3020-68-13-508</u> <i>"</i>	<u>-9.0</u>	<u>-32, -31</u>	<u>-4.6</u>
<i>502</i> 3021-68-21-201 <i>7/22/03</i>	-2.1, -2.5	-32, -32	-4.8
3022-68-34-803 <i>"</i>	-7.6	-30, -30	-4.3, -4.4
3023-69-07-106 <i>7/23/03</i>	-6.8	-38, -38	-5.6, -5.6
3024-68-17-802 <i>"</i>	-6.9	-29, -30	-4.0, -4.0
3025-68-11-404 <i>7/23/03</i>	-0.5, -0.4	-35, -34	-5.2
3026-68-19-323 <i>7/24/03</i>	-3.2	-30, -30	-4.5
3027-68-19-303 <i>7/24/03</i>	-4.3	-29, -30	-4.4
3028-68-19-316 <i>"</i>	-1.6	-28, -29	-4.5
3029-68-11-810 <i>7/25/03</i>	-3.9	-30, -30	-4.3, -4.2
3030-69-24-504 <i>7/28/03</i>	-8.1	-36, -36	-5.4
3031-68-25-507 <i>7/28/03</i>	-3.1	-32, -34	-4.7, -4.8
3032-68-19-506 <i>7/29/03</i>	-9.0, -9.2	-28, -28	-4.8
3033-68-19-612 <i>7/29/03</i>	-3.4	-30, -30	-4.7
3034-68-11-809 <i>"</i>	-1.8	-34, -34	-5.0, -4.9
3035-68-21-103 <i>7/27/03</i>	-4.9	-33, -33	-4.8

CSL Ref#EJ69

Page two

2003FY

TWDB Water Quality Field Data Sheet

State Well Number: 6813308
 County: Comal
 County Code: 0291
 Aquifer Code: 218HSCC
 Aquifer Id: 28

Name: Bear Metro Water District
 Address: 2055 W. Mulane
San Antonio Tx, 78225
 Phone Number: (210) 357-57-06
 Attention: Roger Placencia
 Well Name or #: 119 WP#1 Ranchers Circle

CIRCLE EACH SAMPLE FRACTION COLLECTED:			
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
500ml (filtered)	500ml (filtered)	250ml (filtered)	5
Anions / Total Alk.	Cations	Nitrate	
Ice	Nitric (HNO3)	Ice + H2SO4	

Proper preservation requires adding enough of the correct acid to each sample fraction to bring the pH below 2.0.

Time In: 9:35Time Out: 11:00W. L. depth from LSD (ft.): 500

W.L. remark: _____

M.P. = _____

Pumping Since: 945Sampling Point: FAWWell Use: Public

FIELD G.P.S. readings

Lift: TurbineLatitude: 29° 48' 07. "Power: ElectricLongitude: 98° 26' 35. "

Casing Type: _____

Casing Size: "Sample Time: 10:15

Filter pressure: hand pump / line

Water Quality Stabilization Parameters Table

(at least 3 readings at five minute intervals)

Time:	9:55	10:00	10:05			
pH:	6.31	6.37	6.32	7.0	extended pH	
Celsius Temp. (00010)	22.0	22.0	22.0			
Conductivity (uS/cm):	619	621	620			

* Top of bottle broke off @ the Lab.

Newly Inventoried Well _____

Sample ID Number: 1415Date: 6-18-03Sampler(s): M. Perez

Calibration Verification Readings	
pH	7 = <u>6.35</u> 4 or 10 = <u>9.24</u>
SLP = <u>59.2</u>	7.38 = _____
Conductivity	500 = <u>509</u> 1000 = <u>1007</u> 2000 = _____ 5000 = _____

Field Alkalinity Titration:

7.36 Start pH 4.55 End pH _____

50.0 mL Sample Size _____

mL Acid added for Phenol (> 8.3) _____

10 mL Acid added for Total (8.3 - 4.5) _____

Items below calculated from: mL acid added x 20 = Alkalinity

Phenol Alkalinity (82244): _____ mg/L

Total Alkalinity (39086): 200 mg/L 4.258

Items Below Calculated Later From Results:

Dissolved Solids (mg/L): 337Hardness (as CaCO3): 303Balanced: ✓

Notes:

pH meter not calibrated

Data Entered By Sampler Into Database: _____

yes / no ✓

LCRA Environmental Laboratory Services

Date: 10-Jul-03

502

CLIENT: Texas Water Development Board
Lab Order: 0306281 **File No:** 25108
Project: TWDB FY03
Lab ID: 0306281-05

Client Sample ID: 68-13-308
Collection Date: 6/18/2003 10:15:00 AM
Matrix: GROUNDWATER

Analyses	Storet	Result	Qual	PQL	Units	DF	Batch ID	Date Analyzed
ICP METALS DISSOLVED								
		E200.7		Analyst: MLP				
Calcium	103	0.20		mg/L	1	20412	6/25/2003 6:48:51 PM	
Magnesium	11.1	0.20		mg/L	1	20412	6/25/2003 6:48:51 PM	
Potassium	0.93	0.20		mg/L	1	20412	6/25/2003 6:48:51 PM	
Sodium	6.68	0.70		mg/L	1	20412	6/25/2003 6:48:51 PM	
ICP METALS DISSOLVED								
		E200.7		Analyst: MLP				
Boron	ND	50		µg/L	1	20415	6/25/2003 6:48:51 PM	
Iron	ND	50		µg/L	1	20415	6/25/2003 6:48:51 PM	
Strontium	423	20		µg/L	1	20415	6/25/2003 6:48:51 PM	
ICPMS DISSOLVED METALS								
		E200.8		Analyst: SW				
Aluminum	ND	4.00		µg/L	1	20384	6/25/2003	
Antimony	ND	1.00		µg/L	1	20384	6/25/2003	
Arsenic	ND	2.00		µg/L	1	20384	6/25/2003	
Barium	26.6	1.00		µg/L	1	20384	6/25/2003	
Beryllium	ND	1.00		µg/L	1	20384	6/25/2003	
Cadmium	ND	1.00		µg/L	1	20384	6/25/2003	
Chromium	2.54	1.00		µg/L	1	20384	6/25/2003	
Cobalt	ND	1.00		µg/L	1	20384	6/25/2003	
Copper	4.34	1.00		µg/L	1	20384	6/25/2003	
Lead	1.73	1.00		µg/L	1	20384	6/25/2003	
Lithium	2.93	2.00		µg/L	1	20384	6/25/2003	
Manganese	1.57	1.00		µg/L	1	20384	6/25/2003	
Molybdenum	ND	1.00		µg/L	1	20384	6/25/2003	
Nickel	2.20	1.00		µg/L	1	20384	6/25/2003	
Selenium	ND	4.00		µg/L	1	20384	6/25/2003	
Thallium	ND	1.00		µg/L	1	20384	6/25/2003	
Vanadium	1.87	1.00		µg/L	1	20384	6/25/2003	
Zinc	45.1	4.00		µg/L	1	20384	6/25/2003	
CATION/ANION BALANCES								
		CALCULATION		Analyst: WM				
Cation/Anion Balance	Balanced	0		Date	1	20588	7/8/2003	
ANIONS BY ION CHROMATOGRAPHY, DISSOLVE								
		E300		Analyst: WR				
Bromide Dissolved	0.07	0.02		mg/L	1	20574	7/7/2003 8:37:30 PM	
Chloride Dissolved	10.7	1.00		mg/L	1	20574	7/7/2003 8:37:30 PM	
Fluoride Dissolved	0.20	0.01		mg/L	1	20574	7/7/2003 8:37:30 PM	
Sulfate Dissolved	15.5	1.00		mg/L	1	20574	7/7/2003 8:37:30 PM	
ALKALINITY								
		M2320 B		Analyst: CMM				
Alkalinity, Phenolphthalein	ND	0	mg/L CaCO3	1	20365	6/24/2003		
Alkalinity, Total (As CaCO3)	288	2	mg/L CaCO3	1	20365	6/24/2003		

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit

LCRA Environmental Laboratory Services

Date: 10-Jul-03

CLIENT: Texas Water Development Board
Lab Order: 0306281 **File No:** 25108
Project: TWDB FY03
Lab ID: 0306281-05

Client Sample ID: 68-13-508 **502**
Collection Date: 6/18/2003 10:15:00 AM
Matrix: GROUNDWATER

Analyses	Storet	Result	Qual	PQL	Units	DF	Batch ID	Date Analyzed
NITRATE AND NITRITE			E353.2					Analyst: WM
Nitrogen, Nitrate & Nitrite		1.21		0.02	mg/L	1	20411	6/26/2003
SILICA			E370.1					Analyst: WM
Silica, Dissolved (as SiO2)		10.9		0.50	mg/L	1	20376	6/25/2003

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Water Quality Field Data Sheet

SWN: N/A Sample No. BM-3111-1999
 County: COMAL Date: JUNE 3, 1999
 Aquifer: LOWER TRINITY By: ROGER P.

Name: B.M.W.D.
 Address: 180 RANCHERS CIRCLE
BULVERDE, TX.
 owners well # W/P #1

	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6	Bottle 7	Total Sub-Samples
500 ml Anions	1 liter	250 ml	1 liter	Radioactivity				
	2 ml	0.5 ml	2 ml					
	HNO3 (Nitric)	H2SO4	HNO					
		(Sulfuric)	(Nitric)					
Water level	LSD	Remark		Time in	1100			Starting ph 6.92 @26.2
Temperature(00010)		24.7 c		Time out	1210	Sample time	1130	14.2 ml. of 0.02N to 50 ml. of Sample
Specific Cond.(00094)		582 umhos/cm		Weather	CLOUDY	well use	PUBLIC	Ending ph 4.50 @ 29.0
ph (00400)	6.79			Outside temp	82			
Eh (00090)	134.8 mv.			Sampling point DISCHARGE(FAUCET)				
Phenol ALK (82244)	0	mg/l		Time:	1110	1115	1120	ml
Total ALK (39086)	284	mg/l		ph:	6.55	6.75	6.79	1
Carbonate (00452)	0	mg/l		Temperature:	23.1	24.4	24.7	2
Bicarbonate(00453)	5.68	meq/l		Eh			134.8	3
Total Cations(+)	Balanced				Conductivity:	583	585	582
Total Anions(-)					other notes	SUBMERSIBLE		
Total Hardness(00900)	282				Pumping since	1000	Lift	
Dissolved Solids	315				Latitude	N/A	Power	ELECTRIC
					Longitude	N/A	Gpm	125

FINAL ANALYSIS REPORT

LAB ID: 9907893

SAMPLE DESCRIPTION: Groundwater

COMPANY: TX Water Dev. Board

SAMPLE DATE: 06/03/99

ACCT NO:

SAMPLE TIME: 1130

REQUISITION No.: R11041

DATE RECEIVED: 06/04/99

LOCATION ID: BM-3111-1999

REPORT DATE: 06/23/99

PARAMETER	RESULTS	UNITS	STORET #	PQL in WATER	DATE ANALYZED
-----	-----	-----	-----	-----	-----
Bromide	0.12	mg/L	71870	0.02	06/15/99
Chloride	11.2	mg/L	00941	1.5	06/15/99
Fluoride	0.21	mg/L	00950	0.01	06/15/99
Nit., nitri/nitra-AFA	1.070	mg/L	00630	0.010	06/08/99
Nitrogen, Kjeldahl	0.056	mg/L	00623	0.040	06/08/99
Nitrogen, ammonia	<0.040	mg/L	00608	0.040	06/07/99
Phosphorus, Total	<0.040	mg/L	00665	0.040	06/08/99
Silica	10.20	mg/L	00955	0.50	06/07/99
Sulfate	13.30	mg/L	00946	1.50	06/15/99
Alkalinity, Total	267	mg/L	00410	1	06/07/99
Alkalinity, Phenol.	0	mg/L	00415	0	06/07/99
Boron, Dissolved	85.00	ug/L	01020	50.00	06/10/99
Cobalt, Diss. ICPMS	<1.0	ug/L	01035	1.0	06/08/99
Iron, Dissolved	<50.00	ug/L	01046	50.00	06/10/99
Lithium, Diss. ICPMS	3.8	ug/L	01130	2.0	06/08/99
Molybdenum Dis ICPMS	<1.0	ug/L	01060	1.0	06/08/99
Potassium, Dissolved	0.97	mg/L	00935	0.20	06/10/99
Strontium, Dissolved	369.00	ug/L	01080	20.00	06/10/99
Vanadium, Diss ICPMS	4.4	ug/L	01085	1.0	06/08/99
Aluminum, Dis. ICPMS	<4.0	ug/L	01106	4.0	06/08/99
Arsenic, Diss. ICPMS	<2.0	ug/L	01000	2.0	06/08/99
Barium, Diss. ICPMS	27.8	ug/L	01005	1.0	06/08/99
Cadmium, Diss. ICPMS	<1.0	ug/L	01025	1.0	06/08/99
Calcium, Dissolved	95.40	mg/L	00915	0.20	06/22/99
Chromium, Diss ICPMS	6.8	ug/L	01030	1.0	06/08/99
Copper, Diss. ICPMS	<2.0	ug/L	01040	2.0	06/08/99
Lead, Diss. ICPMS	2.0	ug/L	01049	1.0	06/08/99
Magnesium, Dissolved	10.50	mg/L	00925	0.20	06/10/99
Manganese, Dis ICPMS	<1.0	ug/L	01056	1.0	06/08/99
Nickel, Diss. ICPMS	4.6	ug/L	01065	1.0	06/08/99
Selenium, Dis. ICPMS	<4.0	ug/L	01145	4.0	06/08/99
Sodium, Dissolved	6.98	mg/L	00930	0.20	06/10/99
Antimony, Dis. ICPMS	<1.0	ug/L	01095	1.0	06/08/99
Beryllium, Dis ICPMS	<1.0	ug/L	01010	1.0	06/08/99
Thallium, Diss ICPMS	<1.0	ug/L	01057	1.0	06/08/99
Zinc, Diss. ICPMS	6.7	ug/L	01090	2.0	06/08/99

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

State Well Number	6813517
County	Comal
River Basin	Guadalupe
Groundwater Management Area	9
Regional Water Planning Area	L - South Central Texas
Groundwater Conservation District	Comal Trinity GCD
Latitude (decimal degrees)	29.796945
Latitude (degrees minutes seconds)	29° 47' 49" N
Longitude (decimal degrees)	-98.429167
Longitude (degrees minutes seconds)	098° 25' 45" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	218GLRS - Glen Rose Limestone
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1232
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	470
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	1/19/1995
Drilling Method	Air Rotary
Borehole Completion	Open Hole

Well Type	Withdrawal of Water
Well Use	Public Supply
Water Level Observation	Miscellaneous Measurements
Water Quality Available	No
Pump	Submersible
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	Cedar Hill Day Camp Well #1
Driller	Kuhn Water Enterprises, Inc.
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	G0460200A
Groundwater Conservation District Well Number	
Owner Well Number	1
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Commission on Environmental Quality
Created Date	11/9/2011
Last Update Date	11/9/2011

Remarks Owners well #1. PWS ID #0460200A. Estimated yield 30 GPM. Pump set at 447 feet. Cemented from 0 to 200 feet. Well originally drilled for Robert Burns (Lanark Day Care Center, Inc.).

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
7	Blank	Steel			0	200
6	Open Hole				200	470

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

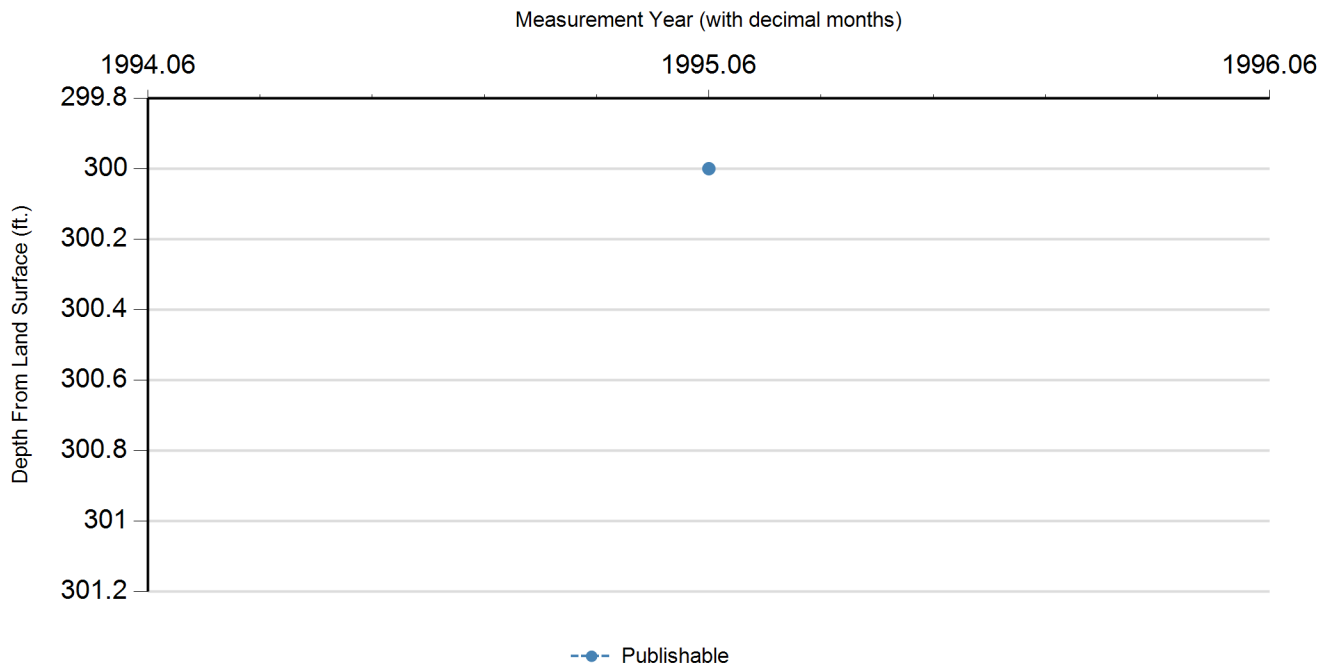
Borehole - No Data

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	1/23/1995		300		932	1	Registered Water Well Driller	Unknown		

Code Descriptions

Status Code	Status Description
P	Publishable

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.



Texas Water Development Board
Well Schedule

groundwater resources
division

State Well Number: **68-13-517** Previous Well Number: County: **Comal** **91**

Latitude (dms): **294749** Longitude (dms): **982545** Coordinate Accuracy: **Global Positioning System - GPS**

River Basin: **Guadalupe River** GMA: **9** RWPA: **L** GCD:

Owner: **Cedar Hill Day Camp** Driller: **Kuhn Water** Aquifer ID: **Trinity**
Well #1 **Enterprises, Inc.** Aquifer Code: **218GLRS**

Depth (ft): **470** Elevation (ft): **1232** **GLEN ROSE**
LIMESTONE

Source of Depth: **Driller's Log** Source of Elevation: **Digital Elevation**
Model -DEM

Date Drilled: **01/19/1995** Well Type: **Withdrawal of Water**

Type of Lift: **Submersible Pump** Power: **Electric Motor** Horsepower:

Construction: **Air Rotary** Completion: **Open Hole**

Casing Material: **Steel** Screen Material:

CASING INTERVALS:
Casing/Blank Pipe (C)
Well Screen/Slotted Zone (S)
Open Hole (O)

	Dia. (in.)	Top (ft.)	Bottom (ft.)
C	7	0	200
O	6	200	470

WATER USE

Primary: **Public** Secondary: Tertiary:
Supply

Water Levels: **Miscellaneous Measurements** Water Quality: **N**

1 measurement
1995
-300

Other Data: Logs: **D**

REMARKS:

Owners well #1. PWS ID #0460200A.
Estimated yield 30 GPM. Pump set at
447 feet. Cemented from 0 to 200
feet. Well originally drilled for
Robert Burns (Lanark Day Care
Center, Inc.).

Reporting Agency: **TWC/TNRCC/TCEQ**

Date Collected or Reported: **11/09/2011**

Recorded by:

D. R. Jones

New

ATTENTION OWNER: Confidentiality
Privilege Notice on Reverse SideState of Texas
WELL REPORTTexas Water Well Drillers Advisory Council
P.O. Box 13067
Austin, TX 78711-0067
512-239-0530

1) OWNER Robert Burns, Lanark Day Care Center, Inc. ADDRESS 4230 Clear Spring, San Antonio, Tx, 78217
(Name) (Street or RFD) (City) (State) (Zip)

2) ADDRESS OF WELL: County Comal St. Hwy 46W (most east piece from T. Anderson Ranch) STATE WELL # 68-13-5
(Street or RFD) (City) (County) (State) (Zip)

3) TYPE OF WORK (Check):
☒ New Well ☐ Deepening
☐ Reconditioning ☐ Plugged

4) PROPOSED USE (Check): ☐ Monitor ☐ Environmental Sampling ☐ Domestic
☐ Industrial ☐ Irrigation ☐ Injection ☒ Public Supply ☐ De-watering ☐ Test well
(If Public Supply well, were plans submitted to the TNRCC? ☒ Yes ☐ No

5) WELL LOG:
Date Drilling: Started 01-12-95 Completed 01-19-95

DIAMETER OF HOLE		
Obs. (in.)	From (ft.)	To (ft.)
10 3/4	Surface	200
6	200	470

7) DRILLING METHOD (Check): ☐ Driven
☒ Air Rotary ☐ Mud Rotary ☐ Bored
☐ Auger ☐ Cable Tool ☐ Jiffed
☐ Other

8) Borehole Completion (Check): ☐ Open Hole ☒ Straight Wall
☐ Uncompleted ☐ Gravel Packed ☐ Other
If Gravel Packed give interval from _____ ft. to _____ ft.

CASING, BLANK PIPE, AND WELL SCREEN DATA:

Dial (in.)	New or Used	Steel, Plastic, etc. Part, Slotted, etc. Screen Mfg. # commercial	Setting (ft.)		Cage Casing Screen
			From	To	
6 3/8	N	Steel	200	12' above surface	158 w

9) CEMENTING DATA [Rule 338.44(1)]
Cemented from 200 ft. to surface ft. No. of sacks used 25 w/ 1 yd
ft. to _____ ft. No. of sacks used _____

Method used pressure
Completed by Halliburton Services
Distance to septic system field lines not in yet
Method of verification of above distance _____

10) SURFACE COMPLETION
☒ Specified Surface Slab Installed [Rule 338.44(2)(A)]
☐ Specified Steel Sleeve Installed [Rule 338.44(3)(A)]
☐ Fitness Apprater Used [Rule 338.44(3)(b)]
☒ Approved Alternative Procedure Used [Rule 338.71]

11) WATER LEVEL:
State level 900 ft. below land surface Date 01-23-95
Artesian flow _____ gpm Date _____

12) PACKERS: Type _____ Depth _____
N/A

13) TYPE PUMP:
☐ Turbine ☐ Jet ☒ Submersible ☐ Cylinder
☐ Other _____
Depth to pump bottom, cylinder, jet, etc. 447 ft.

14) WELL TESTS:
Type test: ☐ Pump ☐ Bailor ☒ Jiffed ☐ Estimated
Yield: 30 gpm with _____ ft. drawdown after _____ hrs.

15) WATER QUALITY:
Did you knowingly penetrate any strata which contained undesirable constituents?
☐ Yes ☒ No If yes, submit "REPORT OF UNDESIRABLE WATER"
Type of water? See Chemical Depth of strata 200 ft.
Was a chemical analysis made? ☒ Yes ☐ No

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief. I understand that failure to complete items 1 thru 15 will result in the log(s) being returned for completion and resubmittal.

COMPANY NAME KHN WATER ENTERPRISES, INC. WELL DRILLER'S LICENSE NO. 4785W
(Type or print)

ADDRESS P.O. Box 160, Bulverde, Texas 78163-0160
(Street or RFD) (City) (State) (Zip)

(Signed) Michael L. Lunsbaker (Signed) _____
(Licensee/Well Driller) (Registered Driller Trainee)

Michael L. Lunsbaker

Please attach electric log, chemical analysis, and other pertinent information, if available.

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

State Well Number	6813519
County	Comal
River Basin	Guadalupe
Groundwater Management Area	9
Regional Water Planning Area	L - South Central Texas
Groundwater Conservation District	Comal Trinity GCD
Latitude (decimal degrees)	29.794445
Latitude (degrees minutes seconds)	29° 47' 40" N
Longitude (decimal degrees)	-98.434445
Longitude (degrees minutes seconds)	098° 26' 04" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	218HSCC - Hensell Sand and Cow Creek Limestone
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1267
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	504
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	9/19/1995
Drilling Method	Air Rotary
Borehole Completion	Open Hole

Well Type	Withdrawal of Water
Well Use	Public Supply
Water Level Observation	Miscellaneous Measurements
Water Quality Available	No
Pump	Submersible
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	CISD-Seay Spring Middle School-Well #1
Driller	Kuhn Water Enterprises, Inc.
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	G0460212A
Groundwater Conservation District Well Number	
Owner Well Number	1
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Commission on Environmental Quality
Created Date	11/15/2011
Last Update Date	11/15/2011

Remarks Owners well #1. PWS ID #0460212A. Estimated yield 50 GPM. Pump set at 483 feet. Cemented from 0 to 365 feet.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
9	Blank	Steel			0	365
8	Open Hole				365	504

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

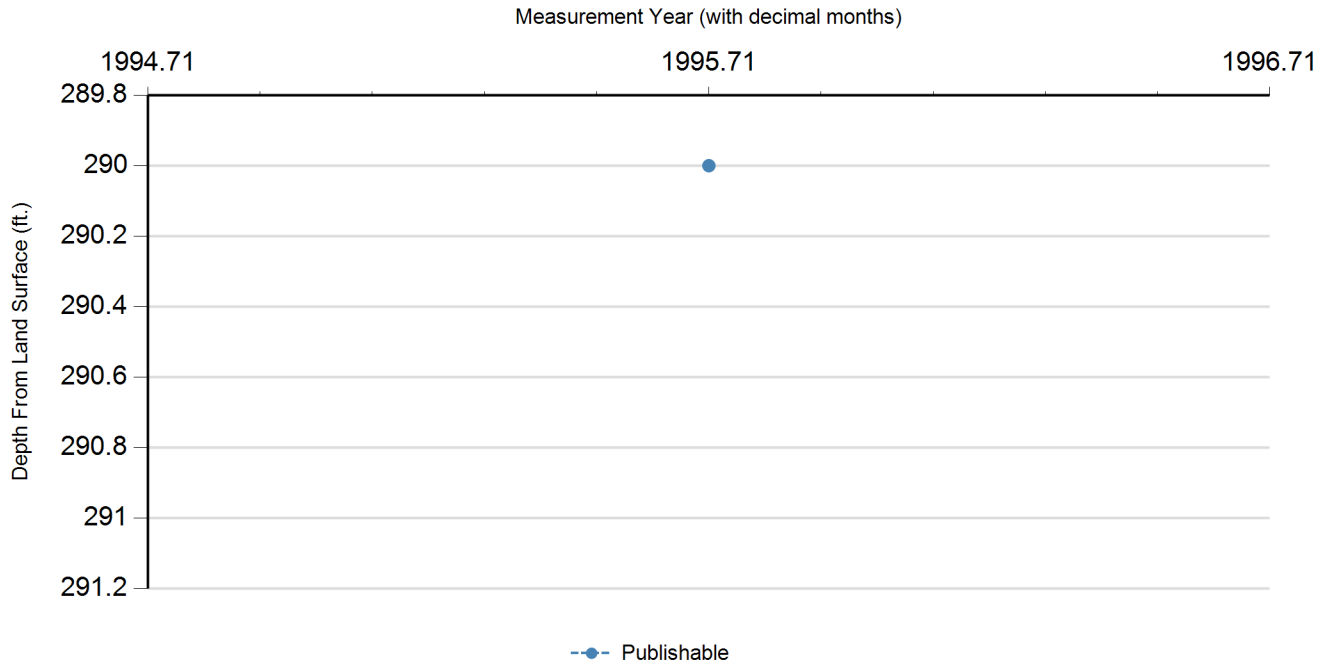
Borehole - No Data

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	9/20/1995		290		977	1	Registered Water Well Driller	Unknown		

Code Descriptions

Status Code	Status Description
P	Publishable

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.



Texas Water Development Board
Well Schedule

groundwater resources
division



State Well Number: **68-13-519** Previous Well Number: County: **Comal** **91**

Latitude (dms): **294740** Longitude (dms): **982604** Coordinate Accuracy: **Global Positioning System - GPS**

River Basin: **Guadalupe River** GMA: **9** RWPA: **L** GCD:

Owner: **CISD-Seay Spring
Middle School-Well #1**

Driller: **Kuhn Water
Enterprises, Inc.**

Aquifer ID: **Trinity**

Aquifer Code: **218HSCC**

Depth (ft): **504**

Elevation (ft): **1267**

**HENSELL SAND AND COW
CREEK
LIMESTONE**

Source of Depth: **Driller's Log**

Source of Elevation: **Digital Elevation
Model -DEM**

Date Drilled: **09/19/1995**

Well Type: **Withdrawal of Water**

Type of Lift: **Submersible Pump**

Power: **Electric Motor**

Horsepower:

Construction: **Air Rotary**

Completion: **Open Hole**

Casing Material: **Steel**

Screen Material:

CASING INTERVALS:
Casing/Blank Pipe (C)
Well Screen/Slotted Zone (S)
Open Hole (O)

	Dia. (in.)	Top (ft.)	Bottom (ft.)
C	9	0	365
O	8	365	504

WATER USE

Primary: **Public
Supply**

Secondary:

Tertiary:

Water Levels: **Miscellaneous Measurements**

Water Quality: **N**

1 measurement
1995
-290

Other Data:

Logs: **D**

REMARKS:

**Owners well #1. PWS ID #0460212A.
Estimated yield 50 GPM. Pump set at
483 feet. Cemented from 0 to 365
feet.**

Reporting Agency: **TWC/TNRCC/TCEQ**

Date Collected or Reported: **11/15/2011**

Recorded by:

DR Jones

New

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

State Well Number	6813520
County	Comal
River Basin	Guadalupe
Groundwater Management Area	9
Regional Water Planning Area	L - South Central Texas
Groundwater Conservation District	Comal Trinity GCD
Latitude (decimal degrees)	29.795556
Latitude (degrees minutes seconds)	29° 47' 44" N
Longitude (decimal degrees)	-98.436667
Longitude (degrees minutes seconds)	098° 26' 12" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	218HSCC - Hensell Sand and Cow Creek Limestone
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1269
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	503
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	2/28/1997
Drilling Method	Air Rotary
Borehole Completion	Open Hole

Well Type	Withdrawal of Water
Well Use	Public Supply
Water Level Observation	Miscellaneous Measurements
Water Quality Available	No
Pump	Submersible
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	CISD-Seay Spring Middle School-Well #2
Driller	Braendle Drilling, Inc.
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	G0460212B
Groundwater Conservation District Well Number	
Owner Well Number	2
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Commission on Environmental Quality
Created Date	11/15/2011
Last Update Date	11/15/2011

Remarks Owners well #2. PWS ID #0460212B. Estimated yield 25 GPM. Pump set at 483 feet. Cemented from 0 to 400 feet.

Casing						
Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
9	Blank	Steel			0	400
9	Open Hole				400	503

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

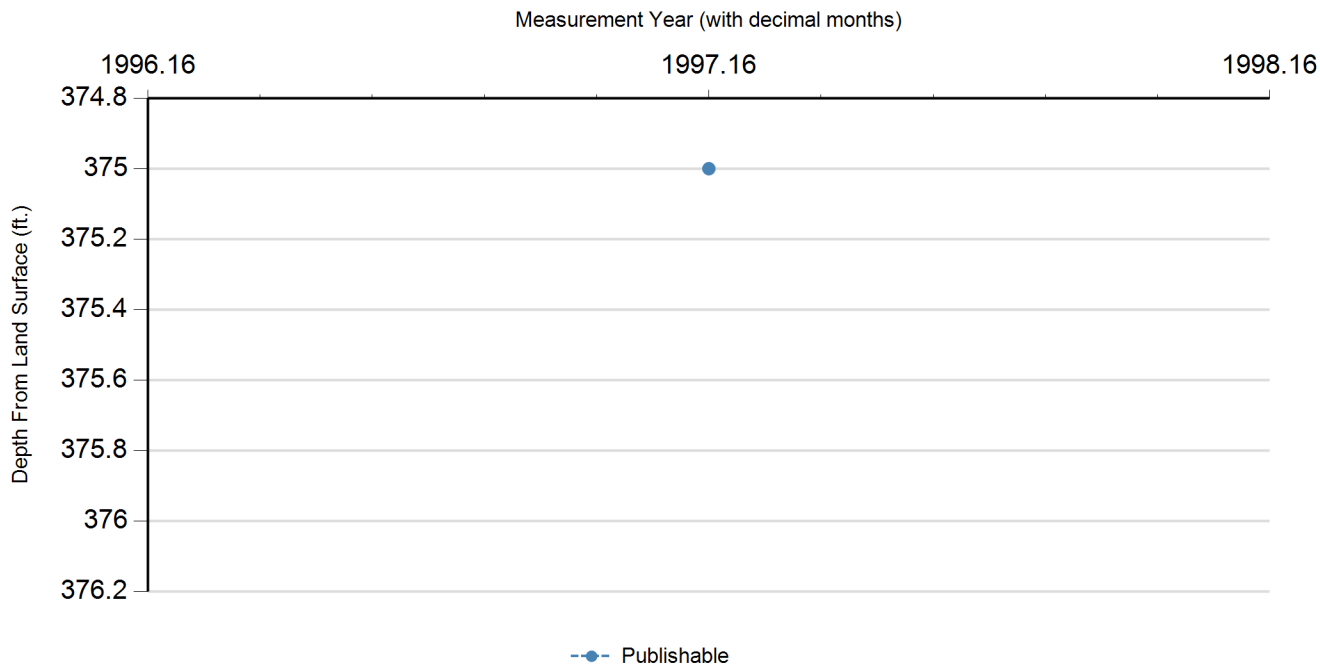
Borehole - No Data

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	2/28/1997		375		894	1	Registered Water Well Driller	Unknown		

Code Descriptions

Status Code	Status Description
P	Publishable

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.



Texas Water Development Board
Well Schedule

groundwater resources
division



State Well Number: **68-13-520** Previous Well Number: County: **Comal** **91**

Latitude (dms): **294744** Longitude (dms): **982612** Coordinate Accuracy: **Global Positioning System - GPS**

River Basin: **Guadalupe River** GMA: **9** RWPA: **L** GCD:

Owner: **CISD-Seay Spring
Middle School-Well #2** Driller: **Braendle
Drilling, Inc.** Aquifer ID: **Trinity**
Aquifer Code: **218HSCC**

Depth (ft): **503** Elevation (ft): **1269**
Source of Depth: **Driller's Log** Source of Elevation: **Digital Elevation
Model -DEM**

**HENSELL SAND AND COW
CREEK
LIMESTONE**

Date Drilled: **02/28/1997** Well Type: **Withdrawal of Water**
Type of Lift: **Submersible Pump** Power: **Electric Motor** Horsepower:
Construction: **Air Rotary** Completion: **Open Hole**
Casing Material: **Steel** Screen Material:

CASING INTERVALS:			
Casing/Blank Pipe (C)			
Well Screen/Slotted Zone (S)			
Open Hole (O)			
	Dia. (in.)	Top (ft.)	Bottom (ft.)
C	9	0	400
O	9	400	503

WATER USE

Primary: **Public
Supply** Secondary: Tertiary:

Water Levels: **Miscellaneous Measurements** Water Quality: **N**

1 measurement
1997
-375

Other Data: Logs: **D**

REMARKS:

Owners well #2. PWS ID #0460212B.
Estimated yield 25 GPM. Pump set at
483 feet. Cemented from 0 to 400
feet.

Reporting Agency: **TWC/TNRCC/TCEQ**

Date Collected or Reported: **11/15/2011**

Recorded by:

DR Jones

New

Texas Water Well Drillers Advisory Council
MC 177
P.O. Box 13087
Austin, TX 78711-3087
512-239-0530

ATTENTION OWNER: Confidentiality
Privilege Notice on on reverse side
of Well Owner's copy (pink)

State of Texas WELL REPORT

1) OWNER COMAL ISD ADDRESS NEW BRAUNFELS, TX
(Name) (Street or RFD) (City) (State) (Zip)

2) ADDRESS OF WELL: COMAL HWY 46 SPRING BRANCH, TX GRID 68-13-5
County (Street, RFD or other) (City) (State) (Zip)

3) TYPE OF WORK (Check):
☒ New Well ☐ Deepening
☐ Reconditioning ☐ Plugging

4) PROPOSED USE (Check): ☐ Monitor ☐ Environmental Soil Boring ☐ Domestic
☐ Industrial ☐ Irrigation ☐ Injection ☒ Public Supply ☐ De-watering ☐ Testwell
If Public Supply well, were plans submitted to the TNRCC? ☐ Yes ☐ No

5)

6) WELL LOG:

Date Drilling:

Started 2-18 19 97Completed 2-28 19 97

DIAMETER OF HOLE

Dia. (in.)	From (ft.)	To (ft.)
12 3/4	Surface	400
8 1/2	400	503

7) DRILLING METHOD (Check):

☒ Air Rotary ☐ Mud Rotary ☐ Bored
☐ Air Hammer ☐ Cable Tool ☐ Jetted
☐ Other _____

From (ft.) To (ft.) Description and color of formation material

0-1 TOP BLACK

1-26 BEDROCK YELLOW

26-35 CLAY BLUE

35-60 CALICHE YELLOW

60-82 LIME GREY

82-110 SHALE BLUE

110-180 LIME BEIGE

180-207 SHALE GREY

207-240 LIME GREY

240-272 LIME BEIGE

272-290 LIME GREY 457-475 BROWN LIME

290-380 LIME BEIGE 475-490 lime grey

380-400 SHALE GREY 490-500 SHALE DARK

415-430 SAND & SHALE 500-503 SHALE BLUE

430-457 GREEN LIME

(Use reverse side of Well Owner's copy, if necessary)

13) TYPE PUMP:

☐ Turbine ☐ Jet ☒ Submersible ☐ Cylinder
☐ Other _____

Depth to pump bowls, cylinder, jet, etc., 483 ft.

14) WELL TESTS:

Type test: ☐ Pump ☐ Bailer ☒ Jetted ☐ Estimated
Yield: 25 gpm with 0 ft. drawdown after 1 hrs.

15) WATER QUALITY:

Did you knowingly penetrate any strata which contained undesirable constituents?

☐ Yes ☒ No If yes, submit "REPORT OF UNDESIRABLE WATER"

Type of water? _____ Depth of strata _____

Was a chemical analysis made? ☒ Yes ☐ No

8) Borehole Completion (Check):

☒ Open Hole ☐ Straight Wall
☐ Underreamed ☐ Gravel Packed ☐ Other _____
If Gravel Packed give interval ... from _____ ft. to _____ ft.

CASING, BLANK PIPE, AND WELL SCREEN DATA:

Dia. (in.)	New or Used	Steel, Plastic, etc. Perf., Slotted, etc. Screen Mfg., if commercial	Setting (ft.)		Gage Casting Screen
			From	To	
8 5/8	N	STEEL	0	400	.322

9) CEMENTING DATA [Rule 338.44(1)]

Cemented from 0 ft. to 400 ft. No. of sacks used 144
_____ ft. to _____ ft. No. of sacks used _____

Method used PRESSURECemented by HALLIBURTONDistance to septic system field lines or other concentrated contamination 150 ± ft.Method of verification of above distance MEASURED

10) SURFACE COMPLETION

☒ Specified Surface Slab installed [Rule 338.44(2)(A)]
☐ Specified Steel Sleeve installed [Rule 338.44(2)(B)]
☐ Pitless Adapter Used [Rule 338.44(3)(b)]
☐ Approved Alternative Procedure used [Rule 338.71]

11) WATER LEVEL:

Static level TEXAS NATURAL CONSERVATION COMMISSION Date 2-28-97
Artesian flow _____ Date _____

12) PACKERS:

Type

Depth

HALLIBURTON399'

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief. I understand that failure to complete items 1 thru 15 will result in the log(s) being returned for completion and resubmittal.

COMPANY NAME BRAENDLE DRILLING, INC.
(Type or print)

WELL DRILLER'S LICENSE NO. 3120WIADDRESS PO BOX 446

(Street or RFD)

HELOTES

(City)

TX

(State)

78023

(Zip)

(Signed)

7. K. Braendle
(Licensed Well Driller)

(Signed)

(Registered Driller Trainee)

Please attach electric log, chemical analysis, and other pertinent information, if available.

0460212 B

68-13-520

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

State Well Number	6813521
County	Comal
River Basin	Guadalupe
Groundwater Management Area	9
Regional Water Planning Area	L - South Central Texas
Groundwater Conservation District	Comal Trinity GCD
Latitude (decimal degrees)	29.796389
Latitude (degrees minutes seconds)	29° 47' 47" N
Longitude (decimal degrees)	-98.4325
Longitude (degrees minutes seconds)	098° 25' 57" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	218HSCC - Hensell Sand and Cow Creek Limestone
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1229
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	490
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	2/6/2002
Drilling Method	Air Rotary
Borehole Completion	Open Hole

Well Type	Withdrawal of Water
Well Use	Public Supply
Water Level Observation	Miscellaneous Measurements
Water Quality Available	No
Pump	Submersible
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	Hill Country Christian Church (Well #1)
Driller	T.R. Drilling & Service
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	G0460242A
Groundwater Conservation District Well Number	
Owner Well Number	1
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Commission on Environmental Quality
Created Date	11/17/2011
Last Update Date	7/12/2016

Remarks Estimated yield 20 GPM. Cemented from 0 to 365 feet.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
7	Blank	Steel			0	365
6	Open Hole				365	490

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

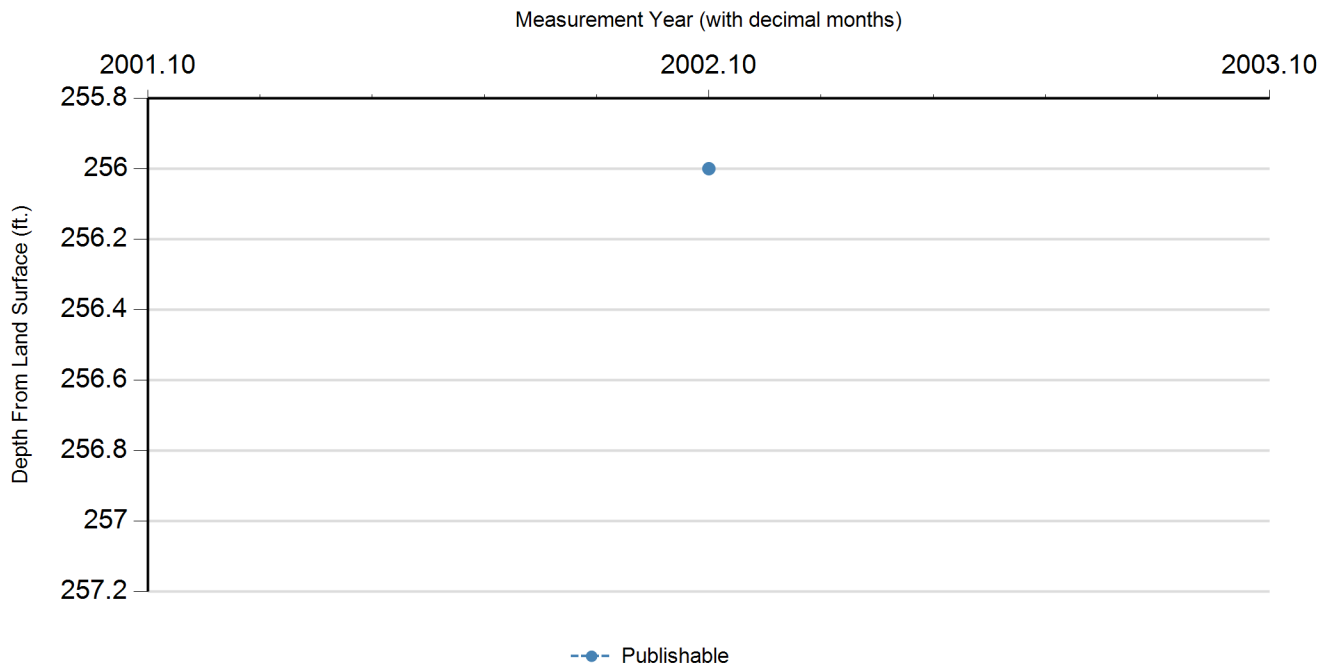
Borehole - No Data

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	2/6/2002		256		973	1	Registered Water Well Driller	Unknown		

Code Descriptions

Status Code	Status Description
P	Publishable

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.



Texas Water Development Board
Well Schedule

groundwater resources
division



State Well Number: **68-13-521** Previous Well Number: County: **Comal** **91**

Latitude (dms): **294747** Longitude (dms): **982557** Coordinate Accuracy: **Global Positioning System - GPS**

River Basin: **Guadalupe River** GMA: **9** RWPA: **L** GCD:

Owner: **Hill Country Christian Church (Well #1)** Driller: **T.R. Drilling & Service** Aquifer ID: **Trinity**

Aquifer Code: **218HSCC**

Depth (ft): **490**

Elevation (ft): **1229**

HENSELL SAND AND COW CREEK LIMESTONE

Source of Depth: **Driller's Log**

Source of Elevation: **Digital Elevation Model -DEM**

Date Drilled: **02/06/2002** Well Type: **Withdrawal of Water**

Type of Lift: **Submersible Pump** Power: **Electric Motor** Horsepower:

Construction: **Air Rotary** Completion: **Open Hole**

Casing Material: **Steel** Screen Material:

CASING INTERVALS:
Casing/Blank Pipe (C)
Well Screen/Slotted Zone (S)
Open Hole (O)

	Dia. (in.)	Top (ft.)	Bottom (ft.)
C	7	0	365
O	6	365	490

WATER USE

Primary: **Public Supply** Secondary: Tertiary:

Water Levels: **Miscellaneous Measurements** Water Quality: **N**

1 measurement
2002
-256

Other Data: Logs: **D**

REMARKS:

Owners well #1. PWS ID #0460242A.
Estimated yield 20 GPM. Cemented
from 0 to 365 feet.

Reporting Agency: **TWC/TNRCC/TCEQ**

Date Collected or Reported: **11/17/2011**

Recorded by: DR Jones

Attention Owner:
Confidentiality Privilege Notice
on reverse side of owner's copy.

Texas Department of License and Regulation
Water Well Driller/Pump Installer Program
P.O. Box 12157 Austin, Texas 78711 (512) 463-7880 FAX (512) 463-8616
Toll free (800) 803-9202
Email address: water.well@license.state.tx.us

This form must be completed
and filed with the department
and owner within 60 days
upon completion of the well.

WELL REPORT

1) OWNER									
Name Hill Country Christian Church		Address HWY 46 East		City Spring Branch		State TX		Zip 78070	
2) WELL LOCATION									
County Comal		Physical Address HWY 46 East		City Spring Branch		State TX		Zip 78070	
3) Type of Work									
<input checked="" type="checkbox"/> New Well <input type="checkbox"/> Deepening <input type="checkbox"/> Reconditioning		Lat.		Long.		Grid # 68-13-5		5) N↑	
4) Proposed Use (check) <input type="checkbox"/> Monitor <input type="checkbox"/> Environmental Soil Boring <input type="checkbox"/> Domestic <input type="checkbox"/> Industrial <input type="checkbox"/> Irrigation <input type="checkbox"/> Injection <input checked="" type="checkbox"/> Public Supply <input type="checkbox"/> De-watering <input type="checkbox"/> Testwell If Public Supply well, were plans submitted to the TNRCC? <input type="checkbox"/> Yes <input type="checkbox"/> No									
6) Drilling Date									
Started 1/30/2002		Diameter of Hole		7) Drilling Method (check) <input type="checkbox"/> Driven					
		Dia. (in) From (ft) To (ft)		<input checked="" type="checkbox"/> Air Rotary <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Bored					
		6 1/8 Pilot Hole 490		<input type="checkbox"/> Air Hammer <input type="checkbox"/> Cable Tool <input type="checkbox"/> Jetted					
Completed 2/06/2002		11 0 365		<input type="checkbox"/> Other					
		6 1/8 365 490							
8) Borehole Completion <input checked="" type="checkbox"/> Open Hole <input type="checkbox"/> Straight Wall									
From (ft) To (ft) Description and color of formation material		<input type="checkbox"/> Under-reamed <input type="checkbox"/> Gravel Packed <input type="checkbox"/> Other							
0 1 Topsoil		If Gravel Packed give the interval from ft. to ft.							
1 18 Yellow Caliche		Casing, Blank Pipe, and Well Screen Data							
18 76 Grey Rock & Shale Layers		Dia. (in.)		New Or Used		Steel, Plastic, etc. Perf., Slotted, etc. Screen Mfg., if commercial		Setting (ft) From To Gage Casing Screen	
76 88 Yellow Rock		6 5/8		N		Steel		0 365 .288	
88 163 Grey Rock & Shale Layers									
163 196 Yellow Rock (Porous)									
196 269 Grey Rock & Shale Layers									
269 318 Yellow Rock									
318 347 Yellow Rock (Porous) & Red Clay Layers									
347 417 Grey Rock & Shale Layers & Calcite									
417 436 Brown, Tan Rock									
436 474 Grey, Brown Rock									
(Use reverse side of Well Owner's copy, If necessary)									
13) Plugged <input type="checkbox"/> Well plugged within 48 hours									
Casing left in well:		Cement/Bentonite placed in well:							
From (ft) To (ft)		From (ft) To (ft)		Sacks used					
14) Typepump									
<input type="checkbox"/> Turbine <input type="checkbox"/> Jet <input checked="" type="checkbox"/> Submersible <input type="checkbox"/> Cylinder									
<input type="checkbox"/> Other									
Depth to pump bowls, cylinder, jet, etc., ft.									
15) Water Test									
Type test <input type="checkbox"/> Pump <input type="checkbox"/> Bailer <input type="checkbox"/> Jetted <input checked="" type="checkbox"/> Estimated									
Yield: 20+ gpm with ft. drawdown after hrs.									
16) Water Quality									
Did you knowingly penetrate any strata which contain undesirable constituents? <input type="checkbox"/> Yes <input type="checkbox"/> NO If yes, did you submit a REPORT OF UNDESIRABLE WATER? Type of water Depth of Strata Was a chemical analysis made? <input type="checkbox"/> Yes <input type="checkbox"/> No									
12) Packers									
Type		Depth							
Shale		365'							
Company or Individual's Name (type or print) TR Drilling & Service Lic. No. 2901WPK									
Address P.O. Box 733		City Boerne		State TX		Zip 78006			
Signature		3105102		Signature		3128102			
Licensed Driller/Pump Installer		Date		Apprentice		Date			

68-13.521

ON BACK

0460242A

APPENDIX H

GROUNDWATER QUALITY REPORT

In accordance with *30 TAC § 309.20(a)(4)(A and B)*, there are 10 wells or sources of water within a 0.5 mile radius of the SADDs disposal site (*30 TAC § 309.20(a)(4)(A)*). Two of these are owned by the school which the WWTP serves. The wells within school property are cased with steel piping. The wells outside the property but within a half-mile are cased with either steel or PVC piping. The site contains no ponds and does not exceed the prescribed rate of 0.1 gal/ft²/day due to its position according to *30 TAC § 222.83*. There are no proposed monitor wells around the site.

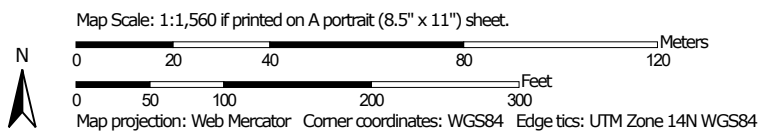
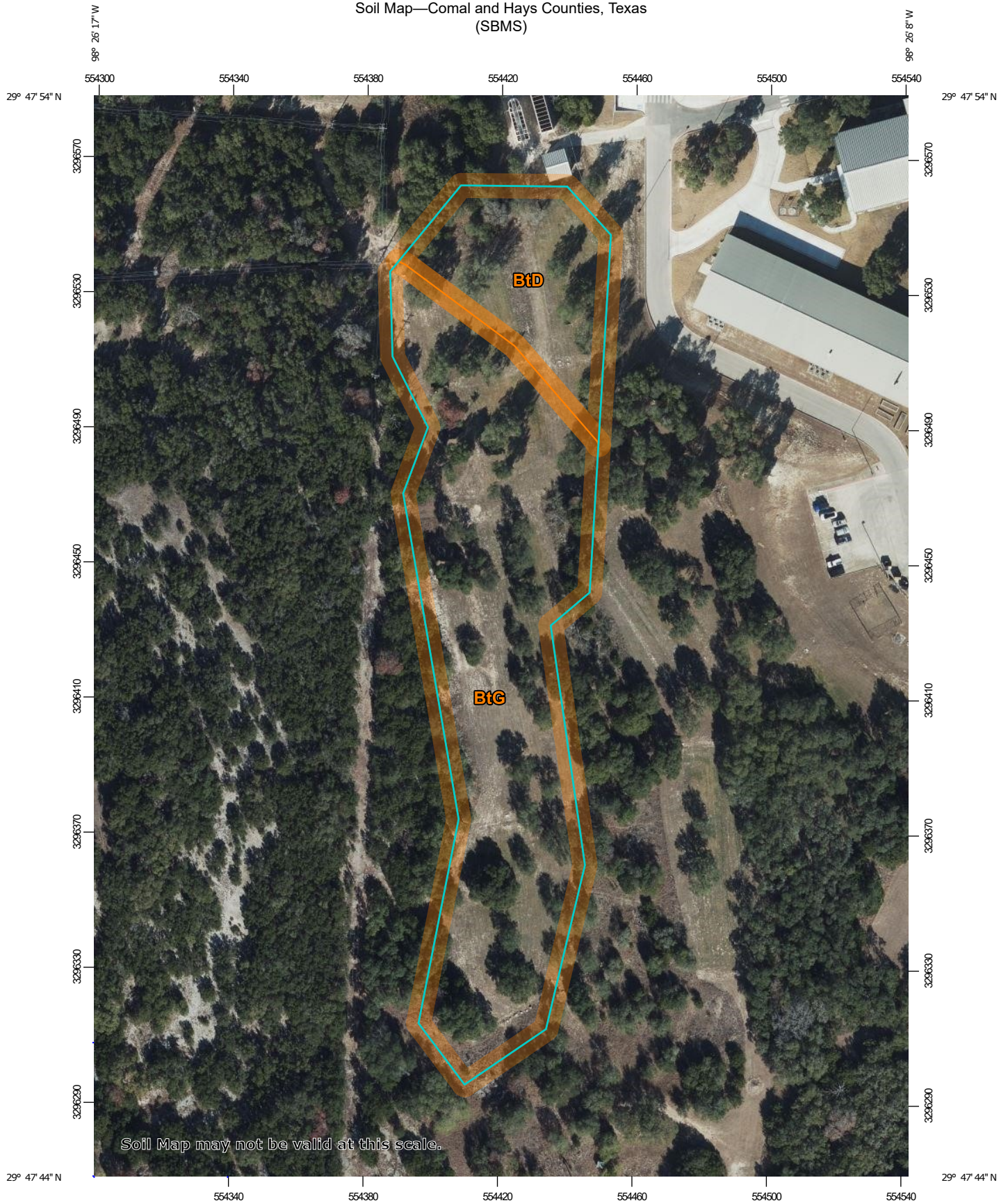
The site is above the Trinity Aquifer and within the contributing zone of the Edwards Aquifer. The depth of groundwater in the area varies between around 250-500 feet from the ground surface. Groundwater use in the surrounding area is a mix of domestic and public supply.

The facility is protective of local groundwater by having a large disposal area, along with using the prescribed rate of 0.1 gal/ft²/day that limits the amount of effluent disposed within the area each day (*30 TAC § 309.20(a)(4)(B)*). The welded steel tanks protect the area from any potential seepage.

APPENDIX I

USDA SOIL MAP


Soil Map—Comal and Hays Counties, Texas
(SBMS)



Soil Map—Comal and Hays Counties, Texas
(SBMS)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Comal and Hays Counties, 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: Dec 10, 2020—Dec 17, 2020

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
BtD	Brackett-Rock outcrop-Comfort complex, 1 to 8 percent slopes	0.6	21.7%
BtG	Brackett-Rock outcrop-Real complex, 8 to 30 percent slopes	2.3	78.3%
Totals for Area of Interest		3.0	100.0%


APPENDIX J

SOIL ANALYSIS

POLLUTION CONTROL SERVICES



Report of Sample Analysis

Client Information	Sample Information	Laboratory Information
Trent DeWaters Comal I.S.D. 1404 N IH 35 New Braunfels, TX 78130	Project Name: Annual Sample ID: SBMS 0-12" Matrix: Soil Date/Time Taken: 12/28/2023 1230	PCS Sample #: 746187 Page 1 of 3 Date/Time Received: 1/2/2024 08:00 Report Date: 1/23/2024 Approved by:  Chuck Wallgren, President

Test Description	Flag	Result	Units	RL	Analysis Date/Time	Method	Analyst
pH		7.8	S.U.	N/A	1/12/2024 12:01	SW846 9045	GTG
Conductivity, Specific		229	µmhos/cm at 25° C	N/A	1/8/2024 10:13	SM 2510B	CLH
Nitrate-N		6.9	mg/kg	0.1	1/15/2024 13:20	EPA 352.1	EMV
Kjeldahl-N, Total	!	1,953	mg/kg	3	1/4/2024 11:15	SM 4500-N B/C	PML
Ammonia-N		<3	mg/kg	3	1/15/2024 13:45	SM 4500-NH3 B/C	PML
Nitrogen, Total		1,960	mg/kg	1	1/15/2024 13:20	Calculation	CFW
Calcium (H2O Soluble)		260	mg/L	1.00	1/19/2024 09:04	SAR / EPA 200.7	DJL
Magnesium (H2O Soluble)	R	13.0	mg/L	1.00	1/19/2024 09:04	SAR / EPA 200.7	DJL

Test Description	Precision	Quality Assurance Summary							Blank
		Limit	LCL	MS	MSD	UCL	LCS	LCS Limit	
pH	N/A	N/A	N/A			N/A			
Conductivity, Specific	N/A	N/A	N/A			N/A			
Nitrate-N	3	10	70	109	106	130	102	85 - 115	
Kjeldahl-N, Total	<1	13	83	86	86	114	101	85 - 115	<3
Ammonia-N	6	10	88	101	95	104	104	85 - 115	
Nitrogen, Total	N/A	N/A	N/A			N/A			
Calcium (H2O Soluble)	<1	20	70	*N/C	*N/C	130	95	85 - 115	
Magnesium (H2O Soluble)	<1	20	70	*145	*145	130	95	85 - 115	

Quality Statement: All supporting quality data adhered to data quality objectives and test results meet the requirements of NELAP unless otherwise noted as flagged exceptions or in a case narrative attachment. Reports with full quality data deliverables are available on request.

*Approved for release per QA Plan, Exception to Limits - QAM Section 13-4
 ! Parameter not NELAP certifiable
 R Spike recovery outside control limits due to matrix effect - LCS within limits
 \$ Reported on a Dry Weight Basis

These analytical results relate only to the sample tested.
 All data is reported on an 'As Is' basis unless designated as 'Dry Wt'.
 RL = Reporting Limits
 *N/C = Not Calculated, Sample Concentration Greater than 5 times the Spike Level

POLLUTION CONTROL SERVICES



Report of Sample Analysis

Client Information	Sample Information	Laboratory Information
Trent DeWaters Comal I.S.D. 1404 N IH 35 New Braunfels, TX 78130	Project Name: Annual Sample ID: SBMS 0-12" Matrix: Soil Date/Time Taken: 12/28/2023 1230	PCS Sample #: 746187 Page 2 of 3 Date/Time Received: 1/2/2024 08:00 Report Date: 1/23/2024

Test Description	Flag	Result	Units	RL	Analysis Date/Time	Method	Analyst
Sodium (H2O Soluble)	R	21.0	mg/L	1.00	1/19/2024 09:04	SAR / EPA 200.7	DJL
Sodium Absorption Ratio	!	0.3	N/A	N/A	1/22/2024 10:20	USDA	DJL
Sodium/ICP (Mehlich III)		25.3	mg/kg	11.5	1/22/2024 08:07	Mehlich 3/EPA 200.7	DJL
Calcium/ICP (Mehlich III)		29,200	mg/kg	5.73	1/22/2024 08:07	Mehlich 3/EPA 200.7	DJL
Magnesium/ICP (Mehlich III)		215	mg/kg	5.73	1/22/2024 08:07	Mehlich 3/EPA 200.7	DJL
Phosphorous/ICP (Mehlich III)		<5.73	mg/kg	5.73	1/22/2024 08:07	Mehlich 3/EPA 200.7	DJL
Potassium/ICP (Mehlich III)		278	mg/kg	5.73	1/22/2024 08:07	Mehlich 3/EPA 200.7	DJL
Sulfur/ICP (Mehlich III)		17.7	mg/kg	5.73	1/22/2024 12:07	Mehlich 3/EPA 200.7	DJL

Test Description	Precision	Quality Assurance Summary				UCL	LCS	LCS Limit	Blank
		Limit	LCL	MS	MSD				
Sodium (H2O Soluble)	<1	20	70	*184	*184	130	95	85 - 115	
Sodium Absorption Ratio	N/A	N/A	N/A			N/A			
Sodium/ICP (Mehlich III)	4	20	70	78	74	130	109	85 - 115	
Calcium/ICP (Mehlich III)	5	20	70	*N/C	*N/C	130	100	85 - 115	
Magnesium/ICP (Mehlich III)	7	20	70	115	107	130	102	85 - 115	
Phosphorous/ICP (Mehlich III)	<1	20	75	123	121	125	105	85 - 115	
Potassium/ICP (Mehlich III)	1	20	70	107	105	130	98	85 - 115	
Sulfur/ICP (Mehlich III)	2	20	70	108	108	130	102	85 - 115	

Quality Statement: All supporting quality data adhered to data quality objectives and test results meet the requirements of NELAP unless otherwise noted as flagged exceptions or in a case narrative attachment. Reports with full quality data deliverables are available on request.

*Approved for release per QA Plan, Exception to Limits - QAM Section 13-4

! Parameter not NELAP certifiable

R Spike recovery outside control limits due to matrix effect - LCS within limits

§ Reported on a Dry Weight Basis

These analytical results relate only to the sample tested.

All data is reported on an 'As Is' basis unless designated as 'Dry Wt'.

RL = Reporting Limits

*N/C = Not Calculated, Sample Concentration Greater than 5 times the Spike Level

POLLUTION CONTROL SERVICES



Report of Sample Analysis

Client Information	Sample Information	Laboratory Information
Trent DeWaters Comal I.S.D. 1404 N IH 35 New Braunfels, TX 78130	Project Name: Annual § Sample ID: SBMS 0-12" Matrix: Soil Date/Time Taken: 12/28/2023 1230	PCS Sample #: 746187 Page 3 of 3 Date/Time Received: 1/2/2024 08:00 Report Date: 1/23/2024

Test Description	Result	Units	RL	Analysis Date/Time	Method	Analyst
Total Solids	86.5	%	0.10	1/2/2024 16:30	SM 2540 G	EMV

Test Description	Precision	Quality Assurance Summary Limit	LCL	MS	MSD	UCL	LCS	LCS Limit	Blank
Total Solids	<1	12	N/A			N/A			

Quality Statement: All supporting quality data adhered to data quality objectives and test results meet the requirements of NELAC unless otherwise noted as flagged exceptions or in a case narrative attachment. Reports with full quality data deliverables are available on request.


§ Reported on a Dry Weight Basis

These analytical results relate only to the sample tested.
All data is reported on an 'As Is' basis unless designated as 'Dry Wt'.
RL = Reporting Limits

POLLUTION CONTROL SERVICES



Report of Sample Analysis

Client Information	Sample Information	Laboratory Information
Trent DeWaters Comal I.S.D. 1404 N IH 35 New Braunfels, TX 78130	Project Name: Annual Sample ID: SBMS 12-24" Matrix: Soil Date/Time Taken: 12/28/2023 1230	PCS Sample #: 746188 Page 1 of 3 Date/Time Received: 1/2/2024 08:00 Report Date: 1/23/2024 Approved by:  Chuck Wallgren, President

Test Description	Flag	Result	Units	RL	Analysis Date/Time	Method	Analyst
pH		7.9	S.U.	N/A	1/12/2024 11:47	SW846 9045	GTG
Conductivity, Specific		204	µmhos/cm at 25° C	N/A	1/8/2024 10:13	SM 2510B	CLH
Nitrate-N		6.3	mg/kg	0.1	1/15/2024 13:20	EPA 352.1	EMV
Kjeldahl-N, Total	!	707	mg/kg	3	1/10/2024 10:30	SM 4500-N B/C	PML
Ammonia-N		<3	mg/kg	3	1/15/2024 13:45	SM 4500-NH3 B/C	PML
Nitrogen, Total		713.3	mg/kg	1	1/15/2024 13:20	Calculation	CFW
Calcium (H2O Soluble)		180	mg/L	1.00	1/19/2024 09:04	SAR / EPA 200.7	DJL
Magnesium (H2O Soluble)	R	10.0	mg/L	1.00	1/19/2024 09:04	SAR / EPA 200.7	DJL

Test Description	Precision	Quality Assurance Summary							Blank
		Limit	LCL	MS	MSD	UCL	LCS	LCS Limit	
pH	N/A	N/A	N/A			N/A			
Conductivity, Specific	N/A	N/A	N/A			N/A			
Nitrate-N	3	10	70	109	106	130	102	85 - 115	
Kjeldahl-N, Total	1	13	83	105	104	114	106	85 - 115	<3
Ammonia-N	6	10	88	101	95	104	104	85 - 115	
Nitrogen, Total	N/A	N/A	N/A			N/A			
Calcium (H2O Soluble)	<1	20	70	*N/C	*N/C	130	95	85 - 115	
Magnesium (H2O Soluble)	<1	20	70	*145	*145	130	95	85 - 115	

Quality Statement: All supporting quality data adhered to data quality objectives and test results meet the requirements of NELAP unless otherwise noted as flagged exceptions or in a case narrative attachment. Reports with full quality data deliverables are available on request.

*Approved for release per QA Plan, Exception to Limits - QAM Section 13-4
 ! Parameter not NELAP certifiable
 R Spike recovery outside control limits due to matrix effect - LCS within limits
 § Reported on a Dry Weight Basis

These analytical results relate only to the sample tested.
 All data is reported on an 'As Is' basis unless designated as 'Dry Wt'.
 RL = Reporting Limits
 *N/C = Not Calculated, Sample Concentration Greater than 5 times the Spike Level

POLLUTION CONTROL SERVICES



Report of Sample Analysis

Client Information	Sample Information	Laboratory Information
Trent DeWaters Comal I.S.D. 1404 N IH 35 New Braunfels, TX 78130	Project Name: Annual § Sample ID: SBMS 12-24" Matrix: Soil Date/Time Taken: 12/28/2023 1230	PCS Sample #: 746188 Page 2 of 3 Date/Time Received: 1/2/2024 08:00 Report Date: 1/23/2024

Test Description	Flag	Result	Units	RL	Analysis Date/Time	Method	Analyst
Sodium (H2O Soluble)	R	51.0	mg/L	1.00	1/19/2024 09:04	SAR / EPA 200.7	DJL
Sodium Absorption Ratio	!	1.0	N/A	N/A	1/22/2024 10:20	USDA	DJL
Sodium/ICP (Mehlich III)		49.3	mg/kg	11.4	1/22/2024 08:07	Mehlich 3/EPA 200.7	DJL
Calcium/ICP (Mehlich III)		43,200	mg/kg	5.69	1/22/2024 08:07	Mehlich 3/EPA 200.7	DJL
Magnesium/ICP (Mehlich III)		282	mg/kg	5.69	1/22/2024 08:07	Mehlich 3/EPA 200.7	DJL
Phosphorous/ICP (Mehlich III)		<5.69	mg/kg	5.69	1/22/2024 08:07	Mehlich 3/EPA 200.7	DJL
Potassium/ICP (Mehlich III)		159	mg/kg	5.69	1/22/2024 08:07	Mehlich 3/EPA 200.7	DJL
Sulfur/ICP (Mehlich III)		26.0	mg/kg	5.69	1/22/2024 12:07	Mehlich 3/EPA 200.7	DJL

Test Description	Precision	Quality Assurance Summary							Blank
		Limit	LCL	MS	MSD	UCL	LCS	LCS Limit	
Sodium (H2O Soluble)	<1	20	70	*184	*184	130	95	85 - 115	
Sodium Absorption Ratio	N/A	N/A	N/A			N/A			
Sodium/ICP (Mehlich III)	4	20	70	78	74	130	109	85 - 115	
Calcium/ICP (Mehlich III)	5	20	70	*N/C	*N/C	130	100	85 - 115	
Magnesium/ICP (Mehlich III)	7	20	70	115	107	130	102	85 - 115	
Phosphorous/ICP (Mehlich III)	<1	20	75	123	121	125	105	85 - 115	
Potassium/ICP (Mehlich III)	1	20	70	107	105	130	98	85 - 115	
Sulfur/ICP (Mehlich III)	2	20	70	108	108	130	102	85 - 115	

Quality Statement: All supporting quality data adhered to data quality objectives and test results meet the requirements of NELAC unless otherwise noted as flagged exceptions or in a case narrative attachment. Reports with full quality data deliverables are available on request.

*Approved for release per QA Plan, Exception to Limits - QAM Section 13-4

! Parameter not NELAP certifiable

R Spike recovery outside control limits due to matrix effect - LCS within limits

§ Reported on a Dry Weight Basis

These analytical results relate only to the sample tested.

All data is reported on an 'As Is' basis unless designated as 'Dry Wt'.

RL = Reporting Limits

*N/C = Not Calculated, Sample Concentration Greater than 5 times the Spike Level

POLLUTION CONTROL SERVICES



Report of Sample Analysis

Client Information	Sample Information	Laboratory Information
Trent DeWaters Comal I.S.D. 1404 N IH 35 New Braunfels, TX 78130	Project Name: Annual §Sample ID: SBMS 12-24" Matrix: Soil Date/Time Taken: 12/28/2023 1230	PCS Sample #: 746188 Page 3 of 3 Date/Time Received: 1/2/2024 08:00 Report Date: 1/23/2024

Test Description	Result	Units	RL	Analysis Date/Time	Method	Analyst
Total Solids	86.9	%	0.10	1/2/2024 16:30	SM 2540 G	EMV

Test Description	Precision	Quality Assurance Summary Limit	LCL	MS	MSD	UCL	LCS	LCS Limit	Blank
Total Solids	<1	12	N/A			N/A			

Quality Statement: All supporting quality data adhered to data quality objectives and test results meet the requirements of NELAP unless otherwise noted as flagged exceptions or in a case narrative attachment. Reports with full quality data deliverables are available on request.

§ Reported on a Dry Weight Basis

These analytical results relate only to the sample tested.
All data is reported on an 'As Is' basis unless designated as 'Dry Wt'.
RL = Reporting Limits

Chain of Custody Number

746187

MULTIPLE SAMPLE ANALYSIS REQUEST AND CHAIN OF CUSTODY FORM

Stamp 1st sample and COC as same number

CUSTOMER INFORMATION				REPORT INFORMATION				Stamp 1: Sample and COC Lab Number																		
Name: <u>Comal ISD</u>				Attention: <u>Bradley Campbell</u>				Phone: <u>830/708-64</u>				Fax:														
SAMPLE INFORMATION																										
Project Information: <u>Spring Branch MS</u>				Collected By: <u>Jeff DePree</u>				Requested Analysis				Instructions/Comments:														
Report "Soils" <input type="checkbox"/> As Is <input checked="" type="checkbox"/> Dry Wt.																										
Client / Field Sample ID		Collected		Field Chlorine Residual mg/L	Composite or Grab	Matrix		Container		Type	Number	Preservative	PH, THN, Cond	NO ₃ -N	K, P, Ca, Mg, Na	S / I-CD	SAR / H ₂ O Soluble Na, Ca, Mg									
		Date	Time																							
0-12"		Start: <u>12/28/23</u>	Start: <u>0800</u>	<input checked="" type="checkbox"/> C <input type="checkbox"/> G	<input type="checkbox"/> DW <input type="checkbox"/> NPW <input type="checkbox"/> WW <input checked="" type="checkbox"/> Soil <input type="checkbox"/> Sludge <input type="checkbox"/> LW <input type="checkbox"/> Other	<input checked="" type="checkbox"/> P <input type="checkbox"/> G <input type="checkbox"/> O	1	<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₃ PO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ICE <input checked="" type="checkbox"/> N/A	X	X	X															PCS Sample Number 746187
		End: <u>12/28/23</u>	End: <u>12:30</u>																							
12-24"		Start: <u>12/28/23</u>	Start: <u>0800</u>	<input checked="" type="checkbox"/> C <input type="checkbox"/> G	<input type="checkbox"/> DW <input type="checkbox"/> NPW <input type="checkbox"/> WW <input checked="" type="checkbox"/> Soil <input type="checkbox"/> Sludge <input type="checkbox"/> LW <input type="checkbox"/> Other	<input checked="" type="checkbox"/> P <input type="checkbox"/> G <input type="checkbox"/> O	1	<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₃ PO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ICE <input checked="" type="checkbox"/> N/A	X	X	X														PCS Sample Number 746188	
		End: <u>12/28/23</u>	End: <u>12:30</u>																							
		Start:	Start:	<input type="checkbox"/> C <input type="checkbox"/> G	<input type="checkbox"/> DW <input type="checkbox"/> NPW <input type="checkbox"/> WW <input type="checkbox"/> Soil <input type="checkbox"/> Sludge <input type="checkbox"/> LW <input type="checkbox"/> Other	<input type="checkbox"/> P <input type="checkbox"/> G <input type="checkbox"/> O		<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₃ PO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ICE <input type="checkbox"/>																		
		End:	End:																							
		Start:	Start:	<input type="checkbox"/> C <input type="checkbox"/> G	<input type="checkbox"/> DW <input type="checkbox"/> NPW <input type="checkbox"/> WW <input type="checkbox"/> Soil <input type="checkbox"/> Sludge <input type="checkbox"/> LW <input type="checkbox"/> Other	<input type="checkbox"/> P <input type="checkbox"/> G <input type="checkbox"/> O		<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₃ PO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ICE <input type="checkbox"/>																		
		End:	End:																							
		Start:	Start:	<input type="checkbox"/> C <input type="checkbox"/> G	<input type="checkbox"/> DW <input type="checkbox"/> NPW <input type="checkbox"/> WW <input type="checkbox"/> Soil <input type="checkbox"/> Sludge <input type="checkbox"/> LW <input type="checkbox"/> Other	<input type="checkbox"/> P <input type="checkbox"/> G <input type="checkbox"/> O		<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₃ PO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ICE <input type="checkbox"/>																		
		End:	End:																							
		Start:	Start:	<input type="checkbox"/> C <input type="checkbox"/> G	<input type="checkbox"/> DW <input type="checkbox"/> NPW <input type="checkbox"/> WW <input type="checkbox"/> Soil <input type="checkbox"/> Sludge <input type="checkbox"/> LW <input type="checkbox"/> Other	<input type="checkbox"/> P <input type="checkbox"/> G <input type="checkbox"/> O		<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₃ PO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ICE <input type="checkbox"/>																		
		End:	End:																							
		Start:	Start:	<input type="checkbox"/> C <input type="checkbox"/> G	<input type="checkbox"/> DW <input type="checkbox"/> NPW <input type="checkbox"/> WW <input type="checkbox"/> Soil <input type="checkbox"/> Sludge <input type="checkbox"/> LW <input type="checkbox"/> Other	<input type="checkbox"/> P <input type="checkbox"/> G <input type="checkbox"/> O		<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₃ PO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ICE <input type="checkbox"/>																		
		End:	End:																							
		Start:	Start:	<input type="checkbox"/> C <input type="checkbox"/> G	<input type="checkbox"/> DW <input type="checkbox"/> NPW <input type="checkbox"/> WW <input type="checkbox"/> Soil <input type="checkbox"/> Sludge <input type="checkbox"/> LW <input type="checkbox"/> Other	<input type="checkbox"/> P <input type="checkbox"/> G <input type="checkbox"/> O		<input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₃ PO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> ICE <input type="checkbox"/>																		
		End:	End:																							
</																										

Rev. Multiple Sample COC 20180628

1532 Universal City Blvd., Ste. 100, Universal City, Texas 78148

P (210) 340-0343 or (800) 880-4616 - F (210) 658-7903

Login at www.pcslab.net

Sample Log-In Checklist

746188 COC No. 746187

CI 50

Sample Delivery to Lab Via:

Client Drop Off _____ Commercial Carrier: Bus _____ UPS
 PCS Field Services: Collection Pick Up ☒ Other: _____

Sample Kit/Coolers

Sample Kit/Cooler? Yes ☒ No ☐ Sample Kit/Cooler: Intact? Yes ☒ No ☐
Custody Seals on Sample Kit/Cooler: Not Present ☒ If Present, Intact ☐ Broken ☐
Sample Containers Intact; Unbroken and Not Leaking? Yes ☒ No ☐

Custody Seals on Sample Bottles: Not Present ☒ If Present

COC Present with Shipment or Delivery or Completed at Drop Off? Yes ✓ No

Has COC been properly Signed when Received/Relinquished? Yes ☒ No ☐

Does COC agree with Sample Bottle Information, Bottle Types, Preservation, etc.? Yes ☒ No ☐

All Samples Received before Hold Time Expiration? Yes ☐ No ☒

Sufficient Sample Volumes for Analysis Requested? Yes ☒ No ☐

Zero Headspace in VOA Vial? Yes ☐ No ☐

Sample Preservation:

Sample Preservation:

* **Cooling:** Not Required ☒ or Required ☐

If cooling required, record temperature of submitted samples Observed/Corrected 15 / 15 °C
Is Ice Present in Sample Kit/Cooler? ☒ Yes ☐ No Samples received same day as collected? ☐ Yes ☒ No
Lab Thermometer Make and Serial Number: Vaughan 1807009583 Other:

Acid Preserved Sample - If present, is pH <2? Yes No H_2SO_4 HNO_3 H_3PO_4

Base Preserved Sample - If present, is $\text{pH} > 12$? Yes ☐ No ☐ ☐ NaOH

Other Preservation: _____ If Present, Meets Requirements? Yes _____ No _____

Sample Preservations Checked by: _____ Date _____ Time _____

pH paper used to check sample preservation (PCS log #): _____ (HEM pH checked at analysis).

Samples Preserved/Adjusted by Lab:	Lab #	Parameters Preserved	Preservative Used	Log #

Adjusted by Tech/Analyst: _____ Date: _____ Time: _____

Client Notification/ Documentation for "No" Responses Above/ Discrepancies/ RevisionComments

Person Notified: _____ Contacted by: _____

Notified Date: _____ Time: _____

Method of Contact: At Drop Off: _____ Phone _____ Left Voice Mail _____ E-Mail _____ Fax _____

Unable to Contact _____ Authorized Laboratory to Proceed : _____ (Lab Director)
Regarding / Comments: _____

Actions taken to correct problems/discrepancies:

Receiving qualifier needed (requires client notification above) Temp. ___ Holding Time ___ Initials: ___

Receiving qualifier entered into LIMS at login

Initial/Date: _____

Revision Comments:

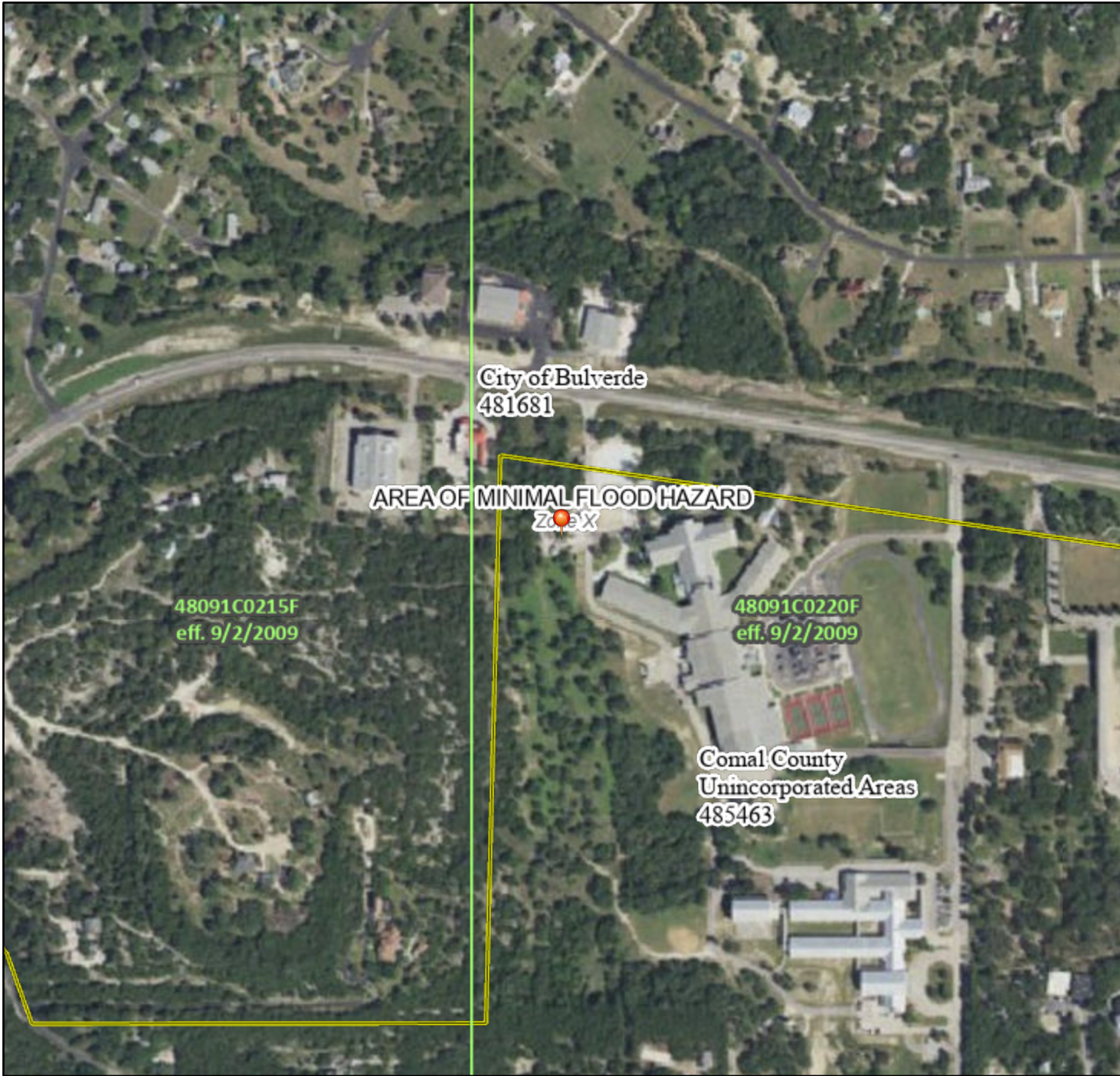
APPENDIX K

FEMA FLOOD MAP

National Flood Hazard Layer FIRMMette



98°26'31"W 29°48'10"N



1:6,000

98°25'53"W 29°47'39"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

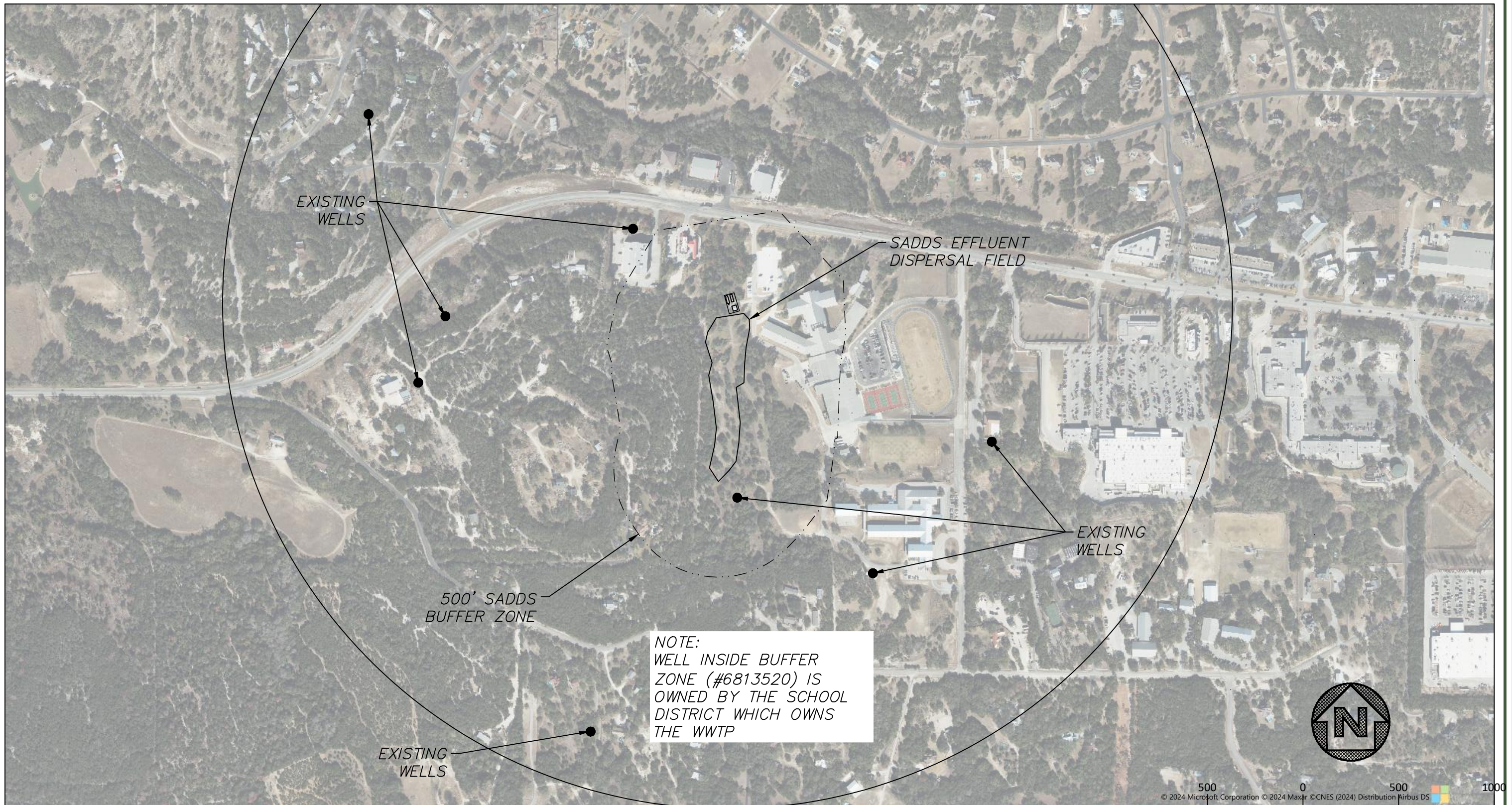
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/8/2024 at 11:18 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX L

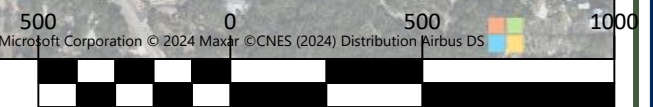
SURFACE WATERS BUFFER MAP

PLOTTED BY: Cody Wootton ON: Tuesday, September 03, 2024 AT: 1:54 PM FILEPATH: P:\012300\012320\001\Civil\CAD\Exhibits\STE.dwg



118 McKinney St. • P.O. Box 606 • Farmersville, Texas 75442
TEL: 972.784.7777
(TXENG FIRM F-1114)

SBMS SURFACE WATER BUFFER ZONE



GRAPHIC SCALE IN FEET

Brooke Paup, *Chairwoman*
Bobby Janecka, *Commissioner*
Catarina R. Gonzales, *Commissioner*
Kelly Keel, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 11, 2025

Mr. Trent DeWaters
Director of Facilities Maintenance
Comal Independent School District
1404 Interstate 35 North
New Braunfels, Texas 78130

RE: Declaration of Administrative Completeness
Applicant Name: Comal Independent School District (CN600249825)
Permit No.: WQ0013812003
Site Name: Spring Branch Middle School WWTP (RN102077542)
Type of Application: Renewal without changes

Dear Mr. DeWaters:

The executive director has declared the above referenced application, received on January 13, 2025 administratively complete on March 11, 2025.

You are now required to publish notice of your proposed activity and make a copy of the application available for public review. The following items are included to help you meet the regulatory requirements associated with this notice:

- Instructions for Public Notice
- Notice for Newspaper Publication
- Public Notice Verification Form
- Publisher's Affidavits

You must follow all the directions in the enclosed instructions. The most common mistakes are the unauthorized changing of notice, wording, or font. If you fail to follow these instructions, you may be required to republish the notices.

The following requirements are also described in the enclosed instructions. However, due to their importance, they are highlighted here as well.

1. Publish the enclosed notice within **30 calendar days** after your application is declared administratively complete. (See this letter's first paragraph for the declaration date.) **You may be required to publish the notice in more than one newspaper, including a newspaper published in an alternative language, to satisfy all of the notice requirements.**
2. On or before the date you publish notice, place a copy of your permit application in a public place in the county where the facility is or will be located. This copy must be accessible to the public for review and copying, must be updated to reflect changes to the application, and must remain in place throughout the comment period.

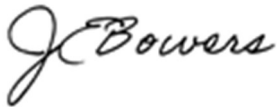
Mr. Trent DeWaters
Page 2
March 11, 2025
Permit No. WQ0013812003

3. For each publication, submit proof of publication of the notice that shows the publication date and newspaper name to the Office of the Chief Clerk within **30 calendar days** after notice is published in the newspaper.
4. Return the original enclosed Public Notice Verification and the Publisher's Affidavits to the Office of the Chief Clerk within **30 calendar days** after the notice is published in the newspaper.

If you do not comply with **all** the requirements described in the instructions, further processing of your application may be suspended, or the agency may take other actions.

If you have any questions regarding publication requirements, please contact the Office of Legal Services at (512) 239-0600. If you have any questions regarding the content of the notice, please contact Candice Calhoun-Courville at (512) 239-4312 or candice.calhoun@tceq.texas.gov.

Sincerely,



Jennifer E. Bowers
Section Manager, Water Quality Division Support
Office of Water
Texas Commission of Environmental Quality

JEB/cgc

Enclosures

Brooke Paup, *Chairwoman*
Bobby Janecka, *Commissioner*
Catarina R. Gonzales, *Commissioner*
Kelly Keel, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 16, 2025

Mr. Cody Wootton, E.I.T.
Consultant
Dunaway
118 McKinney Street
Farmersville, Texas 75442

RE: Application to Renew Permit No.: WQ0013812003
Applicant Name: Comal Independent School District (CN600249825)
Site Name: Spring Branch Middle School WWTP (RN102077542)
Type of Application: Renewal

VIA EMAIL

Dear Mr. Wootton:

We have received the application for the above referenced permit, and it is currently under review. Your attention to the following item(s) are requested before we can declare the application administratively complete. Please submit responses to the following items **via email**.

1. Administrative Report 1.0 – Section 14
 - i) The signature page provided is insufficient. The individual signing the application, for school districts, must at least be the level of an assistant superintendent or board member. Please provide an updated signature page as well as an updated section 3 to match the updated signature page.
2. 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.

Mr. Cody Wootton, E.I.T.
Page 2
January 16, 2025
Permit No. WQ0013812003

APPLICATION. Comal Independent School District, 1404 Interstate 35 North, New Braunfels, Texas 78130, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Land Application Permit (TLAP) No. WQ0013812003 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 13,000 gallons per day via public access subsurface drip irrigation system with a minimum area of 130,000 square feet. The domestic wastewater treatment facility and disposal area are located at 21053 State Highway 46 West, near the city of Spring Branch, in Comal County, Texas 78070. TCEQ received this application on January 13, 2025. The permit application will be available for viewing and copying at Comal School District, Administration Building, 1404 Interstate 35 North, New Braunfels, in Comal 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=-98.436666,29.798333&level=18>

Further information may also be obtained from Comal Independent School District at the address stated above or by calling Mr. Trent DeWaters, Director of Facilities Maintenance, at 830-221-2637.

3. The application indicates that public notices in Spanish are required. After confirming the portion of the NORI above does not contain any errors or omissions, please use the attached template to translate the NORI into Spanish. Only the first and last paragraphs are unique to this application and require translation. Please provide the translated Spanish NORI in a Microsoft Word document.

Please submit the complete response, addressed to my attention by January 30, 2025. If you should have any questions, please do not hesitate to contact me by phone at (512) 239-4312 or by email at candice.calhoun@tceq.texas.gov

Sincerely,



Candice Calhoun-Courville
Applications Review and Processing Team (MC148)
Water Quality Division
Texas Commission of Environmental Quality

cgc

Mr. Cody Wootton, E.I.T.
Page 3
January 16, 2025
Permit No. WQ0013812003

Enclosure(s)

Attachment 1 - Municipal Disposal Renewal Spanish NORI

cc: Mr. Bradley Campbell, Plant Supervisor, Comal Independent School District, 1404
Interstate 35 North, New Braunfels, Texas 78130

Candice Calhoun

From: Candice Calhoun
Sent: Friday, January 31, 2025 2:52 PM
To: Cody Wootton
Cc: bradley.campbell@comalisd.org; Erwin Madrid
Subject: Application for Permit No. WQ0013812003 - Notice of Deficiency 30-Day Will Return Letter
Attachments: WQ0013812003_Will Return Ltr.pdf
Importance: High

Dear applicant,

The attached Notice of Deficiency 30-Day Will Return Letter was mailed on January 31, 2025, requesting additional information needed to declare the application administratively complete. The original will be sent by certified mail. Please send the complete response by March 2, 2025.

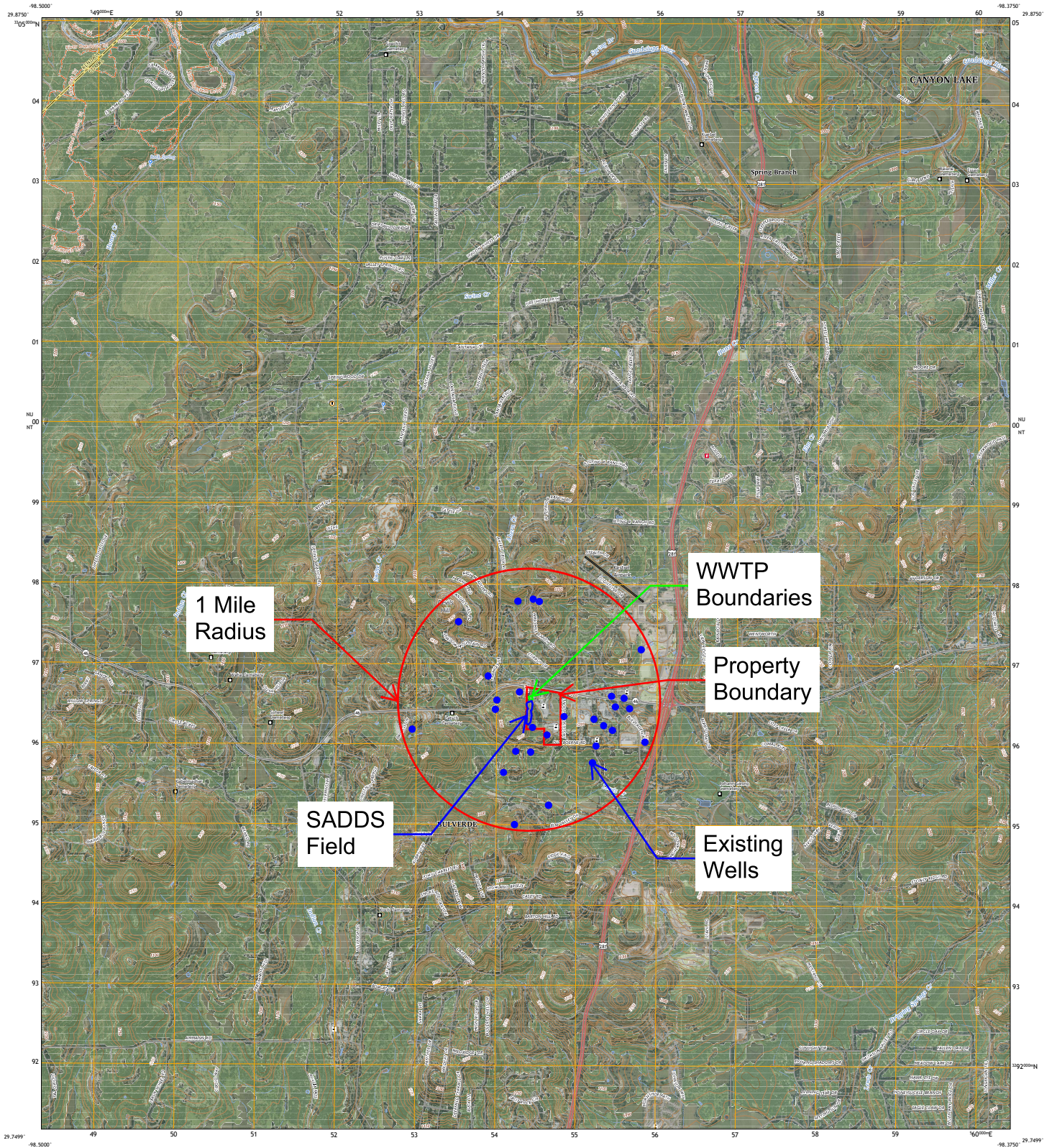
Regards,



Candice Courville

License & Permit Specialist
ARP Team | Water Quality Division
Texas Commission on Environmental
Quality
512-239-4312
candice.calhoun@tceq.texas.gov

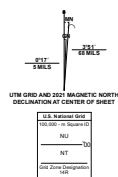
How is our customer service? Fill out our online customer satisfaction survey at
www.tceq.texas.gov/customersurvey



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 14B
Data is provided by The National Map (TNM), is the best available at the time of map
generation, and includes data content from supporting themes of Elevation,
Hydrography, Geographic Names, Boundaries, Transportation, Structures, Land Cover,
and Orthoregistry. Refer to associated Federal Geographic Data Committee (FGDC)
Metadata for additional source data information.

This map is not a legal document. Boundaries may be generalized for this map scale.
Private lands within government ownership may not be shown. Obtain permission
before entering private lands. Temporal changes may have occurred since these data
were collected and some data may no longer represent actual surface conditions.

Learn About The National Map: <https://nationalmap.gov>



Actual	Valley
Subside	Red Core

ADJACENT QUADRANGLES

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

[ZIP Code™ by Address \(/zip-code-lookup.htm?byaddress\)](/zip-code-lookup.htm?byaddress)

[ZIP Code™ by City and State \(/zip-code-lookup.htm?bycitystate\)](/zip-code-lookup.htm?bycitystate)

[Cities by ZIP Code™ \(/zip-code-lookup.htm?citybyzipcode\)](/zip-code-lookup.htm?citybyzipcode)

[FAQs \(https://www.usps.com/faq.htm\)](https://www.usps.com/faq.htm)

Look Up a ZIP Code™

Go to

ZIP Code™ by Address

You entered:

118 MCKINNEY STREET
FARMERSVILLE TX
75442

If more than one address matches the information provided, try narrowing your search by entering a street address and, if applicable, a unit number. **Edit and search again. ([zip-code-lookup.htm?byaddress](/zip-code-lookup.htm?byaddress))**

118 MCKINNEY ST
FARMERSVILLE TX **75442-2214**

[Look Up Another ZIP Code™](#)

[Edit and Search Again \(/zip-code-lookup.htm?byaddress\)](/zip-code-lookup.htm?byaddress)

Feedback

[ZIP Code™ by Address](/zip-code-lookup.htm?byaddress) (/zip-code-lookup.htm?byaddress)

[ZIP Code™ by City and State](/zip-code-lookup.htm?bycitystate) (/zip-code-lookup.htm?bycitystate)

[Cities by ZIP Code™](/zip-code-lookup.htm?citybyzipcode) (/zip-code-lookup.htm?citybyzipcode)

[FAQs](https://www.usps.com/faq.htm) (https://www.usps.com/faq.htm)

Look Up a ZIP Code™

Go to

ZIP Code™ by Address

You entered:

1404 INTERSTATE HIGHWAY 35 NORTH
NEW BRAUNFELS TX
78130

If more than one address matches the information provided, try narrowing your search by entering a street address and, if applicable, a unit number. **Edit and search again.** ([zip-code-lookup.htm?byaddress](/zip-code-lookup.htm?byaddress))

1404 INTERSTATE 35 N
NEW BRAUNFELS TX **78130-2817**

[Look Up Another ZIP Code™](#)

[Edit and Search Again \(/zip-code-lookup.htm?byaddress\)](/zip-code-lookup.htm?byaddress)

Feedback



Workbook last saved: Just now



31

All State Champions over
past 2 years

Comal ISD



[About Us](#)

[Contact Us](#)

[Comal ISD](#)

[Ethics Policy](#)

[Sitemap](#)



096

2024 graduates



6 years

In a row TAEA District of
Distinction award



3 campuses

Awarded purple star
designation

Js
t Us
Cares
Hotline
p

1404 IH 35 North,
New Braunfels, TX 78130
Phone: (830) 221-2000



 | Login

Powered by edlio

 Select Language ▼





Water Quality Receipt Report

JAN-14-25 09:00 PM

Paid In By: COLUMBIA BRAZORIA ISD

<u>Acct.Name</u>	<u>Fee</u>	<u>Endorse. #</u>	<u>Ref#2</u>	<u>PayTyp</u>	<u>Check#</u>	<u>Card#</u>	<u>Tran.Date</u>	<u>Rec.Amnt</u>
WATER QUALITY	WQP	M319728A	14893001	CK	122622		17-AUG-23	-\$300.00
PERMIT APPLICATION								
NOTICE FEES WQP	PTGQ	M319728B	14893001	CK	122622		17-AUG-23	-\$15.00
WATER QUALITY PMT								

Paid In By: COLUMBUS, CITY OF (THE)

<u>Acct.Name</u>	<u>Fee</u>	<u>Endorse. #</u>	<u>Ref#2</u>	<u>PayTyp</u>	<u>Check#</u>	<u>Card#</u>	<u>Tran.Date</u>	<u>Rec.Amnt</u>
WATER QUALITY	WQP	M418054A	10025001	CK	71060		07-JUN-24	-\$1600.00
PERMIT APPLICATION								
WATER QUALITY	WQP	M418053A	10025002	CK	71061		07-JUN-24	-\$800.00
PERMIT APPLICATION								
NOTICE FEES WQP	PTGQ	M418053B	10025002	CK	71061		07-JUN-24	-\$15.00
WATER QUALITY PMT								
NOTICE FEES WQP	PTGQ	M418054B	10025001	CK	71060		07-JUN-24	-\$15.00
WATER QUALITY PMT								

Paid In By: COMAL ISD

<u>Acct.Name</u>	<u>Fee</u>	<u>Endorse. #</u>	<u>Ref#2</u>	<u>PayTyp</u>	<u>Check#</u>	<u>Card#</u>	<u>Tran.Date</u>	<u>Rec.Amnt</u>
WATER QUALITY	WQP	M400054A	14533002	CK	100003187		05-SEP-23	-\$300.00
PERMIT APPLICATION					4			
NOTICE FEES WQP	PTGQ	M400054B	14533002	CK	100003187		05-SEP-23	-\$15.00
WATER QUALITY PMT					4			
WATER QUALITY	WQP	M541218A	13812001	CK	100004083		10-OCT-24	-\$300.00
PERMIT APPLICATION					8			
WATER QUALITY	WQP	M541219A	14295001	CK	100004083		10-OCT-24	-\$300.00
PERMIT APPLICATION					9			
NOTICE FEES WQP	PTGQ	M541218B	13812001	CK	100004083		10-OCT-24	-\$15.00
WATER QUALITY PMT					8			
NOTICE FEES WQP	PTGQ	M541219B	14295001	CK	100004083		10-OCT-24	-\$15.00
WATER QUALITY PMT					9			
WATER QUALITY	WQP	M541419A	13812003	CK	100004097		17-OCT-24	-\$300.00
PERMIT APPLICATION					7			
NOTICE FEES WQP	PTGQ	M541419B	13812003	CK	100004097		17-OCT-24	-\$15.00
WATER QUALITY PMT					7			

Paid In By: COMMODORE COVE IMPROVEMENT DIST

<u>Acct.Name</u>	<u>Fee</u>	<u>Endorse. #</u>	<u>Ref#2</u>	<u>PayTyp</u>	<u>Check#</u>	<u>Card#</u>	<u>Tran.Date</u>	<u>Rec.Amnt</u>
WATER QUALITY	WQP	M319769A	10798001	CK	7507		18-AUG-23	-\$500.00
PERMIT APPLICATION								
NOTICE FEES WQP	PTGQ	M319769B	10798001	CK	7507		18-AUG-23	-\$15.00
WATER QUALITY PMT								

Paid In By: CONCHETTA IMPASTATO

<u>Acct.Name</u>	<u>Fee</u>	<u>Endorse. #</u>	<u>Ref#2</u>	<u>PayTyp</u>	<u>Check#</u>	<u>Card#</u>	<u>Tran.Date</u>	<u>Rec.Amnt</u>
WATER QUALITY	WQP	PI00961001	705933	IFCE	582EA0006		21-MAY-24	-\$300.00
PERMIT APPLICATION					10788			
NOTICE FEES WQP	PTGQ	PI00961000	705934	IFCE	582EA0006		21-MAY-24	-\$15.00
WATER QUALITY PMT					10788			



Basis 2 A/R Outstanding Past Due Transactions Detail Report By Customer Name

JAN-15-25 06:30 AM

Customer Name: COLVIN JOSEPH JR

Account #: 0031267U

Debtcollpath Stage: WHOLD:REFERRED,UNCOL:EXHAUST

Calls:

UST	SC2506-004	LATE FEE FOR UST0504302	0000056697	10-FEB-05	10-FEB-05	\$1.04
UST	SC2507-005	LATE FEE FOR UST0472342	0000056697	10-MAR-05	10-MAR-05	\$1.04
UST	SC2507-003	LATE FEE FOR UST0530136	0000056697	10-MAR-05	10-MAR-05	\$1.04
UST	SC2507-002	LATE FEE FOR UST0560365	0000056697	10-MAR-05	10-MAR-05	\$1.04
UST	SC2507-001	LATE FEE FOR UST0584985	0000056697	10-MAR-05	10-MAR-05	\$1.04
UST	SC2507-004	LATE FEE FOR UST0504302	0000056697	10-MAR-05	10-MAR-05	\$1.04
UST	SC2508-005	LATE FEE FOR UST0472342	0000056697	11-APR-05	11-APR-05	\$1.04
UST	SC2508-003	LATE FEE FOR UST0530136	0000056697	11-APR-05	11-APR-05	\$1.04
UST	SC2508-001	LATE FEE FOR UST0584985	0000056697	11-APR-05	11-APR-05	\$1.04
UST	SC2508-002	LATE FEE FOR UST0560365	0000056697	11-APR-05	11-APR-05	\$1.04
UST	SC2508-004	LATE FEE FOR UST0504302	0000056697	11-APR-05	11-APR-05	\$1.04
UST	SC2509-002	LATE FEE FOR UST0560365	0000056697	10-MAY-05	10-MAY-05	\$1.04
UST	SC2509-001	LATE FEE FOR UST0584985	0000056697	10-MAY-05	10-MAY-05	\$1.04
UST	SC2509-003	LATE FEE FOR UST0530136	0000056697	10-MAY-05	10-MAY-05	\$1.04
UST	SC2509-004	LATE FEE FOR UST0504302	0000056697	10-MAY-05	10-MAY-05	\$1.04
UST	SC2509-005	LATE FEE FOR UST0472342	0000056697	10-MAY-05	10-MAY-05	\$1.04
UST	SC2510-002	LATE FEE FOR UST0560365	0000056697	09-JUN-05	09-JUN-05	\$1.04
UST	SC2510-005	LATE FEE FOR UST0472342	0000056697	09-JUN-05	09-JUN-05	\$1.04
UST	SC2510-001	LATE FEE FOR UST0584985	0000056697	09-JUN-05	09-JUN-05	\$1.04
UST	SC2510-004	LATE FEE FOR UST0504302	0000056697	09-JUN-05	09-JUN-05	\$1.04
UST	SC2510-003	LATE FEE FOR UST0530136	0000056697	09-JUN-05	09-JUN-05	\$1.04

Total of delinquent transactions (Account): \$3247.58

Total of delinquent transactions (Customer): \$3247.58

Customer Name: COMAL AUTO SALVAGE INC

Account #: 20030537

Debtcollpath Stage: WHOLD:REFERRED,UNCOL:EXHAUST

Calls:

GPS	GPS0155446	GEN PMTS STORMWTR	FY12	TXR05T649	31-JAN-12	29-FEB-12	\$200.00
GPS	SC00071988	LATE FEE - MAR 2012			12-MAR-12	12-MAR-12	\$10.00
GPS	SC00074687	LATE FEE - APR 2012			10-APR-12	10-APR-12	\$10.00
GPS	SC00076814	LATE FEE - MAY 2012			10-MAY-12	10-MAY-12	\$.70
GPS	GPS0155446	COLLECTION COST RECOVERY			01-JUN-12	01-JUN-12	\$50.00
GPS	SC00078745	LATE FEE - JUN 2012			11-JUN-12	11-JUN-12	\$.70
GPS	SC00080592	LATE FEE - JUL 2012			10-JUL-12	10-JUL-12	\$.70
GPS	SC00082254	LATE FEE - AUG 2012			10-AUG-12	10-AUG-12	\$.70
GPS	SC00084065	LATE FEE - SEP 2012			10-SEP-12	10-SEP-12	\$.70
GPS	SC00085667	LATE FEE - OCT 2012			10-OCT-12	10-OCT-12	\$.70
GPS	SC00087466	LATE FEE - NOV 2012			12-NOV-12	12-NOV-12	\$.70

Total of delinquent transactions (Account): \$274.90

Total of delinquent transactions (Customer): \$274.90

Customer Name: COMAL COUNTY WCID 6

Account #: 23008491

Debtcollpath Stage:

Calls: MAIL

CWQ	CWQ0078820	PERMIT	FY25	0015095001	31-OCT-24	30-NOV-24	\$1501.01
-----	------------	--------	------	------------	-----------	-----------	-----------

Total of delinquent transactions (Account): \$1501.01

Total of delinquent transactions (Customer): \$1501.01

Customer Name: COMANCHE BEND TRUST

Account #: 24306725

Debtcollpath Stage:

Calls:

BWM	BWM0029373	ASSESSMENT CHARGE	FY25	401260106	31-OCT-24	30-NOV-24	\$50.00	
BWM	BWM0029374	AWR CHARGE	AF	FY25	401260106	31-OCT-24	30-NOV-24	\$41.40

Total of delinquent transactions (Account): \$91.40

Total of delinquent transactions (Customer): \$91.40

Customer Name: COMARK BUILDING SYSTEMS INC

Account #: 20033624

Debtcollpath Stage: UNCOL:EXHAUST

Calls:

GPS	GPS0148045	GEN PMTS STORMWTR	FY11	TXR05W737	31-DEC-10	31-JAN-11	\$200.00
-----	------------	-------------------	------	-----------	-----------	-----------	----------

Candice Calhoun

From: Cody Wootton <cwootton@dunaway.com>
Sent: Thursday, January 30, 2025 6:26 PM
To: Candice Calhoun
Cc: bradley.campbell@comalisd.org; Leah Whallon
Subject: Re: [EXTERNAL]Application to Renew Permit No. WQ0013812003 - Comal Independent School District
Attachments: NOD1 Response Letter.pdf; NORI Espanol.docx

Ms. Courville,

Attached are the relevant documents to respond to the NOD dated January 16, 2025.

Please note that I am working on obtaining the new signatures, and was advised by Ms. Whallon to send you what I have now so we can coordinate an extension for CISD to get me the new signatures to send to you. These files are fully complete as intended other than the PDF containing those updated files, and I informed them that I need the updated signatures ASAP.

Please let me know if there are any questions or comments in the meantime.

Thank you,

Cody Wootton, EIT
Graduate Engineer I
T 972.784.7777

From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Thursday, January 16, 2025 3:05 PM
To: Cody Wootton <cwootton@dunaway.com>
Cc: bradley.campbell@comalisd.org <bradley.campbell@comalisd.org>
Subject: [EXTERNAL]Application to Renew Permit No. WQ0013812003 - Comal Independent School District

Good afternoon, Mr. Wootton,

The attached Notice of Deficiency (NOD) letter dated January 16, 2025, requests additional information needed to declare the application administratively complete. Please send complete response, via email, by January 30, 2025.

Please let me know if you have any questions.

Regards,



Dunaway No. 12320.001

January 30, 2025

Candice Courville
Texas Commission on Environmental Quality
Water Quality Division
Applications Review and Processing Team (MC148)
512-239-4312

Re: Application to Renew Permit No.: WQ0013812003
Applicant Name: Comal Independent School District (CN600249825)
Site Name: Spring Branch Middle School WWTP (RN102077542)
Type of Application: Renewal

Dear Ms. Courville:

This letter is to address the items listed in the Notice of Deficiency 1 sent via email on January 16th, 2024. The complete response is as follows:

Item 1: "Administrative Report 1.0 – Section 14 i) The signature page provided is insufficient. The individual signing the application, for school districts, must at least be the level of an assistant superintendent or board member. Please provide an updated..."

Response 1: Attached is updated pages that contained the old signature. They not have the signature of the new COO of CISD.

Item 2: "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."

Response 2: This portion of the NORI seems accurate and complete.

Item 3: "The application indicates that public notices in Spanish are required. After confirming the portion of the NORI above does not contain any errors or omissions, please use the attached template to translate the NORI into Spanish..."

Response 3: Attached is a Word Document of the NORI translated into Spanish.

Please let us know if there is anything else needed to ensure the renewal application is administratively complete.

Sincerely,

DUNAWAY ASSOCIATES, LLC
a Texas limited liability company

Cody Wootton, EIT
Graduate Engineer

Candice Calhoun

From: Candice Calhoun
Sent: Friday, January 31, 2025 2:52 PM
To: Cody Wootton
Cc: bradley.campbell@comalisd.org; Erwin Madrid
Subject: Application for Permit No. WQ0013812003 - Notice of Deficiency 30-Day Will Return Letter
Attachments: WQ0013812003_Will Return Ltr.pdf
Importance: High

Dear applicant,

The attached Notice of Deficiency 30-Day Will Return Letter was mailed on January 31, 2025, requesting additional information needed to declare the application administratively complete. The original will be sent by certified mail. Please send the complete response by March 2, 2025.

Regards,



Candice Courville

License & Permit Specialist
ARP Team | Water Quality Division
Texas Commission on Environmental
Quality
512-239-4312
candice.calhoun@tceq.texas.gov

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

Candice Calhoun

From: Cody Wootton <cwootton@dunaway.com>
Sent: Wednesday, February 26, 2025 11:22 AM
To: Candice Calhoun
Cc: bradley.campbell@comalisd.org; Leah Whallon
Subject: Re: [EXTERNAL]Application to Renew Permit No. WQ0013812003 - Comal Independent School District
Attachments: NOD1 Response Letter.pdf; NORI Espanol.docx; Signature Updates.pdf

Ms. Courville,

I have received the new signature, attached to this email along with an updated NOD response and its attachments.

Please let me know if you have any questions or need anything else.

Thank you very much for your help,

Cody Wootton, EIT

Graduate Engineer I

T 972.784.7777

From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Friday, January 31, 2025 9:14 AM
To: Cody Wootton <cwootton@dunaway.com>
Cc: bradley.campbell@comalisd.org <bradley.campbell@comalisd.org>; Leah Whallon <Leah.Whallon@Tceq.Texas.Gov>
Subject: RE: [EXTERNAL]Application to Renew Permit No. WQ0013812003 - Comal Independent School District

Mr. Wootton,

Thank you, your response for items 2, and 3 is sufficient. Once you have received the new signature page, please send that over. As stated in my previous email, I will have the 30-day letter issued to you no later than the close of business today.

Thank you,



Candice Courville

License & Permit Specialist

ARP Team | Water Quality Division

Texas Commission on Environmental
Quality

512-239-4312

candice.calhoun@tceq.texas.gov



Dunaway No. 12320.001

February 26, 2025

Candice Courville
Texas Commission on Environmental Quality
Water Quality Division
Applications Review and Processing Team (MC148)
512-239-4312

Re: Application to Renew Permit No.: WQ0013812003
Applicant Name: Comal Independent School District (CN600249825)
Site Name: Spring Branch Middle School WWTP (RN102077542)
Type of Application: Renewal

Dear Ms. Courville:

This letter is to address the items listed in the Notice of Deficiency 1 sent via email on January 16th, 2024. The complete response is as follows:

Item 1: "Administrative Report 1.0 – Section 14 i) The signature page provided is insufficient. The individual signing the application, for school districts, must at least be the level of an assistant superintendent or board member. Please provide an updated..."

Response 1: Attached is updated pages that contained the old signature. These are: signature page, laboratory accreditation, and core data form signature. They now have the signature of the new COO of CISD.

Item 2: "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."

Response 2: This portion of the NORI seems accurate and complete.

Item 3: "The application indicates that public notices in Spanish are required. After confirming the portion of the NORI above does not contain any errors or omissions, please use the attached template to translate the NORI into Spanish..."

Response 3: Attached is a Word Document of the NORI translated into Spanish.

Please let us know if there is anything else needed to ensure the renewal application is administratively complete.

Sincerely,

DUNAWAY ASSOCIATES, LLC
a Texas limited liability company

Cody Wootton, EIT
Graduate Engineer

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0013812003

Applicant: Comal Independent School District


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): Mark Stahl

Signatory title: Chief Operations Officer

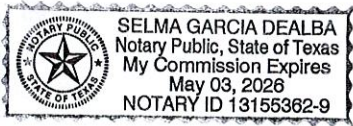
Signature:  Date: 2/26/2025
(Use blue ink)

Subscribed and Sworn to before me by the said Mark Stahl
on this 26 day of Feb, 20 25.
My commission expires on the 3 day of May, 20 26.


Notary Public

[SEAL]

Comal County
County, Texas



Section 14. Laboratory Accreditation (Instructions Page 56)

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: Mark Stahl

Title: Chief Operations Officer

Signature: _____

Date: _____

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:
	WQ0013812003			

SECTION IV: Preparer Information

40. Name:	Cody Wootton, EIT			41. Title:	Graduate Engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address		
(972) 784-7777		() -	cwootton@dunaway.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:	Comal ISO		Job Title:	Chief Operations Officer	
Name (In Print):	Mark A. Stapf			Phone:	(800) 21-2150
Signature:				Date:	02/26/2025



Compliance History Report

Compliance History Report for CN600249825, RN102077542, Rating Year 2024 which includes Compliance History (CH) components from September 1, 2019, through August 31, 2024.

Customer, Respondent, or Owner/Operator:	CN600249825, Comal Independent School District	Classification: SATISFACTORY	Rating: 4.84
Regulated Entity:	RN102077542, SPRING BRANCH MIDDLE SCHOOL	Classification: UNCLASSIFIED	Rating: -----
Complexity Points:	3	Repeat Violator:	NO
CH Group:	14 - Other		
Location:	21053 STATE HIGHWAY 46 W SPRING BRANCH, TX 78070-6125, COMAL COUNTY		
TCEQ Region:	REGION 13 - SAN ANTONIO		

ID Number(s):

WASTEWATER PERMIT WQ0013812003

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

Date Compliance History Report Prepared: March 17, 2025

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

Component Period Selected: January 13, 2020 to March 17, 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? | YES |
| 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

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.

Comal Independent School District, 1404 Interstate 35 North, New Braunfels, Texas 78130, has applied to the TCEQ to renew Texas Land Application Permit No. WQ0013812003 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 13,000 gallons per day via public access subsurface drip irrigation system with a minimum area of 130,000 square feet. The domestic wastewater treatment facility and disposal area are located at 21053 State Highway 46 West, near the city of Spring Branch, in Comal County, Texas 78070. TCEQ received this application on January 13, 2025. The permit application will be available for viewing and copying at Comal School District, Administration Building, 1404 Interstate 35 North, New Braunfels, in Comal 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=-98.436666,29.798333&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: _____

TCEQ Interoffice Memorandum

To: Deba Dutta, Team Leader
Municipal Permits Team
From: Mara Guerin
Water Quality Assessment Team
Date: March 14, 2025
Subject: Agronomy Recommendation, Comal ISD, Spring Branch Middle School WWTP,
Renewal, Permit WQ0013182003, Comal 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. Update Special Provision 6 to the following:

Application rates to the subsurface irrigation site shall not exceed 0.1 gallons per square foot per day. The permittee is responsible for providing equipment for determining application rates and maintaining accurate records of the volume of effluent applied. These records shall be made available for review by the Texas Commission on Environmental Quality and shall be maintained for least three years.

2. Update Special Provision 8 to the following:

Subsurface irrigation practices shall be designed and managed so as to prevent ponding and surfacing of effluent, contamination of ground and surface water, and the occurrence of nuisance conditions in the area. To promote effluent and nutrient uptake by the crop, and to prevent pathways for effluent surfacing, Bermuda grass and rye grass shall be established and well maintained in the irrigation area throughout the year

3. Add the following Special Provision:

Effluent shall not be applied for irrigation during rainfall events or when the ground is frozen or saturated.

4. Update Special Provision 7 to the following:

Based on the requirements of 30 TAC § 222.151, the subsurface area drip dispersal system shall be designed and managed so as to prevent seepage or percolation out of the root zone, other than leaching in the amount required to maintain the health of the vegetative cover. Surfacing and ponding is prohibited. Creating a condition at the treatment facility or the drip dispersal zones that contributes to vector attraction or odor is prohibited.

5. Update Special Provision 13 to the following:

For any area where treated effluent is stored or where there exist hose bibs or faucets, the permittee shall erect adequate signs stating that the irrigation water is from a non-potable water supply. 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.

6. Update Special Provision 20 to the following:

The permittee shall maintain a minimum rootable soil depth of 12 inches below the drip irrigation lines. At least a six-inch layer of soil shall be maintained over the drip lines. If imported soils are used, the permittee shall submit no later than 90 days prior to construction to the TCEQ Water Quality Assessment Team (MC 150) and the Wastewater Permitting Section (MC 148) of the Water Quality Division a plan for review/revision and approval describing how the imported soils will be incorporated into the native soils and how soil erosion will be prevented in the affected areas.

7. Update Special Provision 22 to the following:

The permittee shall use cultural practices to promote and maintain the health and propagation of the Bermuda grass and ryegrass crops and avoid plant lodging. The permittee shall harvest the crops (cut and remove it from the field) at least twice 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.

8. Update Special Provision 25 to the following:

Each zone shall have at least one soil moisture-sensing devices placed at 12 inches below the depth of the drip lines that will automatically shut off irrigation to that zone when the soil becomes saturated. The devices shall be located on the downgradient side of each zone and be spaced a minimum of 50 feet apart. The soil moisture monitoring devices, including a map of the monitoring device locations, shall be included with the dispersal zone design and submitted with the engineering report required by 222 TAC Subchapter D.

9. Update Special Provision 27 to the following:

The physical condition of the land application fields shall be monitored on a weekly basis. Any area with problems such as surface runoff, surficial erosion, or stressed or damaged vegetation, etc., shall be recorded in a field log kept onsite. Corrective measures will be implemented within 24 hours of discovery.

10. Update Special Provision 29 to the following:

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 2.984 acres with no fewer than 10 to 15 subsamples representing each composite sample. For analysis and reporting, subsamples shall be composited by like sampling depth, type of crop, and soil type. 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	Reporting units
-----------	--------	--------------------	-----------------

		Level (MAL)	
pH	2:1 (v/v) water to soil mixture		Reported to 0.1 pH units after calibration of pH meter
Electrical Conductivity	Obtained from the SAR water saturated paste extract	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) Calcium (Ca) Magnesium (Mg) Sodium (Na) Sulfur (S)	May be determined in the same Mehlich III extract with inductively coupled plasma	5 (K) 10 (Ca) 5 (Mg) 10 (Na) 1 (S)	mg/kg (dry weight basis)
Water- soluble: Sodium (Na)	Obtained from the SAR water	1 (Na) 1 (Ca) 1 (Mg)	

Calcium (Ca) Magnesium (Mg)	saturated paste extract		Water soluble constituents are reported in mg/L
Sodium Adsorption Ratio (SAR)	$\text{SAR} = \frac{\text{Na}}{\sqrt{\frac{(\text{Ca} + \text{Mg})}{2}}}$		<p>Express concentrations of Na, Ca and Mg in the water saturated paste extract in milliequivalents/liter (meq/L) to calculate the SAR. The SAR value is unit less.</p> <p>If the SAR is greater than 10, amendments (e.g., gypsum) shall be added to the soil to adjust the SAR to less than 10.</p>
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 13), 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.

TCEQ Interoffice Memorandum

To: Deba Dutta, P.E., Leader, Municipal Permits Team

From: Andrew Gorton, P.G., Geologist, Water Quality Assessment Team

Date: March 12, 2025

Subject: Geology Compliance Review, Comal ISD – Spring Branch Middle School WWTF, Application for a Permit Renewal, Permit No. WQ0013812003, Comal County

Based upon review of the existing permit language and an evaluation of the permit application, the WQA Team reviewing geologist recommends the following to the renewed permit:

1. Revise the first sentence of Special Provision 34 to state “Any recharge features uncovered by construction and operational activities shall be addressed in an updated and certified Recharge Feature Plan (RFP).”
2. Revise Special Provision 36(c) to include fecal coliform.
3. Replace Special Provision 36(d) to state: The permittee shall submit the data, including laboratory reports, and a map showing the locations of any seeps/springs that were sampled per the Seeps/Springs Monitoring Plan to the Water Quality Assessment Team (MC-150) of the Water Quality Division, the TCEQ Region 13 (San Antonio) Office, and the Compliance Monitoring Section (MC-224) during the month of September of each year for review. If no seeps/springs were identified during a particular quarter, that information shall be included in the annual report. Seeps/springs monitoring shall continue for the life of the system.

COMAL INDEPENDENT SCHOOL DISTRICT
PERMIT APPLICATION NO. WQ0013182003
APPLICATION FOR A PERMIT RENEWAL
Technical Completeness Review

Please address the following items:

GEOLOGY ITEMS

1. No comments.

AGRONOMY ITEMS

1. Domestic Technical Report 1.0, Section 7, Table 1.0(2) – The submitted analyses results for Ammonia Nitrogen are elevated. Please explain why this constituent was elevated at the time of sampling and/or submit analyses depicting lower levels of effluent Ammonia Nitrogen.
2. Domestic Worksheet 3.0, Section 2. Land Application Site(s) Table 3.0(1) – Please state Land Use information (pastureland, hay field, park, etc.) in Column 1 of the table.
3. Domestic Worksheet 3.0 Section 8, Appendix J – The submitted soil analyses results for Total Kjeldahl Nitrogen and Total Nitrogen are elevated. Please explain why this constituent was elevated at the time of sampling and/or submit analyses depicting lower levels of soil analysis Total Kjeldahl Nitrogen and Total Nitrogen.

For geology/groundwater-related questions, please contact Andrew Gorton via email at andrew.gorton@tceq.texas.gov (preferred) or at 512-239-4585 and for agronomy related questions, please contact Mara Guerin via email at mara.guerin@tceq.texas.gov (preferred) or at 512-239-4532.