

### 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. Application materials



### Este archivo contiene los siguientes documentos:

- 1. Resumen en lenguaje sencillo (PLS, por sus siglas en inglés) de la actividad propuesta
  - Inglés
  - Idioma alternativo (español)
- 2. Primer aviso (NORI, por sus siglas en inglés)
  - Inglés
  - Idioma alternativo (español)
- 3. Solicitud original

#### 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 digestor 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: <a href="https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications">https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications</a>. El aviso de idioma alternativo en español está disponible en <a href="https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications">https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications</a>.

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 countywide 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 <a href="www.tceq.texas.gov/goto/cid">www.tceq.texas.gov/goto/cid</a>. 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 <a href="https://www14.tceq.texas.gov/epic/eComment/">https://www14.tceq.texas.gov/epic/eComment/</a>, 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 <a href="www.tceq.texas.gov/goto/pep">www.tceq.texas.gov/goto/pep</a>. 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. Ademas, puede pedir que la TCEQ ponga su nombre en una or mas de las listas 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 agrega su nombre en una de las listas designe cual lista(s) y envia 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 <a href="http://www14.tceq.texas.gov/epic/eComment/">http://www14.tceq.texas.gov/epic/eComment/</a> 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



# Comal Independent School District

Spring Branch Middle School Wastewater Permit Renewal Application

December 2024



## ADMINISTRATIVE REPORT

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### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

### DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: <u>Comal Independent School District</u>
PERMIT NUMBER (If new, leave blank): WQ00 <u>13812003</u>

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

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

For TCEQ Use Only	
Segment Number	County
Expiration Date	Region
Permit Number	

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### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

### DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

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

### **Section 1.** Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) \$150.00 □

Payment 1	Informa <sup>.</sup>	tion
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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.	Che	k the box next to the appropriate authorization type.
	$\boxtimes$	Publicly-Owned Domestic Wastewater

- ☐ Privately-Owned Domestic Wastewater
- ☐ Conventional Wastewater Treatment
- **b.** Check the box next to the appropriate facility status.
  - □ Inactive

C.	Che	Check the box next to the appropriate permit type.							
		TPDES Permit							
	☐ TPDES Permit with TLAP component								
	$\boxtimes$	Subsurface Area Drip Dispersal System (SAI	DDS)						
d.	Che	eck the box next to the appropriate applicatio	n typ	pe .					
		New							
		Major Amendment with Renewal		Minor Amendment with Renewal					
		Major Amendment without Renewal		Minor Amendment <u>without</u> Renewal					
	$\boxtimes$	Renewal without changes		Minor Modification of permit					
e.	For	amendments or modifications, describe the J	propo	osed changes: Click to enter text.					
f.	For existing permits:								
	Permit Number: WQ00 <u>13812003</u>								
	EPA	A I.D. (TPDES only): TX Click to enter text.							
	Exp	oiration Date: <u>March 1, 2025</u>							

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

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

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

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 <a href="http://www15.tceq.texas.gov/crpub/">http://www15.tceq.texas.gov/crpub/</a>

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: <u>Chief Operations Officer</u> 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: <a href="http://www15.tceq.texas.gov/crpub/">http://www15.tceq.texas.gov/crpub/</a>

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. <u>Appendix A</u>

### 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: <u>EIT</u> Credential: Click to enter text.

Organization Name: Dunaway

Mailing Address: 118 McKinney Street City, State, Zip Code: Farmersville, TX 75442

Phone No.: <u>972-784-7777</u> E-mail Address: <u>cwootton@dunaway.com</u>

**B.** Prefix: Mr. Last Name, First Name: Campbell, Bradley

Title: <u>Plant Supervisor</u> Credential: <u>WWTP Operator C</u>

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: <u>Plant Supervisor</u> Credential: <u>WWTP Operator C</u>

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: <u>Director of Facilities Maintenance</u> 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: <u>1404 IH 35 N</u> City, State, Zip Code: <u>New Braunfels, TX 78130</u>

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: <u>Plant Supervisor</u> Credential: <u>WWTP Operator C</u>

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.	Co	ntact permit to be listed in the Notices					
	Pre	efix: <u>Mr.</u> Last Name, First Name: <u>DeWaters, Trent</u>					
	Tit	le: <u>Director of Facilities Maintenance</u> Credential: Click to enter text.					
	Org	ganization Name: Comal Independent School District					
	Ma	iling Address: 1404 IH 35 N City, State, Zip Code: New Braunfels, TX 78130					
	Pho	one No.: 830-221-2637 E-mail Address: trent.dewaters@comalisd.org					
D.	Pu	blic Viewing Information					
	-	the facility or outfall is located in more than one county, a public viewing place for each unty must be provided.					
	Pul	blic building name: Comal School District Administration					
	Loc	cation within the building: Click to enter text.					
	Phy	ysical Address of Building: <u>1404 IH 35 N</u>					
	Cit	y: <u>New Braunfels</u> County: <u>Comal</u>					
	Co	ntact (Last Name, First Name): <u>Stanford, Steve</u>					
	Pho	one No.: <u>830-885-1791</u> Ext.: Click to enter text.					
E.	Bil	ingual Notice Requirements					
		is information <b>is required</b> for <b>new, major amendment, minor amendment or minor odification, and renewal</b> applications.					
	be	is section of the application is only used to determine if alternative language notices will needed. Complete instructions on publishing the alternative language notices will be in ur 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 elementar or middle school nearest to the facility or proposed facility?						
		⊠ Yes □ No					
		If <b>no</b> , publication of an alternative language notice is not required; <b>skip to</b> 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 locatio		t these	e schools attend a bilingual education program at another
			Yes	$\boxtimes$	No
	4.				uired to provide a bilingual education program but the school has rement under 19 TAC §89.1205(g)?
			Yes	$\boxtimes$	No
	5.		-	_	uestion 1, 2, 3, or 4, public notices in an alternative language are te is required by the bilingual program? Spanish
F.	Pla	in Lang	guage Sumi	mary T	Template
	Co	mplete	the Plain La	anguag	ge Summary (TCEQ Form 20972) and include as an attachment.
	At	tachme	<b>nt:</b> <u>Appendi</u>	<u>x B</u>	
G.	Pu	blic Inv	olvement 1	Plan Fo	orm
					ement Plan Form (TCEQ Form 20960) for each application for a
		-			dment to a permit and include as an attachment.
	At	tachme	nt: <u>N/A</u>		
_				- 1 -	
Se	ctī	on 9.	Regula Page 2		Entity and Permitted Site Information (Instructions
Α.	If t	he site			ated by TCEQ, provide the Regulated Entity Number (RN) issued to
	thi	s site. R	RN <u>1020775</u> 4	<u> 12</u>	
					Registry at <a href="http://www15.tceq.texas.gov/crpub/">http://www15.tceq.texas.gov/crpub/</a> to determine if ed by TCEQ.
B.	Na	me of p	roject or si	te (the	name known by the community where located):
	Spi	ring Brai	nch Middle S	School	
C.	Ow	ner of	treatment f	acility:	Comal Independent School District
	Ov	nership	of Facility	<b>':</b> 🖂	Public $\square$ Private $\square$ Both $\square$ Federal
D.	Ow	ner of	land where	treatm	nent facility is or will be:
	Pre	efix: Clic	ck to enter	text.	Last Name, First Name: Click to enter text.
	Tit	le: Click	k to enter te	ext.	Credential: Click to enter text.
	Or	ganizati	ion Name: <u>(</u>	Comal I	independent School District
	Ma	iling Ac	ddress: <u>140</u> 4	4 I 35 F	rontage Rd. City, State, Zip Code: New Braunfels, TX 78130
	Ph	one No.	: <u>830-885-1</u>	<u>791</u>	E-mail Address: Click to enter text.
					same person as the facility owner or co-applicant, attach a lease d easement. See instructions.
		Attach	ment: Click	k to en	ter text.

F.

	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 Indepe	ndent School District
	Mailing Address: 1404 I 35 Frontage	e Rd. City, State, Zip Code: New Braunfels, TX 78130
	Phone No.: <u>830-885-1791</u>	E-mail Address: Click to enter text.
	If the landowner is not the same pagreement or deed recorded easer	person as the facility owner or co-applicant, attach a lease ment. See instructions.
	<b>Attachment:</b> Click to enter tex	t.
F.	Owner sewage sludge disposal site property owned or controlled by t	e (if authorization is requested for sludge disposal on he 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 tex	ct. 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 pagreement or deed recorded easer	person as the facility owner or co-applicant, attach a lease ment. See instructions.
	Attachment: Click to enter tex	t
	retucinicies circle to circle terr	t.
Se		e Information (Instructions Page 31)
	ection 10. TPDES Discharg	
	ection 10. TPDES Discharg	e Information (Instructions Page 31)
	ection 10. TPDES Discharg  Is the wastewater treatment facilit  Yes No  If no, or a new permit application	e Information (Instructions Page 31)
	ection 10. TPDES Discharg  Is the wastewater treatment facility  Yes  No	e Information (Instructions Page 31)  ry location in the existing permit accurate?
A.	TPDES Discharg  Is the wastewater treatment facility  Yes No  If no, or a new permit application  Click to enter text.	e Information (Instructions Page 31)  by location in the existing permit accurate?  by location in the existing permit accurate?  by location in the existing permit accurate?
A.	Is the wastewater treatment facility  Yes No  If no, or a new permit application  Click to enter text.  Are the point(s) of discharge and	e Information (Instructions Page 31)  ry location in the existing permit accurate?
A.	rection 10. TPDES Discharg  Is the wastewater treatment facility  Yes No  If no, or a new permit application  Click to enter text.  Are the point(s) of discharge and the second	e Information (Instructions Page 31)  by location in the existing permit accurate?  the please give an accurate description:  the discharge route(s) in the existing permit correct?
A.	Is the wastewater treatment facility.  Yes No  If no, or a new permit application.  Click to enter text.  Are the point(s) of discharge and the discharge are discharged and the discharge are discharged and the discharged are discharged at the discharged a	e Information (Instructions Page 31)  by location in the existing permit accurate?  by location in the existing permit accurate?  by location in the existing permit accurate?
A.	Is the wastewater treatment facility.  Yes No  If no, or a new permit application.  Click to enter text.  Are the point(s) of discharge and some point of discharge and the di	e Information (Instructions Page 31)  ty location in the existing permit accurate?  n, please give an accurate description:  the discharge route(s) in the existing permit correct?  rmit application, provide an accurate description of the
A.	Is the wastewater treatment facility.  Yes No  If no, or a new permit application.  Click to enter text.  Are the point(s) of discharge and the discharge are discharged and the discharge are discharged and the discharged are discharged at the discharged a	e Information (Instructions Page 31)  ty location in the existing permit accurate?  n, please give an accurate description:  the discharge route(s) in the existing permit correct?  rmit application, provide an accurate description of the
A.	Is the wastewater treatment facility.  Yes No  If no, or a new permit application.  Click to enter text.  Are the point(s) of discharge and some point of discharge and the di	e Information (Instructions Page 31)  ty location in the existing permit accurate?  n, please give an accurate description:  the discharge route(s) in the existing permit correct?  rmit application, provide an accurate description of the
A.	Is the wastewater treatment facility.  Yes No  If no, or a new permit application.  Click to enter text.  Are the point(s) of discharge and some point of discharge and the di	e Information (Instructions Page 31)  ry location in the existing permit accurate?  n, please give an accurate description:  the discharge route(s) in the existing permit correct?  rmit application, provide an accurate description of the rge route to the nearest classified segment as defined in 30
A.	Is the wastewater treatment facility.  Yes No  If no, or a new permit application.  Click to enter text.  Are the point(s) of discharge and the point of discharge and the dis	e Information (Instructions Page 31)  by location in the existing permit accurate?  ch, please give an accurate description:  the discharge route(s) in the existing permit correct?  che right application, provide an accurate description of the right route to the nearest classified segment as defined in 30 of enter text.
А.	Is the wastewater treatment facility.  Yes No  If no, or a new permit application.  Click to enter text.  Are the point(s) of discharge and the point of discharge and the dis	e Information (Instructions Page 31)  by location in the existing permit accurate?  In, please give an accurate description:  the discharge route(s) in the existing permit correct?  In the discharge route(s) in the existing permit correct?  In the discharge route an accurate description of the rege route to the nearest classified segment as defined in 30 of enter text.  In the discharge route(s) in the existing permit correct?
А.	Is the wastewater treatment facility.  Yes No  If no, or a new permit application.  Click to enter text.  Are the point(s) of discharge and the discharge an	e Information (Instructions Page 31)  by location in the existing permit accurate?  In, please give an accurate description:  the discharge route(s) in the existing permit correct?  In the discharge route an accurate description of the rege route to the nearest classified segment as defined in 30 of enter text.  In the discharge route(s) in the existing permit correct?

**E.** Owner of effluent disposal site:

	If <b>yes</b> , indicate by a check mark if:
	$\square$ Authorization granted $\square$ Authorization pending
	For <b>new and amendment</b> 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.
C	ation 11 TI AD Discussion (Instruction Dec. 22)
56	ection 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 <b>no, or a new or amendment permit application</b> , provide an accurate description of the disposal site location:
	Click to enter text.
В.	City nearest the disposal site: <u>Spring Branch</u>
C.	County in which the disposal site is located: <u>Comal</u>
D.	For <b>TLAPs</b> , describe the routing of effluent from the treatment facility to the disposal site:
	Into a SADDS system to nearby fields
E.	For <b>TLAPs</b> , please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: <u>Upper Cibolo Creek (segment 1908 of San Antonio River Basin</u>
C	
	ection 12. Miscellaneous Information (Instructions Page 32)
Α.	Is the facility located on or does the treated effluent cross American Indian Land?
	□ Yes ⊠ No
В.	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 <b>yes</b> , 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 <b>yes</b> , please provide the following information:
	Enforcement order number: Click to enter text.
	Amount past due: Click to enter text.
•	
Se	ection 13. Attachments (Instructions Page 33)
	ection 13. Attachments (Instructions Page 33) dicate which attachments are included with the Administrative Report. Check all that apply:
Inc	dicate 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
Inc	dicate 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  Appendix C
Inc	dicate 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:
Inc	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)
Inc	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.

### 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
				•	No.	

Signatory title: Chief Operations Officer

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

Subscribed and	d Sworn to before	me by the	said Malcolm	Holroney
on this	79		October	
My commissio	n expires on the_	3	_day of May	, 20 <u> </u>

Notary Public

SELMA GARCIA DEALBA Notary Public, State of Texas My Commission Expires May 03, 2026 NOTARY ID 13155362-9

[SEAL]

County, Texas

### DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

A.

B.

C.

D.

E.

### Section 1. Affected Landowner Information (Instructions Page 36)

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: i 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
☐ 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.
Indicate by a check mark in which format the landowners list is submitted:  ☐ USB Drive ☐ Four sets of labels
Provide the source of the landowners' names and mailing addresses: Click to enter text.
As required by $Texas\ Water\ Code\ \S\ 5.115$ , is any permanent school fund land affected by this application?
□ Yes □ No

	If <b>ye</b> s	s, provide the location and foreseeable impacts and effects this application has on the s):
	Clic	k to enter text.
Se	ctio	n 2. Original Photographs (Instructions Page 38)
Pro	ovide	original ground level photographs. Indicate with checkmarks that the following tion 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
Se	ctio	n 3. Buffer Zone Map (Instructions Page 38)
	Buffe infor	er zone map. Provide a buffer zone map on $8.5 \times 11$ -inch paper with all of the following mation. The applicant's property line and the buffer zone line may be distinguished by a 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.
В.		er zone compliance method. Indicate how the buffer zone requirements will be met. k all that apply.
		Ownership Restrictive easement
		Nuisance odor control
		Variance
C.		itable site characteristics. Does the facility comply with the requirements regarding itable 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

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality

Texas Commission on Environmental Quality

Financial Administration Division Financial Administration Division

Cashier's Office, MC-214
P.O. Box 13088
Austin, Texas 78711-3088
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.

application until the items below have been addressed.				
Core Data Form (TCEQ Form No. 10400) (Required for all application types. Must be completed in its entirety of Note: Form may be signed by applicant representative.)	and s	igned.		Yes
Correct and Current Industrial Wastewater Permit Application Form (TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or late			$\boxtimes$	Yes
Water Quality Permit Payment Submittal Form (Page 19) (Original payment sent to TCEQ Revenue Section. See instructions for	r mai	iling ad	⊠ dress	Yes
7.5 Minute USGS Quadrangle Topographic Map Attached (Full-size map if seeking "New" permit. 8 ½ x 11 acceptable for Renewals and Amendments)				Yes
Current/Non-Expired, Executed Lease Agreement or Easement		N/A		Yes
Landowners Map (See instructions for landowner requirements)	$\boxtimes$	N/A		Yes
<ul> <li>Things to Know:</li> <li>All the items shown on the map must be labeled.</li> <li>The applicant's complete property boundaries must be deboundaries of contiguous property owned by the applicant.</li> <li>The applicant cannot be its own adjacent landowner. You landowners immediately adjacent to their property, regard from the actual facility.</li> <li>If the applicant's property is adjacent to a road, creek, or on the opposite side must be identified. Although the property applicant's property boundary, they are considered potent of the adjacent road is a divided highway as identified on map, the applicant does not have to identify the landowned the highway.</li> </ul>	nt. mus dless strea perti tially the U	t identi s of how am, the les are i affecto JSGS to	fy the far and	e they are owners djacent to ndowners. aphic
Landowners Cross Reference List (See instructions for landowner requirements)	$\boxtimes$	N/A		Yes
Landowners Labels or USB Drive attached (See instructions for landowner requirements)	$\boxtimes$	N/A		Yes
Original signature per 30 TAC § 305.44 – Blue Ink Preferred (If signature page is not signed by an elected official or principle execution)	rutiva	e office		Yes

*a copy of signature authority/delegation letter must be attached)* 

Plain Language Summary

Yes

## TECHNICAL REPORT

# THE TONMENTAL OUNT

### 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): <u>0.013</u>

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/ALongitude: N/A

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

Latitude: 29.797237Longitude: -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 <b>and</b> a des	cription of the area	a served by the treatmen	t facility.
Spring Branch Middle School	students and faculty	sewage services	
Collection System Informati	ion <b>for wastewater</b>	TPDES permits only: Pr	rovide information for
each <b>uniquely owned</b> collections			
satellite collection systems. <b>examples.</b>	Please see the ins	tructions for a detailed	explanation and
-			
Collection System Name	Owner Name	Ouman Tyma	Donulation Convo
Collection System Name	Owner Name	Owner Type	Population Serve
		Choose an item.	
If yes, does the existing per years of being authorized by Yes No  If yes, provide a detailed di Failure to provide sufficier recommending denial of the	y the TCEQ? scussion regarding nt justification may	the continued need for y	the unbuilt phase.
recommending denial of th	ie unbuilt phase of	r pnases.	1
Click to enter text.			
Section 5. Closure I	Plans (Instruct	ions Page 45)	
Have any treatment units be		rvice permanently, or wi	ll any units be taken
out of service in the next fiv	e years?		
□ Yes ⊠ No			

If y	y <b>es</b> , was a closure plan submitted to the TCEQ?
	□ Yes □ No
If y	yes, provide a brief description of the closure and the date of plan approval.
Se	ection 6. Permit Specific Requirements (Instructions Page 45) or applicants with an existing permit, check the Other Requirements or Special evisions of the permit.
A.	Summary transmittal  Here plans and energifications been emproved for the existing facilities and each proposed
	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: <u>07/17/1996</u>
	Provide information, including dates, on any actions taken to meet a <i>requirement or provision</i> pertaining to the submission of a summary transmittal letter. <b>Provide a copy of an approval letter from the TCEQ, if applicable</b> .
	Click to enter text.
В.	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.

	su	bes the Other Requirements or Special Provisions section in the existing permit require bimission of any other information or other required actions? Examples include tification of Completion, progress reports, soil monitoring data, etc.
	110	☐ Yes ⊠ No
		yes, provide information below on the status of any actions taken to meet the additions of an <i>Other Requirement</i> or <i>Special Provision</i> .
	C	lick to enter text.
D.	Gr	it 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
		<b>If No</b> , 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.

C. Other actions required by the current permit

		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.	Sto	ormwater 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
		<b>If yes</b> , 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
	<b>If yes</b> , 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
	<b>If yes</b> , 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

		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.	Di	scharges to the Lake Houston Watershed
	Do	es the facility discharge in the Lake Houston watershed?
		□ Yes ⊠ No
		yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions. ck to enter text.
G.	Ot	her wastes received including sludge from other WWTPs and septic waste
	1.	Acceptance of sludge from other WWTPs
		Does or will the facility accept sludge from other treatment plants at the facility site?
		□ Yes ⊠ No
		If yes, attach sewage sludge solids management plan. See Example 5 of instructions.
		In addition, provide the date the plant started or is anticipated to start accepting
		sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an
		estimate of the BOD <sub>5</sub> concentration of the sludge, and the design BOD <sub>5</sub> 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?

intend to divert stormwater to the treatment plant headworks and indirectly discharge

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.
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.
on 7. Pollutant Analysis of Treated Effluent (Instructions Page

# Secti

Īς	the	facility	v in	onera	tion?
13	uic	racme	у ш	Obera	uuon:

Yes □ No

3.

**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.

Table 1.0(2) - Pollutant Analysis for Wastewater Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD <sub>5</sub> , 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
E.coli (CFU/100ml) freshwater	1	1	1	Grab	12/27/2024
Entercocci (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, µmohs/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 <sub>3</sub> )*, mg/l	N/A	N/A	N/A	N/A	N/A

<sup>\*</sup>TPDES permits only †TLAP permits only

Table 1.0(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 <sub>3</sub> ), mg/l	N/A	N/A	N/A	N/A	N/A

# **Section 8. Facility Operator (Instructions Page 50)**

Facility Operator Name: Bradley Campbell

Facility Operator's License Classification and Level: C

Facility Operator's License Number: WW0049414

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

A.	ww	TP's Biosolids Management Facility Type
	Che	ck all that apply. See instructions for guidance
		Design flow>= 1 MGD
		Serves >= 10,000 people
		Class I Sludge Management Facility (per 40 CFR § 503.9)
		Biosolids generator
		Biosolids end user – land application (onsite)
		Biosolids end user - surface disposal (onsite)
		Biosolids end user – incinerator (onsite)
B.	ww	TP's Biosolids Treatment Process
	Che	ck all that apply. See instructions for guidance.
	$\boxtimes$	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: <u>Weidner Septic</u> Hauler registration number: 20801

Sludge is transported as a:

	Liquid ⊠	semi-liquid 🗆	semi-solid □	solid $\square$
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# Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 53)

#### A. Beneficial use authorization

Does the existing 1	permit include au	thorization for	land applica	ition of sewa	ge 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							
e processing authorization							
he existing permit include authorization for eor disposal options?	or an	y of the	follow	ving sludge processing,			
dge Composting		Yes	$\boxtimes$	No			
rketing and Distribution of sludge		Yes	$\boxtimes$	No			
dge Surface Disposal or Sludge Monofill		Yes	$\boxtimes$	No			
mporary storage in sludge lagoons		Yes	$\boxtimes$	No			
rization, is the completed <b>Domestic Waste</b>	wate	r Permi	t Appl	ication: Sewage Sludge			
Yes □ No							
11. Sewage Sludge Lagoons (Ins	stru	ctions	Page	e 53)			
facility include sewage sludge lagoons?							
es 🗵 No							
nplete the remainder of this section. If no,	proc	eed to S	ection	12.			
on information							
ollowing maps are required to be submitted le the Attachment Number.	l as p	art of th	ne app	lication. For each map,			
Original General Highway (County) Map:							
Attachment: Click to enter text.							
USDA Natural Resources Conservation Ser	vice	Soil Map	):				
Attachment: Click to enter text.							
Federal Emergency Management Map:							
Attachment: Click to enter text.							
Site map:							
Attachment: Click to enter text.							
ss in a description if any of the following ex	xist v	vithin th	e lago	on area. Check all that			
□ 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.							
	e processing authorization he existing permit include authorization for every disposal options? dge Composting rketing and Distribution of sludge dge Surface Disposal or Sludge Monofill mporary storage in sludge lagoons to any of the above sludge options and the rization, is the completed Domestic Waster ical Report (TCEQ Form No. 10056) attack Yes  No  11. Sewage Sludge Lagoons (Instact) facility include sewage sludge lagoons?  Solution No  Inplete the remainder of this section. If no, on information  Illowing maps are required to be submitted to the Attachment Number.  Original General Highway (County) Map: Attachment: Click to enter text. USDA Natural Resources Conservation Ser Attachment: Click to enter text. Federal Emergency Management Map: Attachment: Click to enter text. Site map: Attachment: Click to enter text. Site map: Attachment: Click to enter text. Site map: Overlap a designated 100-year frequency Soils with flooding classification Overlap an unstable area Wetlands Located less than 60 meters from a fault None of the above	e processing authorization he existing permit include authorization for an e or disposal options?  dge Composting  rketing and Distribution of sludge dge Surface Disposal or Sludge Monofill mporary storage in sludge lagoons to any of the above sludge options and the apprization, is the completed Domestic Wastewate ical Report (TCEQ Form No. 10056) attached to Yes No  11. Sewage Sludge Lagoons (Instrufacility include sewage sludge lagoons?  ES No Inplete the remainder of this section. If no, procon information llowing maps are required to be submitted as pethe Attachment Number.  Original General Highway (County) Map:  Attachment: Click to enter text.  USDA Natural Resources Conservation Service Attachment: Click to enter text.  Federal Emergency Management Map:  Attachment: Click to enter text.  Site map:  Attachment: Click to enter text.  si in a description if any of the following exist wooverlap a designated 100-year frequency floorsoils with flooding classification  Overlap an unstable area  Wetlands  Located less than 60 meters from a fault  None of the above	the existing permit include authorization for any of the e or disposal options?  dge Composting	e processing authorization he existing permit include authorization for any of the follow e or disposal options?  dge Composting			

	Click to enter text.
-	Temporary storage information
	Provide the results for the pollutant screening of sludge lagoons. These results are in addition to pollutant results in <i>Section 7 of Technical Report 1.0.</i>
	Nitrate Nitrogen, mg/kg: Click to enter text.
	Total Kjeldahl Nitrogen, mg/kg: <u>Click to enter text.</u>
	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: <u>Click to enter text.</u>
	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: <u>Click to enter text.</u>
I	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: <u>Click to enter text.</u>

# C. Liner information

Does the active/	proposed	sludge	lagoon(s	s) have	a line	r with	a maxi	imum l	hydrau	ılic
conductivity of	lx10 <sup>-7</sup> cm/	sec?								

Yes	No

	If yes	, describe the liner below. Please note that a liner is required.
	Click	to enter text.
D.	Site d	evelopment plan
	Provid	le a detailed description of the methods used to deposit sludge in the lagoon(s):
	Click	to enter text.
	Attacl	n 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.	Groui	ndwater monitoring
	groun	undwater monitoring currently conducted at this site, or are any wells available for dwater monitoring, or are groundwater monitoring data otherwise available for the e lagoon(s)?
		Yes □ No
	types	undwater monitoring data are available, provide a copy. Provide a profile of soil encountered down to the groundwater table and the depth to the shallowest dwater as a separate attachment.
	At	tachment: 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:
C	lick 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
	<b>If yes</b> to either question, provide a brief summary of the enforcement, the implementation schedule, and the current status:
C	lick to enter text.
Se	ection 13. RCRA/CERCLA Wastes (Instructions Page 55)
Α.	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:
  - o periodically inspected by the TCEQ; or
  - o located in another state and is accredited or inspected by that state; or
  - o 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 TCEO 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: <u>Malcolm Mulroney</u>
Title: Chief Operations Officer

Signature: Mille See

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	T4'C'4'	- C .		
Α.	<b>Justification</b>	OI	permit	neea

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.

	C	Click to enter text.
В.	Re	gionalization of facilities
		r additional guidance, please review <u>TCEQ's Regionalization Policy for Wastewater</u> eatment <sup>1</sup> .
		ovide the following information concerning the potential for regionalization of domestic stewater 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: <u>Click to enter text.</u>
		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

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

<b>If yes</b> , 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 BOD <sub>5</sub> Concentration in mg/l: Click to enter text.
Average Influent Loading (lbs/day = total average flow X average BOD <sub>5</sub> conc. X 8.34): $\underline{\text{Click}}$ to enter text.
Provide the source of the average organic strength or BOD <sub>5</sub> concentration.
Click to enter text.

## B. Proposed organic loading

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

Table 1.1(1) - Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD5 Concentration (mg/l)
Municipality		
Subdivision		
Trailer park - transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources		
AVERAGE BOD <sub>5</sub> 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: <u>Click to enter text.</u>
Total Phosphorus, mg/l: <u>Click to enter text.</u>
Dissolved Oxygen, mg/l: <u>Click to enter text.</u>

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: <u>Click to enter text.</u>
	☐ Ultraviolet Light: <u>Click to enter text.</u> seconds contact time at peak flow
	□ Other: Click to enter text.
Se	ction 4. Design Calculations (Instructions Page 59)
	each design calculations and plant features for each proposed phase. Example 4 of the
	tructions includes sample design calculations and plant features.
	Attachment: Click to enter text.
Co	ation F Facility Site (Instructions Dage 60)
<b>3</b> e	ction 5. Facility Site (Instructions Page 60)
A.	100-year floodplain
	Will the proposed facilities be located <u>above</u> the 100-year frequency flood level?
	□ Yes □ No
	<b>If no</b> , 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
	<b>If yes</b> , has the applicant applied for a US Corps of Engineers 404 Dredge and Fill Permit?
	□ Yes □ No
	If yes, provide the permit number: <u>Click to enter text.</u>
	<b>If no,</b> provide the approximate date you anticipate submitting your application to the Corps: Click to enter text.
B.	Wind rose
	Attach a wind rose: <u>Click to enter text.</u>
Se	ection 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 60)
	(mstructions ruge 00)
Α.	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 <b>Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)</b> : 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 <b>Domestic</b> Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056): Click to enter text.
Se	ection 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 6	4)
Is there a surface water intake for domestic drinking water supply located within 5 mi downstream from the point or proposed point of discharge?	
□ Yes □ No	
If <b>no</b> , proceed it Section 2. <b>If yes</b> , provide the following:	
Owner of the drinking water supply: <u>Click to enter text.</u>	
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 1 64)	Page
Does the facility discharge into tidally affected waters?	
□ Yes □ No	
If <b>no</b> , proceed to Section 3. <b>If yes</b> , complete the remainder of this section. If no, proceed Section 3.	ed to
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.	

36	:CU	UIL	5. Classified Segments (instructions Page 64)
Is	the	disc	harge directly into (or within 300 feet of) a classified segment?
		Ye	s 🗆 No
If	yes	, this	s Worksheet is complete.
If:	no,	com	plete Sections 4 and 5 of this Worksheet.
Se	ct	on	4. Description of Immediate Receiving Waters (Instructions
	.cu		Page 65)
Na	me	of th	he immediate receiving waters: <u>Click to enter text.</u>
A.	Re	ceiv	ing water type
	Ide	entify	y the appropriate description of the receiving waters.
			Stream
			Freshwater Swamp or Marsh
			Lake or Pond
			Surface area, in acres: <u>Click to enter text.</u>
			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: <u>Click to enter text.</u>
			Man-made Channel or Ditch
			Open Bay
			Tidal Stream, Bayou, or Marsh
			Other, specify: <u>Click to enter text.</u>
B.	Flo	ow c	haracteristics
	exi of	isting the o	eam, man-made channel or ditch was checked above, provide the following. For g discharges, check one of the following that best characterizes the area <i>upstream</i> discharge. For new discharges, characterize the area <i>downstream</i> of the discharge one).
			Intermittent - dry for at least one week during most years
		□ mai	Intermittent with Perennial Pools - enduring pools with sufficient habitat to intain significant aquatic life uses
			Perennial - normally flowing
			the method used to characterize the area upstream (or downstream for new rgers).
			USGS flow records
			Historical observation by adjacent landowners
			Personal observation
			Other, specify: Click to enter text.

		e names of all perennial stre tream of the discharge point		n the receiving water within three miles
	Click t	o enter text.		
D.	Downs	stream characteristics		
		receiving water characterist rge (e.g., natural or man-mad Yes D No		vithin three miles downstream of the nds, reservoirs, etc.)?
	If ves.	discuss how.		
		o enter text.		
E.	Provide	l dry weather characteristice general observations of the to enter text.		during normal dry weather conditions.
	Date a	nd time of observation: Click	to enter tex	ct.
	Was th	e water body influenced by s	stormwater	runoff during observations?
		Yes □ No		
Se	ction	5. General Characte Page 66)	eristics of	the Waterbody (Instructions
A.	Upstre	am influences		
		mmediate receiving water up aced by any of the following?		he discharge or proposed discharge site nat apply.
		Oil field activities		Urban runoff
		Upstream discharges		Agricultural runoff
		Septic tanks		Other(s), specify: Click to enter text.

C. Downstream perennial confluences

#### **B.** Waterbody uses Observed or evidences of the following uses. Check all that apply. Livestock watering Contact recreation Irrigation withdrawal Non-contact recreation **Fishing Navigation** Domestic water supply Industrial water supply Park activities 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: <u>Click to enter text.</u>
Location: <u>Click to enter text.</u>
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	Transect location	Water surface	Stream depths (ft) at 4 to 10 points along each
Select riffle, run, glide, or pool. See Instructions, Definitions section.		width (ft)	transect from the channel bed to the water surface. Separate the measurements with commas.
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): <u>Click to enter text.</u>

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

Number of lateral transects made: <u>Click to enter text.</u>

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.): <u>Click to enter text.</u>

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)

Identif	Ty the method of land disposal:		
	Surface application		Subsurface application
	Irrigation		Subsurface soils absorption
	Drip irrigation system	$\boxtimes$	Subsurface area drip dispersal system
	Evaporation		Evapotranspiration beds
	Other (describe in detail): <u>Click</u>	to er	nter text.
	All applicants without authoriza complete and submit Worksheet		or proposing new/amended subsurface disposal

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

application site.

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

Is the land application site <u>within</u> 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

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: Ap	pend	<u>lix H</u>								
Are groundwater n	nonit	oring w	ells av	ailable c	onsite?		Yes	$\boxtimes$	No	
Do you plan to inst	a <u>ll</u> g	round v	vat <u>er</u> n	nonitori	ng wells	or l	ysimetei	s aro	und the	land
application site?		Yes	$\boxtimes$	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	Permeability (µm/s)	Available Water Capacity	Curve Number
	(in)		(cm/cm)	
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	pН	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	pН	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 <u>Click to enter text.</u> And days/week <u>Click to enter text.</u>

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: <u>Click to enter text.</u>

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.

# 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, attach a geological report addressing potential recharge features.

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

Attachment: Click to enter text.

Yes □ No

# 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: <u>Click to enter text.</u>
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: <u>Click to enter text.</u>
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: <u>Click to enter text.</u>
Area of bed(s), in square feet: Click to enter text.
Soil Classification: <u>Click to enter text.</u>
Attach a separate engineering report with the information required in $30\ TAC\ \S\ 309.20$ , excluding the requirements of $\S\ 309.20\ b(3)(A)$ 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
<b>If yes to either question</b> , the subsurface system may be prohibited by <i>30 TAC §213.8</i> . 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.

Se	ction 1. Administrative Information (Instructions Page 75)
Α.	Provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the treatment facility:
В.	<u>Click to enter text.</u> Is the owner of the land where the treatment facility is located the same as the owner of the treatment facility?
	□ Yes □ No
	If <b>no</b> , 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: <u>Click to enter text.</u>
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 <b>no</b> , 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.
Е.	Owner of the land where the subsurface area drip dispersal system is located: <u>Click to enter text.</u>
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 <b>no</b> , identify the name of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in item 1.E.
	Click to enter text.

# Section 2. Subsurface Area Drip Dispersal System (Instructions Page

A.	Type of system
	□ Subsurface Drip Irrigation
	□ Surface Drip Irrigation
	□ Other, specify: <u>Click to enter text.</u>
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: <u>Click to enter text.</u>
	Major soil series: Click to enter text.
	Depth to groundwater, in feet: Click to enter text.
C.	Application rate
	Is the facility located <b>west</b> of the boundary shown in <i>30 TAC § 222.83</i> <b>and</b> 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 <b>east</b> of the boundary shown in <i>30 TAC § 222.83</i> <b>or</b> in any part of the state when the vegetative cover is any crop other than non-native grasses?
	□ Yes □ No
	If <b>yes</b> , the facility must use the formula in <i>30 TAC §222.83</i> 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 <b>yes</b> , 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.
Se	ction 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.
Se	ction 4. Floodway Designation (Instructions Page 76)
A.	Site location
	Is the existing/proposed land application site within a designated floodway?
	□ Yes □ No
В.	Flood map
	Attach either the FEMA flood map or alternate information used to determine the
	floodway.
	Attachment: Click to enter text.
Se	ction 5. Surface Waters in the State (Instructions Page 76)

# S

## 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.

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 Aguifor (Instructions Dags 76)
Section 6. Edwards Aquifer (Instructions Page 76)
<b>A.</b> Is the SADDS located over the Edwards Aquifer Recharge Zone as mapped by TCEQ?
□ Yes □ No
<b>B.</b> Is the SADDS located over the Edwards Aquifer Transition Zone as mapped by TCEQ?
□ Yes □ No
<b>If yes to either question</b> , then the SADDS may be prohibited by <i>30 TAC §213.8</i> . Please call the Municipal Permits Team at 512-239-4671 to schedule a pre-application meeting.

**B.** Buffer variance request

# 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 samp	le.
---	-----

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				0.05
(Lindane)				
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

<sup>(\*1)</sup> Determined by subtracting hexavalent Cr from total Cr.

<sup>(\*2)</sup> Cyanide, amenable to chlorination or weak-acid dissociable.

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

#### **Section 2. Priority Pollutants**

For 1	pollutants	identified	in Ta	bles 4.0	0(2)A-E,	indicate	type o	of samp	ole.
-------	------------	------------	-------	----------	----------	----------	--------	---------	------

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

<sup>(\*1)</sup> Determined by subtracting hexavalent Cr from total Cr.

<sup>(\*2)</sup> 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				10
[1,3-Dichloropropene]				
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 Azobenzene)				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

<sup>\*</sup> 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 ${f or}$ 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: o Average Daily Flows, in MGD: o Significant IUs - non-categorical: Number of IUs: o Average Daily Flows, in MGD: o Other IUs: Number of IUs: o Average Daily Flows, in MGD: o

#### 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 te	ext.		

	In the past three years, has your POTW experienced pass through (see instructions)?
	□ Yes ⊠ No
	<b>If yes</b> , 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
٦.	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.
	<b>If no to either question above</b> , skip Section 2 and complete Section 3 for each significant industrial user and categorical industrial user.
Se	ection 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 90)
Α.	Substantial modifications
	Have there been any <b>substantial modifications</b> to the approved pretreatment program that have not been submitted to the TCEQ for approval according to <i>40 CFR §403.18</i> ?
	□ Yes ⊠ No
	<b>If yes</b> , identify the modifications that have not been submitted to TCEQ, including the purpose of the modification.
	Click to enter text.

C. Treatment plant pass through

		any <b>non-substantial</b> ve not been submitte			
	□ Yes ⊠	No		errew wire week	p currect
		l non-substantial mo pose of the modific		have not been	submitted to TCEQ,
Clie	ck to enter text				
In T mor	Cable 6.0(1), li	ters above the MAL st all parameters me g the last three year eters Above the MAL	easured above th		
Pollut	ant	Concentration	MAL	Units	Date
N/A					
	ustrial user ii	-			
		or other IU caused pass throughs) at yo			
[	□ Yes ⊠	No			
		ne industry, describe and probable pollut		ncluding dates,	duration, description
Cli	ck to enter te	xt.			

**B.** Non-substantial modifications

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

A. General information

	Company Name: <u>N/A</u>
	SIC Code: Click to enter text.
	Contact name: Click to enter text.
	Address: Click to enter text.
	City, State, and Zip Code: <u>Click to enter text.</u>
	Telephone number: <u>Click to enter text.</u>
	Email address: <u>Click to enter text.</u>
В.	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).
	$N/\underline{A}$
C.	Product and service information
C.	Product and service information  Provide a description of the principal product(s) or services performed.
C.	
C.	Provide a description of the principal product(s) or services performed.
C.	Provide a description of the principal product(s) or services performed.
C.	Provide a description of the principal product(s) or services performed.
C.	Provide a description of the principal product(s) or services performed.
C.	Provide a description of the principal product(s) or services performed.
	Provide a description of the principal product(s) or services performed.  N/A
	Provide a description of the principal product(s) or services performed.  N/A  Flow rate information
	Provide a description of the principal product(s) or services performed.  N/A  Flow rate information  See the Instructions for definitions of "process" and "non-process wastewater."
	Provide a description of the principal product(s) or services performed.  N/A  Flow rate information  See the Instructions for definitions of "process" and "non-process wastewater."  Process Wastewater:
	Provide a description of the principal product(s) or services performed.  N/A  Flow rate information  See the Instructions for definitions of "process" and "non-process wastewater."  Process Wastewater:  Discharge, in gallons/day: N/A
	Provide a description of the principal product(s) or services performed.  N/A  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
	Provide a description of the principal product(s) or services performed.    N/A
	Provide a description of the principal product(s) or services performed.  N/A  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
	Provide a description of the principal product(s) or services performed.    N/A

E.	Pretreatment standards						
	Is the SIU or CIU subject to technically based local limits as defined in the <i>i</i> nstructions?						
	□ Yes ⊠ No						
	Is the SIU or CIU subject to categorical pretreatment standards found in <i>40 CFR Parts 405-471</i> ?						
	□ Yes ⊠ No						
	<b>If subject to categorical pretreatment standards</b> , indicate the applicable category and subcategory for each categorical process.						
	Category: Subcategories: <u>N/A</u>						
	Click or tap here to enter text. Click to enter text.						
	Category: <u>N/A</u>						
	Subcategories: Click to enter text.						
	Category: <u>N/A</u>						
	Subcategories: <u>Click to enter text.</u>						
	Category: <u>N/A</u>						
	Subcategories: Click to enter text.						
	Category: <u>N/A</u>						
	Subcategories: <u>Click to enter text.</u>						
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: <u>Click to enter text.</u> Phone Number: <u>Click to enter text.</u>

#### 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.

Name o	f S	ize	Setting	Sacks Cement/Grout -	Hole	Weight
able 7.0	(1) – Do	wn H	ole Design Ta	ble		
ttach a	diagrai	n sig	ned and seal	led by a licensed engineer	as Attachme	ent C.
ection	ı 2.	Prop	osed Dov	vn Hole Design		
	Licens	e Nur	nber: <u>Click t</u>	o enter text.		
			ber: <u>Click to</u>			
	City, S	tate,	and Zip Code	e: Click to enter text.		
	Water	Well	Driller/Insta	ller Name: <u>Click to enter tex</u>	xt.	
8.	Water	Well	Driller/Insta	aller		
	Attach		_	achment B (Attach the Appr	roved Remed	liation Plan, if
	_		ter text.	garding purpose of injection	T System.	
7.	_		scrintion red	garding purpose of Injection	System:	
7.	Purpo		injection we	lls: <u>Click to enter text.</u>		
	□ Numb			Click to enter text.		
			nporary Injec			
			ltration Galle	•		
				l Distribution System		
			tical Injection			
	, ,			on, select one:		
6.	Well I			_		
		_		drangle map as attachment	Α.	
	Metho	d of c	determinatio	n (GPS, TOPO, etc.): Click to	enter text.	
	Longit	ude:	Click to ente	r text.		
	Latitu	de: <u>Cl</u>	ick to enter t	text.		
Э.	Latitu	ue an	a Longituae	, in degrees-minutes-secon	us	

Name of String	Size	Setting Depth	Sacks Cement/Grout - Slurry Volume - Top of Cement	Hole Size	Weight (lbs/ft) PVC/Ste
-------------------	------	------------------	--	--------------	-------------------------------

		Cement	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: <u>Click to enter text.</u> System(s) Construction: Click to enter text.

Section 4	Site Hydrog	reological a	and Injection	Zone Data
occuon 1.	DICC ITY CITUE	COLUBICAL		LOIIC Data

- 1. Name of Contaminated Aguifer: 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): <u>Click to enter text.</u>
- **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): <u>Click to enter text.</u>
- **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 WTTP disposal
- 5W20 Industrial Process Waste Disposal Wells
- 5W31 Septic System (Well Disposal method)
- 5W32 Septic System Drainfield Disposal
- 5X13 Mine Backfill (IW used to control subsidence, dispose of mining byproducts, and/or fill sections of a mine)
- 5X25 Experimental Wells (Pilot Test) (IW used to test new technologies or tracer dye studies)
- 5X26 Aguifer 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.)

☐ New Perr	nit, Registra	tion or Authorization	(Core Data Form s	hould be su	ıbmittea	d with the pro	gram application.)				
Renewal (Core Data Form should be submitted with the renewal form)							Other				
2. Customer Reference Number (if issued) CN 600249825				llow this lin r CN or RN r Central Reg	number	s in	3. Regulated Entity Reference Number (if issued)  RN 102077542				
4. General Cu		Customer			stomer	Information	<b>updates</b> (mm/dd,	/vvvv)			
				ive Date for Customer Information Updates (mm/dd/yyyy)							
☐ New Customer ☐ Update to Customer Information☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas C						_	inge in Regulated En ic Accounts)	tity Own	ership		
(SOS) or Texa	s Comptro	bmitted here may ller of Public Acco	unts (CPA).			on what is					
6. Customer	Legal Nam	<b>e</b> (If an individual, pr	int last name first:	eg: Doe, Jol	hn)		<u>If new Customer,</u>	enter pre	evious Custon	<u>ner below:</u>	
Comal Indeper	ndent Schoo	l District									
7. TX SOS/CPA Filing Number 8. TX			8. TX State Tax	X State Tax ID (11 digits)			9. Federal Tax ID (9 digits) 74-6001777		10. DUNS Number (if applicable) 010541498		
11 Type of C	ustomer	Corpora	ation			∏Indiv	idual	Partne	ershin: $\square$ Ge	neral 🔲 Limited	
11. Type of Customer:				_			Proprietorship Other:			Limited	
12. Number of Employees						3010	13. Independently Owned and Operated?				
□ 0-20 □ 21-100 □ 101-250 □ 251-500 ☑ 501 and higher							⊠ Yes	□ No			
14. Customer	r <b>Role</b> (Prop	oosed or Actual) – as	it relates to the Re	gulated Ent	tity listed	d on this form	. Please check one o	f the follo	owing		
⊠Owner □ Occupation	al Licensee	Operator Responsible Pa	_	r & Operato P/BSA Applio			Other	:			
15. Mailing	1404 IH 3	5 N									
Address:											
	City	New Braunfels		State	TX	ZIP	78130		ZIP + 4		
16. Country I	Mailing Inf	ormation (if outside	· USA)			17. E-Mail <i>F</i>	Address (if applicab	le)			
trent.d					trent.dewate	nt.dewaters@comalisd.org					

TCEQ-10400 (11/22) Page 1 of 3

( 830 ) 885-1791							( )	-		
SECTION III: I	Regul	ated Ent	tity Inforn	nati	<u>on</u>					
21. General Regulated Ent	tity Informa	ation (If 'New Re	gulated Entity" is selec	cted, a n	ew per	mit applica	tion is als	o required.)		
☐ New Regulated Entity [	Update to	Regulated Entity	Name Update	to Regul	ated Er	ntity Inform	ation			
The Regulated Entity Nanas Inc, LP, or LLC).	ne submitte	ed may be upda	ited, in order to me	et TCEC	(Core	Data Star	ndards (r	removal of or	ganization	al endings such
22. Regulated Entity Nam	<b>e</b> (Enter nan	ne of the site whe	re the regulated action	n is takin	g place	e.)				
SPRING BRANCH MIDDLE SCH	HOOL									
23. Street Address of	21053 SH 4	16 W								
the Regulated Entity:										
(No PO Boxes)	City	Spring Branch	State	TX		ZIP	78070		ZIP + 4	6125
24. County	Comal	- 1		ı				l		
		If no Stre	et Address is provi	ded, fie	lds 25	-28 are re	quired.			
25. Description to										
Physical Location:										
26. Nearest City							State		Nea	rest ZIP Code
Latitude/Longitude are re used to supply coordinate	-	-	-			ita Standa	ırds. (Ge	ocoding of th	e Physical .	Address may be
27. Latitude (N) In Decima	al:	29.79785			28. Longitude (\		W) In Decimal:		-98.43511	
Degrees	Minutes		Seconds	[	)egree:	S	Minutes			Seconds
29°		47'	52.26"N		98°			26'		6.396"W
29. Primary SIC Code 30. Secondary SIC		Code 31. Primary NAI			NAICS Co	de	32. Secon	ondary NAICS Code		
(4 digits) (4 digits)			<b>(</b> 5 or 6 digits)				(5 or 6 dig	its)		
8211	154	12								
33. What is the Primary B	usiness of	this entity? (D	o not repeat the SIC o	r NAICS	descrip	tion.)		1		
Middle School										
21053 SH 46 W										
34. Mailing Address:										
Address.	City	Spring Branch	State	тх		ZIP	78070		ZIP + 4	6125
35. E-Mail Address:										I
36. Telephone Number			37. Extension or	Code		38. F	ax Numl	<b>per</b> (if applicab	le)	
( 830 ) 221-2989				(			) -			

19. Extension or Code

20. Fax Number (if applicable)

18. Telephone Number

TCEQ-10400 (11/22) Page 2 of 3

☐ Dam Safety	Districts	Edwards Aquifer		Emissions In		☐ Industrial Hazardous Waste		
Municipal Solid Waste New Sor Review Air		OSSF		☐ P	etroleum Storage Tank	PWS		
☐ Sludge ☐ Storm Water		☐ Title V Air			ires	Used Oil		
☐ Voluntary Cleanup	<b>⊠</b> Wastewater	☐ Wastewater Agriculture		☐ Water Rights		Other:		
	WQ0013812003							
ECTION IV: P	reparer Inf	<u>ormation</u>						
0. Name: Cody Wootton	41. Title: Graduate Engineer							
2. Telephone Number	43. Ext./Code	44. Fax Number	45. E-M	lail Ac	ddress	H		
972 ) 784-7777	( ) -	cwootton@dunaway.com						
ECTION V: A	uthorized S	ignature						
	ify, to the best of my know	wledge, that the informa	ation provided required for th	in this ne upda	form is true and complete ates to the ID numbers ide	e, and that I have signature authori entified in field 39.		
eliminarie e como o como			Job Title	:	Chief opera	Labore and Pair		
Company:	ad ISD		Job Hile		- Me	4-60 -60		
Company:  Com  Jame (In Print):	af ISD color Mri Mulson	rones	Job Hitc		Phone:	1830 221 2150		

## **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.

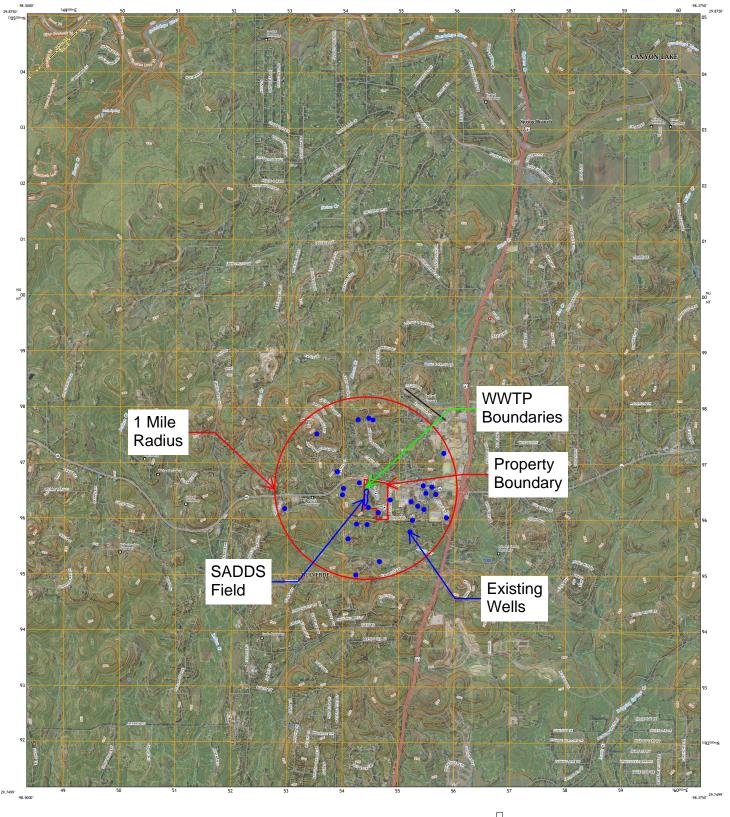
El Distrito Escolar Independiente de Comal (CN600249825) opera la WWTP de la escuela secundaria Spring Branch (RN102077542), una planta de tratamiento de aguas residuales que presta servicio a la escuela. La instalación está ubicada en 21053 SH 46 W, en Spring Branch, condado de Comal, Texas 78070. La 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 digestor aeróbico de lodos y una cámara de contacto de cloro.

# **APPENDIX C**

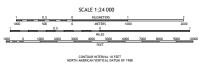
USGS TOPO MAP











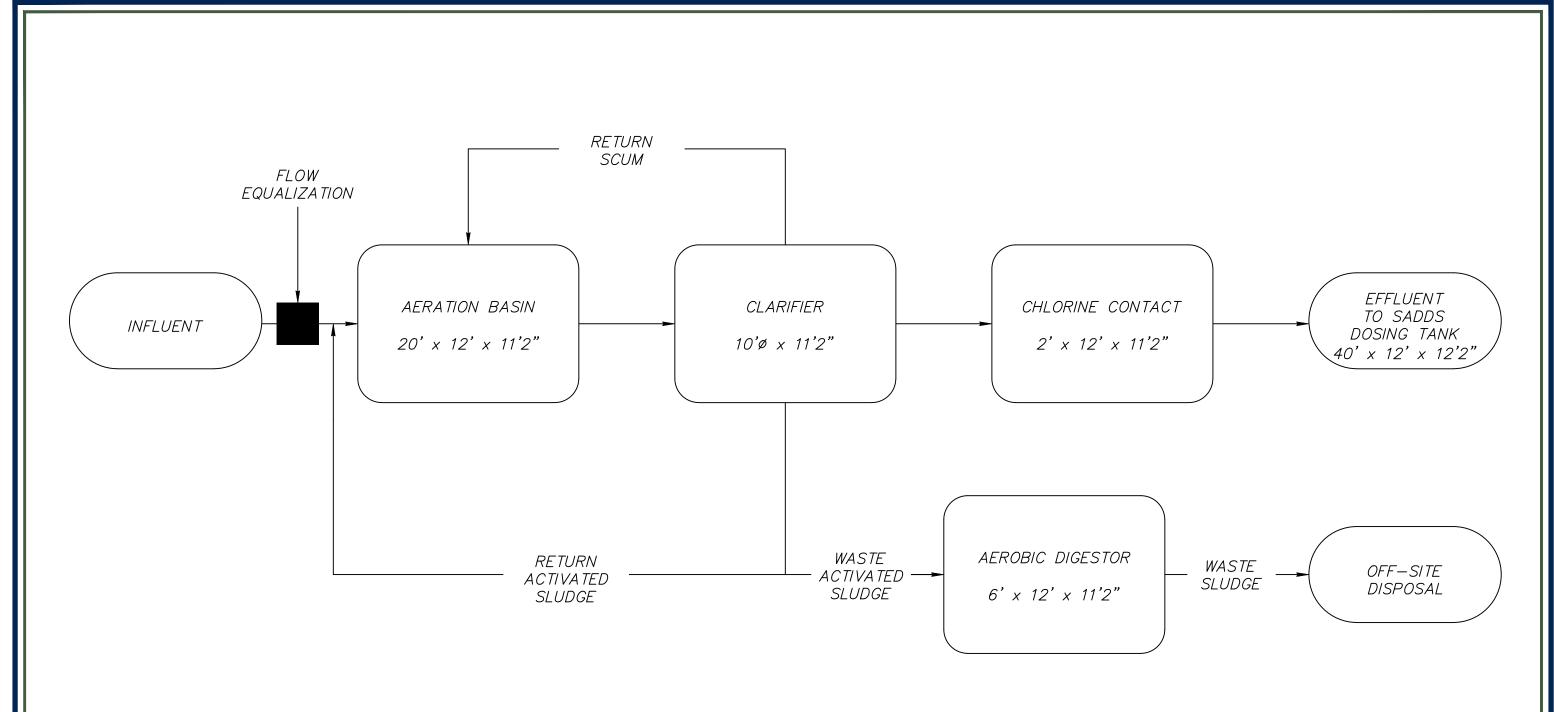




7.5-MINUTE TOPO, TX

## **APPENDIX D**

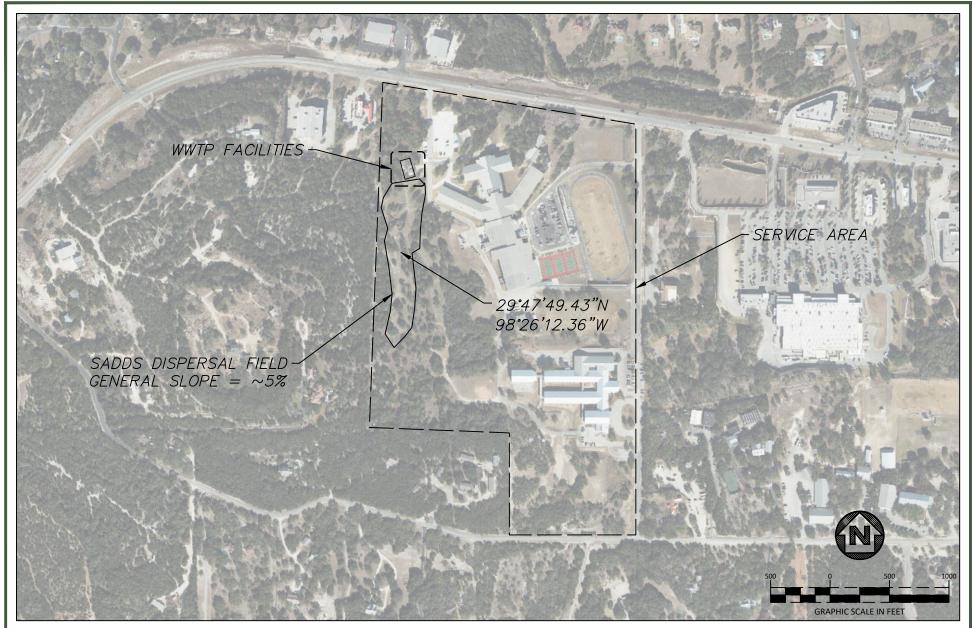
PROCESS FLOW DIAGRAM





# **APPENDIX E**

**SITE DRAWING** 





**SPRING BRANCH MIDDLE SCHOOL WWTP** 

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

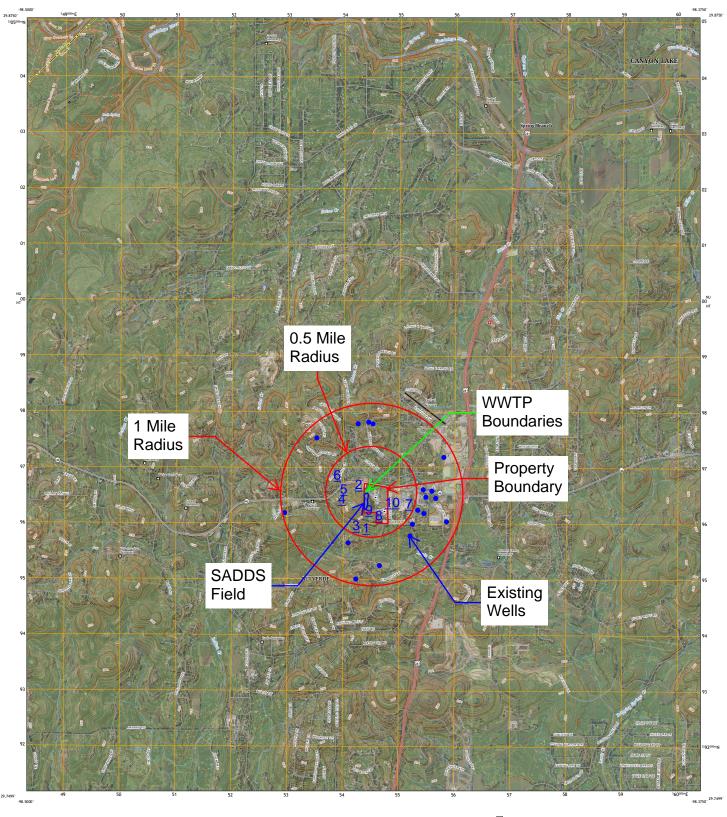
## **APPENDIX F**

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 moved 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**

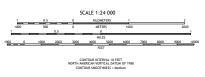
WELL MAP & INFORMATION















**Well Reports** 

Map ID	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
				Т	WDB 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
7	TWDB Data	base	
Water Level Observation Type	Water Quality Available	Aquifer Code Name	
Miscellaneous Measurements	Υ	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 Grid #: 68-13-5

berney, TX 78666

Well Location: 1295 old berney rd Latitude: 29° 47' 36" N

berney, TX 78666 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

 Diameter (in.)
 Top Depth (ft.)
 Bottom Depth (ft.)

 Borehole:
 8
 0
 280

 7
 280
 580

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

Annular Seal Data:

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

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

San Antonio, TX 78216

Well Location: 21155 Hwy 46 West Latitude: 29° 47' 58" N

Bulverde, TX 78163 Longitude: 098° 26' 18" W

Well County: Comal 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

 Diameter (in.)
 Top Depth (ft.)
 Bottom Depth (ft.)

 Borehole:
 10
 0
 530

 6.75
 0
 530

Drilling Method: Air Rotary

Borehole Completion: Open Hole

Annular Seal Data:

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

82PortlandCment

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

Sealed By: **Driller**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 Grid #: 68-13-5

Bulverde, TX 78163

Latitude: 29° 47' 36" N

Well Location: 1451 Old Boerne Rd.
Bulverde, TX 78163
Longitude: 098° 26' 23" W

Well County: Comal 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

Annular Seal Data:

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

2 3/4 yds cemen

Seal Method: Gravity Distance to Property Line (ft.): No Data

Sealed By: TR Drilling & Service 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:

No Data

Water Type

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

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

# STATE OF TEXAS WELL REPORT for Tracking #476572

Owner: Lextor LLC Owner Well #: No Data

Address: 20540 State Hwy 46 West, Ste 115 Grid #: 68-13-5

Spring Branch, TX 78070

Well Location: 1850 Old Boerne Road

Bulverde, TX 78163

Latitude: 29° 47' 50" N

Longitude: 098° 26' 31" W

Well County: Comal 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

 Diameter (in.)
 Top Depth (ft.)
 Bottom Depth (ft.)

 Borehole:
 9
 0
 550

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

Annular Seal Data:

Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
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** 

oncontrated contamination (ii.).

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

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

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)

# Casing: BLANK PIPE & WELL SCREEN DATA

Dla (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

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# STATE OF TEXAS WELL REPORT for Tracking #615024

CTGCD510b)C -sbwws525 Owner Well #: Owner: **Dwayne Hart** 

Address: 7910 Teak Lane Grid #: 68-13-5

San Antonio, TX 78209

Latitude: 29° 47' 53.23" N Well Location: 21477 State Hwy 46 W

Spring branch, TX 78070 Longitude: 098° 26' 29.7" W

Well County: Comal 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

Diameter (in.) Top Depth (ft.) Bottom Depth (ft.) Borehole: 0 3 11

9 501 3

**Drilling Method:** Air Rotary

Borehole Completion: **Filter Packed** 

Bottom Depth (ft.) Filter Material Top Depth (ft.) Size Filter Pack Intervals: 200 501 Gravel 3/8

Top Depth (ft.) Bottom Depth (ft.) Description (number of sacks & material) 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 Sleeve Installed** Surface Completion: Surface Completion by Driller

Water Level: No Data

Packers: No Data

**Submersible** Pump Depth (ft.): 480 Type of Pump:

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

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		

# Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	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		New Plastic (PVC)	0.035	440	500

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### **GWDB** Reports and Downloads

### **Well Basic Details**

### **Scanned Documents**

Oraca Madi Manakan	0040500
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			

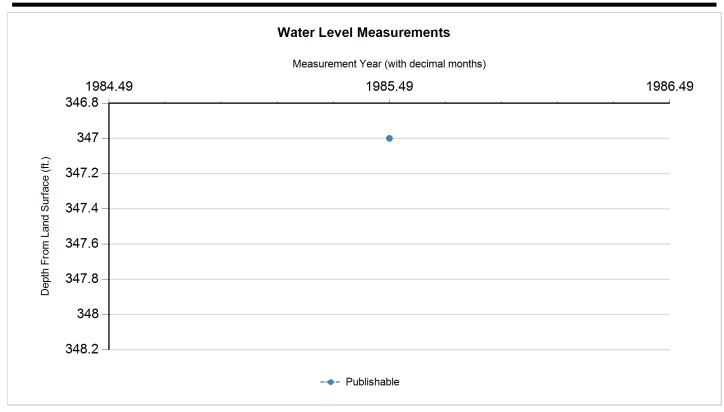




Lithology									
Top Depth (ft.) Bottom Depth (ft.)		Descr	iption						
C	)		1 Top s	Top soil					
1	4		4 White	lime					
4	9		9 Yellow	lime					
9	126		6 Gray a	and brown lime					
126	6	34	5 Gray a	and yellow lime					
345	5	35	9 Brown	lime					
359	359 500 No samples			mples					
Annular Seal R	Range								
Annular Seal Mate	rial	Amount		Unit	Top Depth (ft.)	Bottom Depth (ft.)			
Cement & Sand Mix	(		81 Cubic Feet		0	163			
Borehole					Plugged Back -	No Data			
Diameter (in.)	Top De	epth (ft.)	Bottom	Depth (ft.)					
10.625		0		163					
6.75		163		500					
Filter Pack - No	o Data					Packers			
						Packer Type	Depth (ft.)		
						Baker cement	160		







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

### **Code Descriptions**

Status Code	Status Description
Р	Publishable





### **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 CACO3		284	mg/L as CACO 3	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		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 HCO3)		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 CO3)		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 CACO3)		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 NO3)		4.74	mg/L as NO3	





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	С	
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 CACO3		286	mg/L as CACO 3	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		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 HCO3)		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 CO3)		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 CACO3)		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 NO3)		6.95	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.57	mg/L as N	





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 SIO2	
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	С	
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 CACO 3	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		288	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)		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 CACO 3	
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	





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 SIO2	
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	С	
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	





# **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 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 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 CACO 3	
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	





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 SIO2	
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	С	
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	

<sup>\*</sup> 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/gwdbrpt.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

B.M.W.D. 180 RANCHERS CIRCLE BULVERDE, TX. W/P #1	5 Bottle 6 Bottle 7 Total Sub-			All filtered	unless other		00 Starting ph 6.92 @26.2	1210 Sample time 1130 50 ml. of Sample	well use PUBLIC	DY Ending ph 4.50 @ 29.0	9	70		11.0 mil pm 11.00	6.75 6.79 2	n	24.4 24.7 4	5 6.28		7 6.08	other notes 9	Lift SUBMERSIBLE 10			13	4	14.2 4.5	
* ' ' ' * * * * * * * * * * * * * * * *	Bottle 5	Ŀ	Radioactivity		•		1100 1100		į	her CLOUDY			ling point DIS		6.55		Temperature: 23.1			Conductivity	-	Pumping since 1000		Ide N/A		itude N/A		
	Bottle 2 Bottle 3 Bottle	250 ml	ns Nitrate	2 ml 0.5 ml 2 ml	H2SO4	(Nitric) (Sulfuric) (Nitric)	Time in	Remark Time out	24.7 c	Weather	582 umhos/cm		Samp		O mg/l	)	284 mg/l Temp		O mg/l Eh	246 mail	- 5	Pump		Latitude		Longitude		
NIA 68-13-508 COMAL LOWER TRINITY	Bottle 1	500 ml	Anoins				-	LSD.			<b>∓</b>	6.79		134.8 mv.					D med/I			0 0	that away	Corair	100	28X 20)	315	
SWN: County : Aquifer :								Water ievei	Temperature(00010)	•	Specific Cond.(00094)	ph (00400)		En (00090)	Phenol ALK (82244)		Total ALK (39086)		Carbonate (00452)	(64700)	Dical Dollate(00453)	Total Cations(+)		Total Anions(-)		Total Hardness (00900)	Dissolved Solids	



### FINAL ANALYSIS REPORT

LAB ID: 9907893 SAMPLE DESCRIPTION: Groundwater

COMPANY: TX Water Dev. Board

ACCT NO:

REQUISITION No.: R11041

SAMPLE DATE: 06/03/99

SAMPLE TIME: 1130

DATE RECEIVED: 06/04/99

LOCATION ID: BM-3111-1999 REPORT DATE: 06/23/99

				PQL in	DATE
PARAMETER	RESULTS	UNITS	STORET #	WATER	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
	• • •	5,	<del>-</del>		,,

# 2002FY TWDB Water Quality Field Data Sheet

Conductivity (µS/cm): 604

605

605

Data Entered By Sampler Into Database:

yes / no

# **LCRA Environmental Laboratory Services**

CLIENT: Texas W

Texas Water Development Board

**Client Sample ID: 68-13-508** 

Lab Order:

0206103

File No: 20140

•

Project:

TWDB FY02

Collection

**Collection Date:** 6/7/02 12:00:00 PM

Lab ID:

0206103-10

Matrix: GROUNDWATER

Date: 27-Jun-02

Analyses	Storet Result	PQL	Qual Unit	ts DF	BatchID	Date Analyzed
CP METALS DISSOLVED		E200.7				Analyst: MLI
Calcium	98.6		mg/L			
Magnesium	11.2		mg/L			
Potassium	0.82		mg/L		R14721B	6/18/02 8:16:00 PM
Sodium	6.44	0.70	mg/L	. 1	R14721B	6/18/02 8:16:00 PM
CP METALS DISSOLVED		E200.7				Analyst: MLI
Boron	ND	50	μg/L	1	R14665B	6/18/02 8:16:00 PM
Iron	NE	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
CPMS DISSOLVED META	LS	E200.8				Analyst: SW
Aluminum	NE	4.00	μg/L	1	R14656B	6/18/02
Antimony	ND	1.00	μg/L	1	R14656B	6/18/02
Arsenic	NE	2.00	μg/L	1	R14656B	6/18/02
Barium	27.9	1.00	μg/L	1	R14656B	6/18/02
Beryllium	NC	1.00	μg/L	1	R14656B	6/18/02
Cadmium	ND	1.00	μg/L	1	R14656B	6/18/02
Chromium	1.68	3 1.00	μg/L	1	R14656B	6/18/02
Cobalt	NE	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	NE	1.00	μg/L	1	R14656B	6/18/02
Nickel	3.98	1.00	μg/L	1	R14656B	6/18/02
Selenium	NE	4.00	μg/L	1	R14656B	6/18/02
Thallium	NE	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 BALANCE Cation/Anion Balance	ES Balanced	CALCULAT	ΓΙΟΝ Date	1	R14778	Analyst: AM. 6/26/02
ANIONS BY ION CHROMA  Bromide Dissolved	ATOGRAPHY, DISSOLV		mg/L	. 1	R14737C	Analyst: <b>WR</b> 6/21/02 11:43:32 PM
Promine Piggolyen	0.03	. 0.02	myL	• '		5,21752 11.45.52 7 W

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** 

Client Sample ID: 68-13-508

Lab Order:

0206103

File No: 20140

**Project:** Lab ID:

**TWDB FY02** 0206103-10

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

Matrix: GROUNDWATER

Analyses	Storet	Result	PQL	Qual	Units	DF	BatchID	Date Analyzed
ANIONS BY ION CHROMAT	OGRAPHY,	DISSOLVE E	300					Analyst: WR
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		М	2320 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		E	353.2					Analyst: WM
Nitrogen, Nitrate & Nitrite		1.57	0.02		mg/L	1	R14649B	6/17/02
SILICA		E	370.1					Analyst: WM
Silica, Dissolved (as SiO2)		11.1	0.50		mg/L	1	R14587D	6/12/02

R - RPD outside accepted recovery limits

# TWDB Water Quality Field Data Sheet

Newly Inventoried Well

Deta Entered By Sampler Into Database: yes / no				621 620	_	Conductivity (uS/cm): 619	င္ပ
			0	22.0 220	_	Celsius Temp. (00010) 22 つ	Cels
		atmost of	2,0	632 632	631	pH.	
in war not caribiates				1000 1005	955	Time:	
	ls) Notes:	(at least 3 readings at five minute intervals)	(at least 3 rea	neters Table	ition Paran	Nater Quality Stabilization Parameters Table	<b>Vater</b>
Balanced:							
Hardness (as CaCO3): 305		Filter pressure: hand pump / line	Filter pressure:		1015	Sample Time:	
Dissolved Solids (mg/L):							
Items Below Calculated Later From Results:			Casing Size:			Casing Type:	
					- 1		
Total Alkallunky (39086): 200 mg/L 4, 255		Longitude: <8°26'35."	Longitude:	<b>r</b>		Power:	
Phenol Alkalinity (82244): mg/L		Latitude: 29° ч 8 ' 07. "	Latitude:		Turbine	Lift:	
Items below calculated from: mL acid added x 20 = Alkalinity		FIELD G.P.S. readings	FIELD		Public	Well Use:	
/ O mL Acid added for Total (8.3 - 4.5)							
mL Acid added for Phenol ( > 8.3)		+44	Sampling Point:		GHS	Pumping Since:	
50.0 mL Sample Size		2)					
7.36 Start pH 4.55 End pH	M.P. =		W.L. remark:		500	V. L. depth from LSD (ft.):	N. L. d
Field Alkalinity Titration:							
		11 <i>0</i> 0	Time Out:		9.35	Time In:	
5000 =	to bring the pH below 2.0.	Proper preservation requires adding enough of the correct acid to each sample fraction to bring the pH below 2.0.	ding enough of the con	xeservation requires a	Proper p		
2000 =			ice + H2SO4	Nitric (HNO3) Ic	Nitric (	lce	
1000 = 1007			Nitrate	ons	Cations	Anions / Total Alk.	Anio
Conductivity 500 = 504			250ml (filtered)		500ml (filtered)	500ml (filtered)	5(
SLP = 59 2 7.38 =	5	4	(3)*	2		A	
4 or 10 = 4 24		TED:	CIRCLE EACH SAMPLE FRACTION COLLECTED	E EACH SAMPLE	CIRCL	,   	
pH 77 6.35	Ranches Circle	1 #3 M	Well Name or #: 115				
Calibration Verification Readings	,	Roser Plucencia	Attention:		1	Aquifer Id:	
	6	(210) 357 -5	Phone Number:	C	218HSC	Aquifer Code:	
Sampler(s): MAD	78715	10			03.51	County Code:	
Date: 6-18-03	C	Address: 2055 W. Mulene	Address:		Comal	County:	
Sample ID Number: 1415	Ostrut	Name: Boxer metro weter O street	Name:	%	681350	State Well Number: 6813508	

\* Top of both & broke off @ the lab

# **LCRA Environmental Laboratory Services**

**Date:** 10-Jul-03

**CLIENT:** 

Texas Water Development Board

Lab Order:

0306281

Chefit Sain

Client Sample ID: 68-13-508

Project:

7500201

File No: 25108

1 roject.

TWDB FY03

OR FY03

**Lab ID:** 0306281-05

Collection Date: 6/18/2003 10:15:00 AM
Matrix: GROUNDWATER

Analyses	Storet I	Result Qua	l PQI	L Units	DF	Batch ID	Date Analyzed
ICP METALS DISSOLVED		E2	00.7				Analyst: MLP
Calcium		103	0.20	mg/L	1	20412	6/25/2003 6:48:51 PN
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 PN
ICP METALS DISSOLVED		E2	00.7				Analyst: MLP
Boron		ND	50	μg/L	1	20415	6/25/2003 6:48:51 PN
Iron		ND	50	μg/L	1	20415	6/25/2003 6:48:51 PM
Strontium		423	20	$\mu$ g/L	1	20415	6/25/2003 6:48:51 PN
ICPMS DISSOLVED METALS		E2	8.00				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	Bala	anced	0	Date	1	20588	7/8/2003
ANIONS BY ION CHROMATOGRA	APHY, DISSOLVE	Ε	300				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		M2:	320 B				Analyst: CMM
Alkalinity, Phenolphthalein		ND	0	mg/L CaCO3	1	20365	6/24/2003
Alkalinity, Total (As CaCO3)		288	2	mg/L CaCO3		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

CLIENT: Texas Water Development Board

**Project:** TWDB FY03

**Lab ID:** 0306281-05

Date: 10-Jul-03

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 I	D Date A	nalyzed
NITRATE AND NITRITE Nitrogen, Nitrate & Nitrite		<b>E353</b> .	<b>2</b> 0.02	mg/L	1	20411	Analyst: 6/26/2003	WM
SILICA Silica, Dissolved (as SiO2)		<b>E370</b> .	<b>1</b> 0.50	mg/L	1	20376	Analyst: 6/25/2003	WM

- 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**

terms Below Calculated Later From Results:  Total Hardness: 2/2  Calculated TDS (mg/L): 336  Calculated TDS (mg/L): 100  Calculated TDS (mg/L)	23.2	7.15 23.2 402	7, 63 22, 6 42, 8	Party to	23,5	330	23,3	23, 7 5/6	PH: 4.25 Temperature: 33.7 Conductivity: 5/4 Conductivity Temperature:
	Final Readings:	Final Re	1156	101	1151	1146	rs Table	ramete	W. Q. Stabilization Parameters Table Time: 1/35 1/44
Notes: Ma A.		·		hand (line	Filter pressure: hand (line	Filt	7	207	Sample Time:
Field Total Alkalinity: 0.0 Field Phenol Alkalinity: 0.0		ˈ≓ˈ¥	2636	840	Longitude: Elevation:			N u	Lift: Power:
ml. Acid added for Phenol Items below calculated from ml. acid added data:		z	8	2886	Latitude:	•		P	Well Use:
ml. Acid added for Total	47 GPM	, 297	H C	700	Sampling Point:	Sam	30	11	Pumping Since:
Field Alkalinity Titration:	Oxy 18, Deuterium 1/ Carbon 13	Oxy 18, Deute Carbon 13			W.L. remark:	· · ·			W. L. depth from LSD (ft.):
5000	6 1 - 500 ml	·			Time Out:	•			Time In:
1000 2000	Carbon Ta 1-5 ml NaOH	Carbon 4-5 ml Na	Tritium Dating 1/ No preservative	Tritium No pres	), C Nitrate/Nitrite 0,5 Amr Sulfuric (H2SO4)	) <sub>c</sub> C Nitrate	Cations Nitric (HNO3)	15 Cations	Anions / Total Alkalinity no preservative
Conductivity 500	L 2	- 7	4 (on ice) 1 L	4 (on i	3 (on ice) 250ml (filtered)	3 (o 250ml	2 500ml (filtered)	500m	1 (on ice) 500ml (filtered)
4 or 10	401	1/9	p the pH to 2.	eserved to dro	Add enough of the proper acld to each bottle that is preserved to drop the pH to 2.	cld to each b	the proper a	nough of	Add e
pH 7	HATE	102	e #1/1/s	Ballverl	Well Number: Bollyer de Hills	€			
Daily Meter Calibration:	X 78325	male	Andrea.	20 Sax	Mailing Address:	. Maili	200	71 0	Aquiter Code: Aquiter Id:
Sampler(s):	اح.	euci	Plac	Roger	Attention:	' :	5/	اد	County Code:
ご Sample Number: 3つよる Date: アクン/	Dostric	met water	1 I	Bexar	Owner's Name: Lessee's Name:	Less	13 50	$ \nabla v$	State Well Number: County:
Type of Sample: LCRA / HACH	٠ ٠ ٠	,	ssee	Owner / Le	Send Results To: Owner / Lessee	>> Send I	yes / no	Ye	New Well:

CLIENT: Texas Water Development Board

Lab Order: 0307327 File N

**Project:** TWDB FY03 **Lab ID:** 0307327-02

opment Board Client Sample ID: 68-13-508
File No: 25558

Collection Date: 7/22/2003 12:07:00 PM
Matrix: GROUNDWATER

Date: 19-Aug-03

Analyses	Storet Resu	lt Qual	PQI	Units	DF	Batch II	Date Analyze
ICP METALS DISSOLVED		E200.					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
CP METALS DISSOLVED		E200	.7				Analyst: MLP
Boron	57	,	50	μg/L	1	21091	8/7/2003 7:01:12 PM
Iron	NE	)	50	μg/L	1	21091	8/7/2003 7:01:12 PM
Strontium	393	3	20	μg/L	1	21091	8/7/2003 7:01:12 PM
ICPMS DISSOLVED METALS		E200	.8				Analyst: SW
Aluminum	NE	)	4.00	μg/L	1	21154	8/12/2003
Antimony	NE	)	1.00	μg/L	1	21154	8/12/2003
Arsenic	NE	)	2.00	μg/L	1	21154	8/12/2003
Barium	27.9	)	1.00	μg/L	1	21154	8/12/2003
Beryllium	NE	)	1.00	μg/L	1	21154	8/12/2003
Cadmium	NE	)	1.00	μg/L	1	21154	8/12/2003
Chromium	NE	)	1.00	μg/L	1	21154	8/12/2003
Cobalt	NE	)	1.00	μg/L	1	21154	8/12/2003
Copper	3.09	•	1.00	μg/L	1	21154	8/12/2003
Lead	1.08	3	1.00	μg/L	1	21154	8/12/2003
Lithium	2.64	ļ	2.00	μg/L	1	21154	8/12/2003
Manganese	1.22	2	1.00	μg/L	1	21154	8/12/2003
Molybdenum	N	)	1.00	μg/L	1	21154	8/12/2003
Nickel	2.68	3	1.00	μg/L	1	21154	8/12/2003
Selenium	NE	)	4.00	μg/L	1	21154	8/12/2003
Thallium	NE	)	1.00	μg/L	1	21154	8/12/2003
Vanadium	1.49	5	1.00	μg/L	1	21154	8/12/2003
Zinc	28.2	2	4.00	µg/L	1	21154	8/12/2003
CATION/ANION BALANCES		CALCUL	ATION				Analyst: WM
Cation/Anion Balance	Balance	t	0	Date	1	21159	8/13/2003
ANIONS BY ION CHROMATOGRA	PHY, DISSOI VE	E30	D				Analyst: WM
Bromide Dissolved	0.0		0.02	mg/L	1	21152	8/11/2003 8:16:57 PI
Chloride Dissolved	10.0		1.00	mg/L	1	21152	8/11/2003 8:16:57 PI
Fluoride Dissolved	0.20		0.01	mg/L	1	21152	8/11/2003 8:16:57 PI
Sulfate Dissolved	14.0		1.00	mg/L	1	21152	8/11/2003 8:16:57 PI
		M2320	\ B	-			Analyst: CMM
Alkalinity Phanolophhalain	NI		0	mg/L CaCO3	1	20938	7/31/2003
Alkalinity, Phenolphthalein Alkalinity, Total (As CaCO3)	28		2	mg/L CaCO3		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

CLIENT: Texas Water Development Board

**Lab Order:** 0307327 **File No:** 25558

**Project:** TWDB FY03

**Lab ID:** 0307327-02

**Date:** 19-Aug-03

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 II	Date An	alyzed
NITRATE AND NITRITE Nitrogen, Nitrate & Nitrite		<b>E353.</b> 1.27	<b>2</b> 0.02	mg/L	1	20892	Analyst: 7/28/2003	WM
SILICA Silica, Dissolved (as SiO2)		<b>E370.</b> 11.1	<b>1</b> 0.50	mg/L	1	20950	Analyst: 7/31/2003	WM

- 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

Corral (o.

SAMPLE		$\delta^{13}C_{PDB}$	$\delta D_{SMOW}$	$\delta^{18}O_{SMOW}$
3019-68-20-405	7/22/03	-2.9, -3.4	-30, -30	-4.6
(3020-68-13-508	41	-9.0	-32, -31	-4.6
3021-68-21-201	7/24/03	-2.1, -2.5	-32, -32	-4.8
3022-68-34-803	44	-7.6	-30, -30	-4.3, -4.4
2022 (0.05.10)	7/23/03	6.0		
3023-69-07-106	1/23/03	-6.8	-38, -38	-5.6, -5.6
3024-68-17-802	41	-6.9	-29, -30	-4.0, -4.0
3025-68-11-404	7/23/03	-0.5, -0.4	-35, -34	-5.2
	7/24/03	-3.2	-30, -30	-4.5
2027 (0.10.202	7/24/03			
	1/24/07	-4.3	-29, -30	-4.4
3028-68-19-316	4 (	-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	1/28/03	-8.1	-36, -36	-5.4
3031-68-25-507	1/20/02	2.1		
3031-68-25-50/	1/20/03	-3.1	-32, -34	-4.7, -4.8
3032-68-19-506	7/29/03	<b>-</b> 9.0, <b>-</b> 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	7/27/03	-4.9	-33, -33	-4.8

CSL Ref#EJ69

Page two

#### Texas Water Development Board Well Schedule

Address	State Well	No. 68 13 502 Previous Well No. County	. Comal 091
Transit Oper  Source of  Depth Denum  Activate  Follow Control  Type  Type	River Basis	Guadalupe 18 Zone 1 Lat. 2948 09 Long.	0982626
Address Tenant/Oper.  Dues Drilled Of 28 7985 Depth 500 Depth Datum Akinude 250 Aki Datum 77  Aquifer Glen Rose 21786 Life Scene  Congletion Active Retacy A Marrial Scene Well Construction Method Pump Mfr.  Completion Open Maurial Scene Completion Open Maurial Scene Completion Open Maurial Scene Completion Open Maurial Scene Open Maurial Open Open Open Open Open Open Open Open	Owner's W	ell No. Location1/4,1.4, Section, Bloc	k, Survey
Address Tenant/Oper.  Dues Drilled Of 28 7985 Depth 500 Depth Datum Akinude 250 Aki Datum 77  Aquifer Glen Rose 21786 Life Scene  Congletion Active Retacy A Marrial Scene Well Construction Method Pump Mfr.  Completion Open Maurial Scene Completion Open Maurial Scene Completion Open Maurial Scene Completion Open Maurial Scene Open Maurial Open Open Open Open Open Open Open Open			
Date Drilled	wner OA	KLAND ESTATES Driller T m John	nson
Date Drilled	Address		
Well Construction Method Are Ratary A Material Street Street Completion Open Street Date Completion Open Street Completion Open Open Open Open Open Open Open Ope	Date Drilled	0628 1985 Depth 500 Depth Datum Altitude	250 Alt. Datum
Cating or Blank Tipe (C)  Completion  Pump Mfr.  Coulds Type  Sub rin  S No. Stages  Diam.  Setting 430 ft. Column Diam.  Fuel or  Power  Fuel or  Fue	Aquifer	Glen Rose 218 GLRS Well W	User 618626
Cating or Blank Tipe (C)  Completion  Pump Mfr.  Coulds Type  Sub rin  S No. Stages  Diam.  Setting 430 ft. Column Diam.  Fuel or  Power  Fuel or  Fue	Well Construction	Const.  Merhod A. Rotzav A Marerial Steel S	
Lift Data Pump Mfr. Golds Type Sub ria S No. Stages Comerced from Diam.  in. Setting 430 ft. Column Diam.  Fuel or Power Fiel or	Company		
Bowls Diarn. in. Secting 430 ft. Column Diam 2 in. Cin. Cin. Cin. Cin. Cin. Cin. Cin.	1:6 Des		Open Hole (O)
Motor Mfr. Fuel or Power Elec. E Horsepower 110.00 2 0 6 1 5 5 0 0 1 6 3 5 0 0			Diam. Serring (feet)
Motor Mfr. Power Elec. Horsepower 110. 100 3 500 Most Flow GPM Pump 25 GPM Mess Gern Est. Abullah Desc 6/8.5 3 9 Performance Test Date Length of Test Production GPM 5 GPM fr. Sp.Cap. GPM/fr. 6 Quality (Remarks Water Level M Water Nother Date Level M Water Nother Date Core Date Mess. 3 10 Date Core Date Co			
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. P Secondary Tertiary		Power Flec. Horsepower 1101.00 2	
Static Level — ft. Pumping Level — ft. Drawdown — ft. Sp.Cap. — GPM/ft.  Quality (Remarks — Primary P.S. — Secondary — Tertiary —	Yield F	<del></del> -	
Quality (Remarks  Water Use Primary P.S. P Secondary Tertiary  Other Data Water M Water N Logs D Data Other Data Available Level Quality Logs D Data  Date Date Date Mess. 347 - Junior Date Level Date Record Collected or Updated  Recorded By Phi N. TWRCC Date Record Collected (20 max) Reporting Agency O I Remarks  Remarks  Aquifer Glen Rose  93-0344	-	to the control of the	
Water Use  Other Data  Available  Date  Other Data  Level  Quality  Logs  Mess.  Date  Recorded By  Date  Recorded By  Date  Date  Recorded By  Date  Recorded By  Date  Recorded By  Date  Date		and a second of the control of the c	
Other Data  Available  Level  Date  Date  Date  Water  Quality  Loga  Meas.  Jule  Meas.  Meas.  Meas.  Meas.  Meas.  Meas.  Jule  Recorded By  Water  Date  Recorded By  Water  Aquifer Glen Rose  9  Aquifer Glen Rose  9  10  11  12  13  14  15  16  17  18  19  19  10  10  10  10  10  10  10  10			<del></del>
Date	Water Use		<del></del>
Date	Other Data Available		<b>├╂┼╂┼┼┼╂┼┼┼</b>
Recorded By Chil N. TVRCC Date Record Collected or Updated (20 max) Reporting Agency OII  Remarks 1  Aquifer Glen Rose 93-0384	Dat	06 28 1985 Max 347 · _ driler	
Recorded by Phil N. TVRC Dare Record Collected 72 12 1995 (20 max) Reporting Agency OII  Remarks 1  Aquifer Glen Rose 93-0344	Water Dat	Meas	
Recorded By Phil N. TIRCC Date Record Collected [2] [2] [2] [3] [20 max) Reporting Agency [5] [7] [7] [7] [7] [7] [7] [7] [7] [7] [7	Dat		·
Recorded By Phil N. TVRCC Date Record Collected [2] [2] [2] [3] [20 max) Reporting Agency [3] [4] [5] [6] [6] [6] [6] [6] [6] [6] [6] [6] [6			<b>╎╌╂╌╂╂┼┼┼╂┼┼┼</b> ┤
Remarks 1  Aquifer Glen Rose  Well No. 68-13-50			` <del>                                      </del>
Remarks 1  Aquifer Glen Rose  Well No. 68-13-50	Recorded By	Chil N. TVRCC Dare Record Collected [2 12 1995]	0 max) Reporting Agency
Aquifer Glen Rose Well No. 68-13-50	Remarks 1		
Aquifer Glen Rose Well No. 68-13-50	2		
93-0384			
93-0384	. 4	<del></del>	Clar Para
93-0384	5	<del>╶╎┤</del> <del>╏╏╏╏</del>	Well No. 68-13-50

State of Texas

WATER WELL REPORT

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

congrat copy by the diment to the car Department of Water Resources G. Box 13087 (stm. Texas 78711

ATTENTION OWNER: Confidentiality Privilege Notice on Reverse Side

GWNER Gordon B.	Sutton		ddress			X 16310 San Ancor	<del> </del>	70210	
OCATION OF WELL:	(Name) 2 • 5 ∫	n ngga mga talam tag.	iles in NC	, -		AFD) (Cit	•	rate) (Z	ip)
Oakland Es				(N.E.	, S.W.	, etc.)	(Tow)	1)	
• must complete the legal of : dance and direction from an zey lines, or he must le in official Quarter or Ha : Gighvay Map and attach	escription to the right two intersecting sec- scate and identify the If-Scale Texas Count	it - e ty	Abstract	No		Block NoToSurvey Name on from two intersecting section or	+	· · · · · · · · · · · · · · · · · · ·	
		χCl	See attach	ed ma	p.			<del></del>	<del></del>
TYPE OF WORK (Check):	4) PROPOS	ED USE (Check):				5) DRILLING METHOD (Check	<del></del> ):		
. Metr (Digepe	- 1	c □ Industrian ( n □ Test Well □		•		☐ Mud Rotary ☐ Air Hammer  X☐ Air Rotary ☐ Cable Tool			
HELL LOG.	Dia. (in.) 10 5/8		To (ft.) <b>63</b>	1	<b>О</b> ре	HOLE COMPLETION: In Hole Straight Wall yel Packed Other		nderreamed	
a ta 6-28-85	6 3/4	163 5	00		-	ravel Packed give interval from			
To !tr.i		d color of format material	tion	8)	CASII	NG, BLANK PIPE, AND WELL SC	REEN DATA:		
	op soil white lime			Dia. (in.)	New or Used	Perf., Slotted, etc.	Settir From	ng (ft.)	Gage Casin Scree
- 9	ellow lime			7 5,	8	new T&C X42 steel			
- 126 gray	y and brown gray and ye	lime	<b></b>	<u> </u>	-	forty foot length	3 0	163	261
	prown lime				<del> </del> -	<del> </del>	<del></del>		┼
_	no samples	<del></del>		<del> </del>	├	<del></del>			
one foot cave a	- 257 1/071	v broken	from	1				<del></del>	1-
75 to 381 and 4	100 to 406								
o large amount				<u> </u>	<u> </u>				
· · · · · · · · · · · · · · · · · · ·				-{		CEMENTING		_	
						ted from <u>0</u>	ft. to 16		it
					vietho: Cemen	ted by slurry poured	From top	in di	У
				9)		ER LEVEL:	rface Date	-28-85	5
				4	Artes	sian flowgpm.	Date _		
		OF I W	B L	10)	PAC	KERS: Type	<b>Ge</b> pth		
, <u></u>	10) B	W E V V	15	-	Ва	ker cement basket	at 160'		
	<del></del>	111 1 1 198	15	1		· · · · · · · · · · · · · · · · · · ·	<del></del>	<del></del>	
								~~~	
	MAT	DEPT. OF ER RESOUR	CES	1	TYP  Turl	EPUMP: Goulds subme bine	_		壮エン
	VVAS L	EN NESUUI	ICCS_			10hp 230V 3ph s#	200022	Cylinder	
(Use rev	verse side if necessary	/1		7		to pump bowls, cylinder, jet, etc.,		" galı	7.
i o o yrai kriesvangly pesetra		ontained undesira	ible	12)	WEL	L TESTS:			- <del> </del>
Test Submit "REPORT O		VATER"		1		e Test: Pump Bailer	Letted 🏖	🗆 Estima	
Type of water?  2 s a chemical analysis mad	Depth of s				Yiel	d: 125 gpm with ?	ft. drawdown a	iter <u>72</u>	hrs.
						nder my supervision) and that est of my knowledge and belief.			
MPANY NAME	Johnson		Water V	Nell Dr	iller's	857 License No.			
F.O. B	ype or Print) ox 925 Cas	troville	TX.	780	09		—. —.		
JURESS	REPO	<i>)</i>	(Ci	ty)	<del></del> -	(State)		Zip)	<del>, —, —</del>
(. infl)	Me	non	(Sig	ned)		75	D.4	2	
nttach electric log, chemic	pled Water Well Drill at analysis, and other		nation, if a	vailable	e.	(Registered Drifler Trainee)	For TOWR us Well No. 28: Located on m	· (3·5B	<u>.F</u>



#### **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

Driller: T M Johnson

Aquifer ID: Trinity

Estates) #1 Quercuse

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

Horsepower: 10.0

Type of Lift: Submersible Pump

Power: Electric Motor

Open Hole (O)

C

0

**Bottom** 

Construction: Air Rotary

Completion: Open Hole

(ft.) (ft.) (in.) 0 163 163 500

CASING INTERVALS:

Casing/Blank Pipe (C)

Dia.

7

6

Well Screen/Slotted Zone (S)

Top

Casing Material: Steel

Screen Material:

**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

Wednesday, September 14, 2011

State Well Number:

68-13-502 update

#### Texas Water Development Board Well Schedule

State Well No. 68 13 502 Previous Well No. County Comal 091
River Basin Guadalupe 18 Zone 1 Lat. 2948 09 Long. 098 26 26 of Coord. 1
Owner's Well No. Location 1/4, 1.4, Section , Block , Survey
Owner OAKLAND ESTATES Driller T M Johnson
AddressTenant/Oper
Date Drilled 06 28 1985 Depth Source of Depth Datum Altitude 1250 Alt. Datum
Aquifer Glen Rose 218GLRS Well Type W User 618626
Well Const. Construction Method Arr Rotany A Material Steel S
Completion  Completion  Completion  Completion  Completion  Screen  Material  Solution  Solution  No. Stages  Casing or Blank Pipe (C)  Well Screen or Slotted Zone (S)  Open Hole (O)  Cemented from 0 to 163
Bowls Diam in. Setting 430 ft.Column Diam. 2 in. (in.) From To
Motor Mfr Fuel or Elec. E Horsepower 10.00 2 006 163 500
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
Other Data  Available  Level  Quality  Logs  Other Data  Other Data
Date 06 28 1985 Mess. 347 ·
Water Levels Date 12
Date Meas 13
· · · · · · · · · · · · · · · · · · ·
Recorded By Chil N. TVRCC Date Record Collected or Updated 12 12 1995 (20 max) Reporting Agency 01
Remarks 1
2
3
1 Aquifer Glon Rose
Aquifer Glen Rose Well No. 68-13-50
93-0384 2/9/93

⇒ equal copy by
 ⇒ ed mail to the
 ⇒ Department of Water Resources

 $\ell$  -i. ,  $\ell m / k mov_\ell ng/\gamma$  penetrate any strata which contained undesirable

## State of Texas WATER WELL REPORT

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

O Box 13087 Stim, Texas 78711

ATTENTION OWNER: Confidentiality Privilege Notice on Reverse Side

OWNER Gordon B. Sut	ton		Address —	0.	В	x 163	10 S	an Antoni	o, Tx	. 78	216	
LOCATION OF WELL:	ame) ir garidas	and the second second	.3			RFD)		(City)		State)	(Zip	)
Comal Comal	2.5		_ miles in No	orth	1		direction	from Bulv	erde			
Oakland Estat	es			(N.E.	, S.W.	, etc.)			(To	wn)		
must complete the legal descript : Nacce and direction from two it or rey lines, or he must locate a er of head Ouarter- or Half-Sca : Highway Map and attach the n	ion to the rightersecting second identify the Texas Coun	ie ty	Abstract	No			Survey N	Town		<b>,</b>		
		,	X□ See attach	ed ma	p.						-	
TYPE OF WORK (Check):	4) PROPOS	ED USE (Che	eck):			5) DRIL	LING ME	THOD (Check):				
) Heli I Deepening	1		ial <sup>X</sup> Public Su	pply		☐ Mud	Rotary [	☐ Air Hammer [	Driven [	3 Bored	ı	
The confittioning 11 Plugging			ell 🗆 Other				-	Cable Tool				
offit LOG.	DIAI Dia. (in.) 10 5/8	METER OF H From (ft.) Surface	To (ft.)	1	Оре	HOLE COI in Hole vel Packed		DN:  Straight Wall  Other				
6-28-85	6 3/4	163	500					erval from				
	Description a	nd color of fo material	rmation	8)	CASI	NG, BLANI	C PIPE, A	ND WELL SCRE	EN DATA:			
- 1 ton	soil			Dia.	New		, Plastic,		Sett	ing (ft.)		Gage
	te lime			(in.)	or Used	" Scree		f commercial	From		To	Casing Screen
- 9 yel:	low lim			7 5,	8	•			asing			
- 126 gray a			100		_	forty	foot	lengths	0	<u> </u>	63	2611
	y and your lime		TIME	ļ					ļ			
	samples			├—	ļ				ļ			ļ
				├	<del> </del>				<del> </del>			<del> </del>
one foot cave at 3			n from	<del> </del>		<del> </del>			<del> </del>			
75 to 381 and 400 o large amount of			06		_				<del>                                     </del>			
o rarge amount or	WACCE			<del>                                     </del>	Ь	<u> </u>		CEMENTING DA	ATA			<u> </u>
				1 0	emen	ted from		0		63		ft.
							cubi	c feet of	50%	ceme	nt s	Sand
					Cemen	ted by <b>51</b> 1	urry	poured fi	com to	p in	dr	7
			· · · · · · · · · · · · · · · · · · ·				llas	(Company o	r Individua	I)		
				9)	WAT	ER LEVEI				6 20	05	
			<del></del>	-	Statio	level_34	<b>* /</b> ft	. below land surfa	ce Date	0-20	8-85	
				1	Artes	ian flow		gpm.	Date			
		a E n	WEL	10)	PAC	KERS:		Туре	Depth			
	(a	, <b>6 E</b> 1	VE		Ва	ker c	ement	basket a	at 160	•		
`			ען ייי	<u> </u>								
		JUL 11	1985	<del> </del>								
				<u> </u>					<del></del>	=		1.50
		DEPT. C		1				s submer				±128]
N	WAT	ER RESC	URCES		∃ Turl	l Ohn	☐ Jet 230V	X Submersi 3ph S#20	ble COO22	Cylin	nder	
HIco roupres e	ide if necessar	~)		1						2.4		
ATER QUALITY:		,		<b>,</b>	epth	to pump be	owis, cylii	nder, jet, etc., 4.	on_on_	20	ICTEV.	•

12) WELL TESTS:

Sheet	
Data	
<b>Field</b>	
uality	
ater Q	
<b>JB</b> Water C	

	I WUB Water	WUB Water Quality Field Data Sheet	Jata Sneet	
New Well: yes/no_202	Send Results To: Owner / Lessee	Owner / Lessee		Type of Sample: LCRA / HACH
State Well Number: 6 8 -13 -5	S(V Owner's Name:	Bexar Met	wester Distric	Sample Number: 3020
County:	. X Lessee's Name:			Date: $7/2 / 63$
	Attention:	Roger Place	acencia	Sampler(s): D. Caker
Aquifer Code: 21% HSCC	Mailing Address:	2055 W.	Maloue	
Aquifer Id: 28		San Anton	13, /x 78205	Daily Meter Calibration:
	Well Number: Ballierde	Bullerde Hills.	Hon top	PH 7 629
Add enough of the proper a	Add enough of the proper acid to each bottle that is preserved to drop the pH to 2.	eserved to drop the pH to 2.	119 6/1	4 or 10 /0.0/
1 (on ice) 2	3 (on ice)	4 (on ice)	2	
500ml (filtered) 500ml (filtered)	250ml (filtered)	11	=	Conductivity 500
Anions / Total Alkalinity / Cations	), O Nitrate/Nitrite	Tritium Dating 🗸	Carton Ta	1000
no preservative 10th Nitric (HNO3)	0,5 ant Sulfuric (H2SO4)	No preservative	4-5 ml NaOH	2000
		,	9	2000
Time In:	Time Out:		1 - 500 ml	
	•		Oxy 18, Deuterium V	Field Alkalinity Titration:
W. L. depth from LSD (ft.):	W.L. remark:			Skart pH
-	•	/ -		50 ml. Sample Size
Pumping Since: //30	Sampling Point:	FOO #	1 247 CPM	ml. Acidadded for Total
				ml. Acjaradbed for Phenol
Well Use:	Latitude:	388	Ζ.	Items below calculated from ml. acid added data:
Lift:	Longitude:	0882636	<b>»</b> .	Field Total Alkalinity: 0.0 mg/L
Power: E	Elevation:	(128)	±.	Field Phenol Alkalinity: 0.0 mg/L
		\ 		Notes: No A(K,
Sample Time: 1207	Filter pressure: hand (line	hand (line		ph weter acting
			: !	ap. lowlass
W. Q. Stabilization Parameters Table			Final Readings:	
Time: 1/35 1/45	1186 1151	4511 1126	1201 1206	
pH: 6,25 6,40	6.81 705	1 7.63	7.15 7.31	Items Below Calculated Later From Results:
Temperature: 23, 7 23, 3	23.4 23.5	Janu 22,6	23,2 23,2	Total Hardness: 25/2
Conductivity: 5/6 438	330 655	428	402 277	Calculated TDS (mg/L): 350
Conductivity Temperature:				(

yes/ no

revised 6/7/00

Date: 19-Aug-03

**CLIENT:** 

Texas Water Development Board

Lab Order:

0307327

File No: 25558

**Project:** Lab ID: TWDB FY03

0307327-02

Client Sample ID: 68-13-38 502

Collection Date: 7/22/2003 12:07:00 PM

Matrix: GROUNDWATER

Analyses	Storet Re	sult Qual	PQ	L Units	DF	Batch II	Date Analyz
ICP METALS DISSOLVED		E200	.7				Analyst: MLF
Calcium	9	9.3	0.20	mg/L	1	21089	8/7/2003 7:01:12 PM
Magnesium	1	0.8	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: MLF
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	2	7.9	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	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	2	8.2	4.00	μg/L	1	21154	8/12/2003
CATION/ANION BALANCES		CALCUL	ATION				Analyst: WM
Cation/Anion Balance	Baland	ced	0	Date	1	21159	8/13/2003
ANIONS BY ION CHROMATOGRA	PHY, DISSOLVE	E30	0				Analyst: WM
Bromide Dissolved	•	.05	0.02	mg/L	1	21152	8/11/2003 8:16:57 F
Chloride Dissolved	1	0.6	1.00	mg/L	1	21152	8/11/2003 8:16:57 F
Fluoride Dissolved	0	.20	0.01	mg/L	1	21152	8/11/2003 8:16:57 F
Sulfate Dissolved		4.0	1.00	mg/L	1	21152	8/11/2003 8:16:57 F
ALKALINITY		M2320	В				Analyst: CMI
Alkalinity, Phenolphthalein		ND	0	mg/L CaCO3	1	20938	7/31/2003
Alkalinity, Total (As CaCO3)	,	285	2	mg/L CaCO3		20938	7/31/2003

Qualifiers:

- Value exceeds Maximum Contaminant Level
- Ε Value above quantitation range
- Analyte detected below quantitation limits
- Spike Recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit

**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: 68-13-508 507

Collection Date: 7/22/2003 12:07:00 PM

Matrix: GROUNDWATER

Analyses	Storet	Result Qual	PQL	Units	DF	Batch I	D Date A	nalyzed
NITRATE AND NITRITE Nitrogen, Nitrate & Nitrite		<b>E353</b> .	<b>2</b> 0.02	mg/L	1	20892	Analyst: 7/28/2003	WM
SILICA Silica, Dissolved (as SiO2)		<b>E370</b> .	<b>1</b> 0.50	mg/L	1	20950	Analyst: 7/31/2003	WM

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- Analyte detected below quantitation limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Н 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

Cornal Co.

SAMPLE		$\delta^{13}C_{PDB}$	$\delta D_{SMOW}$	$\delta^{18}O_{SMOW}$
3019-68-20-405	7/22/03	-2.9, -3.4	-30, -30	-4.6
3020-68-13 <b>-368</b>	41	-9.0	-32, -31	-4.6
50	2,			
3021-68-21-201	7/22/63	-2.1, -2.5	-32, -32	-4.8
3022-68-34-803	• •	-7.6	-30, -30	-4.3, -4.4
	1 1 -			
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
	-11			
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	<b>-4</b> .5
3027-68-19-303	7/24/03	-4.3	-29, -30	-4.4
3028-68-19-316	• (	-1.6	-28, -29	-4.5
	7/25/03			
3029-68-11-810		-3.9	-30, -30	-4.3, -4.2
3030-69-24-504	1/28/03	-8.1	-36, -36	-5.4
	- lales			
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
	-101-			
3033-68-19-612	7/19/03		-30, -30	-4.7
3034-68-11-809	**	-1.8	-34, -34	-5.0, -4.9
3035-68-21-103	7/27/03	-4.9	-33, -33	-4.8

CSL Ref#EJ69

Page two

# Calibration Verification Readings Sampler(s): M Aprez Date: 6.18.03 Newly Inventoried Well Sample ID Number: 1915 TWDB Water Quality Field Data Sheet Name: Boxus metro weter 0 struct <u>2003FY</u> <sup>元の</sup>プ State Well Number: 6813586

				داد		2				selow 2.0
lone	Tx, 78225	7-06	2،د	lanchers Cir						ction to bring the aH b
Address: 2055 W. Mulene	San Antonio Tx, 78225	Phone Number: (210) 357 - 57-06	Attention: Rose Plucencia	Well Name or #: 11ch wp# 1 Randers Circle	TED:	4				d acid to each sample fra
Address:	•	Phone Number:	Attention:	Well Name or #:	CIRCLE EACH SAMPLE FRACTION COLLECTED:	(3)*	250ml (filtered)	Nitrate	Ice + H2SO4	Proper preservation recuires adding enough of the correct acid to each sample fraction to bring the pH below 2.0
County: Conal	1520	21845CC	28	,	CIRCLE EACH SAI	(2)	500ml (filtered)	Cations	Nitric (HNO3)	Proper preservation requ
County:	County Code: 02.51	Aquifer Code: 218HSCC	Aquifer Id:		(	3	500ml (filtered)	Anions / Total Alk.	lce	

6.35

4 or 10 / 9.24

7.38 =

SLP = 59.2

T000 = 10001

2000 = **= 000**9

500 = Sod

Conductivity

	LI.S.S. End pH		enol ( > 8.3)	al (8.3 - 4.5)	c 20 = Alkalinity	mg/L	mg/L 4,25%
Field Alkalinity Titration:		50.0 mL Sample Size	mL Acid added for Phenol ( > 8.3)	mL Acid added for Total (8.3 - 4.5)	Items below calculated from: mt. acid added $\times$ 20 = Alkalinity	nlty (82244):	Total Alkalinity (39086): 200
Alkalini	7.36 Start pH	0 mL	H_	<u></u>	elow calculat	Phenol Alkalinity (82244):	Total Alkali
Field	7.3	20		10	Items b		

M.P.

W.L. remark:

Time Out: 1100

Time In: 9:35

|--|

	Y
	$\hat{\mathcal{S}}$
·	
	<b>B</b>
	4
	no
	5
	XX
	7
 S	
Note	

(at least 3 readings at five minute intervals)

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22.0 6.32

22.0 6.37

> Celsius Temp. (00010) 22.0 Conductivity (uS/cm): 619

1000 10001

Water Quality Stabilization Parameters Table

Time: 955

Sample Time: 1015

Casing Type:

029

129

Filter pressure: hand pump / line

Longitude: 48°26'35. Latitude: 2勺。 48・07.

Power: Electric

Lift: Torbine

Well Use: Public

Casing Size:

FIELD G.P.S. readings

FA し

Sampling Point:

Pumping Since: 945

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

Data Entered By Sampler Into Database:

yes / no

\* Top of both broke off @ the lab.

**CLIENT:** Texas Water Development Board

Lab Order:

0306281

File No: 25108

Project: Lab ID: TWDB FY03

0306281-05

Collection Date: 6/18/2003 10:15:00 AM

Client Sample ID: 68-13-308

**Date:** 10-Jul-03

Matrix: GROUNDWATER

Analyses	Storet I	Result	Qual	PQI	L Units	DF	Batch ID	Date Analyze
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	ì.				Analyst: SW
Aluminum		ND	L200.0	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		CA	LCULA	TION				Analyst: WM
Cation/Anion Balance	Bala	inced		0	Date	1	20588	7/8/2003
ANIONS BY ION CHROMATOGRAP	HY. DISSOLVE		E300					Analyst: <b>WR</b>
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	R				Analyst: CMM
Alkalinity, Phenolphthalein		ND		0	mg/L CaCO3	1	20365	6/24/2003
Alkalinity, Total (As CaCO3)		288		2	mg/L CaCO3		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

**Date:** 10-Jul-03

**CLIENT:** 

Texas Water Development Board

Client Sample ID: 68-13-508

Lab Order:

0306281

File No: 25108

**Project:** 

TWDB FY03

Collection Date: 6/18/2003 10:15:00 AM

**Lab ID:** 0306281-05

Matrix: GROUNDWATER

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

- \* 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

Sheet
Data
Field
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705	/	Water Quality Field Data Sheet	ield Data Sh	eet				
SWN: N/A 68-13-508 County: COMAL		Name: Address:	B.M.W.D. 180 RANCH	B.M.W.D. 180 RANCHERS CIRCLE	·щ	Sample No. Date:	BM-3111-1999 JUNE 3, 1999	ام
•			BULVERDE, TX	., TX.		By:	ROGER P.	1
		owners well #	W/P #1					
Bottle 1 Bottle	2 Bottle 3	Bottle 4	Bottle 5 B	Bottle 6	Bottle 7		Total Sub-	1
							Samples	
500 ml 1 liter	250 ml	1 liter Podioactivity						
Alons caudis caudis 2 ml	0.5 ml	2 ml					All filtered	ı
HNO3	H2S04	HNO					unless other	
(Nitric)	(Sulfuric)	(Nitric)					wise stipulated	g
		Time in	1100			Starting ph	6.92 @26.2	1
Water level LSD Remark	논					14.2	14.2 ml. of 0.02N to	ا
		Time out	1210 S	1210 Sample time	1130	50	50 ml. of Sample	•
Temperature(00010) 24	24.7 c		<b>≯</b>	well use	PUBLIC			
		Weather	CLOUDY			Ending ph	4.50 @ 29.0	
Specific Cond.(00094) 58	582 umhos/cm						)	1
		Outside temp	82					
ph (00400) 6.79		Sampling point DISCHARGE(FAUCET)	DISCHARG	E(FAUCET)				
Eh (00090) 134.8 mv.		Time:	1110	1115	1120	ш	hd	
						1	6.82	2
Phenol ALK (82244)	l/gm	ph:	6.55	6.75	6.79	2	6.65	55
						3	6.5	ις.
Total ALK (39086) 28	284 mg/l	Temperature:	23.1	24.4	24.7	4	6.38	<u></u>
						5	6.28	<u></u>
Carbonate (00452) O meq/l O	l/gm	Eh			134.8	9	6.18	<b></b>
						7	90.9	œ
Bicarbonate(00453) 5.68 meq/l 34	346 mg/l	Conductivity:	583	585	285	8	86'9	∞
		,	ō :	other notes		<b>6</b>	5.87	<u></u>
Total Cations(+)		Pumping since	1000 Lift	E	SUBMERSIBLE	10	5.75	<u>.</u>
Malanco.						=	5.6	<u>.</u>
Total Anions(-)		Latitude	N/A P	Power	ELECTRIC	12	5.43	ကျ
700						13	5.17	<u>-  </u>
Total Hardness(00900)	_	Longitude	N/A	Gpm	125	14	4.68	<u>00   1</u>
2/2						14.2	<b>6.4</b>	o]

**Dissolved Solids** 



#### 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	$\mathtt{ug}/\mathtt{L}$	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

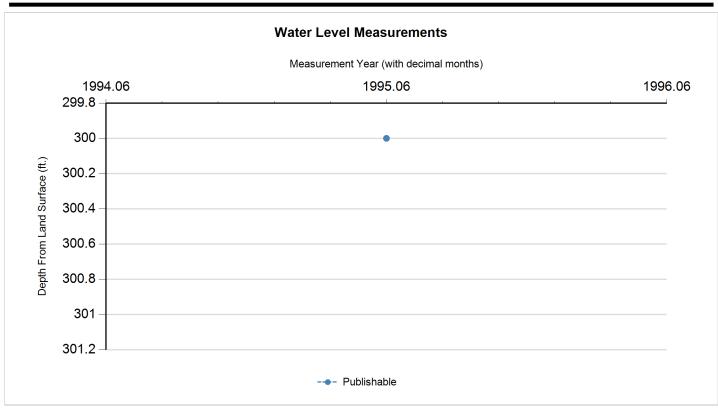
Well Type	Withdrawal of Water		
Well Use	Public Supply		
Water Level Observation	Miscellaneous Measurements		
Water Quality Available	No		
Pump	Submersible		
Pump Depth (feet below land surface)			
Power Type	Electric Motor		
Annular Seal Method			
Surface Completion			
Owner	Cedar Hill Day Camp Well #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 20
6	Open Hole					200 47
Well Tests - Lithology - I						
Annular Sea	al Range - No D	)ata				
Borehole - N	No Data		Plugg	ed Back - No I	Data	
Filter Pack -	· No Data			Pack	kers - No Data	







	Status Code	Date	Time	Water Level (ft. below land surface)	Change value in ( ) indicates rise in level	Water Elevation (ft. above sea level)	#	Measuring Agency	Method	Remark ID	Comments
F	•	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/gwdbrpt.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



91

County: Comal 68-13-517 Previous Well Number: State Well Number: 982545 **Global Positioning System - GPS** 294749 Longitude (dms): Coordinate Accuracy: Latitude (dms): River Basin: Guadalupe River RWPA: L GMA: 9 GCD: Aquifer ID: Trinity Driller: Kuhn Water Owner: Cedar Hill Day Camp Well #1 Enterprises, Inc. Aguifer Code: 218GLRS **GLEN ROSE** LIMESTONE Depth (ft): 470 Elevation (ft): 1232 Source of Depth: Driller's Log Source of Elevation: Digital Elevation **Model -DEM** CASING INTERVALS: Date Drilled: 01/19/1995 Well Type: Withdrawal of Water Casing/Blank Pipe (C) Well Screen/Slotted Zone (S) Open Hole (O) Type of Lift: Submersible Pump Power: Electric Motor Horsepower: Dia. Top Bottom (in.) (ft.) (ft.) Completion: Open Hole Construction: Air Rotary 7  $\mathbf{C}$ 0 200 0 6 200 470 Casing Material: Steel Screen Material:

**WATER USE** 

**Public** Primary:

Supply

Secondary:

Tertiary:

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

Thursday, November 10, 2011

State Well Number:

68-13-517

New

2) ANDRESS OF WESS: County Comail	canark Day Care And Center, Inc. St. Hwy 46W (most east (State or RFD)	Diese from T. Arieston Bench) systematics (CN) Enlaged (SNA) (20), 78163.
3) TYPE OF WORK (Check):	industrial infoation in	Children Commenter Set Boring Comments 5).
Reconditioning   Plagging	Dischargerest of HOLE  AND	#ubmitted to the ThIRECT XX Yes
From (ft.) 7 To (ft.) Carbolo	tion and objer of formatical instantal :	Byrithole Completion (Chilick):      Doon Hote      Braight Wall
0- 35 Firm birn L/S		Chidprojepped   Qiffvel Packed   Chier
35-40 Pirth Anal L/S 40-50 Pirth bin 3/S		CAPITO BLANK PIPE, MYD, WELL TORER DATE
50-90 First Creat I/S		Niet Steef, Plastic, att. Setting(fit) Gage Old Gr. Plast, Stottler, etc. Setting(fit) Gagte
140-180 Firm Crav L/S		(in.) Used Screen Mg. I commercial From To Screen
180-320 Firm than L/S 320-400 Firm gurst/ L/S		6-5/8 N. Steed 200 2. above 188 will surrace
400-420 Firm orn L/S 420-470 Firm Grav L/S	WEGENAR	
		p) CELENTING BATA (Figo 338.44(1)) CLL Ft.
	APR U WSS	Commenced from 200 in to Surfaceth, No spinisher and 28 W/ yd
	TEXAS NATURAL RESO	ASCE Methodshed prossume
(Lipe diverse skt	TEXAS NATURAL RESO	Correcting Halk Hourten, Services Distance to captic system field links - EDL - 10 Wit.
13) TYPE PUMP:		Métrod of verification of above distance
Owler		10) SURFACE COMPLETION
Depth to pump bowls, cylinder, jet, etc.	<u>. 441                                   </u>	☐ Specified Surface Stab Installed: [Rule 338.44(2)(A)] ☐ Specified Steel Steeve Installed: [Rule 338.44(3)(A)]
14) WELL-TESTS!		Pitiese Actep for Usels (Rule 338.44(3)(b))
Typetest: Pump Deller Yield: 30 gpm with		Approved Atternation Processors Lines [Rate 33971]
		State Birel 1900: It below land surfaces. Date 01-23-95
15) WATER QUALITY: Did you knowingly penetrate any strate	which contained undesirable	Artellian flow gpm Date
constituents?	PORT OF UNDESIRABLE WATER	12) PACKERS: Type Deets
Type of water? See Chamical	Control of the 200 ft.	N/A
Was a chemical aselysis made?	Yes D No	
· 불 가 그 중요한 사람들은 가 된 것은 시간 중요한 점점 하는 것	prin (or under my espervision) specticing thru 15 will result in the logical being resul NIERPRISES INC.	nch and all of the statements herein are true to the bast of my knowledge and belief. I read for completion and real benief.  WELL DER LER'S LICENSE NO. 4785W
(Ty	pe or print)	
ADDRESS P.O. Box 160;	C. A. Bu	lvende, 12x2s 7.812/3-01460 (State) (Zip)
	or RESP)	





#### **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		

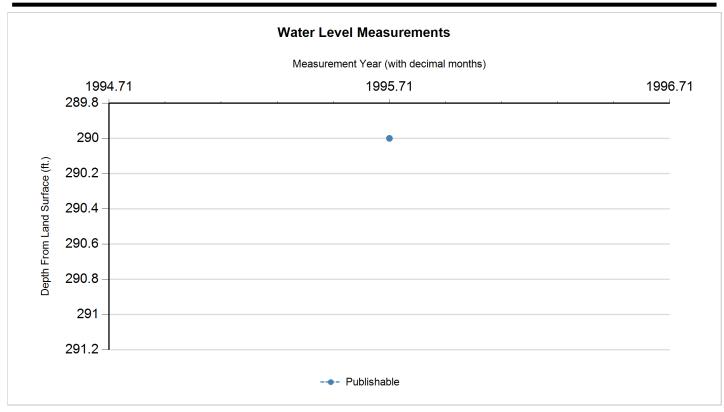
Well Type	Withdrawal of Water
Well Use	Public Supply
Water Level Observation	Miscellaneous Measurements
Water Quality Available	No
Pump	Submersible
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	CISD-Seay Spring Middle School-Well #1
Driller	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.)
g	Blank	Steel			(	365
8	Open Hole				369	5 504
Well Tests - Lithology -						
Annular Sea	al Range - No D	)ata				
Borehole - I	Vo Data		Plugg	ed Back - No L	Data	
Filter Pack -	· No Data			Pack	ers - No Data	







	atus ode	Date	Time	Water Level (ft. below land surface)	Change value in ( ) indicates rise in level	Water Elevation (ft. above sea level)	#	Measuring Agency	Method	Remark ID	Comments
Р		9/20/1995		290		977	1	Registered Water Well Driller	Unknown		

#### **Code Descriptions**

Status Code	Status Description
Р	Publishable





#### Water Quality Analysis - No Data Available

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#### Texas Water Development Board Well Schedule



State Well Number:

68-13-519

Previous Well Number:

County: Comal

91

Latitude (dms): 294740

Longitude (dms):

Coordinate Accuracy: Global Positioning System - GPS

River Basin: Guadalupe River

GMA: 9

982604

RWPA: L

GCD:

Owner: CISD-Seay Spring

Driller: Kuhn Water

Aquifer ID: Trinity

Middle School-Well #1

Enterprises, Inc.

Aquifer Code: 218HSCC

**HENSELL SAND AND COW** CREEK

Depth (ft): 504

Elevation (ft): 1267

LIMESTONE

Source of Depth: Driller's Log

Source of Elevation: Digital Elevation

**Model-DEM** 

Date Drilled: 09/19/1995

Well Type: Withdrawal of Water

Casing/Blank Pipe (C) Well Screen/Slotted Zone (S)

Top

365

CASING INTERVALS:

Open Hole (O) Dia.

(in.)

9

8

Type of Lift: Submersible Pump

Power: Electric Motor

Horsepower:

Construction: Air Rotary

Completion: Open Hole

C 0 (ft.) (ft.) 0 365

**Bottom** 

504

Casing Material: Steel

Supply

Screen Material:

**WATER USE** 

Primary:

**Public** 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

State Well Number:

ATOPHETON OF THE CONTRACTION OF THE PROPERTY O		of Texas REPORT	Perse Water Well Officer Envisors Colling) Pio: Box (2007 Rustin, TX 797-11-3047 \$12-239-05-30
County & KOTIEN	New Intermediate School State Hickory 40%, Bulve (Speeconard)	(Cay) (Siana)	Brainfield Thom. 7819) (Cly) (Smile) (20) STATE WELL & 68-13-5
☐ Myw Welf ☐ Deepening ☐ Plugging ☐ Pluggin	☐ Industrial ☐ Irrigation ☐ Iri	Months: Christomental Saled scan B Public Strate Constant Saled Strate Constant Saled Strate Constant Saled	ordig C Teathers
Completed 09-119 - 19-95 7-	off Gay Shale	I Cityon  II Recollectification (Creek  Abrilettenned City  II Ginvill'Accept along energy)  CASING, BLANK Filly Jilly Will	(\$ □ Opide Hèle (3) Stralight 99ès (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
80-140 Eine Cray L/S whichs of S 40-160, Firm Cray L/S 60-200 Firm Cray L/S whites of S 80-210 Firm Cray L/S 116-260 Eine See L/S 200-300 See See L/S	aft Gray Sháir Aft Gray Clay	Dis. Control Stell Please No. (n.) Used Screen Migri France Screen Migri France Screen Migri France Screen Migri France Screen Screen Migri France Screen Screen Migri France Screen Sc	Setting (ft.), Gage, Cathoo
O. S. Finn Bro L/Siriem Specars 80-460 Bitten Gray E/S w/strick of 1 09-420 Firm Gray L/S 20-460 Firm Bro E/S 60-500 Firm Gray L/S/w/stricks of 5 60-504 Firm Gray L/S. (Use recepted side if necessary and in the company of the property of the posterior of the po	inft Gray Clay 480-500	Mathodised Pressize Comented by Clark Table for Distance to septic system, field Method of virillication of above 10) SURFACE COMPLETION	rite 365. It. No of sacks used: 390 pages i to to No of sacks used: 3 vol. 900 7. Croite ra therefore Newtonias s   Rese to     Rese V_A
14) ,WELLTESTS: Type test: Primp Ballie (\$ Yaskt: 50. girm with R. d.	TEXAS NATION COM	Speciagi State Signs man  Shieff Adepter Guide (Ru Approved Aferentive Prop	MROT [FLU6-338,44(3)(A)]* N=338(44(3)(G)]*
Dill you kilosopy panetrate any strate which constituents?  [X-Yes   No. If yes, sylings "REPORT"  Type of water? Car County and X-Yes  Was a chemical analysis made? [X-Yes	OF LINDESIRABLE WATER!	32) PÁGKERS:	Type Dépti
thefets/family that this well with disided by the (or understand that failure is competicularly from the COMPANY NAME ECHN WATER ENTITYEE OF ADDRESS R.O. Box 1600 (Speel of AFE)	ERPRISES INC.	werronniewstopensen hilverde, (Ohi)	
(Glaned) (Lienther Machael L. Turnlinson		(Signer)	(Registered Critist Trailing)





#### **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		

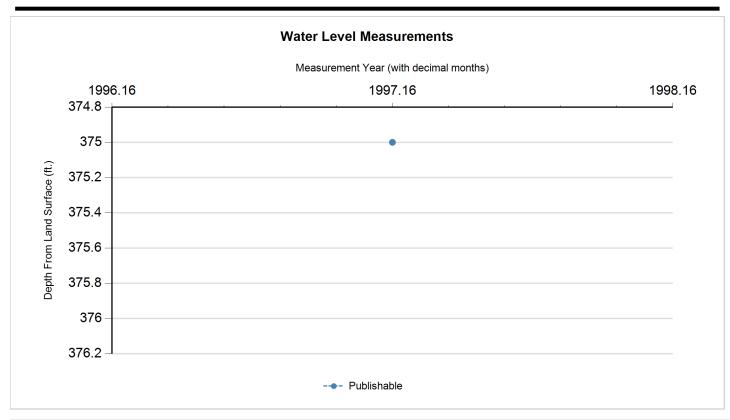
Well Type	Withdrawal of Water				
Well Use	Public Supply				
Water Level Observation	Miscellaneous Measurements				
Water Quality Available	No				
Pump	Submersible				
Pump Depth (feet below land surface)					
Power Type	Electric Motor				
Annular Seal Method					
Surface Completion					
Owner	CISD-Seay 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			(	400
g	Open Hole				400	503
Well Tests - Lithology -						
Annular Sea	al Range - No D	)ata				
Borehole - I	Vo Data		Plugg	ed Back - No L	Data	
Filter Pack -	· No Data		Pack	ers - No Data		







Status Code	Date	Time	Water Level (ft. below land surface)	to discuss of a contract	Water Elevation (ft. above sea level)	Meas #	Measuring Agency	Method	Remark ID	Comments
Р	2/28/1997		375		894	1	Registered Water Well Driller	Unknown		

#### **Code Descriptions**

Status Code	Status Description
Р	Publishable





#### Water Quality Analysis - No Data Available

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#### **Texas Water Development Board Well Schedule**



CASING INTERVALS: Casing/Blank Pipe (C)

Open Hole (O)

Dia.

(in.)

9

0

Well Screen/Slotted Zone (S)

Top

(ft.)

400

0

**Bottom** (ft.)

400

503

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

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

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

Aquifer ID: Trinity Owner: CISD-Seay Spring Driller: Braendle

Middle School-Well #2 Drilling, Inc. Aquifer Code: 218HSCC

**HENSELL SAND AND COW** Elevation (ft): 1269 CREEK

Depth (ft): 503 LIMESTONE

Source of Depth: Driller's Log Source of Elevation: Digital Elevation

Model -DEM

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 9 C

Casing Material: Steel Screen Material:

**WATER USE** 

Public Secondary: Tertiary: Primary:

Supply

483 feet. Cemented from 0 to 400

Water Levels: Miscellaneous Measurements Water Quality: N

1 measurement

1997 Logs: D Other Data: -375

Reporting Agency: TWC/TNRCC/TCEQ REMARKS:

Owners well #2. PWS ID #0460212B. Estimated yield 25 GPM. Pump set at

feet. Date Collected or Reported: 11/15/2011

Recorded by: DR Jones

Wednesday, November 16, 2011 State Well Number:

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

### State of Texas WELL REPORT

Texas Water Well Drillers Advisory Council MC 177 P.O. Box 13087 Auetin, TX 78711-3087

					-		512-239	0530	
1)	OWNER COMAL ISD	ADDRE	ss	NEW	BRAUNFELS.	TX			
_	ADDRESS OF WELL:				Street or RFD)	(City)	1.0	(State)	(Zip)
2)	County COMAL HWY 46 SPRIN					GR	1D #4	15	2
		(Street, RFD or other)		ity)	(State) (Zip	-			
3)	TYPE OF WORK (Check):	, , , –	Monitor	_	Environmental Soil Boring	☐ Domesti	c 5)		
	New Well □ Deepening     Reconditioning □ Plugging	Industrial  Irrigation  Inj If Public Supply well, were plans su				☐ 162(MAII			
		DIAMETER OF HOLE						\	
6)	WELL LOG:	Dia. (in.) From (ft.) To (ft.)	1			Driven Bored			
	Date Drilling: Started 2-18 19 97	123/4 Surface 400	'		, , , ,	Jetted	-		
	Completed 2-28 19 97	8 3 400 503		_	r				
			ļ						• N
Fro	m (ft.) To (ft.) Descrip	tion and color of formation material	1		le Completion (Check):	'	_	traight Wall	
_	-1 TOP BLACK		ı	_	erreamed Gravel Paci	_			ft.
	-26 BEDROCK YELLO	N		ıı Grave	l Packed give Interval from		it. 10		1L
	-35 CLAY BLUE -60 CALICHE YELLO	и	CAS	ING, BL	ANK PIPE, AND WELL SCF	REEN DATA:			
	<u>-60 CALICHE YELLOW</u> -82 LIME GREY	N	Dia.	New	Steel, Plastic, etc.		Setting	j (ft.)	Gage Casting
_	-110 SHALE BLUE		(in.)	or Used	Perf., Slotted, etc. Screen Mfg., if commerci	al	From	То	Screen
	0-180 LIME BEIGE		85/	8 N	STEEL		٥	400	.322
	0-207 SHALE GREY		L.	-					
	7-240 LIME GREY			-					
	0-272 LIME BEIGE 2-290 LIME GREY	457 475pporm		L		l			
	0-380 LIME BEIGE	457-475BROWN LIME 475-4901imegrey	9) CEMENTING DATA [Rule 338.44(1)]  Cemented from 0 ft. to 400 ft. No. of sacks used 144 ft. toft. No. of sacks used  Method used PRESSIRE  Cemented by HALLIBURTON  Distance to septic system field lines or other concentrated contamination 150 + ft.						
	0-400 SHALE GREY	490-500SHALE DARK							
	5-430 SAND&SHALE	500-503SHALE BLUE							
43	0-457 GREENLIME								
$ldsymbol{ldsymbol{ldsymbol{ldsymbol{eta}}}$	(Use reverse side of Well O	wners copy, if necessary)							
13)	TYPE PUMP:	rible		Method	of verification of above distar	nce_MEAS	URED		
	☐ Turbine ☐ Jet ☐XSubmer	sible	10)	SURFA	CE COMPLETION				
	Depth to pump bowls, cylinder, jet, etc	., <u>483</u> ft.				( <u>F</u>	H <del>2Y</del> A)L		
<u> </u>			Specified Sturfage State translation (Figure 338 A4(2)(A))						
14)	WELL TESTS:		_	ss Adapter Uses [Rule 338					
	Type test: Pump Bailer			☐ App	roved Alternative Probablire	TS 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8.71		
	Yield: 25 gpm with 0	ft. drawdown after1hrs.	11)	WATER	RLEVEL: UU		2		
15	) WATER QUALITY:		1	Static	DITAVRIEN CARE DEVELOR OF THE WORLD	vid surface.	Date_	2-28-9	17
"	Did you knowingly penetrate any strate		Artesla	n flow CONSERVATIO		S Date			
	constituents?	12)	PACKE	RS:	Тур	e	Depti	h	
☐ Yes ☑ No If yes, submit "REPORT OF UNDESIRABLE WATER"						IBURTO		·	1991
	Type of water?	Depth of strate				TOURIU			
L									
		me (or under my supervision) and that each				he best of my	knowledg	e and belief.	ı
un	derstand that failure to complete items 1	thru 15 will result in the log(s) being returned	ed for co	mpletion	and resubmittal.	2120	W.T		
CC	DMPANY NAME BRAENDLE	DRILLING, INC.		WELL C	DRILLER'S LICENSE NO	3120	MT		
A.	DDRESS PO BOX 446		HEL	OTES			т	x 79	3023_
^		or RFD)		(City)		(St	ate)	(Zi	
(S	igned) / 12/0e	well 4		(Signed					
	• • • • • • • • • • • • • • • • • • • •	ed Well Driller)			•	Registered Dr	iller Traine	e)	
<u> </u>	Please attach electric log, chemical analysis, and other pertinent information, if available.								

TNRCC-0199 (Rev. 05-21-96)

White - TNRCC

Yellow - DRILLER

Pink - WELL OWNER





#### **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				
<b>Borehole Completion</b>	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

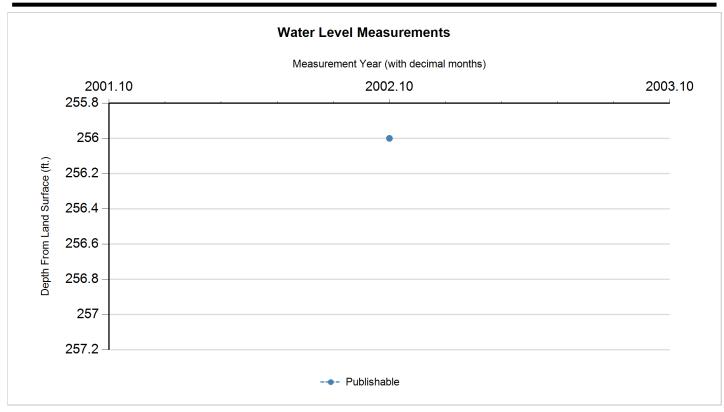
Annular Seal Range - No Data

Borehole - No Data Plugged Back - No Data

Filter Pack - No Data Packers - No Data







Status Code	Date	Time	Water Level (ft. below land surface)	to discuss of a contract	Water Elevation (ft. above sea level)	#	Measuring Agency	Method	Remark ID	Comments
Р	2/6/2002		256		973	1	Registered Water Well Driller	Unknown		

#### **Code Descriptions**

Status Code	Status Description
Р	Publishable



# Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 68-13-521



### 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/gwdbrpt.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



State Well Number:

68-13-521

Previous Well Number:

County: Comal

CASING INTERVALS:

Casing/Blank Pipe (C)

Open Hole (O)

Dia.

(in.)

7

6

 $\mathbf{C}$ 

 $\mathbf{o}$ 

Well Screen/Slotted Zone (S)

Top (ft.)

0

365

**Bottom** 

(ft.)

365

490

91

Latitude (dms): 294747

Longitude (dms):

Coordinate Accuracy: Global Positioning System - GPS

River Basin: Guadalupe River

GMA: 9

982557

RWPA: L

GCD:

Owner: Hill Country Christian

Driller: T.R. Drilling

Aquifer ID: Trinity

Church (Well #1)

& Service

Aquifer Code: 218HSCC

**HENSELL SAND AND COW** CREEK

LIMESTONE

Depth (ft): 490

Source of Depth: Driller's Log

Elevation (ft): 1229

Source of Elevation: Digital Elevation

Model -DEM

Date Drilled: 02/06/2002

Well Type: Withdrawal of Water

Horsepower:

Type of Lift: Submersible Pump

Power: Electric Motor

Completion: Open Hole

Casing Material: Steel

Supply

Construction: Air Rotary

Screen Material:

WATER USE

Primary:

Public 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

State Well Number: Friday, November 18, 2011

68-13-521 New

### 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

This form must be completed and filed with the department and owner within 60 days

			Eı	nail address	: water.wel	ll@li	cense.sta	te.tx.us	3	upon co	empletion (	of the we	11.
1) OWNER			A. WELI	_ IDENTIF				TION	DATA				
Name Hill Country Church	Christian	l	Address HWY 46 East			City <b>Spri</b> u	ng Bran	ch		State TX	78	8070	
2) WELL LO	CATION			-:			<u>.                                    </u>				<u></u>		]
County Comal			Physical Address HWY 46 Eas	•	1	City	ng Bran	ch		State TX	Zij	9 8070	İ
			<u> </u>	1			g Dian			Grid# 6			
3) Type of Web ✓ New Web			Lat. 4) Proposed U	Inn (chack)					l Boring 🗖		5)		N↑
Reconditioning	☐ Deepe	ming	□ Industrial □	1 1 1	2.1		<b>/</b> -		De-watering	of the second of	1		
- Kessininsiiii	5		If Public Supply v				••	•	es DNo				ı
6) Drilling Da	ate			ameter of H						Driven	1		-
Started	1/30/20	102	Dia. (in)	From (ft)	To (ft)			_		☐ Bored			
	1,00,20		6 1/8 Pile	t Hole()	490			•	Cable Tool				l
Completed	2/06/20	<b>102</b>	11	0	365		Other		. 2		1		
	2,00,2		b/e	365	490								•
From (ft)	To (ft)	Descri	ption and color				8) Borel	ole Co	mpletion	☑ Open He	ole 🗆 S	Straigh	Wall
0	1	Topso	<u> </u>							el Packed 🛘			
1	18	· · · · · · · · · · · · · · · · · · ·	v Caliche						e the interval		fl. to		ft.
18	76		Rock & Shale	Layers			Casing	, Blanl New	Steel, Plastic	Well Screen	Data Setting	~ (A)	Gage
76	88		W Rock	T			Dia.	Or	Perf., Slotted	, etc.	·		Casing
88 163	163 196		Rock & Shale w Rock (Porou				(in.) 6 5/8	Used	Steel Steel	if commercial	From	To 365	Screen .288
196	269		Rock & Shale				0 3/0	14	Steel		•	303	.200
269	318		w Rock	Layers					<del> </del>				
318	347		w Rock (Porou	s) & Red C	lay Layers	8							
347	417	Grey	Rock & Shale	Layers & (	Calcite		9) Ceme						
417	436	<del></del>	n, Tan Rock				Cement	ing from		. to <u>365</u> ft.			
436	474		Brown Rock Well Owner's copy	· If acceptant)				n		. to ft.	# of sack	s used _	
13) Plugged			ugged within 4				Method U			g & Service			
Casing left in we		•	ement/Bentonite pla							other concentrated	contamin	ation 1	150 ft.
From (ft)	To (ft)	7	om (ft)	To (ft)	Sacks use	ed .				stance Estim			1
							<u> </u>	-	: 4				
							10) Sur	face Co	mpletion				
							Specifi	ed Surfac	e Slab Installe	d			
14) Typepur	-	_	<b>.</b>				1		e Sleeve Insta	lled			
☐ Turbine ☐ Other	☐ Je	at .	☑ Submer	sible 🗀	Cylinder		Pitless		∪sed native Procedu	ro I lead			
Depth to pump b	owls wlinds	er iet etc		ft.	<del></del>		11) Wa			ie Oscu			
15) Water T		a, joi, oic.,							ft. below	Date 2	/06/200	2	
Typetest		Bailer [	Jetted 🗹 Esti	mated			Artesian F			om. Date	'	Ï	
Yield: 20+	gpm with		ft, drawdown a	fter	hrs.								
16) Water (							12) Pac	kers		Туре		Depth	
			which contain under a REPORT OF UN							Shale		36	55'
Type of water	n yes, aid y	ou subiist	Depth of S		WAILK								
Was a chemical	analysis mad	le? 🔲 Y	Yes 🔲 No										
Company or	Individua	l's Nam	e (type or print	) TR Drilli	ng & Serv	ice				Lic. No. 290	1WPK		
Address P.	O. Box 73	33			City	Boe	rne	Λ	1 5	tate TX	Zip	78006	
Signature	CHA			310	25 102		nature	llon	1 k	//	31	28	102
	ensed Drin	Roup I	nstaller	<del></del>	Date Date			A	prentice	-		Date	

BACK ON

# IMPORTANT NOTICE FOR PERSONS HAVING WELL DRILLED CONCERNING CONFIDENTIALITY

Section 32.005 of the Texas Water Code, concerning confidentiality information in the Reporting of Well Reports, reads as follows:

Every licensed driller drilling, deepening, or otherwise altering a water well in this State shall make and keep a legible and accurate well log in accordance with department rule on forms prescribed by the department. Not later than the 60th day after the completion or cessation of drilling, deepening, or otherwise altering the well, the licensed driller shall deliver or transmit by certified mail a copy of the well log to the department, the Texas Natural Resources Conservation Commission, and the owner of the well or the person for whom the well was drilled. The well log shall be recorded at the time of drilling and must show the depth, thickness, and character of the strata penetrated, the location of water-bearing strata, the depth, size, and character of casing installed, and any other information required by department rule. 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 or the person for whom the well was drilled.

The last sentence specifies the means whereby you may, if you wish, assure that logs of your wells will be kept confidential.

From (ft.)	To (ft.)	Description and color of formation material						
474	490	Soft Blue Grey Shale						
		v						
n.								
***								
		N						
a company and								

# **APPENDIX H**

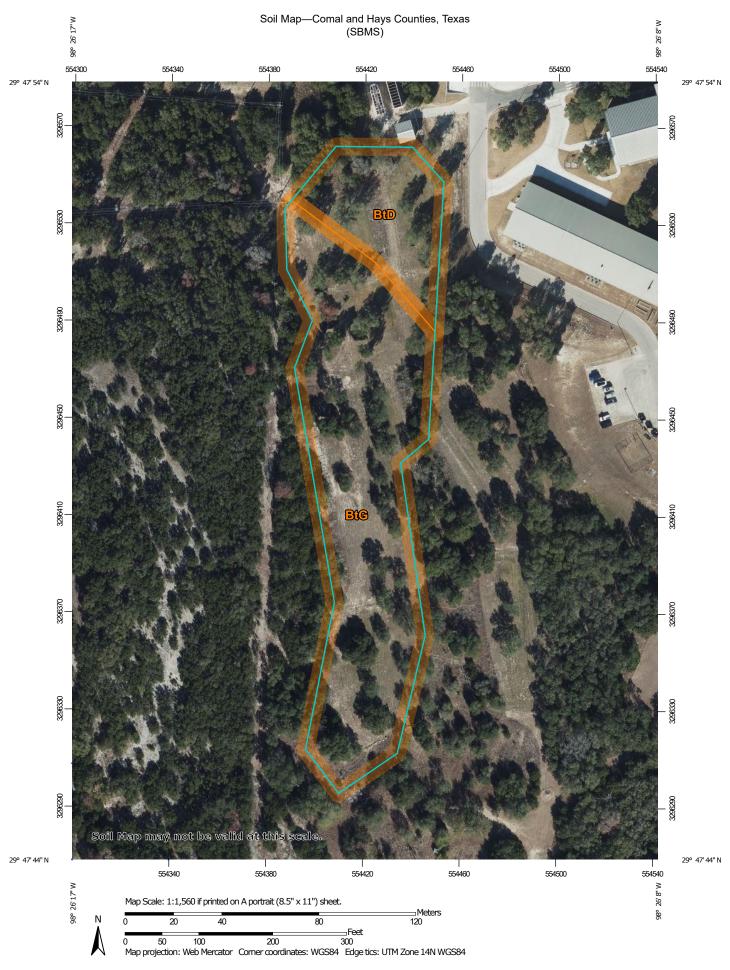
GROUNDWATER QUALITY REPORT In accordance with  $30\ TAC\ \S\ 309.20(a)(4)(A\ and\ B)$ , there are 10 wells or sources of water within a 0.5 mile radius of the SADDS disposal site ( $30\ TAC\ \S\ 309.20(a)(4)(A)$ ). Two of these are owned by the school which the WWTP serves. The wells within school property 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/ft^2/day due to its position according to  $30\ TAC\ \S\ 222.83$ . 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/ft\*2/day that limits the amount of effluent disposed within the area each day ( $30\ TAC\ \S\ 309.20(a)(4)(B)$ ). The welded steel tanks protect the area from any potential seepage.

# **APPENDIX I**

USDA SOIL MAP



### MAP LEGEND

### Area of Interest (AOI)

Area of Interest (AOI)

### Soils

Soil Map Unit Polygons



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

Sandy Spot

Severely Eroded Spot

Saline Spot

Sinkhole

Slide or Slip

Sodic Spot

### CLIAD

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot
 Other

Special Line Features

### **Water Features**

Δ

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



# **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 <sup>§</sup> 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 μι	nhos/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	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 Limit LCL MS MSD UCL LCS LCS Limit Blank										
pН	·	N/A	N/A	N/A	N/A					
1					3711					

	D		surance Sumi	nary	MSD	UCL	LCS	LCS Limit	Blank
Test Description	Precision	Limit	LCL	MS	MISD	UCL	LUS	LC3 Limit	DIAIIK
pН	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 NELAC unless otherwise noted as flagged exceptions or in a case narrative attachment. Reports with full quality data deliverables are abailable on request.

\*Approved for release per QA Plan, Exception to Limits - QAM Section 13-4

! Parameter not NELAP certifiable

§ 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

R Spike recovery outside control limits due to matrix effect - LCS within limits



# **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	Ţ	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 As Limit	surance Sumi LCL	nary MS MSD UCL	LCS LCS Limit	Blank
Sodium (H2O Soluble)		<1	20	70	*184 *184 130	95 85 - 115	

			surance Sumi	nary					au fa
Test Description	Precision	Limit	LCL	MS	MSD	UCL	LCS	LCS Limit	Blank
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 abailable on request.

\*Approved for release per QA Plan, Exception to Limits - QAM Section 13-4

! Parameter not NELAP certifiable

§ 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

R Spike recovery outside control limits due to matrix effect - LCS within limits



# **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 As Limit	surance Summ LCL	MS 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 abailable 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



# **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:				

Test Description	Flag	Result	Units	RL	Analysis Date/Time	Method	Analyst
pН		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		Precisi		surance Sun LCL	mary MS MSD UCL	LCS LCS Limit	Blank

		Quality As	surance Sumi	nary					D1 1
Test Description	Precision	Limit	LCL	MS	MSD	UCL	LCS	LCS Limit	Blank
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	<b>85 -</b> 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 NELAC unless otherwise noted as flagged exceptions or in a case narrative attachment. Reports with full quality data deliverables are abailable on request.

\*Approved for release per QA Plan, Exception to Limits - QAM Section 13-4

§ 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

 $*N/C = Not \ Calculated, \ Sample \ Concentration \ Greater \ than 5 \ times \ the \ Spike \ Level$ 

www.pcslab.net chuck@pcslab.net

1532 Universal City Blvd Universal City, TX 78148-3318 Main: 210-340-0343 Fax: 210-658-7903

<sup>!</sup> Parameter not NELAP certifiable

R Spike recovery outside control limits due to matrix effect - LCS within limits



# **Report of Sample Analysis**

Sample Information

Trent DeWaters Comal I.S.D. 1404 N IH 35 New Braunfels, TX 78130

Client Information

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

**Laboratory Information** 

**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	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

		Quality As	surance Sumr	nary					
Test Description	Precision	Limit	LCL	MS	MSD	UCL	LCS	LCS Limit	Blank
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 abailable on request.

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

<sup>\*</sup>Approved for release per QA Plan, Exception to Limits - QAM Section 13-4

<sup>!</sup> Parameter not NELAP certifiable

 $<sup>^{</sup>R}$  Spike recovery outside control limits due to matrix effect - LCS within limits

<sup>§</sup> Reported on a Dry Weight Basis



**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 <sup>§</sup> 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 As Limit	ssurance Sumu 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 abailable 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

MULTIPLE SAMPLE ANALYSIS REQUEST AND CHAIN OF CUSTODY FORM

Chain of Custody Number

746187

Stamp 1st sample and COC as same number

CUSTOMER INFORMA					REPORT	INF	OR	MATION								C us sume number
Name: Comal Is					Attention:	Bro	ad	ley Campbell		Pho	ne: §	330/	708-6	4	Fax:	
SAMPLE INFORMATIO	N							1	Req	ueste	d Ana					
Project Information:			Collec	cted By	Jeff T	Jeff De Pree				Mey Ma	3				Instructio	ns/Comments:
Spring Branch MS Report "Soils" - As Is Dry Wt.					Matrix				12	Z	3 K					
Report "Soils" As Is ADry	Wt.		ine %L	   5	DW-Drinking				g z	J 0	S	· .				
	Colle	atad	nlori Il mg	site	Water; NPW-Non- potable water;	၂ မွ	ber		3	714	Azos Ca			1		
Client / Field Sample ID	Cone		d C.	npo:	WW-Wastewater;	Type	Number	Preservative	F3	19/	2					
Chent / Field Sample 1D	Date	Time	Field Chlorine Residual mg/L	Composite or Grab	LW-Liquid Waste				PH, THW	K, R, Co., No.	₹ <del>7</del>				PCS	Sample Number
- · · · · · · · · · · · · · · · · · · ·	Start; 28 23	Start:		<b>X</b> C	□ DW □ NPW □ WW 🕱 Soil	<b>X</b> P □G		☐ H <sub>2</sub> SO <sub>4</sub> ☐ HNO <sub>3</sub> ☐ H <sub>3</sub> PO <sub>4</sub> ☐ NaOH							74	6 18 7
0-12"	End: 12 28 23	End: 30		□G	☐ Sludge ☐ LW ☐ Other		ı	DICE KL W/A	X	X	X					I □HEM Other:
. (1	Starte (2/28/23	Start:			□ DW □ NPW □ WW 🔀 Soil	<b>DX</b> (P □G		□ H <sub>2</sub> SO <sub>4</sub> □ HNO <sub>3</sub> □ H <sub>3</sub> PO <sub>4</sub> □ NaOH							7	46188
12-24"	End: 28 23	End:		□G	Sludge LW		(	DICE M N/A	X	*	X					☐HEM Other:
	Start:	Start:		□с	DW NPW	□P □G		□H <sub>2</sub> SO <sub>4</sub> □HNO <sub>3</sub> □H <sub>3</sub> PO <sub>4</sub> □NaOH								
	End:	End:		∏G	Sludge LW			DICE D								☐HEM Other:
	Start:	Start:			□ DW □ NPW □ WW □ Soil	□P □G		□ H <sub>2</sub> SO <sub>4</sub> □ HNO <sub>3</sub> □ H <sub>3</sub> PO <sub>4</sub> □ NaOH								
	End:	End:		L_JG	☐ Sludge ☐ LW ☐ Other			DICE D								☐HEM Other:
	Start:	Start:			☐ DW ☐ NPW ☐ WW ☐ Soil	□P □G		□H <sub>2</sub> SO <sub>4</sub> □ HNO <sub>3</sub> □H <sub>3</sub> PO <sub>4</sub> □ NaOH								
	End:	End:		∐G ∣	☐ Sludge ☐ LW ☐ Other			DICE D								□HEM Other:
	Start:	Start:			□ DW □ NPW □ WW □ Soil	□P □G		□ H₂SO₄ □ HNO₃ □ H₃PO₄ □ NaOH								
	End:	End:		□G	☐ Sludge ☐ LW ☐ Other	□ŏ		DICE D								☐HEM Other:
	Start:	Start:		□c	l□ ww□ soil	□P □G		☐ H <sub>2</sub> SO <sub>4</sub> ☐ HNO <sub>3</sub> ☐ H <sub>3</sub> PO <sub>4</sub> ☐ NaOH								
	End:	End:			☐ Other	<u> </u>		DICE D				1			□S □B □N	□HEM Other:
	Start:	Start:			□ WW □ Soil	□P □G		□ H <sub>2</sub> SO <sub>4</sub> □ HNO <sub>3</sub> □ H <sub>3</sub> PO <sub>4</sub> □ NaOH								
	End:	End:		∟G				DICE D								□HEM Other:
Required Turnaround:   R	outine (6-10 day:	s) EXPEDIT	TE: (Se	e Surcl	harge Schedule)	□ < 8	Hrs	. □ < 16 Hrs. □ < 24 Hrs	s. 🗆 5	days	□ Oth	er;	Rush (	Charges A	uthorized by:	
Sample Archive/Disposal: □	Laboratory Star	ndard 🗆 Hold	for cli	ent pick	cup Cor	itaine	r Ty	pe: P = Plastic, G = Glass,	0 = 0	Other _					Carrier ID:	
Relinquished By:	2 Och		Date	DI	02 24 Time:	09	500	Received By:						Date:		Time:
Relinquished By:			Date		Time:			Received By:	2an	Ces	ille	m		Date:	1-2-24	Time: 0800
Rev. Multiple Sample COC_20180628								1		1						

Sample Log-In Checklist DCN: SL-001, Rev. 1 Effective Date: 6/07/2022

# Pollution Control Services Sample Log-In Checklist

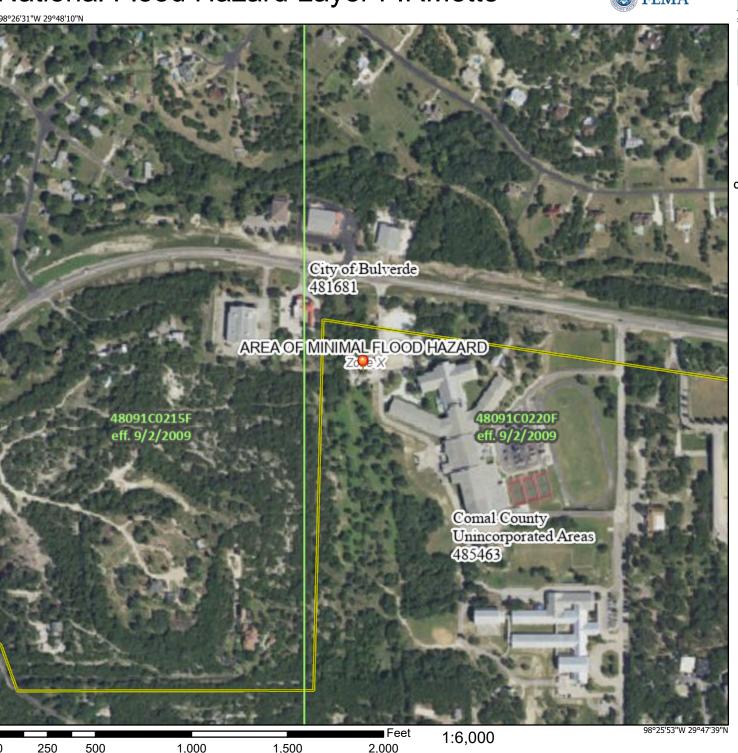
PCS Sample No(s) 7 , 6 1 9 7 7 4 6 18 8 COC No. 7 4 6 18 7
Client/Company Name: £50 Checklist Completed by: 44
Sample Delivery to Lab Via: Client Drop Off Commercial Carrier: Bus UPS Lone Star FedEx USPS PCS Field Services: Collection Prick Up Other:
Sample Kit/Cooler? Yes No Sample Kit/Cooler: Intact? Yes No Custody Seals on Sample Kit/Cooler: Not Present If Present, Intact Broken Sample Containers Intact: Unbroken and Not Leaking? Yes No
COC Present with Shipment or Delivery or Completed at Drop Off? Yes No Has COC sample date/time and other pertinent information been provided by client/sampler? Yes:  No: Has COC been properly Signed when Received/Relinquished? Yes
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: **Cooling: Not Required
Acid Preserved Sample - If present, is pH <2?YesNoH2SO4HNO3H3PO4Base Preserved Sample - If present, is pH >12?YesNoNaOHOther Preservation:If Present, Meets Requirements? YesNoSample Preservations Checked by:DateTimepH paper used to check sample preservation (PCS log #):(HEM pH checked at analysis).Samples Preserved/Adjusted by Lab:Lab #Parameters PreservedLog # Log #
Adjusted by Tech/Analyst: Time:
Client Notification/ Documentation for "No" Responses Above/ Discrepancies/ Revision Comments  Person Notified:  Notified Date:
ct: At Drop
Actions taken to correct problems/discrepancies:
Receiving qualifier needed (requires client notification above) Temp. Holding Time Initails:  Receiving qualifier entered into LIMS at login Initial/Date:  Revision Comments:

# **APPENDIX K**

FEMA FLOOD MAP

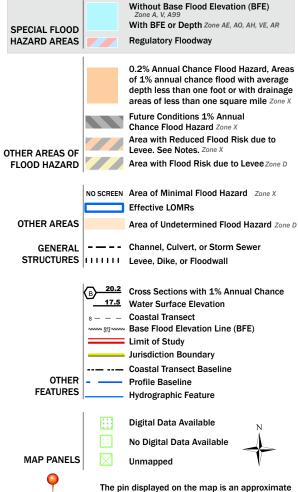
# National Flood Hazard Layer FIRMette





### Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT



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

point selected by the user and does not represent

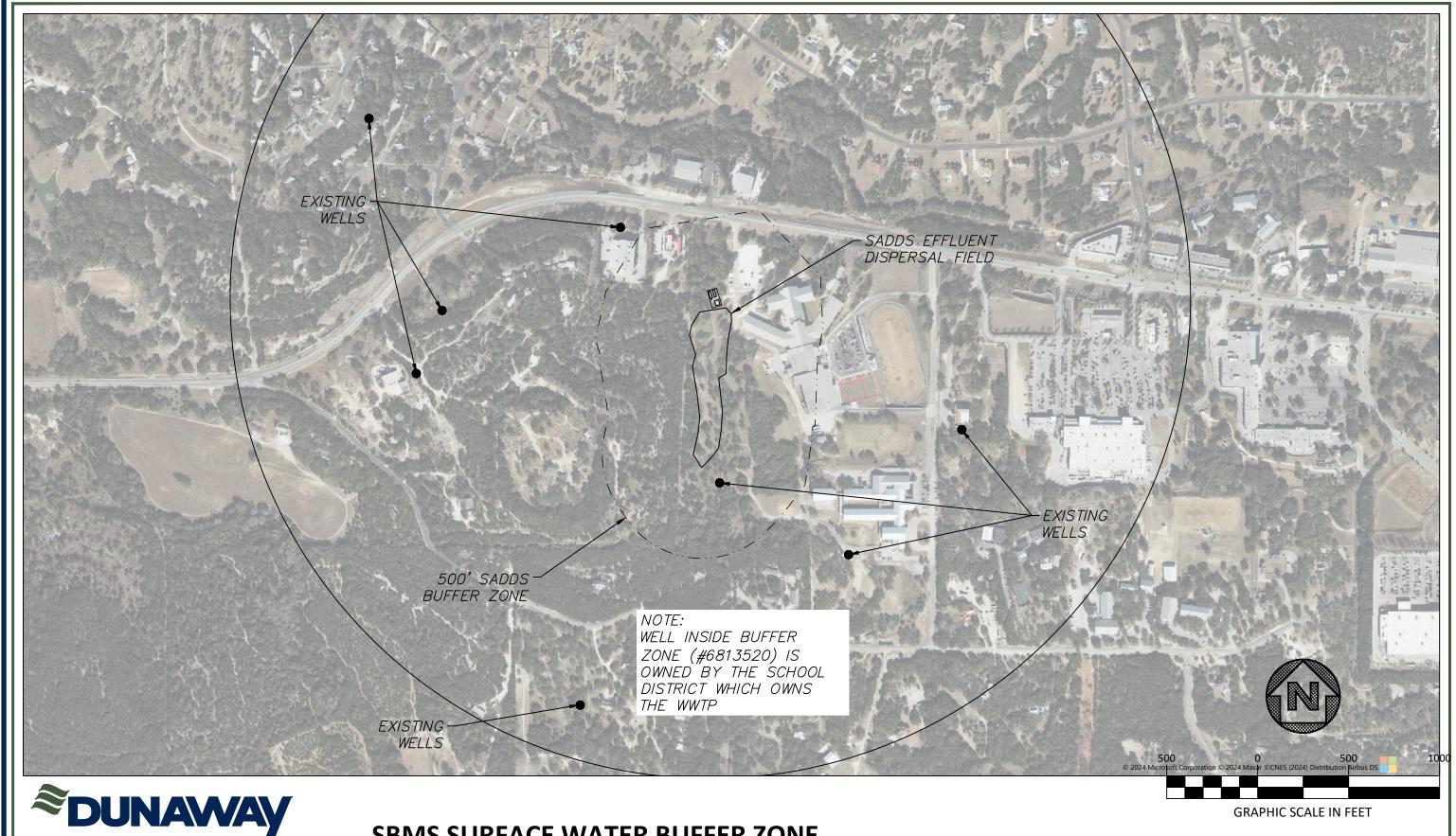
an authoritative property location.

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



**SBMS SURFACE WATER BUFFER ZONE** 

TEL: 972.784.7777 (TXENG FIRM F-1114)

### **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 <br/> 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 <u>January 16, 2025</u>, requests additional information needed to declare the application administratively complete. Please send complete response, via email, by <u>January 30, 2025</u>.

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 16<sup>th</sup>, 2024. The complete response is as follows:

<u>Item 1:</u> "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.

<u>Item 3:</u> "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 <u>January 31, 2025</u>, requesting additional information needed to declare the application administratively complete. The original will be sent by certified mail. Please send the complete response by <u>March 2</u>, <u>2025</u>.

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 <a href="https://www.tceq.texas.gov/customersurvey">www.tceq.texas.gov/customersurvey</a>

### **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 <bra> 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 16<sup>th</sup>, 2024. The complete response is as follows:

<u>Item 1:</u> "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..."

**<u>Response 1:</u>** 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.

<u>Item 2:</u> "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

Fort Worth 🕏 Austin 🕏 Midland 🕏 San Antonio

# 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:
(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.

[SEAL]

Notary Public

# 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 Testina Laboratory Accreditation and Certification.

Printed Name: Mark Stahl

Title: Chief Operations Officer

Signature: April Date: 2/26/2025

D. TCEQ Programs and ID No rm. See the Core Data Form ins	-1 1000 Mark Account	- Access	s/registration nu	mbers that will be affected	by the updates submitted on this
☐ Dam Safety	Districts	Edwards Aquifer		Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	New Source Review Air	OSSF		Petroleum Storage Tank	□ PWS
Sludge	Storm Water	☐ Title V Air		Tires	Used Oil
☐ Voluntary Cleanup		☐ Wastewater Agricu	Iture 🔲	Water Rights	Other:
	WQ0013812003				
42. Telephone Number	43. Ext./Code	44. Fax Number	41. Title: 45. E-Mail		
972 ) 784-7777		( ) -	cwootton@c	lunaway.com	
submit this form on behalf of	tify, to the best of my kno	wledge, that the informati	THE PARTY OF THE P	odates to the ID numbers id	
	na/ 150	N	Job Title:	Chief Spar	80 21-2150 02/26/2025
	who Stat	5		Phone:	830 201-2150
Signature:	feto. The	55		Date:	02/26/2025

TCEQ-10400 (11/22) Page 3 of 3