# Technical Package Cover Page

**This file contains the following documents:**

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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

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

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

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

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

**ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS 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.*

Arete Thomas Ranch, LLC (CN606373215) proposes to operate Thomas Ranch WWTP (RN112190822), a wastewater treatment plant and surface spray irrigation system to dispose of treated effluent. The facility will be located at approximately 1.2 miles northwest of the intersection of State Hwy 71 and Paleface Ranch Rd., in Spicewood, Travis County, Texas 78669. This is a TLAP application to authorize the disposal of treated wastewater at a volume not to exceed 510,000 gallons per day via a surface spray irrigation system on approximately 191 acres. This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), ammonia nitrogen ($NH_3$-N), total phosphorus, and *Escherichia coli*. Domestic wastewater will be treated by a headworks screen, an aeration basin, a clarifier, an aerobic digester, a chlorine contact chamber, a disk filter, and then disposed of through a surface spray irrigation system.

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

**AGUAS RESIDUALES** DOMÉSTICAS **/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.*

Arete Thomas Ranch, LLC (CN606373215) propone operar Thomas Ranch WWTP (RN112190822), una planta de tratamiento de aguas residuales y sistema de riego por aspersión superficial para disposición del efluente tratado. La instalación estará ubicada en aproximadamente 1,2 millas al noroeste de la intersección de State Hwy 71 y Paleface Ranch Rd , en estará, Condado de Travis, Texas 78669. Esta es una solicitud TLAP para autorizar la eliminación de aguas residuales tratadas en un volumen que no exceda los 510,000 galones por día a través de un sistema de riego por aspersión de superficie en aproximadamente 191 acres.Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbonoso, sólidos suspendidos totales, nitrógeno amoniacal, fósforo total y *Escherichia coli*. Aguas residuales domésticas . están tratado por una criba de cabecera, un estanque de aireación, un clarificador, un digestor aeróbico, una cámara de contacto de cloro, un filtro de discos, para luego ser eliminado a través de un sistema de riego por aspersión superficial.

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

## PROPOSED PERMIT NO. WQ0016769001

**APPLICATION.** Arete Thomas Ranch Holdings, LLC, c/o Allen Boone Humphries Robinson LLP, 919 Congress Avenue, Suite 1500, Austin, Texas 78701, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Land Application Permit (TLAP) No. WQ0016769001 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 510,000 gallons per day via surface application and irrigation on 191 acres of land. The domestic wastewater treatment facility and irrigation area will be located approximately 1.2 miles northwest of the intersection of Paleface Ranch Road and State Highway 71, near the city of Austin, in Travis County, Texas 78669, and 0.9 miles northwest of the intersection of Haynie Flat Road and Paleface Ranch Road, near the city of Spicewood, Burnet County, Texas 78669. TCEQ received this application on April 7, 2025. The permit application will be available for viewing and copying at Laura Bush Community Library, Front Desk, 9411 Bee Cave Road, Austin, in Travis County and Spicewood Community Library, Front Desk, 1011 Spur 191, Spicewood, in Burnet 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=-98.10984,30.426025&level=18

**ALTERNATIVE LANGUAGE NOTICE.** Alternative language notice in Spanish is available at: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications.
El aviso de idioma alternativo en español está disponible en https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications.

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

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

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

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

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

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

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

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

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

Further information may also be obtained from Arete Thomas Ranch Holdings, LLC at the address stated above or by calling Ms. Behnaz Jalili, PhD, P.E., Kimley-Horn and Associates, Inc., at 512-518-5596.

Issuance Date: May 6, 2025

# Comisión de Calidad Ambiental del Estado de Texas

**AVISO DE RECIBO DE LA SOLICITUD Y**
**EL INTENTO DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA**

**PERMISO PROPUESTO NO. WQ0016769001**

**SOLICITUD.** Arete Thomas Ranch Holdings, LLC C/O Allen Boone Humphries Robinson LLP, 919 Congress Avenue, Suite 1500, Austin, Texas 78701 ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para el propuesto Permiso No. WQ0016769001 de disposición de aguas residuales para autorizar la disposición de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 510,000 galones por día a través de aplicación superficial y riego en 191 acres de tierra La instalación de tratamiento de aguas residuales domésticas y el área de riego estarán ubicados aproximadamente a 1.2 millas al noroeste de la intersección de Paleface Ranch Road y State Highway 71, cerca de la ciudad de Austin, en el condado de Travis, Texas 78669, y a 0.9 millas al noroeste de la intersección de Haynie Flat Road y Paleface Ranch Road, cerca de la ciudad de Spicewood. Condado de Burnet, Texas 78669. La TCEQ recibió esta solicitud el 7 de abril de 2025. La solicitud para el permiso estará disponible para leerla y copiarla en Spicewood Community Library, Recepción, 1011 Spur 191, Spicewood, en el condado de Burnet y en Laura Bush Community Library, Recepción, 9411 Bee Caves Rd., Austin, en el condado de Travis antes de la fecha de publicación de este aviso en el periódico. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications. 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=-98.10984,30.426025&level=18

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

**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.**

**LISTA DE CORREO.** Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo,

la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos del solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado especifico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

**INFORMACIÓN DISPONIBLE EN LÍNEA.** Para detalles sobre el estado de la solicitud, favor de visitar la Base de Datos Integrada de los Comisionados en www.tceq.texas.gov/goto/cid. Para buscar en la base de datos, utilizar el número de permiso para esta solicitud que aparece en la parte superior de este aviso.

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

También se puede obtener información adicional del Arete Thomas Ranch Holdings, LLC a la dirección indicada arriba o llamando a Ms. Behnaz Jalili, PhD, P.E., Kimley-Horn and Associates, Inc. al 512-518-5596.

Fecha de emisión: 6 de mayo de 2025

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

**NEW**

**PERMIT NO. WQ0016769001**

**APPLICATION AND PRELIMINARY DECISION**. Arete Thomas Ranch Holdings, LLC, c/o Allen Boone Humphries Robinson LLP, 919 Congress Avenue, Suite 1500, Austin, Texas 78701, has applied to the Texas Commission on Environmental Quality (TCEQ) for a new permit, TCEQ Permit No. WQ0016769001 to authorize the disposal of treated domestic wastewater at a daily average flow not to exceed 510,000 gallons per day via surface irrigation on 191 acres of public access land. This permit will not authorize a discharge of pollutants into water in the state. TCEQ received this application on April 7, 2025.

The domestic wastewater treatment facility and disposal site will be located approximately 1.2 miles northwest of the intersection of Paleface Ranch Road and State Highway 71, in Travis County, Texas 78669, and 0.9 miles northwest of the intersection of Haynie Flat Road and Paleface Ranch Road, Burnet County, Texas 78669. The wastewater treatment facility and disposal site will be located in the drainage basin of Pedernales River in Segment No. 1414 of the Colorado River Basin. This link to an electronic map of the site or facility's general location is provided as a public courtesy and is not part of the application or notice. For the exact location, refer to the application.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.10984,30.426025&level=18

The TCEQ Executive Director has completed the technical review of the application and prepared a draft permit. The draft permit, if approved, would establish the conditions under which the facility must operate. The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The permit application, Executive Director's preliminary decision, and draft permit are available for viewing and copying at Laura Bush Community Library, Front Desk, 9411 Bee Cave Road, Austin, in Travis County and Spicewood Community Library, Front Desk, 1011 Spur 191, Spicewood, in Burnet County, Texas. The application, including any updates, and associated notices are available electronically at the following webpage:
https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications.

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

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

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

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

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

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

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

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

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

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

**AGENCY CONTACTS AND INFORMATION.** Public comments and requests must be submitted either electronically at www.tceq.texas.gov/goto/comment, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC 105, P.O. Box 13087, Austin, Texas 78711-3087. Any personal information you submit to the TCEQ will become part of the agency's record; this includes email addresses. For more information about this permit application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at www.tceq.texas.gov/goto/pep. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from Arete Thomas Ranch Holdings, LLC at the address stated above or by calling Ms. Behnaz Jalili, PhD, P.E., Kimley-Horn and Associates, Inc., at 512-518-5596.

Issuance Date: August 28, 2025

# Comisión De Calidad Ambiental Del Estado De Texas

**AVISO DE SOLICITUD Y DECISIÓN PRELIMINAR PARA PERMISO PARA APLICACIÓN DE LA CALIDAD DEL AGUA EN TERRENOS**

**PARA AGUAS RESIDUALES MUNICIPALES**

**NUEVO**

**PERMISO PROPUESTO NO. WQ 0016769001**

**SOLICITUD Y DECISIÓN PRELIMINAR.** Arete Thomas Ranch Holdings, LLC C/O Allen Boone Humphries Robinson LLP, 919 Congress Avenue, Suite 1500, Austin, Texas ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) por un nuevo principal para autorizar la disposición de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 510,000 galones por día a través de aplicación superficial y riego en 191 acres de tierra. Este permiso no autorizará una descarga de contaminantes a las aguas del estado. La TCEQ recibió esta solicitud el 7 de abril de 2025.

La planta y el sitio de disposición están ubicados approximademente a 1.2 millas al noroeste de la intersección de Paleface Ranch Road y State Highway 71, y a 0.9 millas al noroeste de la intersección de Haynie Flat Road y Paleface Ranch Road en el Condado de Travis y el Condado de Burnet, Texas. La planta y el sitio de disposición están ubicados en la cuenca de drenaje del Río Pedernales en el Segmento No. 1414 de la Cuenca del Río Colorado. 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=-98.10984,30.426025&level=18*

El Director Ejecutivo de la TCEQ ha completado la revisión técnica de la solicitud y ha preparado un borrador del permiso. El borrador del permiso, si es aprobado, establecería las condiciones bajo las cuales la instalación debe operar. El Director Ejecutivo ha tomado una decisión preliminar que si este permiso es emitido, cumple con todos los requisitos normativos y legales. La solicitud del permiso, la decisión preliminar del Director Ejecutivo y el borrador del permiso están disponibles para leer y copiar en Spicewood Community Library, Recepción, 1011 Spur 191, Spicewood, en el Condado de Burnet, y en Laura Bush Community Library, Recepción, 9411 Bee Caves Rd., Austin, en el Condado de Travis. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications.

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

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

**OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO.** Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a 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.**

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

**LISTA DE CORREO.** Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. 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 especifico. 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.

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

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

También se puede obtener información adicional del Arete Thomas Ranch Holdings, LLC a la dirección indicada arriba o llamando a Ms/ Behnaz Jalili, PhD, P.E., Kimley-Horn and Associates, Inc., al 512-518-5596.

Fecha de emission: el dia agosto 28, 2025

Kimley»Horn

April 7, 2025

Texas Commission on Environmental Quality
Applications Review and Processing Team (MC 148)
Building F, Room 2101
12100 Park 35 Circle
Austin, Texas 78753

**RE:** ***Texas Land Application Permit (TLAP) Application for the Thomas Ranch Wastewater Treatment Plant***

Dear Water Quality Team:

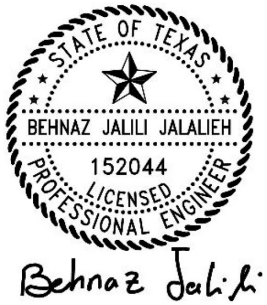
This letter serves to transmit the TLAP application for the Thomas Ranch Wastewater Treatment Plant.

The permit application follows this letter within the following attachments:

| | |
|---|---|
| **10053 – Administrative Report 1.0** | |
| Attachment 1. | Copy of Permit Fee |
| Attachment 2. | 10400 – TCEQ Core Data Form |
| Attachment 3. | 20972 – Summary of Application in Plain Language |
| Attachment 4. | 20960 – Public Involvement Plan Form |
| Attachment 5. | Original USGS Topographic Map |
| Attachment 6. | Affected Landowners Map and Landowner List |
| Attachment 7. | Original Photographs and Plot Plan |
| Attachment 8. | Buffer Zone Map |
| **10054 – Technical Report 1.0** | |
| Attachment 9. | Process Flow Diagram |
| Attachment 10. | Site Drawing and WWTP Site Plan |
| **10054 – Technical Report 1.1** | |
| Attachment 11. | Design Calculations and Plant Features |
| Attachment 12. | Wind Rose |
| Attachment 13. | Solids Management Plan |
| **10054 – Domestic Worksheet 3.0** | |
| Attachment 14. | Pond Liner Certification |
| Attachment 15. | Annual Cropping Plan |
| Attachment 16. | Well Reports |
| Attachment 17. | Groundwater Quality Technical Report |
| Attachment 18. | Soil Map |
| Attachment 19. | Soil Analysis |
| **10054 – Domestic Worksheet 3.1** | |
| Attachment 20. | Water Balance |
| Attachment 21. | Recharge Feature Plan |
| Attachment 22. | Soil Evaluation |
| Attachment 23. | Site Preparation Plan |
| Attachment 24. | Soil Sampling/Testing |
| Attachment 25. | FEMA Flood Plain Map |

If you have any questions regarding this project, please contact me at 512-518-5596.

Sincerely,




Behnaz Jalili, PhD, P.E. (Texas License No. 152044)
KIMLEY-HORN AND ASSOCIATES, INC.
Texas Firm No. 928

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

# DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: Arete Thomas Ranch Holdings, LLC

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

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

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

For TCEQ Use Only

Segment Number _____County _____
Expiration Date _____Region_____
Permit Number _____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

# DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

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

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

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

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

Minor Amendment (for any flow) $150.00 ☐

Payment Information:

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

Check/Money Order Amount: Click to enter text.

Name Printed on Check: Click to enter text.

EPAY Voucher Number: 761261

Copy of Payment Voucher enclosed? Yes ☒

## Section 2. Type of Application (Instructions Page 26)

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

☐ Publicly-Owned Domestic Wastewater

☒ Privately-Owned Domestic Wastewater

☐ Conventional Wastewater Treatment

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

☐ Active ☒ Inactive

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

☐ TPDES Permit

☒ TLAP

☐ TPDES Permit with TLAP component

☐ Subsurface Area Drip Dispersal System (SADDS)

d. Check the box next to the appropriate application type

☒ New

☐ Major Amendment *with* Renewal

☐ Major Amendment *without* Renewal

☐ Renewal without changes

☐ Minor Amendment *with* Renewal

☐ Minor Amendment *without* Renewal

☐ Minor Modification of permit

e. For amendments or modifications, describe the proposed changes: Click to enter text.

f. For existing permits:

Permit Number: WQ00 Click to enter text.

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

Expiration Date: Click to enter text.

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

Arete Thomas Ranch Holdings, LLC

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

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

CN:

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: Hogan, Thomas

Title: Manager

Credential: Click to enter text.

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

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

N/A

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

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

CN: 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. Attachment 2

## 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: Hogan, Thomas

Title: Manager Credential: Click to enter text.

Organization Name: Arete Thomas Ranch Holdings, LLC

Mailing Address: C/O Allen Boone Humphries Robinson LLP, 919 Congress AVE, STE 1500

City, State, Zip Code: Austin, TX 78701-2156

Phone No.: 737-241-9266 E-mail Address: ian.clements@kimley-horn.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

B. Prefix: Ms. Last Name, First Name: Jalili, Behnaz

Title: Project Engineer Credential: PhD, P.E.

Organization Name: Kimley-Horn and Associates, Inc.

Mailing Address: 5301 Southwest Parkway, Building 2, Suite 100 City, State, Zip Code: Austin, TX 78735

Phone No.: 512-518-5596 E-mail Address: Behnaz.jalili@kimley-horn.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

## Section 5. Permit Contact Information (Instructions Page 27)

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

A. Prefix: Mr. Last Name, First Name: Hogan, Thomas

Title: Manager Credential: Click to enter text.

Organization Name: Arete Thomas Ranch Holdings, LLC

Mailing Address: C/O Allen Boone Humphries Robinson LLP, 919 Congress AVE, STE 1500
City, State, Zip Code: Austin, TX 78701-2156

Phone No.: 737-241-9266 E-mail Address: ian.clements@kimley-horn.com

B. Prefix: Ms. Last Name, First Name: Jalili, Behnaz

Title: Project Engineer Credential: PhD, P.E.

Organization Name: Kimley-Horn and Associates, Inc.

Mailing Address: 5301 Southwest Parkway, Building 2, Suite 100 City, State, Zip Code: Austin, TX 78735

Phone No.: 512-518-5596 E-mail Address: Behnaz.jalili@kimley-horn.com

## Section 6. Billing Contact Information (Instructions Page 27)

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

Prefix: Mr. Last Name, First Name: Hogan, Thomas

Title: Manager Credential: Click to enter text.

Organization Name: Arete Thomas Ranch Holdings, LLC

Mailing Address: C/O Allen Boone Humphries Robinson LLP, 919 Congress AVE, STE 1500
City, State, Zip Code: Austin, TX 78701-2156

Phone No.: 737-241-9266 E-mail Address: ian.clements@kimley-horn.com

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

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

Prefix: Mr. Last Name, First Name: Hogan, Thomas

Title: Manager Credential: Click to enter text.

Organization Name: Arete Thomas Ranch Holdings, LLC

Mailing Address: C/O Allen Boone Humphries Robinson LLP, 919 Congress AVE, STE 1500
City, State, Zip Code: Austin, TX 78701-2156

Phone No.: 737-241-9266 E-mail Address: ian.clements@kimley-horn.com

## Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Ms. Last Name, First Name: Jalili, Behnaz

Title: Project Engineer Credential: PhD, P.E.

Organization Name: Kimley-Horn and Associates, Inc.

Mailing Address: 5301 Southwest Parkway, Building 2, Suite 100 City, State, Zip Code: Austin, TX 78735

Phone No.: 512-518-5596 E-mail Address: Behnaz.jalili@kimley-horn.com

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

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

☒ E-mail Address

☐ Fax

☒ Regular Mail

C. Contact permit to be listed in the Notices

Prefix: Ms. Last Name, First Name: Jalili, Behnaz

Title: Project Engineer Credential: PhD, P.E.

Organization Name: Kimley-Horn and Associates, Inc.

Mailing Address: 5301 Southwest Parkway, Building 2, Suite 100 City, State, Zip Code: Austin, TX 78735

Phone No.: 512-518-5596 E-mail Address: Behnaz.jalili@kimley-horn.com

D. Public Viewing Information

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

Public building name: Spicewood Community Library

Location within the building: Front Desk

Physical Address of Building: 1011 Spur 191

City: Spicewood County: Burnet

Contact (Last Name, First Name): James, Rita

Phone No.: 830-693-7892 Ext.: Click to enter text.

Public building name: Laura Bush Community Library

Location within the building: Front Desk

Physical Address of Building: 9411 Bee Caves Rd

City: Austin County: Travis

Contact (Last Name, First Name): Click to enter text.

Phone No.: 512-327-3045 Ext.: Click to enter text.

E. Bilingual Notice Requirements

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

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

Please call the bilingual/ESL coordinator at the nearest elementary and middle schools and

obtain the following information to determine whether an alternative language notices are required.

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

   ☐ Yes ☒ No

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

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

   ☐ Yes ☒ No

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

   ☐ Yes ☒ No

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

   ☐ Yes ☒ No

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

F. Plain Language Summary Template

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

Attachment: Attachment 3

G. Public Involvement Plan Form

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

Attachment: Attachment 4

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

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

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

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

Thomas Ranch Wastewater Treatment Plant

C. Owner of treatment facility: Arete Thomas Ranch Holdings, LLC

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

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

Prefix: Mr. Last Name, First Name: Hogan, Thomas

Title: Manager Credential: Click to enter text.

Organization Name: Arete Thomas Ranch Holdings, LLC

Mailing Address: C/O Allen Boone Humphries Robinson LLP, 919 Congress AVE, STE 1500
City, State, Zip Code: Austin, TX 78701-2156

Phone No.: 737-241-9266 E-mail Address: ian.clements@kimley-horn.com

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

Attachment: Click to enter text.

E. Owner of effluent disposal site:

Prefix: Mr. Last Name, First Name: Hogan, Thomas

Title: Manager Credential: Click to enter text.

Organization Name: Arete Thomas Ranch Holdings, LLC

Mailing Address: C/O Allen Boone Humphries Robinson LLP, 919 Congress AVE, STE 1500
City, State, Zip Code: Austin, TX 78701-2156

Phone No.: 737-241-9266 E-mail Address: ian.clements@kimley-horn.com

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

Attachment: Click to enter text.

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

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

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

Organization Name: Click to enter text.

Mailing Address: Click to enter text. City, State, Zip Code: Click to enter text.

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

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

Attachment: Click to enter text.

## Section 10. TPDES Discharge Information (Instructions Page 31)

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

☐ Yes ☐ No

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

Click to enter text.

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

☐ Yes ☐ No

If no, or a new or amendment permit application, provide an accurate description of the

point of discharge and the discharge route to the nearest classified segment as defined in 30 TAC Chapter 307:

Click to enter text.

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

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

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

☐ Yes ☐ No

If yes, indicate by a check mark if:

☐ Authorization granted ☐ Authorization pending

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

Attachment: Click to enter text.

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

## Section 11. TLAP Disposal Information (Instructions Page 32)

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

☐ Yes ☐ No

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

The spray irrigation fields will be located within the proposed Arete Thomas Ranch subdivision, just northwest of the intersection of State Hwy 71 and Paleface Ranch Rd.

B. City nearest the disposal site: City of Austin

C. County in which the disposal site is located: Travis County, Burnet County

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

Route is from the effluent pump station to the irrigation lake and from the irrigation lake to the irrigation area.

E. For TLAPs, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: Pedernales River

## Section 12. Miscellaneous Information (Instructions Page 32)

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

☐ Yes ☒ No

B. If the existing permit contains an onsite sludge disposal authorization, is the location of the

sewage sludge disposal site in the existing permit accurate?

☐ Yes ☐ No ☒ Not Applicable

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

N/A

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

☐ Yes ☒ No

If yes, list each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application: Click to enter text.

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If yes, provide the following information:

Account number: Click to enter text.

Amount past due: Click to enter text.

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If yes, please provide the following information:

Enforcement order number: Click to enter text.

Amount past due: Click to enter text.

## Section 13. Attachments (Instructions Page 33)

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

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

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

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

☐ Attachment 1 for Individuals as co-applicants

☐ Other Attachments. Please specify: Click to enter text.

## Section 14. Signature Page (Instructions Page 34)

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

Permit Number: Click to enter text.

Applicant: Arcté Thomas Ranch Holdings, LLC

Certification:

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

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

Signatory name (typed or printed): Click to enter text. Thomas Hogan

Signatory title: Click to enter text. Manager

Signature: _____ Date: 3/19/25

(Use blue ink)

Subscribed and Sworn to before me by the said Thomas Hogan

on this 19 day of March, 2025.

My commission expires on the 26 day of June, 2027.

Notary Public [SEAL]

Salt Lake County, ~~Texas~~ Utah

AMBER DAVIS
Notary Public - State of Utah
Comm. No. 731806
My Commission Expires on
Jun 26, 2027

# DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

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

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

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

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

C. Indicate by a check mark in which format the landowners list is submitted:

☐ USB Drive ☒ Four sets of labels

D. Provide the source of the landowners' names and mailing addresses: Travis County Appraisal District & Burnet County Appraisal District

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

☐ Yes ☒ No

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

Click to enter text.

## Section 2. Original Photographs (Instructions Page 38)

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

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

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

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

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

## Section 3. Buffer Zone Map (Instructions Page 38)

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

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

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

☒ Ownership

☐ Restrictive easement

☐ Nuisance odor control

☐ Variance

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

☒ Yes ☐ No

# DOMESTIC WASTEWATER PERMIT APPLICATION

# SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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

Attachment: Click to enter text.

# WATER QUALITY PERMIT

# PAYMENT SUBMITTAL FORM

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

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

Mail this form and the check or money order to:

*BY REGULAR U.S. MAIL*

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

*BY OVERNIGHT/EXPRESS MAIL*

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

Fee Code: WQP  Waste Permit No: Click to enter text.

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: Click to enter text.

   Physical Address of Project or Site: Click to enter text.

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

Staple Check or Money Order in This Space

# ATTACHMENT 1

# INDIVIDUAL INFORMATION

## Section 1. Individual Information (Instructions Page 41)

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

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

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

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

Date of Birth: Click to enter text.

Mailing Address: Click to enter text.

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

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

E-mail Address: Click to enter text.

CN: Click to enter text.

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

# DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

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

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

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

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

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

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

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

Things to Know:

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

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

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

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

Plain Language Summary ☒ Yes

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

# DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

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

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

## Section 1. Permitted or Proposed Flows (Instructions Page 43)

A. Existing/Interim I Phase

Design Flow (MGD): 0.26

2-Hr Peak Flow (MGD): 1.04

Estimated construction start date: 2026

Estimated waste disposal start date: 2027

B. Interim II Phase

Design Flow (MGD): N/A

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

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

C. Final Phase

Design Flow (MGD): 0.51

2-Hr Peak Flow (MGD): 2.04

Estimated construction start date: 2029

Estimated waste disposal start date: 2031

D. Current Operating Phase

Provide the startup date of the facility: N/A

## 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.

Raw water will enter the headworks screen and flow into two aeration basins, a clarifier, a disk filter, and a chlorine contact basin. Effluent from the chlorine contact basin flows to an effluent pump station, which pumps it to the effluent storage pond. From there, an irrigation pump station pumps the effluent to the surface irrigation area. Wasted solids from the clarifier go to an aerobic digester and are trucked to a landfill.

B. Treatment Units

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

Table 1.0(1) - Treatment Units

| Treatment Unit Type | Number of Units | Dimensions (L x W x D) |
|---|---|---|
| Aeration Basin | 2 | 50’ x 14’ x 12’ |
| Clarifier | 1 | 48’⌀ x 10’ |
| Aerobic Digester | 1 | 45’⌀ x 12’ |
| Chlorine Contact Chamber | 1 | 23’ x 10’ x 10’ |
| Disk Filter | 1 | 26’x70’x12’ |
| | | |

C. Process Flow Diagram

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

Attachment: Attachment 9

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

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

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

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

- Latitude: 30.449747°
- Longitude: -98.105714°

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: Attachment 10

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

The area to be served by the treatment plant is a mixed-use residential development consisting of single-family, multi-family, and high-density residential, as well as open space, commercial retail, and public infrastructure. This development includes 2,900 LUEs with an ultimate flow rate of 0.51 MGD.

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

Collection System Information

| Collection System Name | Owner Name | Owner Type | Population Served |
|---|---|---|---|
| | | Choose an item. | |
| | | Choose an item. | |
| | | Choose an item. | |
| | | Choose an item. | |

## Section 4. Unbuilt Phases (Instructions Page 45)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

N/A

## Section 5. Closure Plans (Instructions Page 45)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

N/A

## Section 6. Permit Specific Requirements (Instructions Page 45)

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

A. Summary transmittal

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

☐ Yes ☐ No

If yes, provide the date(s) of approval for each phase: Click to enter text.

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

Click to enter text.

B. Buffer zones

Have the buffer zone requirements been met?

☐ Yes ☐ No

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

Click to enter text.

C. Other actions required by the current permit

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

☐ Yes ☐ No

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

Click to enter text.

D. Grit and grease treatment

1. *Acceptance of grit and grease waste*

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

☐ Yes ☐ No

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

2. *Grit and grease processing*

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

Click to enter text.

3. *Grit disposal*

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

☐ Yes ☐ No

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

Describe the method of grit disposal.

Click to enter text.

4. *Grease and decanted liquid disposal*

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

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

Click to enter text.

E. Stormwater management

1. *Applicability*

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

2. *MSGP coverage*

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

☐ Yes ☐ No

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

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

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

☐ Yes ☐ No

3. *Conditional exclusion*

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

☐ Yes ☐ No

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

Click to enter text.

4. *Existing coverage in individual permit*

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

☐ Yes ☐ No

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

Click to enter text.

5. *Zero stormwater discharge*

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

☐ Yes ☐ No

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

Click to enter text.

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

6. *Request for coverage in individual permit*

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

☐ Yes ☐ No

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

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

Click to enter text.

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

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☐ No

If yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions.
Click to enter text.

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

1. *Acceptance of sludge from other WWTPs*

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

☐ Yes ☐ No

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

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

Click to enter text.

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

2. *Acceptance of septic waste*

Is the facility accepting or will it accept septic waste?

☐ Yes ☐ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

Click to enter text.

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

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

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

☐ Yes ☐ No

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

Click to enter text.

## Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 50)

Is the facility in operation?

☐ Yes ☒ No

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

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

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

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

| Pollutant | Average Conc. | Max Conc. | No. of Samples | Sample Type | Sample Date/Time |
|---|---|---|---|---|---|
| $CBOD_5$, mg/l | | | | | |
| Total Suspended Solids, mg/l | | | | | |
| Ammonia Nitrogen, mg/l | | | | | |
| Nitrate Nitrogen, mg/l | | | | | |
| Total Kjeldahl Nitrogen, mg/l | | | | | |
| Sulfate, mg/l | | | | | |
| Chloride, mg/l | | | | | |
| Total Phosphorus, mg/l | | | | | |
| pH, standard units | | | | | |
| Dissolved Oxygen*, mg/l | | | | | |
| Chlorine Residual, mg/l | | | | | |
| *E.coli* (CFU/100ml) freshwater | | | | | |
| Entercocci (CFU/100ml) saltwater | | | | | |
| Total Dissolved Solids, mg/l | | | | | |
| Electrical Conductivity, µmohs/cm, † | | | | | |
| Oil & Grease, mg/l | | | | | |
| Alkalinity ($CaCO_3$)*, mg/l | | | | | |

*TPDES permits only
†TLAP permits only

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

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

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

Facility Operator Name: Facility not in operation.

Facility Operator's License Classification and Level: Facility not in operation.

Facility Operator's License Number: Facility not in operation.

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

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

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

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

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

C. Biosolids Management

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

all biosolids management practices listed in the instructions. Rather indicate the management practice the facility plans to use.

Biosolids Management

| Management Practice | Handler or Preparer Type | Bulk or Bag Container | Amount (dry metric tons) | Pathogen Reduction Options | Vector Attraction Reduction Option |
|---|---|---|---|---|---|
| Disposal in Landfill | Off-site Third-Party Handler or Preparer | Bulk | 14 per month | Choose an item. | Choose an item. |
| Choose an item. | Choose an item. | Choose an item. | | Choose an item. | Choose an item. |
| Choose an item. | Choose an item. | Choose an item. | | Choose an item. | Choose an item. |

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

D. Disposal site

Disposal site name: Will be transported to another WWTP to be selected at a later date.

TCEQ permit or registration number: N/A

County where disposal site is located: N/A

E. Transportation method

Method of transportation (truck, train, pipe, other): Registered hauler to be selected at a later date.

Name of the hauler: N/A

Hauler registration number: N/A

Sludge is transported as a:

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

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

A. Beneficial use authorization

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

B. Sludge processing authorization

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

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

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

☐ Yes ☐ No

## Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

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

A. Location information

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

- Original General Highway (County) Map:

  Attachment: Click to enter text.
- USDA Natural Resources Conservation Service Soil Map:

  Attachment: Click to enter text.
- Federal Emergency Management Map:

  Attachment: Click to enter text.
- Site map:

  Attachment: Click to enter text.

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

☐ Overlap a designated 100-year frequency flood plain

☐ Soils with flooding classification

☐ Overlap an unstable area

☐ Wetlands

☐ Located less than 60 meters from a fault

☐ None of the above

Attachment: Click to enter text.

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

Click to enter text.

B. Temporary storage information

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

Nitrate Nitrogen, mg/kg: Click to enter text.

Total Kjeldahl Nitrogen, mg/kg: Click to enter text.

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

Phosphorus, mg/kg: Click to enter text.

Potassium, mg/kg: Click to enter text.

pH, standard units: Click to enter text.

Ammonia Nitrogen mg/kg: Click to enter text.

Arsenic: Click to enter text.

Cadmium: Click to enter text.

Chromium: Click to enter text.

Copper: Click to enter text.

Lead: Click to enter text.

Mercury: Click to enter text.

Molybdenum: Click to enter text.

Nickel: Click to enter text.

Selenium: Click to enter text.

Zinc: Click to enter text.

Total PCBs: Click to enter text.

Provide the following information:

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

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

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

C. Liner information

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

☐ Yes ☐ No

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

Click to enter text.

D. Site development plan

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

Click to enter text.

Attach the following documents to the application.

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

  Attachment: Click to enter text.
- Copy of the closure plan

  Attachment: Click to enter text.
- Copy of deed recordation for the site

  Attachment: Click to enter text.
- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons

  Attachment: Click to enter text.
- Description of the method of controlling infiltration of groundwater and surface water from entering the site

  Attachment: Click to enter text.
- Procedures to prevent the occurrence of nuisance conditions

  Attachment: Click to enter text.

E. Groundwater monitoring

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

☐ Yes ☐ No

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

Attachment: Click to enter text.

## Section 12. Authorizations/Compliance/Enforcement (Instructions Page 55)

A. Additional authorizations

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

☐ Yes ☒ No

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

N/A

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

N/A

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

A. RCRA hazardous wastes

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

☐ Yes ☒ No

B. Remediation activity wastewater

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

☐ Yes ☒ No

C. Details about wastes received

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

Attachment: N/A

## Section 14. Laboratory Accreditation (Instructions Page 56)

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

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

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

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

CERTIFICATION:

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

Printed Name: Thomas Hogan

Title: Manager

Signature: _____

Date: 3/19/25

# DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.1

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

## Section 1. Justification for Permit (Instructions Page 57)

A. Justification of permit need

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

A new treatment plant is needed to serve the Thomas Ranch subdivision. The ultimate buildout of the development will include 2,079 acres of single-family, multi-family, and high-density residential, as well as open space, commercial retail, and public infrastructure. Given the acreage distribution of the proposed development, industry-standard flows from Metcalf & Eddy were used to determine that 0.51 MGD would be representative of the flows from the Heritage development. There is no wastewater treatment plant within three miles to provide wastewater service to this subdivision.

B. Regionalization of facilities

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

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

1. *Municipally incorporated areas*

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

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

☐ Yes ☒ No ☐ Not Applicable

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

If yes, attach correspondence from the city.

Attachment: N/A

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: N/A

2. *Utility CCN areas*

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

☐ Yes ☒ No

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

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

Attachment: N/A

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: N/A

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: N/A

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: N/A

## 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): N/A

Average Influent Organic Strength or $BOD_5$ Concentration in mg/l: N/A

Average Influent Loading (lbs/day = total average flow X average $BOD_5$ conc. X 8.34): N/A

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

| |
|---|
| N/A |

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 | 0.26 | 300 |
| 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 | 0.26 | |
| AVERAGE $BOD_5$ from all sources | | 300 |

## 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: 20

Total Suspended Solids, mg/l: 20

Ammonia Nitrogen, mg/l: N/A

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 4

Other: N/A

B. Interim II Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: N/A

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: 20

Total Suspended Solids, mg/l: 20

Ammonia Nitrogen, mg/l: N/A

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: 4

Other: N/A

D. Disinfection Method

Identify the proposed method of disinfection.

☒ Chlorine: 1.0 mg/l after 20 minutes detention time at peak flow

Dechlorination process: Click to enter text.

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

☐ Other: Click to enter text.

## Section 4. Design Calculations (Instructions Page 59)

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

Attachment: Attachment 11

## Section 5. Facility Site (Instructions Page 60)

A. 100-year floodplain

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

☒ Yes ☐ No

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

Click to enter text.

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

FEMA Product ID NFHL_48_20250223

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

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

B. Wind rose

Attach a wind rose: Attachment 12

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

A. Beneficial use authorization

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

☐ Yes ☒ No

If yes, attach the completed Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451): N/A

B. Sludge processing authorization

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

☐ Sludge Composting

☐ Marketing and Distribution of sludge

☐ Sludge Surface Disposal or Sludge Monofill

If any of the above, sludge options are selected, attach the completed Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056): N/A

## Section 7. Sewage Sludge Solids Management Plan (Instructions Page 61)

Attach a solids management plan to the application.

Attachment: Attachment 13

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 3.0: LAND DISPOSAL OF EFFLUENT

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

## Section 1. Type of Disposal System (Instructions Page 68)

Identify the method of land disposal:

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

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

For existing authorizations, provide Registration Number: N/A

## Section 2. Land Application Site(s) (Instructions Page 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 Overseeded with Rye | 191 | 260,000 | Yes |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

## 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 |
|---|---|---|---|---|
| 1 | 5.3 | 23 | 500'x520' | synthetic liner |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

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

Attachment: Attachment 14

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

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

☐ Yes ☒ No

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

Click to enter text.

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

Click to enter text.

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

Click to enter text.

## 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: Attachment 15

- 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: Attachment 5

- 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 |
|---|---|---|---|---|
| | | | Choose an item. | |
| | | | Choose an item. | |
| | | | Choose an item. | |
| | | | Choose an item. | |
| | | | Choose an item. | |

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

Attachment: Attachment 16

## 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: Attachment 17

Are groundwater monitoring wells available onsite? ☐ Yes ☒ No

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

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

Attachment: Click to enter text.

## Section 8. Soil Map and Soil Analyses (Instructions Page 70)

A. Soil map

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

Attachment: Attachment 18

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: Attachment 19

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

Table 3.0(4) – Soil Data

| Soil Series | Depth from Surface | Permeability | Available Water Capacity | Curve Number |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
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## Section 9. Effluent Monitoring Data (Instructions Page 71)

Is the facility in operation?

☐ Yes ☒ No

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

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

Table 3.0(5) – Effluent Monitoring Data

| Date | 30 Day Avg Flow MGD | BOD5 mg/l | TSS mg/l | pH | Chlorine Residual mg/l | Acres irrigated |
|---|---|---|---|---|---|---|
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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: 191

Design application frequency:

hours/day 8 hours/day And days/week 7 days/week

Land grade (slope):

average percent (%): 10

maximum percent (%): 20

Design application rate in acre-feet/acre/year: 3

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: Attachment 20

B. Evaporation ponds

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

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

Attachment: Click to enter text.

C. Evapotranspiration beds

Number of beds: Click to enter text.

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

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

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

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

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

Attachment: Click to enter text.

D. Overland flow

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

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

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

Slope length, in feet: Click to enter text.

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

Design application frequency:

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

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

Attachment: Click to enter text.

## Section 2. Edwards Aquifer (Instructions Page 73)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

Attachment: N/A

# Attachment 1

Copy of Permit Fee

**Your transaction is complete. Thank you for using TCEQ ePay.**

**Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt and the vouchers for your records. An email receipt has also been sent.**

**Transaction Information**

| | |
|---|---|
| **Trace Number:** | 582EA000662829 |
| **Date:** | 04/07/2025 02:22 PM |
| **Payment Method:** | CC - Authorization 0000207335 |
| **ePay Actor:** | IAN CLEMENTS |
| **Actor Email:** | ian.clements@kimley-horn.com |
| **IP:** | 130.41.212.196 |
| **TCEQ Amount:** | $1,650.00 |
| **Texas.gov Price:** | $1,687.38* |

* This service is provided by Texas.gov, the official website of Texas. The price of this service includes funds that support the ongoing operations and enhancements of Texas.gov, which is provided by a third party in partnership with the State.

**Payment Contact Information**

| | |
|---|---|
| **Name:** | IAN CLEMENTS |
| **Company:** | KIMLEY-HORN |
| **Address:** | 113 COREOPSIS COVE, KYLE, TX 78640 |
| **Phone:** | 361-548-9915 |

**Cart Items**

Click on the voucher number to see the voucher details.

| Voucher | Fee Description | AR Number | Amount |
|---|---|---|---|
| 761261 | WW PERMIT - FACILITY WITH FLOW >= .50 & < 1.0 MGD - NEW AND MAJOR AMENDMENTS | | $1,600.00 |
| 761262 | 30 TAC 305.53B WQ NOTIFICATION FEE | | $50.00 |
| | | **TCEQ Amount:** | $1,650.00 |

ePay Again | Exit ePay

**Note: It may take up to 3 working days for this electronic payment to be processed and be reflected in the TCEQ ePay system. Print this receipt for your records.**



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**Print this voucher for your records. If you are sending the TCEQ hardcopy documents related to this payment, include a copy of this voucher.**

## Transaction Information

| | |
|---|---|
| **Voucher Number:** | 761261 |
| **Trace Number:** | 582EA000662829 |
| **Date:** | 04/07/2025 02:22 PM |
| **Payment Method:** | CC - Authorization 0000207335 |
| **Voucher Amount:** | $1,600.00 |
| **Fee Type:** | WW PERMIT - FACILITY WITH FLOW >= .50 & < 1.0 MGD - NEW AND MAJOR AMENDMENTS |
| **ePay Actor:** | IAN CLEMENTS |
| **Actor Email:** | ian.clements@kimley-horn.com |
| **IP:** | 130.41.212.196 |

## Payment Contact Information

| | |
|---|---|
| **Name:** | IAN CLEMENTS |
| **Company:** | KIMLEY-HORN |
| **Address:** | 113 COREOPSIS COVE, KYLE, TX 78640 |
| **Phone:** | 361-548-9915 |

## Site Information

| | |
|---|---|
| **Site Name:** | THOMAS RANCH WWTP |
| **Site Location:** | APPROXIMATELY 1.2 MILES NW OF THE INTERSECTION OF STATE HWY 71 & PALEFACE RD |

## Customer Information

| | |
|---|---|
| **Customer Name:** | ARETE THOMAS RANCH HOLDINGS LLC |
| **Customer Address:** | 919 CONGRESS AVE STE 1500, AUSTIN, TX 78701 2156 |
| **State Franchise Tax ID:** | 32082433494 |

Close



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**Print this voucher for your records. If you are sending the TCEQ hardcopy documents related to this payment, include a copy of this voucher.**

**Transaction Information**

| | |
|---|---|
| **Voucher Number:** | 761262 |
| **Trace Number:** | 582EA000662829 |
| **Date:** | 04/07/2025 02:22 PM |
| **Payment Method:** | CC - Authorization 0000207335 |
| **Voucher Amount:** | $50.00 |
| **Fee Type:** | 30 TAC 305.53B WQ NOTIFICATION FEE |
| **ePay Actor:** | IAN CLEMENTS |
| **Actor Email:** | ian.clements@kimley-horn.com |
| **IP:** | 130.41.212.196 |

**Payment Contact Information**

| | |
|---|---|
| **Name:** | IAN CLEMENTS |
| **Company:** | KIMLEY-HORN |
| **Address:** | 113 COREOPSIS COVE, KYLE, TX 78640 |
| **Phone:** | 361-548-9915 |

Close



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# Attachment 2

10400 – TCEQ Core Data Form

TCEQ Use Only

# TCEQ Core Data Form

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

## SECTION I: General Information

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

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

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

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

## SECTION II: Customer Information

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

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

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

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

Arete Thomas Ranch Holdings, LLC

| **7. TX SOS/CPA Filing Number** | **8. TX State Tax ID** (11 digits) | **9. Federal Tax ID** (9 digits) | **10. DUNS Number** *(if applicable)* |
|---|---|---|---|
| 804367904 | 32082433494 | 42-2785650 | N/A |

**11. Type of Customer:** ☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

**12. Number of Employees**
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

**13. Independently Owned and Operated?**
☐ **Yes** ☐ **No**

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

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

**15. Mailing Address:**

C/O Allen Boone Humphries Robinson LLP
919 Congress AVE, STE 1500

| **City** | Austin | **State** | TX | **ZIP** | 78701 | **ZIP + 4** | 2156 |
|---|---|---|---|---|---|---|---|

| **16. Country Mailing Information** *(if outside USA)* | **17. E-Mail Address** *(if applicable)* |
|---|---|
| | ian.clements@kimley-horn.com |

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

| | | |
|---|---|---|
| ( 737 ) 241-9266 | | ( ) - |

## SECTION III: Regulated Entity Information

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

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

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

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

Thomas Ranch WWTP

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

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

| | | | | | |
|---|---|---|---|---|---|
| **25. Description to Physical Location:** | Approximately 1.2 miles northwest of the intersection of State Hwy 71 and Paleface Ranch Rd. | | | | |
| **26. Nearest City** | | | **State** | **Nearest ZIP Code** | |
| Austin | | | TX | 78669 | |

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

| | | | | | |
|---|---|---|---|---|---|
| **27. Latitude (N) In Decimal:** | 30.426025 | | **28. Longitude (W) In Decimal:** | -98.109841 | |
| Degrees | Minutes | Seconds | Degrees | Minutes | Seconds |
| 30 | 25 | 34 | -98 | 6 | 35 |

| | | | |
|---|---|---|---|
| **29. Primary SIC Code** (4 digits) | **30. Secondary SIC Code** (4 digits) | **31. Primary NAICS Code** (5 or 6 digits) | **32. Secondary NAICS Code** (5 or 6 digits) |
| 9511 | | 221310 | |

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

Wastewater Treatment

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **34. Mailing Address:** | **C/O Allen Boone Humphries Robinson LLP** | | | | | | | |
| | **919 Congress AVE, STE 1500** | | | | | | | |
| | **City** | **Austin** | **State** | **TX** | **ZIP** | **78701** | **ZIP + 4** | **2156** |
| **35. E-Mail Address:** | **ian.clements@kimley-horn.com** | | | | | | | |

| | | |
|---|---|---|
| **36. Telephone Number** | **37. Extension or Code** | **38. Fax Number** *(if applicable)* |
| **( 737 ) 241-9266** | | ( ) - |

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

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

## SECTION IV: Preparer Information

| 40. Name: | Behnaz Jalili | 41. Title: | Project Manager |
|---|---|---|---|

| 42. Telephone Number | 43. Ext./Code | 44. Fax Number | 45. E-Mail Address |
|---|---|---|---|
| ( 512 ) 518-5596 | | (  )  - | Behnaz.Jalili@kimley-horn.com |

## SECTION V: Authorized Signature

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

| Company: | Arete Thomas Ranch Holdings, LLC | Job Title: | Manager |
|---|---|---|---|
| Name *(In Print)*: | Thomas, Hogan | Phone: | (801)333-8156 |
| Signature: | | Date: | 4/7/25 |

# Attachment 3

20972 – Summary of Application in Plain Language

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

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

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

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

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

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS
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*.

Arete Thomas Ranch, LLC (CN#########) proposes to operate Thomas Ranch WWTP (RN########), a wastewater treatment plant and surface spray irrigation system to dispose of treated effluent. The facility will be located at approximately 1.2 miles northwest of the intersection of State Hwy 71 and Paleface Ranch Rd., in Spicewood, Travis County, Texas 78669. This is a TLAP application to authorize the disposal of treated wastewater at a volume not to exceed 260,000 gallons per day via a surface spray irrigation system on approximately 191 acres. This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), ammonia nitrogen ($NH_3$-N), total phosphorus, and *Escherichia coli*. Domestic wastewater will be treated by a headworks screen, an aeration basin, a clarifier, an aerobic digester, a chlorine contact chamber, a disk filter, and then disposed of through a surface spray irrigation system.

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

AGUAS RESIDUALES DOMÉSTICAS / 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*.

Arete Thomas Ranch, LLC (CN#########) propone operar Thomas Ranch WWTP (RN########), una planta de tratamiento de aguas residuales y sistema de riego por aspersión superficial para disposición del efluente tratado. La instalación estará ubicada en aproximadamente 1,2 millas al noroeste de la intersección de State Hwy 71 y Paleface Ranch Rd , en estará, Condado de Travis, Texas 78669. Esta es una solicitud TLAP para autorizar la eliminación de aguas residuales tratadas en un volumen que no exceda los 260,000 galones por día a través de un sistema de riego por aspersión de superficie en aproximadamente 191 acres.Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbonoso, sólidos suspendidos totales, nitrógeno amoniacal, fósforo total y *Escherichia coli*. Aguas residuales domésticas . están tratado por una criba de cabecera, un estanque de aireación, un clarificador, un digestor aeróbico, una cámara de contacto de cloro, un filtro de discos, para luego ser eliminado a través de un sistema de riego por aspersión superficial.

# Attachment 4

20960 – Public Involvement Plan Form

Texas Commission on Environmental Quality

# Public Involvement Plan Form for Permit and Registration Applications

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

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

## Section 1. Preliminary Screening

☒ New Permit or Registration Application

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

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

## Section 2. Secondary Screening

☒ Requires public notice,

☐ Considered to have significant public interest, **and**

☒ Located within any of the following geographical locations:

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

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

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

## Section 3. Application Information

**Type of Application (check all that apply):**

Air ☐ Initial ☐ Federal ☐ Amendment ☐ Standard Permit ☐ Title V

Waste ☐ Municipal Solid Waste ☐ Industrial and Hazardous Waste ☐ Scrap Tire
☐ Radioactive Material Licensing ☐ Underground Injection Control

Water Quality

☐ Texas Pollutant Discharge Elimination System (TPDES)

☒ Texas Land Application Permit (TLAP)

☐ State Only Concentrated Animal Feeding Operation (CAFO)

☐ Water Treatment Plant Residuals Disposal Permit

☐ Class B Biosolids Land Application Permit

☐ Domestic Septage Land Application Registration

Water Rights New Permit

☐ New Appropriation of Water

☐ New or existing reservoir

Amendment to an Existing Water Right

☐ Add a New Appropriation of Water

☐ Add a New or Existing Reservoir

☐ Major Amendment that could affect other water rights or the environment

## Section 4. Plain Language Summary

Provide a brief description of planned activities.

Arete Thomas Ranch LLC proposes to operate Thomas Ranch WWTP, a wastewater treatment plant and surface spray irrigation system to dispose of treated effluent. The facility will be located approximately 1.2 miles northwest of the intersection of State Hwy 71 and Paleface Ranch Rd., in Spicewood, Travis County, Texas 78669. This is a TLAP application to authorize the disposal of treated wastewater at a volume not to exceed 260,000 gallons per day via a surface spray irrigation system on approximately 191 acres. This permit will not authorize a discharge of pollutants into water in the state. Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand (CBOD5), total suspended solids (TSS), ammonia nitrogen (NH3-N), total phosphorus, and *Escherichia coli*. Domestic wastewater will be treated by a headworks screen, an aeration basin, a clarifier, an aerobic digester, a chlorine contact chamber, a disk filter, and then disposed of through a surface spray irrigation system.

## Section 5. Community and Demographic Information

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

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

(City)

Travis County

(County)

(Census Tract)

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

☐ City ☒ County ☐ Census Tract

(a) Percent of people over 25 years of age who at least graduated from high school

92.8%

(b) Per capita income for population near the specified location

$63,799

(c) Percent of minority population and percent of population by race within the specified location

(d) Percent of Linguistically Isolated Households by language within the specified location

(e) Languages commonly spoken in area by percentage

English: 69.6%, Spanish: 20.5%, Other Indo-European languages: 4.3%, Asian & Pacific Island languages: 4.3%, Other languages: 1.3%

(f) Community and/or Stakeholder Groups

(g) Historic public interest or involvement

## Section 6. Planned Public Outreach Activities

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

☒ Yes ☐ No

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

☐ Yes ☒ No

If Yes, please describe.

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

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

☐ Yes ☐ No

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

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

☐ Publish in alternative language newspaper
☐ Posted on Commissioner's Integrated Database Website
☐ Mailed by TCEQ's Office of the Chief Clerk
☐ Other (specify)

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

☐ TCEQ Regional Office ☐ TCEQ Central Office
☐ Public Place (specify)

## Section 7. Voluntary Submittal

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

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

☒ Yes ☐ No

What types of notice will be provided?

☒ Publish in alternative language newspaper
☐ Posted on Commissioner's Integrated Database Website
☐ Mailed by TCEQ's Office of the Chief Clerk
☐ Other (specify)

# Attachment 5

Original USGS Topographic Map




# USGS TOPOGRAPHIC MAP
# PACE BEND QUADRANGLE

## THOMAS RANCH WWTP

MARCH 2025

N

Legend

- 1-Mile Radius Offset
- Well - BRACS Database
- Well - TWDB Groundwater
- Well - Well Reports
- Well - Plugging Reports

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

USGS science for a changing world

The National Map US Topo

**PACE BEND QUADRANGLE**
**TEXAS**
**7.5-MINUTE SERIES**




**Produced by the United States Geological Survey**
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 14R

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, September 2016 - November 2016
Roads.....U.S. Census Bureau, 2015 - 2019
Names.....GNIS, 1979 - 2021
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2021
Boundaries.....Multiple sources; see metadata file 2019 - 2021

Wetlands.....FWS National Wetlands Inventory Not Available

UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

MN
GN
0°29'
9 MILS
3°54'
69 MILS

U.S. National Grid
100,000-m Square ID
NU
Grid Zone Designation
14R

SCALE 1:24 000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 20 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard.

TEXAS
QUADRANGLE LOCATION

| | | |
|---|---|---|
| 1 | 2 | 3 |
| 4 | | 5 |
| 6 | 7 | 8 |

ADJOINING QUADRANGLES
1 Smithwick
2 Travis Peak
3 Nameless
4 Spicewood
5 Mansfield Dam
6 Hammetts Crossing
7 Shingle Hills
8 Bee Cave

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

**PACE BEND, TX**
**2022**

# USGS TOPOGRAPHIC MAP
# PACE BEND QUADRANGLE

## THOMAS RANCH WWTP

MARCH 2025

N

Legend
- WWTP Site
- Irrigation Areas
- 1-Mile Radius Offset
- Well - BRACS Database
- Well - TWDB Groundwater
- Well - Well Reports
- Well - Plugging Reports

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# Attachment 6

Affected Landowners Map and Landowner List

Affected Landowners List

Property 1
LORALOMA BORROWER 1 LLC (2012201)
4670 HOLLIDAY VILLAGE PLZ STE 200
SALT LAKE CITY UT 84117-5291

Property 2
SW RV PARK LLC (1950604)
413 W 14TH ST STE 208
NEW YORK NY 10014-1023

Property 3
STROH JOHANN (1679278)
2712 SCARLET OAKS DR
PEARLAND TX 77581-1430

Property 4
BARTON CREEK RESORT LLC (1371382)
4001 MAPLE AVE STE 500
DALLAS TX 75219-3241

Property 5
AQUA TEXAS INC (539574)
1106 CLAYTON LN STE 400W
AUSTIN TX 78723-2476

Property 6
RASHID SOFIA (1752848)
1001 MARLY WAY
AUSTIN TX 78733-3274

Property 7
CULLEY ROBERT DOUGLAS (316347)
10811 SANS SOUCI PL
AUSTIN TX 78759-5151

Property 8
LAKE TRAVIS ENCLAVE LLC (1714202)
PO BOX 4263
HORSESHOE BAY TX 78657-4263

Property 9
LAKE TRAVIS ENCLAVE LLC (1714202)
PO BOX 4263
HORSESHOE BAY TX 78657-4263

Property 10
LAKE TRAVIS ENCLAVE LLC (1714202)
PO BOX 4263
HORSESHOE BAY TX 78657-4263

Property 11
LAKE TRAVIS ENCLAVE LLC (1714202)
PO BOX 4263
HORSESHOE BAY TX 78657-4263

Property 12
LAKE TRAVIS ENCLAVE LLC (1714202)
PO BOX 4263
HORSESHOE BAY TX 78657-4263

Property 13
LAKE TRAVIS ENCLAVE LLC (1714202)
PO BOX 4263
HORSESHOE BAY TX 78657-4263

Property 14
LAKE TRAVIS ENCLAVE LLC (1714202)
PO BOX 4263
HORSESHOE BAY TX 78657-4263

Property 15
LAKE TRAVIS ENCLAVE LLC (1714202)
PO BOX 4263
HORSESHOE BAY TX 78657-4263

Property 16
BARTON CREEK RESORT LLC (1371382)
4001 MAPLE AVE STE 500
DALLAS TX 75219-3241

Property 17
MOTHERAL PAUL H (316416)
1116 SADDLEBROOK CANYON CT
SPICEWOOD TX 78669-1507

Property 18
KANDY LYDIA SUSAN & (1888991)
3005 MISTY HEIGHTS CV
PFLUGERVILLE TX 78660-3591

Property 19
CHILDRESS GARY (1445158)
1715 CLUBHHOUSE HILL DR
SPICEWOOD TX 78669-1361

Property 20
FIRST NATIONAL BANK (1529699)
2305 MANGUM RD
HOUSTON TX 77092-8117

Property 21
TOM LESLIE LARRY LLC (1729670)
2110 EAGLE CT
SAN ANGELO TX 76904-8064

Property 22
TOM LESLIE LARRY LLC (1729670)
2110 EAGLE CT
SAN ANGELO TX 76904-8064

Property 23
CAYMUS HOMES LLC
C/O JAY ELKINS
8904 TIOMBE BEND
AUSTIN, TX 78749

Property 24
OVERLOOK MARKET LLC
4206 WATERS EDGE COVE
AUSTIN, TX 78731

Property 25
PATEL PRAKSHA & RUPAL PARMAR
2104 BRIGHTON PARK DR
BAKERSFIELD, CA 93311

Property 26
ARETE THOMAS RANCH HOLDINGS LLC
ATTN REBECCA BUCHAN
4670 S HOLLADAY VILLAGE PLAZA STE 200
HOLLIDAY, UT 84117

Property 27
ARETE THOMAS RANCH HOLDINGS LLC
ATTN REBECCA BUCHAN
4670 S HOLLADAY VILLAGE PLAZA STE 200
HOLLIDAY, UT 84117

Property 28
ARETE THOMAS RANCH HOLDINGS LLC
ATTN REBECCA BUCHAN
4670 S HOLLADAY VILLAGE PLAZA STE 200
HOLLIDAY, UT 84117

Property 29
ARETE THOMAS RANCH HOLDINGS LLC
ATTN REBECCA BUCHAN
4670 S HOLLADAY VILLAGE PLAZA STE 200
HOLLIDAY, UT 84117

Property 30
JAYCO HOLDINGS II LTD
602 FALL RIVER RD
HOUSTON, TX 77024

Properties 31 – 82
ARETE THOMAS RANCH HOLDINGS LLC
ATTN REBECCA BUCHAN
4670 S HOLLADAY VILLAGE PLAZA STE 200
HOLLIDAY, UT 84117

Property 83
ONX-CANYON WEST LLC
% ONX INC
3200 EARHART DR
CARROLTON, TX 75006

Property 84
REMINGTON PREMIER LLC (2016358)
595 S RIVERWOODS PKWY STE 400
LOGAN  UT 84321

Property 85 – 89
LUNECKI DANIEL K & AUDREY L (113426)
15401 ROCK CREEK
AUSTIN TX 78734-1528

Property 90
GLASS DELTON (1763855)
401 CAROL ANN DR
AUSTIN TX 78737

Property 91
SCAMARDO BRIAN A (1456367)
PSC 489 BOX 589
APO AE 09751-0006

Property 92
SCAMARDO LUKE P & BRIAN A (1346543)
13323 TROTTING PATH
HELOTES TX 78023-4590

Property 93
MORRISON GARY E INVESTMENTS LTD (1263601)
336 S CONGRESS AVE STE 100
AUSTIN TX 78704-1265

Property 94
AUSTIN GOLF CLUB (532807)
24900 STATE HIGHWAY 71 W
SPICEWOOD TX 78669-2656

Property 95
BEILHARZ DAVID & AMY (402615)
1890 JOY RIDGE RD
OCCIDENTAL CA 95465-9215

Property 96
BEILHARZ DAVID C (1717823)
1223 PALEFACE RANCH RD
SPICEWOOD TX 78669-1392

Property 97
ETHEREDGE PHILIP LANGDON & (197913)
1401 W 39TH 1/2 ST
AUSTIN TX 78756-3907

Property 98
LCRA TRANSMISSION SERVICES (299659)
3700 LAKE AUSTIN BLVD
AUSTIN TX 78703-3504

Property 99
PEDERNALES ELECTRIC (127038)
PO BOX 1
JOHNSON CITY TX 78636-0001

Property 100
RAMSEY FOSTER & DOVIE IRREVOCABLE TRUST THE (1561171)
PO BOX 309
SPICEWOOD TX 78669-0309

Property 101
RAMSEY FOSTER & DOVIE IRREVOCABLE TRUST THE (1561171)
PO BOX 309
SPICEWOOD TX 78669-0309

Property 102
THOMPSON DAVID R & JEANNE A (315640)
26106 RED BRANGUS RD
SPICEWOOD TX 78669-6679

Property 103
RAMSEY FOSTER & DOVIE IRREVOCABLE TRUST THE (1561171)
PO BOX 309
SPICEWOOD TX 78669-0309

Property 104
RAMSEY FOSTER & DOVIE IRREVOCABLE TRUST THE (1561171)
PO BOX 309
SPICEWOOD TX 78669-0309

Property 105
ATRH EQUESTRIAN LLC (1971167)
4670 HOLLIDAY VILLAGE PLZ STE 200
HOLLADAY UT 84117-5291

Property 106
ARETE THOMAS RANCH HOLDINGS LLC (1989259)
4670 S HOLLADAY VILLAGE PLAZA STE 200
SALT LAKE CITY UT 84117-5291

Property 107
WPP THOMAS RANCH LLC ETAL (1984159)
595 S 80 E STE 400
LOGAN UT 84321

Property 108
HILL GENEVA & STEVE (316195)
102 N PALEFACE RANCH RD
SPICEWOOD TX 78669-1339

Property 109
ARETE THOMAS RANCH HOLDINGS LLC (1989259)
4670 S HOLLADAY VILLAGE PLAZA STE 200
SALT LAKE CITY UT 84117-5291

Property 110
NAUMANN GLORIA & SHANNON KERLEY (1616251)
109 N PALEFACE RANCH RD
SPICEWOOD TX 78669-1339

Property 111
BURGOS-VENCES JORGE & (1722328)
1909 CRAZY HORSE PASS
AUSTIN TX 78734-3114

Property 112
DRMTX INVESTMENTS LLC (1894147)
9060 LONG POINT ROAD
HOUSTON TX 77055-4610

Property 113
DRMTX INVESTMENTS LLC (1931559)
7635 TIBURON TRL
SUGAR LAND TX 77479-6158

Property 114
ZLEEP LLC (1914617)
237 PALEFACE RANCH RD S
SPICEWOOD TX 78669-1786

Property 115
O'MEARA-ARROYO TRUST (1985430)
237 S PALEFACE RANCH RD
SPICEWOOD TX 78669-1786

Property 116
BONIECKI GARY TRUST (1994422)
233 N PALEFACE RANCH RD
SPICEWOOD TX 78669

Property 117
CASTLETOP RANCH (316199)
25800 COX CROSSING RD
SPICEWOOD TX 78669-1480

Property 118
PEDERNALES EMERGENCY SERVICES (507152)
801 BEE CREEK RD
SPICEWOOD TX 78669-2186

Property 119
CASTLETOP RANCH (316199)
25800 COX CROSSING RD
SPICEWOOD TX 78669-1480

Property 120
TEAGUE EMITT ERNEST (VLB) (316206)
26317 COX CROSSING RD
SPICEWOOD TX 78669-1338

Property 121
CASTLETOP RANCH LTD (316200)
3600 N CAPITAL OF TEXAS HWY 320B
AUSTIN TX 78746-3314

Property 122
LORALOMA BORROWER 1 LLC (2012201)
4670 HOLLIDAY VILLAGE PLZ STE 200
SALT LAKE CITY UT 84117-5291

Property 123
LORALOMA BORROWER 1 LLC (2012201)
4670 HOLLIDAY VILLAGE PLZ STE 200
SALT LAKE CITY UT 84117-5291

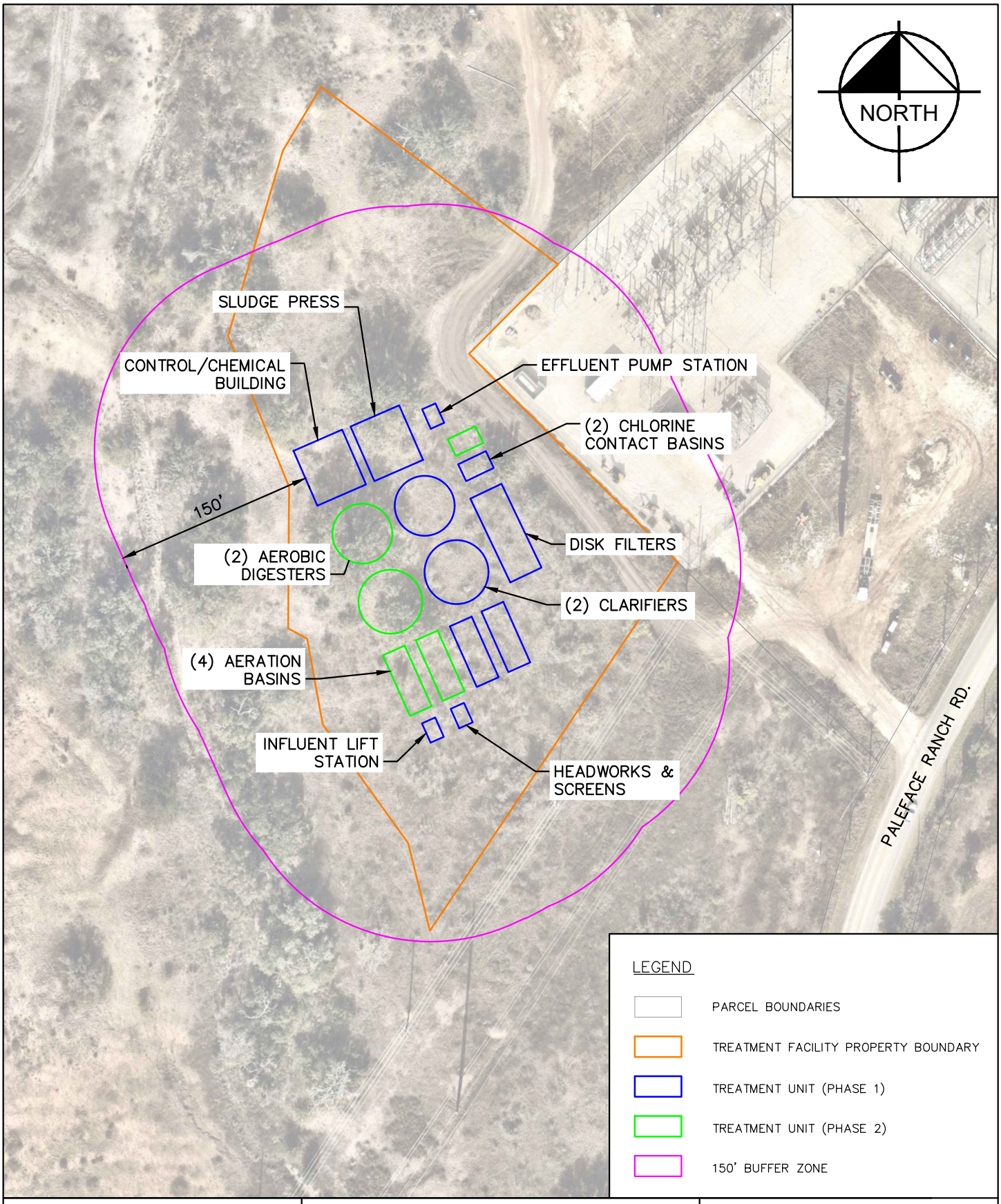
# Attachment 7

Original Photographs and Plot Plan

To Be Provided Later

# Attachment 8

Buffer Zone Map




GRAPHIC SCALE IN FEET

0 50 100 200

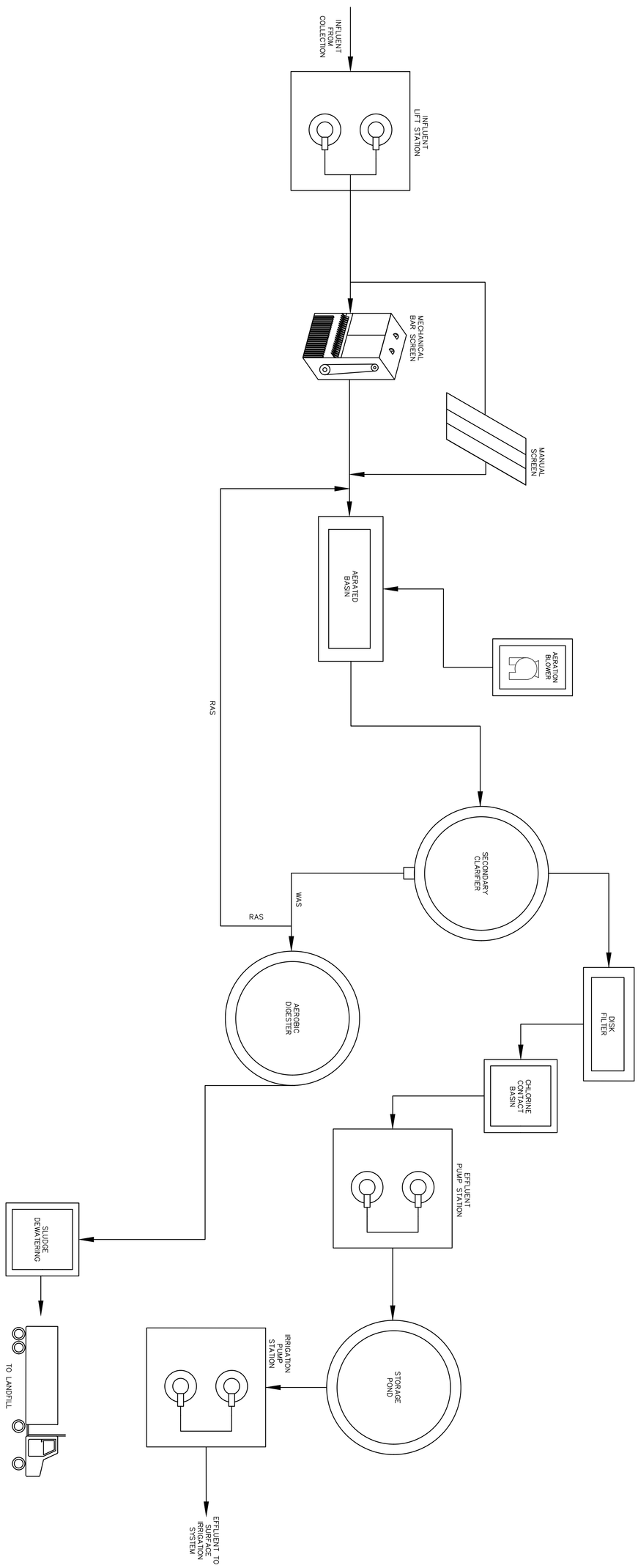
# THOMAS RANCH
## BUFFER ZONE MAP
MARCH 2025

Kimley»Horn
5301 Southwest Pkwy, Building 2, Suite 100
Austin, Texas 78735
512-646-2237
State of Texas Registration No. F-928

# Attachment 9

Process Flow Diagram

K:\SAU_WR\069406207_Thomas Ranch TLAP\CAD\EXHIBITS\Process Flow Diagram\Thomas Ranch_ProcessFlowDiagram.dwg 3/4/2025 1:39 PM




SHEET

| | |
|---|---|
| DATE: | MARCH 2025 |
| DESIGN: | IMC |
| DRAWN: | BJ |
| CHECKED: | IMC |
| KHA NO.: | 069406207 |

# PROCESS FLOW DIAGRAM

THOMAS RANCH
WWTP TLAP

THIS DOCUMENT IS INCOMPLETE AND IS RELEASED TEMPORARILY FOR INTERIM REVIEW ONLY. IT IS NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

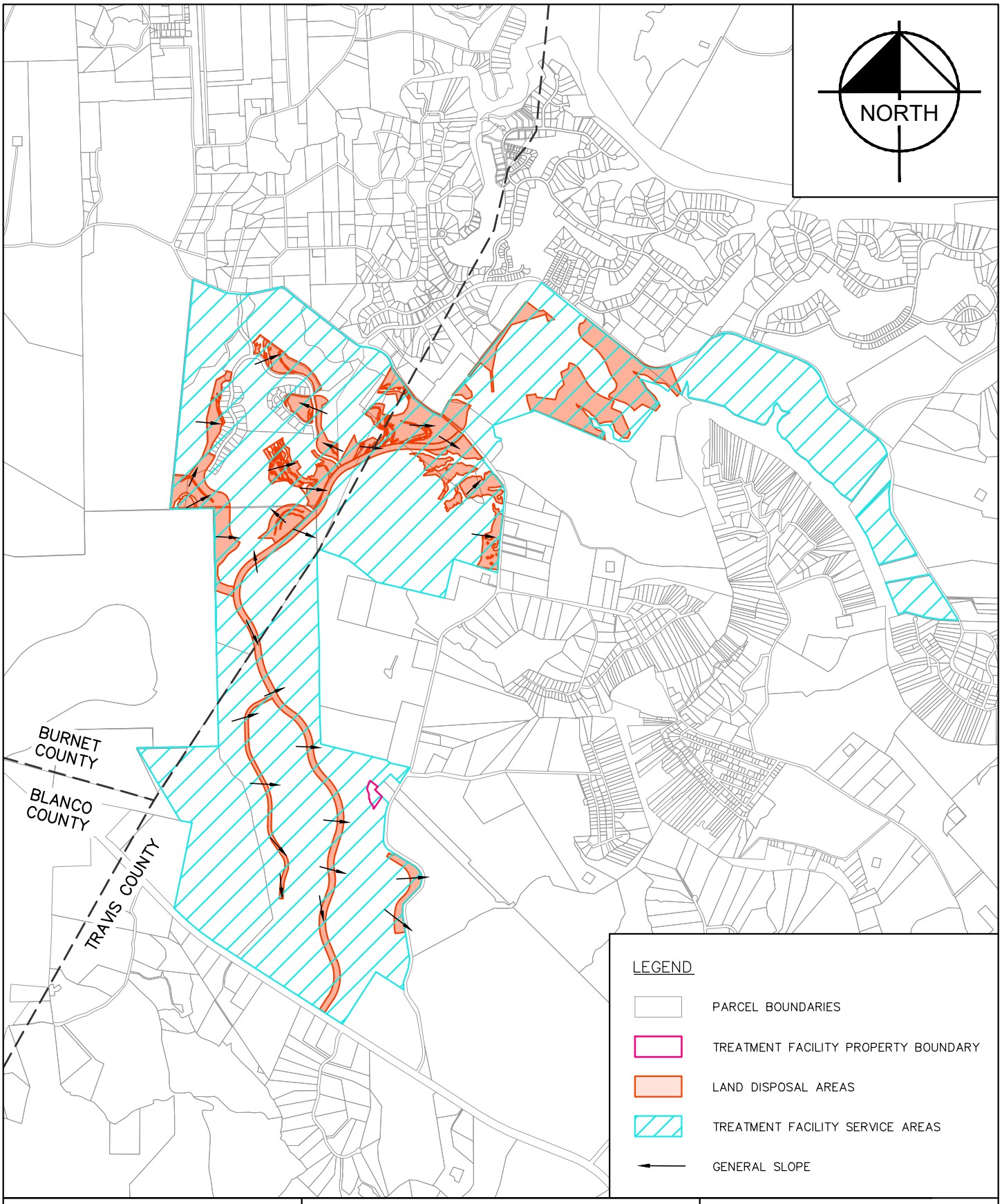
IAN CLEMENTS P.E.
SERIAL NO. 126771
DATE: SEPTEMBER 2024


Kimley»Horn
Firm No. F-928
5301 Southwest Pkwy, Bldg 3, Suite 100, Austin TX, 78735 P:512-646-2237


| No. | Revision | By | Date |
|---|---|---|---|
| | | | |

# Attachment 10

Site Drawing and WWTP Site Plan




GRAPHIC SCALE IN FEET

0 1500 3000 6000

# THOMAS RANCH
## SITE DRAWING
MARCH 2025

Kimley»Horn
5301 Southwest Pkwy, Building 2, Suite 100
Austin, Texas 78735
512-646-2237
State of Texas Registration No. F-928

LEGEND

PHASE 1

PHASE 2

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

PROPERTY BOUNDARY

WWTP SITE PROPERTY BOUNDARY

TRANSMISSION LINE EASEMENT

CONTROL/CHEMICAL BUILDING

SLUDGE PRESS

EFFLUENT PUMP STATION

(2) AEROBIC DIGESTERS

(4) AERATION BASINS

CHLORINE CONTACT BASINS

100' ELECTRIC TRANSMISSION EASEMENT

100-YR FLOODPLAIN BOUNDARY

LCRA DRAINAGE EASEMENT

INFLUENT LIFT STATION

DISK FILTERS

(2) CLARIFIERS

HEADWORKS & SCREENS

20' PEC EASEMENT

100' ELECTRIC TRANSMISSION EASEMENT

PROPERTY BOUNDARY

PALEFACE RANCH RD.

k:\SAU_WR\069406207_Thomas Ranch TLAP\CAD\EXHIBITS\20250128_Site Plan\20250128_SITE PLAN_LEG.dwg 3/4/2025 9:05 AM

Kimley»Horn

Firm No. F-928
3501 Southwest Pkwy, Bldg 3, Suite 100, Austin TX, 78735 P:512-646-2237

| No. | Revision | By | Date |
|---|---|---|---|

THIS DOCUMENT IS INCOMPLETE AND IS RELEASED TEMPORARILY FOR INTERIM REVIEW ONLY. IT IS NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

IAN CLEMENTS P.E.
SERIAL NO.: 126771
DATE: SEPTEMBER 2024

# THOMAS RANCH WWTP TLAP

# WWTP SITE PLAN

| | |
|---|---|
| DATE: | FEBRUARY 2025 |
| DESIGN: | IMC |
| DRAWN: | BJ |
| CHECKED: | IMC |
| KHA NO.: | 069406207 |

SHEET

# Attachment 11

Design Calculations and Plant Features

# Phase 1

*RAS*

**Design to maintain MLSS concentration in aeration basin between 4,000 mg/L and 10,000 mg/L*

**Calculate RAS rate by usign a mass balance of the aeration tank*

| | | | |
|---|---|---|---|
| Influent Design Flow Rate to Aeration Tank ($Q_O$) | 0.256 | MGD | |
| Influent Peak Flow Rate to Aeration Tank ($Q_{PEAK}$) | 1.022 | MGD | |
| Mixed Liquor Suspended Solids (X) | 4,000 | mg/L | *per TCEQ 217.157 (d) (2)* |
| Return Activated Sludge Suspended Solids ($X_R$) | 12,000 | mg/L | |
| Return Sludge Flow at Design Flow (RAS) | 0.12775 | MGD | |
| Return Sludge Flow at Peak Flow (RAS) | 0.511 | MGD | |

*Aeration Basins* *per TCEQ §217.153 (b)*

| | | | |
|---|---|---|---|
| Design Flow for Aeration Basins | 0.38 | MGD | |
| Design Sludge Retention Time ($\theta_A$) | 10 | days | |
| Organic Loading Rate | 45 | lbBOD5/d/1,000 ft3 | *per TCEQ §217.154 (b) (2)* |
| | 1000 | ft3 | |
| *Required Minimum Volume* | *14,206* | *$ft^3$* | |
| Number of Aeration Basins to Add | 2 | | *per TCEQ §217.153 (c)* |
| Aeration Basin Length | 50 | ft | |
| Aeration Basin Width | 14 | ft | |
| Side Water Depth of Aeration Basin | 12 | ft | |
| Total Provided Aeration Basin Volume | 16,800 | $ft^3$ | |
| Aeration Basin in Service with Largest Length | 50 | ft | |
| Largest Aeration Basin's Side Water Depth | 12 | ft | |
| Total Aeration Basin Volume ($V_R$) | 16,800 | $ft^3$ | |
| Calculated Oxygen Required | 1.63 | lbs $O_2$ / lb $BOD_5$ | *per TCEQ §217.155, Eq F.2* |
| Oxygen Requirement ($O_2R$) | 2.2 | lbs $O_2$ / lb $BOD_5$ | *Table F.3* |
| Calculated Air Flowrate | 2,178 | scfm | *per TCEQ §217.155, Eq F.4* |
| Clean water transfer efficiencety | 4% | | *per TCEQ §217.155* |
| Clean water transfer efficiency adjustment based on diffuser | 65% | | *per TCEQ §217.155* |
| WOTE | 3% | | *per TCEQ §217.155* |

*WAS*

**Design based on volume of aeration tank*

| | | |
|---|---|---|
| Provided Aeration Basin Volume ($V_R$) | 0.126 | Mgal |
| Waste Sludge Flowrate from Aeration Basin, Average Flow | 0.0125664 | MGD |
| Daily Sludge Production Rate | 107,948 | lb/d |

*Aerobic Digester*

| | | |
|---|---|---|
| % of Volatile Solids (%VS) | 80% | |
| % Volatile Solids Destroyed in Digestion (%VSD) | 40% | |
| MLSS Concentration | 20,000 | mg/L |
| Minimum Solids Retention Time (SRT) | 40 | days |
| Solids Loading | 0.2 | lb VSS/$ft^3$-d |
| Digester Percent Solids | 2% | |
| Mass of Influent Solids | 639 | ppd |
| Mass of Digested Solids | 435 | ppd |
| Average Solids in Digester | 537 | ppd |
| Total Solids in Digester Based on SRT | 21,479 | lb |
| *Minimum Required Digester Volume* | *17,216* | *$ft^3$* |
| Number of Digester Basins to Add | 1 | |
| Digester Basins Diameter | 45 | ft |
| Side Water Depth | 12 | ft |
| Digester Basin Volume to Add | 19,085 | $ft^3$ |
| Digester Basin Volume to Add | 142,757 | gal |
| Total Digester Basin Volume | 19,085 | |

| | | |
|---|---|---|
| % Volatile Solids Destroyed in Degestion (%VSD) | 40% | |
| Total Mass Reduced | 205 | lb VSS red/day |
| Oxidation of VSS | 2.3 | kg $O_2$/kg VSS |
| Oxygen Required | 212 | kg $O_2$/day |
| Density of Air | 1.204 | kg/$m^3$ @ 20° C |
| Volume of Air Required per Day | 758 | $m^3$ air/day |
| Oxygen Transfer Efficiency | 10% | |
| Air Flow Rate | 5.3 | $m^3$/min |
| Air Loading | 72.8 | $ft^3$/min*1000$ft^3$ |

| *Solids Generated* | 100% Flow | 75% Flow | 50% Flow | 25% Flow |
|---|---|---|---|---|
| Pounds Influent $BOD_5$ (lb/d) | 639 | 479 | 320 | 160 |
| Pounds of Digested Dry Sludge Produced (lb/d) | 435 | 326 | 217 | 109 |
| Pounds of Wet Sludge Produced (lb/d) | 21,735 | 16,301 | 10,867 | 5,434 |
| Gallons of Wet Sludge Produced (gpd) | 2,606 | 1,955 | 1,303 | 652 |

*Secondary Clarifier*

| | | | |
|---|---|---|---|
| Maximum Overflow Rate @ Peak Flow | 1,200 | gal/day/$ft^2$ | |
| Minimum Detention Time @ Peak Flow | 1.8 | hours | |
| Maximum Weir Loading | 20,000 | gal/day/ft | |
| *Minimum Required Surface Area (Overflow)* | *852* | *$ft^2$* | |
| *Minimum required Surface Area (Detention Time)* | *1,025* | *$ft^2$* | |
| *Minimum Required Weir Length* | *51* | *ft* | |
| Number of Clarifiers to Add | 1 | | |
| Clarifier Diameter | 48 | ft | |
| Side Water Depth of Clarifier | 10 | ft | *per TCEQ §217.144 (d)* |
| Total Weir Length | 151 | ft | |
| Total Clarifier Surface Area | 1,810 | $ft^2$ | |
| Total Clarifier Volume | 18,096 | $ft^3$ | |
| Clarifier in Service with Largest Diameter | 48 | ft | |
| Side Water Depth of Largest Clarifier | 10 | ft | |
| Total Surface Area | 1,810 | $ft^2$ | |
| Total Weir Length | 151 | ft | |
| Total Volume | 18,096 | $ft^3$ | |
| Detention Time @ Peak Flow | 3.1786 | hours | |

*Chlorine Contact Basin*

| | | | |
|---|---|---|---|
| Minimum Detention Time at Peak Flow | 20 | min | |
| Number of Parallel Channels | 1 | | |
| Width | 10 | ft | |
| Depth | 10 | ft | |
| Length | 23 | ft | |
| Volume | 2300 | $ft^3$ | |
| Total Volume | 2300 | | |
| Detention Time | 24.24046967 | min | |

# Phase 2

*RAS*

**Design to maintain MLSS concentration in aeration basin between 4,000 mg/L and 10,000 mg/L*

**Calculate RAS rate by usign a mass balance of the aeration tank*

| | | | |
|---|---|---|---|
| Influent Design Flow Rate to Aeration Tank ($Q_O$) | 0.50625 | MGD | |
| Influent Peak Flow Rate to Aeration Tank ($Q_{PEAK}$) | 2.025 | MGD | |
| Mixed Liquor Suspended Solids (X) | 4,000 | mg/L | *per TCEQ 217.157 (d) (2)* |
| Return Activated Sludge Suspended Solids ($X_R$) | 12,000 | mg/L | |
| Return Sludge Flow at Design Flow (RAS) | 0.253125 | MGD | |
| Return Sludge Flow at Peak Flow (RAS) | 1.0125 | MGD | |

*Aeration Basins* *per TCEQ §217.153 (b)*

| | | | |
|---|---|---|---|
| Design Flow for Aeration Basins | 0.759375 | MGD | |
| Design Sludge Retention Time ($\theta_A$) | 10 | days | |
| Organic Loading Rate | 45 | lbBOD5/d/1,000 ft3 | *per TCEQ §217.154 (b) (2)* |
| *Required Minimum Volume* | *28,148* | *$ft^3$* | |
| Number of Aeration Basins to Add | 4 | | *per TCEQ §217.153 (c)* |
| Aeration Basin Length | 50 | ft | |
| Aeration Basin Width | 14 | ft | |
| Side Water Depth of Aeration Basin | 12 | ft | |
| Total Provided Aeration Basin Volume ($V_R$) | 50,400 | $ft^3$ | |
| Aeration Basin in Service with Largest Length | 50 | ft | |
| Largest Aeration Basin's Side Water Depth | 12 | ft | |
| Total Aeration Basin Volume ($V_R$) | 50,400 | $ft^3$ | |
| Calculated Oxygen Required | 1.63 | lbs $O_2$ / lb $BOD_5$ | *per TCEQ §217.155, Eq F.2* |
| Oxygen Requirement ($O_2R$) | 2.2 | lbs $O_2$ / lb $BOD_5$ | *Table F.3* |
| Calculated Air Flowrate | 2,805 | scfm | *per TCEQ §217.155, Eq F.4* |
| Clean water transfer efficiencety | 4% | | *per TCEQ §217.155* |
| Clean water transfer efficiency adjustment based on diffuser | 65% | | *per TCEQ §217.155* |
| WOTE | 3% | | *per TCEQ §217.155* |

*WAS*

**Design based on volume of aeration tank*

| | | |
|---|---|---|
| Provided Aeration Basin Volume ($V_R$) | 0.377 | Mgal |
| Waste Sludge Flowrate from Aeration Basin, Average Flow | 0.0376992 | MGD |
| Daily Sludge Production Rate | 323,844 | lb/d |

*Aerobic Digester*

| | | |
|---|---|---|
| % of Volatile Solids (%VS) | 80% | |
| % Volatile Solids Destroyed in Digestion (%VSD) | 40% | |
| MLSS Concentration | 20,000 | mg/L |
| Minimum Solids Retention Time (SRT) | 40 | days |
| Solids Loading | 0.2 | lb VSS/$ft^3$-d |
| Digester Percent Solids | 2% | |
| Mass of Influent Solids | 1,267 | ppd |
| Mass of Digested Solids | 861 | ppd |
| Average Solids in Digester | 1,064 | ppd |
| Total Solids in Digester Based on SRT | 42,559 | lb |
| *Minimum Required Digester Volume* | *34,111* | *$ft^3$* |
| Number of Digester Basins to Add | 2 | |
| Digester Basins Diameter | 45 | ft |
| Side Water Depth | 12 | ft |
| Digester Basin Volume to Add | 38,170 | $ft^3$ |
| Digester Basin Volume to Add | 285,514 | gal |
| Total Digester Basin Volume | 57,256 | |

428,271

| | | |
|---|---|---|
| % Volatile Solids Destroyed in Degestion (%VSD) | 40% | |
| Total Mass Reduced | 405 | lb VSS red/day |
| Oxidation of VSS | 2.3 | kg $O_2$/kg VSS |
| Oxygen Required | 420 | kg $O_2$/day |
| Density of Air | 1.204 | kg/$m^3$ @ 20° C |
| Volume of Air Required per Day | 1502 | $m^3$ air/day |
| Oxygen Transfer Efficiency | 10% | |
| Air Flow Rate | 10.4 | $m^3$/min |
| Air Loading | 72.1 | $ft^3$/min*1000$ft^3$ |

| *Solids Generated* | 100% Flow | 75% Flow | 50% Flow | 25% Flow |
|---|---|---|---|---|
| Pounds Influent $BOD_5$ (lb/d) | 1,267 | 950 | 633 | 317 |
| Pounds of Digested Dry Sludge Produced (lb/d) | 861 | 646 | 431 | 215 |
| Pounds of Wet Sludge Produced (lb/d) | 43,066 | 32,299 | 21,533 | 10,766 |
| Gallons of Wet Sludge Produced (gpd) | 5,164 | 3,873 | 2,582 | 1,291 |

*Clarifier*

| | | | |
|---|---|---|---|
| Maximum Overflow Rate @ Peak Flow | 1,200 | gal/day/$ft^2$ | |
| Minimum Detention Time @ Peak Flow | 1.8 | hours | |
| Maximum Weir Loading | 30,000 | gal/day/ft | |
| *Minimum Required Surface Area (Overflow)* | *1,688* | *$ft^2$* | |
| *Minimum required Surface Area (Detention Time)* | *1,846* | *$ft^2$* | |
| *Minimum Required Weir Length* | *68* | *ft* | |
| Number of Clarifiers to Add | 2 | | |
| Clarifier Diameter | 23 | ft | |
| Side Water Depth of Clarifier | 11 | ft | *per TCEQ §217.144 (d)* |
| Total Weir Length | 295 | ft | |
| Total Clarifier Surface Area | 2,641 | $ft^2$ | |
| Total Clarifier Volume | 47,141 | $ft^3$ | |
| Clarifier in Service with Largest Diameter | 48 | ft | |
| Side Water Depth of Largest Clarifier | 10 | ft | |
| Total Surface Area | 2,641 | $ft^2$ | |
| Total Weir Length | 295 | ft | |
| Total Volume with Largest Clarifier out of Service | 29,046 | $ft^3$ | |
| Detention Time @ Peak Flow w/ largest clarifier out of service | 2.5749 | hours | |

*Chlorine Contact Basin*

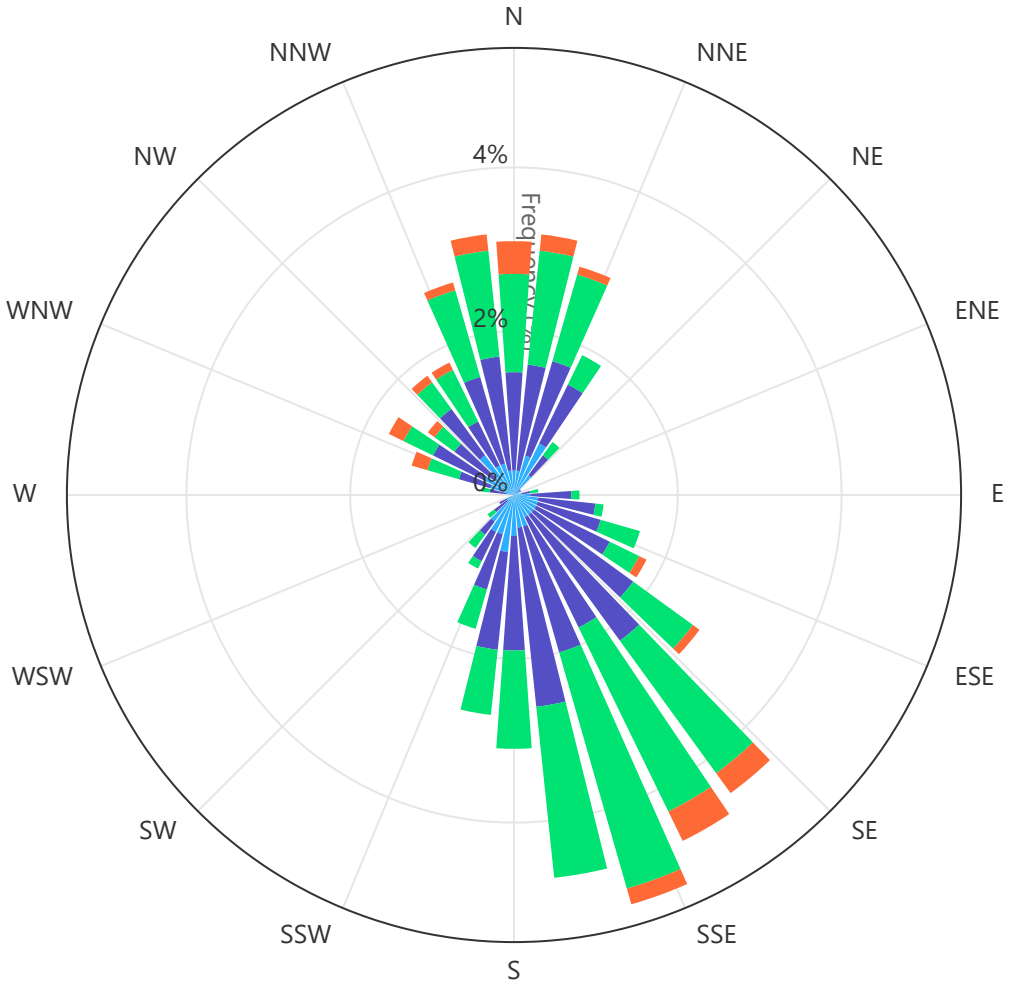
| | | |
|---|---|---|
| Minimum Detention Time at Peak Flow | 20 | min |
| Number of Parallel Channels | 1 | |
| Width | 10 | ft |
| Depth | 10 | ft |
| Length | 23 | ft |
| Volume | 2300 | $ft^3$ |
| Total Volume | 4600 | $ft^3$ |
| Detention Time | 24.46791111 | min |

# Attachment 12

Wind Rose

# AUSTIN-CAMP MABRY (TX) Wind Rose

January 01, 2024 - February 10, 2025
Sub-Interval: January 1 - December 31, 0 - 24




**Wind Speed (mph)**

- 1.3 - 4
- 4 - 8
- 8 - 13
- 13 - 19
- 19 - 25
- 25 - 32
- 32 - 39
- 39 - 47
- 47 -

Click and drag to zoom

# Attachment 13

Solids Management Plan

# Thomas Ranch Wastewater Treatment Plant

# Solids Management Plan

Design Calculations of the Domestic Technical Report 1.1 identifies an influent BOD strength of 300 mg/l. The final design flow capacity of this treatment facility is 0.256 MGD. This corresponds with the removal of 1267 lbs. BOD/day (300 mg/l x 8.34 lbs./gallons x 0.506 MGD). The volatile solids in the sludge are estimated to have no reduction, therefore 100% solids would be remaining.

| Biosolids Production | | | | | | |
|---|---|---|---|---|---|---|
| Percent Permitted Flow | lbs. BOD/Day Removed | Daily Wet Sludge Qty. (lbs @ 2% solids) | Wasted Gal./Day @2% solids | Daily Dewatered Sludge Qty.(lbs @ 25% solids) | Minimum days between trucks (assuming 25% solids) | Daily Bone Dry Sludge Qty (lbs @ 100% solids) |
| 100% | 1,267 | 50,666 | 6,075 | 4,053 | 9 | 1,013 |
| 75% | 950 | 38,000 | 4,556 | 3,040 | 13 | 760 |
| 50% | 633 | 25,332 | 3,037 | 2,026 | 19 | 507 |
| 25% | 317 | 12,667 | 1,519 | 1,013 | 39 | 253 |

Assuming influent BOD at average temperatures and 2.0% solids concentration in the Aerobic Digester and at 100% of design flow, sludge would be wasted at 6,075 gallons per day. The total capacity of the proposed aerobic digester basin is 38,170 $ft^3$. The digested sludge will be transported by a registered hauler and disposed of at a registered landfill. For the calculations presented here, the volume of each truck was assumed to be 25 cubic yards and the total available weight capacity was assumed as 20 tons.

The aerobic digester is designed to be 45’ø x 12’.

# Attachment 14

Pond Liner Certification

Kimley»Horn

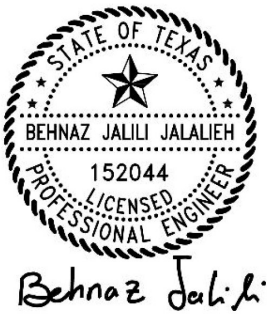
April 1, 2025

# Pond Liner Certification

Thomas Ranch WWTP

Spicewood, Texas

Domestic Worksheet 3.0, Section 3 requests submittal of a liner certification for each on-site storage or evaporation lagoon/pond. The pond for effluent storage of the Thomas Ranch WWTP has not yet been constructed. The pond liner used for this pond will adhere to *30 TAC Chapters 217 and 309.*




Behnaz Jalili, PhD, P.E.
KIMLEY-HORN AND ASSOCIATES, INC.
Texas Firm No. 928

# Attachment 15

Annual Cropping Plan

Kimley»Horn

April 1, 2025

# Annual Cropping Plan

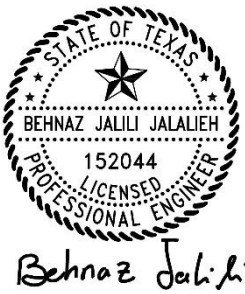
Thomas Ranch WWTP

Spicewood, Texas

The existing effluent application areas for this project consist of non-public access surface irrigation TLAP areas. The cropping and maintenance plan for the surface irrigation TLAP areas has consisted of the following: preparing the site and installing surface irrigation TLAP areas, vegetating the site, maintaining cool and warm season grasses, and harvesting the grasses as necessary. The surface irrigation TLAP areas were prepared by removing the existing herbaceous vegetation, grading the field areas to provide a uniform slope, importing and/or placing additional soil where necessary, installing the surface irrigation TLAP areas, and seeding the fields with Bermuda grass. The fields were overseeded with winter ryegrass during the cool season to ensure year-round uptake of water and nutrients. The Bermuda grass grows from March to October. The ryegrass grows from November to February. The fields are part of an active golf course and thus are mowed regularly throughout the year to maintain an appropriate vegetative height to ensure that the grasses are actively growing at all times. There are no specific crop yield goals at this time. Grass clippings are left on the dosing drain fields after mowing. Regular soil testing has shown that the soil is not adversely affected by leaving the clippings and that nutrient levels remain well below threshold levels.

The grasses were fertilized for germination at the time of construction. Fertilization recommendations for the grasses to be used at this site are generally 100-150 lbs/acre of nitrogen. Turf grasses are very salt tolerant, and this site is not expected to develop salinity problems. The grass is only harvested to maintain vigorous growth in the fields. This is done at the discretion of the golf course maintenance superintendent.

Sincerely,




Behnaz Jalili, PhD, PE
KIMLEY-HORN AND ASSOCIATES, INC.
Texas Firm No. 928

# Attachment 16

Well Reports

Table 3.0(3) - Water Well Data

| Well ID (State Well Number, Tracking Number, Plugging Report Number, etc.) | Well Use | Producing? | Open, Cased, Capped, or Plugged? | Proposed Best Management Practice |
|---|---|---|---|---|
| 87938 | Withdrawal of Water | | | N/A |
| 5739905 | Domestic | | | N/A |
| 5740101 | Plugged or Destroyed | No | Plugged | N/A |
| 5740102 | Plugged or Destroyed | No | Plugged | N/A |
| 5740104 | De-watering | | | N/A |
| 5740402 | Domestic | | | N/A |
| 5740406 | Domestic | | | N/A |
| 5740407 | Public Supply | | | N/A |
| 5740408 | Plugged or Destroyed | No | Plugged | N/A |
| 5740409 | Public Supply | | | N/A |
| 5740410 | Unused | No | Plugged | N/A |
| 5740411 | Public Supply | | | N/A |
| 5740412 | Public Supply | | | N/A |
| 5740413 | Public Supply | | | N/A |
| 5740414 | Public Supply | | | N/A |
| 5740415 | Domestic | | | N/A |
| 5740705 | Public Supply | | | N/A |
| 696 | Public Supply | | | N/A |
| 9666 | Domestic | | | N/A |
| 9667 | Domestic | | | N/A |
| 11657 | Domestic | | | N/A |
| 16952 | Domestic | | | N/A |
| 19564 | Domestic | | | N/A |
| 23609 | Domestic | | | N/A |
| 33024 | Domestic | | | N/A |
| 33390 | Irrigation | | | N/A |
| 33759 | Domestic | | | N/A |
| 34017 | Domestic | | | N/A |
| 34418 | Domestic | | | N/A |
| 34419 | Domestic | | | N/A |
| 39388 | Domestic | | | N/A |
| 39460 | Domestic | | | N/A |
| 42279 | Domestic | | | N/A |
| 42280 | Domestic | | | N/A |
| 42870 | Domestic | | | N/A |
| 50739 | Domestic | | | N/A |
| 52638 | Domestic | | | N/A |
| 58488 | Domestic | | | N/A |
| 62952 | Domestic | | | N/A |
| 64164 | Domestic | | | N/A |
| 64169 | Domestic | | | N/A |
| 66308 | Domestic | | | N/A |
| 67465 | Domestic | | | N/A |
| 72623 | Domestic | | | N/A |
| 72645 | Domestic | | | N/A |
| 78808 | Domestic | | | N/A |
| 82004 | Domestic | | | N/A |
| 84738 | Domestic | | | N/A |
| 88585 | Domestic | | | N/A |
| 88588 | Domestic | | | N/A |
| 88589 | Domestic | | | N/A |
| 90499 | Domestic | | | N/A |
| 91343 | Domestic | | | N/A |
| 91533 | Domestic | | | N/A |

| Well ID (State Well Number, Tracking Number, Plugging Report Number, etc.) | Well Use | Producing? | Open, Cased, Capped, or Plugged? | Proposed Best Management Practice |
|---|---|---|---|---|
| 93629 | Domestic | | | N/A |
| 93632 | Domestic | | | N/A |
| 95931 | Domestic | | | N/A |
| 95936 | Domestic | | | N/A |
| 99843 | Domestic | | | N/A |
| 100952 | Domestic | | | N/A |
| 102754 | Domestic | | | N/A |
| 103092 | Domestic | | | N/A |
| 105073 | Domestic | | | N/A |
| 111526 | Domestic | | | N/A |
| 117473 | Domestic | | | N/A |
| 117475 | Domestic | | | N/A |
| 121336 | Domestic | | | N/A |
| 127312 | Domestic | | | N/A |
| 131575 | Domestic | | | N/A |
| 139600 | Domestic | | | N/A |
| 141907 | Domestic | | | N/A |
| 146397 | Domestic | | | N/A |
| 147063 | Domestic | | | N/A |
| 153340 | Domestic | | | N/A |
| 162929 | Domestic | | | N/A |
| 171112 | Domestic | | | N/A |
| 171128 | Domestic | | | N/A |
| 182186 | Domestic | | | N/A |
| 184974 | Domestic | | | N/A |
| 185363 | Domestic | | | N/A |
| 185366 | Domestic | | | N/A |
| 188861 | Domestic | | | N/A |
| 188862 | Domestic | | | N/A |
| 194388 | Domestic | | | N/A |
| 194390 | Domestic | | | N/A |
| 197486 | Domestic | | | N/A |
| 199176 | Domestic | | | N/A |
| 200198 | Irrigation | | | N/A |
| 200203 | Irrigation | | | N/A |
| 202458 | Domestic | | | N/A |
| 202492 | Domestic | | | N/A |
| 207661 | Monitor | | | N/A |
| 207669 | Monitor | | | N/A |
| 217963 | Domestic | | | N/A |
| 219164 | Domestic | | | N/A |
| 221177 | Domestic | | | N/A |
| 221198 | Domestic | | | N/A |
| 222768 | Domestic | | | N/A |
| 222818 | Domestic | | | N/A |
| 223672 | Domestic | | | N/A |
| 224060 | Domestic | | | N/A |
| 227938 | Domestic | | | N/A |
| 227962 | Test Well | | | N/A |
| 228772 | Domestic | | | N/A |
| 228776 | Domestic | | | N/A |
| 250203 | Domestic | | | N/A |
| 252679 | Domestic | | | N/A |
| 253127 | Domestic | | | N/A |
| 259536 | Irrigation | | | N/A |
| 259543 | Irrigation | | | N/A |

| Well ID (State Well Number, Tracking Number, Plugging Report Number, etc.) | Well Use | Producing? | Open, Cased, Capped, or Plugged? | Proposed Best Management Practice |
|---|---|---|---|---|
| 261764 | Irrigation | | | N/A |
| 261824 | Irrigation | | | N/A |
| 261828 | Irrigation | | | N/A |
| 268320 | Irrigation | | | N/A |
| 268325 | Irrigation | | | N/A |
| 268472 | Irrigation | | | N/A |
| 270711 | Domestic | | | N/A |
| 272820 | Domestic | | | N/A |
| 273395 | Irrigation | | | N/A |
| 274163 | Irrigation | | | N/A |
| 277354 | Domestic | | | N/A |
| 278643 | Domestic | | | N/A |
| 278921 | Domestic | | | N/A |
| 278922 | Domestic | | | N/A |
| 279161 | Domestic | | | N/A |
| 279444 | Domestic | | | N/A |
| 279590 | Domestic | | | N/A |
| 279911 | Domestic | | | N/A |
| 280188 | Domestic | | | N/A |
| 280190 | Domestic | | | N/A |
| 280192 | Domestic | | | N/A |
| 280197 | Domestic | | | N/A |
| 280364 | Domestic | | | N/A |
| 280863 | Domestic | | | N/A |
| 281349 | Irrigation | | | N/A |
| 281847 | Closed-Loop Geothermal | | | N/A |
| 282444 | Irrigation | | | N/A |
| 283991 | Test Well | | | N/A |
| 286612 | Domestic | | | N/A |
| 293782 | Domestic | | | N/A |
| 293783 | Domestic | | | N/A |
| 298268 | Domestic | | | N/A |
| 304430 | Domestic | | | N/A |
| 304431 | Domestic | | | N/A |
| 309265 | Domestic | | | N/A |
| 314465 | Domestic | | | N/A |
| 316394 | Irrigation | | | N/A |
| 324857 | Closed-Loop Geothermal | | | N/A |
| 342767 | Irrigation | | | N/A |
| 342864 | Irrigation | | | N/A |
| 342868 | Irrigation | | | N/A |
| 342870 | Irrigation | | | N/A |
| 342989 | Domestic | | | N/A |
| 342990 | Domestic | | | N/A |
| 343517 | Domestic | | | N/A |
| 343750 | Domestic | | | N/A |
| 350471 | Domestic | | | N/A |
| 352933 | Domestic | | | N/A |
| 352968 | Domestic | | | N/A |
| 356159 | Irrigation | | | N/A |
| 365692 | Domestic | | | N/A |
| 365693 | Domestic | | | N/A |
| 365694 | Domestic | | | N/A |
| 366269 | Irrigation | | | N/A |
| 369054 | Closed-Loop Geothermal | | | N/A |
| 379880 | Domestic | | | N/A |

| Well ID (State Well Number, Tracking Number, Plugging Report Number, etc.) | Well Use | Producing? | Open, Cased, Capped, or Plugged? | Proposed Best Management Practice |
|---|---|---|---|---|
| 380214 | Test Well | | | N/A |
| 380217 | Test Well | | | N/A |
| 389265 | Domestic | | | N/A |
| 394995 | Domestic | | | N/A |
| 400260 | Domestic | | | N/A |
| 400701 | Test Well | | | N/A |
| 401733 | Domestic | | | N/A |
| 402044 | Domestic | | | N/A |
| 414548 | Domestic | | | N/A |
| 417990 | Test Well | | | N/A |
| 425170 | Domestic | | | N/A |
| 438698 | Domestic | | | N/A |
| 447531 | Domestic | | | N/A |
| 447537 | Domestic | | | N/A |
| 454576 | Domestic | | | N/A |
| 457629 | Domestic | | | N/A |
| 458570 | Domestic | | | N/A |
| 474708 | Domestic | | | N/A |
| 476156 | Domestic | | | N/A |
| 484790 | Unknown | | | N/A |
| 486560 | Unknown | | | N/A |
| 489225 | Domestic | | | N/A |
| 491869 | Domestic | | | N/A |
| 494592 | Domestic | | | N/A |
| 511022 | Domestic | | | N/A |
| 512967 | Domestic | | | N/A |
| 523352 | Domestic | | | N/A |
| 532030 | Domestic | | | N/A |
| 532031 | Domestic | | | N/A |
| 532132 | Domestic | | | N/A |
| 538042 | Domestic | | | N/A |
| 538512 | Domestic | | | N/A |
| 543926 | Domestic | | | N/A |
| 548603 | Domestic | | | N/A |
| 551973 | Domestic | | | N/A |
| 551966 | Domestic | | | N/A |
| 551963 | Domestic | | | N/A |
| 553035 | Domestic | | | N/A |
| 555318 | Domestic | | | N/A |
| 555931 | Unknown | | | N/A |
| 559779 | Domestic | | | N/A |
| 512433 | Public Supply | | | N/A |
| 560551 | Domestic | | | N/A |
| 563205 | Domestic | | | N/A |
| 564213 | Domestic | | | N/A |
| 571040 | Domestic | | | N/A |
| 586295 | Domestic | | | N/A |
| 595029 | Domestic | | | N/A |
| 600456 | Unknown | | | N/A |
| 603203 | Domestic | | | N/A |
| 603201 | Domestic | | | N/A |
| 610596 | Domestic | | | N/A |
| 616691 | Domestic | | | N/A |
| 628725 | Domestic | | | N/A |
| 629045 | Public Supply | | | N/A |
| 633176 | Domestic | | | N/A |

| Well ID (State Well Number, Tracking Number, Plugging Report Number, etc.) | Well Use | Producing? | Open, Cased, Capped, or Plugged? | Proposed Best Management Practice |
|---|---|---|---|---|
| 421110 | Domestic | | | N/A |
| 636797 | Domestic | | | N/A |
| 108237 | Domestic | | | N/A |
| 50664 | Domestic | | | N/A |
| 656699 | Domestic | | | N/A |
| 664544 | Test Well | | | N/A |
| 664545 | Test Well | | | N/A |
| 676449 | Domestic | | | N/A |
| 679858 | Domestic | | | N/A |
| 681979 | Domestic | | | N/A |
| 97873 | Withdrawal of Water | No | Plugged | N/A |
| 97872 | Withdrawal of Water | No | Plugged | N/A |
| 63993 | Withdrawal of Water | No | Plugged | N/A |
| 60368 | Withdrawal of Water | No | Plugged | N/A |
| 74847 | Withdrawal of Water | No | Plugged | N/A |
| 65508 | Withdrawal of Water | No | Plugged | N/A |
| 37418 | Withdrawal of Water | No | Plugged | N/A |
| 60369 | Withdrawal of Water | No | Plugged | N/A |
| 2779 | Withdrawal of Water | No | Plugged | N/A |
| 23102 | Withdrawal of Water | No | Plugged | N/A |
| 5190 | Withdrawal of Water | No | Plugged | N/A |
| 5191 | Withdrawal of Water | No | Plugged | N/A |
| 5194 | Withdrawal of Water | No | Plugged | N/A |
| 5195 | Withdrawal of Water | No | Plugged | N/A |
| 482 | Withdrawal of Water | No | Plugged | N/A |
| 106255 | Domestic | No | Plugged | N/A |
| 106256 | Domestic | No | Plugged | N/A |
| 108916 | Domestic | No | Plugged | N/A |
| 123550 | Domestic | No | Plugged | N/A |
| 124614 | Domestic | No | Plugged | N/A |
| 124928 | Domestic | No | Plugged | N/A |
| 125283 | Domestic | No | Plugged | N/A |
| 125869 | Domestic | No | Plugged | N/A |
| 128251 | Test Well | No | Plugged | N/A |
| 133044 | Irrigation | No | Plugged | N/A |
| 133045 | Irrigation | No | Plugged | N/A |
| 133055 | Irrigation | No | Plugged | N/A |
| 147051 | Closed-Loop Geothermal | No | Plugged | N/A |
| 151258 | Test Well | No | Plugged | N/A |
| 151478 | Domestic | No | Plugged | N/A |
| 158605 | Test Well | No | Plugged | N/A |
| 180507 | Withdrawal of Water | No | Plugged | N/A |
| 187078 | Domestic | No | Plugged | N/A |
| 193005 | Domestic | No | Plugged | N/A |
| 225402 | Domestic | No | Plugged | N/A |
| 226578 | Withdrawal of Water | No | Plugged | N/A |
| 240782 | Domestic | No | Plugged | N/A |
| 241402 | Domestic | No | Plugged | N/A |

TEXAS WATER DEVELOPMENT BOARD

WELL SCHEDULE

Aquifer(s) Hosston Project No. 3216 State Well No. 57-40-101

Field No./Owner's Well No. 3 County Travis

1. Location: ¼, ¼, Section ____, Block ____, Survey ____, Lat. 30-27-38 Long. 98-05-30
Hidden Valley Near Lake Travis off of Harnie Flat Road
Barton Creek Lakeside

2. Owner: The Ranch Associates Address: ____

Tenant (other): ____ Address: ____

Driller: Associated Drilling Address: Austin

3. Land Surface Elevation: 772 ft. above msl determined by Developer's 2 Ft contour Map

4. Drilled: 10-7 19 85; Dug, Cable Tool, Rotary, Air,

5. Depth: Rept. 400 ft. Meas. ____ ft.

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

7. Pump: Mfr. ____ Type Sub

No. Stages ____, Bowls Diam. ____ in., Setting 360 ft.

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

8. Motor: Mfr. ____ Fuel ____ HP. ____

9. Yield: Flow ____ gpm, Pump 100 gpm, Meas., Rept., Est. ____ Date 85

10. Performance Test: Date 10-28-85 Length of Test 2 hrs Made by drlr

Static Level 107 ft. Pumping Level ____ ft. Drawdown 243 ft.

Production 100 gpm Specific Capacity ____ gpm/ft.

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

Analyses

Date ____ Laboratory ____ TDS ____ Sp Cond ____

Date ____ Laboratory ____ TDS ____ Sp Cond ____

12. Other data available (as circled): Pumping Test, Power & Yield Test, Drillers Log,

Formation Samples, Geophysical Log(s) ____ (type)

13. Water Level(s): 107 ft. rept/meas. 10-28 1985 above/below (S.L.) ____ which is ____ ft. above/below Land Surface

____ ft. rept. meas. ____ 19 ____ above/below ____ which is ____ ft. above/below Land Surface

14. Use: Dom., Stock, Public Supply, Ind. (Irr.), Observation, Other (Test Hole, Oil Test, etc.) Not Used

15. Recorded by: J. Dutton Source of data: J. Shaw, DC, to 65 Date: 10-13-87

16. Remarks: If Consultant says well will be plugged

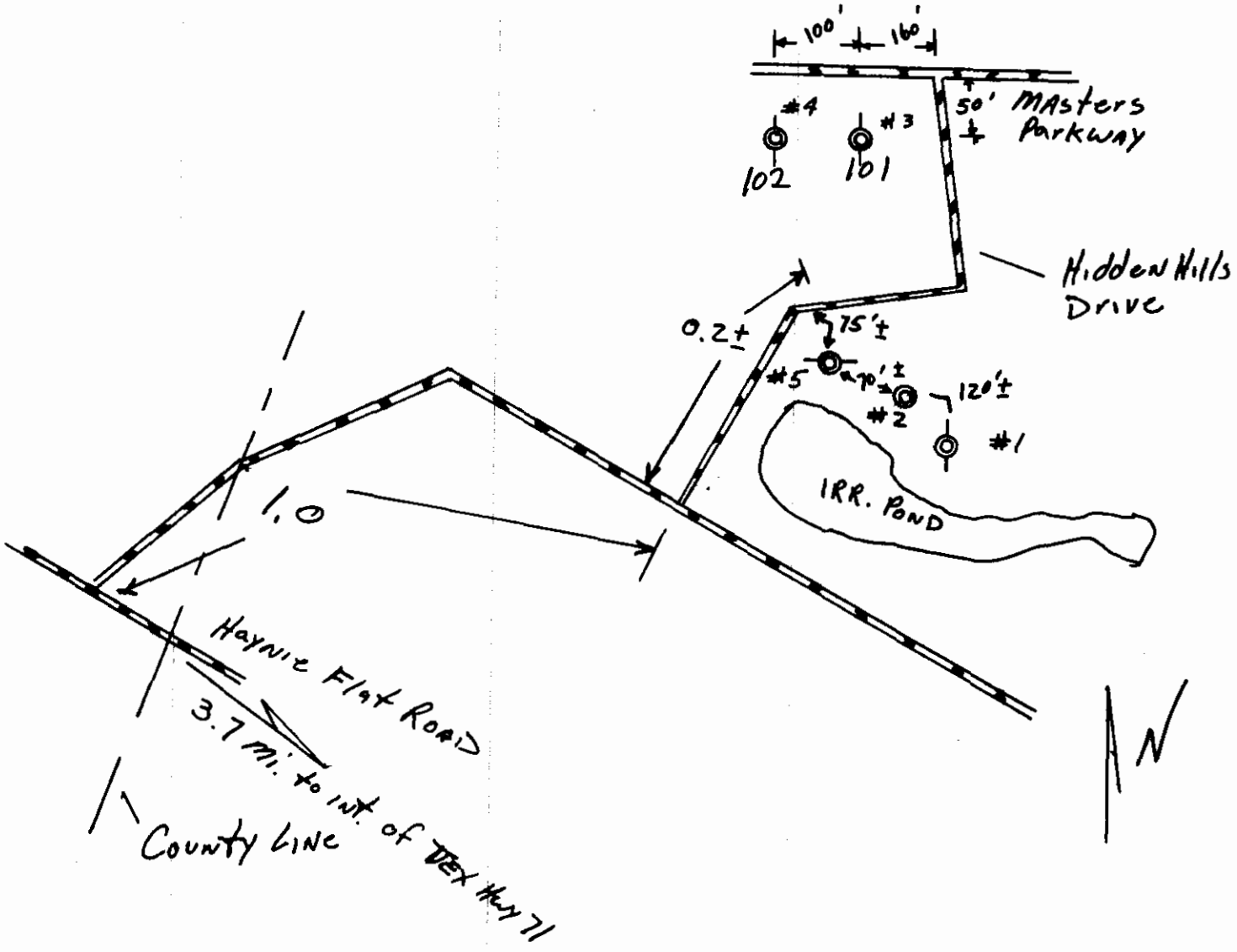
17. Location or Sketch:

| CASING, BLANK PIPE & WELL SCREEN Cemented From 0 ft. to 120 ft. | | | |
|---|---|---|---|
| Diam. (in.) | Type | Setting (feet) from | to |
| 8 5/8 | steel | 0 | 400 |
| " | slotted | 120 | 320 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

TWDB-0308 (Rev. 12-11-85)

W/L Obs. Well ___ W/Q Obs. Well ___

State Well No. 57-40-101


100'
160'
50' ± Masters Parkway
#4
#3
102
101
Hidden Hills Drive
0.2±
75'±
#5
70'±
#2
120'±
#1
IRR. POND
1.0
Haynie Flat Road
3.7 Mi. to int. of Dex Hwy 71
County Line
N

57-40-101

...ink.
...nd ori... by
certified ... the
Texas Department of Water Resources
P. O. Box 13087
Austin, Texas 78711

State of
# WATER WELL REPORT
ATTENTION OWNER: *Confidentiality Privilege Notice on Reverse Side*

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

1) OWNER THE RANCH ASSOCIATES (3) (Name) Address PO BOX 19417 (Street or RFD) JACKSONVILLE (City) FL (State) 32245 (Zip)

2) LOCATION OF WELL:
County TRAVIS 10 miles in NW (N.E., S.W., etc.) direction from LAKEWAY (Town)

Driller must complete the legal description to the right with distance and direction from two intersecting section or survey lines, or he must locate and identify the well on an official Quarter- or Half-Scale Texas County General Highway Map and attach the map to this form.

☐ Legal description:
Section No. _____ Block No. _____ Township _____
Abstract No. _____ Survey Name _____
Distance and direction from two intersecting section or survey lines _____
☒ See attached map.

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

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

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

6) WELL LOG:
Date drilled 10-7-85

| DIAMETER OF HOLE Dia. (in.) | From (ft.) | To (ft.) |
|---|---|---|
| 12¼ | Surface | 400 |
| | | |
| | | |

7) BOREHOLE COMPLETION:
☒ Open Hole ☐ Straight Wall ☐ Underreamed ☐ Gravel Packed ☐ Other _____
If Gravel Packed give interval ... from _____ ft. to _____ ft.

| From (ft.) | To (ft.) | Description and color of formation material |
|---|---|---|
| 0 | 5 | FILL |
| 5 | 10 | CALICHE |
| 10 | 45 | GRAY CLAY & SHALE |
| 45 | 105 | TAN LIMESTONE |
| 105 | 115 | BLUE CLAY |
| 115 | 120 | YELLOW LIMESTONE & SANDSTONE |
| 120 | 175 | GRAY LIMESTONE |
| 175 | 200 | RED CLAY W/ GRAVEL |
| 200 | 225 | GRAVEL |
| 225 | 250 | SAND |
| 250 | 325 | SAND & CLAY |
| 325 | 375 | GRAY SHALE & SAND |
| 375 | 400 | CLAY |

(Use reverse side if necessary)

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

| Dia. (in.) | New or Used | Steel, Plastic, etc. Perf., Slotted, etc. Screen Mgf., if commercial | Setting (ft.) From | Setting (ft.) To | Gage Casing Screen |
|---|---|---|---|---|---|
| 8 5/8 | N | STEEL | 0 | 400 | 40 |
| | | W/ SLOTS | 120 | 320 | |

9) CEMENTING DATA [Rule 319.44(b)]
Cemented from 0 ft. to 120 ft.
_____ ft. to _____ ft.
Method used PRESSURE
Cemented by ADC

10) SURFACE COMPLETION
☒ Specified Surface Slab Installed [Rule 319.44(c)]
☐ Pitless Adapter Used [Rule 319.44(d)]
☐ Approved Alternative Procedure Used [Rule 319.71]

11) WATER LEVEL:
Static level 107 ft. below land surface Date 10-28-85
Artesian flow _____ gpm. Date _____

12) PACKERS:

| Type | Depth |
|---|---|
| BURLAP | 120 |

RECEIVED
NOV 14 1985
TEXAS WATER COMMISSION

13) TYPE PUMP:
☐ Turbine ☐ Jet ☒ Submersible ☐ Cylinder
☐ Other _____
Depth to pump bowls, cylinder, jet, etc., 360 ft.

14) WELL TESTS:
Type Test: ☒ Pump ☐ Bailer ☐ Jetted ☐ Estimated
Yield: 100 gpm with 243 ft. drawdown after 2 hrs.

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

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief. I understand that failure to complete items 1 thru 12 will result in the log(s) being returned for completion and resubmittal.

COMPANY NAME ASSOCIATED DRILLING (Type or Print) Water Well Driller's License No. 1955

ADDRESS 4431 LUCKSINGER LN (Street or RFD) AUSTIN (City) TEXAS (State) 78745 (Zip)

(Signed) Byron Bennett (Licensed Water Well Driller) (Signed) _____ (Registered Driller Trainee)

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

For TDWR use only
Well No. 57-40-488
Located on map YES MAP

TDWR-0392 (12/29/83) DEPARTMENT OF WATER RESOURCES COPY

57-40-451 X

GW 1

TEXAS WATER DEVELOPMENT BOARD

WELL SCHEDULE

Aquifer ~~Kfk~~ Kfk Kpk | Field No. _____ | State Well No. 57-40-406

Owner's Well No. _____ | County Travis

1. Location: ___ 1/4, ___ 1/4 Sec. _____, Block _____ Survey _____

2. Owner: H.E. Naumann Address: Box 513, Marble Falls, Tex.

Tenant: _____ Address: _____

Driller: Central Texas Drlg. Co. Address: Austin, Tex.

3. Elevation of L.S.D. is 840 ft. above msl, determined by 7½ topo

4. Drilled: 9/30 1967; Dug, Cable Tool, (Rotary) 6¼" hole

5. Depth: Rept. 81 ft. Meas. _____ ft.

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

7. Pump: Mfgr. _____ Type _____

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

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

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

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

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

Static Level ___ ft. Pumping Level ___ ft. Drawdown ___ ft.

Production _____ gpm Specific Capacity _____ gpm/ft.

CASING & BLANK PIPE — Cemented From ___ ft. to ___ ft.

| Diam. (in.) | Type | Setting, ft. from | to |
|---|---|---|---|
| 4 | Plastic | 0 | 80 |

11. Water Level: 55 ft. (rept.) meas. 9/30 1967 above (below) L.S.D. which is ___ ft. above below surface.

UTM ft. rept. meas. 2/17 19 71 above (below) well sealed which is ___ ft. above below surface.

_____ ft. rept. meas. _____ 19___ above below _____ which is ___ ft. above below surface.

_____ ft. rept. meas. _____ 19___ above below _____ which is ___ ft. above below surface.

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

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

Temp. 72 °F, Date sampled for analysis 2/17/71 Laboratory TSHD

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

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

WELL SCREEN — Screen Openings _____

| Diam. (in.) | Type | Setting, ft. from | to |
|---|---|---|---|
| 4 | Plastic Perf. | 61 | 80 |

14. Other data available as circled: (Driller's Log), Radioactivity Log, Electric Log, Formation Samples, Pumping Test, D-log See Back

15. Record by: R. Blunteen Date 5/1 1968

Source of Data W.W. Rept.

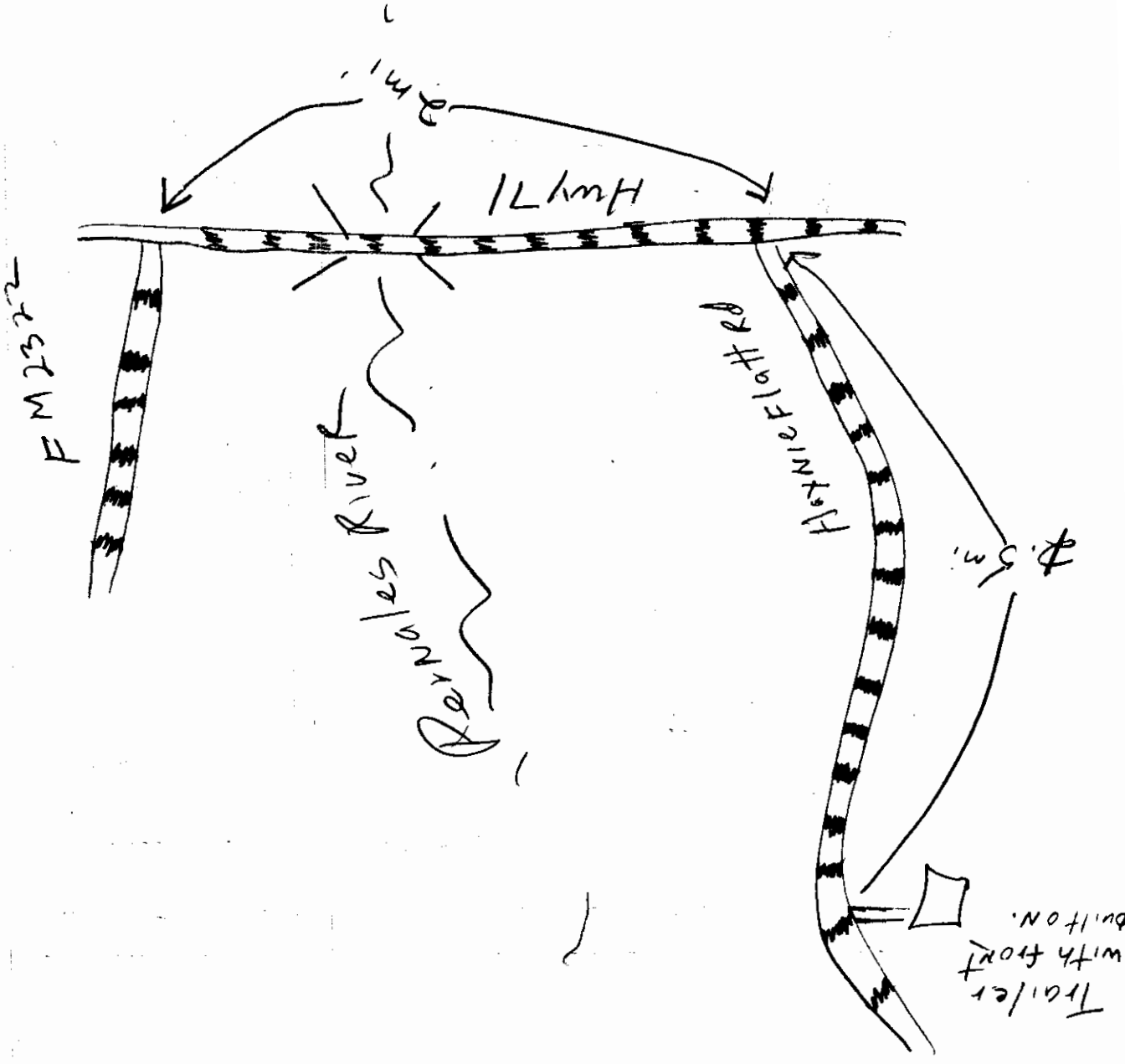
16. Remarks: _____

(Sketch)

57-40-406

14. Drillers log

0-5 Red clay
5-18 Shale
18-26 Red + blue clay
26-40 Shale
40-81 Sandstone



GW 7

Send original copy by certified mail to the Texas Water Development Board P. O. Box 12386 Austin, Texas 78711

State of Texas

# WATER WELL REPORT

For TWDB use only
Well No.
Located on map
Received:
Form GW 8
Form GW 9

1) OWNER:
Person having well drilled H.E. Naumann (Name) Address Box 513 (Street or RFD) Marble Falls (City) Texas (State)

Landowner Same (Name) Address (Street or RFD) (City) (State)

2) LOCATION OF WELL:
County Travis Labor League Abstract No.

NW¼ NE¼ SW¼ SE¼ of Section Block No. Survey
(Circle as many as are known)

miles in (NE, SW, etc.) direction from (Town).

NORTH

Sketch map of well location with distances from adjacent section or survey lines, and to landmarks, roads, and creeks.

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

4) PROPOSED USE (Check):
Domestic ☒ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

5) TYPE OF WELL (Check):
Rotary ☒ Driven ☐ Dug ☐
Cable ☐ Jetted ☐ Bored ☐

6) WELL LOG:
Diameter of hole 6 1/4 in. Depth drilled 81 ft. Depth of completed well 81 ft. Date drilled 9/30/67

All measurements made from 0 ft. above ground level.

| From (ft.) | To (ft.) | Description and color of formation material |
|---|---|---|
| 0 | 5 | Red clay |
| 5 | 18 | Shale |
| 18 | 26 | Red & blue clay |
| 26 | 40 | Shale |
| 40 | 81 | Sand stone |

| From (ft.) | To (ft.) | Description and color of formation material |
|---|---|---|
| | | (Use reverse side if necessary) |

7) COMPLETION (Check):
Straight wall ☐ Gravel packed ☐ Other ☐
Under reamed ☐ Open hole ☐

8) WATER LEVEL:
Static level 55 ft. below land surface Date 9/30/67
Artesian pressure lbs. per square inch Date

9) CASING:
Type: old ☐ New ☐ Steel ☐ Plastic ☒ Other ☐
Cemented from ft. to ft.

| Diameter (inches) | Setting From (ft.) | Setting To (ft.) | Gage |
|---|---|---|---|
| 6" | 0 | 80 | |

10) SCREEN:
Type Plastic
Perforated ☒ Slotted ☐

| Diameter (inches) | Setting From (ft.) | Setting To (ft.) | Slot size |
|---|---|---|---|
| | 61 | 80 | 11/64 |

11) WELL TESTS:
Was a pump test made? ☐ Yes ☐ No If yes by whom?

Yield: gpm with ft. drawdown after hrs

Bailer test gpm with ft. drawdown after hrs

Artesian flow gpm Date

Temperature of water

Was a chemical analysis made? ☐ Yes ☐ No

Did any strata contain undesirable water? ☐ Yes ☐ No

Type of water? depth of strata

12) PUMP DATA:
Manufacturer's Name

Type H.P.

Designed pumping rate gpm ☐ gph ☐

Type power unit

Depth to bowls, cylinder, jet, etc., ft. below land surface.

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

NAME Forrest S. Tatum (Type or Print) Water Well Drillers Registration No. 534

Address P.O. Box 1527 (Street or RFD) Austin (City) Texas (State)

(Signed) Forrest S. Tatum (Water Well Driller) Central Texas Drilling Co. (Company Name)

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

YD57-40-406

TWDBE-GW ONLY

Program No. 7421

Proj. No.

# CHEMICAL WATER ANALYSIS REPORT

Typewrite (Black ribbon) or Print Plainly
(soft pencil or black ink)
Do not use ball point pen

Texas State Department of Health Laboratories
1100 West 49th Street
Austin 5, Texas

Send report to:

Ground Water Division
Texas Water Development Board
P.O. Box 13087
Austin, Texas 78711

County TRAVIS

State Well No. 57-40-406

Well No.

Date Collected 2/17/71

By

Location ON Haynie Flatt Rd 2mi W. of Paleface Park

Source (type of well) Submerg Elec Owner H. E. Newman

Date Drilled 9/30/67 Depth 81 ft. WBF

Producing intervals 80-81 Water level GTM - well sealed ft.

Sampled after pumping 5 min hrs. Yield — GPM meas. est. Temperature 72 °F °C

Point of collection faucet near well Appearance

(clear) - turbid - colored

Use Dom Remarks

---

FOR LABORATORY USE ONLY

KEY PUNCHED

CHEMICAL ANALYSIS

Laboratory No. 131132 W Date Received FEB 19 1971 Date Reported MAR - 4 1971

| | MG/L | ME/L | | MG/L | ME/L |
|---|---|---|---|---|---|
| Silica | 15 | | Carbonate | | 0 |
| Calcium | 68 | 3.39 | Bicarbonate | 198 403 | 6.60 |
| Magnesium | 46 | 3.79 | Sulfate | 40 | 0.83 |
| Sodium | 16 | 0.71 | Chloride | 15 | 0.41 |
| | Total | 7.89 | Fluoride | 0.6 | |
| ☐ Potassium | | | Nitrate | 1.8 | |
| ☐ Manganese | | %Na | pH 7.4 | Total | 7.84 |
| ☐ Boron | | SAR | 1/ Dissolved Solids (sum) | 401 | |
| ☐ Total Iron | | RSC | Phenolphthalein Alkalinity as C $aCO_3$ | 0 | |
| ☐ (other) | | | Total Alkalinity as C $aCO_3$ | (6.60) 330 | |
| Specific Conductance (micromhos/cm3) | 657 | | Total Hardness as C $aCO_3$ | (7.18) 359 | |
| Diluted Conductance (micromhos/cm3) | 5 x 150 | | | | |
| "☐" items will be analyzed if checked. | 750 | | Analyst | | |

Total Iron requires separate sample.

Checked by

1/ The bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

TWDBE-GW-50

TEXAS WATER DEVELOPMENT BOARD

WELL SCHEDULE

Aquifer(s) Hosston Project No. 3216 Field No./Owner's Well No. 1 State Well No. 57-40-407 County Travis

1. Location: ¼, ¼, Section ____, Block ____, Survey ____, Lat. ____, Long. ____
Hidden Hills near Lake Travis off of Haynie Flat Road

2. Owner: The Ranch Associates Address: /
Tenant (other): Barton Creek Lakeside Address: ____
Driller: Associated Drilling Address: Austin

3. Land Surface Elevation: 793 ft. above msl determined by Developers 2Ft Contour Map

4. Drilled: 7-13 19 85; Dug, Cable Tool, Rotary, Air, ____

1] 5. Depth: Rept. 400 ft. Meas. ____ ft.

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

7. Pump: Mfr. ____ Type Sub
No. Stages ____, Bowls Diam. ____ in., Setting 360 ft.
Column Diam. ____ in., Length Tailpipe ____ ft.

8. Motor: Mfr. ____ Fuel ____ HP. ____

9. Yield: Flow ____ gpm, Pump 50 gpm (Meas), Rept., Est. ____ Date 85

10. Performance Test: Date 10-9-85 Length of Test 48 hrs Made by drlr.
Static Level 125 ft. Pumping Level ____ ft. Drawdown 225 ft.
Production 50 gpm Specific Capacity ____ gpm/ft.

11. Quality: (Remarks on taste, odor, color, etc.) ____
Analyses
Date ____ Laboratory ____ TDS ____ Sp Cond ____
Date ____ Laboratory ____ TDS ____ Sp Cond ____

12. Other data available (as circled): Pumping Test, Power & Yield Test, Drillers Log,
Formation Samples, Geophysical Log(s) ____

CASING, BLANK PIPE & WELL SCREEN Cemented From 0 ft. to 125 ft.

| Diam. (In.) | Type | Setting (feet) from | to |
|---|---|---|---|
| 14 | steel | 0 | 6 |
| 8 5/8 | steel | 0 | 400 |
| " | slotted | 120 | 320 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

13. Water Level(s): 125 ft. rept. meas. 10-9 1985 (type) above below CSD which is ____ ft. above below Land Surface
____ ft. rept. meas. ____ 19__ above below ____ which is ____ ft. above below Land Surface

2] 14. Use: Dom., Stock, Public Supply, Ind., Irr., Observation, Other (Test Hole, Oil Test, etc.) Not Used

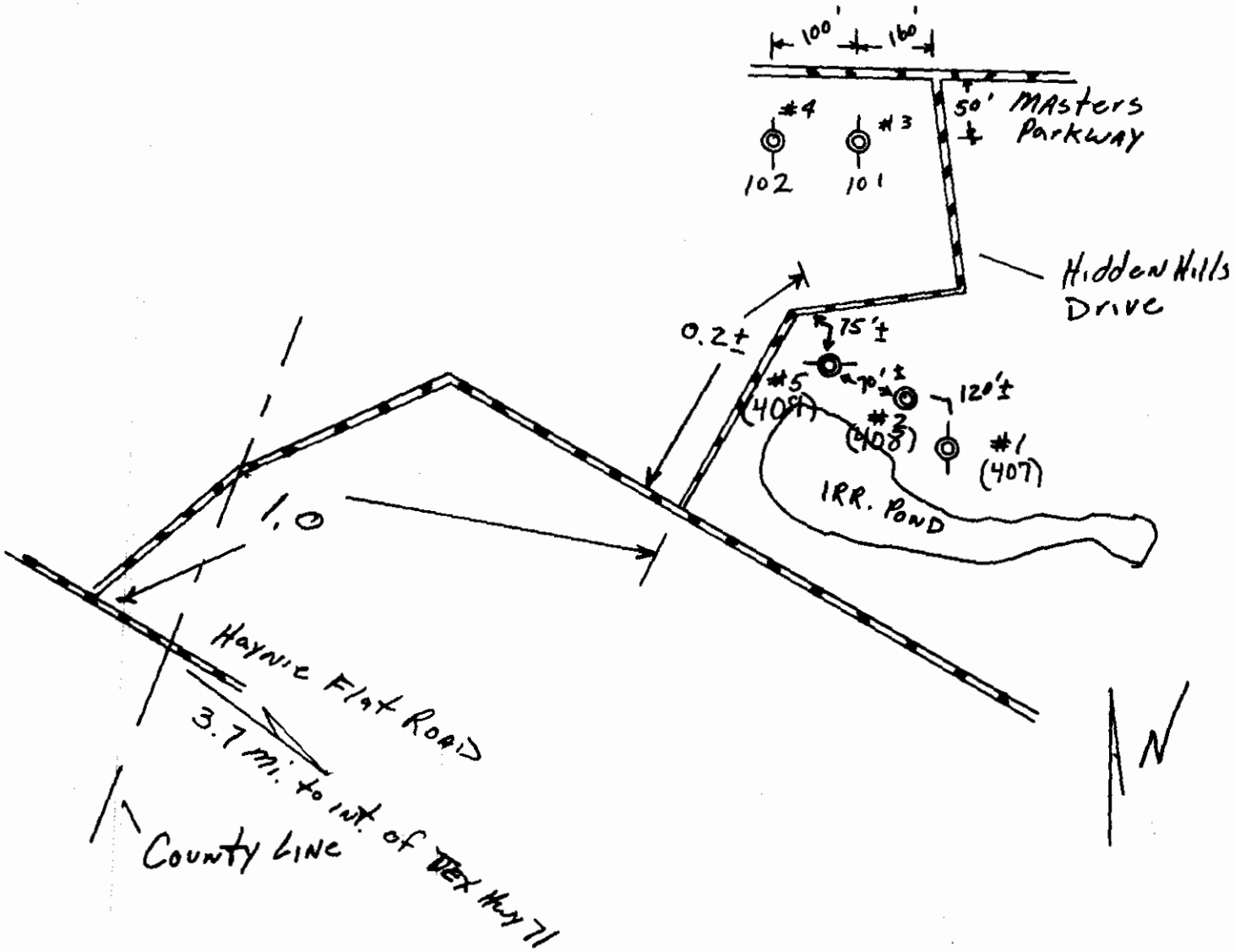
15. Recorded by: J. Derton Source of data: Jim Shaw, Dk. + obs Date: 10-13-87

16. Remarks: 1] originally drilled to 300' deepened to 400' 9-21-85
2] Consultant says well will be plugged. Two other test holes were drilled; location unknown

17. Location or Sketch:

TWDB-0308 (Rev. 12-11-85)

W/L Obs. Well ___ W/Q Obs. Well ___
State Well No. 57-40-407


100'
160'
50' ± Masters Parkway
#4
#3
102
101
Hidden Hills Drive
0.2±
15'±
#5
(406)
#2
(408)
#1
(407)
120'±
IRR. POND
1.0
Haynie Flat Road
3.7 mi. to int. of Hwy 71
County Line
N

57-40-407

Please use pen.
Send original copy by certified mail to the Texas Department of Water Resources P. O. Box 13087 Austin, Texas 78711

# State of Texas
# WATER WELL REPORT

ATTENTION OWNER: *Confidentiality Privilege Notice on Reverse Side*

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

1) OWNER THE RANCH TEST WELL #2 (Name) Address 6120 HWY 290 WEST (Street or RFD) AUSTIN (City) TX (State) 78735 (Zip)

2) LOCATION OF WELL:
County TRAVIS 15 miles in NW (N.E., S.W., etc.) direction from AUSTIN (Town)

Driller must complete the legal description to the right with distance and direction from two intersecting section or survey lines, or he must locate and identify the well on an official Quarter- or Half-Scale Texas County General Highway Map and attach the map to this form.

☐ Legal description:
Section No. ____ Block No. ____ Township ____
Abstract No. ____ Survey Name ____
Distance and direction from two intersecting section or survey lines ____

☒ See attached map. Mason 57-40-4AA

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

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

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

6) WELL LOG:
Date drilled 7-13-85

| DIAMETER OF HOLE | Dia. (in.) | From (ft.) | To (ft.) |
|---|---|---|---|
| | 16 | Surface | 6 |
| | 8¼ | 6 | 300 |

| From (ft.) | To (ft.) | Description and color of formation material |
|---|---|---|
| 0 | 2 | TOPSOIL |
| 2 | 50 | LIMESTONE WITH CLAY |
| 50 | 125 | LIMESTONE CLAY AND FLINT |
| 125 | 175 | FRACTURED LIMESTONE WITH SAND (WATER BEARING STRATA) |
| 175 | 260 | LIMESTONE MIXED WITH CLAY AND SHALE |
| 260 | 280 | BROKEN LIMESTONE (WATER BEARING STRATA) |
| 280 | 300 | LIMESTONE |

RECEIVED
JUL 22 1985
DEPT. OF WATER RESOURCES

(Use reverse side if necessary)

7) BOREHOLE COMPLETION:
☒ Open Hole ☐ Straight Wall ☐ Underreamed
☐ Gravel Packed ☐ Other ____
If Gravel Packed give interval . . . from ____ ft. to ____ ft.

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

| Dia. (in.) | New or Used | Steel, Plastic, etc. Perf., Slotted, etc. Screen Mgf., if commercial | Setting (ft.) From | Setting (ft.) To | Gage Casing | Gage Screen |
|---|---|---|---|---|---|---|
| 14 | N | STEEL | 0 | 6 | 40 | |

9) CEMENTING DATA (Rule 319.44(b))
Cemented from 0 ft. to 6 ft.
____ ft. to ____ ft.
Method used HAND
Cemented by ADC

10) SURFACE COMPLETION
☒ Specified Surface Slab Installed (Rule 319.44(c))
☐ Pitless Adapter Used (Rule 319.44(d))
☐ Approved Alternative Procedure Used (Rule 319.71)

11) WATER LEVEL:
Static level 110 ft. below land surface Date 7-13-85
Artesian flow ____ gpm. Date ____

12) PACKERS:

| Type | Depth |
|---|---|
| BURLAP | 6' |

13) TYPE PUMP:
☐ Turbine ☐ Jet ☒ Submersible ☐ Cylinder
☐ Other ____
Depth to pump bowls, cylinder, jet, etc., 185 ft.

14) WELL TESTS:
Type Test: ☒ Pump ☐ Bailer ☐ Jetted ☐ Estimated
Yield: 50 gpm with 75 ft. drawdown after 1 hrs.

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

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief. I understand that failure to complete items 1 thru 12 will result in the log(s) being returned for completion and resubmittal.

COMPANY NAME ASSOCIATED DRILLING CO (Type or Print) Water Well Driller's License No. 1955

ADDRESS 4431 LUCKSINGER LN (Street or RFD) AUSTIN (City) TEXAS (State) 78745 (Zip)

(Signed) Byron Bennett (Licensed Water Well Driller) (Signed) ____ (Registered Driller Trainee)

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

For TDWR use only
Well No. 57-40-4AA
Located on map YBSS-F-S

TDWR-0392 (12/28/83)

DEPARTMENT OF WATER RESOURCES COPY

57-40-407

Please type or print in ink.
Send original copy by certified mail to the
Texas Department of Water Resources
P. O. Box 13087
Austin, Texas 78711

State of Texas

# WATER WELL REPORT

ATTENTION OWNER: *Confidentiality Privilege Notice on Reverse Side*

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

1) OWNER THE RANCH ASSOCIATES (2) (Name) Address PO BOX 19417 (Street or RFD) JACKSONVILLE (City) FL (State) 32245 (Zip)

2) LOCATION OF WELL: County TRAVIS 10 miles in NW (N.E., S.W., etc.) direction from LAKEWAY (Town)

Driller must complete the legal description to the right with distance and direction from two intersecting section or survey lines, or he must locate and identify the well on an official Quarter- or Half-Scale Texas County General Highway Map and attach the map to this form.

☐ Legal description:
Section No. _____ Block No. _____ Township _____
Abstract No. _____ Survey Name _____
Distance and direction from two intersecting section or survey lines _____

☒ See attached map.

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

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

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

6) WELL LOG:

| DIAMETER OF HOLE Dia. (in.) | From (ft.) | To (ft.) |
|---|---|---|
| 12¼ | Surface | 400 |
| | | |
| | | |

Date drilled 10-4-85

| From (ft.) | To (ft.) | Description and color of formation material |
|---|---|---|
| 0 | 60 | CALICHE |
| 60 | 85 | GRAY SHALE/CLAY |
| 85 | 100 | TAN CLAY & SAND |
| 100 | 112 | BLUE CLAY |
| 112 | 120 | RED CLAY |
| 120 | 175 | BROWN CLAY AND SAND W/ PEA GRAVEL |
| 175 | 205 | TAN LIMESTONE |
| 205 | 245 | YELLOW-TAN PEA GRAVEL |
| 245 | 300 | BLUE CLAY AND SHALE |
| 300 | 400 | GRAY LIMESTONE |

(Use reverse side if necessary)

7) BOREHOLE COMPLETION:
☒ Open Hole ☐ Straight Wall ☐ Underreamed
☐ Gravel Packed ☐ Other _____
If Gravel Packed give interval . . . from _____ ft. to _____ ft.

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

| Dia. (in.) | New or Used | Steel, Plastic, etc. Perf., Slotted, etc. Screen Mgf., if commercial | Setting (ft.) From | Setting (ft.) To | Gage Casing Screen |
|---|---|---|---|---|---|
| 8⅝ | N | STEEL | 0 | 235 | 40 |
| | | | | | |
| | | W/ SLOTS | 125 | 235 | |
| | | | | | |

9) CEMENTING DATA [Rule 319.44(b)]
Cemented from 0 ft. to 120 ft.
_____ ft. to _____ ft.
Method used PRESSURE
Cemented by ADC

10) SURFACE COMPLETION
☒ Specified Surface Slab Installed [Rule 319.44(c)]
☐ Pitless Adapter Used [Rule 319.44(d)]
☐ Approved Alternative Procedure Used [Rule 319.71]

11) WATER LEVEL:
Static level 130 ft. below land surface Date 10-11-85
Artesian flow _____ gpm. Date _____

12) PACKERS: Type BURLAP Depth 120

13) TYPE PUMP:
☐ Turbine ☐ Jet ☒ Submersible ☐ Cylinder
☐ Other _____
Depth to pump bowls, cylinder, jet, etc., 240 ft.

14) WELL TESTS:
Type Test: ☒ Pump ☐ Bailer ☐ Jetted ☐ Estimated
Yield: 250 gpm with 45 ft. drawdown after 48 hrs.

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

RECEIVED
NOV 14 1985
TEXAS WATER COMMISSION

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief. I understand that failure to complete items 1 thru 12 will result in the log(s) being returned for completion and resubmittal.

COMPANY NAME ASSOCIATED DRILLING (Type or Print) Water Well Driller's License No. 1955

ADDRESS 4431 LUCKSINGER LN (Street or RFD) AUSTIN (City) TEXAS (State) 78745 (Zip)

(Signed) Byron Blount (Licensed Water Well Driller) (Signed) _____ (Registered Driller Trainee)

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

For TDWR use only
Well No. 57-40-408
Located on map YES MAC

TDWR-0392 (12/29/83)

DEPARTMENT OF WATER RESOURCES COPY

57-40-407 X

G·M SERVICES

# PERFORMANCE TEST REPORT

| | | | |
|---|---|---|---|
| Facility: | Barton Creek – Lakeside | Date: | 8/5/93 |
| Location: | Well #2 407 | | |

**WELL PUMP DATA**

| | | | |
|---|---|---|---|
| Manufacturer: | Goulds | Serial #: | N/A |
| Bowl Type: | 275–H | Stages: | N/A |
| Column Size: | 4" | Setting: | 241 feet |
| Design Point: | N/A | | |

**MOTOR DATA**

| | | | |
|---|---|---|---|
| Manufacturer: | Franklin | Serial #: | N/A |
| Horsepower: | 30 | Frame: | N/A |
| Amps/Volts: | N/A | RPM: | 3450 |

## PERFORMANCE TEST DATA

| | |
|---|---|
| Static Level (ft) | 119 |
| 10 Min Static | |
| Operating Pressure | 4 |
| Capacity (GPM) | 99 |
| Pumping Level (ft) | 184 |
| Drawdown (ft) | 65 |
| Specific Capacity | 1.5 |
| Field Head (ft) | 193 |
| Water Horsepower | 4.8 |
| Overall Eff. | 24.89% |
| Horsepower Input | 19.4 |
| Kilowatt Input | 14.5 |
| Amp Draw | 20–25–21 |
| Actual Shaft Speed (RPM) | N/A |
| Sand (PPM) | < 1 |
| Time (min) | 60 |

## ADDITIONAL DATA

| | | | |
|---|---|---|---|
| Pump Submergence (ft) | 57 | Meter Accuracy | 103.0% |
| KWH/Million Gallons | 2441 | HP Utilization | 58.9% |
| Start–up Sand (PPM) | < 1 | Airline Functional | N/A |

Remarks: Flowmeter registers 102 GPM at 4 PSI discharge pressure.

57-40-407

P.O. BOX 690309 HOUSTON, TEXAS 77269-0309 TELEPHONE (713) 894-8971

TEXAS WATER DEVELOPMENT BOARD

WELL SCHEDULE

Aquifer(s) Hosston Project No. 3216 State Well No. 57-40-409

Field No./Owner's Well No. 5 County Travis

1. Location: ___ ¼, ___ ¼, Section ___, Block ___, Survey ___, Lat. ___, Long. ___
Hidden Valley near Lake Travis off of Haynie Flat Road
Barton Creek Lakeside

2. Owner: The Ranch Associates Address: ___

Tenant (other): ___ Address: ___

Driller: Associated Drilling Address: ___

3. Land Surface Elevation: 786 ft. above msl determined by Developers' 2 Ft contour MAP

4. Drilled: 6-12 19 86; Dug, Cable Tool, Rotary, Air

5. Depth: Rept. 400 ft. Meas. ___ ft.

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

7. Pump: Mfr. ___ Type Sub

No. Stages ___, Bowls Diam. ___ in., Setting 336 ft.

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

8. Motor: Mfr. ___ Fuel Elec HP. ___

9. Yield: Flow ___ gpm, Pump 200 gpm, Meas., Rept., Est. ___ Date 86

10. Performance Test: Date 6-12-86 Length of Test 36 hrs Made by drlr

Static Level 130 ft. Pumping Level ___ ft. Drawdown 45 ft.

Production 200 gpm Specific Capacity ___ gpm/ft.

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

Analyses

Date ___ Laboratory ___ TDS ___ Sp Cond ___

Date ___ Laboratory ___ TDS ___ Sp Cond ___

12. Other data available (as circled): Pumping Test, Power & Yield Test, Drillers Log,

Formation Samples, Geophysical Log(s) ___

CASING, BLANK PIPE & WELL SCREEN
Cemented From 0 ft. to 120 ft.

| Diam. (in.) | Type | Setting (feet) from | to |
|---|---|---|---|
| 8 5/8 | steel | 0 | 400 |
| " | slotted | 125 | 400 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

13. Water Level(s): 130 ft. rept/meas. 6-12 1986 (type) above/below ___ which is ___ ft. above/below Land Surface

117.50 ft. rept/meas. 10-1 1987 above/below Hole mpsp which is 2 ft. above/below Land Surface

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

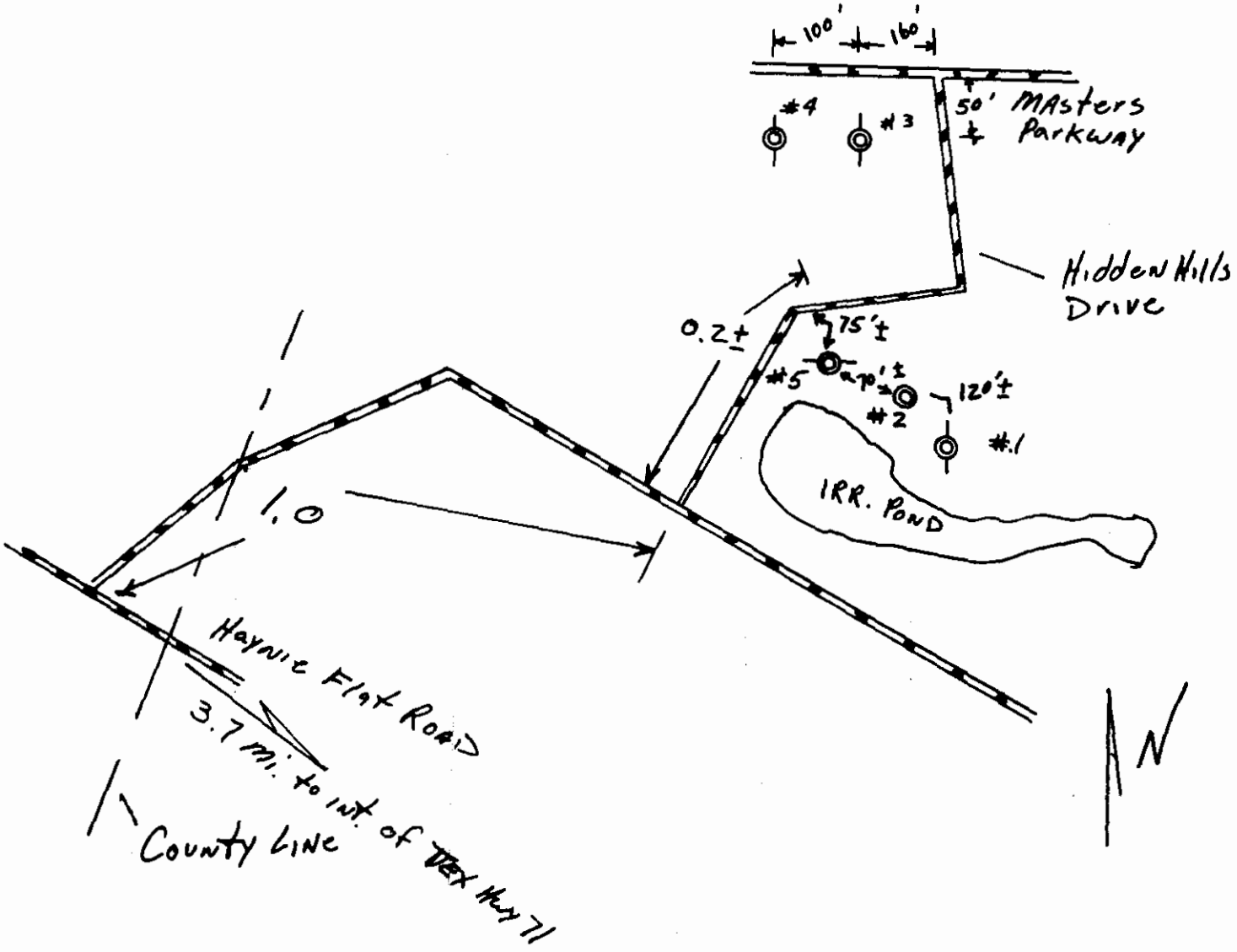
15. Recorded by: J. Derton Source of data: ___ Date: ___

16. Remarks: The development plans on going to surface water when the subdivision gets larger.

17. Location or Sketch:

TWDB-0308 (Rev. 12-11-85)

W/L Obs. Well ___ W/Q Obs. Well ___
State Well No. 57-40-409


100'
160'
50' Masters Parkway
#4
#3
Hidden Hills Drive
0.2±
75'±
#5
#2
120'±
#1
IRR. POND
1.0
Haynie Flat Road
3.7 mi. to int. of Tex Hwy 71
County Line
N

57-40-409

Please use this form. Send original by certified mail to the Texas Department of Water Resources P. O. Box 13087 Austin, Texas 78711

# State of Texas
# WATER WELL REPORT

ATTENTION OWNER: *Confidentiality Privilege Notice on Reverse Side*

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

1) OWNER THE RANCH ASSOCIATES (5) (Name) Address P.O. BOX 19417 (Street or RFD) JACKSONVILLE (City) FL (State) 32245 (Zip)

2) LOCATION OF WELL:
County TRAVIS 10 miles in WNW (N.E., S.W., etc.) direction from LAKEWAY (Town)
Hwy 71 Flat

Driller must complete the legal description to the right with distance and direction from two intersecting section or survey lines, or he must locate and identify the well on an official Quarter- or Half-Scale Texas County General Highway Map and attach the map to this form.

☐ Legal description:
Section No. _____ Block No. _____ Township _____
Abstract No. _____ Survey Name _____
Distance and direction from two intersecting section or survey lines _____

☒ See attached map.

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

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

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

6) WELL LOG:

DIAMETER OF HOLE

| Dia. (in.) | From (ft.) | To (ft.) |
|---|---|---|
| 12¼ | Surface | 400 |
| | | |
| | | |

Date drilled 6-12-86

| From (ft.) | To (ft.) | Description and color of formation material |
|---|---|---|
| 0 | 60 | CALICHE |
| 60 | 85 | GRAY SHALE/CLAY |
| 85 | 100 | TAN CLAY & SAND |
| 100 | 112 | BLUE CLAY |
| 112 | 120 | RED CLAY |
| 120 | 175 | BROWN CLAY & SAND W/ PEA GRAVEL |
| 175 | 205 | TAN LIMESTONE |
| 205 | 245 | YELLOW-TAN PEA GRAVEL |
| 245 | 300 | BLUE CLAY AND SHALE |
| 300 | 400 | GRAY LIMESTONE |

APR 2 3 87
Water Commission

(Use reverse side if necessary)

7) BOREHOLE COMPLETION:
☒ Open Hole ☐ Straight Wall ☐ Underreamed
☐ Gravel Packed ☐ Other _____
If Gravel Packed give interval . . . from _____ ft. to _____ ft.

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

| Dia. (in.) | New or Used | Steel, Plastic, etc. Perf., Slotted, etc. Screen Mgf., if commercial | Setting (ft.) From | Setting (ft.) To | Gage Casing Screen |
|---|---|---|---|---|---|
| 8 5/8 | N | STEEL | 0 | 400 | 40 |
| | | | | | |
| | | W/ SLOTS | 125 | 400 | |

9) CEMENTING DATA (Rule 319.44(b))
Cemented from 0 ft. to -120 ft.
_____ ft. to _____ ft.
Method used PRESSURE
Cemented by A.D.C.

10) SURFACE COMPLETION
☒ Specified Surface Slab Installed (Rule 319.44(c))
☐ Pitless Adapter Used (Rule 319.44(d))
☐ Approved Alternative Procedure Used (Rule 319.71)

11) WATER LEVEL:
Static level 130 ft. below land surface Date 6-12-86
Artesian flow _____ gpm. Date _____

12) PACKERS: Type BURLAP Depth 120

13) TYPE PUMP:
☐ Turbine ☐ Jet ☒ Submersible ☐ Cylinder
☐ Other _____
Depth to pump bowls, cylinder, jet, etc., 336 ft.

14) WELL TESTS:
Type Test: ☒ Pump ☐ Bailer ☐ Jetted ☐ Estimated
Yield: 200 gpm with 45 ft. drawdown after 36 hrs.

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

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief. I understand that failure to complete items 1 thru 12 will result in the log(s) being returned for completion and resubmittal.

COMPANY NAME ASSOCIATED DRILLING (Type or Print) Water Well Driller's License No. 1955

ADDRESS 4431 LUCKSINGER LN. (Street or RFD) AUSTIN (City) TEXAS (State) 78745 (Zip)

(Signed) _____ (Licensed Water Well Driller) (Signed) _____ (Registered Driller Trainee)

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

For TDWR use only
Well No. 57-40-4
Located on map _____

TDWR-0392 (12/29/83) DEPARTMENT OF WATER RESOURCES COPY

57-40-409X

G-M SERVICES

# PERFORMANCE TEST REPORT

| | | | |
|---|---|---|---|
| Facility: | Barton Creek – Lakeside | Date: | 8/5/93 |
| Location: | Well #5 409 | | |

**WELL PUMP DATA**

| | | | |
|---|---|---|---|
| Manufacturer: | Goulds | Serial #: | N/A |
| Bowl Type: | 425–S | Stages: | N/A |
| Column Size: | N/A | Setting: | 336 feet |
| Design Point: | N/A | | |

**MOTOR DATA**

| | | | |
|---|---|---|---|
| Manufacturer: | Franklin | Serial #: | N/A |
| Horsepower: | 20 | Frame: | N/A |
| Amps/Volts: | N/A | RPM: | 3450 |

**PERFORMANCE TEST DATA**

| | |
|---|---|
| Static Level (ft) | 114 |
| 10 Min Static | 115 |
| Operating Pressure | 4 |
| Capacity (GPM) | 134 |
| Pumping Level (ft) | 181 |
| Drawdown (ft) | 67 |
| Specific Capacity | 2.0 |
| Field Head (ft) | 190 |
| Water Horsepower | 6.4 |
| Overall Eff. | 29.50% |
| Horsepower Input | 21.8 |
| Kilowatt Input | 16.3 |
| Amp Draw | 22–28–22 |
| Actual Shaft Speed (RPM) | N/A |
| Sand (PPM) | < 3 |
| Time (min) | 60 |

**ADDITIONAL DATA**

| | | | |
|---|---|---|---|
| Pump Submergence (ft) | 155 | Meter Accuracy | 96.3% |
| KWH/Million Gallons | 2027 | HP Utilization | 99.4% |
| Start–up Sand (PPM) | < 3 | Airline Functional | N/A |

Remarks: Flowmeter registers 129 GPM at 4 PSI discharge pressure.
Small brass shavings detected in water.

57-40-409

P.O. BOX 690309 HOUSTON, TEXAS 77269-0309 TELEPHONE (713) 894-8971

# TEXAS WATER DEVELOPMENT BOARD

## WELL SCHEDULE

State Well No. 57 40 410 (10–17) Previous Well No. (19–26) County Travis (28–30) 453

River Basin Colorado 14 (32–33) Zone 3 (35) Lat. 32 26 14 (37–42) Long. 098 05 32 (44–52) Source of Coord. I

Owner's Well No. #2 Location ____ 1/4, ____ 1/4, Section ____, Block ____, Survey ____

Owner: Paleface Pedernales Water Supply Corp. (10–31)

Address: Rt.2 Box 15X Spicewood, Tx. 78669

Driller: Highland Drilling Inc. (33–52)

Address: Rt. 1 Box 40-A Tow, Tx. 78672

Tenant ____ Address ____

Date Drilled 09 07 1984 (10–17) Depth 170 (19–23) Source of Depth Datum D (25) Altitude 768 (27–30) Source of Alt. Datum M (32)

Aquifer Hosston (Khoss) 217HSTN (34–41) Well Type W (43) User 6398ID (45–53)

Well Construction: Const. Method Air Rotary A (55) Casing Material PVC P (57)

Screen Material PVC P (59) Completion Slotted D (61)

Lift Data: Pump Mfr. ____ Type Subm S (63) No. Stages ____

Bowls Diam. ____ in. Setting ____ ft. Column Diam. ____ in. Length Tailpipe ____ ft.

Motor Mfr. ____ Fuel or Power Elec E (65) Horsepower ____ (67–73)

Yield: Flow ____ GPM Pump 15 GPM Meas., Rept., Est. ____ Date ____

Performance Test: Date ____ Length of Test ____ Production ____ GPM

Static Level 105 ft. Pumping Level ____ ft. Drawdown ____ ft. Sp. Cap. ____ GPM/ft.

Quality (Remarks on Taste, Odor, Color, Etc.) ____

Water Use: Primary Use Unused U (10) Secondary Use ____ (12) Tertiary Use ____ (14)

Other Data Available: Water Level M (16) Water Quality W (18) Logs ____ (20–25) Other Data ____ (27–31)

Water Levels: Date 09 07 1984 Meas. 105.00 ft. (+) Above (–) Below Landsurface

Date ____ Meas. ____ ft. (+) Above (–) Below Landsurface

Casing or Blank Pipe (C)
Well Screen or Slotted Zone (S)
Open Hole (O)
Cemented from 0 to 20

| | Diam. (in.) | From | To | |
|---|---|---|---|---|
| 10–23 | C 05 | 0 | 150 | 23 |
| 26–39 | S 05 | 150 | 170 | 39 |
| 42–55 | | | | 55 |
| 58–71 | | | | 71 |
| 10–23 | | | | 23 |
| 26–39 | | | | 39 |
| 42–55 | | | | 55 |
| 58–71 | | | | 71 |
| 10–23 | | | | 23 |
| 26–39 | | | | 39 |
| 42–55 | | | | 55 |
| 58–71 | | | | 71 |
| 10–23 | | | | 23 |
| 26–39 | | | | 39 |
| 42–55 | | | | 55 |
| 58–71 | | | | 71 |

Recorded By F. Bilberry Date Record Collected or Updated 12 20 1989 (33–40) Reporting Agency 01 (42–43)

Remarks: Abandoned. public supply well.

Well Schedule In TWDB File Y (45)

Aquifer Hosston

Well No. 57-40-410

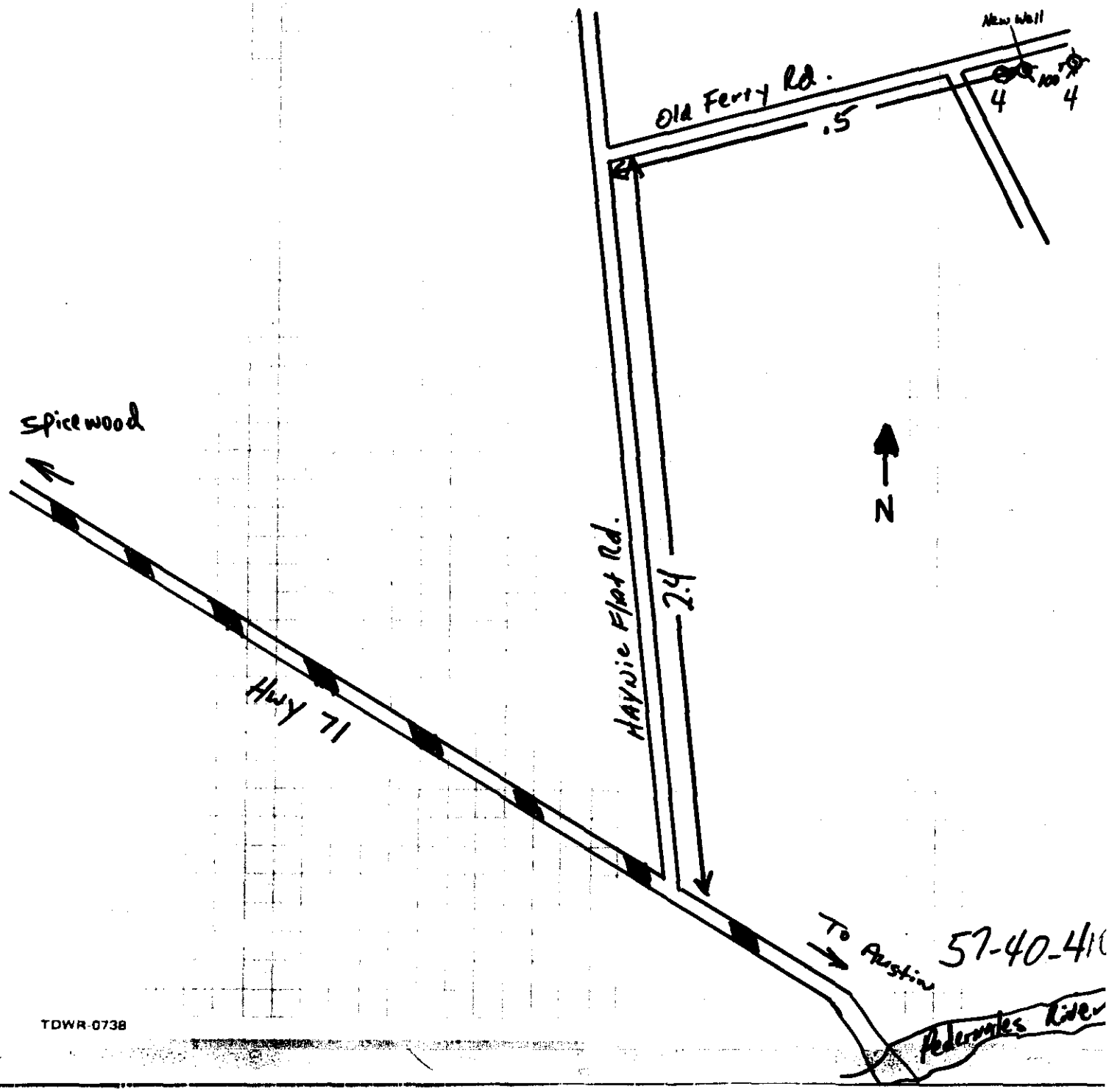
TWDB-0409 (02-26-88)

TEXAS DEPARTMENT OF WATER RESOURCES

BY_____ DATE_____ DIVISION _____ SHEET NO._____ OF_____

CHKD_____ DATE_____ JOB NAME _____

_____ JOB NO._____ PROG. CODE_____




TDWR-0738

...ginal copy by
...d mail to the
... Department of Water Resources
... Box 13087
...stin, Texas 78711

State of ...xas
# WATER WELL REPORT
ATTENTION OWNER: *Confidentiality Privilege Notice on Reverse Side*

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

1) OWNER Pale Face Pedernales Water Supply Corp. Address R1.2 Box 15x Spicewood (Street or RFD) (City) Texas (State) 78669 (Zip)

2) LOCATION OF WELL: County Burnet County TRAVIS ... miles in ... (N.E., S.W., etc.) direction from ... (Town)

Driller must complete the legal description to the right with distance and direction from two intersecting section or survey lines, or he must locate and identify the well on an official Quarter- or Half-Scale Texas County General Highway Map and attach the map to this form.

☐ Legal description:
Section No. ... Block No. ... Township ...
Abstract No. ... Survey Name ...
Distance and direction from two intersecting section or survey lines ...
☒ See attached map. Mapco 57-30-288

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

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

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

6) WELL LOG:

Date drilled 9-7-84

| DIAMETER OF HOLE Dia. (in.) | From (ft.) | To (ft.) |
|---|---|---|
| 6¾ | Surface | 170' |

7) BOREHOLE COMPLETION: ☐ Open Hole ☐ Straight Wall ☐ Underreamed ☐ Gravel Packed ☐ Other ...
If Gravel Packed give interval ... from ... ft. to ... ft.

| From (ft.) | To (ft.) | Description and color of formation material |
|---|---|---|
| 0' | 40' | Lime Stone |
| 40' | 155' | Red Shell |
| 155' | 170' | Sand + Gravel |

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

| Dia. (in.) | New or Used | Steel, Plastic, etc. Perf., Slotted, etc. Screen Mgf., if commercial | Setting (ft.) From | Setting (ft.) To | Gage Casing Screen |
|---|---|---|---|---|---|
| 5" | New | P.V.C. | Plain | 0' | 150' |
| 5" | New | P.V.C. | Slotted | 150' | 170' |

CEMENTING DATA
Cemented from 0' ft. to 20' ft.
Method used Slurry
Cemented by C.W. Bohannon (Company or Individual)

9) WATER LEVEL:
Static level 105 ft. below land surface Date 9-7-84
Artesian flow ... gpm. Date ...

10) PACKERS: Type ... Depth ...

RECEIVED
SEP 11 1984
DEPT. OF WATER RESOURCES

(Use reverse side if necessary)

11) TYPE PUMP: ☐ Turbine ☐ Jet ☐ Submersible ☐ Cylinder ☐ Other ...
Depth to pump bowls, cylinder, jet, etc., ... ft.

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

12) WELL TESTS: ☐ Type Test: ☐ Pump ☐ Bailer ☐ Jetted ☐ Estimated
Yield: 15 gpm with ... ft. drawdown after ... hrs.

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

COMPANY NAME Highland Drilling Inc (Type or Print) Water Well Driller's License No. #2400

ADDRESS R.1. Box Ho-A (Street or RFD) Tow (City) Texas (State) 78672 (Zip)

(Signed) Clarence W Bohannon (Licensed Water Well Driller) (Signed) ... (Registered Driller Trainee)

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

For TDWR use only
Well No 57-39-36
Located on map Y.E.S.C.F.B.

TDWR 0392 (Rev. 5-27-82) DEPARTMENT OF WATER RESOURCES COPY

57-40 410

# Texas Water Development Board
## Well Schedule

State Well No. 57 40 413 Previous Well No. _____ County Travis 453

River Basin Colorado 14 Zone 3 Lat. 30 25 33 Long. 098 05 42 Source of Coord. 1

Owner's Well No. #1 Location ____ 1/4, ____ 1.4, Section ____, Block ____, Survey ____

Owner Paleface Lake Country Estates Driller McDonald

Address Rt 2 Box 17 T Spicewood Tx 78669 Tenant/Oper. Mrs. Newhart

Date Drilled 01 01 1964 Depth 180 Source of Depth Datum 0 Altitude 785 Source of Alt. Datum m

Aquifer Hosston 217HSTN Well Type W User 639805

**Well Construction** Const. Method _____ Casing Material Steel 5

Completion _____ Screen Material _____

Lift Data Pump Mfr. _____ Type Subm. S No. Stages ____

Bowls Diam. ____ in. Setting ____ ft. Column Diam. ____ in.

Motor Mfr. _____ Fuel or Power Elect E Horsepower 1.50

Yield Flow ____ GPM Pump ____ GPM Meas.,Rept.,Est. ____ Date ____

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 Public P Secondary _____ Tertiary _____

Other Data Available: Water Level ☐ Water Quality ☐ Logs ☐ Other Data ☐

Water Levels: Date ____ Meas. ____ • ____ ____

Date ____ Meas. ____ • ____ ____

Date ____ Meas. ____ • ____ ____

Casing or Blank Pipe (C)
Well Screen or Slotted Zone (S)
Open Hole (O)
Cemented from ___ to ___

| | Diam. (in.) | From | To |
|---|---|---|---|
| 1 | C 06 | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| 11 | | | |
| 12 | | | |
| 13 | | | |
| 14 | | | |
| 15 | | | |
| 16 | | | |

(20 max)

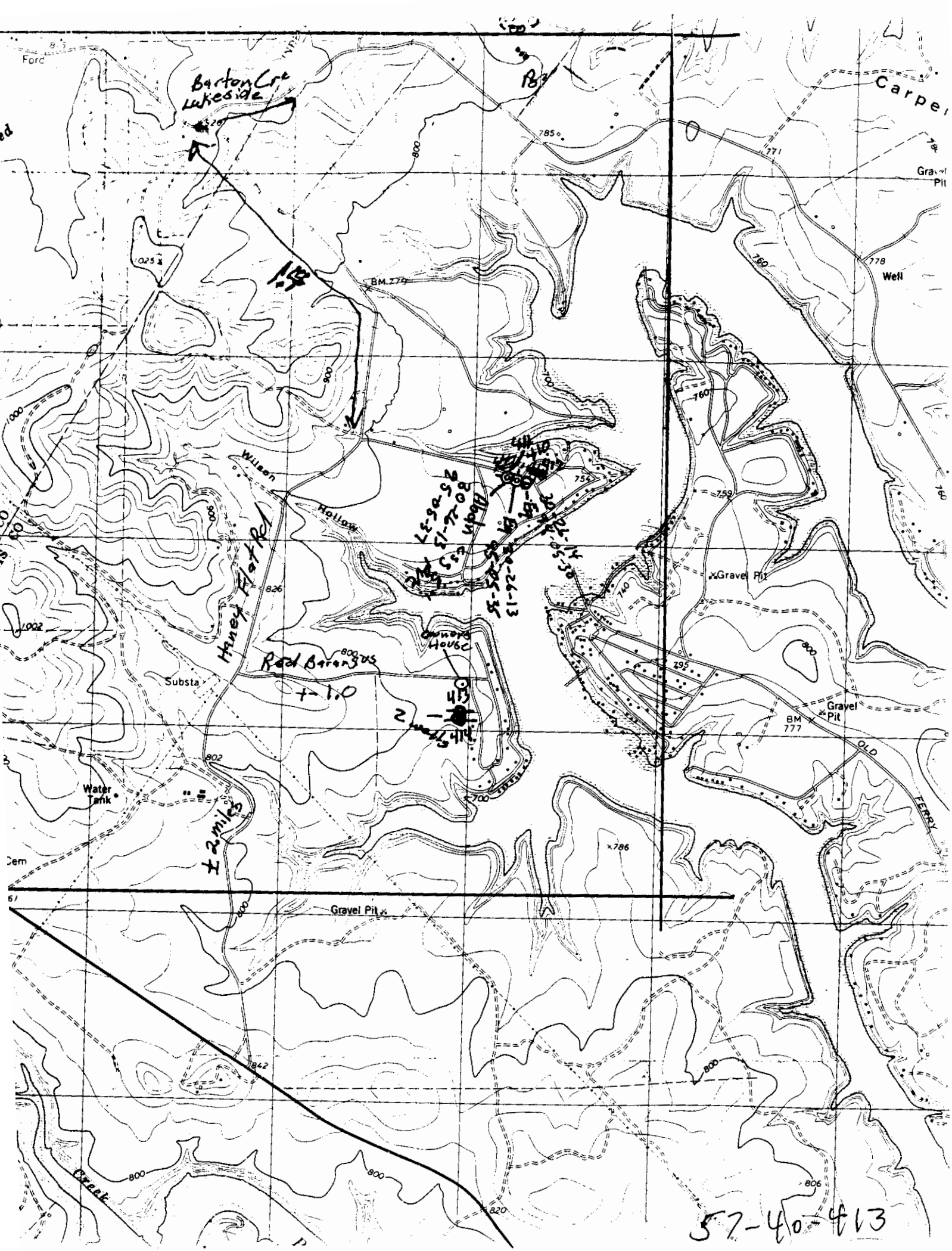
Recorded By Ron Mohr Date Record Collected or Updated 07 26 1994 Reporting Agency 01

Remarks: Reported yield 11 gpm

Aquifer Hosston

Well No. 57-40-413

93-0384
2/9/93


Barton Cr
Lakeside
Carpe
Gravel Pit
Well
BM 779
Wilson
Hollow
Hanel Flatrd
Gravel Pit
Red Barn
Substa
Water Tank
± 2 miles
Gravel Pit
OLD
FERRY
Creek
57-40-413

# Texas Water Development Board
## Well Schedule

State Well No. 57 40 414 Previous Well No. _____ County Travis 453

River Basin Colorado 14 Zone 3 Lat. 30 25 34 Long. 098 05 43 Source of Coord. 1

Owner's Well No. #2 Location ____ 1/4, ____ 1/4, Section ____, Block ____, Survey ____

Owner Paleface Lake Country Estates

Driller McDonald

Address Rt 2 Box 177 Spicewood, Tx 78669 Tenant/Oper. _____

Date Drilled 1978 Depth 222 Source of Depth Datum A Altitude 785 Source of Alt. Datum M

Aquifer Hosston 21 7N 5W Well Type W User 63905

**Well Construction**

Const. Method _____ Casing Material PVC P

Completion _____ Screen Material _____

Lift Data Pump Mfr. _____ Type Sub S No. Stages ____

Bowls Diam. ____ in. Setting ____ ft. Column Diam. ____ in.

Motor Mfr. _____ Fuel or Power Elec E Horsepower 1.50

Yield Flow ____ GPM Pump ____ GPM Meas., Rept., Est. ____ Date ____

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 Public P Secondary _____ Tertiary _____

Other Data Available: Water Level N, Water Quality N, Logs _____, Other Data _____

Water Levels: Date ____ Meas. ____ • ____ ; Date ____ Meas. ____ • ____ ; Date ____ Meas. ____ • ____

Casing or Blank Pipe (C)
Well Screen or Slotted Zone (S)
Open Hole (O)
Cemented from ___ to ___

| | Diam. (in.) | From | To | Setting (feet) |
|---|---|---|---|---|
| 1 | C 04 | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |
| 15 | | | | |
| 16 | | | | |

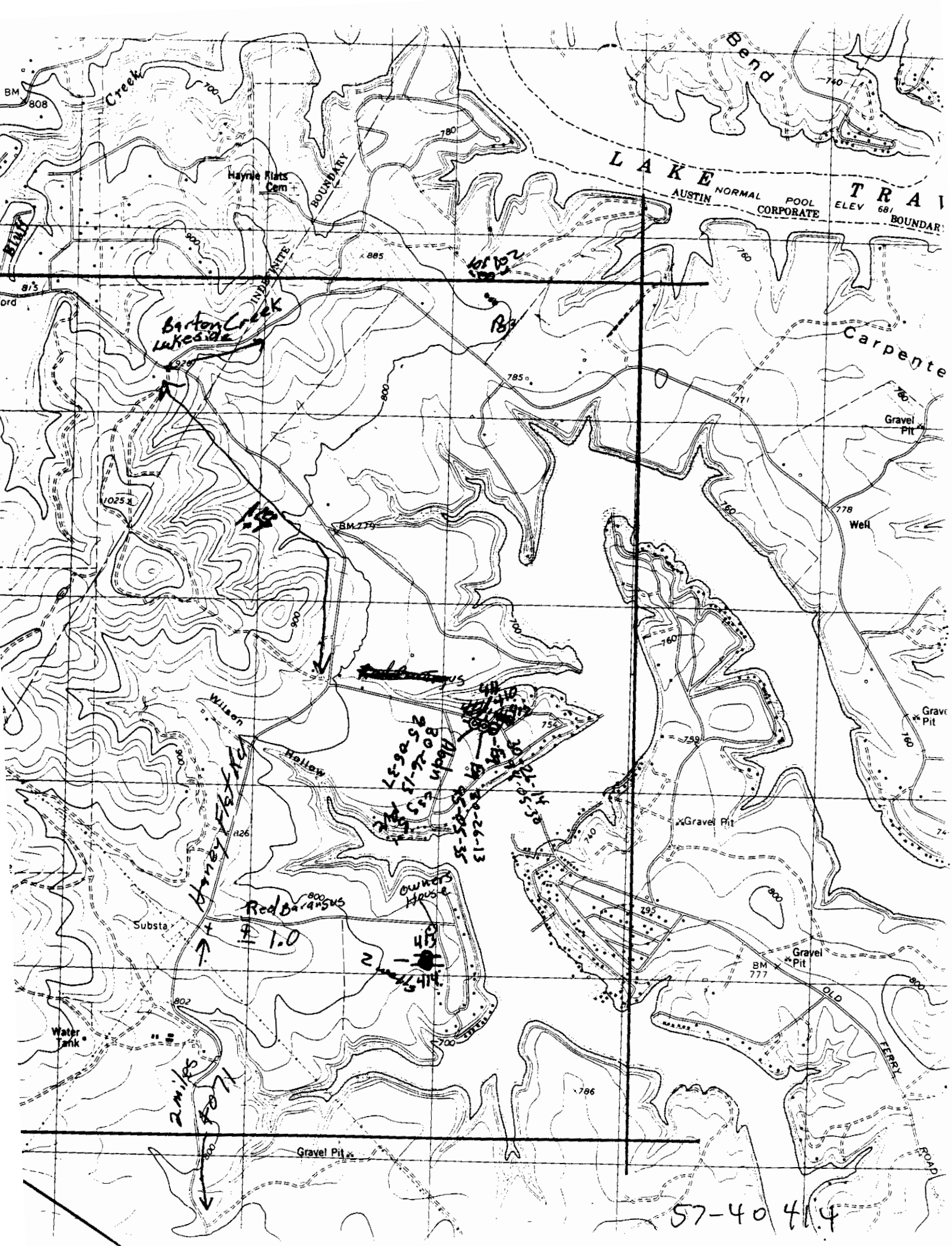
Recorded By Ron Mohr Date Record Collected or Updated 07 26 1991 (20 max) Reporting Agency 01

Remarks

Aquifer Hosston

Well No. 57-40-414

93-0384
2/9/93


Creek
BM 808
Hayrick Flats Cem
BOUNDARY
INDEFINITE
LAKE AUSTIN NORMAL POOL ELEV 681
CORPORATE BOUNDARY
Bend
Barton Creek Lakeside
Carpente
Gravel Pit
Well
BM 779
Wilson Hollow
Hayrick Flats Rd
Red Bird Ranch
Owners House
Substa
Water Tank
Gravel Pit
BM 777
OLD FERRY ROAD
2 miles to FM 71
1.0
2
4
57-40 4 4

405

# Water Quality Sampling Run

SWN: 40-414
County: Travis
Aquifer(s): 2117 HSTN

Name: Perdnales Lake Country Estates
Address: Rt 2 Box 177
Spicewood Tx 78669

Sample No. GW-1995-4
Date: 9-14-95
By: Ron Mahr

| Bottle 1 | Bottle 2 | Bottle 3 | Bottle 4 | Total SUB-Samples |
|---|---|---|---|---|
| 1 liter Anions | 1 liter Cations | 1 liter Radioactivity | 500 ml Nitrate | 4 |
| Preserve with: | 2 ml HNO (Nitric) | 2 ml HNO (Nitric) | 1 ml H SO (Sulfuric) | All filtered unless otherwise stipulated. All on ice. |

Water Level _____ LSD Remark _____
Temperature (00010) 22.5 c
Specific Conductance (00094) 1068 umhos/cm
pH (00400) 7.05
Eh (00090) + 24.5 mv.
Phenol ALK (82244) _____ mg/l
Total ALK (39086) 486 mg/l
Carbonate (00452) 0 meq/l 0 mg/l
Bicarbonate (00453) 9.72 meq/l 593 mg/l
Total Cations(+) _____
Total Anions (-) _____
Total Hardness (46570) 430
Dissolved Solids(70301) 665

Time in: 1100
Time out: 1215
Weather Cloudy
Outside Temp: 78°
Sampling point: Well Head

Starting pH 7.53
343 ml. of 0.02N to
50 ml. of Sample
Ending pH 4.55

| Time: | 1115 | 1120 | 1125 | 1130 | | |
|---|---|---|---|---|---|---|
| pH: | 7.06 | 7.04 | 7.05 | | | |
| Temp: | 22.5 | 22.5 | 22.5 | | | |
| Eh: | | | + | 24.5 | | |
| Cond. | 1097 | 1075 | 1063 | | | |

other notes:

| ml. | pH | ml. | pH | ml. | pH |
|---|---|---|---|---|---|
| 2 | 7.26 | 16 | 6.50 | 24.3 | 4.55 |
| 4 | 7.11 | 18 | 6.36 | | |
| 6 | 7.02 | 20 | 6.17 | | |
| 8 | 6.91 | 22 | 5.84 | | |
| 10 | 6.81 | 23 | 5.58 | | |
| 12 | 6.70 | 24 | 5.0 | | |
| 14 | 6.61 | 24.1 | 4.86 | | |
| | | 24.2 | 4.71 | | |

Texas Water Development Board

# Chemical Water Analysis Report

GWR- Rm-1995-405
(Anions)

| TWDB Use Only |
|---|
| Work No. |
| IAC No. |

**Send Reply To:**
Ground Water Unit
Texas Water Development Board
P.O. Box 13231
Austin, Texas 78711

Attention: Phil Nordstrom
State Well Number: 57-40-414
County: Travis
Date & Time: 9-14-94 1130
Owner: Pendales; Lake Country Est ☒ Send Copy To Owner
Address: Rt 2 Box 177 T Spicewood Tx 78669
Sampled After Pumping: 30 min Hours
Date Drilled: ____ Depth: 180
Yield: ____ GPM ☐ Measured ☐ Estimated
Collection Point: well Head pH 7.05
Use: PS Temperature: 22.5 °C
By: Ron Mohr
Specific Conductance: 1063

OCT 10 1994

Requested Chem [redacted]
Laboratory No.: [redacted] Date Received: SEP 16 1994 Date Reported: ____

THD-Sample No. EB4 1633 Date Received 09/16/94 Date Reported 10/08/94

| | | MEQ/L | MG/L |
|---|---|---|---|
| Silica | (00955) | | 15 |
| Sulfate | (00946) | 1.17 | 56 |
| Chloride | (00941) | .45 | 53 |
| Fluoride | (00950) | 0.05 | 0.34 |
| P.Alkalinity | (01415) | 0.00 | 0 |
| T.Alkalinity | (00410) | 9.84 | 432 |
| Bromide | (71870) | | 1.00 |

* Convert mg/l Boron to µg/l for data entry.

only in Irrigation Areas

Texas Water Development Board

# Chemical Water Analysis Report

GWN- RM-1995-405
(Nitrogen Cycle)

| TWDB Use Only |
|---|
| Work No. |
| IAC No. |

**Send Reply To:**
Ground Water Unit
Texas Water Development Board
P.O. Box 13231
Austin, Texas 78711

Attention: Phil Nordstrom
State Well Number: 57-40-414

County: Travis
Date & Time: 9-14-94 1130

Owner: Perdnales Lake Country Est
☑ Send Copy To Owner

Address: _____
Sampled After Pumping: _____ Hours

Date Drilled: _____ Depth: _____
Yield: _____ GPM ☐ Measured ☐ Estimated

Collection Point: _____ pH _____
Use: _____ Temperature: _____ °C

By: Ron Mohr
Specific Conductance: _____

**Requested Chemical Analysis**

Laboratory No.: [redacted]
Date Received: SEP 16 1994
Date Reported: SEP 23 1994

THD-Sample No. EB4 1660 Date Received 09/16/94 Date Reported 09/22/94

| | | |
|---|---|---|
| 00623- | 0.6 | TKN as N mg/L |
| 00608- | 0.29 | Ammonia as N mg/l |
| 00613- | < 0.01 | Nitrite as N mg/ |
| 00618- | 0.01 | Nitrate as N mg/ |

*Note: To convert $NO_3$-N to $NO_3$, multiply by 4.427.

Texas Water Development Board

# Chemical Water Analysis Report

RAD - RM-1995-405
RAD = Radioactivity Sample

*TWDB Use Only*
Work No. _____
IAC No. _____

**Send Reply To:**
Ground Water Monitoring Unit
Texas Water Development Board
P.O. Box 13231
Austin, Texas 78711

Attention: Phil Nordstrom
State Well Number: 57-40-414
County: Travis
Date & Time: 9-14-94 1130
Owner: Perdnales Lake Country Est.
☑ Send Copy To Owner
Address: _____
Sampled After Pumping: _____ Hours
Date Drilled: _____ Depth: _____
Yield: _____ GPM ☐ Measured ☐ Estimated
Collection Point: _____ pH _____
Use: _____ Temperature: _____ °C
By: Ron Mahr
Specific Conductance: _____

**Requested Chemical Analysis**

Laboratory No.: [redacted]
Date Received: SEP 16 1994
Date Reported: OCT 19 1994

| | | | |
|---|---|---|---|
| Alpha | (01503) | 2.4 ± 2.3 | pCi/l |
| Beta | (03503) | 9.1 ± 3.3 | pCi/l |

94-0147-R|2

Texas Water Development Board

# Chemical Water Analysis Report

HM- RM .1995.405
HM = Heavy Trace and Alkaline-Earth Metals

*TWDB Use Only*
Work No. _____
IAC No. _____

**Send Reply To:**
Ground Water Unit
Texas Water Development Board
P.O. Box 13231
Austin, Texas 78711

Attention: Phil Nordstrom  State Well Number: 57-40-414

County: Travis  Date & Time: 9-14-94 1130

Owner: Pedernales Lake Country Est. ☑ Send Copy To Owner

Address: Rt 2 Box 177 Spicewood Tx 78669  Sampled After Pumping: _____ Hours

Date Drilled: _____ Depth: _____ Yield: _____ GPM ☐ Measured ☐ Estimated

Collection Point: _____ pH _____ Use: _____ Temperature: _____ °C

By: Ron Mohr  Specific Conductance: _____

Requested [redacted]

Laboratory No.: _____ Date Received: SEP 16 1994 Date Reported: OCT. 25 1994

| | | mg/L | | | mg/L |
|---|---|---|---|---|---|
| Calcium | (00915) | 79 | Sodium | (00930) | 92 |
| Magnesium | (00925) | 55 | Potassium | (00935) | 12 |
| Lithium | (01130) | 0.143 | [Convert to µg/L for Data Entry] | | |

| | | µg/L | | | µg/L |
|---|---|---|---|---|---|
| Aluminum | (01106) | <20 | Manganese | (01056) | 23.0 |
| Antimony | (01095) | <2.0 | Mercury | (71890) | <0.13 |
| Arsenic | (01000) | <1.0 | Molybdenum | (01060) | <50 |
| Barium | (01005) | 83.1 | Nickel | (01065) | <10 |
| Beryllium | (01010) | <2.0 | Selenium | (01145) | <4.0 |
| Cadmium | (01025) | <0.5 | Silver | (01075) | <10 |
| Chromium | (01030) | <10 | Strontium | (01080) | 1140 |
| Cobalt | (01035) | <10 | Thallium | (01057) | <2.0 |
| Copper | (01040) | 5.3 | Vanadium | (01085) | <10 |
| Iron | (01046) | 61.0 | Zinc | (01090) | 19.5 |
| Lead | (01049) | <5.0 | | | |

Note: Crossout those elements not to be analyzed.

TEXAS WATER DEVELOPMENT BOARD

WELL SCHEDULE

Aquifer(s) Hosston Project No. 3216 State Well No. 57-40-101

Field No./Owner's Well No. 3 County Travis

1. Location: ¼, ¼, Section ____, Block ____, Survey ____, Lat. 30-27-38 Long. 98-05-30
Hidden Valley Near Lake Travis off of Harnie Flat Road
Barton Creek Lakeside

2. Owner: The Ranch Associates Address: ____

Tenant (other): ____ Address: ____

Driller: Associated Drilling Address: Austin

3. Land Surface Elevation: 772 ft. above msl determined by Developer's 2 Ft contour Map

4. Drilled: 10-7 19 85; Dug, Cable Tool, Rotary, Air,

5. Depth: Rept. 400 ft. Meas. ____ ft.

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

7. Pump: Mfr. ____ Type Sub

No. Stages ____, Bowls Diam. ____ in., Setting 360 ft.

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

8. Motor: Mfr. ____ Fuel ____ HP. ____

9. Yield: Flow ____ gpm, Pump 100 gpm, Meas., Rept., Est. ____ Date 85

10. Performance Test: Date 10-28-85 Length of Test 2 hrs Made by drlr

Static Level 107 ft. Pumping Level ____ ft. Drawdown 243 ft.

Production 100 gpm Specific Capacity ____ gpm/ft.

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

Analyses

Date ____ Laboratory ____ TDS ____ Sp Cond ____

Date ____ Laboratory ____ TDS ____ Sp Cond ____

12. Other data available (as circled): Pumping Test, Power & Yield Test, Drillers Log,

Formation Samples, Geophysical Log(s) ____ (type)

13. Water Level(s): 107 ft. rept/meas. 10-28 1985 above/below (S.L.) ____ which is ____ ft. above/below Land Surface

____ ft. rept. meas. ____ 19 ____ above/below ____ which is ____ ft. above/below Land Surface

14. Use: Dom., Stock, Public Supply, Ind. (Irr.), Observation, Other (Test Hole, Oil Test, etc.) Not Used

15. Recorded by: J. Dutton Source of data: J. Shaw, DC, to 65 Date: 10-13-87

16. Remarks: If Consultant says well will be plugged

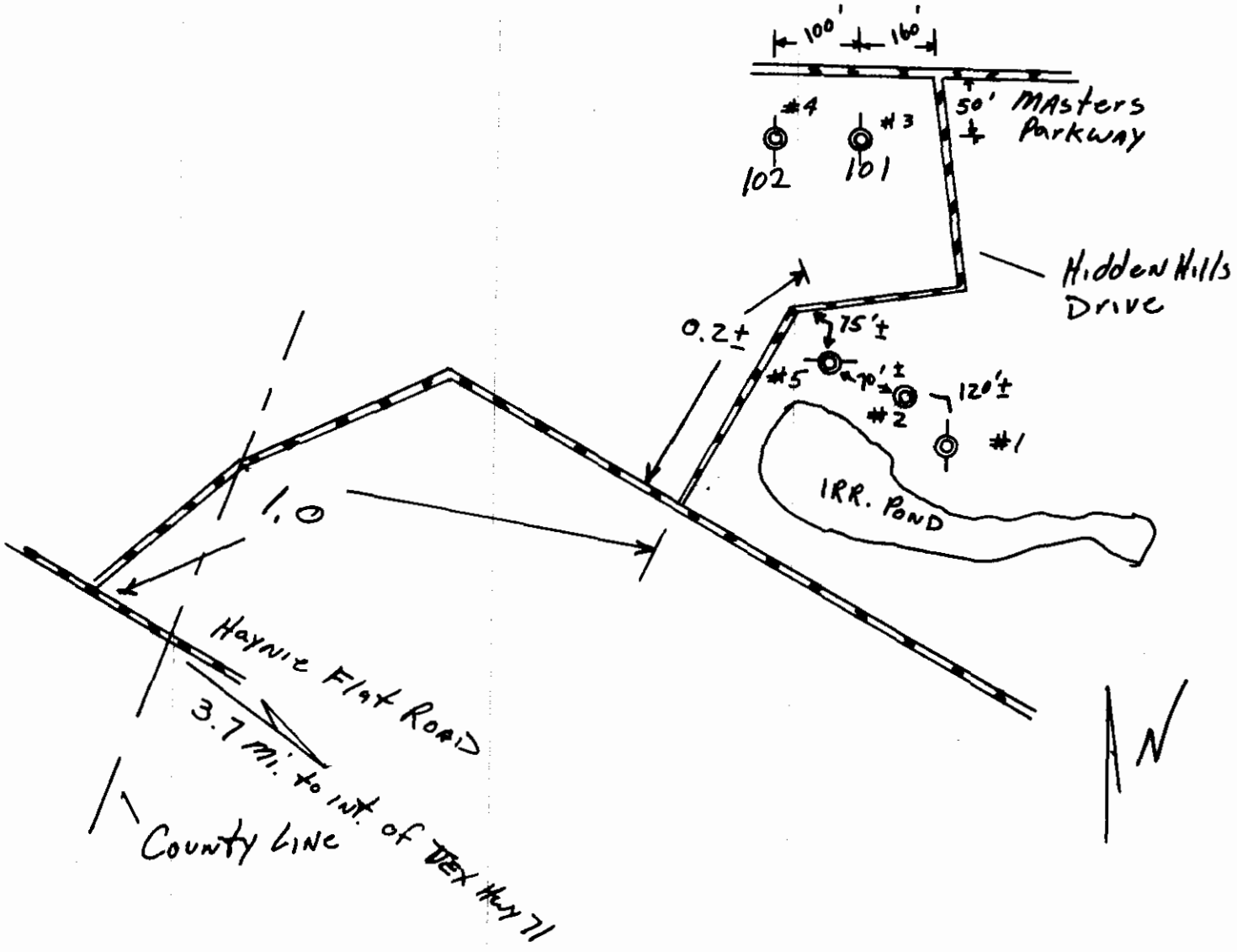
17. Location or Sketch:

| CASING, BLANK PIPE & WELL SCREEN Cemented From 0 ft. to 120 ft. | | | |
|---|---|---|---|
| Diam. (in.) | Type | Setting (feet) from | to |
| 8 5/8 | steel | 0 | 400 |
| " | slotted | 120 | 320 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
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| | | | |
| | | | |
| | | | |
| | | | |

TWDB-0308 (Rev. 12-11-85)

W/L Obs. Well ___ W/Q Obs. Well ___

State Well No. 57-40-101


100'
160'
50' ± Masters Parkway
#4
#3
102
101
Hidden Hills Drive
0.2±
75'±
#5
70'±
#2
120'±
#1
IRR. POND
1.0
Haynie Flat Road
3.7 Mi. to int. of Dex Hwy 71
County Line
N

57-40-101

...ink.
...nd ori... by
certified ... the
Texas Department of Water Resources
P. O. Box 13087
Austin, Texas 78711

State of
# WATER WELL REPORT
ATTENTION OWNER: *Confidentiality Privilege Notice on Reverse Side*

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

1) OWNER THE RANCH ASSOCIATES (3) (Name) Address PO BOX 19417 (Street or RFD) JACKSONVILLE (City) FL (State) 32245 (Zip)

2) LOCATION OF WELL:
County TRAVIS 10 miles in NW (N.E., S.W., etc.) direction from LAKEWAY (Town)

Driller must complete the legal description to the right with distance and direction from two intersecting section or survey lines, or he must locate and identify the well on an official Quarter- or Half-Scale Texas County General Highway Map and attach the map to this form.

☐ Legal description:
Section No. _____ Block No. _____ Township _____
Abstract No. _____ Survey Name _____
Distance and direction from two intersecting section or survey lines _____
☒ See attached map.

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

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

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

6) WELL LOG:
Date drilled 10-7-85

| DIAMETER OF HOLE Dia. (in.) | From (ft.) | To (ft.) |
|---|---|---|
| 12¼ | Surface | 400 |
| | | |
| | | |

7) BOREHOLE COMPLETION:
☒ Open Hole ☐ Straight Wall ☐ Underreamed ☐ Gravel Packed ☐ Other _____
If Gravel Packed give interval ... from _____ ft. to _____ ft.

| From (ft.) | To (ft.) | Description and color of formation material |
|---|---|---|
| 0 | 5 | FILL |
| 5 | 10 | CALICHE |
| 10 | 45 | GRAY CLAY & SHALE |
| 45 | 105 | TAN LIMESTONE |
| 105 | 115 | BLUE CLAY |
| 115 | 120 | YELLOW LIMESTONE & SANDSTONE |
| 120 | 175 | GRAY LIMESTONE |
| 175 | 200 | RED CLAY W/ GRAVEL |
| 200 | 225 | GRAVEL |
| 225 | 250 | SAND |
| 250 | 325 | SAND & CLAY |
| 325 | 375 | GRAY SHALE & SAND |
| 375 | 400 | CLAY |

(Use reverse side if necessary)

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

| Dia. (in.) | New or Used | Steel, Plastic, etc. Perf., Slotted, etc. Screen Mgf., if commercial | Setting (ft.) From | Setting (ft.) To | Gage Casing Screen |
|---|---|---|---|---|---|
| 8 5/8 | N | STEEL | 0 | 400 | 40 |
| | | W/ SLOTS | 120 | 320 | |

9) CEMENTING DATA [Rule 319.44(b)]
Cemented from 0 ft. to 120 ft.
_____ ft. to _____ ft.
Method used PRESSURE
Cemented by ADC

10) SURFACE COMPLETION
☒ Specified Surface Slab Installed [Rule 319.44(c)]
☐ Pitless Adapter Used [Rule 319.44(d)]
☐ Approved Alternative Procedure Used [Rule 319.71]

11) WATER LEVEL:
Static level 107 ft. below land surface Date 10-28-85
Artesian flow _____ gpm. Date _____

12) PACKERS:

| Type | Depth |
|---|---|
| BURLAP | 120 |

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NOV 14 1985
TEXAS WATER COMMISSION

13) TYPE PUMP:
☐ Turbine ☐ Jet ☒ Submersible ☐ Cylinder
☐ Other _____
Depth to pump bowls, cylinder, jet, etc., 360 ft.

14) WELL TESTS:
Type Test: ☒ Pump ☐ Bailer ☐ Jetted ☐ Estimated
Yield: 100 gpm with 243 ft. drawdown after 2 hrs.

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

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief. I understand that failure to complete items 1 thru 12 will result in the log(s) being returned for completion and resubmittal.

COMPANY NAME ASSOCIATED DRILLING (Type or Print) Water Well Driller's License No. 1955

ADDRESS 4431 LUCKSINGER LN (Street or RFD) AUSTIN (City) TEXAS (State) 78745 (Zip)

(Signed) Byron Bennett (Licensed Water Well Driller) (Signed) _____ (Registered Driller Trainee)

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

For TDWR use only
Well No. 57-40-488
Located on map YES MAP

TDWR-0392 (12/29/83) DEPARTMENT OF WATER RESOURCES COPY

57-40-451 X

# Texas Water Development Board (TWDB)
# Groundwater Database (GWDB)
# Well Information Report for State Well Number 57-39-905

GWDB Reports and Downloads

## Well Basic Details

Scanned Documents

| | |
|---|---|
| **State Well Number** | 5739905 |
| **County** | Travis |
| **River Basin** | Colorado |
| **Groundwater Management Area** | 9 |
| **Regional Water Planning Area** | K - Lower Colorado |
| **Groundwater Conservation District** | Southwestern Travis County GCD |
| **Latitude** (decimal degrees) | 30.416389 |
| **Latitude** (degrees minutes seconds) | 30° 24' 59" N |
| **Longitude** (decimal degrees) | -98.131389 |
| **Longitude** (degrees minutes seconds) | 098° 07' 53" W |
| **Coordinate Source** | +/- 1 Second |
| **Aquifer Code** | 217HSTN - Hosston Formation |
| **Aquifer** | Trinity |
| **Aquifer Pick Method** | |
| **Land Surface Elevation** (feet above sea level) | 925 |
| **Land Surface Elevation Method** | Interpolated From Topo Map |
| **Well Depth** (feet below land surface) | 176 |
| **Well Depth Source** | Owner |
| **Drilling Start Date** | |
| **Drilling End Date** | 0/0/1967 |
| **Drilling Method** | |
| **Borehole Completion** | |

| | |
|---|---|
| **Well Type** | Withdrawal of Water |
| **Well Use** | Domestic |
| **Water Level Observation** | Historical |
| **Water Quality Available** | Yes |
| **Pump** | Submersible |
| **Pump Depth** (feet below land surface) | |
| **Power Type** | Electric Motor |
| **Annular Seal Method** | |
| **Surface Completion** | |
| **Owner** | Larry Hollingsworth |
| **Driller** | Central Texas Drilling |
| **Other Data Available** | Microlog |
| **Well Report Tracking Number** | |
| **Plugging Report Tracking Number** | |
| **U.S. Geological Survey Site Number** | |
| **Texas Commission on Environmental Quality Source Id** | |
| **Groundwater Conservation District Well Number** | |
| **Owner Well Number** | |
| **Other Well Number** | |
| **Previous State Well Number** | |
| **Reporting Agency** | Texas Water Development Board |
| **Created Date** | |
| **Last Update Date** | 3/4/2020 |

| | |
|---|---|
| **Remarks** | Reported yield 10 gal/min on Aug.18 1972. Slotted from 116 to 176 feet. Historical observation well. |

### *Casing*

| Diameter (in.) | Casing Type | Casing Material | Schedule | Gauge | Top Depth (ft.) | Bottom Depth (ft.) |
|---|---|---|---|---|---|---|
| 8 | Blank | | | | 0 | 116 |
| 8 | Screen | | | | 116 | 176 |

### *Well Tests - No Data*

### *Lithology - No Data*

### *Annular Seal Range - No Data*

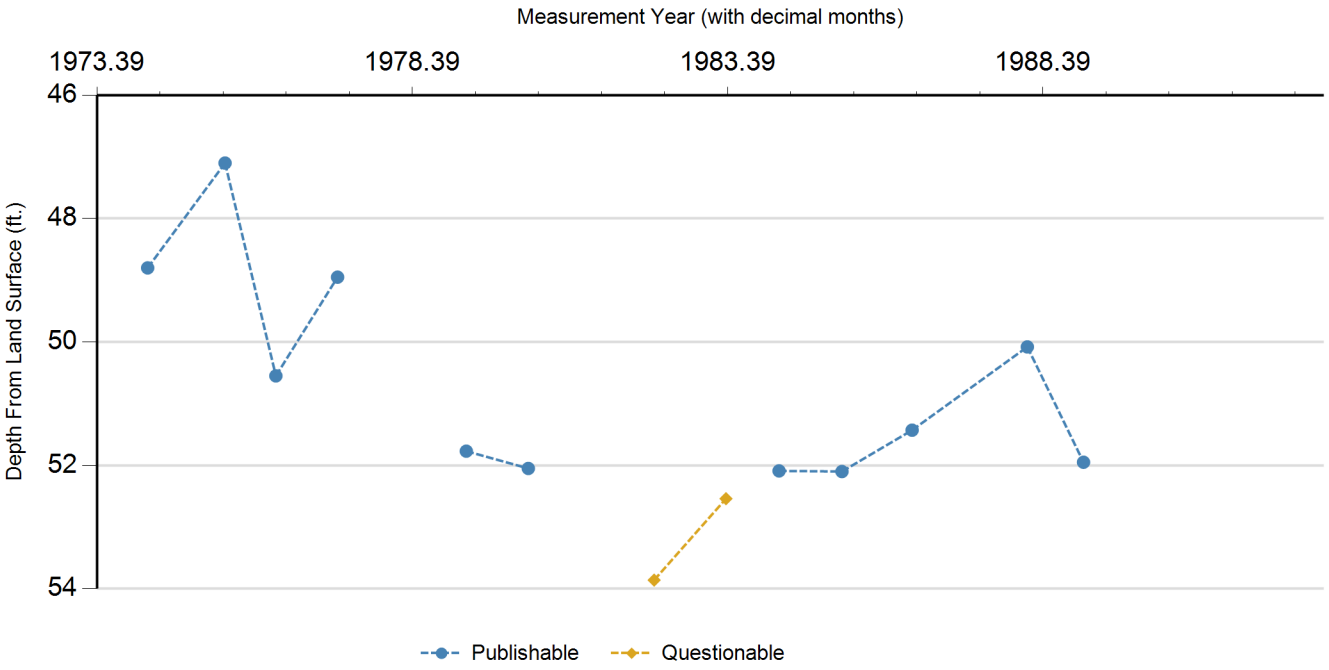
### *Borehole - No Data*

### *Plugged Back - No Data*

### *Filter Pack - No Data*

### *Packers - No Data*

## Water Level Measurements




| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 3/11/1974 | | 48.8 | | 876.2 | 1 | Texas Water Development Board | Steel Tape | | |
| P | 6/4/1975 | | 47.1 | (1.70) | 877.9 | 1 | Texas Water Development Board | Steel Tape | | |
| P | 3/23/1976 | | 50.55 | 3.45 | 874.45 | 1 | Texas Water Development Board | Steel Tape | | |
| P | 3/15/1977 | | 48.95 | (1.60) | 876.05 | 1 | Texas Water Development Board | Steel Tape | | |
| X | 3/23/1978 | | | | | 1 | Texas Water Development Board | | 19 | |
| P | 3/30/1979 | | 51.77 | | 873.23 | 1 | Texas Water Development Board | Steel Tape | | |
| P | 3/24/1980 | | 52.05 | 0.28 | 872.95 | 1 | Texas Water Development Board | Steel Tape | | |
| Q | 3/22/1982 | | 53.86 | 1.81 | 871.14 | 1 | Texas Water Development Board | Steel Tape | 12 | |
| Q | 5/13/1983 | | 52.54 | (1.32) | 872.46 | 1 | Texas Water Development Board | Steel Tape | 4 | |
| P | 3/15/1984 | | 52.09 | (0.45) | 872.91 | 1 | Texas Water Development Board | Steel Tape | | |
| P | 3/14/1985 | | 52.1 | 0.01 | 872.9 | 1 | Texas Water Development Board | Steel Tape | | |
| P | 4/25/1986 | | 51.43 | (0.67) | 873.57 | 1 | Texas Water Development Board | Steel Tape | | |
| P | 2/22/1988 | | 50.08 | (1.35) | 874.92 | 1 | Texas Water Development Board | Steel Tape | | |
| P | 1/12/1989 | | 51.95 | 1.87 | 873.05 | 1 | Texas Water Development Board | Steel Tape | | |
| X | 3/4/1990 | | | | | 1 | Texas Water Development Board | | 32 | |
| X | 3/5/1991 | | | | | 1 | Texas Water Development Board | | 32 | |
| X | 1/14/1992 | | | | | 1 | Texas Water Development Board | | 30 | |

## Code Descriptions

| Status Code | Status Description |
|---|---|
| P | Publishable |
| Q | Questionable |
| X | No Measurement |

| Remark ID | Remark Description |
|---|---|
| 4 | Well pumped recently |
| 12 | Uncertain of reason for questionable measurement |
| 19 | Well pumping |
| 30 | Well temporarily inaccessible due to impassable roads, locked gate, etc. |
| 32 | Well temporarily inaccessible due to winterization or debris |

## Water Quality Analysis

**Sample Date:** 8/18/1972 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

**Sampled Aquifer:** Hosston Formation

**Analyzed Lab:** Texas Department of Health **Reliability:** Reliability unknown or not available

**Collection Remarks:** No Data

| Parameter Code | Parameter Description | Flag | Value* | Units | Plus/Minus |
|---|---|---|---|---|---|
| 00415 | ALKALINITY, PHENOLPHTHALEIN (MG/L) | | 0 | mg/L | |
| 00410 | ALKALINITY, TOTAL (MG/L AS CACO3) | | 319 | mg/L as CACO3 | |
| 00440 | BICARBONATE ION, CALCULATED (MG/L AS HCO3) | | 389.29 | mg/L | |
| 00910 | CALCIUM (MG/L) | | 79 | mg/L | |
| 00445 | CARBONATE ION, CALCULATED (MG/L AS CO3) | | 0 | mg/L | |
| 00940 | CHLORIDE, TOTAL (MG/L AS CL) | | 15 | mg/L | |
| 00950 | FLUORIDE, DISSOLVED (MG/L AS F) | | 0.4 | mg/L | |
| 00900 | HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3) | | 369 | mg/L as CACO3 | |
| 00920 | MAGNESIUM (MG/L) | | 42 | mg/L | |
| 71851 | NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3) | | 6 | mg/L as NO3 | |
| 00400 | PH (STANDARD UNITS), FIELD | | 7.9 | SU | |
| 71860 | RESIDUAL SODIUM CARBONATE, CALCULATED | | 0 | | |
| 00955 | SILICA, DISSOLVED (MG/L AS SI02) | | 16 | mg/L as SIO2 | |
| 00931 | SODIUM ADSORPTION RATIO, CALCULATED (SAR) | | 0.18 | | |
| 00932 | SODIUM, CALCULATED, PERCENT | | 4 | PCT | |
| 00929 | SODIUM, TOTAL (MG/L AS NA) | | 8 | mg/L | |
| 00094 | SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C) | | 745 | MICR | |
| 00945 | SULFATE, TOTAL (MG/L AS SO4) | | 39 | mg/L as SO4 | |
| 70301 | TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L) | | 396 | mg/L | |

## Water Quality Analysis

**Sample Date:** 3/24/1980 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

**Sampled Aquifer:** Hosston Formation

**Analyzed Lab:** Texas Department of Health **Reliability:** From well not sufficiently pumped; not filtered or preserved

**Collection Remarks:** faucet at pressure tank

| Parameter Code | Parameter Description | Flag | Value* | Units | Plus/Minus |
|---|---|---|---|---|---|
| 00415 | ALKALINITY, PHENOLPHTHALEIN (MG/L) | | 4 | mg/L | |
| 00410 | ALKALINITY, TOTAL (MG/L AS CACO3) | | 323 | mg/L as CACO3 | |
| 00440 | BICARBONATE ION, CALCULATED (MG/L AS HCO3) | | 384.41 | mg/L | |
| 00910 | CALCIUM (MG/L) | | 85 | mg/L | |
| 00445 | CARBONATE ION, CALCULATED (MG/L AS CO3) | | 4.8 | mg/L | |
| 00940 | CHLORIDE, TOTAL (MG/L AS CL) | | 15 | mg/L | |
| 00950 | FLUORIDE, DISSOLVED (MG/L AS F) | | 0.4 | mg/L | |
| 00900 | HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3) | | 372 | mg/L as CACO3 | |
| 00920 | MAGNESIUM (MG/L) | | 39 | mg/L | |
| 71851 | NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3) | | 4.3 | mg/L as NO3 | |
| 00400 | PH (STANDARD UNITS), FIELD | | 8.4 | SU | |
| 71860 | RESIDUAL SODIUM CARBONATE, CALCULATED | | 0 | | |
| 00955 | SILICA, DISSOLVED (MG/L AS SI02) | | 14 | mg/L as SIO2 | |
| 00931 | SODIUM ADSORPTION RATIO, CALCULATED (SAR) | | 0.18 | | |
| 00932 | SODIUM, CALCULATED, PERCENT | | 4 | PCT | |
| 00929 | SODIUM, TOTAL (MG/L AS NA) | | 8 | mg/L | |
| 00094 | SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C) | | 750 | MICR | |
| 00945 | SULFATE, TOTAL (MG/L AS SO4) | | 40 | mg/L as SO4 | |
| 00010 | TEMPERATURE, WATER (CELSIUS) | | 21 | C | |
| 70301 | TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L) | | 399 | mg/L | |

## Water Quality Analysis

**Sample Date:** 6/10/1986 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

**Sampled Aquifer:** Hosston Formation

**Analyzed Lab:** Texas Department of Health **Reliability:** From well not sufficiently pumped; not filtered or preserved

**Collection Remarks:** pressure tank sample

| Parameter Code | Parameter Description | Flag | Value* | Units | Plus/Minus |
|---|---|---|---|---|---|
| 00415 | ALKALINITY, PHENOLPHTHALEIN (MG/L) | | 0 | mg/L | |
| 00410 | ALKALINITY, TOTAL (MG/L AS CACO3) | | 327 | mg/L as CACO3 | |
| 00440 | BICARBONATE ION, CALCULATED (MG/L AS HCO3) | | 399.05 | mg/L | |
| 00910 | CALCIUM (MG/L) | | 83 | mg/L | |
| 00445 | CARBONATE ION, CALCULATED (MG/L AS CO3) | | 0 | mg/L | |
| 00940 | CHLORIDE, TOTAL (MG/L AS CL) | | 14 | mg/L | |
| 00950 | FLUORIDE, DISSOLVED (MG/L AS F) | | 0.4 | mg/L | |
| 00900 | HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3) | | 359 | mg/L as CACO3 | |
| 00920 | MAGNESIUM (MG/L) | | 37 | mg/L | |
| 71851 | NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3) | | 3.68 | mg/L as NO3 | |
| 00400 | PH (STANDARD UNITS), FIELD | | 7.4 | SU | |
| 00937 | POTASSIUM, TOTAL (MG/L AS K) | | 2 | mg/L | |
| 71860 | RESIDUAL SODIUM CARBONATE, CALCULATED | | 0 | | |
| 00955 | SILICA, DISSOLVED (MG/L AS SI02) | | 15 | mg/L as SIO2 | |
| 00931 | SODIUM ADSORPTION RATIO, CALCULATED (SAR) | | 0.18 | | |
| 00932 | SODIUM, CALCULATED, PERCENT | | 4 | PCT | |
| 00929 | SODIUM, TOTAL (MG/L AS NA) | | 8 | mg/L | |
| 00094 | SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C) | | 750 | MICR | |
| 00945 | SULFATE, TOTAL (MG/L AS SO4) | | 40 | mg/L as SO4 | |
| 70301 | TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L) | | 399 | mg/L | |

## Water Quality Analysis

**Sample Date:** 8/26/1991 **Sample Time:** 0940 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

**Sampled Aquifer:** Hosston Formation

**Analyzed Lab:** TWDB Field Analysis **Reliability:** Sampled using TWDB protocols but through Hach DR-2000 lab

**Collection Remarks:** No Data

| Parameter Code | Parameter Description | Flag | Value* | Units | Plus/Minus |
|---|---|---|---|---|---|
| 39086 | ALKALINITY FIELD DISSOLVED AS CACO3 | | 352 | mg/L as CACO3 | |
| 00415 | ALKALINITY, PHENOLPHTHALEIN (MG/L) | | 0 | mg/L | |
| 00410 | ALKALINITY, TOTAL (MG/L AS CACO3) | | 352 | mg/L as CACO3 | |
| 00440 | BICARBONATE ION, CALCULATED (MG/L AS HCO3) | | 429.56 | mg/L | |
| 00910 | CALCIUM (MG/L) | | 77.66 | mg/L | |
| 00445 | CARBONATE ION, CALCULATED (MG/L AS CO3) | | 0 | mg/L | |
| 00940 | CHLORIDE, TOTAL (MG/L AS CL) | | 12.65 | mg/L | |
| 00950 | FLUORIDE, DISSOLVED (MG/L AS F) | | 0.34 | mg/L | |
| 00900 | HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3) | | 368 | mg/L as CACO3 | |
| 01046 | IRON, DISSOLVED (UG/L AS FE) | < | 20 | ug/L | |
| 00920 | MAGNESIUM (MG/L) | | 42.59 | mg/L | |
| 00618 | NITRATE NITROGEN, DISSOLVED (MG/L AS N) | | 0.36 | mg/L as N | |
| 71851 | NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3) | | 1.59 | mg/L as NO3 | |
| 00090 | OXIDATION REDUCTION POTENTIAL (ORP), MILLIVOLTS | | 144.3 | MV | |
| 00400 | PH (STANDARD UNITS), FIELD | | 7.37 | SU | |
| 00671 | PHOSPHORUS, DISSOLVED ORTHOPHOSPHATE (MG/L AS P) | | 0.03 | mg/L as P | |
| 71860 | RESIDUAL SODIUM CARBONATE, CALCULATED | | 0 | | |
| 00955 | SILICA, DISSOLVED (MG/L AS SI02) | | 15.57 | mg/L as SIO2 | |
| 00945 | SULFATE, TOTAL (MG/L AS SO4) | | 43.85 | mg/L as SO4 | |
| 00010 | TEMPERATURE, WATER (CELSIUS) | | 24 | C | |

** Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..*

# Texas Water Development Board (TWDB)
# Groundwater Database (GWDB)
# Well Information Report for State Well Number 57-39-905

*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 (TWDB)
# Groundwater Database (GWDB)
# Well Information Report for State Well Number 57-40-102

GWDB Reports and Downloads

## Well Basic Details

Scanned Documents

| | |
|---|---|
| **State Well Number** | 5740102 |
| **County** | Travis |
| **River Basin** | Colorado |
| **Groundwater Management Area** | 9 |
| **Regional Water Planning Area** | K - Lower Colorado |
| **Groundwater Conservation District** | Southwestern Travis County GCD |
| **Latitude** (decimal degrees) | 30.458889 |
| **Latitude** (degrees minutes seconds) | 30° 27' 32" N |
| **Longitude** (decimal degrees) | -98.091667 |
| **Longitude** (degrees minutes seconds) | 098° 05' 30" W |
| **Coordinate Source** | +/- 1 Second |
| **Aquifer Code** | 217HSTN - Hosston Formation |
| **Aquifer** | Trinity |
| **Aquifer Pick Method** | |
| **Land Surface Elevation** (feet above sea level) | 768 |
| **Land Surface Elevation Method** | Interpolated From Topo Map |
| **Well Depth** (feet below land surface) | 400 |
| **Well Depth Source** | Driller's Log |
| **Drilling Start Date** | |
| **Drilling End Date** | 10/14/1985 |
| **Drilling Method** | Air Rotary |
| **Borehole Completion** | Perforated or Slotted |

| | |
|---|---|
| **Well Type** | Withdrawal of Water |
| **Well Use** | Plugged or Destroyed |
| **Water Level Observation** | Miscellaneous Measurements |
| **Water Quality Available** | No |
| **Pump** | None |
| **Pump Depth** (feet below land surface) | |
| **Power Type** | |
| **Annular Seal Method** | |
| **Surface Completion** | |
| **Owner** | Barton Creek Lakeside |
| **Driller** | Associated Drillers |
| **Other Data Available** | Drillers Log; Specific Capacity |
| **Well Report Tracking Number** | |
| **Plugging Report Tracking Number** | |
| **U.S. Geological Survey Site Number** | |
| **Texas Commission on Environmental Quality Source Id** | G2270282F |
| **Groundwater Conservation District Well Number** | |
| **Owner Well Number** | |
| **Other Well Number** | |
| **Previous State Well Number** | |
| **Reporting Agency** | Texas Water Development Board |
| **Created Date** | 10/20/1998 |
| **Last Update Date** | 3/4/2020 |

| | |
|---|---|
| **Remarks** | Owner's #4 well. Plugged public supply well. Measured yield 65 GPM with 240 feet drawdown after pump- ing 2 hours in 1985. Cemented from 0 to 120 feet. Specific capacity 0.27 |

### *Casing*

| Diameter (in.) | Casing Type | Casing Material | Schedule | Gauge | Top Depth (ft.) | Bottom Depth (ft.) |
|---|---|---|---|---|---|---|
| 9 | Blank | Steel | | | 0 | 120 |
| 9 | Screen | Steel | | | 120 | 320 |
| 9 | Blank | Steel | | | 320 | 400 |

### *Well Tests - No Data*

### *Lithology - No Data*

### *Annular Seal Range - No Data*

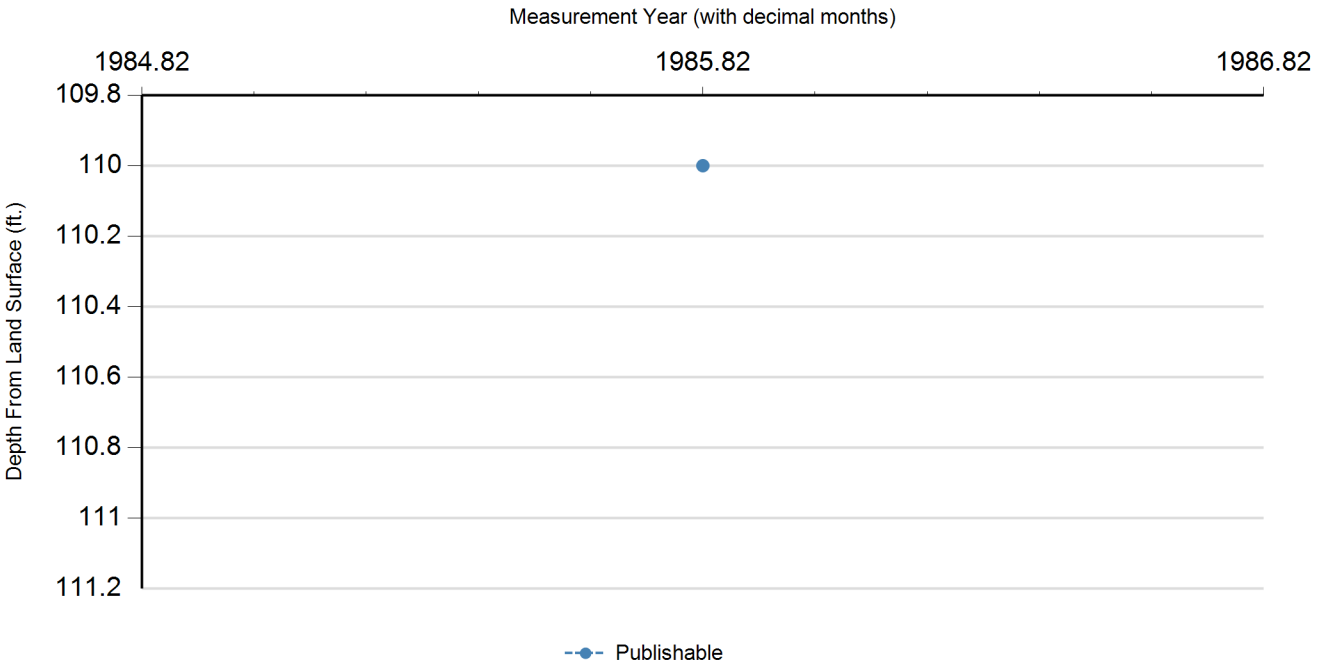
### *Borehole - No Data*

### *Plugged Back - No Data*

### *Filter Pack - No Data*

### *Packers - No Data*

## Water Level Measurements




| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 10/28/1985 | | 110 | | 658 | 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 (TWDB)
# Groundwater Database (GWDB)
# Well Information Report for State Well Number 57-40-104

GWDB Reports and Downloads

## Well Basic Details

Scanned Documents

| | |
|---|---|
| **State Well Number** | 5740104 |
| **County** | Burnet |
| **River Basin** | Colorado |
| **Groundwater Management Area** | 8 |
| **Regional Water Planning Area** | K - Lower Colorado |
| **Groundwater Conservation District** | Central Texas GCD |
| **Latitude** (decimal degrees) | 30.4591667 |
| **Latitude** (degrees minutes seconds) | 30° 27' 33" N |
| **Longitude** (decimal degrees) | -98.1186111 |
| **Longitude** (degrees minutes seconds) | 098° 07' 07" W |
| **Coordinate Source** | Global Positioning System - GPS |
| **Aquifer Code** | 218CCRK - Cow Creek Limestone |
| **Aquifer** | Trinity |
| **Aquifer Pick Method** | |
| **Land Surface Elevation** (feet above sea level) | 806 |
| **Land Surface Elevation Method** | Digital Elevation Model -DEM |
| **Well Depth** (feet below land surface) | 180 |
| **Well Depth Source** | Driller's Log |
| **Drilling Start Date** | |
| **Drilling End Date** | 6/12/2006 |
| **Drilling Method** | Air Rotary |
| **Borehole Completion** | Straight Wall |

| | |
|---|---|
| **Well Type** | Withdrawal of Water |
| **Well Use** | De-watering |
| **Water Level Observation** | GCD Current Sensor |
| **Water Quality Available** | No |
| **Pump** | |
| **Pump Depth** (feet below land surface) | |
| **Power Type** | |
| **Annular Seal Method** | Slurry |
| **Surface Completion** | Surface Sleeve Installed |
| **Owner** | Donald Glide Spicewood well |
| **Driller** | Apex Drilling, Inc. |
| **Other Data Available** | Drillers Log |
| **Well Report Tracking Number** | 91533 |
| **Plugging Report Tracking Number** | |
| **U.S. Geological Survey Site Number** | |
| **Texas Commission on Environmental Quality Source Id** | |
| **Groundwater Conservation District Well Number** | |
| **Owner Well Number** | |
| **Other Well Number** | |
| **Previous State Well Number** | |
| **Reporting Agency** | Groundwater Conservation District |
| **Created Date** | 6/13/2012 |
| **Last Update Date** | 11/20/2024 |

| | |
|---|---|
| **Remarks** | Burlap packers at 75, 70, 20 ft. |

### *Casing*

| Diameter (in.) | Casing Type | Casing Material | Schedule | Gauge | Top Depth (ft.) | Bottom Depth (ft.) |
|---|---|---|---|---|---|---|
| 5 | Blank | Plastic (PVC) | | | 0 | 120 |
| 5 | Screen | Plastic (PVC) | | | 120 | 160 |
| 5 | Blank | Plastic (PVC) | | | 160 | 180 |

### *Well Tests*

| Test Date | Test Type | Yield (gallons per minute) | Drawdown (ft.) | Test Hours |
|---|---|---|---|---|
| 2006-06-12 | Jetted | 1/2 | | |

## Lithology

| Top Depth (ft.) | Bottom Depth (ft.) | Description |
|---|---|---|
| 0 | 30 | Grey & Tan Limestone |
| 30 | 45 | Grey Limestone |
| 45 | 75 | Grey Clay |
| 75 | 85 | Red Sandstone |
| 85 | 90 | Gravel |
| 90 | 100 | Red Sandstone |
| 100 | 160 | Gravel |
| 160 | 165 | Tan clay |
| 165 | 180 | Grey Clay |

## Annular Seal Range - No Data

## Borehole

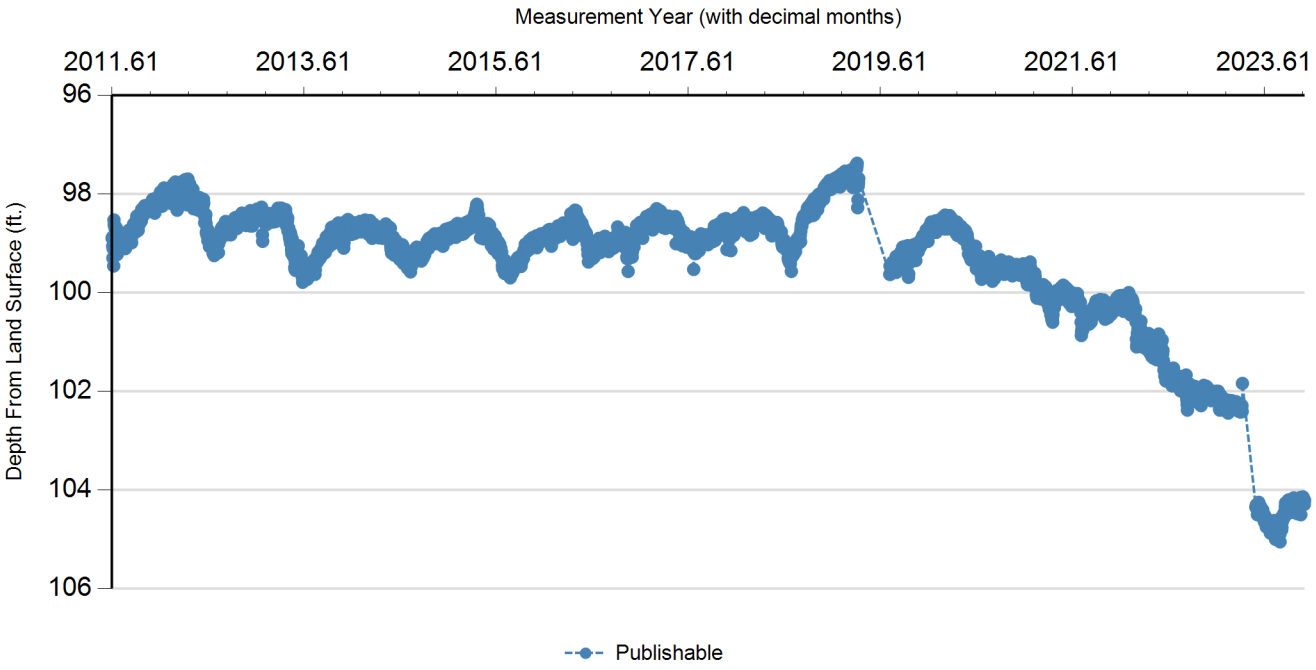
| Diameter (in.) | Top Depth (ft.) | Bottom Depth (ft.) |
|---|---|---|
| 8 | 0 | 20 |
| 6 | 20 | 180 |

## Plugged Back - No Data

## Filter Pack - No Data

## Packers - No Data

## Water Level Measurements




| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 8/13/2011 | | 98.9 | | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/14/2011 | | 98.88 | (0.02) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/15/2011 | | 99.06 | 0.18 | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/16/2011 | | 99.3 | 0.24 | 706.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/17/2011 | | 99.11 | (0.19) | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/18/2011 | | 99.08 | (0.03) | 706.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/19/2011 | | 99.46 | 0.38 | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/20/2011 | | 98.53 | (0.93) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/21/2011 | | 98.62 | 0.09 | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/22/2011 | | 98.65 | 0.03 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/23/2011 | | 98.95 | 0.30 | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/24/2011 | | 98.65 | (0.30) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/25/2011 | | 98.73 | 0.08 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/26/2011 | | 98.98 | 0.25 | 707.02 | 1 | Groundwater Conservation District | Transducer | | |

Texas Water Development Board

# Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 57-40-104

groundwater division

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 8/27/2011 | | 98.9 | (0.08) | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/28/2011 | | 98.79 | (0.11) | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/29/2011 | | 98.69 | (0.10) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/30/2011 | | 99.16 | 0.47 | 706.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/31/2011 | | 98.94 | (0.22) | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/1/2011 | | 98.97 | 0.03 | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/2/2011 | | 99.23 | 0.26 | 706.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/3/2011 | | 99.04 | (0.19) | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/4/2011 | | 98.94 | (0.10) | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/5/2011 | | 98.82 | (0.12) | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/6/2011 | | 98.89 | 0.07 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/7/2011 | | 98.79 | (0.10) | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/8/2011 | | 98.8 | 0.01 | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/9/2011 | | 98.92 | 0.12 | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/10/2011 | | 98.97 | 0.05 | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/11/2011 | | 98.98 | 0.01 | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/12/2011 | | 99.04 | 0.06 | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/13/2011 | | 99.07 | 0.03 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/14/2011 | | 99.12 | 0.05 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/15/2011 | | 99.09 | (0.03) | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/16/2011 | | 99.04 | (0.05) | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/17/2011 | | 98.87 | (0.17) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/18/2011 | | 99.05 | 0.18 | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/19/2011 | | 99.03 | (0.02) | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/20/2011 | | 98.94 | (0.09) | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/21/2011 | | 98.88 | (0.06) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/22/2011 | | 98.86 | (0.02) | 707.14 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 9/23/2011 | | 99 | 0.14 | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/24/2011 | | 98.89 | (0.11) | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/25/2011 | | 99 | 0.11 | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/26/2011 | | 99.07 | 0.07 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/27/2011 | | 98.99 | (0.08) | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/28/2011 | | 99.02 | 0.03 | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/29/2011 | | 99.07 | 0.05 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/30/2011 | | 99.03 | (0.04) | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/1/2011 | | 99 | (0.03) | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/2/2011 | | 98.91 | (0.09) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/3/2011 | | 99.11 | 0.20 | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/4/2011 | | 99 | (0.11) | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/5/2011 | | 99.09 | 0.09 | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/6/2011 | | 98.97 | (0.12) | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/7/2011 | | 99.02 | 0.05 | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/8/2011 | | 98.98 | (0.04) | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/9/2011 | | 98.9 | (0.08) | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/10/2011 | | 98.95 | 0.05 | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/11/2011 | | 98.98 | 0.03 | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/12/2011 | | 98.89 | (0.09) | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/13/2011 | | 98.84 | (0.05) | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/14/2011 | | 98.85 | 0.01 | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/15/2011 | | 98.8 | (0.05) | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/16/2011 | | 98.74 | (0.06) | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/17/2011 | | 98.9 | 0.16 | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/18/2011 | | 98.75 | (0.15) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/19/2011 | | 98.89 | 0.14 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |

Texas Water Development Board

# Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 57-40-104

groundwater division

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 10/20/2011 | | 98.73 | (0.16) | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/21/2011 | | 98.78 | 0.05 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/22/2011 | | 98.81 | 0.03 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/23/2011 | | 98.87 | 0.06 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/24/2011 | | 98.91 | 0.04 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/25/2011 | | 98.88 | (0.03) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/26/2011 | | 98.91 | 0.03 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/27/2011 | | 98.99 | 0.08 | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/28/2011 | | 98.72 | (0.27) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/29/2011 | | 98.69 | (0.03) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/30/2011 | | 98.79 | 0.10 | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/31/2011 | | 98.78 | (0.01) | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/1/2011 | | 98.73 | (0.05) | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/2/2011 | | 98.77 | 0.04 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/3/2011 | | 98.7 | (0.07) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/4/2011 | | 98.64 | (0.06) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/5/2011 | | 98.61 | (0.03) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/6/2011 | | 98.67 | 0.06 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/7/2011 | | 98.64 | (0.03) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/8/2011 | | 98.68 | 0.04 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/9/2011 | | 98.65 | (0.03) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/10/2011 | | 98.62 | (0.03) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/11/2011 | | 98.58 | (0.04) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/12/2011 | | 98.57 | (0.01) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/13/2011 | | 98.66 | 0.09 | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/14/2011 | | 98.77 | 0.11 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/15/2011 | | 98.68 | (0.09) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 11/16/2011 | | 98.67 | (0.01) | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/17/2011 | | 98.45 | (0.22) | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/18/2011 | | 98.5 | 0.05 | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/19/2011 | | 98.6 | 0.10 | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/20/2011 | | 98.58 | (0.02) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/21/2011 | | 98.67 | 0.09 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/22/2011 | | 98.74 | 0.07 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/23/2011 | | 98.5 | (0.24) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/24/2011 | | 98.51 | 0.01 | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/25/2011 | | 98.58 | 0.07 | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/26/2011 | | 98.57 | (0.01) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/27/2011 | | 98.41 | (0.16) | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/28/2011 | | 98.6 | 0.19 | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/29/2011 | | 98.46 | (0.14) | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/30/2011 | | 98.43 | (0.03) | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/1/2011 | | 98.45 | 0.02 | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/2/2011 | | 98.49 | 0.04 | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/3/2011 | | 98.45 | (0.04) | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/4/2011 | | 98.55 | 0.10 | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/5/2011 | | 98.48 | (0.07) | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/6/2011 | | 98.31 | (0.17) | 707.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/7/2011 | | 98.42 | 0.11 | 707.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/8/2011 | | 98.37 | (0.05) | 707.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/9/2011 | | 98.38 | 0.01 | 707.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/10/2011 | | 98.39 | 0.01 | 707.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/11/2011 | | 98.33 | (0.06) | 707.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/12/2011 | | 98.33 | 0.00 | 707.67 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 12/13/2011 | | 98.43 | 0.10 | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/14/2011 | | 98.37 | (0.06) | 707.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/15/2011 | | 98.37 | 0.00 | 707.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/16/2011 | | 98.31 | (0.06) | 707.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/17/2011 | | 98.24 | (0.07) | 707.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/18/2011 | | 98.39 | 0.15 | 707.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/19/2011 | | 98.38 | (0.01) | 707.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/20/2011 | | 98.35 | (0.03) | 707.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/21/2011 | | 98.33 | (0.02) | 707.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/22/2011 | | 98.28 | (0.05) | 707.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/23/2011 | | 98.24 | (0.04) | 707.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/24/2011 | | 98.27 | 0.03 | 707.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/25/2011 | | 98.33 | 0.06 | 707.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/26/2011 | | 98.35 | 0.02 | 707.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/27/2011 | | 98.28 | (0.07) | 707.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/28/2011 | | 98.29 | 0.01 | 707.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/29/2011 | | 98.24 | (0.05) | 707.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/30/2011 | | 98.33 | 0.09 | 707.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/31/2011 | | 98.22 | (0.11) | 707.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/1/2012 | | 98.31 | 0.09 | 707.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/2/2012 | | 98.27 | (0.04) | 707.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/3/2012 | | 98.23 | (0.04) | 707.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/4/2012 | | 98.23 | 0.00 | 707.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/5/2012 | | 98.33 | 0.10 | 707.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/6/2012 | | 98.25 | (0.08) | 707.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/7/2012 | | 98.23 | (0.02) | 707.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/8/2012 | | 98.34 | 0.11 | 707.66 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 1/9/2012 | | 98.29 | (0.05) | 707.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/10/2012 | | 98.15 | (0.14) | 707.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/11/2012 | | 98.26 | 0.11 | 707.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/12/2012 | | 98.11 | (0.15) | 707.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/13/2012 | | 98.12 | 0.01 | 707.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/14/2012 | | 98.12 | 0.00 | 707.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/15/2012 | | 98.13 | 0.01 | 707.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/16/2012 | | 98.27 | 0.14 | 707.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/17/2012 | | 98.25 | (0.02) | 707.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/18/2012 | | 98.17 | (0.08) | 707.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/19/2012 | | 98.21 | 0.04 | 707.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/20/2012 | | 98.39 | 0.18 | 707.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/21/2012 | | 98.19 | (0.20) | 707.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/22/2012 | | 98.18 | (0.01) | 707.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/23/2012 | | 98.25 | 0.07 | 707.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/24/2012 | | 98.16 | (0.09) | 707.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/25/2012 | | 98.19 | 0.03 | 707.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/26/2012 | | 98.18 | (0.01) | 707.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/27/2012 | | 98.09 | (0.09) | 707.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/28/2012 | | 98.11 | 0.02 | 707.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/29/2012 | | 98.07 | (0.04) | 707.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/30/2012 | | 98.1 | 0.03 | 707.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/31/2012 | | 98.19 | 0.09 | 707.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/1/2012 | | 98.1 | (0.09) | 707.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/2/2012 | | 98.1 | 0.00 | 707.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/3/2012 | | 98.19 | 0.09 | 707.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/4/2012 | | 98.23 | 0.04 | 707.77 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 2/5/2012 | | 98.11 | (0.12) | 707.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/6/2012 | | 98.1 | (0.01) | 707.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/7/2012 | | 98.1 | 0.00 | 707.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/8/2012 | | 98.1 | 0.00 | 707.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/9/2012 | | 98.11 | 0.01 | 707.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/10/2012 | | 98.09 | (0.02) | 707.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/11/2012 | | 98.06 | (0.03) | 707.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/12/2012 | | 97.96 | (0.10) | 708.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/13/2012 | | 98.21 | 0.25 | 707.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/14/2012 | | 98.08 | (0.13) | 707.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/15/2012 | | 98.07 | (0.01) | 707.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/16/2012 | | 98.17 | 0.10 | 707.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/17/2012 | | 98.01 | (0.16) | 707.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/18/2012 | | 98.25 | 0.24 | 707.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/19/2012 | | 98.03 | (0.22) | 707.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/20/2012 | | 98.03 | 0.00 | 707.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/21/2012 | | 98.04 | 0.01 | 707.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/22/2012 | | 98.07 | 0.03 | 707.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/23/2012 | | 98.08 | 0.01 | 707.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/24/2012 | | 97.96 | (0.12) | 708.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/25/2012 | | 97.88 | (0.08) | 708.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/26/2012 | | 97.94 | 0.06 | 708.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/27/2012 | | 98.08 | 0.14 | 707.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/28/2012 | | 97.97 | (0.11) | 708.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/29/2012 | | 97.96 | (0.01) | 708.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/1/2012 | | 98.15 | 0.19 | 707.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/2/2012 | | 98 | (0.15) | 708 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 3/3/2012 | | 97.97 | (0.03) | 708.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/4/2012 | | 97.95 | (0.02) | 708.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/5/2012 | | 98.04 | 0.09 | 707.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/6/2012 | | 97.96 | (0.08) | 708.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/7/2012 | | 98.12 | 0.16 | 707.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/8/2012 | | 98.17 | 0.05 | 707.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/9/2012 | | 98.11 | (0.06) | 707.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/10/2012 | | 98.03 | (0.08) | 707.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/11/2012 | | 98.09 | 0.06 | 707.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/12/2012 | | 98.14 | 0.05 | 707.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/13/2012 | | 98.1 | (0.04) | 707.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/14/2012 | | 98.13 | 0.03 | 707.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/15/2012 | | 98.01 | (0.12) | 707.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/16/2012 | | 97.95 | (0.06) | 708.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/17/2012 | | 98.13 | 0.18 | 707.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/18/2012 | | 97.98 | (0.15) | 708.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/19/2012 | | 98.19 | 0.21 | 707.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/20/2012 | | 98.05 | (0.14) | 707.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/21/2012 | | 97.93 | (0.12) | 708.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/22/2012 | | 97.93 | 0.00 | 708.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/23/2012 | | 97.94 | 0.01 | 708.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/24/2012 | | 97.9 | (0.04) | 708.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/25/2012 | | 97.9 | 0.00 | 708.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/26/2012 | | 97.87 | (0.03) | 708.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/27/2012 | | 97.92 | 0.05 | 708.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/28/2012 | | 97.84 | (0.08) | 708.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/29/2012 | | 97.86 | 0.02 | 708.14 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 3/30/2012 | | 97.81 | (0.05) | 708.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/31/2012 | | 97.83 | 0.02 | 708.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/1/2012 | | 97.93 | 0.10 | 708.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/2/2012 | | 98.14 | 0.21 | 707.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/3/2012 | | 97.88 | (0.26) | 708.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/4/2012 | | 97.83 | (0.05) | 708.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/5/2012 | | 97.92 | 0.09 | 708.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/6/2012 | | 98.23 | 0.31 | 707.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/7/2012 | | 97.85 | (0.38) | 708.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/8/2012 | | 97.76 | (0.09) | 708.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/9/2012 | | 97.89 | 0.13 | 708.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/10/2012 | | 97.88 | (0.01) | 708.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/11/2012 | | 97.92 | 0.04 | 708.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/12/2012 | | 98.05 | 0.13 | 707.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/13/2012 | | 97.86 | (0.19) | 708.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/14/2012 | | 97.93 | 0.07 | 708.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/15/2012 | | 98.33 | 0.40 | 707.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/16/2012 | | 97.84 | (0.49) | 708.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/17/2012 | | 97.83 | (0.01) | 708.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/18/2012 | | 98.09 | 0.26 | 707.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/19/2012 | | 97.94 | (0.15) | 708.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/20/2012 | | 98.03 | 0.09 | 707.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/21/2012 | | 97.78 | (0.25) | 708.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/22/2012 | | 97.98 | 0.20 | 708.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/23/2012 | | 97.92 | (0.06) | 708.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/24/2012 | | 97.92 | 0.00 | 708.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/25/2012 | | 97.77 | (0.15) | 708.23 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 4/26/2012 | | 97.9 | 0.13 | 708.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/27/2012 | | 97.95 | 0.05 | 708.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/28/2012 | | 97.95 | 0.00 | 708.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/29/2012 | | 97.96 | 0.01 | 708.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/30/2012 | | 97.86 | (0.10) | 708.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/1/2012 | | 97.98 | 0.12 | 708.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/2/2012 | | 97.83 | (0.15) | 708.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/3/2012 | | 97.9 | 0.07 | 708.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/4/2012 | | 97.97 | 0.07 | 708.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/5/2012 | | 98.18 | 0.21 | 707.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/6/2012 | | 97.91 | (0.27) | 708.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/7/2012 | | 97.9 | (0.01) | 708.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/8/2012 | | 97.77 | (0.13) | 708.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/9/2012 | | 97.76 | (0.01) | 708.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/10/2012 | | 97.85 | 0.09 | 708.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/11/2012 | | 97.75 | (0.10) | 708.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/12/2012 | | 97.73 | (0.02) | 708.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/13/2012 | | 97.72 | (0.01) | 708.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/14/2012 | | 97.75 | 0.03 | 708.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/15/2012 | | 97.89 | 0.14 | 708.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/16/2012 | | 97.73 | (0.16) | 708.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/17/2012 | | 97.78 | 0.05 | 708.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/18/2012 | | 97.71 | (0.07) | 708.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/19/2012 | | 97.93 | 0.22 | 708.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/20/2012 | | 97.84 | (0.09) | 708.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/21/2012 | | 98.22 | 0.38 | 707.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/22/2012 | | 97.79 | (0.43) | 708.21 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 5/23/2012 | | 98.06 | 0.27 | 707.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/24/2012 | | 97.93 | (0.13) | 708.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/25/2012 | | 97.88 | (0.05) | 708.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/26/2012 | | 97.7 | (0.18) | 708.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/27/2012 | | 97.77 | 0.07 | 708.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/28/2012 | | 97.97 | 0.20 | 708.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/29/2012 | | 97.85 | (0.12) | 708.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/30/2012 | | 98.05 | 0.20 | 707.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/31/2012 | | 97.93 | (0.12) | 708.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/1/2012 | | 97.8 | (0.13) | 708.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/2/2012 | | 97.79 | (0.01) | 708.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/3/2012 | | 97.84 | 0.05 | 708.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/4/2012 | | 97.97 | 0.13 | 708.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/5/2012 | | 97.9 | (0.07) | 708.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/6/2012 | | 97.85 | (0.05) | 708.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/7/2012 | | 97.95 | 0.10 | 708.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/8/2012 | | 98.04 | 0.09 | 707.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/9/2012 | | 98.2 | 0.16 | 707.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/10/2012 | | 97.95 | (0.25) | 708.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/11/2012 | | 97.99 | 0.04 | 708.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/12/2012 | | 98.05 | 0.06 | 707.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/13/2012 | | 98 | (0.05) | 708 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/14/2012 | | 98.12 | 0.12 | 707.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/15/2012 | | 97.91 | (0.21) | 708.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/16/2012 | | 98.13 | 0.22 | 707.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/17/2012 | | 98.3 | 0.17 | 707.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/18/2012 | | 98.26 | (0.04) | 707.74 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 6/19/2012 | | 98.03 | (0.23) | 707.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/20/2012 | | 98.2 | 0.17 | 707.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/21/2012 | | 98.29 | 0.09 | 707.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/22/2012 | | 98.27 | (0.02) | 707.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/23/2012 | | 98.26 | (0.01) | 707.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/24/2012 | | 98.24 | (0.02) | 707.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/25/2012 | | 98.17 | (0.07) | 707.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/26/2012 | | 98.15 | (0.02) | 707.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/27/2012 | | 98.28 | 0.13 | 707.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/28/2012 | | 98.31 | 0.03 | 707.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/29/2012 | | 98.27 | (0.04) | 707.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/30/2012 | | 98.21 | (0.06) | 707.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/1/2012 | | 98.28 | 0.07 | 707.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/2/2012 | | 98.21 | (0.07) | 707.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/3/2012 | | 98.24 | 0.03 | 707.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/4/2012 | | 98.25 | 0.01 | 707.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/5/2012 | | 98.33 | 0.08 | 707.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/6/2012 | | 98.19 | (0.14) | 707.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/7/2012 | | 98.28 | 0.09 | 707.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/8/2012 | | 98.15 | (0.13) | 707.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/9/2012 | | 98.18 | 0.03 | 707.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/10/2012 | | 98.08 | (0.10) | 707.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/11/2012 | | 98.14 | 0.06 | 707.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/12/2012 | | 98.08 | (0.06) | 707.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/13/2012 | | 98.12 | 0.04 | 707.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/14/2012 | | 98.1 | (0.02) | 707.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/15/2012 | | 98.16 | 0.06 | 707.84 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 7/16/2012 | | 98.15 | (0.01) | 707.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/17/2012 | | 98.23 | 0.08 | 707.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/18/2012 | | 98.16 | (0.07) | 707.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/19/2012 | | 98.27 | 0.11 | 707.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/20/2012 | | 98.2 | (0.07) | 707.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/21/2012 | | 98.21 | 0.01 | 707.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/22/2012 | | 98.3 | 0.09 | 707.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/23/2012 | | 98.19 | (0.11) | 707.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/24/2012 | | 98.23 | 0.04 | 707.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/25/2012 | | 98.11 | (0.12) | 707.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/26/2012 | | 98.19 | 0.08 | 707.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/27/2012 | | 98.4 | 0.21 | 707.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/28/2012 | | 98.43 | 0.03 | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/29/2012 | | 98.42 | (0.01) | 707.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/30/2012 | | 98.59 | 0.17 | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/31/2012 | | 98.57 | (0.02) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/1/2012 | | 98.44 | (0.13) | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/2/2012 | | 98.51 | 0.07 | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/3/2012 | | 98.59 | 0.08 | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/4/2012 | | 98.42 | (0.17) | 707.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/5/2012 | | 98.6 | 0.18 | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/6/2012 | | 98.78 | 0.18 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/7/2012 | | 98.77 | (0.01) | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/8/2012 | | 98.83 | 0.06 | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/9/2012 | | 98.72 | (0.11) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/10/2012 | | 98.78 | 0.06 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/11/2012 | | 98.72 | (0.06) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 8/12/2012 | | 98.95 | 0.23 | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/13/2012 | | 98.91 | (0.04) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/14/2012 | | 98.93 | 0.02 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/15/2012 | | 98.94 | 0.01 | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/16/2012 | | 98.97 | 0.03 | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/17/2012 | | 98.88 | (0.09) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/18/2012 | | 99.07 | 0.19 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/19/2012 | | 98.98 | (0.09) | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/20/2012 | | 99.04 | 0.06 | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/21/2012 | | 98.99 | (0.05) | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/22/2012 | | 98.91 | (0.08) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/23/2012 | | 98.92 | 0.01 | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/24/2012 | | 98.93 | 0.01 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/25/2012 | | 99.09 | 0.16 | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/26/2012 | | 99.05 | (0.04) | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/27/2012 | | 99.1 | 0.05 | 706.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/28/2012 | | 99.04 | (0.06) | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/29/2012 | | 99.12 | 0.08 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/30/2012 | | 99.06 | (0.06) | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/31/2012 | | 99.09 | 0.03 | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/1/2012 | | 99.03 | (0.06) | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/2/2012 | | 99.21 | 0.18 | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/3/2012 | | 99.16 | (0.05) | 706.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/4/2012 | | 99.19 | 0.03 | 706.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/5/2012 | | 99.07 | (0.12) | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/6/2012 | | 99.25 | 0.18 | 706.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/7/2012 | | 99.1 | (0.15) | 706.9 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 9/8/2012 | | 99.13 | 0.03 | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/9/2012 | | 99 | (0.13) | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/10/2012 | | 99.2 | 0.20 | 706.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/11/2012 | | 99.15 | (0.05) | 706.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/12/2012 | | 99.06 | (0.09) | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/13/2012 | | 99.21 | 0.15 | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/14/2012 | | 98.99 | (0.22) | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/15/2012 | | 98.92 | (0.07) | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/16/2012 | | 98.96 | 0.04 | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/17/2012 | | 98.91 | (0.05) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/18/2012 | | 98.91 | 0.00 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/19/2012 | | 98.88 | (0.03) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/20/2012 | | 98.81 | (0.07) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/21/2012 | | 98.87 | 0.06 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/22/2012 | | 99.19 | 0.32 | 706.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/23/2012 | | 99.01 | (0.18) | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/24/2012 | | 98.95 | (0.06) | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/25/2012 | | 98.96 | 0.01 | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/26/2012 | | 98.84 | (0.12) | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/27/2012 | | 98.81 | (0.03) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/28/2012 | | 98.93 | 0.12 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/29/2012 | | 98.79 | (0.14) | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/30/2012 | | 98.78 | (0.01) | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/1/2012 | | 98.82 | 0.04 | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/2/2012 | | 98.74 | (0.08) | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/3/2012 | | 98.7 | (0.04) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/4/2012 | | 98.77 | 0.07 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |

Texas Water Development Board

# Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 57-40-104

groundwater division

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 10/5/2012 | | 98.72 | (0.05) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/6/2012 | | 98.76 | 0.04 | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/7/2012 | | 98.67 | (0.09) | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/8/2012 | | 98.73 | 0.06 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/9/2012 | | 98.66 | (0.07) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/10/2012 | | 98.7 | 0.04 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/11/2012 | | 98.66 | (0.04) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/12/2012 | | 98.65 | (0.01) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/13/2012 | | 98.71 | 0.06 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/14/2012 | | 98.72 | 0.01 | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/15/2012 | | 98.62 | (0.10) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/16/2012 | | 98.64 | 0.02 | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/17/2012 | | 98.66 | 0.02 | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/18/2012 | | 98.63 | (0.03) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/19/2012 | | 98.56 | (0.07) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/20/2012 | | 98.68 | 0.12 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/21/2012 | | 98.62 | (0.06) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/22/2012 | | 98.83 | 0.21 | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/23/2012 | | 98.7 | (0.13) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/24/2012 | | 98.76 | 0.06 | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/25/2012 | | 98.69 | (0.07) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/26/2012 | | 98.75 | 0.06 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/27/2012 | | 98.67 | (0.08) | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/28/2012 | | 98.77 | 0.10 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/29/2012 | | 98.62 | (0.15) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/30/2012 | | 98.65 | 0.03 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/31/2012 | | 98.6 | (0.05) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 11/1/2012 | | 99.04 | 0.44 | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/2/2012 | | 98.62 | (0.42) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/3/2012 | | 98.69 | 0.07 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/4/2012 | | 98.6 | (0.09) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/5/2012 | | 98.75 | 0.15 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/6/2012 | | 98.64 | (0.11) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/7/2012 | | 98.76 | 0.12 | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/8/2012 | | 98.78 | 0.02 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/9/2012 | | 98.83 | 0.05 | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/10/2012 | | 98.68 | (0.15) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/11/2012 | | 98.7 | 0.02 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/12/2012 | | 98.57 | (0.13) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/13/2012 | | 98.66 | 0.09 | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/14/2012 | | 98.6 | (0.06) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/15/2012 | | 98.74 | 0.14 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/16/2012 | | 98.55 | (0.19) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/17/2012 | | 98.66 | 0.11 | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/18/2012 | | 98.56 | (0.10) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/19/2012 | | 98.54 | (0.02) | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/20/2012 | | 98.54 | 0.00 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/21/2012 | | 98.67 | 0.13 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/22/2012 | | 98.65 | (0.02) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/23/2012 | | 98.6 | (0.05) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/24/2012 | | 98.49 | (0.11) | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/25/2012 | | 98.7 | 0.21 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/26/2012 | | 98.63 | (0.07) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/27/2012 | | 98.48 | (0.15) | 707.52 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 11/28/2012 | | 98.54 | 0.06 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/29/2012 | | 98.58 | 0.04 | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/30/2012 | | 98.52 | (0.06) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/1/2012 | | 98.54 | 0.02 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/2/2012 | | 98.52 | (0.02) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/3/2012 | | 98.7 | 0.18 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/4/2012 | | 98.55 | (0.15) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/5/2012 | | 98.5 | (0.05) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/6/2012 | | 98.54 | 0.04 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/7/2012 | | 98.66 | 0.12 | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/8/2012 | | 98.61 | (0.05) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/9/2012 | | 98.55 | (0.06) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/10/2012 | | 98.62 | 0.07 | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/11/2012 | | 98.48 | (0.14) | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/12/2012 | | 98.56 | 0.08 | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/13/2012 | | 98.5 | (0.06) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/14/2012 | | 98.56 | 0.06 | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/15/2012 | | 98.51 | (0.05) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/16/2012 | | 98.63 | 0.12 | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/17/2012 | | 98.5 | (0.13) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/18/2012 | | 98.47 | (0.03) | 707.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/19/2012 | | 98.53 | 0.06 | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/20/2012 | | 98.42 | (0.11) | 707.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/21/2012 | | 98.39 | (0.03) | 707.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/22/2012 | | 98.41 | 0.02 | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/23/2012 | | 98.53 | 0.12 | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/24/2012 | | 98.5 | (0.03) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 12/25/2012 | | 98.55 | 0.05 | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/26/2012 | | 98.44 | (0.11) | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/27/2012 | | 98.62 | 0.18 | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/28/2012 | | 98.6 | (0.02) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/29/2012 | | 98.55 | (0.05) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/30/2012 | | 98.62 | 0.07 | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/31/2012 | | 98.53 | (0.09) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/1/2013 | | 98.55 | 0.02 | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/2/2013 | | 98.64 | 0.09 | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/3/2013 | | 98.45 | (0.19) | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/4/2013 | | 98.44 | (0.01) | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/5/2013 | | 98.47 | 0.03 | 707.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/6/2013 | | 98.41 | (0.06) | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/7/2013 | | 98.58 | 0.17 | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/8/2013 | | 98.55 | (0.03) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/9/2013 | | 98.44 | (0.11) | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/10/2013 | | 98.47 | 0.03 | 707.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/11/2013 | | 98.45 | (0.02) | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/12/2013 | | 98.58 | 0.13 | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/13/2013 | | 98.5 | (0.08) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/14/2013 | | 98.5 | 0.00 | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/15/2013 | | 98.43 | (0.07) | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/16/2013 | | 98.38 | (0.05) | 707.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/17/2013 | | 98.49 | 0.11 | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/18/2013 | | 98.34 | (0.15) | 707.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/19/2013 | | 98.65 | 0.31 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/20/2013 | | 98.52 | (0.13) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 1/21/2013 | | 98.6 | 0.08 | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/22/2013 | | 98.57 | (0.03) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/23/2013 | | 98.48 | (0.09) | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/24/2013 | | 98.52 | 0.04 | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/25/2013 | | 98.55 | 0.03 | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/26/2013 | | 98.65 | 0.10 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/27/2013 | | 98.51 | (0.14) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/28/2013 | | 98.59 | 0.08 | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/29/2013 | | 98.49 | (0.10) | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/30/2013 | | 98.56 | 0.07 | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/31/2013 | | 98.4 | (0.16) | 707.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/1/2013 | | 98.43 | 0.03 | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/2/2013 | | 98.38 | (0.05) | 707.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/3/2013 | | 98.5 | 0.12 | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/4/2013 | | 98.44 | (0.06) | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/5/2013 | | 98.44 | 0.00 | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/6/2013 | | 98.38 | (0.06) | 707.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/7/2013 | | 98.51 | 0.13 | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/8/2013 | | 98.36 | (0.15) | 707.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/9/2013 | | 98.45 | 0.09 | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/10/2013 | | 98.41 | (0.04) | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/11/2013 | | 98.51 | 0.10 | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/12/2013 | | 98.41 | (0.10) | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/13/2013 | | 98.31 | (0.10) | 707.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/14/2013 | | 98.41 | 0.10 | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/15/2013 | | 98.44 | 0.03 | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/16/2013 | | 98.32 | (0.12) | 707.68 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 2/17/2013 | | 98.44 | 0.12 | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/18/2013 | | 98.48 | 0.04 | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/19/2013 | | 98.39 | (0.09) | 707.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/20/2013 | | 98.4 | 0.01 | 707.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/21/2013 | | 98.5 | 0.10 | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/22/2013 | | 98.36 | (0.14) | 707.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/23/2013 | | 98.46 | 0.10 | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/24/2013 | | 98.36 | (0.10) | 707.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/25/2013 | | 98.53 | 0.17 | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/26/2013 | | 98.37 | (0.16) | 707.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/27/2013 | | 98.43 | 0.06 | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/28/2013 | | 98.28 | (0.15) | 707.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/1/2013 | | 98.27 | (0.01) | 707.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/2/2013 | | 98.34 | 0.07 | 707.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/3/2013 | | 98.45 | 0.11 | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/4/2013 | | 98.83 | 0.38 | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/5/2013 | | 98.96 | 0.13 | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/6/2013 | | 98.5 | (0.46) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/7/2013 | | 98.54 | 0.04 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/8/2013 | | 98.53 | (0.01) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/9/2013 | | 98.49 | (0.04) | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/10/2013 | | 98.48 | (0.01) | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/11/2013 | | 98.5 | 0.02 | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/12/2013 | | 98.49 | (0.01) | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/13/2013 | | 98.44 | (0.05) | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/14/2013 | | 98.48 | 0.04 | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/15/2013 | | 98.49 | 0.01 | 707.51 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 3/16/2013 | | 98.57 | 0.08 | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/17/2013 | | 98.63 | 0.06 | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/18/2013 | | 98.56 | (0.07) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/19/2013 | | 98.48 | (0.08) | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/20/2013 | | 98.49 | 0.01 | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/21/2013 | | 98.5 | 0.01 | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/22/2013 | | 98.61 | 0.11 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/23/2013 | | 98.46 | (0.15) | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/24/2013 | | 98.54 | 0.08 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/25/2013 | | 98.45 | (0.09) | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/26/2013 | | 98.46 | 0.01 | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/27/2013 | | 98.46 | 0.00 | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/28/2013 | | 98.5 | 0.04 | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/29/2013 | | 98.43 | (0.07) | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/30/2013 | | 98.49 | 0.06 | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/31/2013 | | 98.45 | (0.04) | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/1/2013 | | 98.56 | 0.11 | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/2/2013 | | 98.53 | (0.03) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/3/2013 | | 98.5 | (0.03) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/4/2013 | | 98.4 | (0.10) | 707.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/5/2013 | | 98.41 | 0.01 | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/6/2013 | | 98.49 | 0.08 | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/7/2013 | | 98.47 | (0.02) | 707.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/8/2013 | | 98.53 | 0.06 | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/9/2013 | | 98.54 | 0.01 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/10/2013 | | 98.51 | (0.03) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/11/2013 | | 98.46 | (0.05) | 707.54 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 4/12/2013 | | 98.49 | 0.03 | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/13/2013 | | 98.46 | (0.03) | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/14/2013 | | 98.57 | 0.11 | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/15/2013 | | 98.53 | (0.04) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/16/2013 | | 98.54 | 0.01 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/17/2013 | | 98.49 | (0.05) | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/18/2013 | | 98.54 | 0.05 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/19/2013 | | 98.46 | (0.08) | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/20/2013 | | 98.51 | 0.05 | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/21/2013 | | 98.49 | (0.02) | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/22/2013 | | 98.56 | 0.07 | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/23/2013 | | 98.56 | 0.00 | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/24/2013 | | 98.41 | (0.15) | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/25/2013 | | 98.45 | 0.04 | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/26/2013 | | 98.47 | 0.02 | 707.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/27/2013 | | 98.54 | 0.07 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/28/2013 | | 98.44 | (0.10) | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/29/2013 | | 98.47 | 0.03 | 707.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/30/2013 | | 98.43 | (0.04) | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/1/2013 | | 98.41 | (0.02) | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/2/2013 | | 98.41 | 0.00 | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/3/2013 | | 98.29 | (0.12) | 707.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/4/2013 | | 98.43 | 0.14 | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/5/2013 | | 98.35 | (0.08) | 707.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/6/2013 | | 98.4 | 0.05 | 707.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/7/2013 | | 98.4 | 0.00 | 707.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/8/2013 | | 98.37 | (0.03) | 707.63 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 5/9/2013 | | 98.54 | 0.17 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/10/2013 | | 98.38 | (0.16) | 707.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/11/2013 | | 98.35 | (0.03) | 707.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/12/2013 | | 98.29 | (0.06) | 707.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/13/2013 | | 98.33 | 0.04 | 707.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/14/2013 | | 98.35 | 0.02 | 707.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/15/2013 | | 98.32 | (0.03) | 707.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/16/2013 | | 98.42 | 0.10 | 707.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/17/2013 | | 98.29 | (0.13) | 707.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/18/2013 | | 98.36 | 0.07 | 707.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/19/2013 | | 98.43 | 0.07 | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/20/2013 | | 98.42 | (0.01) | 707.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/21/2013 | | 98.41 | (0.01) | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/22/2013 | | 98.4 | (0.01) | 707.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/23/2013 | | 98.43 | 0.03 | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/24/2013 | | 98.47 | 0.04 | 707.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/25/2013 | | 98.5 | 0.03 | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/26/2013 | | 98.39 | (0.11) | 707.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/27/2013 | | 98.44 | 0.05 | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/28/2013 | | 98.48 | 0.04 | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/29/2013 | | 98.34 | (0.14) | 707.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/30/2013 | | 98.47 | 0.13 | 707.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/31/2013 | | 98.38 | (0.09) | 707.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/1/2013 | | 98.43 | 0.05 | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/2/2013 | | 98.32 | (0.11) | 707.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/3/2013 | | 98.4 | 0.08 | 707.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/4/2013 | | 98.47 | 0.07 | 707.53 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 6/5/2013 | | 98.46 | (0.01) | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/6/2013 | | 98.65 | 0.19 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/7/2013 | | 98.47 | (0.18) | 707.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/8/2013 | | 98.67 | 0.20 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/9/2013 | | 98.55 | (0.12) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/10/2013 | | 98.49 | (0.06) | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/11/2013 | | 98.75 | 0.26 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/12/2013 | | 98.71 | (0.04) | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/13/2013 | | 98.7 | (0.01) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/14/2013 | | 98.69 | (0.01) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/15/2013 | | 98.79 | 0.10 | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/16/2013 | | 98.81 | 0.02 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/17/2013 | | 98.88 | 0.07 | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/18/2013 | | 98.89 | 0.01 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/19/2013 | | 98.93 | 0.04 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/20/2013 | | 98.78 | (0.15) | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/21/2013 | | 99 | 0.22 | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/22/2013 | | 98.83 | (0.17) | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/23/2013 | | 98.93 | 0.10 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/24/2013 | | 98.95 | 0.02 | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/25/2013 | | 99.13 | 0.18 | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/26/2013 | | 99.21 | 0.08 | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/27/2013 | | 98.91 | (0.30) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/28/2013 | | 99.14 | 0.23 | 706.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/29/2013 | | 99.06 | (0.08) | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/30/2013 | | 99.16 | 0.10 | 706.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/1/2013 | | 99.09 | (0.07) | 706.91 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 7/2/2013 | | 99.26 | 0.17 | 706.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/3/2013 | | 99.02 | (0.24) | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/4/2013 | | 99.22 | 0.20 | 706.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/5/2013 | | 99.04 | (0.18) | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/6/2013 | | 99.3 | 0.26 | 706.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/7/2013 | | 99.49 | 0.19 | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/8/2013 | | 99.53 | 0.04 | 706.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/9/2013 | | 99.39 | (0.14) | 706.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/10/2013 | | 99.55 | 0.16 | 706.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/11/2013 | | 99.38 | (0.17) | 706.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/12/2013 | | 99.36 | (0.02) | 706.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/13/2013 | | 99.49 | 0.13 | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/14/2013 | | 99.42 | (0.07) | 706.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/15/2013 | | 99.41 | (0.01) | 706.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/16/2013 | | 99.2 | (0.21) | 706.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/17/2013 | | 99.12 | (0.08) | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/18/2013 | | 99.1 | (0.02) | 706.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/19/2013 | | 99.21 | 0.11 | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/20/2013 | | 99.05 | (0.16) | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/21/2013 | | 99.24 | 0.19 | 706.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/22/2013 | | 99.22 | (0.02) | 706.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/23/2013 | | 99.25 | 0.03 | 706.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/24/2013 | | 99.38 | 0.13 | 706.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/25/2013 | | 99.42 | 0.04 | 706.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/26/2013 | | 99.34 | (0.08) | 706.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/27/2013 | | 99.39 | 0.05 | 706.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/28/2013 | | 99.29 | (0.10) | 706.71 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 7/29/2013 | | 99.44 | 0.15 | 706.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/30/2013 | | 99.32 | (0.12) | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/31/2013 | | 99.25 | (0.07) | 706.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/1/2013 | | 99.5 | 0.25 | 706.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/2/2013 | | 99.49 | (0.01) | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/3/2013 | | 99.52 | 0.03 | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/4/2013 | | 99.6 | 0.08 | 706.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/5/2013 | | 99.6 | 0.00 | 706.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/6/2013 | | 99.69 | 0.09 | 706.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/7/2013 | | 99.79 | 0.10 | 706.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/8/2013 | | 99.66 | (0.13) | 706.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/9/2013 | | 99.63 | (0.03) | 706.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/10/2013 | | 99.42 | (0.21) | 706.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/11/2013 | | 99.58 | 0.16 | 706.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/12/2013 | | 99.62 | 0.04 | 706.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/13/2013 | | 99.66 | 0.04 | 706.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/14/2013 | | 99.75 | 0.09 | 706.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/15/2013 | | 99.59 | (0.16) | 706.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/16/2013 | | 99.5 | (0.09) | 706.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/17/2013 | | 99.46 | (0.04) | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/18/2013 | | 99.53 | 0.07 | 706.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/19/2013 | | 99.56 | 0.03 | 706.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/20/2013 | | 99.58 | 0.02 | 706.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/21/2013 | | 99.49 | (0.09) | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/22/2013 | | 99.49 | 0.00 | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/23/2013 | | 99.51 | 0.02 | 706.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/24/2013 | | 99.55 | 0.04 | 706.45 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 8/25/2013 | | 99.73 | 0.18 | 706.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/26/2013 | | 99.66 | (0.07) | 706.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/27/2013 | | 99.69 | 0.03 | 706.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/28/2013 | | 99.66 | (0.03) | 706.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/29/2013 | | 99.63 | (0.03) | 706.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/30/2013 | | 99.57 | (0.06) | 706.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/31/2013 | | 99.5 | (0.07) | 706.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/1/2013 | | 99.6 | 0.10 | 706.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/2/2013 | | 99.6 | 0.00 | 706.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/3/2013 | | 99.55 | (0.05) | 706.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/4/2013 | | 99.51 | (0.04) | 706.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/5/2013 | | 99.4 | (0.11) | 706.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/6/2013 | | 99.55 | 0.15 | 706.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/7/2013 | | 99.6 | 0.05 | 706.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/8/2013 | | 99.49 | (0.11) | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/9/2013 | | 99.61 | 0.12 | 706.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/10/2013 | | 99.56 | (0.05) | 706.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/11/2013 | | 99.42 | (0.14) | 706.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/12/2013 | | 99.54 | 0.12 | 706.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/13/2013 | | 99.56 | 0.02 | 706.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/14/2013 | | 99.39 | (0.17) | 706.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/15/2013 | | 99.38 | (0.01) | 706.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/16/2013 | | 99.53 | 0.15 | 706.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/17/2013 | | 99.52 | (0.01) | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/18/2013 | | 99.53 | 0.01 | 706.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/19/2013 | | 99.5 | (0.03) | 706.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/20/2013 | | 99.52 | 0.02 | 706.48 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 9/21/2013 | | 99.36 | (0.16) | 706.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/22/2013 | | 99.33 | (0.03) | 706.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/23/2013 | | 99.37 | 0.04 | 706.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/24/2013 | | 99.63 | 0.26 | 706.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/25/2013 | | 99.54 | (0.09) | 706.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/26/2013 | | 99.43 | (0.11) | 706.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/27/2013 | | 99.31 | (0.12) | 706.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/28/2013 | | 99.32 | 0.01 | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/29/2013 | | 99.3 | (0.02) | 706.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/30/2013 | | 99.36 | 0.06 | 706.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/1/2013 | | 99.32 | (0.04) | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/2/2013 | | 99.39 | 0.07 | 706.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/3/2013 | | 99.32 | (0.07) | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/4/2013 | | 99.23 | (0.09) | 706.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/5/2013 | | 99.25 | 0.02 | 706.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/6/2013 | | 99.18 | (0.07) | 706.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/7/2013 | | 99.27 | 0.09 | 706.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/8/2013 | | 99.33 | 0.06 | 706.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/9/2013 | | 99.21 | (0.12) | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/10/2013 | | 99.3 | 0.09 | 706.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/11/2013 | | 99.22 | (0.08) | 706.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/12/2013 | | 99.31 | 0.09 | 706.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/13/2013 | | 99.23 | (0.08) | 706.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/14/2013 | | 99.18 | (0.05) | 706.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/15/2013 | | 99.29 | 0.11 | 706.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/16/2013 | | 99.13 | (0.16) | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/17/2013 | | 99.1 | (0.03) | 706.9 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 10/18/2013 | | 99.1 | 0.00 | 706.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/19/2013 | | 99.09 | (0.01) | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/20/2013 | | 99.12 | 0.03 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/21/2013 | | 99.12 | 0.00 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/22/2013 | | 99.09 | (0.03) | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/23/2013 | | 99 | (0.09) | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/24/2013 | | 99.12 | 0.12 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/25/2013 | | 99.21 | 0.09 | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/26/2013 | | 99.13 | (0.08) | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/27/2013 | | 99.2 | 0.07 | 706.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/28/2013 | | 99.17 | (0.03) | 706.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/29/2013 | | 99.18 | 0.01 | 706.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/30/2013 | | 99.09 | (0.09) | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/31/2013 | | 99.12 | 0.03 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/1/2013 | | 99.1 | (0.02) | 706.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/2/2013 | | 98.98 | (0.12) | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/3/2013 | | 99.19 | 0.21 | 706.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/4/2013 | | 99.09 | (0.10) | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/5/2013 | | 99.07 | (0.02) | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/6/2013 | | 99.02 | (0.05) | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/7/2013 | | 98.87 | (0.15) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/8/2013 | | 98.89 | 0.02 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/9/2013 | | 98.93 | 0.04 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/10/2013 | | 99.06 | 0.13 | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/11/2013 | | 98.91 | (0.15) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/12/2013 | | 98.85 | (0.06) | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/13/2013 | | 98.87 | 0.02 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 11/14/2013 | | 98.9 | 0.03 | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/15/2013 | | 98.89 | (0.01) | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/16/2013 | | 98.89 | 0.00 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/17/2013 | | 99.07 | 0.18 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/18/2013 | | 98.89 | (0.18) | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/19/2013 | | 98.81 | (0.08) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/20/2013 | | 98.82 | 0.01 | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/21/2013 | | 98.91 | 0.09 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/22/2013 | | 98.89 | (0.02) | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/23/2013 | | 98.78 | (0.11) | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/24/2013 | | 98.84 | 0.06 | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/25/2013 | | 98.89 | 0.05 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/26/2013 | | 98.8 | (0.09) | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/27/2013 | | 98.68 | (0.12) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/28/2013 | | 98.87 | 0.19 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/29/2013 | | 98.71 | (0.16) | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/30/2013 | | 98.78 | 0.07 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/1/2013 | | 98.85 | 0.07 | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/2/2013 | | 99.01 | 0.16 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/3/2013 | | 98.9 | (0.11) | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/4/2013 | | 98.75 | (0.15) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/5/2013 | | 98.81 | 0.06 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/6/2013 | | 98.72 | (0.09) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/7/2013 | | 98.66 | (0.06) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/8/2013 | | 98.73 | 0.07 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/9/2013 | | 98.89 | 0.16 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/10/2013 | | 98.68 | (0.21) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 12/11/2013 | | 98.68 | 0.00 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/12/2013 | | 98.69 | 0.01 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/13/2013 | | 98.91 | 0.22 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/14/2013 | | 98.75 | (0.16) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/15/2013 | | 98.73 | (0.02) | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/16/2013 | | 98.71 | (0.02) | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/17/2013 | | 98.77 | 0.06 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/18/2013 | | 98.64 | (0.13) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/19/2013 | | 98.69 | 0.05 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/20/2013 | | 98.7 | 0.01 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/21/2013 | | 98.8 | 0.10 | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/22/2013 | | 98.66 | (0.14) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/23/2013 | | 98.59 | (0.07) | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/24/2013 | | 98.62 | 0.03 | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/25/2013 | | 98.8 | 0.18 | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/26/2013 | | 98.76 | (0.04) | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/27/2013 | | 98.63 | (0.13) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/28/2013 | | 98.65 | 0.02 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/29/2013 | | 98.68 | 0.03 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/30/2013 | | 98.62 | (0.06) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/31/2013 | | 98.63 | 0.01 | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/1/2014 | | 98.71 | 0.08 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/2/2014 | | 98.7 | (0.01) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/3/2014 | | 98.6 | (0.10) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/4/2014 | | 98.7 | 0.10 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/5/2014 | | 98.76 | 0.06 | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/6/2014 | | 98.6 | (0.16) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 1/7/2014 | | 98.59 | (0.01) | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/8/2014 | | 99.1 | 0.51 | 706.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/9/2014 | | 98.99 | (0.11) | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/10/2014 | | 98.76 | (0.23) | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/11/2014 | | 98.76 | 0.00 | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/12/2014 | | 98.65 | (0.11) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/13/2014 | | 98.8 | 0.15 | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/14/2014 | | 98.7 | (0.10) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/15/2014 | | 98.56 | (0.14) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/16/2014 | | 98.74 | 0.18 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/17/2014 | | 98.58 | (0.16) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/18/2014 | | 98.66 | 0.08 | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/19/2014 | | 98.71 | 0.05 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/20/2014 | | 98.81 | 0.10 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/21/2014 | | 98.57 | (0.24) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/22/2014 | | 98.62 | 0.05 | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/23/2014 | | 98.64 | 0.02 | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/24/2014 | | 98.52 | (0.12) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/25/2014 | | 98.68 | 0.16 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/26/2014 | | 98.7 | 0.02 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/27/2014 | | 98.76 | 0.06 | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/28/2014 | | 98.62 | (0.14) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/29/2014 | | 98.6 | (0.02) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/30/2014 | | 98.78 | 0.18 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/31/2014 | | 98.75 | (0.03) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/1/2014 | | 98.71 | (0.04) | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/2/2014 | | 98.65 | (0.06) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 2/3/2014 | | 98.56 | (0.09) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/4/2014 | | 98.68 | 0.12 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/5/2014 | | 98.63 | (0.05) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/6/2014 | | 98.68 | 0.05 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/7/2014 | | 98.67 | (0.01) | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/8/2014 | | 98.82 | 0.15 | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/9/2014 | | 98.77 | (0.05) | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/10/2014 | | 98.79 | 0.02 | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/11/2014 | | 98.68 | (0.11) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/12/2014 | | 98.7 | 0.02 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/13/2014 | | 98.76 | 0.06 | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/14/2014 | | 98.78 | 0.02 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/15/2014 | | 98.7 | (0.08) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/16/2014 | | 98.64 | (0.06) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/17/2014 | | 98.72 | 0.08 | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/18/2014 | | 98.67 | (0.05) | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/19/2014 | | 98.63 | (0.04) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/20/2014 | | 98.8 | 0.17 | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/21/2014 | | 98.59 | (0.21) | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/22/2014 | | 98.68 | 0.09 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/23/2014 | | 98.65 | (0.03) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/24/2014 | | 98.76 | 0.11 | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/25/2014 | | 98.65 | (0.11) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/26/2014 | | 98.6 | (0.05) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/27/2014 | | 98.68 | 0.08 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/28/2014 | | 98.71 | 0.03 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/1/2014 | | 98.62 | (0.09) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 3/2/2014 | | 98.73 | 0.11 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/3/2014 | | 98.6 | (0.13) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/4/2014 | | 98.69 | 0.09 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/5/2014 | | 98.63 | (0.06) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/6/2014 | | 98.58 | (0.05) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/7/2014 | | 98.72 | 0.14 | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/8/2014 | | 98.69 | (0.03) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/9/2014 | | 98.56 | (0.13) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/10/2014 | | 98.57 | 0.01 | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/11/2014 | | 98.73 | 0.16 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/12/2014 | | 98.68 | (0.05) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/13/2014 | | 98.56 | (0.12) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/14/2014 | | 98.6 | 0.04 | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/15/2014 | | 98.73 | 0.13 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/16/2014 | | 98.77 | 0.04 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/17/2014 | | 98.65 | (0.12) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/18/2014 | | 98.71 | 0.06 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/19/2014 | | 98.64 | (0.07) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/20/2014 | | 98.58 | (0.06) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/21/2014 | | 98.57 | (0.01) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/22/2014 | | 98.71 | 0.14 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/23/2014 | | 98.68 | (0.03) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/24/2014 | | 98.62 | (0.06) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/25/2014 | | 98.61 | (0.01) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/26/2014 | | 98.68 | 0.07 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/27/2014 | | 98.66 | (0.02) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/28/2014 | | 98.76 | 0.10 | 707.24 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 3/29/2014 | | 98.53 | (0.23) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/30/2014 | | 98.66 | 0.13 | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/31/2014 | | 98.62 | (0.04) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/1/2014 | | 98.66 | 0.04 | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/2/2014 | | 98.63 | (0.03) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/3/2014 | | 98.63 | 0.00 | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/4/2014 | | 98.67 | 0.04 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/5/2014 | | 98.57 | (0.10) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/6/2014 | | 98.73 | 0.16 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/7/2014 | | 98.64 | (0.09) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/8/2014 | | 98.55 | (0.09) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/9/2014 | | 98.63 | 0.08 | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/10/2014 | | 98.62 | (0.01) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/11/2014 | | 98.66 | 0.04 | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/12/2014 | | 98.75 | 0.09 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/13/2014 | | 98.73 | (0.02) | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/14/2014 | | 98.83 | 0.10 | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/15/2014 | | 98.56 | (0.27) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/16/2014 | | 98.65 | 0.09 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/17/2014 | | 98.65 | 0.00 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/18/2014 | | 98.54 | (0.11) | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/19/2014 | | 98.7 | 0.16 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/20/2014 | | 98.78 | 0.08 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/21/2014 | | 98.7 | (0.08) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/22/2014 | | 98.69 | (0.01) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/23/2014 | | 98.68 | (0.01) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/24/2014 | | 98.72 | 0.04 | 707.28 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 4/25/2014 | | 98.72 | 0.00 | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/26/2014 | | 98.9 | 0.18 | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/27/2014 | | 98.74 | (0.16) | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/28/2014 | | 98.73 | (0.01) | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/29/2014 | | 98.78 | 0.05 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/30/2014 | | 98.79 | 0.01 | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/1/2014 | | 98.61 | (0.18) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/2/2014 | | 98.68 | 0.07 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/3/2014 | | 98.65 | (0.03) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/4/2014 | | 98.65 | 0.00 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/5/2014 | | 98.76 | 0.11 | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/6/2014 | | 98.78 | 0.02 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/7/2014 | | 98.7 | (0.08) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/8/2014 | | 98.7 | 0.00 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/9/2014 | | 98.66 | (0.04) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/10/2014 | | 98.72 | 0.06 | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/11/2014 | | 98.7 | (0.02) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/12/2014 | | 98.71 | 0.01 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/13/2014 | | 98.69 | (0.02) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/14/2014 | | 98.82 | 0.13 | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/15/2014 | | 98.7 | (0.12) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/16/2014 | | 98.83 | 0.13 | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/17/2014 | | 98.72 | (0.11) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/18/2014 | | 98.75 | 0.03 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/19/2014 | | 98.71 | (0.04) | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/20/2014 | | 98.72 | 0.01 | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/21/2014 | | 98.71 | (0.01) | 707.29 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 5/22/2014 | | 98.89 | 0.18 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/23/2014 | | 98.81 | (0.08) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/24/2014 | | 98.84 | 0.03 | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/25/2014 | | 98.75 | (0.09) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/26/2014 | | 98.7 | (0.05) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/27/2014 | | 98.81 | 0.11 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/28/2014 | | 98.67 | (0.14) | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/29/2014 | | 98.75 | 0.08 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/30/2014 | | 98.74 | (0.01) | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/31/2014 | | 98.73 | (0.01) | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/1/2014 | | 98.72 | (0.01) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/2/2014 | | 98.7 | (0.02) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/3/2014 | | 98.8 | 0.10 | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/4/2014 | | 98.89 | 0.09 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/5/2014 | | 98.87 | (0.02) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/6/2014 | | 98.89 | 0.02 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/7/2014 | | 98.84 | (0.05) | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/8/2014 | | 98.9 | 0.06 | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/9/2014 | | 98.87 | (0.03) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/10/2014 | | 98.79 | (0.08) | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/11/2014 | | 98.82 | 0.03 | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/12/2014 | | 98.78 | (0.04) | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/13/2014 | | 98.69 | (0.09) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/14/2014 | | 98.7 | 0.01 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/15/2014 | | 98.66 | (0.04) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/16/2014 | | 98.76 | 0.10 | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/17/2014 | | 98.75 | (0.01) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 6/18/2014 | | 98.61 | (0.14) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/19/2014 | | 98.7 | 0.09 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/20/2014 | | 98.69 | (0.01) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/21/2014 | | 98.67 | (0.02) | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/22/2014 | | 98.69 | 0.02 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/23/2014 | | 98.73 | 0.04 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/24/2014 | | 98.66 | (0.07) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/25/2014 | | 98.71 | 0.05 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/26/2014 | | 98.75 | 0.04 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/27/2014 | | 98.75 | 0.00 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/28/2014 | | 98.78 | 0.03 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/29/2014 | | 98.68 | (0.10) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/30/2014 | | 98.67 | (0.01) | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/1/2014 | | 98.75 | 0.08 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/2/2014 | | 98.72 | (0.03) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/3/2014 | | 98.92 | 0.20 | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/4/2014 | | 98.7 | (0.22) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/5/2014 | | 98.69 | (0.01) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/6/2014 | | 98.84 | 0.15 | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/7/2014 | | 99.07 | 0.23 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/8/2014 | | 99.13 | 0.06 | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/9/2014 | | 99.13 | 0.00 | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/10/2014 | | 99.2 | 0.07 | 706.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/11/2014 | | 99.18 | (0.02) | 706.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/12/2014 | | 98.95 | (0.23) | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/13/2014 | | 99.01 | 0.06 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/14/2014 | | 99.15 | 0.14 | 706.85 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 7/15/2014 | | 98.98 | (0.17) | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/16/2014 | | 98.87 | (0.11) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/17/2014 | | 98.98 | 0.11 | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/18/2014 | | 99.01 | 0.03 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/19/2014 | | 98.93 | (0.08) | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/20/2014 | | 99.24 | 0.31 | 706.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/21/2014 | | 99.15 | (0.09) | 706.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/22/2014 | | 99.07 | (0.08) | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/23/2014 | | 98.99 | (0.08) | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/24/2014 | | 99.03 | 0.04 | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/25/2014 | | 99 | (0.03) | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/26/2014 | | 99.01 | 0.01 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/27/2014 | | 98.95 | (0.06) | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/28/2014 | | 99.12 | 0.17 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/29/2014 | | 99.05 | (0.07) | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/30/2014 | | 99.2 | 0.15 | 706.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/31/2014 | | 99.19 | (0.01) | 706.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/1/2014 | | 99.09 | (0.10) | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/2/2014 | | 99.12 | 0.03 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/3/2014 | | 99.09 | (0.03) | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/4/2014 | | 99.13 | 0.04 | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/5/2014 | | 99.01 | (0.12) | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/6/2014 | | 99.01 | 0.00 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/7/2014 | | 99.03 | 0.02 | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/8/2014 | | 99.27 | 0.24 | 706.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/9/2014 | | 99.09 | (0.18) | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/10/2014 | | 99.2 | 0.11 | 706.8 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 8/11/2014 | | 99.33 | 0.13 | 706.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/12/2014 | | 99.19 | (0.14) | 706.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/13/2014 | | 99.13 | (0.06) | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/14/2014 | | 99.15 | 0.02 | 706.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/15/2014 | | 99.05 | (0.10) | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/16/2014 | | 99.16 | 0.11 | 706.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/17/2014 | | 99.16 | 0.00 | 706.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/18/2014 | | 99.1 | (0.06) | 706.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/19/2014 | | 99.2 | 0.10 | 706.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/20/2014 | | 99.03 | (0.17) | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/21/2014 | | 99.17 | 0.14 | 706.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/22/2014 | | 99.04 | (0.13) | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/23/2014 | | 99.07 | 0.03 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/24/2014 | | 99.25 | 0.18 | 706.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/25/2014 | | 99.41 | 0.16 | 706.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/26/2014 | | 99.29 | (0.12) | 706.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/27/2014 | | 99.17 | (0.12) | 706.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/28/2014 | | 99.32 | 0.15 | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/29/2014 | | 99.22 | (0.10) | 706.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/30/2014 | | 99.35 | 0.13 | 706.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/31/2014 | | 99.3 | (0.05) | 706.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/1/2014 | | 99.36 | 0.06 | 706.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/2/2014 | | 99.41 | 0.05 | 706.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/3/2014 | | 99.35 | (0.06) | 706.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/4/2014 | | 99.34 | (0.01) | 706.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/5/2014 | | 99.37 | 0.03 | 706.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/6/2014 | | 99.37 | 0.00 | 706.63 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 9/7/2014 | | 99.32 | (0.05) | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/8/2014 | | 99.32 | 0.00 | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/9/2014 | | 99.31 | (0.01) | 706.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/10/2014 | | 99.26 | (0.05) | 706.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/11/2014 | | 99.51 | 0.25 | 706.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/12/2014 | | 99.44 | (0.07) | 706.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/13/2014 | | 99.37 | (0.07) | 706.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/14/2014 | | 99.32 | (0.05) | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/15/2014 | | 99.32 | 0.00 | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/16/2014 | | 99.39 | 0.07 | 706.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/17/2014 | | 99.36 | (0.03) | 706.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/18/2014 | | 99.32 | (0.04) | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/19/2014 | | 99.27 | (0.05) | 706.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/20/2014 | | 99.26 | (0.01) | 706.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/21/2014 | | 99.52 | 0.26 | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/22/2014 | | 99.58 | 0.06 | 706.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/23/2014 | | 99.49 | (0.09) | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/24/2014 | | 99.43 | (0.06) | 706.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/25/2014 | | 99.38 | (0.05) | 706.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/26/2014 | | 99.37 | (0.01) | 706.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/27/2014 | | 99.35 | (0.02) | 706.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/28/2014 | | 99.44 | 0.09 | 706.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/29/2014 | | 99.27 | (0.17) | 706.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/30/2014 | | 99.3 | 0.03 | 706.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/1/2014 | | 99.26 | (0.04) | 706.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/2/2014 | | 99.29 | 0.03 | 706.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/3/2014 | | 99.19 | (0.10) | 706.81 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 10/4/2014 | | 99.14 | (0.05) | 706.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/5/2014 | | 99.23 | 0.09 | 706.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/6/2014 | | 99.26 | 0.03 | 706.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/7/2014 | | 99.18 | (0.08) | 706.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/8/2014 | | 99.21 | 0.03 | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/9/2014 | | 99.2 | (0.01) | 706.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/10/2014 | | 99.29 | 0.09 | 706.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/11/2014 | | 99.18 | (0.11) | 706.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/12/2014 | | 99.24 | 0.06 | 706.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/13/2014 | | 99.3 | 0.06 | 706.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/14/2014 | | 99.09 | (0.21) | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/15/2014 | | 99.1 | 0.01 | 706.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/16/2014 | | 99.08 | (0.02) | 706.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/17/2014 | | 99.24 | 0.16 | 706.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/18/2014 | | 99.14 | (0.10) | 706.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/19/2014 | | 99.15 | 0.01 | 706.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/20/2014 | | 99.17 | 0.02 | 706.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/21/2014 | | 99.17 | 0.00 | 706.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/22/2014 | | 99.15 | (0.02) | 706.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/23/2014 | | 99.09 | (0.06) | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/24/2014 | | 99.14 | 0.05 | 706.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/25/2014 | | 99.11 | (0.03) | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/26/2014 | | 99.18 | 0.07 | 706.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/27/2014 | | 99.25 | 0.07 | 706.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/28/2014 | | 99.19 | (0.06) | 706.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/29/2014 | | 99.16 | (0.03) | 706.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/30/2014 | | 99.28 | 0.12 | 706.72 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 10/31/2014 | | 99.23 | (0.05) | 706.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/1/2014 | | 99.17 | (0.06) | 706.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/2/2014 | | 99.21 | 0.04 | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/3/2014 | | 99.36 | 0.15 | 706.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/4/2014 | | 99.32 | (0.04) | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/5/2014 | | 99.2 | (0.12) | 706.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/6/2014 | | 99.17 | (0.03) | 706.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/7/2014 | | 99.18 | 0.01 | 706.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/8/2014 | | 99.28 | 0.10 | 706.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/9/2014 | | 99.14 | (0.14) | 706.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/10/2014 | | 99.3 | 0.16 | 706.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/11/2014 | | 99.26 | (0.04) | 706.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/12/2014 | | 99.09 | (0.17) | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/13/2014 | | 99.11 | 0.02 | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/14/2014 | | 99.1 | (0.01) | 706.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/15/2014 | | 99.1 | 0.00 | 706.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/16/2014 | | 99.23 | 0.13 | 706.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/17/2014 | | 99.14 | (0.09) | 706.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/18/2014 | | 99.05 | (0.09) | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/19/2014 | | 99.08 | 0.03 | 706.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/20/2014 | | 99.12 | 0.04 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/21/2014 | | 99.11 | (0.01) | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/22/2014 | | 99.06 | (0.05) | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/23/2014 | | 99.12 | 0.06 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/24/2014 | | 99.05 | (0.07) | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/25/2014 | | 98.96 | (0.09) | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/26/2014 | | 98.97 | 0.01 | 707.03 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 11/27/2014 | | 98.96 | (0.01) | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/28/2014 | | 99.06 | 0.10 | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/29/2014 | | 99.05 | (0.01) | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/30/2014 | | 99.11 | 0.06 | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/1/2014 | | 99.05 | (0.06) | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/2/2014 | | 98.9 | (0.15) | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/3/2014 | | 98.97 | 0.07 | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/4/2014 | | 98.98 | 0.01 | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/5/2014 | | 98.98 | 0.00 | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/6/2014 | | 98.93 | (0.05) | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/7/2014 | | 98.99 | 0.06 | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/8/2014 | | 98.96 | (0.03) | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/9/2014 | | 98.89 | (0.07) | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/10/2014 | | 98.91 | 0.02 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/11/2014 | | 98.96 | 0.05 | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/12/2014 | | 98.89 | (0.07) | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/13/2014 | | 98.87 | (0.02) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/14/2014 | | 98.93 | 0.06 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/15/2014 | | 98.97 | 0.04 | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/16/2014 | | 98.85 | (0.12) | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/17/2014 | | 98.88 | 0.03 | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/18/2014 | | 98.94 | 0.06 | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/19/2014 | | 98.87 | (0.07) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/20/2014 | | 98.95 | 0.08 | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/21/2014 | | 98.98 | 0.03 | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/22/2014 | | 98.97 | (0.01) | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/23/2014 | | 98.95 | (0.02) | 707.05 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 12/24/2014 | | 98.81 | (0.14) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/25/2014 | | 98.92 | 0.11 | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/26/2014 | | 98.84 | (0.08) | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/27/2014 | | 98.92 | 0.08 | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/28/2014 | | 98.88 | (0.04) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/29/2014 | | 98.84 | (0.04) | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/30/2014 | | 99.01 | 0.17 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/31/2014 | | 98.91 | (0.10) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/1/2015 | | 98.87 | (0.04) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/2/2015 | | 98.9 | 0.03 | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/3/2015 | | 98.9 | 0.00 | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/4/2015 | | 98.92 | 0.02 | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/5/2015 | | 98.85 | (0.07) | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/6/2015 | | 98.87 | 0.02 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/7/2015 | | 98.94 | 0.07 | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/8/2015 | | 98.8 | (0.14) | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/9/2015 | | 98.94 | 0.14 | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/10/2015 | | 98.84 | (0.10) | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/11/2015 | | 98.85 | 0.01 | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/12/2015 | | 98.91 | 0.06 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/13/2015 | | 98.84 | (0.07) | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/14/2015 | | 98.91 | 0.07 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/15/2015 | | 98.89 | (0.02) | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/16/2015 | | 98.99 | 0.10 | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/17/2015 | | 98.94 | (0.05) | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/18/2015 | | 98.95 | 0.01 | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/19/2015 | | 99.02 | 0.07 | 706.98 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 1/20/2015 | | 99.06 | 0.04 | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/21/2015 | | 98.95 | (0.11) | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/22/2015 | | 98.92 | (0.03) | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/23/2015 | | 98.92 | 0.00 | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/24/2015 | | 98.82 | (0.10) | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/25/2015 | | 98.86 | 0.04 | 707.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/26/2015 | | 98.81 | (0.05) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/27/2015 | | 98.94 | 0.13 | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/28/2015 | | 98.81 | (0.13) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/29/2015 | | 98.91 | 0.10 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/30/2015 | | 98.72 | (0.19) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/31/2015 | | 98.89 | 0.17 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/1/2015 | | 98.91 | 0.02 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/2/2015 | | 98.73 | (0.18) | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/3/2015 | | 98.82 | 0.09 | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/4/2015 | | 98.82 | 0.00 | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/5/2015 | | 98.75 | (0.07) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/6/2015 | | 98.8 | 0.05 | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/7/2015 | | 98.81 | 0.01 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/8/2015 | | 98.82 | 0.01 | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/9/2015 | | 98.74 | (0.08) | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/10/2015 | | 98.74 | 0.00 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/11/2015 | | 98.92 | 0.18 | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/12/2015 | | 98.7 | (0.22) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/13/2015 | | 98.74 | 0.04 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/14/2015 | | 98.74 | 0.00 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/15/2015 | | 98.77 | 0.03 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 2/16/2015 | | 98.88 | 0.11 | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/17/2015 | | 98.76 | (0.12) | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/18/2015 | | 98.75 | (0.01) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/19/2015 | | 98.71 | (0.04) | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/20/2015 | | 98.74 | 0.03 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/21/2015 | | 98.85 | 0.11 | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/22/2015 | | 98.75 | (0.10) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/23/2015 | | 98.68 | (0.07) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/24/2015 | | 98.71 | 0.03 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/25/2015 | | 98.81 | 0.10 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/26/2015 | | 98.77 | (0.04) | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/27/2015 | | 98.73 | (0.04) | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/28/2015 | | 98.68 | (0.05) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/1/2015 | | 98.85 | 0.17 | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/2/2015 | | 98.7 | (0.15) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/3/2015 | | 98.74 | 0.04 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/4/2015 | | 98.79 | 0.05 | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/5/2015 | | 98.81 | 0.02 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/6/2015 | | 98.71 | (0.10) | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/7/2015 | | 98.72 | 0.01 | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/8/2015 | | 98.67 | (0.05) | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/9/2015 | | 98.88 | 0.21 | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/10/2015 | | 98.69 | (0.19) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/11/2015 | | 98.62 | (0.07) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/12/2015 | | 98.64 | 0.02 | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/13/2015 | | 98.71 | 0.07 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/14/2015 | | 98.68 | (0.03) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 3/15/2015 | | 98.6 | (0.08) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/16/2015 | | 98.77 | 0.17 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/17/2015 | | 98.71 | (0.06) | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/18/2015 | | 98.7 | (0.01) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/19/2015 | | 98.7 | 0.00 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/20/2015 | | 98.77 | 0.07 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/21/2015 | | 98.66 | (0.11) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/22/2015 | | 98.81 | 0.15 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/23/2015 | | 98.67 | (0.14) | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/24/2015 | | 98.69 | 0.02 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/25/2015 | | 98.73 | 0.04 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/26/2015 | | 98.65 | (0.08) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/27/2015 | | 98.62 | (0.03) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/28/2015 | | 98.65 | 0.03 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/29/2015 | | 98.63 | (0.02) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/30/2015 | | 98.73 | 0.10 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/31/2015 | | 98.82 | 0.09 | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/1/2015 | | 98.71 | (0.11) | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/2/2015 | | 98.66 | (0.05) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/3/2015 | | 98.74 | 0.08 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/4/2015 | | 98.61 | (0.13) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/5/2015 | | 98.63 | 0.02 | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/6/2015 | | 98.68 | 0.05 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/7/2015 | | 98.65 | (0.03) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/8/2015 | | 98.81 | 0.16 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/9/2015 | | 98.69 | (0.12) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/10/2015 | | 98.65 | (0.04) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 4/11/2015 | | 98.77 | 0.12 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/12/2015 | | 98.68 | (0.09) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/13/2015 | | 98.71 | 0.03 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/14/2015 | | 98.64 | (0.07) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/15/2015 | | 98.77 | 0.13 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/16/2015 | | 98.69 | (0.08) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/17/2015 | | 98.66 | (0.03) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/18/2015 | | 98.62 | (0.04) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/19/2015 | | 98.69 | 0.07 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/20/2015 | | 98.65 | (0.04) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/21/2015 | | 98.57 | (0.08) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/22/2015 | | 98.69 | 0.12 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/23/2015 | | 98.58 | (0.11) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/24/2015 | | 98.67 | 0.09 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/25/2015 | | 98.61 | (0.06) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/26/2015 | | 98.69 | 0.08 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/27/2015 | | 98.72 | 0.03 | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/28/2015 | | 98.56 | (0.16) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/29/2015 | | 98.62 | 0.06 | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/30/2015 | | 98.69 | 0.07 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/1/2015 | | 98.57 | (0.12) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/2/2015 | | 98.56 | (0.01) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/3/2015 | | 98.56 | 0.00 | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/4/2015 | | 98.64 | 0.08 | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/5/2015 | | 98.53 | (0.11) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/6/2015 | | 98.55 | 0.02 | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/7/2015 | | 98.69 | 0.14 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 5/8/2015 | | 98.6 | (0.09) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/9/2015 | | 98.55 | (0.05) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/10/2015 | | 98.52 | (0.03) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/11/2015 | | 98.62 | 0.10 | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/12/2015 | | 98.51 | (0.11) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/13/2015 | | 98.5 | (0.01) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/14/2015 | | 98.52 | 0.02 | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/15/2015 | | 98.65 | 0.13 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/16/2015 | | 98.59 | (0.06) | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/17/2015 | | 98.55 | (0.04) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/18/2015 | | 98.47 | (0.08) | 707.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/19/2015 | | 98.52 | 0.05 | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/20/2015 | | 98.46 | (0.06) | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/21/2015 | | 98.4 | (0.06) | 707.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/22/2015 | | 98.41 | 0.01 | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/23/2015 | | 98.5 | 0.09 | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/24/2015 | | 98.36 | (0.14) | 707.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/25/2015 | | 98.31 | (0.05) | 707.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/26/2015 | | 98.34 | 0.03 | 707.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/27/2015 | | 98.36 | 0.02 | 707.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/28/2015 | | 98.24 | (0.12) | 707.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/29/2015 | | 98.21 | (0.03) | 707.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/30/2015 | | 98.24 | 0.03 | 707.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/31/2015 | | 98.23 | (0.01) | 707.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/1/2015 | | 98.49 | 0.26 | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/2/2015 | | 98.33 | (0.16) | 707.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/3/2015 | | 98.5 | 0.17 | 707.5 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 6/4/2015 | | 98.43 | (0.07) | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/5/2015 | | 98.56 | 0.13 | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/6/2015 | | 98.43 | (0.13) | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/7/2015 | | 98.57 | 0.14 | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/8/2015 | | 98.59 | 0.02 | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/9/2015 | | 98.6 | 0.01 | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/10/2015 | | 98.61 | 0.01 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/11/2015 | | 98.69 | 0.08 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/12/2015 | | 98.67 | (0.02) | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/13/2015 | | 98.89 | 0.22 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/14/2015 | | 98.74 | (0.15) | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/15/2015 | | 98.7 | (0.04) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/16/2015 | | 98.75 | 0.05 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/17/2015 | | 98.76 | 0.01 | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/18/2015 | | 98.76 | 0.00 | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/19/2015 | | 98.83 | 0.07 | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/20/2015 | | 98.78 | (0.05) | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/21/2015 | | 98.87 | 0.09 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/22/2015 | | 98.81 | (0.06) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/23/2015 | | 98.86 | 0.05 | 707.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/24/2015 | | 98.91 | 0.05 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/25/2015 | | 98.9 | (0.01) | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/26/2015 | | 98.82 | (0.08) | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/27/2015 | | 98.87 | 0.05 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/28/2015 | | 98.83 | (0.04) | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/29/2015 | | 98.84 | 0.01 | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/30/2015 | | 98.84 | 0.00 | 707.16 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 7/1/2015 | | 98.76 | (0.08) | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/2/2015 | | 98.87 | 0.11 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/3/2015 | | 98.74 | (0.13) | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/4/2015 | | 98.78 | 0.04 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/5/2015 | | 98.7 | (0.08) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/6/2015 | | 98.75 | 0.05 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/7/2015 | | 98.74 | (0.01) | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/8/2015 | | 98.6 | (0.14) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/9/2015 | | 98.78 | 0.18 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/10/2015 | | 98.62 | (0.16) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/11/2015 | | 98.66 | 0.04 | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/12/2015 | | 98.61 | (0.05) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/13/2015 | | 98.68 | 0.07 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/14/2015 | | 98.7 | 0.02 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/15/2015 | | 98.64 | (0.06) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/16/2015 | | 98.64 | 0.00 | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/17/2015 | | 98.64 | 0.00 | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/18/2015 | | 98.8 | 0.16 | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/19/2015 | | 98.77 | (0.03) | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/20/2015 | | 98.83 | 0.06 | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/21/2015 | | 98.96 | 0.13 | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/22/2015 | | 98.93 | (0.03) | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/23/2015 | | 98.95 | 0.02 | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/24/2015 | | 99.05 | 0.10 | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/25/2015 | | 99 | (0.05) | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/26/2015 | | 98.97 | (0.03) | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/27/2015 | | 99.04 | 0.07 | 706.96 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 7/28/2015 | | 99 | (0.04) | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/29/2015 | | 98.79 | (0.21) | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/30/2015 | | 98.84 | 0.05 | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/31/2015 | | 98.88 | 0.04 | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/1/2015 | | 98.75 | (0.13) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/2/2015 | | 98.87 | 0.12 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/3/2015 | | 99.12 | 0.25 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/4/2015 | | 98.99 | (0.13) | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/5/2015 | | 98.91 | (0.08) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/6/2015 | | 98.99 | 0.08 | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/7/2015 | | 98.9 | (0.09) | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/8/2015 | | 98.85 | (0.05) | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/9/2015 | | 98.88 | 0.03 | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/10/2015 | | 99.09 | 0.21 | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/11/2015 | | 98.93 | (0.16) | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/12/2015 | | 98.97 | 0.04 | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/13/2015 | | 99.03 | 0.06 | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/14/2015 | | 98.96 | (0.07) | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/15/2015 | | 99.13 | 0.17 | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/16/2015 | | 98.99 | (0.14) | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/17/2015 | | 99.02 | 0.03 | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/18/2015 | | 99.13 | 0.11 | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/19/2015 | | 99.21 | 0.08 | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/20/2015 | | 98.97 | (0.24) | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/21/2015 | | 99.21 | 0.24 | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/22/2015 | | 99.03 | (0.18) | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/23/2015 | | 99.07 | 0.04 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 8/24/2015 | | 99.03 | (0.04) | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/25/2015 | | 99.15 | 0.12 | 706.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/26/2015 | | 99.02 | (0.13) | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/27/2015 | | 99.11 | 0.09 | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/28/2015 | | 99.11 | 0.00 | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/29/2015 | | 99.16 | 0.05 | 706.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/30/2015 | | 99.1 | (0.06) | 706.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/31/2015 | | 99.2 | 0.10 | 706.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/1/2015 | | 99.23 | 0.03 | 706.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/2/2015 | | 99.19 | (0.04) | 706.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/3/2015 | | 99.18 | (0.01) | 706.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/4/2015 | | 99.32 | 0.14 | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/5/2015 | | 99.3 | (0.02) | 706.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/6/2015 | | 99.45 | 0.15 | 706.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/7/2015 | | 99.52 | 0.07 | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/8/2015 | | 99.5 | (0.02) | 706.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/9/2015 | | 99.36 | (0.14) | 706.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/10/2015 | | 99.47 | 0.11 | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/11/2015 | | 99.43 | (0.04) | 706.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/12/2015 | | 99.48 | 0.05 | 706.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/13/2015 | | 99.38 | (0.10) | 706.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/14/2015 | | 99.61 | 0.23 | 706.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/15/2015 | | 99.39 | (0.22) | 706.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/16/2015 | | 99.36 | (0.03) | 706.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/17/2015 | | 99.35 | (0.01) | 706.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/18/2015 | | 99.4 | 0.05 | 706.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/19/2015 | | 99.38 | (0.02) | 706.62 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 9/20/2015 | | 99.48 | 0.10 | 706.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/21/2015 | | 99.41 | (0.07) | 706.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/22/2015 | | 99.48 | 0.07 | 706.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/23/2015 | | 99.46 | (0.02) | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/24/2015 | | 99.57 | 0.11 | 706.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/25/2015 | | 99.46 | (0.11) | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/26/2015 | | 99.52 | 0.06 | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/27/2015 | | 99.44 | (0.08) | 706.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/28/2015 | | 99.47 | 0.03 | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/29/2015 | | 99.43 | (0.04) | 706.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/30/2015 | | 99.54 | 0.11 | 706.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/1/2015 | | 99.49 | (0.05) | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/2/2015 | | 99.54 | 0.05 | 706.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/3/2015 | | 99.47 | (0.07) | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/4/2015 | | 99.55 | 0.08 | 706.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/5/2015 | | 99.57 | 0.02 | 706.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/6/2015 | | 99.7 | 0.13 | 706.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/7/2015 | | 99.53 | (0.17) | 706.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/8/2015 | | 99.55 | 0.02 | 706.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/9/2015 | | 99.48 | (0.07) | 706.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/10/2015 | | 99.47 | (0.01) | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/11/2015 | | 99.52 | 0.05 | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/12/2015 | | 99.6 | 0.08 | 706.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/13/2015 | | 99.61 | 0.01 | 706.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/14/2015 | | 99.61 | 0.00 | 706.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/15/2015 | | 99.6 | (0.01) | 706.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/16/2015 | | 99.52 | (0.08) | 706.48 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 10/17/2015 | | 99.55 | 0.03 | 706.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/18/2015 | | 99.56 | 0.01 | 706.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/19/2015 | | 99.47 | (0.09) | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/20/2015 | | 99.51 | 0.04 | 706.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/21/2015 | | 99.45 | (0.06) | 706.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/22/2015 | | 99.51 | 0.06 | 706.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/23/2015 | | 99.47 | (0.04) | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/24/2015 | | 99.47 | 0.00 | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/25/2015 | | 99.46 | (0.01) | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/26/2015 | | 99.44 | (0.02) | 706.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/27/2015 | | 99.46 | 0.02 | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/28/2015 | | 99.46 | 0.00 | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/29/2015 | | 99.44 | (0.02) | 706.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/30/2015 | | 99.39 | (0.05) | 706.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/31/2015 | | 99.4 | 0.01 | 706.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/1/2015 | | 99.35 | (0.05) | 706.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/2/2015 | | 99.32 | (0.03) | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/3/2015 | | 99.31 | (0.01) | 706.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/4/2015 | | 99.37 | 0.06 | 706.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/5/2015 | | 99.29 | (0.08) | 706.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/6/2015 | | 99.33 | 0.04 | 706.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/7/2015 | | 99.32 | (0.01) | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/8/2015 | | 99.32 | 0.00 | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/9/2015 | | 99.36 | 0.04 | 706.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/10/2015 | | 99.35 | (0.01) | 706.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/11/2015 | | 99.37 | 0.02 | 706.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/12/2015 | | 99.29 | (0.08) | 706.71 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 11/13/2015 | | 99.38 | 0.09 | 706.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/14/2015 | | 99.35 | (0.03) | 706.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/15/2015 | | 99.26 | (0.09) | 706.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/16/2015 | | 99.32 | 0.06 | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/17/2015 | | 99.47 | 0.15 | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/18/2015 | | 99.41 | (0.06) | 706.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/19/2015 | | 99.25 | (0.16) | 706.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/20/2015 | | 99.24 | (0.01) | 706.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/21/2015 | | 99.27 | 0.03 | 706.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/22/2015 | | 99.26 | (0.01) | 706.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/23/2015 | | 99.21 | (0.05) | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/24/2015 | | 99.23 | 0.02 | 706.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/25/2015 | | 99.28 | 0.05 | 706.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/26/2015 | | 99.31 | 0.03 | 706.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/27/2015 | | 99.23 | (0.08) | 706.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/28/2015 | | 99.14 | (0.09) | 706.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/29/2015 | | 99.15 | 0.01 | 706.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/30/2015 | | 99.15 | 0.00 | 706.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/1/2015 | | 99.14 | (0.01) | 706.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/2/2015 | | 99.1 | (0.04) | 706.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/3/2015 | | 99.02 | (0.08) | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/4/2015 | | 99.06 | 0.04 | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/5/2015 | | 99.11 | 0.05 | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/6/2015 | | 99.07 | (0.04) | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/7/2015 | | 99.1 | 0.03 | 706.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/8/2015 | | 99.12 | 0.02 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/9/2015 | | 99.15 | 0.03 | 706.85 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 12/10/2015 | | 99.07 | (0.08) | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/11/2015 | | 99.16 | 0.09 | 706.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/12/2015 | | 99.11 | (0.05) | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/13/2015 | | 99.12 | 0.01 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/14/2015 | | 99.06 | (0.06) | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/15/2015 | | 99.05 | (0.01) | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/16/2015 | | 99.05 | 0.00 | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/17/2015 | | 99.05 | 0.00 | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/18/2015 | | 98.95 | (0.10) | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/19/2015 | | 98.94 | (0.01) | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/20/2015 | | 99.05 | 0.11 | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/21/2015 | | 99.04 | (0.01) | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/22/2015 | | 99.06 | 0.02 | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/23/2015 | | 99.11 | 0.05 | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/24/2015 | | 99.02 | (0.09) | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/25/2015 | | 99 | (0.02) | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/26/2015 | | 99.05 | 0.05 | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/27/2015 | | 99.07 | 0.02 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/28/2015 | | 99.02 | (0.05) | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/29/2015 | | 98.96 | (0.06) | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/30/2015 | | 98.89 | (0.07) | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/31/2015 | | 98.99 | 0.10 | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/1/2016 | | 98.98 | (0.01) | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/2/2016 | | 98.95 | (0.03) | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/3/2016 | | 99.02 | 0.07 | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/4/2016 | | 99.07 | 0.05 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/5/2016 | | 98.94 | (0.13) | 707.06 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 1/6/2016 | | 98.96 | 0.02 | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/7/2016 | | 99.01 | 0.05 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/8/2016 | | 99 | (0.01) | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/9/2016 | | 98.93 | (0.07) | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/10/2016 | | 98.85 | (0.08) | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/11/2016 | | 98.93 | 0.08 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/12/2016 | | 99.09 | 0.16 | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/13/2016 | | 98.98 | (0.11) | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/14/2016 | | 99 | 0.02 | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/15/2016 | | 98.99 | (0.01) | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/16/2016 | | 99.03 | 0.04 | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/17/2016 | | 98.85 | (0.18) | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/18/2016 | | 98.89 | 0.04 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/19/2016 | | 98.88 | (0.01) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/20/2016 | | 98.87 | (0.01) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/21/2016 | | 98.97 | 0.10 | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/22/2016 | | 98.93 | (0.04) | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/23/2016 | | 98.91 | (0.02) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/24/2016 | | 98.98 | 0.07 | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/25/2016 | | 98.97 | (0.01) | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/26/2016 | | 98.88 | (0.09) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/27/2016 | | 98.81 | (0.07) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/28/2016 | | 98.9 | 0.09 | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/29/2016 | | 98.89 | (0.01) | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/30/2016 | | 98.93 | 0.04 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/31/2016 | | 98.95 | 0.02 | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/1/2016 | | 98.98 | 0.03 | 707.02 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 2/2/2016 | | 98.9 | (0.08) | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/3/2016 | | 98.91 | 0.01 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/4/2016 | | 98.81 | (0.10) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/5/2016 | | 98.87 | 0.06 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/6/2016 | | 98.86 | (0.01) | 707.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/7/2016 | | 98.86 | 0.00 | 707.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/8/2016 | | 98.9 | 0.04 | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/9/2016 | | 98.92 | 0.02 | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/10/2016 | | 98.88 | (0.04) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/11/2016 | | 98.92 | 0.04 | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/12/2016 | | 98.83 | (0.09) | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/13/2016 | | 98.79 | (0.04) | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/14/2016 | | 98.88 | 0.09 | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/15/2016 | | 98.91 | 0.03 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/16/2016 | | 98.86 | (0.05) | 707.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/17/2016 | | 98.86 | 0.00 | 707.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/18/2016 | | 98.79 | (0.07) | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/19/2016 | | 98.84 | 0.05 | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/20/2016 | | 98.82 | (0.02) | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/21/2016 | | 98.84 | 0.02 | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/22/2016 | | 98.83 | (0.01) | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/23/2016 | | 98.95 | 0.12 | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/24/2016 | | 98.87 | (0.08) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/25/2016 | | 98.77 | (0.10) | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/26/2016 | | 98.73 | (0.04) | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/27/2016 | | 98.77 | 0.04 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/28/2016 | | 98.8 | 0.03 | 707.2 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 2/29/2016 | | 98.83 | 0.03 | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/1/2016 | | 98.79 | (0.04) | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/2/2016 | | 98.72 | (0.07) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/3/2016 | | 98.79 | 0.07 | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/4/2016 | | 98.75 | (0.04) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/5/2016 | | 98.84 | 0.09 | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/6/2016 | | 98.76 | (0.08) | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/7/2016 | | 99.06 | 0.30 | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/8/2016 | | 98.93 | (0.13) | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/9/2016 | | 98.87 | (0.06) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/10/2016 | | 98.84 | (0.03) | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/11/2016 | | 98.75 | (0.09) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/12/2016 | | 98.81 | 0.06 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/13/2016 | | 98.78 | (0.03) | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/14/2016 | | 98.81 | 0.03 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/15/2016 | | 98.83 | 0.02 | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/16/2016 | | 98.75 | (0.08) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/17/2016 | | 98.79 | 0.04 | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/18/2016 | | 98.87 | 0.08 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/19/2016 | | 98.75 | (0.12) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/20/2016 | | 98.77 | 0.02 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/21/2016 | | 98.72 | (0.05) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/22/2016 | | 98.87 | 0.15 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/23/2016 | | 98.9 | 0.03 | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/24/2016 | | 98.74 | (0.16) | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/25/2016 | | 98.75 | 0.01 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/26/2016 | | 98.82 | 0.07 | 707.18 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 3/27/2016 | | 98.72 | (0.10) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/28/2016 | | 98.7 | (0.02) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/29/2016 | | 98.86 | 0.16 | 707.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/30/2016 | | 98.77 | (0.09) | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/31/2016 | | 98.83 | 0.06 | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/1/2016 | | 98.73 | (0.10) | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/2/2016 | | 98.65 | (0.08) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/3/2016 | | 98.74 | 0.09 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/4/2016 | | 98.75 | 0.01 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/5/2016 | | 98.67 | (0.08) | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/6/2016 | | 98.75 | 0.08 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/7/2016 | | 98.71 | (0.04) | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/8/2016 | | 98.68 | (0.03) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/9/2016 | | 98.69 | 0.01 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/10/2016 | | 98.68 | (0.01) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/11/2016 | | 98.86 | 0.18 | 707.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/12/2016 | | 98.84 | (0.02) | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/13/2016 | | 98.8 | (0.04) | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/14/2016 | | 98.75 | (0.05) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/15/2016 | | 98.78 | 0.03 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/16/2016 | | 98.72 | (0.06) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/17/2016 | | 98.75 | 0.03 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/18/2016 | | 98.66 | (0.09) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/19/2016 | | 98.66 | 0.00 | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/20/2016 | | 98.74 | 0.08 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/21/2016 | | 98.65 | (0.09) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/22/2016 | | 98.59 | (0.06) | 707.41 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 4/23/2016 | | 98.75 | 0.16 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/24/2016 | | 98.64 | (0.11) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/25/2016 | | 98.68 | 0.04 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/26/2016 | | 98.63 | (0.05) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/27/2016 | | 98.66 | 0.03 | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/28/2016 | | 98.7 | 0.04 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/29/2016 | | 98.68 | (0.02) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/30/2016 | | 98.69 | 0.01 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/1/2016 | | 98.65 | (0.04) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/2/2016 | | 98.64 | (0.01) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/3/2016 | | 98.6 | (0.04) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/4/2016 | | 98.59 | (0.01) | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/5/2016 | | 98.65 | 0.06 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/6/2016 | | 98.64 | (0.01) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/7/2016 | | 98.65 | 0.01 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/8/2016 | | 98.62 | (0.03) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/9/2016 | | 98.69 | 0.07 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/10/2016 | | 98.62 | (0.07) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/11/2016 | | 98.57 | (0.05) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/12/2016 | | 98.6 | 0.03 | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/13/2016 | | 98.63 | 0.03 | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/14/2016 | | 98.67 | 0.04 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/15/2016 | | 98.6 | (0.07) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/16/2016 | | 98.61 | 0.01 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/17/2016 | | 98.61 | 0.00 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/18/2016 | | 98.55 | (0.06) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/19/2016 | | 98.58 | 0.03 | 707.42 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 5/20/2016 | | 98.51 | (0.07) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/21/2016 | | 98.4 | (0.11) | 707.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/22/2016 | | 98.53 | 0.13 | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/23/2016 | | 98.43 | (0.10) | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/24/2016 | | 98.59 | 0.16 | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/25/2016 | | 98.55 | (0.04) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/26/2016 | | 98.68 | 0.13 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/27/2016 | | 98.72 | 0.04 | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/28/2016 | | 98.78 | 0.06 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/29/2016 | | 98.92 | 0.14 | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/30/2016 | | 98.81 | (0.11) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/31/2016 | | 98.85 | 0.04 | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/1/2016 | | 98.62 | (0.23) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/2/2016 | | 98.61 | (0.01) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/3/2016 | | 98.5 | (0.11) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/4/2016 | | 98.5 | 0.00 | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/5/2016 | | 98.41 | (0.09) | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/6/2016 | | 98.38 | (0.03) | 707.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/7/2016 | | 98.33 | (0.05) | 707.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/8/2016 | | 98.41 | 0.08 | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/9/2016 | | 98.41 | 0.00 | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/10/2016 | | 98.39 | (0.02) | 707.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/11/2016 | | 98.34 | (0.05) | 707.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/12/2016 | | 98.39 | 0.05 | 707.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/13/2016 | | 98.43 | 0.04 | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/14/2016 | | 98.55 | 0.12 | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/15/2016 | | 98.56 | 0.01 | 707.44 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 6/16/2016 | | 98.45 | (0.11) | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/17/2016 | | 98.48 | 0.03 | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/18/2016 | | 98.55 | 0.07 | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/19/2016 | | 98.52 | (0.03) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/20/2016 | | 98.54 | 0.02 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/21/2016 | | 98.62 | 0.08 | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/22/2016 | | 98.65 | 0.03 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/23/2016 | | 98.51 | (0.14) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/24/2016 | | 98.7 | 0.19 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/25/2016 | | 98.7 | 0.00 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/26/2016 | | 98.64 | (0.06) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/27/2016 | | 98.65 | 0.01 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/28/2016 | | 98.63 | (0.02) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/29/2016 | | 98.74 | 0.11 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/30/2016 | | 98.72 | (0.02) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/1/2016 | | 98.6 | (0.12) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/2/2016 | | 98.67 | 0.07 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/3/2016 | | 98.59 | (0.08) | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/4/2016 | | 98.64 | 0.05 | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/5/2016 | | 98.67 | 0.03 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/6/2016 | | 98.68 | 0.01 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/7/2016 | | 98.67 | (0.01) | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/8/2016 | | 98.72 | 0.05 | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/9/2016 | | 98.7 | (0.02) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/10/2016 | | 98.87 | 0.17 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/11/2016 | | 98.8 | (0.07) | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/12/2016 | | 98.86 | 0.06 | 707.14 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 7/13/2016 | | 98.8 | (0.06) | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/14/2016 | | 98.85 | 0.05 | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/15/2016 | | 98.79 | (0.06) | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/16/2016 | | 98.76 | (0.03) | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/17/2016 | | 98.85 | 0.09 | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/18/2016 | | 98.83 | (0.02) | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/19/2016 | | 98.85 | 0.02 | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/20/2016 | | 98.8 | (0.05) | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/21/2016 | | 98.91 | 0.11 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/22/2016 | | 98.94 | 0.03 | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/23/2016 | | 99.01 | 0.07 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/24/2016 | | 98.98 | (0.03) | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/25/2016 | | 99.12 | 0.14 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/26/2016 | | 99.23 | 0.11 | 706.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/27/2016 | | 99.07 | (0.16) | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/28/2016 | | 99.38 | 0.31 | 706.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/29/2016 | | 99.05 | (0.33) | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/30/2016 | | 99.11 | 0.06 | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/31/2016 | | 99.03 | (0.08) | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/1/2016 | | 99.11 | 0.08 | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/2/2016 | | 99.07 | (0.04) | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/3/2016 | | 99.28 | 0.21 | 706.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/4/2016 | | 99.22 | (0.06) | 706.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/5/2016 | | 99.24 | 0.02 | 706.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/6/2016 | | 99.13 | (0.11) | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/7/2016 | | 99.07 | (0.06) | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/8/2016 | | 99.28 | 0.21 | 706.72 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 8/9/2016 | | 99.13 | (0.15) | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/10/2016 | | 99.27 | 0.14 | 706.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/11/2016 | | 99.31 | 0.04 | 706.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/12/2016 | | 99.26 | (0.05) | 706.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/13/2016 | | 99.25 | (0.01) | 706.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/14/2016 | | 99.31 | 0.06 | 706.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/15/2016 | | 99.26 | (0.05) | 706.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/16/2016 | | 99.24 | (0.02) | 706.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/17/2016 | | 99.21 | (0.03) | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/18/2016 | | 99.21 | 0.00 | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/19/2016 | | 99.26 | 0.05 | 706.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/20/2016 | | 99.28 | 0.02 | 706.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/21/2016 | | 99.19 | (0.09) | 706.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/22/2016 | | 99.25 | 0.06 | 706.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/23/2016 | | 99.13 | (0.12) | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/24/2016 | | 99.05 | (0.08) | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/25/2016 | | 99.04 | (0.01) | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/26/2016 | | 99.03 | (0.01) | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/27/2016 | | 98.96 | (0.07) | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/28/2016 | | 99.03 | 0.07 | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/29/2016 | | 98.94 | (0.09) | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/30/2016 | | 99.05 | 0.11 | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/31/2016 | | 99.01 | (0.04) | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/1/2016 | | 98.96 | (0.05) | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/2/2016 | | 98.99 | 0.03 | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/3/2016 | | 98.95 | (0.04) | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/4/2016 | | 99.01 | 0.06 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 9/5/2016 | | 98.93 | (0.08) | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/6/2016 | | 98.97 | 0.04 | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/7/2016 | | 98.96 | (0.01) | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/8/2016 | | 98.9 | (0.06) | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/9/2016 | | 98.92 | 0.02 | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/10/2016 | | 99.05 | 0.13 | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/11/2016 | | 99.01 | (0.04) | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/12/2016 | | 99.19 | 0.18 | 706.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/13/2016 | | 99.14 | (0.05) | 706.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/14/2016 | | 99.04 | (0.10) | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/15/2016 | | 99.02 | (0.02) | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/16/2016 | | 99.14 | 0.12 | 706.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/17/2016 | | 99.09 | (0.05) | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/18/2016 | | 98.98 | (0.11) | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/19/2016 | | 98.94 | (0.04) | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/20/2016 | | 99.03 | 0.09 | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/21/2016 | | 99.16 | 0.13 | 706.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/22/2016 | | 98.97 | (0.19) | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/23/2016 | | 98.94 | (0.03) | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/24/2016 | | 99.02 | 0.08 | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/25/2016 | | 99 | (0.02) | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/26/2016 | | 98.94 | (0.06) | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/27/2016 | | 98.9 | (0.04) | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/28/2016 | | 98.87 | (0.03) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/29/2016 | | 98.97 | 0.10 | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/30/2016 | | 98.87 | (0.10) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/1/2016 | | 98.86 | (0.01) | 707.14 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 10/2/2016 | | 99.05 | 0.19 | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/3/2016 | | 98.93 | (0.12) | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/4/2016 | | 99.08 | 0.15 | 706.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/5/2016 | | 98.9 | (0.18) | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/6/2016 | | 98.95 | 0.05 | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/7/2016 | | 99.03 | 0.08 | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/8/2016 | | 99.07 | 0.04 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/9/2016 | | 98.91 | (0.16) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/10/2016 | | 98.94 | 0.03 | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/11/2016 | | 98.99 | 0.05 | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/12/2016 | | 99.06 | 0.07 | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/13/2016 | | 99 | (0.06) | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/14/2016 | | 98.91 | (0.09) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/15/2016 | | 99.17 | 0.26 | 706.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/16/2016 | | 99.06 | (0.11) | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/17/2016 | | 99.1 | 0.04 | 706.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/18/2016 | | 99 | (0.10) | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/19/2016 | | 98.96 | (0.04) | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/20/2016 | | 99 | 0.04 | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/21/2016 | | 98.91 | (0.09) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/22/2016 | | 99.03 | 0.12 | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/23/2016 | | 99.04 | 0.01 | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/24/2016 | | 98.99 | (0.05) | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/25/2016 | | 98.92 | (0.07) | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/26/2016 | | 99 | 0.08 | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/27/2016 | | 98.98 | (0.02) | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/28/2016 | | 99.01 | 0.03 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 10/29/2016 | | 99.03 | 0.02 | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/30/2016 | | 98.97 | (0.06) | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/31/2016 | | 99.05 | 0.08 | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/1/2016 | | 99.05 | 0.00 | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/2/2016 | | 99.01 | (0.04) | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/3/2016 | | 99.1 | 0.09 | 706.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/4/2016 | | 99.03 | (0.07) | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/5/2016 | | 99.07 | 0.04 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/6/2016 | | 99.04 | (0.03) | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/7/2016 | | 99 | (0.04) | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/8/2016 | | 99.07 | 0.07 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/9/2016 | | 99.02 | (0.05) | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/10/2016 | | 98.95 | (0.07) | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/11/2016 | | 98.93 | (0.02) | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/12/2016 | | 99.01 | 0.08 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/13/2016 | | 98.89 | (0.12) | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/14/2016 | | 98.94 | 0.05 | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/15/2016 | | 98.85 | (0.09) | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/16/2016 | | 98.94 | 0.09 | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/17/2016 | | 98.88 | (0.06) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/18/2016 | | 98.81 | (0.07) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/19/2016 | | 98.67 | (0.14) | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/20/2016 | | 98.88 | 0.21 | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/21/2016 | | 98.82 | (0.06) | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/22/2016 | | 98.85 | 0.03 | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/23/2016 | | 98.94 | 0.09 | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/24/2016 | | 98.75 | (0.19) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 11/25/2016 | | 99.03 | 0.28 | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/26/2016 | | 98.8 | (0.23) | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/27/2016 | | 98.93 | 0.13 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/28/2016 | | 98.98 | 0.05 | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/29/2016 | | 98.96 | (0.02) | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/30/2016 | | 98.87 | (0.09) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/1/2016 | | 98.93 | 0.06 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/2/2016 | | 98.91 | (0.02) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/3/2016 | | 99.01 | 0.10 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/4/2016 | | 99.05 | 0.04 | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/5/2016 | | 98.98 | (0.07) | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/6/2016 | | 98.97 | (0.01) | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/7/2016 | | 99 | 0.03 | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/8/2016 | | 98.99 | (0.01) | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/9/2016 | | 98.82 | (0.17) | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/10/2016 | | 98.83 | 0.01 | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/11/2016 | | 98.98 | 0.15 | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/12/2016 | | 99.07 | 0.09 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/13/2016 | | 98.95 | (0.12) | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/14/2016 | | 98.85 | (0.10) | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/15/2016 | | 98.82 | (0.03) | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/16/2016 | | 98.89 | 0.07 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/17/2016 | | 99.05 | 0.16 | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/18/2016 | | 98.87 | (0.18) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/19/2016 | | 98.78 | (0.09) | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/20/2016 | | 98.87 | 0.09 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/21/2016 | | 98.98 | 0.11 | 707.02 | 1 | Groundwater Conservation District | Transducer | | |

Texas Water Development Board

# Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 57-40-104

groundwater division

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 12/22/2016 | | 98.97 | (0.01) | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/23/2016 | | 99.1 | 0.13 | 706.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/24/2016 | | 99.28 | 0.18 | 706.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/25/2016 | | 99.31 | 0.03 | 706.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/26/2016 | | 99.06 | (0.25) | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/27/2016 | | 99.13 | 0.07 | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/28/2016 | | 99.21 | 0.08 | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/29/2016 | | 99.57 | 0.36 | 706.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/30/2016 | | 99.29 | (0.28) | 706.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/31/2016 | | 99.31 | 0.02 | 706.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/1/2017 | | 99.15 | (0.16) | 706.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/2/2017 | | 99.11 | (0.04) | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/3/2017 | | 99.08 | (0.03) | 706.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/4/2017 | | 98.95 | (0.13) | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/5/2017 | | 99.02 | 0.07 | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/6/2017 | | 98.94 | (0.08) | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/7/2017 | | 98.83 | (0.11) | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/8/2017 | | 98.9 | 0.07 | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/9/2017 | | 99.28 | 0.38 | 706.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/10/2017 | | 99.17 | (0.11) | 706.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/11/2017 | | 99.05 | (0.12) | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/12/2017 | | 99.04 | (0.01) | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/13/2017 | | 99.04 | 0.00 | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/14/2017 | | 98.97 | (0.07) | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/15/2017 | | 98.93 | (0.04) | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/16/2017 | | 99.08 | 0.15 | 706.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/17/2017 | | 98.94 | (0.14) | 707.06 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 1/18/2017 | | 98.84 | (0.10) | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/19/2017 | | 98.88 | 0.04 | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/20/2017 | | 98.93 | 0.05 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/21/2017 | | 98.87 | (0.06) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/22/2017 | | 98.85 | (0.02) | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/23/2017 | | 98.76 | (0.09) | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/24/2017 | | 98.91 | 0.15 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/25/2017 | | 98.77 | (0.14) | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/26/2017 | | 98.64 | (0.13) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/27/2017 | | 98.76 | 0.12 | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/28/2017 | | 98.65 | (0.11) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/29/2017 | | 98.73 | 0.08 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/30/2017 | | 98.78 | 0.05 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/31/2017 | | 98.8 | 0.02 | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/1/2017 | | 98.74 | (0.06) | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/2/2017 | | 98.69 | (0.05) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/3/2017 | | 98.65 | (0.04) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/4/2017 | | 98.65 | 0.00 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/5/2017 | | 98.74 | 0.09 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/6/2017 | | 98.76 | 0.02 | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/7/2017 | | 98.78 | 0.02 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/8/2017 | | 98.75 | (0.03) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/9/2017 | | 98.58 | (0.17) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/10/2017 | | 98.65 | 0.07 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/11/2017 | | 98.86 | 0.21 | 707.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/12/2017 | | 98.67 | (0.19) | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/13/2017 | | 98.63 | (0.04) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 2/14/2017 | | 98.66 | 0.03 | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/15/2017 | | 98.84 | 0.18 | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/16/2017 | | 98.66 | (0.18) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/17/2017 | | 98.68 | 0.02 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/18/2017 | | 98.71 | 0.03 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/19/2017 | | 98.9 | 0.19 | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/20/2017 | | 98.62 | (0.28) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/21/2017 | | 98.61 | (0.01) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/22/2017 | | 98.64 | 0.03 | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/23/2017 | | 98.72 | 0.08 | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/24/2017 | | 98.73 | 0.01 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/25/2017 | | 98.56 | (0.17) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/26/2017 | | 98.68 | 0.12 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/27/2017 | | 98.64 | (0.04) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/28/2017 | | 98.61 | (0.03) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/1/2017 | | 98.61 | 0.00 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/2/2017 | | 98.51 | (0.10) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/3/2017 | | 98.46 | (0.05) | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/4/2017 | | 98.52 | 0.06 | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/5/2017 | | 98.48 | (0.04) | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/6/2017 | | 98.69 | 0.21 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/7/2017 | | 98.61 | (0.08) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/8/2017 | | 98.5 | (0.11) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/9/2017 | | 98.52 | 0.02 | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/10/2017 | | 98.57 | 0.05 | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/11/2017 | | 98.53 | (0.04) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/12/2017 | | 98.65 | 0.12 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 3/13/2017 | | 98.5 | (0.15) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/14/2017 | | 98.5 | 0.00 | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/15/2017 | | 98.51 | 0.01 | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/16/2017 | | 98.44 | (0.07) | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/17/2017 | | 98.42 | (0.02) | 707.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/18/2017 | | 98.53 | 0.11 | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/19/2017 | | 98.42 | (0.11) | 707.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/20/2017 | | 98.47 | 0.05 | 707.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/21/2017 | | 98.49 | 0.02 | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/22/2017 | | 98.52 | 0.03 | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/23/2017 | | 98.48 | (0.04) | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/24/2017 | | 98.65 | 0.17 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/25/2017 | | 98.48 | (0.17) | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/26/2017 | | 98.56 | 0.08 | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/27/2017 | | 98.73 | 0.17 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/28/2017 | | 98.53 | (0.20) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/29/2017 | | 98.54 | 0.01 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/30/2017 | | 98.41 | (0.13) | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/31/2017 | | 98.42 | 0.01 | 707.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/1/2017 | | 98.4 | (0.02) | 707.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/2/2017 | | 98.45 | 0.05 | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/3/2017 | | 98.4 | (0.05) | 707.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/4/2017 | | 98.42 | 0.02 | 707.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/5/2017 | | 98.36 | (0.06) | 707.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/6/2017 | | 98.35 | (0.01) | 707.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/7/2017 | | 98.46 | 0.11 | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/8/2017 | | 98.41 | (0.05) | 707.59 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 4/9/2017 | | 98.46 | 0.05 | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/10/2017 | | 98.53 | 0.07 | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/11/2017 | | 98.41 | (0.12) | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/12/2017 | | 98.3 | (0.11) | 707.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/13/2017 | | 98.33 | 0.03 | 707.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/14/2017 | | 98.36 | 0.03 | 707.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/15/2017 | | 98.39 | 0.03 | 707.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/16/2017 | | 98.35 | (0.04) | 707.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/17/2017 | | 98.39 | 0.04 | 707.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/18/2017 | | 98.43 | 0.04 | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/19/2017 | | 98.33 | (0.10) | 707.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/20/2017 | | 98.48 | 0.15 | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/21/2017 | | 98.5 | 0.02 | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/22/2017 | | 98.38 | (0.12) | 707.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/23/2017 | | 98.34 | (0.04) | 707.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/24/2017 | | 98.45 | 0.11 | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/25/2017 | | 98.41 | (0.04) | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/26/2017 | | 98.54 | 0.13 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/27/2017 | | 98.35 | (0.19) | 707.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/28/2017 | | 98.4 | 0.05 | 707.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/29/2017 | | 98.54 | 0.14 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/30/2017 | | 98.5 | (0.04) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/1/2017 | | 98.5 | 0.00 | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/2/2017 | | 98.42 | (0.08) | 707.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/3/2017 | | 98.63 | 0.21 | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/4/2017 | | 98.53 | (0.10) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/5/2017 | | 98.43 | (0.10) | 707.57 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 5/6/2017 | | 98.68 | 0.25 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/7/2017 | | 98.62 | (0.06) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/8/2017 | | 98.57 | (0.05) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/9/2017 | | 98.54 | (0.03) | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/10/2017 | | 98.57 | 0.03 | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/11/2017 | | 98.55 | (0.02) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/12/2017 | | 98.67 | 0.12 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/13/2017 | | 98.58 | (0.09) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/14/2017 | | 98.54 | (0.04) | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/15/2017 | | 98.56 | 0.02 | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/16/2017 | | 98.7 | 0.14 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/17/2017 | | 98.6 | (0.10) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/18/2017 | | 98.57 | (0.03) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/19/2017 | | 98.51 | (0.06) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/20/2017 | | 98.58 | 0.07 | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/21/2017 | | 98.53 | (0.05) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/22/2017 | | 98.51 | (0.02) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/23/2017 | | 98.54 | 0.03 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/24/2017 | | 98.46 | (0.08) | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/25/2017 | | 98.54 | 0.08 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/26/2017 | | 98.54 | 0.00 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/27/2017 | | 98.49 | (0.05) | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/28/2017 | | 98.45 | (0.04) | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/29/2017 | | 98.47 | 0.02 | 707.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/30/2017 | | 98.52 | 0.05 | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/31/2017 | | 98.48 | (0.04) | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/1/2017 | | 98.47 | (0.01) | 707.53 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 6/2/2017 | | 98.47 | 0.00 | 707.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/3/2017 | | 98.49 | 0.02 | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/4/2017 | | 98.48 | (0.01) | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/5/2017 | | 98.67 | 0.19 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/6/2017 | | 98.52 | (0.15) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/7/2017 | | 98.53 | 0.01 | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/8/2017 | | 98.5 | (0.03) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/9/2017 | | 98.53 | 0.03 | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/10/2017 | | 98.47 | (0.06) | 707.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/11/2017 | | 98.62 | 0.15 | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/12/2017 | | 98.52 | (0.10) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/13/2017 | | 98.66 | 0.14 | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/14/2017 | | 98.53 | (0.13) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/15/2017 | | 98.49 | (0.04) | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/16/2017 | | 98.53 | 0.04 | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/17/2017 | | 98.7 | 0.17 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/18/2017 | | 98.58 | (0.12) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/19/2017 | | 98.53 | (0.05) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/20/2017 | | 98.57 | 0.04 | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/21/2017 | | 98.64 | 0.07 | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/22/2017 | | 98.57 | (0.07) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/23/2017 | | 98.51 | (0.06) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/24/2017 | | 98.46 | (0.05) | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/25/2017 | | 98.52 | 0.06 | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/26/2017 | | 99.01 | 0.49 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/27/2017 | | 98.57 | (0.44) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/28/2017 | | 98.56 | (0.01) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 6/29/2017 | | 98.6 | 0.04 | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/30/2017 | | 98.56 | (0.04) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/1/2017 | | 98.53 | (0.03) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/2/2017 | | 98.71 | 0.18 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/3/2017 | | 98.68 | (0.03) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/4/2017 | | 98.63 | (0.05) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/5/2017 | | 98.6 | (0.03) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/6/2017 | | 98.78 | 0.18 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/7/2017 | | 98.68 | (0.10) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/8/2017 | | 98.74 | 0.06 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/9/2017 | | 98.92 | 0.18 | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/10/2017 | | 98.68 | (0.24) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/11/2017 | | 98.82 | 0.14 | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/12/2017 | | 98.96 | 0.14 | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/13/2017 | | 98.72 | (0.24) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/14/2017 | | 98.79 | 0.07 | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/15/2017 | | 98.85 | 0.06 | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/16/2017 | | 98.83 | (0.02) | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/17/2017 | | 98.76 | (0.07) | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/18/2017 | | 98.83 | 0.07 | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/19/2017 | | 98.88 | 0.05 | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/20/2017 | | 99.05 | 0.17 | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/21/2017 | | 98.99 | (0.06) | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/22/2017 | | 98.95 | (0.04) | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/23/2017 | | 98.98 | 0.03 | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/24/2017 | | 98.9 | (0.08) | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/25/2017 | | 98.88 | (0.02) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 7/26/2017 | | 98.95 | 0.07 | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/27/2017 | | 98.78 | (0.17) | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/28/2017 | | 98.99 | 0.21 | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/29/2017 | | 99 | 0.01 | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/30/2017 | | 98.92 | (0.08) | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/31/2017 | | 98.87 | (0.05) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/1/2017 | | 99.02 | 0.15 | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/2/2017 | | 99.02 | 0.00 | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/3/2017 | | 98.88 | (0.14) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/4/2017 | | 98.96 | 0.08 | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/5/2017 | | 98.99 | 0.03 | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/6/2017 | | 99.08 | 0.09 | 706.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/7/2017 | | 99.02 | (0.06) | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/8/2017 | | 99.05 | 0.03 | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/9/2017 | | 98.88 | (0.17) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/10/2017 | | 99.07 | 0.19 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/11/2017 | | 98.86 | (0.21) | 707.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/12/2017 | | 98.91 | 0.05 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/13/2017 | | 98.95 | 0.04 | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/14/2017 | | 99.01 | 0.06 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/15/2017 | | 99 | (0.01) | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/16/2017 | | 99.08 | 0.08 | 706.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/17/2017 | | 98.95 | (0.13) | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/18/2017 | | 99.03 | 0.08 | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/19/2017 | | 98.97 | (0.06) | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/20/2017 | | 98.91 | (0.06) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/21/2017 | | 98.88 | (0.03) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 8/22/2017 | | 98.87 | (0.01) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/23/2017 | | 98.98 | 0.11 | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/24/2017 | | 98.95 | (0.03) | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/25/2017 | | 98.91 | (0.04) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/26/2017 | | 99 | 0.09 | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/27/2017 | | 98.98 | (0.02) | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/28/2017 | | 98.94 | (0.04) | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/29/2017 | | 98.92 | (0.02) | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/30/2017 | | 98.89 | (0.03) | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/31/2017 | | 98.98 | 0.09 | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/1/2017 | | 98.84 | (0.14) | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/2/2017 | | 99.17 | 0.33 | 706.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/3/2017 | | 99.53 | 0.36 | 706.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/4/2017 | | 99.14 | (0.39) | 706.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/5/2017 | | 99.01 | (0.13) | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/6/2017 | | 98.98 | (0.03) | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/7/2017 | | 99.21 | 0.23 | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/8/2017 | | 99.16 | (0.05) | 706.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/9/2017 | | 99.17 | 0.01 | 706.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/10/2017 | | 98.98 | (0.19) | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/11/2017 | | 99.21 | 0.23 | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/12/2017 | | 99 | (0.21) | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/13/2017 | | 98.98 | (0.02) | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/14/2017 | | 99.03 | 0.05 | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/15/2017 | | 99.08 | 0.05 | 706.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/16/2017 | | 98.92 | (0.16) | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/17/2017 | | 99.01 | 0.09 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 9/18/2017 | | 98.99 | (0.02) | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/19/2017 | | 99.13 | 0.14 | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/20/2017 | | 98.97 | (0.16) | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/21/2017 | | 99.01 | 0.04 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/22/2017 | | 99.01 | 0.00 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/23/2017 | | 98.89 | (0.12) | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/24/2017 | | 99.15 | 0.26 | 706.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/25/2017 | | 98.96 | (0.19) | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/26/2017 | | 98.96 | 0.00 | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/27/2017 | | 98.9 | (0.06) | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/28/2017 | | 99.07 | 0.17 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/29/2017 | | 98.91 | (0.16) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/30/2017 | | 98.81 | (0.10) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/1/2017 | | 99.05 | 0.24 | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/2/2017 | | 99.04 | (0.01) | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/3/2017 | | 98.9 | (0.14) | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/4/2017 | | 98.82 | (0.08) | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/5/2017 | | 98.96 | 0.14 | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/6/2017 | | 98.96 | 0.00 | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/7/2017 | | 98.9 | (0.06) | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/8/2017 | | 99.01 | 0.11 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/9/2017 | | 98.94 | (0.07) | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/10/2017 | | 98.83 | (0.11) | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/11/2017 | | 98.89 | 0.06 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/12/2017 | | 98.99 | 0.10 | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/13/2017 | | 98.89 | (0.10) | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/14/2017 | | 98.87 | (0.02) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 10/15/2017 | | 98.95 | 0.08 | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/16/2017 | | 98.83 | (0.12) | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/17/2017 | | 98.92 | 0.09 | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/18/2017 | | 98.87 | (0.05) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/19/2017 | | 98.97 | 0.10 | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/20/2017 | | 98.88 | (0.09) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/21/2017 | | 98.93 | 0.05 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/22/2017 | | 98.88 | (0.05) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/23/2017 | | 98.88 | 0.00 | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/24/2017 | | 98.93 | 0.05 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/25/2017 | | 98.87 | (0.06) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/26/2017 | | 98.98 | 0.11 | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/27/2017 | | 99.03 | 0.05 | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/28/2017 | | 98.88 | (0.15) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/29/2017 | | 98.88 | 0.00 | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/30/2017 | | 98.96 | 0.08 | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/31/2017 | | 98.94 | (0.02) | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/1/2017 | | 98.97 | 0.03 | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/2/2017 | | 98.96 | (0.01) | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/3/2017 | | 98.96 | 0.00 | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/4/2017 | | 98.98 | 0.02 | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/5/2017 | | 98.97 | (0.01) | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/6/2017 | | 98.92 | (0.05) | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/7/2017 | | 98.85 | (0.07) | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/8/2017 | | 98.85 | 0.00 | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/9/2017 | | 98.87 | 0.02 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/10/2017 | | 98.81 | (0.06) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 11/11/2017 | | 98.89 | 0.08 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/12/2017 | | 98.81 | (0.08) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/13/2017 | | 98.8 | (0.01) | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/14/2017 | | 98.97 | 0.17 | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/15/2017 | | 98.83 | (0.14) | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/16/2017 | | 98.81 | (0.02) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/17/2017 | | 98.96 | 0.15 | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/18/2017 | | 98.83 | (0.13) | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/19/2017 | | 98.73 | (0.10) | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/20/2017 | | 98.88 | 0.15 | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/21/2017 | | 98.82 | (0.06) | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/22/2017 | | 98.65 | (0.17) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/23/2017 | | 98.81 | 0.16 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/24/2017 | | 98.79 | (0.02) | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/25/2017 | | 98.94 | 0.15 | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/26/2017 | | 98.65 | (0.29) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/27/2017 | | 98.81 | 0.16 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/28/2017 | | 98.76 | (0.05) | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/29/2017 | | 98.68 | (0.08) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/30/2017 | | 98.87 | 0.19 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/1/2017 | | 98.71 | (0.16) | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/2/2017 | | 98.74 | 0.03 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/3/2017 | | 98.82 | 0.08 | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/4/2017 | | 98.74 | (0.08) | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/5/2017 | | 98.7 | (0.04) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/6/2017 | | 98.8 | 0.10 | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/7/2017 | | 98.65 | (0.15) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 12/8/2017 | | 98.61 | (0.04) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/9/2017 | | 98.85 | 0.24 | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/10/2017 | | 98.63 | (0.22) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/11/2017 | | 98.7 | 0.07 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/12/2017 | | 98.74 | 0.04 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/13/2017 | | 98.69 | (0.05) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/14/2017 | | 98.71 | 0.02 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/15/2017 | | 98.63 | (0.08) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/16/2017 | | 98.78 | 0.15 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/17/2017 | | 98.75 | (0.03) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/18/2017 | | 98.66 | (0.09) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/19/2017 | | 98.79 | 0.13 | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/20/2017 | | 98.69 | (0.10) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/21/2017 | | 98.71 | 0.02 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/22/2017 | | 98.74 | 0.03 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/23/2017 | | 98.58 | (0.16) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/24/2017 | | 98.58 | 0.00 | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/25/2017 | | 98.52 | (0.06) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/26/2017 | | 98.73 | 0.21 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/27/2017 | | 98.52 | (0.21) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/28/2017 | | 98.63 | 0.11 | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/29/2017 | | 98.69 | 0.06 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/30/2017 | | 98.59 | (0.10) | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/31/2017 | | 98.72 | 0.13 | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/1/2018 | | 98.5 | (0.22) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/2/2018 | | 98.7 | 0.20 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/3/2018 | | 98.77 | 0.07 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 1/4/2018 | | 99.13 | 0.36 | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/5/2018 | | 98.7 | (0.43) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/6/2018 | | 98.85 | 0.15 | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/7/2018 | | 98.68 | (0.17) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/8/2018 | | 98.77 | 0.09 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/9/2018 | | 98.83 | 0.06 | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/10/2018 | | 98.78 | (0.05) | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/11/2018 | | 98.83 | 0.05 | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/12/2018 | | 98.93 | 0.10 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/13/2018 | | 98.93 | 0.00 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/14/2018 | | 98.75 | (0.18) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/15/2018 | | 98.77 | 0.02 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/16/2018 | | 98.73 | (0.04) | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/17/2018 | | 98.89 | 0.16 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/18/2018 | | 98.8 | (0.09) | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/19/2018 | | 99.15 | 0.35 | 706.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/20/2018 | | 98.81 | (0.34) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/21/2018 | | 98.82 | 0.01 | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/22/2018 | | 98.87 | 0.05 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/23/2018 | | 98.66 | (0.21) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/24/2018 | | 98.58 | (0.08) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/25/2018 | | 98.59 | 0.01 | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/26/2018 | | 98.68 | 0.09 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/27/2018 | | 98.69 | 0.01 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/28/2018 | | 98.75 | 0.06 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/29/2018 | | 98.6 | (0.15) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/30/2018 | | 98.57 | (0.03) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 1/31/2018 | | 98.84 | 0.27 | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/1/2018 | | 98.66 | (0.18) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/2/2018 | | 98.6 | (0.06) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/3/2018 | | 98.56 | (0.04) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/4/2018 | | 98.61 | 0.05 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/5/2018 | | 98.54 | (0.07) | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/6/2018 | | 98.55 | 0.01 | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/7/2018 | | 98.52 | (0.03) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/8/2018 | | 98.5 | (0.02) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/9/2018 | | 98.58 | 0.08 | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/10/2018 | | 98.67 | 0.09 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/11/2018 | | 98.52 | (0.15) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/12/2018 | | 98.56 | 0.04 | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/13/2018 | | 98.63 | 0.07 | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/14/2018 | | 98.55 | (0.08) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/15/2018 | | 98.61 | 0.06 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/16/2018 | | 98.65 | 0.04 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/17/2018 | | 98.63 | (0.02) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/18/2018 | | 98.5 | (0.13) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/19/2018 | | 98.71 | 0.21 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/20/2018 | | 98.57 | (0.14) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/21/2018 | | 98.47 | (0.10) | 707.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/22/2018 | | 98.57 | 0.10 | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/23/2018 | | 98.51 | (0.06) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/24/2018 | | 98.5 | (0.01) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/25/2018 | | 98.55 | 0.05 | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/26/2018 | | 98.58 | 0.03 | 707.42 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 2/27/2018 | | 98.51 | (0.07) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/28/2018 | | 98.52 | 0.01 | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/1/2018 | | 98.55 | 0.03 | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/2/2018 | | 98.47 | (0.08) | 707.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/3/2018 | | 98.42 | (0.05) | 707.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/4/2018 | | 98.61 | 0.19 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/5/2018 | | 98.5 | (0.11) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/6/2018 | | 98.42 | (0.08) | 707.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/7/2018 | | 98.38 | (0.04) | 707.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/8/2018 | | 98.52 | 0.14 | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/9/2018 | | 98.48 | (0.04) | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/10/2018 | | 98.73 | 0.25 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/11/2018 | | 98.64 | (0.09) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/12/2018 | | 98.63 | (0.01) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/13/2018 | | 98.62 | (0.01) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/14/2018 | | 98.6 | (0.02) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/15/2018 | | 98.63 | 0.03 | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/16/2018 | | 98.77 | 0.14 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/17/2018 | | 98.58 | (0.19) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/18/2018 | | 98.6 | 0.02 | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/19/2018 | | 98.67 | 0.07 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/20/2018 | | 98.7 | 0.03 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/21/2018 | | 98.62 | (0.08) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/22/2018 | | 98.49 | (0.13) | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/23/2018 | | 98.69 | 0.20 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/24/2018 | | 98.58 | (0.11) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/25/2018 | | 98.68 | 0.10 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 3/26/2018 | | 98.66 | (0.02) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/27/2018 | | 98.66 | 0.00 | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/28/2018 | | 98.67 | 0.01 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/29/2018 | | 98.65 | (0.02) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/30/2018 | | 98.73 | 0.08 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/31/2018 | | 98.63 | (0.10) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/1/2018 | | 98.84 | 0.21 | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/2/2018 | | 98.84 | 0.00 | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/3/2018 | | 98.7 | (0.14) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/4/2018 | | 98.49 | (0.21) | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/5/2018 | | 98.57 | 0.08 | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/6/2018 | | 98.6 | 0.03 | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/7/2018 | | 98.61 | 0.01 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/8/2018 | | 98.61 | 0.00 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/9/2018 | | 98.64 | 0.03 | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/10/2018 | | 98.54 | (0.10) | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/11/2018 | | 98.57 | 0.03 | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/12/2018 | | 98.81 | 0.24 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/13/2018 | | 98.62 | (0.19) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/14/2018 | | 98.57 | (0.05) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/15/2018 | | 98.52 | (0.05) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/16/2018 | | 98.6 | 0.08 | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/17/2018 | | 98.55 | (0.05) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/18/2018 | | 98.62 | 0.07 | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/19/2018 | | 98.52 | (0.10) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/20/2018 | | 98.52 | 0.00 | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/21/2018 | | 98.52 | 0.00 | 707.48 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 4/22/2018 | | 98.5 | (0.02) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/23/2018 | | 98.62 | 0.12 | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/24/2018 | | 98.55 | (0.07) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/25/2018 | | 98.47 | (0.08) | 707.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/26/2018 | | 98.6 | 0.13 | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/27/2018 | | 98.56 | (0.04) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/28/2018 | | 98.49 | (0.07) | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/29/2018 | | 98.51 | 0.02 | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/30/2018 | | 98.62 | 0.11 | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/1/2018 | | 98.64 | 0.02 | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/2/2018 | | 98.57 | (0.07) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/3/2018 | | 98.53 | (0.04) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/4/2018 | | 98.54 | 0.01 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/5/2018 | | 98.45 | (0.09) | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/6/2018 | | 98.45 | 0.00 | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/7/2018 | | 98.56 | 0.11 | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/8/2018 | | 98.46 | (0.10) | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/9/2018 | | 98.49 | 0.03 | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/10/2018 | | 98.46 | (0.03) | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/11/2018 | | 98.53 | 0.07 | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/12/2018 | | 98.51 | (0.02) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/13/2018 | | 98.46 | (0.05) | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/14/2018 | | 98.54 | 0.08 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/15/2018 | | 98.55 | 0.01 | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/16/2018 | | 98.53 | (0.02) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/17/2018 | | 98.48 | (0.05) | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/18/2018 | | 98.5 | 0.02 | 707.5 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 5/19/2018 | | 98.48 | (0.02) | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/20/2018 | | 98.39 | (0.09) | 707.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/21/2018 | | 98.39 | 0.00 | 707.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/22/2018 | | 98.42 | 0.03 | 707.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/23/2018 | | 98.43 | 0.01 | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/24/2018 | | 98.49 | 0.06 | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/25/2018 | | 98.41 | (0.08) | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/26/2018 | | 98.61 | 0.20 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/27/2018 | | 98.45 | (0.16) | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/28/2018 | | 98.42 | (0.03) | 707.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/29/2018 | | 98.7 | 0.28 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/30/2018 | | 98.58 | (0.12) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/31/2018 | | 98.53 | (0.05) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/1/2018 | | 98.51 | (0.02) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/2/2018 | | 98.44 | (0.07) | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/3/2018 | | 98.44 | 0.00 | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/4/2018 | | 98.64 | 0.20 | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/5/2018 | | 98.46 | (0.18) | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/6/2018 | | 98.52 | 0.06 | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/7/2018 | | 98.46 | (0.06) | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/8/2018 | | 98.53 | 0.07 | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/9/2018 | | 98.67 | 0.14 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/10/2018 | | 98.61 | (0.06) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/11/2018 | | 98.71 | 0.10 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/12/2018 | | 98.59 | (0.12) | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/13/2018 | | 98.51 | (0.08) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/14/2018 | | 98.58 | 0.07 | 707.42 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 6/15/2018 | | 98.51 | (0.07) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/16/2018 | | 98.66 | 0.15 | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/17/2018 | | 98.56 | (0.10) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/18/2018 | | 98.61 | 0.05 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/19/2018 | | 98.64 | 0.03 | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/20/2018 | | 98.7 | 0.06 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/21/2018 | | 98.64 | (0.06) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/22/2018 | | 98.56 | (0.08) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/23/2018 | | 98.59 | 0.03 | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/24/2018 | | 98.59 | 0.00 | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/25/2018 | | 98.85 | 0.26 | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/26/2018 | | 98.61 | (0.24) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/27/2018 | | 98.61 | 0.00 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/28/2018 | | 98.56 | (0.05) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/29/2018 | | 98.61 | 0.05 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/30/2018 | | 98.58 | (0.03) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/1/2018 | | 98.62 | 0.04 | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/2/2018 | | 98.58 | (0.04) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/3/2018 | | 98.71 | 0.13 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/4/2018 | | 98.72 | 0.01 | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/5/2018 | | 98.82 | 0.10 | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/6/2018 | | 98.65 | (0.17) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/7/2018 | | 98.61 | (0.04) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/8/2018 | | 98.61 | 0.00 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/9/2018 | | 98.61 | 0.00 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/10/2018 | | 98.63 | 0.02 | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/11/2018 | | 98.68 | 0.05 | 707.32 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 7/12/2018 | | 98.65 | (0.03) | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/13/2018 | | 98.62 | (0.03) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/14/2018 | | 98.72 | 0.10 | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/15/2018 | | 98.58 | (0.14) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/16/2018 | | 98.62 | 0.04 | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/17/2018 | | 98.62 | 0.00 | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/18/2018 | | 98.71 | 0.09 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/19/2018 | | 98.71 | 0.00 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/20/2018 | | 98.69 | (0.02) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/21/2018 | | 98.74 | 0.05 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/22/2018 | | 98.77 | 0.03 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/23/2018 | | 98.86 | 0.09 | 707.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/24/2018 | | 98.75 | (0.11) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/25/2018 | | 98.74 | (0.01) | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/26/2018 | | 98.81 | 0.07 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/27/2018 | | 98.81 | 0.00 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/28/2018 | | 98.87 | 0.06 | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/29/2018 | | 98.79 | (0.08) | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/30/2018 | | 98.85 | 0.06 | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/31/2018 | | 98.77 | (0.08) | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/1/2018 | | 98.92 | 0.15 | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/2/2018 | | 98.94 | 0.02 | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/3/2018 | | 99 | 0.06 | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/4/2018 | | 99.03 | 0.03 | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/5/2018 | | 98.96 | (0.07) | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/6/2018 | | 99.08 | 0.12 | 706.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/7/2018 | | 99.01 | (0.07) | 706.99 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 8/8/2018 | | 99.07 | 0.06 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/9/2018 | | 99.08 | 0.01 | 706.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/10/2018 | | 99.01 | (0.07) | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/11/2018 | | 98.93 | (0.08) | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/12/2018 | | 98.99 | 0.06 | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/13/2018 | | 99.03 | 0.04 | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/14/2018 | | 99.05 | 0.02 | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/15/2018 | | 99.11 | 0.06 | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/16/2018 | | 99.01 | (0.10) | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/17/2018 | | 99.02 | 0.01 | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/18/2018 | | 99.04 | 0.02 | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/19/2018 | | 99.08 | 0.04 | 706.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/20/2018 | | 99.07 | (0.01) | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/21/2018 | | 99.12 | 0.05 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/22/2018 | | 99.11 | (0.01) | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/23/2018 | | 99.16 | 0.05 | 706.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/24/2018 | | 99.13 | (0.03) | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/25/2018 | | 99.16 | 0.03 | 706.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/26/2018 | | 99.13 | (0.03) | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/27/2018 | | 99.3 | 0.17 | 706.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/28/2018 | | 99.34 | 0.04 | 706.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/29/2018 | | 99.33 | (0.01) | 706.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/30/2018 | | 99.28 | (0.05) | 706.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/31/2018 | | 99.31 | 0.03 | 706.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/1/2018 | | 99.33 | 0.02 | 706.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/2/2018 | | 99.39 | 0.06 | 706.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/3/2018 | | 99.33 | (0.06) | 706.67 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 9/4/2018 | | 99.38 | 0.05 | 706.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/5/2018 | | 99.42 | 0.04 | 706.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/6/2018 | | 99.29 | (0.13) | 706.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/7/2018 | | 99.25 | (0.04) | 706.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/8/2018 | | 99.28 | 0.03 | 706.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/9/2018 | | 99.57 | 0.29 | 706.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/10/2018 | | 99.26 | (0.31) | 706.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/11/2018 | | 99.2 | (0.06) | 706.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/12/2018 | | 99.21 | 0.01 | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/13/2018 | | 99.27 | 0.06 | 706.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/14/2018 | | 99.18 | (0.09) | 706.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/15/2018 | | 99.11 | (0.07) | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/16/2018 | | 99.12 | 0.01 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/17/2018 | | 99.22 | 0.10 | 706.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/18/2018 | | 99.11 | (0.11) | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/19/2018 | | 99.22 | 0.11 | 706.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/20/2018 | | 99.06 | (0.16) | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/21/2018 | | 99.07 | 0.01 | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/22/2018 | | 99.13 | 0.06 | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/23/2018 | | 99.07 | (0.06) | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/24/2018 | | 99.05 | (0.02) | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/25/2018 | | 99.17 | 0.12 | 706.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/26/2018 | | 99.01 | (0.16) | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/27/2018 | | 98.96 | (0.05) | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/28/2018 | | 98.99 | 0.03 | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/29/2018 | | 98.95 | (0.04) | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/30/2018 | | 98.92 | (0.03) | 707.08 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 10/1/2018 | | 99.03 | 0.11 | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/2/2018 | | 98.95 | (0.08) | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/3/2018 | | 98.91 | (0.04) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/4/2018 | | 98.93 | 0.02 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/5/2018 | | 98.91 | (0.02) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/6/2018 | | 98.95 | 0.04 | 707.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/7/2018 | | 98.9 | (0.05) | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/8/2018 | | 98.94 | 0.04 | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/9/2018 | | 98.99 | 0.05 | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/10/2018 | | 98.85 | (0.14) | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/11/2018 | | 98.9 | 0.05 | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/12/2018 | | 98.84 | (0.06) | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/13/2018 | | 98.82 | (0.02) | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/14/2018 | | 98.97 | 0.15 | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/15/2018 | | 98.75 | (0.22) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/16/2018 | | 98.68 | (0.07) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/17/2018 | | 98.64 | (0.04) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/18/2018 | | 98.62 | (0.02) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/19/2018 | | 98.65 | 0.03 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/20/2018 | | 98.58 | (0.07) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/21/2018 | | 98.52 | (0.06) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/22/2018 | | 98.54 | 0.02 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/23/2018 | | 98.55 | 0.01 | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/24/2018 | | 98.5 | (0.05) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/25/2018 | | 98.45 | (0.05) | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/26/2018 | | 98.46 | 0.01 | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/27/2018 | | 98.45 | (0.01) | 707.55 | 1 | Groundwater Conservation District | Transducer | | |

Texas Water Development Board

# Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 57-40-104

groundwater division

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 10/28/2018 | | 98.44 | (0.01) | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/29/2018 | | 98.5 | 0.06 | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/30/2018 | | 98.45 | (0.05) | 707.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/31/2018 | | 98.49 | 0.04 | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/1/2018 | | 98.44 | (0.05) | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/2/2018 | | 98.41 | (0.03) | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/3/2018 | | 98.42 | 0.01 | 707.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/4/2018 | | 98.4 | (0.02) | 707.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/5/2018 | | 98.43 | 0.03 | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/6/2018 | | 98.46 | 0.03 | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/7/2018 | | 98.46 | 0.00 | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/8/2018 | | 98.38 | (0.08) | 707.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/9/2018 | | 98.48 | 0.10 | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/10/2018 | | 98.29 | (0.19) | 707.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/11/2018 | | 98.41 | 0.12 | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/12/2018 | | 98.41 | 0.00 | 707.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/13/2018 | | 98.31 | (0.10) | 707.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/14/2018 | | 98.26 | (0.05) | 707.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/15/2018 | | 98.38 | 0.12 | 707.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/16/2018 | | 98.36 | (0.02) | 707.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/17/2018 | | 98.34 | (0.02) | 707.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/18/2018 | | 98.29 | (0.05) | 707.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/19/2018 | | 98.33 | 0.04 | 707.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/20/2018 | | 98.23 | (0.10) | 707.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/21/2018 | | 98.27 | 0.04 | 707.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/22/2018 | | 98.3 | 0.03 | 707.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/23/2018 | | 98.3 | 0.00 | 707.7 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 11/24/2018 | | 98.28 | (0.02) | 707.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/25/2018 | | 98.29 | 0.01 | 707.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/26/2018 | | 98.18 | (0.11) | 707.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/27/2018 | | 98.2 | 0.02 | 707.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/28/2018 | | 98.4 | 0.20 | 707.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/29/2018 | | 98.39 | (0.01) | 707.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/30/2018 | | 98.36 | (0.03) | 707.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/1/2018 | | 98.44 | 0.08 | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/2/2018 | | 98.3 | (0.14) | 707.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/3/2018 | | 98.23 | (0.07) | 707.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/4/2018 | | 98.16 | (0.07) | 707.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/5/2018 | | 98.1 | (0.06) | 707.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/6/2018 | | 98.42 | 0.32 | 707.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/7/2018 | | 98.24 | (0.18) | 707.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/8/2018 | | 98.15 | (0.09) | 707.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/9/2018 | | 98.14 | (0.01) | 707.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/10/2018 | | 98.15 | 0.01 | 707.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/11/2018 | | 98.11 | (0.04) | 707.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/12/2018 | | 98.19 | 0.08 | 707.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/13/2018 | | 98.18 | (0.01) | 707.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/14/2018 | | 98.16 | (0.02) | 707.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/15/2018 | | 98.06 | (0.10) | 707.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/16/2018 | | 98.07 | 0.01 | 707.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/17/2018 | | 98.08 | 0.01 | 707.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/18/2018 | | 98.12 | 0.04 | 707.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/19/2018 | | 98.32 | 0.20 | 707.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/20/2018 | | 98.17 | (0.15) | 707.83 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 12/21/2018 | | 98.07 | (0.10) | 707.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/22/2018 | | 98.15 | 0.08 | 707.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/23/2018 | | 98.01 | (0.14) | 707.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/24/2018 | | 98.04 | 0.03 | 707.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/25/2018 | | 98.15 | 0.11 | 707.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/26/2018 | | 98.2 | 0.05 | 707.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/27/2018 | | 98.1 | (0.10) | 707.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/28/2018 | | 98.05 | (0.05) | 707.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/29/2018 | | 98.06 | 0.01 | 707.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/30/2018 | | 97.99 | (0.07) | 708.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/31/2018 | | 98.03 | 0.04 | 707.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/1/2019 | | 98.01 | (0.02) | 707.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/2/2019 | | 97.98 | (0.03) | 708.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/3/2019 | | 98.02 | 0.04 | 707.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/4/2019 | | 98.01 | (0.01) | 707.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/5/2019 | | 98.02 | 0.01 | 707.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/6/2019 | | 98.11 | 0.09 | 707.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/7/2019 | | 98.05 | (0.06) | 707.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/8/2019 | | 98.02 | (0.03) | 707.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/9/2019 | | 97.87 | (0.15) | 708.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/10/2019 | | 97.89 | 0.02 | 708.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/11/2019 | | 97.91 | 0.02 | 708.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/12/2019 | | 97.94 | 0.03 | 708.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/13/2019 | | 97.92 | (0.02) | 708.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/14/2019 | | 97.83 | (0.09) | 708.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/15/2019 | | 97.84 | 0.01 | 708.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/16/2019 | | 97.89 | 0.05 | 708.11 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 1/17/2019 | | 97.92 | 0.03 | 708.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/18/2019 | | 97.89 | (0.03) | 708.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/19/2019 | | 97.87 | (0.02) | 708.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/20/2019 | | 97.79 | (0.08) | 708.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/21/2019 | | 97.92 | 0.13 | 708.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/22/2019 | | 97.87 | (0.05) | 708.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/23/2019 | | 97.82 | (0.05) | 708.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/24/2019 | | 97.86 | 0.04 | 708.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/25/2019 | | 97.8 | (0.06) | 708.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/26/2019 | | 97.86 | 0.06 | 708.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/27/2019 | | 97.8 | (0.06) | 708.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/28/2019 | | 97.87 | 0.07 | 708.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/29/2019 | | 97.73 | (0.14) | 708.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/30/2019 | | 97.79 | 0.06 | 708.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/31/2019 | | 97.79 | 0.00 | 708.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/1/2019 | | 97.8 | 0.01 | 708.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/2/2019 | | 97.74 | (0.06) | 708.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/3/2019 | | 97.77 | 0.03 | 708.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/4/2019 | | 97.91 | 0.14 | 708.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/5/2019 | | 97.84 | (0.07) | 708.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/6/2019 | | 97.76 | (0.08) | 708.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/7/2019 | | 97.83 | 0.07 | 708.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/8/2019 | | 97.73 | (0.10) | 708.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/9/2019 | | 97.75 | 0.02 | 708.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/10/2019 | | 97.83 | 0.08 | 708.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/11/2019 | | 97.86 | 0.03 | 708.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/12/2019 | | 97.83 | (0.03) | 708.17 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 2/13/2019 | | 97.73 | (0.10) | 708.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/14/2019 | | 97.87 | 0.14 | 708.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/15/2019 | | 97.84 | (0.03) | 708.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/16/2019 | | 97.75 | (0.09) | 708.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/17/2019 | | 97.84 | 0.09 | 708.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/18/2019 | | 97.69 | (0.15) | 708.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/19/2019 | | 97.77 | 0.08 | 708.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/20/2019 | | 97.79 | 0.02 | 708.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/21/2019 | | 97.84 | 0.05 | 708.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/22/2019 | | 97.68 | (0.16) | 708.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/23/2019 | | 97.72 | 0.04 | 708.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/24/2019 | | 97.76 | 0.04 | 708.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/25/2019 | | 97.68 | (0.08) | 708.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/26/2019 | | 97.73 | 0.05 | 708.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/27/2019 | | 97.72 | (0.01) | 708.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/28/2019 | | 97.67 | (0.05) | 708.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/1/2019 | | 97.73 | 0.06 | 708.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/2/2019 | | 97.72 | (0.01) | 708.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/3/2019 | | 97.84 | 0.12 | 708.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/4/2019 | | 97.64 | (0.20) | 708.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/5/2019 | | 97.69 | 0.05 | 708.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/6/2019 | | 97.73 | 0.04 | 708.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/7/2019 | | 97.75 | 0.02 | 708.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/8/2019 | | 97.75 | 0.00 | 708.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/9/2019 | | 97.86 | 0.11 | 708.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/10/2019 | | 97.67 | (0.19) | 708.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/11/2019 | | 97.69 | 0.02 | 708.31 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 3/12/2019 | | 97.69 | 0.00 | 708.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/13/2019 | | 97.77 | 0.08 | 708.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/14/2019 | | 97.64 | (0.13) | 708.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/15/2019 | | 97.61 | (0.03) | 708.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/16/2019 | | 97.59 | (0.02) | 708.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/17/2019 | | 97.78 | 0.19 | 708.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/18/2019 | | 97.62 | (0.16) | 708.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/19/2019 | | 97.62 | 0.00 | 708.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/20/2019 | | 97.68 | 0.06 | 708.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/21/2019 | | 97.63 | (0.05) | 708.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/22/2019 | | 97.72 | 0.09 | 708.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/23/2019 | | 97.62 | (0.10) | 708.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/24/2019 | | 97.62 | 0.00 | 708.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/25/2019 | | 97.59 | (0.03) | 708.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/26/2019 | | 97.56 | (0.03) | 708.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/27/2019 | | 97.6 | 0.04 | 708.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/28/2019 | | 97.54 | (0.06) | 708.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/29/2019 | | 97.6 | 0.06 | 708.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/30/2019 | | 97.62 | 0.02 | 708.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/31/2019 | | 97.62 | 0.00 | 708.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/1/2019 | | 97.7 | 0.08 | 708.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/2/2019 | | 97.57 | (0.13) | 708.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/3/2019 | | 97.62 | 0.05 | 708.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/4/2019 | | 97.61 | (0.01) | 708.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/5/2019 | | 97.78 | 0.17 | 708.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/6/2019 | | 97.64 | (0.14) | 708.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/7/2019 | | 97.58 | (0.06) | 708.42 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 4/8/2019 | | 97.64 | 0.06 | 708.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/9/2019 | | 97.6 | (0.04) | 708.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/10/2019 | | 97.62 | 0.02 | 708.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/11/2019 | | 97.74 | 0.12 | 708.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/12/2019 | | 97.54 | (0.20) | 708.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/13/2019 | | 97.55 | 0.01 | 708.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/14/2019 | | 97.59 | 0.04 | 708.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/15/2019 | | 97.55 | (0.04) | 708.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/16/2019 | | 97.65 | 0.10 | 708.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/17/2019 | | 97.54 | (0.11) | 708.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/18/2019 | | 97.62 | 0.08 | 708.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/19/2019 | | 97.52 | (0.10) | 708.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/20/2019 | | 97.57 | 0.05 | 708.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/21/2019 | | 97.59 | 0.02 | 708.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/22/2019 | | 97.69 | 0.10 | 708.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/23/2019 | | 97.53 | (0.16) | 708.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/24/2019 | | 97.63 | 0.10 | 708.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/25/2019 | | 97.54 | (0.09) | 708.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/26/2019 | | 97.61 | 0.07 | 708.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/27/2019 | | 97.78 | 0.17 | 708.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/28/2019 | | 97.87 | 0.09 | 708.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/29/2019 | | 97.66 | (0.21) | 708.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/30/2019 | | 97.73 | 0.07 | 708.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/1/2019 | | 97.72 | (0.01) | 708.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/2/2019 | | 97.49 | (0.23) | 708.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/3/2019 | | 97.52 | 0.03 | 708.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/4/2019 | | 97.53 | 0.01 | 708.47 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 5/5/2019 | | 97.49 | (0.04) | 708.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/6/2019 | | 97.45 | (0.04) | 708.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/7/2019 | | 97.5 | 0.05 | 708.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/8/2019 | | 97.48 | (0.02) | 708.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/9/2019 | | 97.51 | 0.03 | 708.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/10/2019 | | 97.45 | (0.06) | 708.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/11/2019 | | 97.41 | (0.04) | 708.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/12/2019 | | 97.49 | 0.08 | 708.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/13/2019 | | 97.44 | (0.05) | 708.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/14/2019 | | 97.38 | (0.06) | 708.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/15/2019 | | 97.69 | 0.31 | 708.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/16/2019 | | 98.28 | 0.59 | 707.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/17/2019 | | 98.12 | (0.16) | 707.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/18/2019 | | 97.84 | (0.28) | 708.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/19/2019 | | 97.77 | (0.07) | 708.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/20/2019 | | 97.69 | (0.08) | 708.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/18/2019 | | 99.63 | 1.94 | 706.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/19/2019 | | 99.46 | (0.17) | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/20/2019 | | 99.63 | 0.17 | 706.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/21/2019 | | 99.61 | (0.02) | 706.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/22/2019 | | 99.59 | (0.02) | 706.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/23/2019 | | 99.51 | (0.08) | 706.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/24/2019 | | 99.59 | 0.08 | 706.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/25/2019 | | 99.46 | (0.13) | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/26/2019 | | 99.55 | 0.09 | 706.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/27/2019 | | 99.43 | (0.12) | 706.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/28/2019 | | 99.54 | 0.11 | 706.46 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 9/29/2019 | | 99.38 | (0.16) | 706.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/30/2019 | | 99.45 | 0.07 | 706.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/1/2019 | | 99.52 | 0.07 | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/2/2019 | | 99.4 | (0.12) | 706.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/3/2019 | | 99.46 | 0.06 | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/4/2019 | | 99.45 | (0.01) | 706.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/5/2019 | | 99.42 | (0.03) | 706.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/6/2019 | | 99.46 | 0.04 | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/7/2019 | | 99.38 | (0.08) | 706.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/8/2019 | | 99.46 | 0.08 | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/9/2019 | | 99.47 | 0.01 | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/10/2019 | | 99.52 | 0.05 | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/11/2019 | | 99.5 | (0.02) | 706.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/12/2019 | | 99.27 | (0.23) | 706.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/13/2019 | | 99.59 | 0.32 | 706.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/14/2019 | | 99.39 | (0.20) | 706.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/15/2019 | | 99.43 | 0.04 | 706.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/16/2019 | | 99.41 | (0.02) | 706.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/17/2019 | | 99.47 | 0.06 | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/18/2019 | | 99.4 | (0.07) | 706.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/19/2019 | | 99.42 | 0.02 | 706.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/20/2019 | | 99.35 | (0.07) | 706.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/21/2019 | | 99.38 | 0.03 | 706.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/22/2019 | | 99.24 | (0.14) | 706.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/23/2019 | | 99.36 | 0.12 | 706.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/24/2019 | | 99.42 | 0.06 | 706.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/25/2019 | | 99.3 | (0.12) | 706.7 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 10/26/2019 | | 99.31 | 0.01 | 706.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/27/2019 | | 99.41 | 0.10 | 706.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/28/2019 | | 99.36 | (0.05) | 706.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/29/2019 | | 99.32 | (0.04) | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/30/2019 | | 99.24 | (0.08) | 706.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/31/2019 | | 99.17 | (0.07) | 706.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/1/2019 | | 99.14 | (0.03) | 706.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/2/2019 | | 99.21 | 0.07 | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/3/2019 | | 99.23 | 0.02 | 706.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/4/2019 | | 99.23 | 0.00 | 706.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/5/2019 | | 99.17 | (0.06) | 706.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/6/2019 | | 99.2 | 0.03 | 706.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/7/2019 | | 99.08 | (0.12) | 706.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/8/2019 | | 99.18 | 0.10 | 706.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/9/2019 | | 99.11 | (0.07) | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/10/2019 | | 99.18 | 0.07 | 706.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/11/2019 | | 99.09 | (0.09) | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/12/2019 | | 99.13 | 0.04 | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/13/2019 | | 99.09 | (0.04) | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/14/2019 | | 99.07 | (0.02) | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/15/2019 | | 99.09 | 0.02 | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/16/2019 | | 99.25 | 0.16 | 706.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/17/2019 | | 99.43 | 0.18 | 706.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/18/2019 | | 99.26 | (0.17) | 706.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/19/2019 | | 99.14 | (0.12) | 706.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/20/2019 | | 99.11 | (0.03) | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/21/2019 | | 99.19 | 0.08 | 706.81 | 1 | Groundwater Conservation District | Transducer | | |

Texas Water Development Board

# Texas Water Development Board (TWDB)
# Groundwater Database (GWDB)
# Well Information Report for State Well Number 57-40-104

groundwater division

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 11/22/2019 | | 99.09 | (0.10) | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/23/2019 | | 99.12 | 0.03 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/24/2019 | | 99.2 | 0.08 | 706.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/25/2019 | | 99.25 | 0.05 | 706.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/26/2019 | | 99.05 | (0.20) | 706.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/27/2019 | | 99.09 | 0.04 | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/28/2019 | | 99.11 | 0.02 | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/29/2019 | | 99.69 | 0.58 | 706.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/30/2019 | | 99.62 | (0.07) | 706.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/1/2019 | | 99.32 | (0.30) | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/2/2019 | | 99.24 | (0.08) | 706.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/3/2019 | | 99.4 | 0.16 | 706.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/4/2019 | | 99.38 | (0.02) | 706.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/5/2019 | | 99.38 | 0.00 | 706.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/6/2019 | | 99.24 | (0.14) | 706.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/7/2019 | | 99.32 | 0.08 | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/8/2019 | | 99.35 | 0.03 | 706.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/9/2019 | | 99.26 | (0.09) | 706.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/10/2019 | | 99.12 | (0.14) | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/11/2019 | | 99.2 | 0.08 | 706.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/12/2019 | | 99.24 | 0.04 | 706.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/13/2019 | | 99.23 | (0.01) | 706.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/14/2019 | | 99.18 | (0.05) | 706.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/15/2019 | | 99.22 | 0.04 | 706.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/16/2019 | | 99.04 | (0.18) | 706.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/17/2019 | | 99.13 | 0.09 | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/18/2019 | | 99.15 | 0.02 | 706.85 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 12/19/2019 | | 99.16 | 0.01 | 706.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/20/2019 | | 99.03 | (0.13) | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/21/2019 | | 99.11 | 0.08 | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/22/2019 | | 99.08 | (0.03) | 706.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/23/2019 | | 99.19 | 0.11 | 706.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/24/2019 | | 99.17 | (0.02) | 706.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/25/2019 | | 99.11 | (0.06) | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/26/2019 | | 99.12 | 0.01 | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/27/2019 | | 99.35 | 0.23 | 706.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/28/2019 | | 99.11 | (0.24) | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/29/2019 | | 99.1 | (0.01) | 706.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/30/2019 | | 99.01 | (0.09) | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/31/2019 | | 99.1 | 0.09 | 706.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/1/2020 | | 99.17 | 0.07 | 706.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/2/2020 | | 99.09 | (0.08) | 706.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/3/2020 | | 98.98 | (0.11) | 707.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/4/2020 | | 98.99 | 0.01 | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/5/2020 | | 99.08 | 0.09 | 706.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/6/2020 | | 99.03 | (0.05) | 706.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/7/2020 | | 98.97 | (0.06) | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/8/2020 | | 99.08 | 0.11 | 706.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/9/2020 | | 99.07 | (0.01) | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/10/2020 | | 99.02 | (0.05) | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/11/2020 | | 99.02 | 0.00 | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/12/2020 | | 98.97 | (0.05) | 707.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/13/2020 | | 98.92 | (0.05) | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/14/2020 | | 99 | 0.08 | 707 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 1/15/2020 | | 99 | 0.00 | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/16/2020 | | 98.91 | (0.09) | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/17/2020 | | 98.89 | (0.02) | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/18/2020 | | 98.85 | (0.04) | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/19/2020 | | 98.89 | 0.04 | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/20/2020 | | 98.91 | 0.02 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/21/2020 | | 98.96 | 0.05 | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/22/2020 | | 98.99 | 0.03 | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/23/2020 | | 98.89 | (0.10) | 707.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/24/2020 | | 98.88 | (0.01) | 707.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/25/2020 | | 98.87 | (0.01) | 707.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/26/2020 | | 98.9 | 0.03 | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/27/2020 | | 98.9 | 0.00 | 707.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/28/2020 | | 98.84 | (0.06) | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/29/2020 | | 98.82 | (0.02) | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/30/2020 | | 98.81 | (0.01) | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/31/2020 | | 98.73 | (0.08) | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/1/2020 | | 98.81 | 0.08 | 707.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/2/2020 | | 98.94 | 0.13 | 707.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/3/2020 | | 98.92 | (0.02) | 707.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/4/2020 | | 98.79 | (0.13) | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/5/2020 | | 98.76 | (0.03) | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/6/2020 | | 98.76 | 0.00 | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/7/2020 | | 98.79 | 0.03 | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/8/2020 | | 98.96 | 0.17 | 707.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/9/2020 | | 98.83 | (0.13) | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/10/2020 | | 98.71 | (0.12) | 707.29 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 2/11/2020 | | 98.77 | 0.06 | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/12/2020 | | 98.72 | (0.05) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/13/2020 | | 98.66 | (0.06) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/14/2020 | | 98.66 | 0.00 | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/15/2020 | | 98.73 | 0.07 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/16/2020 | | 98.8 | 0.07 | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/17/2020 | | 98.77 | (0.03) | 707.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/18/2020 | | 98.66 | (0.11) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/19/2020 | | 98.7 | 0.04 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/20/2020 | | 98.57 | (0.13) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/21/2020 | | 98.7 | 0.13 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/22/2020 | | 98.7 | 0.00 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/23/2020 | | 98.79 | 0.09 | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/24/2020 | | 98.75 | (0.04) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/25/2020 | | 98.59 | (0.16) | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/26/2020 | | 98.57 | (0.02) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/27/2020 | | 98.64 | 0.07 | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/28/2020 | | 98.69 | 0.05 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/29/2020 | | 98.74 | 0.05 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/1/2020 | | 98.69 | (0.05) | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/2/2020 | | 98.69 | 0.00 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/3/2020 | | 98.68 | (0.01) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/4/2020 | | 98.57 | (0.11) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/5/2020 | | 98.55 | (0.02) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/6/2020 | | 98.58 | 0.03 | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/7/2020 | | 98.58 | 0.00 | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/9/2020 | | 98.78 | 0.20 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 3/10/2020 | | 98.6 | (0.18) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/11/2020 | | 98.63 | 0.03 | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/12/2020 | | 98.59 | (0.04) | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/13/2020 | | 98.61 | 0.02 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/14/2020 | | 98.56 | (0.05) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/15/2020 | | 98.54 | (0.02) | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/16/2020 | | 98.57 | 0.03 | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/17/2020 | | 98.6 | 0.03 | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/18/2020 | | 98.65 | 0.05 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/19/2020 | | 98.7 | 0.05 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/20/2020 | | 98.55 | (0.15) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/21/2020 | | 98.54 | (0.01) | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/22/2020 | | 98.58 | 0.04 | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/23/2020 | | 98.63 | 0.05 | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/24/2020 | | 98.6 | (0.03) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/25/2020 | | 98.7 | 0.10 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/26/2020 | | 98.63 | (0.07) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/27/2020 | | 98.6 | (0.03) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/28/2020 | | 98.57 | (0.03) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/29/2020 | | 98.57 | 0.00 | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/30/2020 | | 98.56 | (0.01) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/31/2020 | | 98.61 | 0.05 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/1/2020 | | 98.51 | (0.10) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/2/2020 | | 98.59 | 0.08 | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/3/2020 | | 98.58 | (0.01) | 707.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/4/2020 | | 98.51 | (0.07) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/5/2020 | | 98.47 | (0.04) | 707.53 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 4/6/2020 | | 98.53 | 0.06 | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/7/2020 | | 98.55 | 0.02 | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/8/2020 | | 98.64 | 0.09 | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/9/2020 | | 98.52 | (0.12) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/10/2020 | | 98.71 | 0.19 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/11/2020 | | 98.63 | (0.08) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/12/2020 | | 98.59 | (0.04) | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/13/2020 | | 98.43 | (0.16) | 707.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/14/2020 | | 98.56 | 0.13 | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/15/2020 | | 98.44 | (0.12) | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/16/2020 | | 98.48 | 0.04 | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/17/2020 | | 98.54 | 0.06 | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/18/2020 | | 98.51 | (0.03) | 707.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/19/2020 | | 98.53 | 0.02 | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/20/2020 | | 98.59 | 0.06 | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/21/2020 | | 98.71 | 0.12 | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/22/2020 | | 98.61 | (0.10) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/23/2020 | | 98.53 | (0.08) | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/24/2020 | | 98.48 | (0.05) | 707.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/25/2020 | | 98.46 | (0.02) | 707.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/26/2020 | | 98.56 | 0.10 | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/27/2020 | | 98.54 | (0.02) | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/28/2020 | | 98.52 | (0.02) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/29/2020 | | 98.62 | 0.10 | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/30/2020 | | 98.44 | (0.18) | 707.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/1/2020 | | 98.53 | 0.09 | 707.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/2/2020 | | 98.52 | (0.01) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 5/3/2020 | | 98.5 | (0.02) | 707.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/4/2020 | | 98.57 | 0.07 | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/5/2020 | | 98.59 | 0.02 | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/6/2020 | | 98.57 | (0.02) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/7/2020 | | 98.49 | (0.08) | 707.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/8/2020 | | 98.7 | 0.21 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/9/2020 | | 98.52 | (0.18) | 707.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/10/2020 | | 98.67 | 0.15 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/11/2020 | | 98.62 | (0.05) | 707.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/12/2020 | | 98.61 | (0.01) | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/13/2020 | | 98.54 | (0.07) | 707.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/14/2020 | | 98.61 | 0.07 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/15/2020 | | 98.65 | 0.04 | 707.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/16/2020 | | 98.56 | (0.09) | 707.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/17/2020 | | 98.55 | (0.01) | 707.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/18/2020 | | 98.64 | 0.09 | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/19/2020 | | 98.67 | 0.03 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/20/2020 | | 98.7 | 0.03 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/21/2020 | | 98.6 | (0.10) | 707.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/22/2020 | | 98.7 | 0.10 | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/23/2020 | | 98.68 | (0.02) | 707.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/24/2020 | | 98.79 | 0.11 | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/25/2020 | | 98.64 | (0.15) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/26/2020 | | 98.69 | 0.05 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/27/2020 | | 98.59 | (0.10) | 707.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/28/2020 | | 98.57 | (0.02) | 707.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/29/2020 | | 98.61 | 0.04 | 707.39 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 5/30/2020 | | 98.84 | 0.23 | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/31/2020 | | 99.01 | 0.17 | 706.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/1/2020 | | 98.72 | (0.29) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/2/2020 | | 98.84 | 0.12 | 707.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/3/2020 | | 98.64 | (0.20) | 707.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/4/2020 | | 98.75 | 0.11 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/5/2020 | | 98.63 | (0.12) | 707.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/6/2020 | | 98.67 | 0.04 | 707.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/7/2020 | | 98.74 | 0.07 | 707.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/8/2020 | | 98.73 | (0.01) | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/9/2020 | | 98.78 | 0.05 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/10/2020 | | 98.8 | 0.02 | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/11/2020 | | 98.72 | (0.08) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/12/2020 | | 98.73 | 0.01 | 707.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/13/2020 | | 98.78 | 0.05 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/14/2020 | | 98.66 | (0.12) | 707.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/15/2020 | | 98.69 | 0.03 | 707.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/16/2020 | | 98.75 | 0.06 | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/17/2020 | | 98.85 | 0.10 | 707.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/18/2020 | | 98.71 | (0.14) | 707.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/19/2020 | | 98.7 | (0.01) | 707.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/20/2020 | | 98.82 | 0.12 | 707.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/21/2020 | | 98.91 | 0.09 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/22/2020 | | 98.91 | 0.00 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/23/2020 | | 98.78 | (0.13) | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/24/2020 | | 98.78 | 0.00 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/25/2020 | | 98.72 | (0.06) | 707.28 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 6/26/2020 | | 98.78 | 0.06 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/27/2020 | | 98.75 | (0.03) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/28/2020 | | 98.76 | 0.01 | 707.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/29/2020 | | 98.78 | 0.02 | 707.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/30/2020 | | 98.83 | 0.05 | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/1/2020 | | 98.75 | (0.08) | 707.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/2/2020 | | 98.79 | 0.04 | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/3/2020 | | 98.8 | 0.01 | 707.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/4/2020 | | 98.79 | (0.01) | 707.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/5/2020 | | 98.86 | 0.07 | 707.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/6/2020 | | 98.99 | 0.13 | 707.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/7/2020 | | 98.83 | (0.16) | 707.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/8/2020 | | 98.91 | 0.08 | 707.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/9/2020 | | 98.93 | 0.02 | 707.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/10/2020 | | 99.08 | 0.15 | 706.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/11/2020 | | 99.02 | (0.06) | 706.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/12/2020 | | 99.22 | 0.20 | 706.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/13/2020 | | 99 | (0.22) | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/14/2020 | | 99.06 | 0.06 | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/15/2020 | | 99 | (0.06) | 707 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/16/2020 | | 99.14 | 0.14 | 706.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/17/2020 | | 99.14 | 0.00 | 706.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/18/2020 | | 99.28 | 0.14 | 706.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/19/2020 | | 99.13 | (0.15) | 706.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/20/2020 | | 99.28 | 0.15 | 706.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/21/2020 | | 99.23 | (0.05) | 706.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/22/2020 | | 99.34 | 0.11 | 706.66 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 7/23/2020 | | 99.14 | (0.20) | 706.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/24/2020 | | 99.21 | 0.07 | 706.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/25/2020 | | 99.16 | (0.05) | 706.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/26/2020 | | 99.2 | 0.04 | 706.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/27/2020 | | 99.11 | (0.09) | 706.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/28/2020 | | 99.3 | 0.19 | 706.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/29/2020 | | 99.32 | 0.02 | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/30/2020 | | 99.23 | (0.09) | 706.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/31/2020 | | 99.22 | (0.01) | 706.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/1/2020 | | 99.12 | (0.10) | 706.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/2/2020 | | 99.16 | 0.04 | 706.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/3/2020 | | 99.23 | 0.07 | 706.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/4/2020 | | 99.07 | (0.16) | 706.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/5/2020 | | 99.17 | 0.10 | 706.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/6/2020 | | 99.2 | 0.03 | 706.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/7/2020 | | 99.24 | 0.04 | 706.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/8/2020 | | 99.36 | 0.12 | 706.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/9/2020 | | 99.06 | (0.30) | 706.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/10/2020 | | 99.34 | 0.28 | 706.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/11/2020 | | 99.37 | 0.03 | 706.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/12/2020 | | 99.52 | 0.15 | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/13/2020 | | 99.44 | (0.08) | 706.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/14/2020 | | 99.37 | (0.07) | 706.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/15/2020 | | 99.33 | (0.04) | 706.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/16/2020 | | 99.35 | 0.02 | 706.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/17/2020 | | 99.33 | (0.02) | 706.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/18/2020 | | 99.52 | 0.19 | 706.48 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 8/19/2020 | | 99.37 | (0.15) | 706.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/20/2020 | | 99.4 | 0.03 | 706.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/21/2020 | | 99.5 | 0.10 | 706.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/22/2020 | | 99.38 | (0.12) | 706.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/23/2020 | | 99.25 | (0.13) | 706.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/24/2020 | | 99.32 | 0.07 | 706.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/25/2020 | | 99.33 | 0.01 | 706.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/26/2020 | | 99.35 | 0.02 | 706.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/27/2020 | | 99.55 | 0.20 | 706.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/28/2020 | | 99.39 | (0.16) | 706.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/29/2020 | | 99.38 | (0.01) | 706.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/30/2020 | | 99.64 | 0.26 | 706.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/31/2020 | | 99.6 | (0.04) | 706.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/1/2020 | | 99.5 | (0.10) | 706.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/2/2020 | | 99.73 | 0.23 | 706.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/3/2020 | | 99.46 | (0.27) | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/4/2020 | | 99.47 | 0.01 | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/5/2020 | | 99.4 | (0.07) | 706.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/6/2020 | | 99.46 | 0.06 | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/7/2020 | | 99.68 | 0.22 | 706.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/8/2020 | | 99.56 | (0.12) | 706.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/9/2020 | | 99.4 | (0.16) | 706.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/10/2020 | | 99.3 | (0.10) | 706.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/11/2020 | | 99.34 | 0.04 | 706.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/12/2020 | | 99.34 | 0.00 | 706.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/13/2020 | | 99.55 | 0.21 | 706.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/14/2020 | | 99.44 | (0.11) | 706.56 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 9/15/2020 | | 99.42 | (0.02) | 706.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/16/2020 | | 99.49 | 0.07 | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/17/2020 | | 99.48 | (0.01) | 706.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/18/2020 | | 99.42 | (0.06) | 706.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/19/2020 | | 99.43 | 0.01 | 706.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/20/2020 | | 99.42 | (0.01) | 706.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/21/2020 | | 99.46 | 0.04 | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/22/2020 | | 99.43 | (0.03) | 706.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/23/2020 | | 99.39 | (0.04) | 706.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/24/2020 | | 99.39 | 0.00 | 706.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/25/2020 | | 99.45 | 0.06 | 706.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/26/2020 | | 99.43 | (0.02) | 706.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/27/2020 | | 99.57 | 0.14 | 706.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/28/2020 | | 99.44 | (0.13) | 706.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/29/2020 | | 99.27 | (0.17) | 706.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/30/2020 | | 99.37 | 0.10 | 706.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/1/2020 | | 99.48 | 0.11 | 706.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/2/2020 | | 99.47 | (0.01) | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/3/2020 | | 99.46 | (0.01) | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/4/2020 | | 99.36 | (0.10) | 706.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/5/2020 | | 99.5 | 0.14 | 706.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/6/2020 | | 99.6 | 0.10 | 706.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/7/2020 | | 99.49 | (0.11) | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/8/2020 | | 99.5 | 0.01 | 706.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/9/2020 | | 99.49 | (0.01) | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/10/2020 | | 99.56 | 0.07 | 706.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/11/2020 | | 99.62 | 0.06 | 706.38 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 10/12/2020 | | 99.58 | (0.04) | 706.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/13/2020 | | 99.77 | 0.19 | 706.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/14/2020 | | 99.52 | (0.25) | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/15/2020 | | 99.65 | 0.13 | 706.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/16/2020 | | 99.48 | (0.17) | 706.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/17/2020 | | 99.58 | 0.10 | 706.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/18/2020 | | 99.65 | 0.07 | 706.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/19/2020 | | 99.62 | (0.03) | 706.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/20/2020 | | 99.63 | 0.01 | 706.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/21/2020 | | 99.72 | 0.09 | 706.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/22/2020 | | 99.51 | (0.21) | 706.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/23/2020 | | 99.55 | 0.04 | 706.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/24/2020 | | 99.57 | 0.02 | 706.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/25/2020 | | 99.55 | (0.02) | 706.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/26/2020 | | 99.63 | 0.08 | 706.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/27/2020 | | 99.46 | (0.17) | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/28/2020 | | 99.56 | 0.10 | 706.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/29/2020 | | 99.62 | 0.06 | 706.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/30/2020 | | 99.41 | (0.21) | 706.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/31/2020 | | 99.52 | 0.11 | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/1/2020 | | 99.49 | (0.03) | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/2/2020 | | 99.46 | (0.03) | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/3/2020 | | 99.47 | 0.01 | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/4/2020 | | 99.52 | 0.05 | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/5/2020 | | 99.43 | (0.09) | 706.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/6/2020 | | 99.42 | (0.01) | 706.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/7/2020 | | 99.42 | 0.00 | 706.58 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 11/8/2020 | | 99.56 | 0.14 | 706.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/9/2020 | | 99.53 | (0.03) | 706.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/10/2020 | | 99.44 | (0.09) | 706.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/11/2020 | | 99.48 | 0.04 | 706.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/12/2020 | | 99.43 | (0.05) | 706.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/13/2020 | | 99.5 | 0.07 | 706.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/14/2020 | | 99.49 | (0.01) | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/15/2020 | | 99.39 | (0.10) | 706.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/16/2020 | | 99.34 | (0.05) | 706.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/17/2020 | | 99.42 | 0.08 | 706.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/18/2020 | | 99.41 | (0.01) | 706.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/19/2020 | | 99.43 | 0.02 | 706.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/20/2020 | | 99.39 | (0.04) | 706.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/21/2020 | | 99.43 | 0.04 | 706.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/22/2020 | | 99.52 | 0.09 | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/23/2020 | | 99.56 | 0.04 | 706.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/24/2020 | | 99.61 | 0.05 | 706.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/25/2020 | | 99.57 | (0.04) | 706.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/26/2020 | | 99.6 | 0.03 | 706.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/27/2020 | | 99.59 | (0.01) | 706.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/28/2020 | | 99.63 | 0.04 | 706.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/29/2020 | | 99.47 | (0.16) | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/30/2020 | | 99.5 | 0.03 | 706.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/1/2020 | | 99.55 | 0.05 | 706.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/2/2020 | | 99.45 | (0.10) | 706.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/3/2020 | | 99.39 | (0.06) | 706.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/4/2020 | | 99.47 | 0.08 | 706.53 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 12/5/2020 | | 99.45 | (0.02) | 706.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/6/2020 | | 99.5 | 0.05 | 706.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/7/2020 | | 99.44 | (0.06) | 706.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/8/2020 | | 99.46 | 0.02 | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/9/2020 | | 99.49 | 0.03 | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/10/2020 | | 99.48 | (0.01) | 706.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/11/2020 | | 99.51 | 0.03 | 706.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/12/2020 | | 99.55 | 0.04 | 706.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/13/2020 | | 99.4 | (0.15) | 706.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/14/2020 | | 99.54 | 0.14 | 706.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/15/2020 | | 99.38 | (0.16) | 706.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/16/2020 | | 99.45 | 0.07 | 706.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/17/2020 | | 99.44 | (0.01) | 706.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/18/2020 | | 99.53 | 0.09 | 706.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/19/2020 | | 99.46 | (0.07) | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/20/2020 | | 99.54 | 0.08 | 706.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/21/2020 | | 99.41 | (0.13) | 706.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/22/2020 | | 99.61 | 0.20 | 706.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/23/2020 | | 99.42 | (0.19) | 706.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/24/2020 | | 99.47 | 0.05 | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/25/2020 | | 99.47 | 0.00 | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/26/2020 | | 99.49 | 0.02 | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/27/2020 | | 99.51 | 0.02 | 706.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/28/2020 | | 99.55 | 0.04 | 706.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/29/2020 | | 99.66 | 0.11 | 706.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/30/2020 | | 99.62 | (0.04) | 706.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/31/2020 | | 99.58 | (0.04) | 706.42 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 1/1/2021 | | 99.45 | (0.13) | 706.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/2/2021 | | 99.48 | 0.03 | 706.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/3/2021 | | 99.64 | 0.16 | 706.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/4/2021 | | 99.63 | (0.01) | 706.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/5/2021 | | 99.58 | (0.05) | 706.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/6/2021 | | 99.52 | (0.06) | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/7/2021 | | 99.46 | (0.06) | 706.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/8/2021 | | 99.52 | 0.06 | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/9/2021 | | 99.47 | (0.05) | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/10/2021 | | 99.43 | (0.04) | 706.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/11/2021 | | 99.5 | 0.07 | 706.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/12/2021 | | 99.52 | 0.02 | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/13/2021 | | 99.52 | 0.00 | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/14/2021 | | 99.49 | (0.03) | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/15/2021 | | 99.49 | 0.00 | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/16/2021 | | 99.44 | (0.05) | 706.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/17/2021 | | 99.56 | 0.12 | 706.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/18/2021 | | 99.57 | 0.01 | 706.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/19/2021 | | 99.44 | (0.13) | 706.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/20/2021 | | 99.56 | 0.12 | 706.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/21/2021 | | 99.56 | 0.00 | 706.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/22/2021 | | 99.48 | (0.08) | 706.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/23/2021 | | 99.5 | 0.02 | 706.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/24/2021 | | 99.65 | 0.15 | 706.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/25/2021 | | 99.55 | (0.10) | 706.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/26/2021 | | 99.52 | (0.03) | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/27/2021 | | 99.47 | (0.05) | 706.53 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 1/28/2021 | | 99.51 | 0.04 | 706.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/29/2021 | | 99.57 | 0.06 | 706.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/30/2021 | | 99.5 | (0.07) | 706.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/31/2021 | | 99.55 | 0.05 | 706.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/1/2021 | | 99.58 | 0.03 | 706.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/2/2021 | | 99.55 | (0.03) | 706.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/3/2021 | | 99.54 | (0.01) | 706.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/4/2021 | | 99.42 | (0.12) | 706.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/5/2021 | | 99.58 | 0.16 | 706.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/6/2021 | | 99.42 | (0.16) | 706.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/7/2021 | | 99.66 | 0.24 | 706.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/8/2021 | | 99.52 | (0.14) | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/9/2021 | | 99.52 | 0.00 | 706.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/10/2021 | | 99.47 | (0.05) | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/11/2021 | | 99.51 | 0.04 | 706.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/12/2021 | | 99.58 | 0.07 | 706.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/13/2021 | | 99.45 | (0.13) | 706.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/14/2021 | | 99.47 | 0.02 | 706.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/15/2021 | | 99.54 | 0.07 | 706.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/16/2021 | | 99.59 | 0.05 | 706.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/17/2021 | | 99.73 | 0.14 | 706.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/18/2021 | | 99.64 | (0.09) | 706.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/19/2021 | | 99.78 | 0.14 | 706.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/20/2021 | | 99.73 | (0.05) | 706.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/21/2021 | | 99.84 | 0.11 | 706.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/22/2021 | | 99.68 | (0.16) | 706.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/23/2021 | | 99.71 | 0.03 | 706.29 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 2/24/2021 | | 99.78 | 0.07 | 706.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/25/2021 | | 99.65 | (0.13) | 706.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/26/2021 | | 99.58 | (0.07) | 706.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/27/2021 | | 99.56 | (0.02) | 706.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/28/2021 | | 99.68 | 0.12 | 706.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/1/2021 | | 99.38 | (0.30) | 706.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/2/2021 | | 99.51 | 0.13 | 706.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/3/2021 | | 99.49 | (0.02) | 706.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/4/2021 | | 99.57 | 0.08 | 706.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/5/2021 | | 99.65 | 0.08 | 706.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/6/2021 | | 99.65 | 0.00 | 706.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/7/2021 | | 99.7 | 0.05 | 706.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/8/2021 | | 99.66 | (0.04) | 706.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/9/2021 | | 99.7 | 0.04 | 706.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/10/2021 | | 99.84 | 0.14 | 706.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/11/2021 | | 99.87 | 0.03 | 706.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/12/2021 | | 99.86 | (0.01) | 706.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/13/2021 | | 99.76 | (0.10) | 706.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/15/2021 | | 99.82 | 0.06 | 706.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/16/2021 | | 99.65 | (0.17) | 706.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/17/2021 | | 99.61 | (0.04) | 706.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/18/2021 | | 99.67 | 0.06 | 706.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/19/2021 | | 99.61 | (0.06) | 706.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/20/2021 | | 99.68 | 0.07 | 706.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/21/2021 | | 99.74 | 0.06 | 706.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/22/2021 | | 99.9 | 0.16 | 706.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/23/2021 | | 99.92 | 0.02 | 706.08 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 3/24/2021 | | 99.9 | (0.02) | 706.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/25/2021 | | 100.06 | 0.16 | 705.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/26/2021 | | 100.04 | (0.02) | 705.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/27/2021 | | 100.11 | 0.07 | 705.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/28/2021 | | 100.11 | 0.00 | 705.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/29/2021 | | 100.09 | (0.02) | 705.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/30/2021 | | 100.05 | (0.04) | 705.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/31/2021 | | 99.94 | (0.11) | 706.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/1/2021 | | 99.94 | 0.00 | 706.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/2/2021 | | 99.86 | (0.08) | 706.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/3/2021 | | 99.82 | (0.04) | 706.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/4/2021 | | 99.88 | 0.06 | 706.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/5/2021 | | 100.07 | 0.19 | 705.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/6/2021 | | 99.98 | (0.09) | 706.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/7/2021 | | 100.02 | 0.04 | 705.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/8/2021 | | 99.86 | (0.16) | 706.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/9/2021 | | 100.07 | 0.21 | 705.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/10/2021 | | 100.05 | (0.02) | 705.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/11/2021 | | 100.01 | (0.04) | 705.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/12/2021 | | 100.12 | 0.11 | 705.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/13/2021 | | 100.13 | 0.01 | 705.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/14/2021 | | 100 | (0.13) | 706 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/15/2021 | | 100.11 | 0.11 | 705.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/16/2021 | | 100.09 | (0.02) | 705.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/17/2021 | | 99.98 | (0.11) | 706.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/18/2021 | | 99.91 | (0.07) | 706.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/19/2021 | | 99.98 | 0.07 | 706.02 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 4/20/2021 | | 99.92 | (0.06) | 706.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/21/2021 | | 99.84 | (0.08) | 706.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/22/2021 | | 100.07 | 0.23 | 705.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/23/2021 | | 99.98 | (0.09) | 706.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/24/2021 | | 99.99 | 0.01 | 706.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/25/2021 | | 99.91 | (0.08) | 706.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/26/2021 | | 99.91 | 0.00 | 706.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/27/2021 | | 99.98 | 0.07 | 706.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/28/2021 | | 99.98 | 0.00 | 706.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/29/2021 | | 100.07 | 0.09 | 705.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/30/2021 | | 99.88 | (0.19) | 706.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/1/2021 | | 99.94 | 0.06 | 706.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/2/2021 | | 99.96 | 0.02 | 706.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/3/2021 | | 100.01 | 0.05 | 705.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/4/2021 | | 100.08 | 0.07 | 705.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/5/2021 | | 100.18 | 0.10 | 705.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/6/2021 | | 100.07 | (0.11) | 705.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/7/2021 | | 100.09 | 0.02 | 705.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/8/2021 | | 100.21 | 0.12 | 705.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/9/2021 | | 100.2 | (0.01) | 705.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/10/2021 | | 100.25 | 0.05 | 705.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/11/2021 | | 100.22 | (0.03) | 705.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/12/2021 | | 100.14 | (0.08) | 705.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/13/2021 | | 100.2 | 0.06 | 705.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/14/2021 | | 100.34 | 0.14 | 705.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/15/2021 | | 100.32 | (0.02) | 705.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/16/2021 | | 100.29 | (0.03) | 705.71 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 5/17/2021 | | 100.31 | 0.02 | 705.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/18/2021 | | 100.36 | 0.05 | 705.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/19/2021 | | 100.31 | (0.05) | 705.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/20/2021 | | 100.45 | 0.14 | 705.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/21/2021 | | 100.45 | 0.00 | 705.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/22/2021 | | 100.37 | (0.08) | 705.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/23/2021 | | 100.48 | 0.11 | 705.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/24/2021 | | 100.54 | 0.06 | 705.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/25/2021 | | 100.56 | 0.02 | 705.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/26/2021 | | 100.51 | (0.05) | 705.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/27/2021 | | 100.6 | 0.09 | 705.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/28/2021 | | 100.45 | (0.15) | 705.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/29/2021 | | 100.2 | (0.25) | 705.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/30/2021 | | 100.26 | 0.06 | 705.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/31/2021 | | 100.26 | 0.00 | 705.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/1/2021 | | 100.2 | (0.06) | 705.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/2/2021 | | 100.17 | (0.03) | 705.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/3/2021 | | 100.31 | 0.14 | 705.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/4/2021 | | 100.04 | (0.27) | 705.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/5/2021 | | 100.1 | 0.06 | 705.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/6/2021 | | 100.09 | (0.01) | 705.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/7/2021 | | 100.19 | 0.10 | 705.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/8/2021 | | 100.06 | (0.13) | 705.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/9/2021 | | 99.97 | (0.09) | 706.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/10/2021 | | 99.97 | 0.00 | 706.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/11/2021 | | 100.02 | 0.05 | 705.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/12/2021 | | 99.96 | (0.06) | 706.04 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 6/13/2021 | | 100.07 | 0.11 | 705.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/14/2021 | | 100.01 | (0.06) | 705.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/15/2021 | | 99.96 | (0.05) | 706.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/16/2021 | | 99.98 | 0.02 | 706.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/17/2021 | | 100.14 | 0.16 | 705.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/18/2021 | | 100.01 | (0.13) | 705.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/19/2021 | | 99.95 | (0.06) | 706.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/20/2021 | | 100.11 | 0.16 | 705.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/21/2021 | | 100.15 | 0.04 | 705.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/22/2021 | | 100.04 | (0.11) | 705.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/23/2021 | | 99.95 | (0.09) | 706.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/24/2021 | | 99.98 | 0.03 | 706.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/25/2021 | | 100.02 | 0.04 | 705.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/26/2021 | | 100.05 | 0.03 | 705.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/27/2021 | | 99.92 | (0.13) | 706.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/28/2021 | | 99.9 | (0.02) | 706.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/29/2021 | | 99.99 | 0.09 | 706.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/30/2021 | | 99.89 | (0.10) | 706.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/1/2021 | | 100.03 | 0.14 | 705.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/2/2021 | | 100.02 | (0.01) | 705.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/3/2021 | | 99.95 | (0.07) | 706.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/4/2021 | | 99.94 | (0.01) | 706.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/5/2021 | | 100.05 | 0.11 | 705.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/6/2021 | | 99.92 | (0.13) | 706.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/7/2021 | | 99.85 | (0.07) | 706.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/8/2021 | | 99.96 | 0.11 | 706.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/9/2021 | | 99.88 | (0.08) | 706.12 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 7/10/2021 | | 99.9 | 0.02 | 706.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/11/2021 | | 99.87 | (0.03) | 706.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/12/2021 | | 99.97 | 0.10 | 706.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/13/2021 | | 99.98 | 0.01 | 706.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/14/2021 | | 99.91 | (0.07) | 706.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/15/2021 | | 99.92 | 0.01 | 706.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/16/2021 | | 99.91 | (0.01) | 706.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/17/2021 | | 99.9 | (0.01) | 706.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/18/2021 | | 100.06 | 0.16 | 705.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/19/2021 | | 99.98 | (0.08) | 706.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/20/2021 | | 99.99 | 0.01 | 706.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/21/2021 | | 100.09 | 0.10 | 705.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/22/2021 | | 99.99 | (0.10) | 706.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/23/2021 | | 99.93 | (0.06) | 706.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/24/2021 | | 100.13 | 0.20 | 705.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/25/2021 | | 99.96 | (0.17) | 706.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/26/2021 | | 100.12 | 0.16 | 705.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/27/2021 | | 100.03 | (0.09) | 705.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/28/2021 | | 100.06 | 0.03 | 705.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/29/2021 | | 100.21 | 0.15 | 705.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/30/2021 | | 100.13 | (0.08) | 705.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/31/2021 | | 100.15 | 0.02 | 705.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/1/2021 | | 100.06 | (0.09) | 705.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/2/2021 | | 100.05 | (0.01) | 705.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/3/2021 | | 100.13 | 0.08 | 705.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/4/2021 | | 100 | (0.13) | 706 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/5/2021 | | 100.01 | 0.01 | 705.99 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 8/6/2021 | | 99.99 | (0.02) | 706.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/7/2021 | | 100.04 | 0.05 | 705.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/8/2021 | | 100.06 | 0.02 | 705.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/9/2021 | | 100.28 | 0.22 | 705.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/10/2021 | | 100.01 | (0.27) | 705.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/11/2021 | | 100.15 | 0.14 | 705.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/12/2021 | | 100.22 | 0.07 | 705.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/13/2021 | | 100.08 | (0.14) | 705.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/14/2021 | | 100.01 | (0.07) | 705.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/15/2021 | | 100.04 | 0.03 | 705.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/16/2021 | | 100.15 | 0.11 | 705.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/17/2021 | | 100.12 | (0.03) | 705.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/18/2021 | | 100.21 | 0.09 | 705.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/19/2021 | | 100.19 | (0.02) | 705.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/20/2021 | | 100.08 | (0.11) | 705.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/21/2021 | | 100.09 | 0.01 | 705.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/22/2021 | | 100.03 | (0.06) | 705.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/23/2021 | | 100.25 | 0.22 | 705.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/24/2021 | | 100.09 | (0.16) | 705.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/25/2021 | | 100.13 | 0.04 | 705.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/26/2021 | | 100.08 | (0.05) | 705.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/27/2021 | | 100.17 | 0.09 | 705.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/28/2021 | | 100.11 | (0.06) | 705.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/29/2021 | | 100.16 | 0.05 | 705.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/30/2021 | | 100.1 | (0.06) | 705.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/31/2021 | | 100.09 | (0.01) | 705.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/1/2021 | | 100.02 | (0.07) | 705.98 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 9/2/2021 | | 100.1 | 0.08 | 705.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/3/2021 | | 100.23 | 0.13 | 705.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/4/2021 | | 100.17 | (0.06) | 705.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/5/2021 | | 100.16 | (0.01) | 705.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/6/2021 | | 100.27 | 0.11 | 705.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/7/2021 | | 100.29 | 0.02 | 705.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/8/2021 | | 100.23 | (0.06) | 705.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/9/2021 | | 100.32 | 0.09 | 705.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/10/2021 | | 100.25 | (0.07) | 705.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/11/2021 | | 100.19 | (0.06) | 705.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/12/2021 | | 100.2 | 0.01 | 705.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/13/2021 | | 100.34 | 0.14 | 705.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/14/2021 | | 100.41 | 0.07 | 705.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/15/2021 | | 100.6 | 0.19 | 705.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/16/2021 | | 100.87 | 0.27 | 705.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/17/2021 | | 100.79 | (0.08) | 705.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/18/2021 | | 100.76 | (0.03) | 705.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/19/2021 | | 100.7 | (0.06) | 705.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/20/2021 | | 100.76 | 0.06 | 705.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/21/2021 | | 100.76 | 0.00 | 705.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/22/2021 | | 100.69 | (0.07) | 705.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/23/2021 | | 100.66 | (0.03) | 705.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/24/2021 | | 100.64 | (0.02) | 705.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/25/2021 | | 100.62 | (0.02) | 705.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/26/2021 | | 100.52 | (0.10) | 705.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/27/2021 | | 100.59 | 0.07 | 705.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/28/2021 | | 100.57 | (0.02) | 705.43 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 9/29/2021 | | 100.43 | (0.14) | 705.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/30/2021 | | 100.46 | 0.03 | 705.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/1/2021 | | 100.59 | 0.13 | 705.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/2/2021 | | 100.39 | (0.20) | 705.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/3/2021 | | 100.63 | 0.24 | 705.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/4/2021 | | 100.52 | (0.11) | 705.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/5/2021 | | 100.49 | (0.03) | 705.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/6/2021 | | 100.43 | (0.06) | 705.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/7/2021 | | 100.45 | 0.02 | 705.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/8/2021 | | 100.52 | 0.07 | 705.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/9/2021 | | 100.46 | (0.06) | 705.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/10/2021 | | 100.46 | 0.00 | 705.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/11/2021 | | 100.43 | (0.03) | 705.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/12/2021 | | 100.54 | 0.11 | 705.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/13/2021 | | 100.56 | 0.02 | 705.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/14/2021 | | 100.59 | 0.03 | 705.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/15/2021 | | 100.64 | 0.05 | 705.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/16/2021 | | 100.53 | (0.11) | 705.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/17/2021 | | 100.48 | (0.05) | 705.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/18/2021 | | 100.58 | 0.10 | 705.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/19/2021 | | 100.58 | 0.00 | 705.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/20/2021 | | 100.59 | 0.01 | 705.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/21/2021 | | 100.46 | (0.13) | 705.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/22/2021 | | 100.48 | 0.02 | 705.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/23/2021 | | 100.6 | 0.12 | 705.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/24/2021 | | 100.52 | (0.08) | 705.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/25/2021 | | 100.52 | 0.00 | 705.48 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 10/26/2021 | | 100.42 | (0.10) | 705.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/27/2021 | | 100.51 | 0.09 | 705.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/28/2021 | | 100.42 | (0.09) | 705.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/29/2021 | | 100.32 | (0.10) | 705.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/30/2021 | | 100.36 | 0.04 | 705.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/31/2021 | | 100.4 | 0.04 | 705.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/1/2021 | | 100.33 | (0.07) | 705.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/2/2021 | | 100.38 | 0.05 | 705.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/3/2021 | | 100.34 | (0.04) | 705.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/4/2021 | | 100.28 | (0.06) | 705.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/5/2021 | | 100.38 | 0.10 | 705.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/6/2021 | | 100.36 | (0.02) | 705.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/7/2021 | | 100.27 | (0.09) | 705.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/8/2021 | | 100.27 | 0.00 | 705.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/9/2021 | | 100.26 | (0.01) | 705.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/10/2021 | | 100.31 | 0.05 | 705.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/11/2021 | | 100.22 | (0.09) | 705.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/12/2021 | | 100.17 | (0.05) | 705.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/13/2021 | | 100.38 | 0.21 | 705.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/14/2021 | | 100.36 | (0.02) | 705.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/15/2021 | | 100.3 | (0.06) | 705.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/16/2021 | | 100.32 | 0.02 | 705.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/17/2021 | | 100.2 | (0.12) | 705.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/18/2021 | | 100.18 | (0.02) | 705.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/19/2021 | | 100.31 | 0.13 | 705.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/20/2021 | | 100.32 | 0.01 | 705.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/21/2021 | | 100.26 | (0.06) | 705.74 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 11/22/2021 | | 100.21 | (0.05) | 705.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/23/2021 | | 100.23 | 0.02 | 705.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/24/2021 | | 100.25 | 0.02 | 705.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/25/2021 | | 100.16 | (0.09) | 705.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/26/2021 | | 100.18 | 0.02 | 705.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/27/2021 | | 100.22 | 0.04 | 705.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/28/2021 | | 100.14 | (0.08) | 705.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/29/2021 | | 100.25 | 0.11 | 705.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/30/2021 | | 100.21 | (0.04) | 705.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/1/2021 | | 100.22 | 0.01 | 705.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/2/2021 | | 100.26 | 0.04 | 705.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/3/2021 | | 100.24 | (0.02) | 705.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/4/2021 | | 100.41 | 0.17 | 705.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/5/2021 | | 100.44 | 0.03 | 705.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/6/2021 | | 100.28 | (0.16) | 705.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/7/2021 | | 100.31 | 0.03 | 705.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/8/2021 | | 100.32 | 0.01 | 705.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/9/2021 | | 100.29 | (0.03) | 705.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/10/2021 | | 100.28 | (0.01) | 705.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/11/2021 | | 100.15 | (0.13) | 705.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/12/2021 | | 100.28 | 0.13 | 705.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/13/2021 | | 100.3 | 0.02 | 705.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/14/2021 | | 100.42 | 0.12 | 705.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/15/2021 | | 100.46 | 0.04 | 705.54 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/16/2021 | | 100.54 | 0.08 | 705.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/17/2021 | | 100.45 | (0.09) | 705.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/18/2021 | | 100.34 | (0.11) | 705.66 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 12/19/2021 | | 100.48 | 0.14 | 705.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/20/2021 | | 100.41 | (0.07) | 705.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/21/2021 | | 100.38 | (0.03) | 705.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/22/2021 | | 100.42 | 0.04 | 705.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/23/2021 | | 100.42 | 0.00 | 705.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/24/2021 | | 100.44 | 0.02 | 705.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/25/2021 | | 100.38 | (0.06) | 705.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/26/2021 | | 100.41 | 0.03 | 705.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/27/2021 | | 100.51 | 0.10 | 705.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/28/2021 | | 100.42 | (0.09) | 705.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/29/2021 | | 100.39 | (0.03) | 705.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/30/2021 | | 100.42 | 0.03 | 705.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/31/2021 | | 100.48 | 0.06 | 705.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/1/2022 | | 100.38 | (0.10) | 705.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/2/2022 | | 100.43 | 0.05 | 705.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/3/2022 | | 100.45 | 0.02 | 705.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/4/2022 | | 100.36 | (0.09) | 705.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/5/2022 | | 100.4 | 0.04 | 705.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/6/2022 | | 100.28 | (0.12) | 705.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/7/2022 | | 100.42 | 0.14 | 705.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/8/2022 | | 100.32 | (0.10) | 705.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/9/2022 | | 100.2 | (0.12) | 705.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/10/2022 | | 100.22 | 0.02 | 705.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/11/2022 | | 100.25 | 0.03 | 705.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/12/2022 | | 100.25 | 0.00 | 705.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/13/2022 | | 100.32 | 0.07 | 705.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/14/2022 | | 100.3 | (0.02) | 705.7 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 1/15/2022 | | 100.19 | (0.11) | 705.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/16/2022 | | 100.29 | 0.10 | 705.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/17/2022 | | 100.37 | 0.08 | 705.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/18/2022 | | 100.28 | (0.09) | 705.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/19/2022 | | 100.19 | (0.09) | 705.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/20/2022 | | 100.18 | (0.01) | 705.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/21/2022 | | 100.25 | 0.07 | 705.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/22/2022 | | 100.2 | (0.05) | 705.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/23/2022 | | 100.32 | 0.12 | 705.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/24/2022 | | 100.21 | (0.11) | 705.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/25/2022 | | 100.11 | (0.10) | 705.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/26/2022 | | 100.14 | 0.03 | 705.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/27/2022 | | 100.2 | 0.06 | 705.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/28/2022 | | 100.16 | (0.04) | 705.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/29/2022 | | 100.32 | 0.16 | 705.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/30/2022 | | 100.2 | (0.12) | 705.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/31/2022 | | 100.19 | (0.01) | 705.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/1/2022 | | 100.28 | 0.09 | 705.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/2/2022 | | 100.17 | (0.11) | 705.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/3/2022 | | 100.07 | (0.10) | 705.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/4/2022 | | 100.18 | 0.11 | 705.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/5/2022 | | 100.32 | 0.14 | 705.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/6/2022 | | 100.14 | (0.18) | 705.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/7/2022 | | 100.15 | 0.01 | 705.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/8/2022 | | 100.17 | 0.02 | 705.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/9/2022 | | 100.14 | (0.03) | 705.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/10/2022 | | 100.22 | 0.08 | 705.78 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 2/11/2022 | | 100.27 | 0.05 | 705.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/12/2022 | | 100.06 | (0.21) | 705.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/13/2022 | | 100.15 | 0.09 | 705.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/14/2022 | | 100.15 | 0.00 | 705.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/15/2022 | | 100.18 | 0.03 | 705.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/16/2022 | | 100.25 | 0.07 | 705.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/17/2022 | | 100.06 | (0.19) | 705.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/18/2022 | | 100.1 | 0.04 | 705.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/19/2022 | | 100.11 | 0.01 | 705.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/20/2022 | | 100.18 | 0.07 | 705.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/21/2022 | | 100.38 | 0.20 | 705.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/22/2022 | | 100.13 | (0.25) | 705.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/23/2022 | | 100.26 | 0.13 | 705.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/24/2022 | | 100.14 | (0.12) | 705.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/25/2022 | | 100.15 | 0.01 | 705.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/26/2022 | | 100.1 | (0.05) | 705.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/27/2022 | | 100.15 | 0.05 | 705.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/28/2022 | | 100.27 | 0.12 | 705.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/1/2022 | | 100.18 | (0.09) | 705.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/2/2022 | | 100.17 | (0.01) | 705.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/3/2022 | | 100.17 | 0.00 | 705.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/4/2022 | | 100.15 | (0.02) | 705.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/5/2022 | | 100.12 | (0.03) | 705.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/6/2022 | | 100.08 | (0.04) | 705.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/7/2022 | | 100.08 | 0.00 | 705.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/8/2022 | | 100.16 | 0.08 | 705.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/9/2022 | | 100.15 | (0.01) | 705.85 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 3/10/2022 | | 100.14 | (0.01) | 705.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/11/2022 | | 100 | (0.14) | 706 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/12/2022 | | 100.05 | 0.05 | 705.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/14/2022 | | 100.17 | 0.12 | 705.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/15/2022 | | 100.12 | (0.05) | 705.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/16/2022 | | 100.3 | 0.18 | 705.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/17/2022 | | 100.2 | (0.10) | 705.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/18/2022 | | 100.45 | 0.25 | 705.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/19/2022 | | 100.28 | (0.17) | 705.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/20/2022 | | 100.17 | (0.11) | 705.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/21/2022 | | 100.33 | 0.16 | 705.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/22/2022 | | 100.25 | (0.08) | 705.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/23/2022 | | 100.12 | (0.13) | 705.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/24/2022 | | 100.23 | 0.11 | 705.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/25/2022 | | 100.15 | (0.08) | 705.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/26/2022 | | 100.17 | 0.02 | 705.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/27/2022 | | 100.21 | 0.04 | 705.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/28/2022 | | 100.41 | 0.20 | 705.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/29/2022 | | 100.4 | (0.01) | 705.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/30/2022 | | 100.42 | 0.02 | 705.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/31/2022 | | 100.33 | (0.09) | 705.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/1/2022 | | 100.31 | (0.02) | 705.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/2/2022 | | 100.3 | (0.01) | 705.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/3/2022 | | 100.44 | 0.14 | 705.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/4/2022 | | 100.51 | 0.07 | 705.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/5/2022 | | 100.43 | (0.08) | 705.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/6/2022 | | 100.52 | 0.09 | 705.48 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 4/7/2022 | | 100.33 | (0.19) | 705.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/8/2022 | | 100.52 | 0.19 | 705.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/9/2022 | | 100.6 | 0.08 | 705.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/10/2022 | | 100.94 | 0.34 | 705.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/11/2022 | | 101.1 | 0.16 | 704.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/12/2022 | | 101.05 | (0.05) | 704.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/13/2022 | | 100.94 | (0.11) | 705.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/14/2022 | | 100.82 | (0.12) | 705.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/15/2022 | | 100.84 | 0.02 | 705.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/16/2022 | | 100.74 | (0.10) | 705.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/17/2022 | | 100.65 | (0.09) | 705.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/18/2022 | | 100.76 | 0.11 | 705.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/19/2022 | | 100.64 | (0.12) | 705.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/20/2022 | | 100.85 | 0.21 | 705.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/21/2022 | | 100.73 | (0.12) | 705.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/22/2022 | | 100.66 | (0.07) | 705.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/23/2022 | | 100.71 | 0.05 | 705.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/24/2022 | | 100.65 | (0.06) | 705.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/25/2022 | | 100.75 | 0.10 | 705.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/26/2022 | | 100.58 | (0.17) | 705.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/27/2022 | | 100.58 | 0.00 | 705.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/28/2022 | | 100.75 | 0.17 | 705.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/29/2022 | | 100.94 | 0.19 | 705.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/30/2022 | | 100.88 | (0.06) | 705.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/1/2022 | | 100.82 | (0.06) | 705.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/2/2022 | | 101.1 | 0.28 | 704.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/3/2022 | | 100.88 | (0.22) | 705.12 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 5/4/2022 | | 100.9 | 0.02 | 705.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/5/2022 | | 100.85 | (0.05) | 705.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/6/2022 | | 100.84 | (0.01) | 705.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/7/2022 | | 101.02 | 0.18 | 704.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/8/2022 | | 100.98 | (0.04) | 705.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/9/2022 | | 100.93 | (0.05) | 705.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/10/2022 | | 100.97 | 0.04 | 705.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/11/2022 | | 100.93 | (0.04) | 705.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/12/2022 | | 100.99 | 0.06 | 705.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/13/2022 | | 101.02 | 0.03 | 704.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/14/2022 | | 100.96 | (0.06) | 705.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/15/2022 | | 101.03 | 0.07 | 704.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/16/2022 | | 101.07 | 0.04 | 704.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/17/2022 | | 101.14 | 0.07 | 704.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/18/2022 | | 101.14 | 0.00 | 704.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/19/2022 | | 101.1 | (0.04) | 704.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/20/2022 | | 101.1 | 0.00 | 704.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/21/2022 | | 101.04 | (0.06) | 704.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/22/2022 | | 100.98 | (0.06) | 705.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/23/2022 | | 100.97 | (0.01) | 705.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/24/2022 | | 100.96 | (0.01) | 705.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/25/2022 | | 100.87 | (0.09) | 705.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/26/2022 | | 100.86 | (0.01) | 705.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/27/2022 | | 100.83 | (0.03) | 705.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/28/2022 | | 100.9 | 0.07 | 705.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/29/2022 | | 100.92 | 0.02 | 705.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/30/2022 | | 101.14 | 0.22 | 704.86 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 5/31/2022 | | 101.37 | 0.23 | 704.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/1/2022 | | 101.13 | (0.24) | 704.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/2/2022 | | 101.23 | 0.10 | 704.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/3/2022 | | 101.15 | (0.08) | 704.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/4/2022 | | 101.06 | (0.09) | 704.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/5/2022 | | 101.04 | (0.02) | 704.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/6/2022 | | 100.93 | (0.11) | 705.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/7/2022 | | 101.19 | 0.26 | 704.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/8/2022 | | 101.12 | (0.07) | 704.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/9/2022 | | 101.3 | 0.18 | 704.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/10/2022 | | 101.11 | (0.19) | 704.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/11/2022 | | 101.19 | 0.08 | 704.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/12/2022 | | 101.3 | 0.11 | 704.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/13/2022 | | 101.22 | (0.08) | 704.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/14/2022 | | 101.22 | 0.00 | 704.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/15/2022 | | 101.3 | 0.08 | 704.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/16/2022 | | 101.33 | 0.03 | 704.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/17/2022 | | 101.26 | (0.07) | 704.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/18/2022 | | 101.19 | (0.07) | 704.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/19/2022 | | 101.17 | (0.02) | 704.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/20/2022 | | 101.2 | 0.03 | 704.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/21/2022 | | 101.17 | (0.03) | 704.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/22/2022 | | 101.3 | 0.13 | 704.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/23/2022 | | 101.3 | 0.00 | 704.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/24/2022 | | 101.29 | (0.01) | 704.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/25/2022 | | 101.24 | (0.05) | 704.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/26/2022 | | 101.2 | (0.04) | 704.8 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 6/27/2022 | | 101.36 | 0.16 | 704.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/28/2022 | | 101.26 | (0.10) | 704.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/29/2022 | | 101.14 | (0.12) | 704.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 6/30/2022 | | 101.02 | (0.12) | 704.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/1/2022 | | 101.04 | 0.02 | 704.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/2/2022 | | 100.87 | (0.17) | 705.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/3/2022 | | 100.87 | 0.00 | 705.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/4/2022 | | 100.96 | 0.09 | 705.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/5/2022 | | 100.84 | (0.12) | 705.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/6/2022 | | 100.91 | 0.07 | 705.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/7/2022 | | 101.27 | 0.36 | 704.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/8/2022 | | 101.1 | (0.17) | 704.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/9/2022 | | 100.94 | (0.16) | 705.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/10/2022 | | 100.94 | 0.00 | 705.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/11/2022 | | 101.13 | 0.19 | 704.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/12/2022 | | 101.14 | 0.01 | 704.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/13/2022 | | 101.07 | (0.07) | 704.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/14/2022 | | 101.19 | 0.12 | 704.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/15/2022 | | 101.18 | (0.01) | 704.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/16/2022 | | 100.98 | (0.20) | 705.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/17/2022 | | 100.98 | 0.00 | 705.02 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/18/2022 | | 100.96 | (0.02) | 705.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/19/2022 | | 101.18 | 0.22 | 704.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/20/2022 | | 101.24 | 0.06 | 704.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/21/2022 | | 101.17 | (0.07) | 704.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/22/2022 | | 101.37 | 0.20 | 704.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/23/2022 | | 101.41 | 0.04 | 704.59 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 7/24/2022 | | 101.45 | 0.04 | 704.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/25/2022 | | 101.57 | 0.12 | 704.43 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/26/2022 | | 101.5 | (0.07) | 704.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/27/2022 | | 101.58 | 0.08 | 704.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/28/2022 | | 101.69 | 0.11 | 704.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/29/2022 | | 101.51 | (0.18) | 704.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/30/2022 | | 101.49 | (0.02) | 704.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/31/2022 | | 101.58 | 0.09 | 704.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/1/2022 | | 101.51 | (0.07) | 704.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/2/2022 | | 101.79 | 0.28 | 704.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/3/2022 | | 101.56 | (0.23) | 704.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/4/2022 | | 101.6 | 0.04 | 704.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/5/2022 | | 101.55 | (0.05) | 704.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/6/2022 | | 101.6 | 0.05 | 704.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/7/2022 | | 101.61 | 0.01 | 704.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/8/2022 | | 101.69 | 0.08 | 704.31 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/9/2022 | | 101.62 | (0.07) | 704.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/10/2022 | | 101.68 | 0.06 | 704.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/11/2022 | | 101.59 | (0.09) | 704.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/12/2022 | | 101.56 | (0.03) | 704.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/13/2022 | | 101.64 | 0.08 | 704.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/14/2022 | | 101.71 | 0.07 | 704.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/15/2022 | | 101.62 | (0.09) | 704.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/16/2022 | | 101.68 | 0.06 | 704.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/17/2022 | | 101.62 | (0.06) | 704.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/18/2022 | | 101.64 | 0.02 | 704.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/19/2022 | | 101.61 | (0.03) | 704.39 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 8/20/2022 | | 101.63 | 0.02 | 704.37 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/21/2022 | | 101.71 | 0.08 | 704.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/22/2022 | | 101.67 | (0.04) | 704.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/23/2022 | | 101.61 | (0.06) | 704.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/24/2022 | | 101.59 | (0.02) | 704.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/25/2022 | | 101.71 | 0.12 | 704.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/26/2022 | | 101.89 | 0.18 | 704.11 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/27/2022 | | 101.65 | (0.24) | 704.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/28/2022 | | 101.56 | (0.09) | 704.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/29/2022 | | 101.54 | (0.02) | 704.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/30/2022 | | 101.6 | 0.06 | 704.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/31/2022 | | 101.53 | (0.07) | 704.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/1/2022 | | 101.65 | 0.12 | 704.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/2/2022 | | 101.66 | 0.01 | 704.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/3/2022 | | 101.71 | 0.05 | 704.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/4/2022 | | 101.68 | (0.03) | 704.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/5/2022 | | 101.71 | 0.03 | 704.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/6/2022 | | 101.8 | 0.09 | 704.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/7/2022 | | 101.65 | (0.15) | 704.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/8/2022 | | 101.66 | 0.01 | 704.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/9/2022 | | 101.71 | 0.05 | 704.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/10/2022 | | 101.73 | 0.02 | 704.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/11/2022 | | 101.73 | 0.00 | 704.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/12/2022 | | 101.77 | 0.04 | 704.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/13/2022 | | 101.86 | 0.09 | 704.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/14/2022 | | 101.8 | (0.06) | 704.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/15/2022 | | 101.81 | 0.01 | 704.19 | 1 | Groundwater Conservation District | Transducer | | |

Texas Water Development Board

# Texas Water Development Board (TWDB)
# Groundwater Database (GWDB)
# Well Information Report for State Well Number 57-40-104

groundwater division

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 9/16/2022 | | 101.79 | (0.02) | 704.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/17/2022 | | 101.83 | 0.04 | 704.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/18/2022 | | 101.81 | (0.02) | 704.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/19/2022 | | 101.84 | 0.03 | 704.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/20/2022 | | 101.83 | (0.01) | 704.17 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/21/2022 | | 101.7 | (0.13) | 704.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/22/2022 | | 101.88 | 0.18 | 704.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/23/2022 | | 101.93 | 0.05 | 704.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/24/2022 | | 101.84 | (0.09) | 704.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/25/2022 | | 101.86 | 0.02 | 704.14 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/26/2022 | | 101.8 | (0.06) | 704.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/27/2022 | | 101.9 | 0.10 | 704.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/28/2022 | | 101.99 | 0.09 | 704.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/29/2022 | | 101.85 | (0.14) | 704.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/30/2022 | | 101.91 | 0.06 | 704.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/1/2022 | | 101.93 | 0.02 | 704.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/2/2022 | | 101.84 | (0.09) | 704.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/3/2022 | | 101.85 | 0.01 | 704.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/4/2022 | | 101.91 | 0.06 | 704.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/5/2022 | | 101.7 | (0.21) | 704.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/6/2022 | | 101.77 | 0.07 | 704.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/7/2022 | | 101.78 | 0.01 | 704.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/8/2022 | | 101.76 | (0.02) | 704.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/9/2022 | | 101.74 | (0.02) | 704.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/10/2022 | | 101.81 | 0.07 | 704.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/11/2022 | | 101.8 | (0.01) | 704.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/12/2022 | | 101.74 | (0.06) | 704.26 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 10/13/2022 | | 101.76 | 0.02 | 704.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/14/2022 | | 101.8 | 0.04 | 704.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/15/2022 | | 101.79 | (0.01) | 704.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/16/2022 | | 101.94 | 0.15 | 704.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/17/2022 | | 101.8 | (0.14) | 704.2 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/18/2022 | | 101.82 | 0.02 | 704.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/19/2022 | | 101.67 | (0.15) | 704.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/20/2022 | | 102.01 | 0.34 | 703.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/21/2022 | | 102.11 | 0.10 | 703.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/22/2022 | | 102.18 | 0.07 | 703.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/23/2022 | | 102.27 | 0.09 | 703.73 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/24/2022 | | 102.38 | 0.11 | 703.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/25/2022 | | 102.29 | (0.09) | 703.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/26/2022 | | 102.05 | (0.24) | 703.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/27/2022 | | 102.08 | 0.03 | 703.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/28/2022 | | 101.97 | (0.11) | 704.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/29/2022 | | 102 | 0.03 | 704 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/30/2022 | | 101.94 | (0.06) | 704.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/31/2022 | | 101.92 | (0.02) | 704.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/1/2022 | | 101.96 | 0.04 | 704.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/2/2022 | | 101.85 | (0.11) | 704.15 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/3/2022 | | 101.93 | 0.08 | 704.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/4/2022 | | 102 | 0.07 | 704 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/5/2022 | | 101.96 | (0.04) | 704.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/6/2022 | | 101.97 | 0.01 | 704.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/7/2022 | | 101.99 | 0.02 | 704.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/8/2022 | | 101.9 | (0.09) | 704.1 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 11/9/2022 | | 102.05 | 0.15 | 703.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/10/2022 | | 102.09 | 0.04 | 703.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/11/2022 | | 102.06 | (0.03) | 703.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/12/2022 | | 102.08 | 0.02 | 703.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/13/2022 | | 102.15 | 0.07 | 703.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/14/2022 | | 102.08 | (0.07) | 703.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/15/2022 | | 101.93 | (0.15) | 704.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/16/2022 | | 102.02 | 0.09 | 703.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/17/2022 | | 102.01 | (0.01) | 703.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/18/2022 | | 102.06 | 0.05 | 703.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/19/2022 | | 102.04 | (0.02) | 703.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/20/2022 | | 102.03 | (0.01) | 703.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/21/2022 | | 102.02 | (0.01) | 703.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/22/2022 | | 101.9 | (0.12) | 704.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/23/2022 | | 102.01 | 0.11 | 703.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/24/2022 | | 102 | (0.01) | 704 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/25/2022 | | 102.06 | 0.06 | 703.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/26/2022 | | 102.08 | 0.02 | 703.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/27/2022 | | 102.14 | 0.06 | 703.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/28/2022 | | 102.16 | 0.02 | 703.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/29/2022 | | 101.97 | (0.19) | 704.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/30/2022 | | 102.05 | 0.08 | 703.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/1/2022 | | 102.09 | 0.04 | 703.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/2/2022 | | 102.1 | 0.01 | 703.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/3/2022 | | 102.1 | 0.00 | 703.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/4/2022 | | 102.12 | 0.02 | 703.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/5/2022 | | 102.17 | 0.05 | 703.83 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 12/6/2022 | | 102 | (0.17) | 704 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/7/2022 | | 102.13 | 0.13 | 703.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/8/2022 | | 102.18 | 0.05 | 703.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/9/2022 | | 102.24 | 0.06 | 703.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/10/2022 | | 102.23 | (0.01) | 703.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/11/2022 | | 102.26 | 0.03 | 703.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/12/2022 | | 102.26 | 0.00 | 703.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/13/2022 | | 102.11 | (0.15) | 703.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/14/2022 | | 102.2 | 0.09 | 703.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/15/2022 | | 102.25 | 0.05 | 703.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/16/2022 | | 102.29 | 0.04 | 703.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/17/2022 | | 102.01 | (0.28) | 703.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/18/2022 | | 102.06 | 0.05 | 703.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/19/2022 | | 102.02 | (0.04) | 703.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/20/2022 | | 102.02 | 0.00 | 703.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/21/2022 | | 101.97 | (0.05) | 704.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/22/2022 | | 101.96 | (0.01) | 704.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/23/2022 | | 101.97 | 0.01 | 704.03 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/24/2022 | | 102.08 | 0.11 | 703.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/25/2022 | | 101.93 | (0.15) | 704.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/26/2022 | | 101.88 | (0.05) | 704.12 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/27/2022 | | 102.03 | 0.15 | 703.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/28/2022 | | 101.95 | (0.08) | 704.05 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/29/2022 | | 101.94 | (0.01) | 704.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/30/2022 | | 101.92 | (0.02) | 704.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/31/2022 | | 101.94 | 0.02 | 704.06 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/1/2023 | | 101.9 | (0.04) | 704.1 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 1/2/2023 | | 102.02 | 0.12 | 703.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/3/2023 | | 101.96 | (0.06) | 704.04 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/4/2023 | | 101.92 | (0.04) | 704.08 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/5/2023 | | 101.93 | 0.01 | 704.07 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/6/2023 | | 102.02 | 0.09 | 703.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/7/2023 | | 102.06 | 0.04 | 703.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/8/2023 | | 102.02 | (0.04) | 703.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/9/2023 | | 102.02 | 0.00 | 703.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/10/2023 | | 102.02 | 0.00 | 703.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/11/2023 | | 102.05 | 0.03 | 703.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/12/2023 | | 101.99 | (0.06) | 704.01 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/13/2023 | | 102.02 | 0.03 | 703.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/14/2023 | | 102.02 | 0.00 | 703.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/15/2023 | | 102.06 | 0.04 | 703.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/16/2023 | | 102.04 | (0.02) | 703.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/17/2023 | | 102.05 | 0.01 | 703.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/18/2023 | | 102.08 | 0.03 | 703.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/19/2023 | | 102.1 | 0.02 | 703.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/20/2023 | | 102.19 | 0.09 | 703.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/21/2023 | | 102.15 | (0.04) | 703.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/22/2023 | | 102.08 | (0.07) | 703.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/23/2023 | | 102.1 | 0.02 | 703.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/24/2023 | | 102.05 | (0.05) | 703.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/25/2023 | | 102 | (0.05) | 704 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/26/2023 | | 102.07 | 0.07 | 703.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/27/2023 | | 102.09 | 0.02 | 703.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/28/2023 | | 102.06 | (0.03) | 703.94 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 1/29/2023 | | 102.09 | 0.03 | 703.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/30/2023 | | 102.03 | (0.06) | 703.97 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/31/2023 | | 102.09 | 0.06 | 703.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/1/2023 | | 102.11 | 0.02 | 703.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/2/2023 | | 102.08 | (0.03) | 703.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/3/2023 | | 102.04 | (0.04) | 703.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/4/2023 | | 102.11 | 0.07 | 703.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/5/2023 | | 102.12 | 0.01 | 703.88 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/6/2023 | | 102.06 | (0.06) | 703.94 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/7/2023 | | 102.04 | (0.02) | 703.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/8/2023 | | 102.11 | 0.07 | 703.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/9/2023 | | 102 | (0.11) | 704 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/10/2023 | | 102.02 | 0.02 | 703.98 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/11/2023 | | 102.01 | (0.01) | 703.99 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/12/2023 | | 102.05 | 0.04 | 703.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/13/2023 | | 102.07 | 0.02 | 703.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/14/2023 | | 102.07 | 0.00 | 703.93 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/15/2023 | | 102.11 | 0.04 | 703.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/16/2023 | | 102 | (0.11) | 704 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/17/2023 | | 102.04 | 0.04 | 703.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/18/2023 | | 102.04 | 0.00 | 703.96 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/19/2023 | | 102.11 | 0.07 | 703.89 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/20/2023 | | 102.08 | (0.03) | 703.92 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/21/2023 | | 102.36 | 0.28 | 703.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/22/2023 | | 102.38 | 0.02 | 703.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/23/2023 | | 102.1 | (0.28) | 703.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/24/2023 | | 102.08 | (0.02) | 703.92 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 2/25/2023 | | 102.1 | 0.02 | 703.9 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/26/2023 | | 102.13 | 0.03 | 703.87 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/27/2023 | | 102.09 | (0.04) | 703.91 | 1 | Groundwater Conservation District | Transducer | | |
| P | 2/28/2023 | | 102.16 | 0.07 | 703.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/1/2023 | | 102.33 | 0.17 | 703.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/2/2023 | | 102.28 | (0.05) | 703.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/3/2023 | | 102.36 | 0.08 | 703.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/4/2023 | | 102.36 | 0.00 | 703.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/5/2023 | | 102.28 | (0.08) | 703.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/6/2023 | | 102.26 | (0.02) | 703.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/7/2023 | | 102.22 | (0.04) | 703.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/8/2023 | | 102.26 | 0.04 | 703.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/9/2023 | | 102.21 | (0.05) | 703.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/10/2023 | | 102.33 | 0.12 | 703.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/11/2023 | | 102.39 | 0.06 | 703.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/13/2023 | | 102.21 | (0.18) | 703.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/14/2023 | | 102.29 | 0.08 | 703.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/15/2023 | | 102.25 | (0.04) | 703.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/16/2023 | | 102.21 | (0.04) | 703.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/17/2023 | | 102.24 | 0.03 | 703.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/18/2023 | | 102.18 | (0.06) | 703.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/19/2023 | | 102.22 | 0.04 | 703.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/20/2023 | | 102.25 | 0.03 | 703.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/21/2023 | | 102.25 | 0.00 | 703.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/22/2023 | | 102.18 | (0.07) | 703.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/23/2023 | | 102.28 | 0.10 | 703.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/24/2023 | | 102.44 | 0.16 | 703.56 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 3/25/2023 | | 102.2 | (0.24) | 703.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/26/2023 | | 102.25 | 0.05 | 703.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/27/2023 | | 102.29 | 0.04 | 703.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/28/2023 | | 102.26 | (0.03) | 703.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/29/2023 | | 102.25 | (0.01) | 703.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/30/2023 | | 102.22 | (0.03) | 703.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 3/31/2023 | | 102.24 | 0.02 | 703.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/1/2023 | | 102.3 | 0.06 | 703.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/2/2023 | | 102.25 | (0.05) | 703.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/3/2023 | | 102.26 | 0.01 | 703.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/4/2023 | | 102.28 | 0.02 | 703.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/5/2023 | | 102.25 | (0.03) | 703.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/6/2023 | | 102.19 | (0.06) | 703.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/7/2023 | | 102.2 | 0.01 | 703.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/8/2023 | | 102.24 | 0.04 | 703.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/9/2023 | | 102.22 | (0.02) | 703.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/10/2023 | | 102.2 | (0.02) | 703.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/11/2023 | | 102.2 | 0.00 | 703.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/12/2023 | | 102.24 | 0.04 | 703.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/13/2023 | | 102.23 | (0.01) | 703.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/14/2023 | | 102.22 | (0.01) | 703.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/15/2023 | | 102.22 | 0.00 | 703.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/16/2023 | | 102.26 | 0.04 | 703.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/17/2023 | | 102.29 | 0.03 | 703.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/18/2023 | | 102.35 | 0.06 | 703.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/19/2023 | | 102.28 | (0.07) | 703.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/20/2023 | | 102.35 | 0.07 | 703.65 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 4/21/2023 | | 102.24 | (0.11) | 703.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/22/2023 | | 102.28 | 0.04 | 703.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/23/2023 | | 102.29 | 0.01 | 703.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/24/2023 | | 102.21 | (0.08) | 703.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/25/2023 | | 102.28 | 0.07 | 703.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/26/2023 | | 102.28 | 0.00 | 703.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/27/2023 | | 102.26 | (0.02) | 703.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/28/2023 | | 102.32 | 0.06 | 703.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/29/2023 | | 102.25 | (0.07) | 703.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 4/30/2023 | | 102.35 | 0.10 | 703.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/1/2023 | | 102.39 | 0.04 | 703.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/2/2023 | | 102.4 | 0.01 | 703.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/3/2023 | | 102.34 | (0.06) | 703.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/4/2023 | | 102.36 | 0.02 | 703.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/5/2023 | | 102.4 | 0.04 | 703.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/6/2023 | | 102.38 | (0.02) | 703.62 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/7/2023 | | 102.36 | (0.02) | 703.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/8/2023 | | 102.29 | (0.07) | 703.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/9/2023 | | 102.31 | 0.02 | 703.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/10/2023 | | 102.33 | 0.02 | 703.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/11/2023 | | 102.42 | 0.09 | 703.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/12/2023 | | 102.31 | (0.11) | 703.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/13/2023 | | 102.3 | (0.01) | 703.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/14/2023 | | 102.28 | (0.02) | 703.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/15/2023 | | 102.31 | 0.03 | 703.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/16/2023 | | 102.29 | (0.02) | 703.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 5/17/2023 | | 102.41 | 0.12 | 703.59 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 5/18/2023 | | 101.84 | (0.57) | 704.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/9/2023 | | 104.35 | 2.51 | 701.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/10/2023 | | 104.33 | (0.02) | 701.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/11/2023 | | 104.3 | (0.03) | 701.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/12/2023 | | 104.37 | 0.07 | 701.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/13/2023 | | 104.32 | (0.05) | 701.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/14/2023 | | 104.33 | 0.01 | 701.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/15/2023 | | 104.5 | 0.17 | 701.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/16/2023 | | 104.41 | (0.09) | 701.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/17/2023 | | 104.49 | 0.08 | 701.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/18/2023 | | 104.42 | (0.07) | 701.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/19/2023 | | 104.28 | (0.14) | 701.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/20/2023 | | 104.25 | (0.03) | 701.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/21/2023 | | 104.28 | 0.03 | 701.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/22/2023 | | 104.4 | 0.12 | 701.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/23/2023 | | 104.35 | (0.05) | 701.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/24/2023 | | 104.42 | 0.07 | 701.58 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/25/2023 | | 104.33 | (0.09) | 701.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/26/2023 | | 104.33 | 0.00 | 701.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/27/2023 | | 104.34 | 0.01 | 701.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/28/2023 | | 104.4 | 0.06 | 701.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/29/2023 | | 104.44 | 0.04 | 701.56 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/30/2023 | | 104.49 | 0.05 | 701.51 | 1 | Groundwater Conservation District | Transducer | | |
| P | 7/31/2023 | | 104.4 | (0.09) | 701.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/1/2023 | | 104.4 | 0.00 | 701.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/2/2023 | | 104.47 | 0.07 | 701.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/3/2023 | | 104.48 | 0.01 | 701.52 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 8/4/2023 | | 104.43 | (0.05) | 701.57 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/5/2023 | | 104.4 | (0.03) | 701.6 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/6/2023 | | 104.52 | 0.12 | 701.48 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/7/2023 | | 104.47 | (0.05) | 701.53 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/8/2023 | | 104.59 | 0.12 | 701.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/9/2023 | | 104.58 | (0.01) | 701.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/10/2023 | | 104.54 | (0.04) | 701.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/11/2023 | | 104.5 | (0.04) | 701.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/12/2023 | | 104.65 | 0.15 | 701.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/13/2023 | | 104.6 | (0.05) | 701.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/14/2023 | | 104.54 | (0.06) | 701.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/15/2023 | | 104.56 | 0.02 | 701.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/16/2023 | | 104.58 | 0.02 | 701.42 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/17/2023 | | 104.62 | 0.04 | 701.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/18/2023 | | 104.7 | 0.08 | 701.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/19/2023 | | 104.75 | 0.05 | 701.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/20/2023 | | 104.67 | (0.08) | 701.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/21/2023 | | 104.62 | (0.05) | 701.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/22/2023 | | 104.59 | (0.03) | 701.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/23/2023 | | 104.59 | 0.00 | 701.41 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/24/2023 | | 104.64 | 0.05 | 701.36 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/25/2023 | | 104.65 | 0.01 | 701.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/26/2023 | | 104.76 | 0.11 | 701.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/27/2023 | | 104.74 | (0.02) | 701.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/28/2023 | | 104.72 | (0.02) | 701.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/29/2023 | | 104.66 | (0.06) | 701.34 | 1 | Groundwater Conservation District | Transducer | | |
| P | 8/30/2023 | | 104.75 | 0.09 | 701.25 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 8/31/2023 | | 104.79 | 0.04 | 701.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/1/2023 | | 104.76 | (0.03) | 701.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/2/2023 | | 104.71 | (0.05) | 701.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/3/2023 | | 104.75 | 0.04 | 701.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/4/2023 | | 104.87 | 0.12 | 701.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/5/2023 | | 104.87 | 0.00 | 701.13 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/6/2023 | | 104.82 | (0.05) | 701.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/7/2023 | | 104.81 | (0.01) | 701.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/8/2023 | | 104.79 | (0.02) | 701.21 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/9/2023 | | 104.78 | (0.01) | 701.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/10/2023 | | 104.77 | (0.01) | 701.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/11/2023 | | 104.84 | 0.07 | 701.16 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/12/2023 | | 104.74 | (0.10) | 701.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/13/2023 | | 104.73 | (0.01) | 701.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/14/2023 | | 104.72 | (0.01) | 701.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/15/2023 | | 104.71 | (0.01) | 701.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/16/2023 | | 104.67 | (0.04) | 701.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/17/2023 | | 104.67 | 0.00 | 701.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/18/2023 | | 104.68 | 0.01 | 701.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/19/2023 | | 104.62 | (0.06) | 701.38 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/20/2023 | | 104.82 | 0.20 | 701.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/21/2023 | | 104.67 | (0.15) | 701.33 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/22/2023 | | 104.72 | 0.05 | 701.28 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/23/2023 | | 104.77 | 0.05 | 701.23 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/24/2023 | | 105 | 0.23 | 701 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/25/2023 | | 104.91 | (0.09) | 701.09 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/26/2023 | | 104.8 | (0.11) | 701.2 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 9/27/2023 | | 104.82 | 0.02 | 701.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/28/2023 | | 104.82 | 0.00 | 701.18 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/29/2023 | | 104.74 | (0.08) | 701.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 9/30/2023 | | 104.71 | (0.03) | 701.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/1/2023 | | 104.76 | 0.05 | 701.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/2/2023 | | 104.7 | (0.06) | 701.3 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/3/2023 | | 104.75 | 0.05 | 701.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/4/2023 | | 104.76 | 0.01 | 701.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/5/2023 | | 104.74 | (0.02) | 701.26 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/6/2023 | | 104.75 | 0.01 | 701.25 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/7/2023 | | 104.73 | (0.02) | 701.27 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/8/2023 | | 104.68 | (0.05) | 701.32 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/9/2023 | | 104.78 | 0.10 | 701.22 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/10/2023 | | 104.9 | 0.12 | 701.1 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/11/2023 | | 105.05 | 0.15 | 700.95 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/12/2023 | | 104.76 | (0.29) | 701.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/13/2023 | | 104.71 | (0.05) | 701.29 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/14/2023 | | 104.6 | (0.11) | 701.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/15/2023 | | 104.56 | (0.04) | 701.44 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/16/2023 | | 104.76 | 0.20 | 701.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/17/2023 | | 104.81 | 0.05 | 701.19 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/18/2023 | | 104.76 | (0.05) | 701.24 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/19/2023 | | 104.65 | (0.11) | 701.35 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/20/2023 | | 104.61 | (0.04) | 701.39 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/21/2023 | | 104.55 | (0.06) | 701.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/22/2023 | | 104.6 | 0.05 | 701.4 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/23/2023 | | 104.57 | (0.03) | 701.43 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 10/24/2023 | | 104.53 | (0.04) | 701.47 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/25/2023 | | 104.48 | (0.05) | 701.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/26/2023 | | 104.55 | 0.07 | 701.45 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/27/2023 | | 104.51 | (0.04) | 701.49 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/28/2023 | | 104.45 | (0.06) | 701.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/29/2023 | | 104.54 | 0.09 | 701.46 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/30/2023 | | 104.45 | (0.09) | 701.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 10/31/2023 | | 104.34 | (0.11) | 701.66 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/1/2023 | | 104.31 | (0.03) | 701.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/2/2023 | | 104.26 | (0.05) | 701.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/3/2023 | | 104.28 | 0.02 | 701.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/4/2023 | | 104.28 | 0.00 | 701.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/5/2023 | | 104.36 | 0.08 | 701.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/6/2023 | | 104.33 | (0.03) | 701.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/7/2023 | | 104.3 | (0.03) | 701.7 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/8/2023 | | 104.32 | 0.02 | 701.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/9/2023 | | 104.32 | 0.00 | 701.68 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/10/2023 | | 104.24 | (0.08) | 701.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/11/2023 | | 104.29 | 0.05 | 701.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/12/2023 | | 104.22 | (0.07) | 701.78 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/13/2023 | | 104.2 | (0.02) | 701.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/14/2023 | | 104.21 | 0.01 | 701.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/15/2023 | | 104.23 | 0.02 | 701.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/16/2023 | | 104.24 | 0.01 | 701.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/17/2023 | | 104.21 | (0.03) | 701.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/18/2023 | | 104.23 | 0.02 | 701.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/19/2023 | | 104.31 | 0.08 | 701.69 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 11/20/2023 | | 104.23 | (0.08) | 701.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/21/2023 | | 104.35 | 0.12 | 701.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/22/2023 | | 104.25 | (0.10) | 701.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/23/2023 | | 104.45 | 0.20 | 701.55 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/24/2023 | | 104.28 | (0.17) | 701.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/25/2023 | | 104.35 | 0.07 | 701.65 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/26/2023 | | 104.29 | (0.06) | 701.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/27/2023 | | 104.18 | (0.11) | 701.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/28/2023 | | 104.26 | 0.08 | 701.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/29/2023 | | 104.26 | 0.00 | 701.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 11/30/2023 | | 104.28 | 0.02 | 701.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/1/2023 | | 104.25 | (0.03) | 701.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/2/2023 | | 104.18 | (0.07) | 701.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/3/2023 | | 104.16 | (0.02) | 701.84 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/4/2023 | | 104.21 | 0.05 | 701.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/5/2023 | | 104.18 | (0.03) | 701.82 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/6/2023 | | 104.25 | 0.07 | 701.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/7/2023 | | 104.37 | 0.12 | 701.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/8/2023 | | 104.33 | (0.04) | 701.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/9/2023 | | 104.24 | (0.09) | 701.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/10/2023 | | 104.36 | 0.12 | 701.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/11/2023 | | 104.39 | 0.03 | 701.61 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/12/2023 | | 104.41 | 0.02 | 701.59 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/13/2023 | | 104.36 | (0.05) | 701.64 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/14/2023 | | 104.33 | (0.03) | 701.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/15/2023 | | 104.21 | (0.12) | 701.79 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/16/2023 | | 104.19 | (0.02) | 701.81 | 1 | Groundwater Conservation District | Transducer | | |

| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 12/17/2023 | | 104.48 | 0.29 | 701.52 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/18/2023 | | 104.28 | (0.20) | 701.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/19/2023 | | 104.33 | 0.05 | 701.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/20/2023 | | 104.31 | (0.02) | 701.69 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/21/2023 | | 104.37 | 0.06 | 701.63 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/22/2023 | | 104.28 | (0.09) | 701.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/23/2023 | | 104.24 | (0.04) | 701.76 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/24/2023 | | 104.23 | (0.01) | 701.77 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/25/2023 | | 104.33 | 0.10 | 701.67 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/26/2023 | | 104.28 | (0.05) | 701.72 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/27/2023 | | 104.25 | (0.03) | 701.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/28/2023 | | 104.17 | (0.08) | 701.83 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/29/2023 | | 104.15 | (0.02) | 701.85 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/30/2023 | | 104.5 | 0.35 | 701.5 | 1 | Groundwater Conservation District | Transducer | | |
| P | 12/31/2023 | | 104.26 | (0.24) | 701.74 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/1/2024 | | 104.19 | (0.07) | 701.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/2/2024 | | 104.2 | 0.01 | 701.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/3/2024 | | 104.14 | (0.06) | 701.86 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/4/2024 | | 104.25 | 0.11 | 701.75 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/5/2024 | | 104.2 | (0.05) | 701.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/6/2024 | | 104.19 | (0.01) | 701.81 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/7/2024 | | 104.2 | 0.01 | 701.8 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/8/2024 | | 104.29 | 0.09 | 701.71 | 1 | Groundwater Conservation District | Transducer | | |
| P | 1/9/2024 | | 104.21 | (0.08) | 701.79 | 1 | Groundwater Conservation District | Transducer | | |

## 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 (TWDB)
# Groundwater Database (GWDB)
# Well Information Report for State Well Number 57-40-402

GWDB Reports and Downloads

## Well Basic Details

Scanned Documents

| | |
|---|---|
| **State Well Number** | 5740402 |
| **County** | Travis |
| **River Basin** | Colorado |
| **Groundwater Management Area** | 9 |
| **Regional Water Planning Area** | K - Lower Colorado |
| **Groundwater Conservation District** | Southwestern Travis County GCD |
| **Latitude** (decimal degrees) | 30.426944 |
| **Latitude** (degrees minutes seconds) | 30° 25' 37" N |
| **Longitude** (decimal degrees) | -98.092778 |
| **Longitude** (degrees minutes seconds) | 098° 05' 34" W |
| **Coordinate Source** | +/- 10 Seconds |
| **Aquifer Code** | 217HSTN - Hosston Formation |
| **Aquifer** | Trinity |
| **Aquifer Pick Method** | |
| **Land Surface Elevation** (feet above sea level) | 740 |
| **Land Surface Elevation Method** | Interpolated From Topo Map |
| **Well Depth** (feet below land surface) | 215 |
| **Well Depth Source** | Driller's Log |
| **Drilling Start Date** | |
| **Drilling End Date** | 0/0/1963 |
| **Drilling Method** | |
| **Borehole Completion** | |

| | |
|---|---|
| **Well Type** | Withdrawal of Water |
| **Well Use** | Domestic |
| **Water Level Observation** | Miscellaneous Measurements |
| **Water Quality Available** | Yes |
| **Pump** | Submersible |
| **Pump Depth** (feet below land surface) | |
| **Power Type** | Electric Motor |
| **Annular Seal Method** | |
| **Surface Completion** | |
| **Owner** | I.W. McElroy |
| **Driller** | Roy Farrer |
| **Other Data Available** | Drillers Log; Specific Capacity |
| **Well Report Tracking Number** | |
| **Plugging Report Tracking Number** | |
| **U.S. Geological Survey Site Number** | |
| **Texas Commission on Environmental Quality Source Id** | |
| **Groundwater Conservation District Well Number** | |
| **Owner Well Number** | |
| **Other Well Number** | |
| **Previous State Well Number** | |
| **Reporting Agency** | Texas Water Development Board |
| **Created Date** | 10/20/1998 |
| **Last Update Date** | 3/4/2020 |

| | |
|---|---|
| **Remarks** | Reported yield 15 GPM with 20 feet drawdown after pumping 1/2 hour in 1963. Specific capacity 0.75. |

***Casing - No Data***

***Well Tests - No Data***

***Lithology - No Data***

***Annular Seal Range - No Data***

***Borehole - No Data***

***Plugged Back - No Data***

***Filter Pack - No Data***

***Packers - No Data***

## Water Level Measurements




| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 3/8/1963 | | 115 | | 625 | 1 | Other or Source of Measurement Unknown | Unknown | | |

## Code Descriptions

| Status Code | Status Description |
|---|---|
| P | Publishable |

# Texas Water Development Board (TWDB)
# Groundwater Database (GWDB)
# Well Information Report for State Well Number 57-40-402

## Water Quality Analysis

**Sample Date:** 10/13/1970 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

**Sampled Aquifer:** Hosston Formation

**Analyzed Lab:** Texas Department of Health **Reliability:** Collected from pumped well, but not filtered or preserved

**Collection Remarks:** No Data

| Parameter Code | Parameter Description | Flag | Value* | Units | Plus/Minus |
|---|---|---|---|---|---|
| 00415 | ALKALINITY, PHENOLPHTHALEIN (MG/L) | | 0 | mg/L | |
| 00410 | ALKALINITY, TOTAL (MG/L AS CACO3) | | 570 | mg/L as CACO3 | |
| 00440 | BICARBONATE ION, CALCULATED (MG/L AS HCO3) | | 695.6 | mg/L | |
| 00910 | CALCIUM (MG/L) | | 138 | mg/L | |
| 00445 | CARBONATE ION, CALCULATED (MG/L AS CO3) | | 0 | mg/L | |
| 00940 | CHLORIDE, TOTAL (MG/L AS CL) | | 125 | mg/L | |
| 00950 | FLUORIDE, DISSOLVED (MG/L AS F) | | 0.8 | mg/L | |
| 00900 | HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3) | | 714 | mg/L as CACO3 | |
| 00920 | MAGNESIUM (MG/L) | | 90 | mg/L | |
| 71851 | NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3) | < | 0.4 | mg/L as NO3 | |
| 00400 | PH (STANDARD UNITS), FIELD | | 7.1 | SU | |
| 71860 | RESIDUAL SODIUM CARBONATE, CALCULATED | | 0 | | |
| 00955 | SILICA, DISSOLVED (MG/L AS SI02) | | 15 | mg/L as SIO2 | |
| 00931 | SODIUM ADSORPTION RATIO, CALCULATED (SAR) | | 2.41 | | |
| 00932 | SODIUM, CALCULATED, PERCENT | | 31 | PCT | |
| 00929 | SODIUM, TOTAL (MG/L AS NA) | | 148 | mg/L | |
| 00094 | SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C) | | 2147 | MICR | |
| 00945 | SULFATE, TOTAL (MG/L AS SO4) | | 282 | mg/L as SO4 | |
| 00010 | TEMPERATURE, WATER (CELSIUS) | | 22 | C | |
| 70301 | TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L) | | 1141 | mg/L | |

** Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..*

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# Texas Water Development Board (TWDB)
# Groundwater Database (GWDB)
# Well Information Report for State Well Number 57-40-408

GWDB Reports and Downloads

## Well Basic Details

Scanned Documents

| | |
|---|---|
| **State Well Number** | 5740408 |
| **County** | Travis |
| **River Basin** | Colorado |
| **Groundwater Management Area** | 9 |
| **Regional Water Planning Area** | K - Lower Colorado |
| **Groundwater Conservation District** | Southwestern Travis County GCD |
| **Latitude** (decimal degrees) | 30.458056 |
| **Latitude** (degrees minutes seconds) | 30° 27' 29" N |
| **Longitude** (decimal degrees) | -98.092222 |
| **Longitude** (degrees minutes seconds) | 098° 05' 32" W |
| **Coordinate Source** | +/- 1 Second |
| **Aquifer Code** | 217HSTN - Hosston Formation |
| **Aquifer** | Trinity |
| **Aquifer Pick Method** | |
| **Land Surface Elevation** (feet above sea level) | 791 |
| **Land Surface Elevation Method** | Interpolated From Topo Map |
| **Well Depth** (feet below land surface) | 400 |
| **Well Depth Source** | Driller's Log |
| **Drilling Start Date** | |
| **Drilling End Date** | 10/4/1985 |
| **Drilling Method** | Air Rotary |
| **Borehole Completion** | Open Hole |

| | |
|---|---|
| **Well Type** | Withdrawal of Water |
| **Well Use** | Plugged or Destroyed |
| **Water Level Observation** | None |
| **Water Quality Available** | No |
| **Pump** | None |
| **Pump Depth** (feet below land surface) | |
| **Power Type** | |
| **Annular Seal Method** | |
| **Surface Completion** | |
| **Owner** | Barton Creek Lakeside |
| **Driller** | Associated Drilling |
| **Other Data Available** | Drillers Log; Specific Capacity |
| **Well Report Tracking Number** | |
| **Plugging Report Tracking Number** | |
| **U.S. Geological Survey Site Number** | |
| **Texas Commission on Environmental Quality Source Id** | |
| **Groundwater Conservation District Well Number** | |
| **Owner Well Number** | |
| **Other Well Number** | |
| **Previous State Well Number** | |
| **Reporting Agency** | Texas Water Development Board |
| **Created Date** | 10/20/1998 |
| **Last Update Date** | 3/4/2020 |

| | |
|---|---|
| **Remarks** | Owner's #2 well. Plugged public supply well. Measured yield 50 GPM with 225 feet drawdown after pump- ing 48 hours in 1985. Cemented from 0 to 20 feet. Specific capacity 0.67. |

### *Casing*

| Diameter (in.) | Casing Type | Casing Material | Schedule | Gauge | Top Depth (ft.) | Bottom Depth (ft.) |
|---|---|---|---|---|---|---|
| 9 | Blank | Steel | | | 0 | 125 |
| 9 | Screen | | | | 125 | 235 |
| | Open Hole | | | | 235 | 400 |

### *Well Tests - No Data*

### *Lithology - No Data*

### *Annular Seal Range - No Data*

### *Borehole - No Data*

### *Plugged Back - No Data*

### *Filter Pack - No Data*

### *Packers - No Data*

## Water Level Measurements

No Data Available

## Water Quality Analysis - No Data Available

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# Texas Water Development Board (TWDB)
# Groundwater Database (GWDB)
# Well Information Report for State Well Number 57-40-411

GWDB Reports and Downloads

## Well Basic Details

Scanned Documents

| | |
|---|---|
| **State Well Number** | 5740411 |
| **County** | Travis |
| **River Basin** | Colorado |
| **Groundwater Management Area** | 9 |
| **Regional Water Planning Area** | K - Lower Colorado |
| **Groundwater Conservation District** | Southwestern Travis County GCD |
| **Latitude** (decimal degrees) | 30.437222 |
| **Latitude** (degrees minutes seconds) | 30° 26' 14" N |
| **Longitude** (decimal degrees) | -98.093334 |
| **Longitude** (degrees minutes seconds) | 098° 05' 36" W |
| **Coordinate Source** | +/- 1 Second |
| **Aquifer Code** | 217HSTN - Hosston Formation |
| **Aquifer** | Trinity |
| **Aquifer Pick Method** | |
| **Land Surface Elevation** (feet above sea level) | 768 |
| **Land Surface Elevation Method** | Interpolated From Topo Map |
| **Well Depth** (feet below land surface) | 205 |
| **Well Depth Source** | Driller's Log |
| **Drilling Start Date** | |
| **Drilling End Date** | 6/21/1989 |
| **Drilling Method** | Air Rotary |
| **Borehole Completion** | Perforated or Slotted |

| | |
|---|---|
| **Well Type** | Withdrawal of Water |
| **Well Use** | Public Supply |
| **Water Level Observation** | None |
| **Water Quality Available** | No |
| **Pump** | Submersible |
| **Pump Depth** (feet below land surface) | |
| **Power Type** | Electric Motor |
| **Annular Seal Method** | |
| **Surface Completion** | |
| **Owner** | Paleface Pedernales W.S.C. |
| **Driller** | Highland Drilling Co |
| **Other Data Available** | Drillers Log |
| **Well Report Tracking Number** | |
| **Plugging Report Tracking Number** | |
| **U.S. Geological Survey Site Number** | |
| **Texas Commission on Environmental Quality Source Id** | G2270111C |
| **Groundwater Conservation District Well Number** | |
| **Owner Well Number** | |
| **Other Well Number** | |
| **Previous State Well Number** | |
| **Reporting Agency** | Texas Water Development Board |
| **Created Date** | 7/27/1994 |
| **Last Update Date** | 3/4/2020 |

| | |
|---|---|
| **Remarks** | Owner's #3 well. Estimated yield 2 GPM in 1989. |

### *Casing*

| Diameter (in.) | Casing Type | Casing Material | Schedule | Gauge | Top Depth (ft.) | Bottom Depth (ft.) |
|---|---|---|---|---|---|---|
| 5 | Blank | Plastic (PVC) | | | 0 | 165 |
| 5 | Screen | Plastic (PVC) | | | 165 | 200 |
| 7 | Open Hole | | | | 200 | 205 |

### *Well Tests - No Data*

### *Lithology - No Data*

### *Annular Seal Range - No Data*

### *Borehole - No Data*

### *Plugged Back - No Data*

### *Filter Pack - No Data*

### *Packers - No Data*

## Water Level Measurements

No Data Available

## Water Quality Analysis - No Data Available

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# Texas Water Development Board (TWDB)
# Groundwater Database (GWDB)
# Well Information Report for State Well Number 57-40-412

GWDB Reports and Downloads

## Well Basic Details

Scanned Documents

| | |
|---|---|
| **State Well Number** | 5740412 |
| **County** | Travis |
| **River Basin** | Colorado |
| **Groundwater Management Area** | 9 |
| **Regional Water Planning Area** | K - Lower Colorado |
| **Groundwater Conservation District** | Southwestern Travis County GCD |
| **Latitude** (decimal degrees) | 30.436667 |
| **Latitude** (degrees minutes seconds) | 30° 26' 12" N |
| **Longitude** (decimal degrees) | -98.092222 |
| **Longitude** (degrees minutes seconds) | 098° 05' 32" W |
| **Coordinate Source** | +/- 1 Second |
| **Aquifer Code** | 217HSTN - Hosston Formation |
| **Aquifer** | Trinity |
| **Aquifer Pick Method** | |
| **Land Surface Elevation** (feet above sea level) | 712 |
| **Land Surface Elevation Method** | Digital Elevation Model -DEM |
| **Well Depth** (feet below land surface) | 180 |
| **Well Depth Source** | Another Government Agency |
| **Drilling Start Date** | |
| **Drilling End Date** | 0/0/1964 |
| **Drilling Method** | |
| **Borehole Completion** | |

| | |
|---|---|
| **Well Type** | Withdrawal of Water |
| **Well Use** | Public Supply |
| **Water Level Observation** | None |
| **Water Quality Available** | No |
| **Pump** | Submersible |
| **Pump Depth** (feet below land surface) | |
| **Power Type** | Electric Motor |
| **Annular Seal Method** | |
| **Surface Completion** | |
| **Owner** | Paleface Pedernales WSC |
| **Driller** | |
| **Other Data Available** | |
| **Well Report Tracking Number** | |
| **Plugging Report Tracking Number** | |
| **U.S. Geological Survey Site Number** | |
| **Texas Commission on Environmental Quality Source Id** | G2270111A |
| **Groundwater Conservation District Well Number** | |
| **Owner Well Number** | |
| **Other Well Number** | |
| **Previous State Well Number** | |
| **Reporting Agency** | Texas Water Development Board |
| **Created Date** | 7/27/1994 |
| **Last Update Date** | 3/4/2020 |

| | |
|---|---|
| **Remarks** | Owner's #1 well. |

***Casing - No Data***

***Well Tests - No Data***

***Lithology - No Data***

***Annular Seal Range - No Data***

***Borehole - No Data***

***Plugged Back - No Data***

***Filter Pack - No Data***

***Packers - No Data***

## Water Level Measurements

No Data Available

## Water Quality Analysis - No Data Available

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# Texas Water Development Board (TWDB)
# Groundwater Database (GWDB)
# Well Information Report for State Well Number 57-40-415

GWDB Reports and Downloads

## Well Basic Details

Scanned Documents

| | |
|---|---|
| **State Well Number** | 5740415 |
| **County** | Travis |
| **River Basin** | Colorado |
| **Groundwater Management Area** | 9 |
| **Regional Water Planning Area** | K - Lower Colorado |
| **Groundwater Conservation District** | Southwestern Travis County GCD |
| **Latitude** (decimal degrees) | 30.4465083 |
| **Latitude** (degrees minutes seconds) | 30° 26' 47.43" N |
| **Longitude** (decimal degrees) | -98.0844167 |
| **Longitude** (degrees minutes seconds) | 098° 05' 03.9" W |
| **Coordinate Source** | Global Positioning System - GPS |
| **Aquifer Code** | 217HSTN - Hosston Formation |
| **Aquifer** | Trinity |
| **Aquifer Pick Method** | Provided by Groundwater Conservation District |
| **Land Surface Elevation** (feet above sea level) | 718 |
| **Land Surface Elevation Method** | Digital Elevation Model -DEM |
| **Well Depth** (feet below land surface) | 118 |
| **Well Depth Source** | Memory of Owner |
| **Drilling Start Date** | |
| **Drilling End Date** | |
| **Drilling Method** | |
| **Borehole Completion** | |

| | |
|---|---|
| **Well Type** | Withdrawal of Water |
| **Well Use** | Domestic |
| **Water Level Observation** | Miscellaneous Measurements |
| **Water Quality Available** | Yes |
| **Pump** | Submersible |
| **Pump Depth** (feet below land surface) | |
| **Power Type** | Electric Motor |
| **Annular Seal Method** | |
| **Surface Completion** | |
| **Owner** | Glen Zapalac |
| **Driller** | |
| **Other Data Available** | Specific Capacity |
| **Well Report Tracking Number** | |
| **Plugging Report Tracking Number** | |
| **U.S. Geological Survey Site Number** | |
| **Texas Commission on Environmental Quality Source Id** | |
| **Groundwater Conservation District Well Number** | |
| **Owner Well Number** | |
| **Other Well Number** | |
| **Previous State Well Number** | |
| **Reporting Agency** | Groundwater Conservation District |
| **Created Date** | 11/8/2018 |
| **Last Update Date** | 3/4/2020 |

| | |
|---|---|
| **Remarks** | Specific capacity 19.7 GPM/ft. |

### *Casing - No Data*

### *Well Tests*

| Test Date | Test Type | Yield (gallons per minute) | Drawdown (ft.) | Test Hours |
|---|---|---|---|---|
| 11/6/2018 | Pump | 15 | 0.76 | 0.5 |

### *Lithology - No Data*

### *Annular Seal Range - No Data*

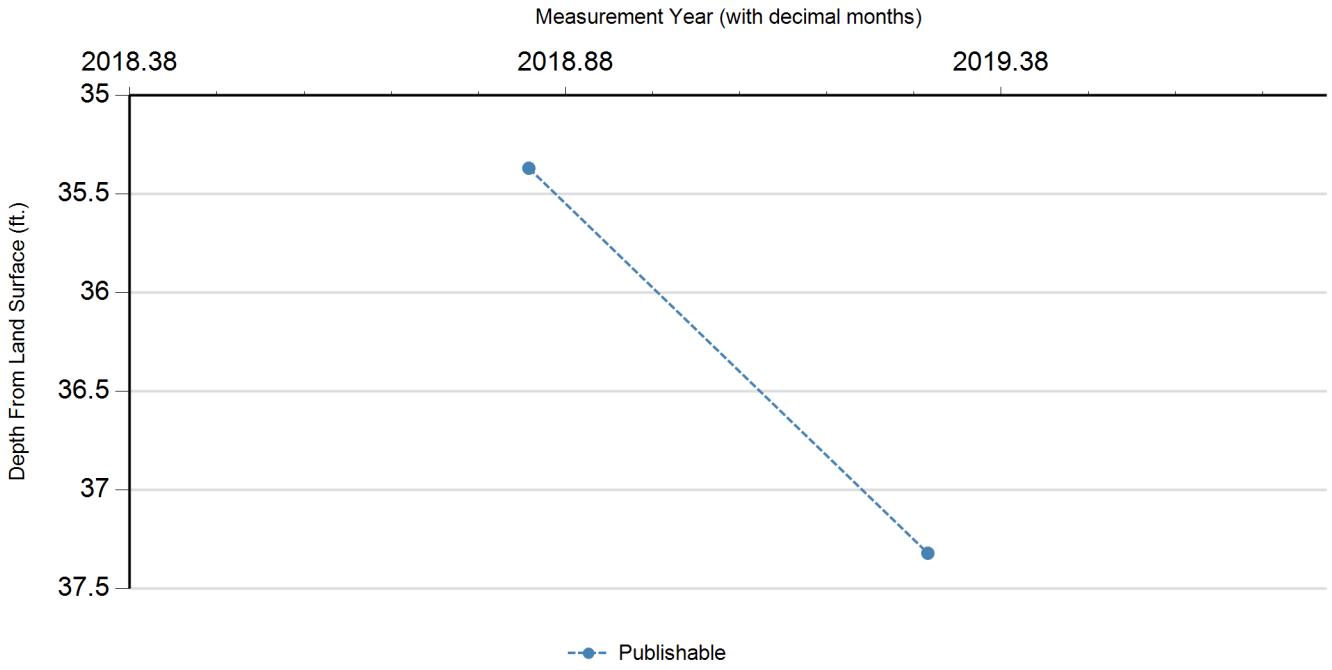
### *Borehole - No Data*

### *Plugged Back - No Data*

### *Filter Pack - No Data*

### *Packers - No Data*

## Water Level Measurements




| Status Code | Date | Time | Water Level (ft. below land surface) | Change value in ( ) indicates rise in level | Water Elevation (ft. above sea level) | Meas # | Measuring Agency | Method | Remark ID | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| P | 11/6/2018 | | 35.37 | | 682.63 | 1 | Groundwater Conservation District | Electric Line | | |
| P | 4/18/2019 | 1110 | 37.32 | 1.95 | 680.68 | 1 | Groundwater Conservation District | Electric Line | | |

## Code Descriptions

| Status Code | Status Description |
|---|---|
| P | Publishable |

## Water Quality Analysis

**Sample Date:** 11/6/2018 **Sample Time:** 1030 **Sample Number:** 1 **Collection Entity:** Barton Springs/Edwards Aquifer CD

**Sampled Aquifer:** Hosston Formation

**Analyzed Lab:** LCRA - Lower Colorado River Authority **Reliability:** Sampled using TWDB protocols

**Collection Remarks:** Lab Calculated Anion/Cation Chg Bal set to TWDB Calculated Value due to an error in the lab calculated formula

| Parameter Code | Parameter Description | Flag | Value* | Units | Plus/Minus |
|---|---|---|---|---|---|
| 00425 | ALKALINITY, BICARBONATE DISSOLVED (MG/L), LAB | | 446 | mg/L | |
| 00430 | ALKALINITY, CARBONATE DISSOLVED (MG/L), LAB | | 0 | mg/L | |
| 00420 | ALKALINITY, HYDROXIDE DISSOLVED (MG/L), LAB | | 0 | mg/L | |
| 00415 | ALKALINITY, PHENOLPHTHALEIN (MG/L) | | 0 | mg/L | |
| 00410 | ALKALINITY, TOTAL (MG/L AS CACO3) | | 446 | mg/L as CACO3 | |
| 01106 | ALUMINUM, DISSOLVED (UG/L AS AL) | < | 5 | ug/L | |
| 50938 | ANION/CATION CHG BAL, PERCENT | | -2.4379 | PCT | |
| 01095 | ANTIMONY, DISSOLVED (UG/L AS SB) | < | 1 | ug/L | |
| 01000 | ARSENIC, DISSOLVED (UG/L AS AS) | < | 1 | ug/L | |
| 01005 | BARIUM, DISSOLVED (UG/L AS BA) | | 143 | ug/L | |
| 01010 | BERYLLIUM, DISSOLVED (UG/L AS BE) | < | 1 | ug/L | |
| 00440 | BICARBONATE ION, CALCULATED (MG/L AS HCO3) | | 544.274 | mg/L | |
| 01020 | BORON, DISSOLVED (UG/L AS B) | < | 50 | ug/L | |
| 71870 | BROMIDE, DISSOLVED, (MG/L AS BR) | | 0.506 | mg/L | |
| 01025 | CADMIUM, DISSOLVED (UG/L AS CD) | < | 1 | ug/L | |
| 00915 | CALCIUM, DISSOLVED (MG/L AS CA) | | 155 | mg/L | |
| 28004 | CARBON-14 DISS APPARENT AGE (YEARS BP) | | 190 | Y-BP | |
| 82172 | CARBON-14 FRACTION MODERN | | 1.024 | | 0.0037 |
| 00445 | CARBONATE ION, CALCULATED (MG/L AS CO3) | | 0 | mg/L | |
| 00941 | CHLORIDE, DISSOLVED (MG/L AS CL) | | 85 | 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) | | 9.68 | ug/L | |
| 82081 | DELTA CARBON 13 C13/C12 PER MIL | | -9.7 | 0/00 | |
| 50791 | DEUTERIUM, EXPRESSED AS PERMIL VSMOW | | -24.6 | 0/00 | |
| 00950 | FLUORIDE, DISSOLVED (MG/L AS F) | | 0.0865 | mg/L | |
| 00900 | HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3) | | 574.201 | mg/L as CACO3 | |
| 01046 | IRON, DISSOLVED (UG/L AS FE) | < | 50 | ug/L | |
| 01049 | LEAD, DISSOLVED (UG/L AS PB) | < | 1 | ug/L | |
| 01130 | LITHIUM, DISSOLVED (UG/L AS LI) | | 11.9 | ug/L | |
| 00925 | MAGNESIUM, DISSOLVED (MG/L AS MG) | | 45.2 | mg/L | |
| 01056 | MANGANESE, DISSOLVED (UG/L AS MN) | < | 1 | ug/L | |

| Parameter Code | Parameter Description | Flag | Value* | Units | Plus/Minus |
|---|---|---|---|---|---|
| 71890 | MERCURY, DISSOLVED (UG/L AS HG) | | 0.943 | ug/L | |
| 01060 | MOLYBDENUM, DISSOLVED (UG/L AS MO) | < | 1 | ug/L | |
| 71851 | NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3) | | 7.437 | mg/L as NO3 | |
| 00631 | NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N) | | 1.68 | mg/L as N | |
| 50790 | OXYGEN-18, EXPRESSED AS PERMIL VSMOW | | -4.18 | 0/00 | |
| 00666 | PHOSPHORUS, DISSOLVED (MG/L AS P) | < | 0.02 | mg/L as P | |
| 00935 | POTASSIUM, DISSOLVED (MG/L AS K) | | 4.4 | mg/L | |
| 71860 | RESIDUAL SODIUM CARBONATE, CALCULATED | | 0 | | |
| 01145 | SELENIUM, DISSOLVED (UG/L AS SE) | < | 5 | ug/L | |
| 00955 | SILICA, DISSOLVED (MG/L AS SI02) | | 18.1 | mg/L as SIO2 | |
| 01075 | SILVER, DISSOLVED (UG/L AS AG) | < | 1 | ug/L | |
| 00931 | SODIUM ADSORPTION RATIO, CALCULATED (SAR) | | 0.616 | | |
| 00932 | SODIUM, CALCULATED, PERCENT | | 11.406 | PCT | |
| 00930 | SODIUM, DISSOLVED (MG/L AS NA) | | 33.9 | mg/L | |
| 01080 | STRONTIUM, DISSOLVED (UG/L AS SR) | | 813 | ug/L | |
| 48297 | STRONTIUM, ISOTOPE OF MASS 86 AND 87 RATIO | | 0.7088773 | N/A | |
| 00946 | SULFATE, DISSOLVED (MG/L AS SO4) | | 109 | mg/L as SO4 | |
| 01057 | THALLIUM, DISSOLVED (UG/L AS TL) | < | 1 | ug/L | |
| 70301 | TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L) | | 726.556 | mg/L | |
| 07012 | TRITIUM IN WATER (TRITIUM UNITS) | | 1.8 | TU | 0.09 |
| 22703 | URANIUM, NATURAL, DISSOLVED (UG/L AS U) | | 1.81 | ug/L | |
| 01085 | VANADIUM, DISSOLVED (UG/L AS V) | | 2.48 | ug/L | |
| 01090 | ZINC, DISSOLVED (UG/L AS ZN) | < | 5 | ug/L | |

** Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..*

*GWDB DISCLAIMER: Except where noted, all of the information provided in the Texas Water Development Board (TWDB) Groundwater Database (https://www.twdb.texas.gov/groundwater/data/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 (TWDB)
# Groundwater Database (GWDB)
# Well Information Report for State Well Number 57-40-705

GWDB Reports and Downloads

## Well Basic Details

Scanned Documents

| | |
|---|---|
| **State Well Number** | 5740705 |
| **County** | Travis |
| **River Basin** | Colorado |
| **Groundwater Management Area** | 9 |
| **Regional Water Planning Area** | K - Lower Colorado |
| **Groundwater Conservation District** | Barton Springs/Edwards Aquifer CD |
| **Latitude** (decimal degrees) | 30.4162194 |
| **Latitude** (degrees minutes seconds) | 30° 24' 58.39" N |
| **Longitude** (decimal degrees) | -98.1017806 |
| **Longitude** (degrees minutes seconds) | 098° 06' 06.41" W |
| **Coordinate Source** | Global Positioning System - GPS |
| **Aquifer Code** | |
| **Aquifer** | Unassigned |
| **Aquifer Pick Method** | |
| **Land Surface Elevation** (feet above sea level) | 775 |
| **Land Surface Elevation Method** | Digital Elevation Model -DEM |
| **Well Depth** (feet below land surface) | |
| **Well Depth Source** | |
| **Drilling Start Date** | |
| **Drilling End Date** | |
| **Drilling Method** | |
| **Borehole Completion** | |

| | |
|---|---|
| **Well Type** | Withdrawal of Water |
| **Well Use** | Public Supply |
| **Water Level Observation** | |
| **Water Quality Available** | Yes |
| **Pump** | |
| **Pump Depth** (feet below land surface) | |
| **Power Type** | |
| **Annular Seal Method** | |
| **Surface Completion** | |
| **Owner** | Austin Golf Club |
| **Driller** | |
| **Other Data Available** | |
| **Well Report Tracking Number** | |
| **Plugging Report Tracking Number** | |
| **U.S. Geological Survey Site Number** | |
| **Texas Commission on Environmental Quality Source Id** | G2270344C |
| **Groundwater Conservation District Well Number** | |
| **Owner Well Number** | #3 Las Casitas |
| **Other Well Number** | |
| **Previous State Well Number** | |
| **Reporting Agency** | Groundwater Conservation District |
| **Created Date** | 4/17/2019 |
| **Last Update Date** | 4/17/2019 |

| | |
|---|---|
| **Remarks** | |

***Casing - No Data***

***Well Tests - No Data***

***Lithology - No Data***

***Annular Seal Range - No Data***

***Borehole - No Data***

***Plugged Back - No Data***

***Filter Pack - No Data***

***Packers - No Data***

## Water Level Measurements

No Data Available

## Water Quality Analysis

**Sample Date:** 4/17/2019 **Sample Time:** 0900 **Sample Number:** 1 **Collection Entity:** Barton Springs/Edwards Aquifer CD

**Sampled Aquifer:**

**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 |
|---|---|---|---|---|---|
| 28004 | CARBON-14 DISS APPARENT AGE (YEARS BP) | | 16700 | Y-BP | |
| 82172 | CARBON-14 FRACTION MODERN | | 0.125 | | 0.0008 |
| 82081 | DELTA CARBON 13 C13/C12 PER MIL | | -7.5 | 0/00 | |
| 50791 | DEUTERIUM, EXPRESSED AS PERMIL VSMOW | | -26.1 | 0/00 | |
| 50790 | OXYGEN-18, EXPRESSED AS PERMIL VSMOW | | -4.34 | 0/00 | |
| 07012 | TRITIUM IN WATER (TRITIUM UNITS) | | 0.04 | TU | 0.09 |

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# STATE OF TEXAS WELL REPORT for Tracking #696

| | | | |
|---|---|---|---|
| Owner: | **Doss Comm. Improv. Club Inc.** | Owner Well #: | **No Data** |
| Address: | **3419 Manor Rd.<br>Harper, TX 78631** | Grid #: | **56-39-6** |
| Well Location: | **Well S/E of Fire Dept. on lot<br>Doss, TX** | Latitude: | **30° 26' 37.08" N** |
| | | Longitude: | **099° 07' 49.04" W** |
| Well County: | **Gillespie** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Public Supply**

Drilling Start Date: **9/13/2000** Drilling End Date: **4/6/2001** **Plans Approved by TCEQ - YES**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **12** | **0** | **47** |
| **10** | **47** | **177** |
| **6.75** | **177** | **178** |

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **177** | **40** |

Seal Method: **Pressure**

Sealed By: **Driller**

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

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

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

Method of Verification: **Measure**

Surface Completion: **Surface Slab Installed**

Water Level: **60 ft.** below land surface on **2001-04-06** Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **400**

Well Tests: **Jetted** **Yield: 22 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **650-880** | **good (580 ppmTDS)** |

Chemical Analysis Made: **No**

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

| Top Depth (ft.) | Bottom Depth (ft.) | Natural Injurious Constituents | Unnatural Injurious Constituents |
|---|---|---|---|
| **150** | **150** | **Unknown** | |

**The driller did certify that while drilling, deepening or otherwise altering the above described well, injurious water or constituents was encountered and the landowner or person having the well drilled was informed that such well must be completed or plugged in such a manner as to avoid injury or pollution.**

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

Company Information: **Virdell Drilling Inc.**

**111 E. Grayson St.**
**Llano, TX 78643**

Driller Name: **Taylor Virdell, Jr.** License Number: **1900**

Comments: **Encountered bad water at 150' - 13 GPM**
**Additional to "Diameter of Hole": 6" from 178 - 880**

**Report Amended on 3/17/2025 by Request #44625**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **Topsoil** |
| **2** | **7** | **Caliche & Gravel** |
| **7** | **17** | **Clay-Brown & Gravel** |
| **17** | **25** | **Gravel** |
| **25** | **45** | **Sand** |
| **45** | **52** | **Clay-Red & Limestone Ledges** |
| **52** | **60** | **Limestone-Gray & Limestone-Brown** |
| **60** | **155** | **Dark Limestone-Gray Glauconitic** |
| **155** | **190** | **Dark and Medium Sandy Limestone-Gray** |
| **190** | **250** | **Dark and Medium Limestone-Gray with Shale Streak** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **10" N Steel -2 - 47 .188** |
| **6" N PVC +3 - 178 sch 40** |

| | | |
|---|---|---|
| **250** | **315** | **Light & Dark Limestone-Gray & Glauconitic (Morgan Creek)** |
| **315** | **330** | **Medium & Dark Limestone-Grey Glauconitic w/ Red Streaks** |
| **330** | **347** | **Sandstone-Gray (Welge)** |
| **347** | **365** | **Dark Sandstone-Gray w/ Limestone Ledges (Lion Mt.)** |
| **365** | **420** | **Light and Dark Limestone-Gray w/ Glauconitic Sandstone (Cap Mt.)** |
| **420** | **500** | **Lt. gray & Brown Limestone Streaks** |
| **500** | **650** | **Gray sandy Limestone w/ gray sandstone Streaks** |
| **650** | **720** | **Red & Gray Sandstone (Hickory)** |
| **720** | **780** | **Red and Brown Sandstone** |
| **780** | **880** | **Gray-green Sandstone** |

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**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 #9666

| | | | |
|---|---|---|---|
| Owner: | **RICK GARDNER # 1** | Owner Well #: | **001** |
| Address: | **3516 TANGLEY<br>HOUSTON, TX 77005** | Grid #: | **57-40-4** |
| | | Latitude: | **30° 25' 22" N** |
| Well Location: | **25242 PALEFACE LAKE DR.<br>SPICEWOOD, TX 78669** | Longitude: | **098° 05' 39" W** |
| Well County: | **Travis** | Elevation: | **1200 ft. above sea level** |
| | | | ****Plugged Within 48 Hours**** |

****This well has been plugged**** **Plugging Report Tracking #106255**

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **6/21/2002** Drilling End Date: **6/21/2002**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8.75** | **0** | **10** |
| **6.125** | **10** | **200** |

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **3** | **3** |

Seal Method: **N/A**

Sealed By: **BOBBY ROBERTS**

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

Distance to Septic Field or other concentrated contamination (ft.): **0**

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

Method of Verification: **N/A**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data** on **2002-06-21** Measurement Method: **Unknown**

Packers: **N/A**

Type of Pump: **NONE**

Well Tests: **Jetted** **Yield: 0 GPM**

Plug Information:

| *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **NONE 0 3 CEMENT 3** | | |

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: **BEE CAVE DRILLING, INC.**

**185 ANGELFIRE DR.**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **JIM BLAIR**

License Number: **54416**

Apprentice Name: **BOBBY ROBERTS**

Apprentice Number: **WWDAPP00001234**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **TOPSOIL** |
| **2** | **10** | **CALICHE** |
| **10** | **30** | **RED ROCK** |
| **30** | **33** | **CAVE** |
| **33** | **60** | **NO RETURN** |
| **60** | **80** | **BLUE SHALE** |
| **80** | **100** | **RED ROCK** |
| **100** | **110** | **RED ROCK** |
| **110** | **120** | **SANDSTONE** |
| **120** | **160** | **RED ROCK** |
| **160** | **200** | **TAN SHALE** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **NONE** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #9667

| | | | |
|---|---|---|---|
| Owner: | **RICK GARDNER # 2** | Owner Well #: | **001** |
| Address: | **3516 TANGLEY<br>HOUSTON, TX 77005** | Grid #: | **57-40-4** |
| | | Latitude: | **30° 25' 23" N** |
| Well Location: | **25242 PALEFACE LAKE DR.<br>SPICEWOOD, TX 78669** | Longitude: | **098° 05' 38" W** |
| Well County: | **Travis** | Elevation: | **1200 ft. above sea level** |
| | | | ****Plugged Within 48 Hours**** |

****This well has been plugged**** **Plugging Report Tracking #106256**

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **6/21/2002** Drilling End Date: **6/21/2002**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8.75** | **0** | **10** |
| **6.125** | **10** | **155** |

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **3** | **3** |

Seal Method: **N/A**

Sealed By: **BOBBY ROBERTS**

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

Distance to Septic Field or other concentrated contamination (ft.): **0**

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

Method of Verification: **N/A**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data** on **2002-06-21** Measurement Method: **Unknown**

Packers: **N/A**

Type of Pump: **NONE**

Well Tests: **Jetted** **Yield: 0 GPM**

Plug Information:

| *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **NONE 0 3 CEMENT 3** | | |

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: **BEE CAVE DRILLING, INC.**

**185 ANGELFIRE DR.**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **JIM BLAIR**

License Number: **54416**

Apprentice Name: **BOBBY ROBERTS**

Apprentice Number: **WWDAPP00001234**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **TOPSOIL** |
| **2** | **10** | **GREY ROCK** |
| **10** | **15** | **CALICHE** |
| **15** | **35** | **GREY LIMESTONE** |
| **35** | **80** | **GREY SHALE** |
| **80** | **95** | **TAN SHALE** |
| **95** | **115** | **RED ROCK** |
| **115** | **120** | **TAN CLAY** |
| **120** | **145** | **RED ROCK** |
| **145** | **155** | **TAN ROCK** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **NONE** | | | |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #11657

| | | | |
|---|---|---|---|
| Owner: | **VIcki Schnabel** | Owner Well #: | **No Data** |
| Address: | **100 Spanish Oak Trail<br>Spicewood, TX 78669** | Grid #: | **57-40-4** |
| | | Latitude: | **30° 25' 39" N** |
| Well Location: | **Nomad Drive<br>Spicewood, TX 78669** | Longitude: | **098° 05' 33" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **4/23/2002** Drilling End Date: **4/23/2002**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **6** | **100** | **225** |
| **0** | **0** | **10** |

Drilling Method: **Air Rotary**

Borehole Completion: **cased**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **12** |

Seal Method: **Pressure**

Sealed By: **Driller**

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

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

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

Method of Verification: **as per landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 115',110'**

Type of Pump: **No Data**

Well Tests: **Estimated** **Yield: 7-8 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **115-215** | **Trinity** |

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: **APEX Drilling**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael Becker** License Number: **54516**

Apprentice Name: **Andrew Johnson** Apprentice Number: **1116**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **Top Soil** |
| **2** | **30** | **Wht Cryt. LS** |
| **30** | **65** | **Gry LS w/Clay** |
| **65** | **92** | **Blue Clay** |
| **92** | **115** | **Red Clay-Wht LS** |
| **115** | **127** | **Red Sandstone** |
| **127** | **138** | **Gravel (H20)** |
| **138** | **145** | **Red Clay SS** |
| **145** | **175** | **Gravel (H20)** |
| **175** | **200** | **Tan LS** |
| **200** | **215** | **Red Sandstone** |
| **215** | **225** | **Tan Clay-Blue Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **5 New PVC +2 to 225 Sch40** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #16952

| | | | |
|---|---|---|---|
| Owner: | **SUNRISE CUSTOM HOMES** | Owner Well #: | **001** |
| Address: | **22227 OBAN DR.<br>AUSTIN, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **LOT 25 ESTATES ABOVE FALL CREEK<br>SPICEWOOD, TX 78669** | Latitude: | **30° 24' 24" N** |
| | | Longitude: | **098° 06' 40" W** |
| Well County: | **Travis** | Elevation: | **843 ft. above sea level** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **1/6/2003** Drilling End Date: **1/6/2003**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9.875** | **0** | **13** |
| **6.5** | **13** | **228** |

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **10** | **12** |

Seal Method: **SLURRIED & POURED**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **NOT YET INSTALLED**

Surface Completion: **Surface Sleeve Installed**

Water Level: **168 ft.** below land surface on **2003-01-07** Measurement Method: **Unknown**

Packers: **PLASTIC 10**
**PLASTIC 193**

Type of Pump: **Submersible** Pump Depth (ft.): **200**

Well Tests: **Jetted** **Yield: 4 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

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

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

Company Information: **BEE CAVE DRILLING, INC.**

**185 ANGELFIRE DR.**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **BOBBY ROBERTS** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **TOPSOIL** |
| **1** | **14** | **CALICHE** |
| **14** | **45** | **RED CLAY** |
| **45** | **85** | **RED ROCK** |
| **85** | **108** | **GREY LIMESTONE** |
| **108** | **150** | **BLUE CLAY** |
| **150** | **192** | **RED CLAY** |
| **192** | **219** | **RED ROCK W/B 4 GPM** |
| **219** | **222** | **RED CLAY** |
| **222** | **227** | **RED ROCK** |
| **227** | **228** | **BLACK ROCK** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 NEW PLASTIC 0 - 200** |
| **4.5 NEW SCREEN MFG. 200 - 220** |
| **4.5 NEW PLASTIC 220 - 228** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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# STATE OF TEXAS WELL REPORT for Tracking #19564

| | | | |
|---|---|---|---|
| Owner: | **Pedernales Fire Dept. ATTN: Ken VanRens** | Owner Well #: | **No Data** |
| Address: | **801 Bee Creek Road Spicewood, TX 78669** | Grid #: | **57-40-4** |
| | | Latitude: | **30° 26' 32" N** |
| Well Location: | **311 Paleface Ranch Spicewood, TX 78669** | Longitude: | **098° 05' 59" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **9/6/2002** Drilling End Date: **9/6/2002**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6** | **20** | **230** |

Drilling Method: **Air Rotary**

Borehole Completion: **cased**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **as per landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 117',114',20'**

Type of Pump: **No Data**

Well Tests: **Unknown** **Yield: 9-10 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **118-210** | **Trinity** |

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: **APEX Drilling**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael Becker** License Number: **54516**

Apprentice Name: **Andrew Johnson** Apprentice Number: **1116**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **15** | **Tan Clay** |
| **15** | **27** | **Tan Red Clay w/Wht LS** |
| **27** | **70** | **Tan Wht LS** |
| **70** | **85** | **Gry LS** |
| **85** | **107** | **Blue Clay** |
| **107** | **118** | **Gry Sand-Blue Clay** |
| **118** | **128** | **Red SS-Clay** |
| **128** | **141** | **Gravel-Sand (H20)** |
| **141** | **158** | **Red Clay** |
| **158** | **210** | **Gravel-Sand (H20)** |
| **210** | **225** | **Tan LS-Clay** |
| **225** | **230** | **Blue Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **5 New PVC +2 to 230 SDR17** |

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# STATE OF TEXAS WELL REPORT for Tracking #23609

| | | | |
|---|---|---|---|
| Owner: | **David Searcy** | Owner Well #: | **No Data** |
| Address: | **24428 Pedernales Drive Spicewood, TX 78669** | Grid #: | **57-40-1** |
| Well Location: | **24428 Pedernales Drive Spicewood, TX 78669** | Latitude: | **30° 28' 04" N** |
| | | Longitude: | **098° 05' 35" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **7/25/2003** Drilling End Date: **7/25/2003**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **230** |

Drilling Method: **Air Rotary**

Borehole Completion: **cased**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 140', 130', 20'**

Type of Pump: **Submersible** Pump Depth (ft.): **200**

Well Tests: **Estimated** **Yield: 60 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **140' - 220'** | **Trinity** |

Chemical Analysis Made: **Unknown**

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: **APEX Drilling**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael Becker** License Number: **54516**

Apprentice Name: **Andrew Johnson** Apprentice Number: **1116**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **3** | **Gravel** |
| **3** | **13** | **Caliche** |
| **13** | **35** | **Sand-Gravel** |
| **35** | **45** | **Tan LS** |
| **45** | **50** | **Tan-Gry LS** |
| **50** | **57** | **Gry LS** |
| **57** | **65** | **Gry Clay** |
| **65** | **75** | **Tan Clay** |
| **75** | **95** | **Gry Clay** |
| **95** | **120** | **Red Clay-Tan LS** |
| **120** | **140** | **Red Clay-Red SS** |
| **140** | **150** | **Gravel (H2O)** |
| **150** | **160** | **Red SS** |
| **160** | **198** | **Gravel (H2O)** |
| **198** | **205** | **Red-Tan SS** |
| **205** | **220** | **Gravel (H2O)** |
| **220** | **225** | **Tan LS** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5"OD) New PVC +2 to 230' Sch40** |

| | | |
|---|---|---|
| **225** | **230** | **Tan Clay** |

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# STATE OF TEXAS WELL REPORT for Tracking #33024

| | | | |
|---|---|---|---|
| Owner: | **Danny and Melonie Watts** | Owner Well #: | **No Data** |
| Address: | **410 Dasher**<br>**Austin, TX 78734** | Grid #: | **57-40-4** |
| Well Location: | **804 Rivercliff Drive**<br>**Spicewood, TX 78669** | Latitude: | **30° 25' 16" N** |
| | | Longitude: | **098° 05' 26" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **7/16/2003** Drilling End Date: **8/1/2003**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **8** | **0** | **200** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|---|
| Filter Pack Intervals: | **98** | **200** | **Gravel** | |

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | | | **9 Portland** |
| | **0** | **98** | **4 Benseal** |

Seal Method: **Pressure Grout**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **non-existant**

Surface Completion: **Surface Sleeve Installed**

Water Level: **100 ft.** below land surface on **2003-07-22** Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **160**

Well Tests: **Jetted** **Yield: 10 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **105-112** | **unkown** |

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: **Whisenant & Lyle WSI**

**P. O. Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Fred Smith** License Number: **54437**

Comments: **$dfs**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **22** | **Hard White Limestone** |
| **10** | **12** | **GPM** |
| **22** | **34** | **Limestone/Shale** |
| **34** | **41** | **Gray Shale** |
| **41** | **42** | **Damp Gray Limestone** |
| **42** | **47** | **Blue Limestone** |
| **47** | **96** | **Blue Shale** |
| **96** | **105** | **Red Beds** |
| **105** | **112** | **Conglomerate Water Bearing** |
| **112** | **129** | **Red Gray Shale** |
| **129** | **135** | **Lt. Gray Limestone** |
| **135** | **149** | **Red Sandstone Shale** |
| **149** | **197** | **Conglomerate** |
| **192** | **200** | **Blue/Green Shale Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **New** | **PVC-SDR17** | **+2 100** |
| **4.5** | **New** | **PVC-SDR17** | **Perf. 100 180 .40** |
| **4.5** | **New** | **PVC-SDR17** | **180 200** |

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# STATE OF TEXAS WELL REPORT for Tracking #33390

| | | | |
|---|---|---|---|
| Owner: | **Two River Canyon Entertainment Complex** | Owner Well #: | **2** |
| Address: | **11750 E Hwy 71 Spicewood, TX 78669** | Grid #: | **57-39-6** |
| | | Latitude: | **30° 26' 01" N** |
| Well Location: | **E Hwy 71 Spicewood, TX 78669** | Longitude: | **098° 08' 03" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Irrigation**

Drilling Start Date: **6/10/2003** Drilling End Date: **6/10/2003**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6** | **20** | **335** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4** |

Seal Method: **Slurry**

Sealed By: **APEX Drilling**

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

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

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

Method of Verification: **landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 135', 125', 20'**

Type of Pump: **No Data**

Well Tests: **Estimated** **Yield: 4 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **135-325** | **Trinity** |

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: **APEX Drilling Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **22** | **Tan LS** |
| **22** | **101** | **Tan Gry LS** |
| **101** | **115** | **Blue LS** |
| **115** | **135** | **Red Clay** |
| **135** | **165** | **Sand Gravel** |
| **165** | **212** | **Tan LS** |
| **212** | **260** | **Gry LS** |
| **260** | **278** | **Red Clay** |
| **278** | **325** | **Gravel** |
| **325** | **335** | **Tan Clay-Blue Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5"OD) New PVC +2 to 335 Sch40** |

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# STATE OF TEXAS WELL REPORT for Tracking #33759

Owner: **MIKE MARTIN**

Address: **3875 E WHITESTONE BLVD CEDAR PARK, TX 78613**

Well Location: **RIVER CLIFF RANCH SPICEWOOD, TX 78669**

Well County: **Travis**

Owner Well #: **No Data**

Grid #: **57-40-7**

Latitude: **30° 24' 58" N**

Longitude: **098° 05' 36" W**

Elevation: **755 ft. above sea level**

****Plugged Within 48 Hours****

****This well has been plugged****

**Plugging Report Tracking #108916**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **1/14/2004** Drilling End Date: **1/14/2004**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **13** |
| **7** | **13** | **230** |

Drilling Method: **Air Hammer**

Borehole Completion: **Unknown**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

Sealed By: **GREG SVETLIK**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **NONE**

Type of Pump: **No Data**

Well Tests: **Unknown** **Yield: 0 GPM**

Plug Information:

| *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **0 - 2 CEMENT** | | |
| **2 - 230 CUTTINGS** | | |

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: **BEE CAVE DRILLING, INC.**

**185 ANGELFIRE DR.**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **JIM BLAIR**

License Number: **54416**

Apprentice Name: **GREG SVETLIK**

Apprentice Number: **WWWDAPP00001734**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **TOPSOIL** |
| **1** | **5** | **GREY ROCK** |
| **5** | **8** | **GOLD SANDSTONE** |
| **8** | **8** | **LT BROWN LIMESTONE** |
| **20** | **45** | **BLUE LIMESTONE** |
| **45** | **54** | **GREY SHALE** |
| **54** | **57** | **RED SHALE** |
| **57** | **88** | **GREY SHALE** |
| **88** | **107** | **RED SHALE-SANDY DRY** |
| **107** | **109** | **YELLOW ROCK** |
| **109** | **120** | **SANDY RED SHALE** |
| **120** | **130** | **PINK ROCK** |
| **130** | **144** | **RED CLAY** |
| **144** | **185** | **YELLOW ROCK / CLAY STREAKS** |
| **185** | **200** | **PINK ROCK** |
| **200** | **230** | **BLUE / YELLOW CLAY** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #34017

| | | | |
|---|---|---|---|
| Owner: | **AGC** | Owner Well #: | **No Data** |
| Address: | **12400 State Highway 71-W,#350<br>Austin, TX 78736** | Grid #: | **57-40-7** |
| | | Latitude: | **30° 24' 25" N** |
| Well Location: | **25400 Highway 71 W<br>Spicewood, TX 78669** | Longitude: | **098° 06' 13" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **6/6/2003** Drilling End Date: **6/6/2003**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **8** | **0** | **200** |

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **20** | **4.5 Cement** |

Seal Method: **Pour Slurry**

Sealed By: **C.W. Bohannon**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **no septic**

Surface Completion: **Surface Sleeve Installed**

Water Level: **140 ft.** below land surface on **2003-05-06** Measurement Method: **Unknown**

Packers: **Rubber 20**
**Rubber 140**

Type of Pump: **No Data**

Well Tests: **Estimated** **Yield: 20 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

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

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

Company Information: **Highland Drilling Inc.**

**309 Frazier Street**
**Tow, TX 78672**

Driller Name: **Charles Bohannon** License Number: **2400**

Comments: **$dfs**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **20** | **Caliche** |
| **20** | **80** | **Blue Shale** |
| **80** | **135** | **Red Clay** |
| **135** | **140** | **Limestone** |
| **140** | **170** | **Sand** |
| **170** | **200** | **Red Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4 1/2 New PVC 0 140 Sch40** |
| **4 1/2 New Perf. 140 170 Sch40** |
| **4 1/2 New PVC 170 200 Sch40** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #34418

| | | | |
|---|---|---|---|
| Owner: | **Kevin Woodstock c/o Action Water Wells** | Owner Well #: | **1** |
| | | Grid #: | **57-40-5** |
| Address: | **100 Spanish Oak Trail Spicewood, TX 78669** | Latitude: | **30° 26' 27" N** |
| Well Location: | **Spicewood Spicewood, TX 78669** | Longitude: | **098° 04' 42" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **8/19/2003** Drilling End Date: **8/19/2003**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **100** |
| **6** | **100** | **200** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **11** |

Seal Method: **Pressure Tremmie**

Sealed By: **APEX Drilling, Inc**

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

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

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

Method of Verification: **landowner / contractor**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 108', 104', 100'**

Type of Pump: **No Data**

Well Tests: **Estimated** **Yield: 50 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **108-182** | **Trinity** |

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: **APEX Drilling, Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **22** | **Tan LS** |
| **22** | **38** | **Gry LS** |
| **38** | **63** | **Blue Clay** |
| **63** | **108** | **Red Clay** |
| **108** | **112** | **Gravel** |
| **112** | **120** | **Red Clay** |
| **120** | **160** | **Gravel-H2O** |
| **160** | **165** | **Tan LS** |
| **165** | **182** | **Gravel-H2O** |
| **182** | **200** | **Tan Blue Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5"(5"od)** | **New** | **PVC** | **+2 to 200 Sch40** |
| **4.5"** | **New** | **Slotted** | **160 to 180 .035** |
| **4.5"** | **New** | **Slotted** | **140 to 160 .035** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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**P.O. Box 12157**
**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #34419

| | | | |
|---|---|---|---|
| Owner: | **Kevin Woodstock c/o Action Water Wells** | Owner Well #: | **2** |
| Address: | **100 Spanish Oak Trail Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **Spicewood Spicewood, TX 78669** | Latitude: | **30° 26' 27" N** |
| Well County: | **Travis** | Longitude: | **098° 04' 41" W** |
| | | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **8/20/2003** Drilling End Date: **8/20/2003**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **100** |
| **6** | **100** | **200** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **11** |

Seal Method: **Pressure Tremmie**

Sealed By: **APEX Drilling, Inc**

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

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

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

Method of Verification: **landowner / contractor**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 120', 110', 100'**

Type of Pump: **No Data**

Well Tests: **Estimated** **Yield: 50 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **124-179** | **Trinity** |

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: **APEX Drilling, Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **5** | **Caliche** |
| **5** | **20** | **Tan LS** |
| **20** | **30** | **Gry LS** |
| **30** | **55** | **Tan LS** |
| **55** | **67** | **Gry Clay** |
| **67** | **124** | **Red SS w/ Clay** |
| **124** | **170** | **Gravel-H2O** |
| **170** | **175** | **Tan LS** |
| **175** | **179** | **Gravel-H2O** |
| **179** | **200** | **Tan Blue Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5"(5"od) New PVC +2 to 200 Sch40** |
| **4.5" New Slotted 160 to 180 .035** |
| **4.5" New Slotted 140 to 160 .035** |

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# STATE OF TEXAS WELL REPORT for Tracking #39388

| | | | |
|---|---|---|---|
| Owner: | **DAN SCOTT** | Owner Well #: | **No Data** |
| Address: | **5004 BEE CREEK RD SPICEWOOD, TX 78669** | Grid #: | **57-39-6** |
| Well Location: | **349 SCENIC RIDGE SPICEWOOD, TX 78669** | Latitude: | **30° 26' 43" N** |
| | | Longitude: | **098° 08' 18" W** |
| Well County: | **Burnet** | Elevation: | **1045 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **5/5/2004** Drilling End Date: **5/5/2004**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **13** |
| **8** | **13** | **425** |

Drilling Method: **Air Hammer**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **325** | **425** | **Gravel** | |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **10** | **12 CEMENT** |
| **305** | **325** | **2 HOLE PLUG** |

Seal Method: **SLURRIED & POURED**

Sealed By: **JACOB CROUSE**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **NOT YET INSTALLED**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **PLASTIC 13**

Type of Pump: **DID NOT SET**

Well Tests: **Jetted** **Yield: 7 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

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

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

Company Information: **BEE CAVE DRILLING, INC.**

**185 ANGEL FIRE DR**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **JIM BLAIR**

License Number: **54416**

Apprentice Name: **JACOB CROUSE**

Apprentice Number: **WWDAPP00001862**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **TOPSOIL & SURFACE ROCK** |
| **2** | **26** | **CALICHE & YELLOW CLAY** |
| **26** | **202** | **GREY LIMESTONE** |
| **202** | **208** | **GREY SAND** |
| **208** | **225** | **GREY LIMESTONE** |
| **225** | **246** | **RED CLAY** |
| **246** | **248** | **SANDY RED CLAY** |
| **248** | **250** | **GREY SAND** |
| **250** | **255** | **RED & GREY SAND** |
| **255** | **260** | **RED CLAY & SAND W/SMALL GREY ROCK FRAGMENTS** |
| **260** | **264** | **GREY SAND** |
| **264** | **270** | **RED CLAY & WHITE ROCK** |
| **270** | **276** | **TAN SAND & WHITE ROCK** |
| **276** | **287** | **WHITE SAND** |
| **287** | **302** | **PINK CLAY W/WHITE ROCK** |
| **302** | **325** | **REDDISH BROWN CLAY W/GREY ROCK** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **NEW** | **PLASTIC** | **0 - 360** |
| **4.5** | **NEW** | **SCREEN MFG** | **360 - 420 .10** |
| **4.5** | **NEW** | **PLASTIC** | **420 - 425** |

| | | |
|---|---|---|
| **325** | **352** | **GREY SHALE** |
| **352** | **374** | **RED CLAY** |
| **374** | **395** | **RED CLAY & TAN YELLOW ROCK** |
| **395** | **420** | **TAN & WHITE ROCK W/B 7 GPM** |
| **420** | **425** | **GOLD CLAY / BLUE SHALE** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #39460

| | | | |
|---|---|---|---|
| Owner: | **OLEN WARDLAW** | Owner Well #: | **No Data** |
| Address: | **16100 STEWARD RD<br>AUSTIN, TX 78734** | Grid #: | **57-40-4** |
| Well Location: | **312 PARKFACE POINT<br>SPICEWOOD, TX 78669** | Latitude: | **30° 26' 05" N** |
| | | Longitude: | **098° 05' 44" W** |
| Well County: | **Travis** | Elevation: | **819 ft. above sea level** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **5/13/2004** Drilling End Date: **5/13/2004**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **13** |
| **7** | **13** | **210** |

Drilling Method: **Air Hammer**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **110** | **210** | **Gravel** | |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **10** | **12 CEMENT** |
| **95** | **110** | **2 HOLE PLUG** |

Seal Method: **SLURRIED & POURED**

Sealed By: **JACOB CROUSE**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **NOT YET INSTALLED**

Surface Completion: **Surface Sleeve Installed**

Water Level: **48 ft.** below land surface on **2004-05-17** Measurement Method: **Unknown**

Packers: **PLASTIC 10**

Type of Pump: **Submersible** Pump Depth (ft.): **200**

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

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

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

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

Company Information: **BEE CAVE DRILLING, INC.**

**185 ANGEL FIRE DR**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **JIM BLAIR**

License Number: **54416**

Apprentice Name: **JACOB CROUSE**

Apprentice Number: **WWDAPP00001862**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **TOPSOIL** |
| **1** | **8** | **RED CLAY & CALICHE** |
| **8** | **36** | **CALICHE** |
| **36** | **52** | **TAN SAND & GRAVEL** |
| **52** | **93** | **GREY CLAY** |
| **93** | **111** | **GREY CLAY & LIMESTONE** |
| **111** | **124** | **RED CLAY** |
| **124** | **140** | **RED CLAY & SANDSTONE** |
| **140** | **155** | **YELLOW / TAN ROCK & CLAY (RED)** |
| **155** | **173** | **TAN ROCK / BLUE SANDSTONE W/B 5 GPM** |
| **173** | **201** | **TAN & WHITE ROCK** |
| **201** | **210** | **BLUE SHALE / GOLD CLAY** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 NEW PLASTIC 0 - 130** |
| **4.5 NEW SCREEN MFG 130 - 190 .10** |
| **4.5 NEW PLASTIC 190 - 210** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #42279

| | | | |
|---|---|---|---|
| Owner: | **Jay Ledbetter** | Owner Well #: | **1** |
| Address: | **100 Spanish Oak Trail<br>Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **Estates above Fall Creek<br>Spicewood, TX 78669** | Latitude: | **30° 24' 10" N** |
| | | Longitude: | **098° 06' 51" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **10/17/2003** Drilling End Date: **10/17/2003**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6** | **20** | **290** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data: **No Data**

Seal Method: **N/A**

Sealed By: **N/A**

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

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

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

Method of Verification: **landowner**

Surface Completion: **Alternative Procedure Used**

Water Level: **No Data**

Packers: **N/A**

Type of Pump: **No Data**

Well Tests: **Estimated** **Yield: 0 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **100-201** | **Trinity** |

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: **APEX Drilling Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker, P.G.** License Number: **54516**

Comments: **updated county by TWDB on 2/12/08 - BA**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **31** | **White-Tan Limestone** |
| **31** | **48** | **Tan Limestone-Light Gray** |
| **48** | **65** | **Blue Clay** |
| **65** | **70** | **Tan Clay** |
| **70** | **83** | **Gray-Tan Limestone** |
| **83** | **100** | **Tan Clay** |
| **100** | **140** | **Gravel** |
| **140** | **150** | **White Limestone with Red Sandstone** |
| **150** | **170** | **Sand and Gravel** |
| **170** | **184** | **Tan Limestone** |
| **184** | **201** | **Gravel** |
| **201** | **218** | **Tan-Red Clay** |
| **218** | **220** | **Gray Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **N/A** | | | |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #42280

| | | | |
|---|---|---|---|
| Owner: | **Jay Ledbetter** | Owner Well #: | **2** |
| Address: | **100 Spanish Oak Trail<br>Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **Estates above Fall Creek<br>Spicewood, TX 78669** | Latitude: | **30° 24' 09" N** |
| | | Longitude: | **098° 06' 51" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **10/18/2003** Drilling End Date: **10/18/2003**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6** | **20** | **255** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data: **No Data**

Seal Method: **N/A**

Sealed By: **N/A**

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

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

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

Method of Verification: **landowner**

Surface Completion: **Alternative Procedure Used**

Water Level: **No Data**

Packers: **N/A**

Type of Pump: **No Data**

Well Tests: **Estimated** **Yield: 0 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **88-207** | **Trinity** |

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: **APEX Drilling Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker, P.G.** License Number: **54516**

Comments: **updated county by TWDB on 2/12/08 - BA**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **42** | **White-Tan Limestone** |
| **42** | **70** | **Gray Limestone with Clay** |
| **70** | **74** | **Sand and Gray Clay** |
| **74** | **88** | **Gray Clay** |
| **88** | **95** | **Red Clay** |
| **95** | **135** | **Red Gravel** |
| **135** | **145** | **White Limestone** |
| **145** | **198** | **Red Gravel** |
| **198** | **207** | **Red Clay** |
| **207** | **255** | **Tan-Blue Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **N/A** | | | |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #42870

| | | | |
|---|---|---|---|
| Owner: | **CHARLES MEEKS** | Owner Well #: | **No Data** |
| Address: | **5713 SAM HOUSTON CIRCLE AUSTIN, TX 78713** | Grid #: | **57-39-9** |
| Well Location: | **2809 FALL CREEK RD. SPICEWOOD, TX 78669** | Latitude: | **30° 24' 45" N** |
| | | Longitude: | **098° 07' 32" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **5/6/2003** Drilling End Date: **9/1/2003**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **10** |
| **8** | **10** | **20** |
| **6.25** | **20** | **145** |

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **6** |

Seal Method: **HAND POURED**

Sealed By: **Driller**

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

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

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

Method of Verification: **TAPE MEASURE ***

Surface Completion: **Surface Sleeve Installed**

Water Level: **40 ft.** below land surface on **2003-05-06** Measurement Method: **Unknown**

Packers: **SHALE CATCHER 40', 80'**

Type of Pump: **No Data**

Well Tests: **Estimated** **Yield: 30 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

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

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

Company Information: **TOM ARNOLD DRILLING**

**1147 CR 170**
**ROUND ROCK, TX 78664**

Driller Name: **TOMMY ARNOLD** License Number: **2096**

Comments: *** from proposed site**
**DG**
**corrected drilling date to match hard copy $mew 2/26/09**
**(was 5/6/04 to 8/1/04)**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **FILL** |
| **1** | **14** | **YELLOW LIMESTONE** |
| **14** | **24** | **YELLOW SHALE** |
| **24** | **27** | **BLUE SHALE** |
| **27** | **31** | **RED SHALE** |
| **31** | **33** | **GRAY LIMESTONE** |
| **33** | **38** | **GRAY SANDSTONE** |
| **38** | **42** | **RED SHALE** |
| **42** | **48** | **RED SAND** |
| **48** | **60** | **RED CLAY** |
| **60** | **80** | **GRAVEL** |
| **80** | **110** | **YELLOW LIMESTONE** |
| **110** | **124** | **RED SHALE** |
| **124** | **130** | **RED SHALE** |
| **130** | **145** | **BLUE SHALE & LIMESTONE** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **6 1/4 N PLASTIC 0-20** |
| **4 1/2 N PLASTIC 0-145** |
| **PERF 40-60** |
| **PERF 80-100** |

**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 #50664

| | | | |
|---|---|---|---|
| Owner: | **Cotie Properties** | Owner Well #: | **1** |
| Address: | **1403 Hargis Creek Trail<br>Austin, TX 78717** | Grid #: | **57-40-4** |
| | | Latitude: | **30° 25' 33.19" N** |
| Well Location: | **629 Nomad<br>Spicewood, TX 78669** | Longitude: | **098° 05' 31.05" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **12/6/2004** Drilling End Date: **12/6/2004**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **100** |
| **6** | **100** | **220** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **9** |

Seal Method: **Pressure Tremmie**

Sealed By: **Driller**

Distance to Property Line (ft.): **7**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 120', 110', 100'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 2 - 3 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **120 - 210** | **Trinity** |

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: **APEX Drilling Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker** License Number: **54516**

Comments: **No Data**

**Report Amended on 7/31/2023 by Request #40060**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **42** | **White Limestone** |
| **42** | **65** | **Grey Limestone** |
| **65** | **95** | **Blue Clay** |
| **95** | **120** | **Red Clay** |
| **120** | **125** | **Gravel** |
| **125** | **145** | **Red Clay** |
| **145** | **210** | **Gravel** |
| **210** | **220** | **Tan-Blue Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5" (5OD")** | **New** | **PVC** | **+ 2' to 220' Sch 40** |
| **4.5" (5OD")** | **New** | **PVC Screen** | **150' to 210' .035** |

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# STATE OF TEXAS WELL REPORT for Tracking #50739

| | | | |
|---|---|---|---|
| Owner: | **Randy Lasater** | Owner Well #: | **1** |
| Address: | **3204 Fall Creek Estates Dr. Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **3204 Fall Creek Estates Dr. Spicewood, TX 78669** | Latitude: | **30° 24' 13" N** |
| | | Longitude: | **098° 06' 45" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **9/28/2004** Drilling End Date: **9/28/2004**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **100** |
| **6** | **100** | **220** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **9** |

Seal Method: **Pressure Tremmie**

Sealed By: **Driller**

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

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

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

Method of Verification: **landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 120', 100'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 4 - 5 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **120 - 203** | **Trinity** |

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: **APEX Drilling Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker, P.G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **39** | **White Limestone** |
| **39** | **72** | **Grey Limestone** |
| **72** | **105** | **Blue Clay** |
| **105** | **120** | **Red Clay** |
| **120** | **203** | **Gravel** |
| **203** | **220** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5" (5"OD) New PVC +2' to 220' Sch40** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #52638

| | | | |
|---|---|---|---|
| Owner: | **Randy Hinkle** | Owner Well #: | **1** |
| Address: | **8600 RR 620 Apt. 1025<br>Austin, TX 78726** | Grid #: | **57-40-4** |
| Well Location: | **504 Nomad<br>Spicewood, TX 78669** | Latitude: | **30° 25' 45" N** |
| | | Longitude: | **098° 05' 41" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **9/30/2004** Drilling End Date: **9/30/2004**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **75** |
| **6** | **75** | **220** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **75** | **9** |

Seal Method: **Pressure Tremmie**

Sealed By: **Driller**

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

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

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

Method of Verification: **landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 80', 75'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 25 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **75 - 220** | **Trinity** |

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: **APEX Drilling Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker, P.G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **30** | **Tan-Grey Limestone** |
| **30** | **40** | **Grey Limestone** |
| **40** | **75** | **Blue Clay** |
| **75** | **180** | **Red Sandstone with Gravel** |
| **180** | **205** | **Tan Clay** |
| **205** | **220** | **Grey Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5" (5"OD) New PVC +2' to 220' Sch40** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #58488

| | | | |
|---|---|---|---|
| Owner: | **CHRIS HIGHTOWER** | Owner Well #: | **No Data** |
| Address: | **705 JIM BOWIE<br>SPICEWOOD, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **501 PALEFACE RANCH RD.<br>SPICEWOOD, TX 78669** | Latitude: | **30° 26' 04" N** |
| | | Longitude: | **098° 06' 12" W** |
| Well County: | **Travis** | Elevation: | **770 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **4/19/2005** Drilling End Date: **4/19/2005**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **13** |
| **8** | **13** | **232** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **128** | **232** | **Gravel** | |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **10** | **10 CEMENT** |
| **118** | **128** | **3 HOLE PLUG** |

Seal Method: **SLURRIED & POURED**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **NOT YET INSTALLED**

Surface Completion: **Surface Sleeve Installed**

Water Level: **97 ft.** below land surface on **2005-04-20** Measurement Method: **Unknown**

Packers: **PLASTIC 10**

Type of Pump: **Submersible** Pump Depth (ft.): **212**

Well Tests: **Pump** **Yield: 3.8 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

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

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

Company Information: **BEE CAVE DRILLING, INC.**

**185 ANGEL FIRE DR.**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **GREG SVETLIK** License Number: **54416**

Comments: **updated county by TWDB on 2/14/08 - BA**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **TOPSOIL** |
| **1** | **10** | **TAN LIMESTONE** |
| **10** | **30** | **FRACTURED WHITE ROCK** |
| **30** | **55** | **GREY LIMESTONE** |
| **55** | **67** | **BLUE SHALE** |
| **67** | **75** | **BROWN SHALE** |
| **75** | **88** | **BLUE CLAY** |
| **88** | **100** | **RED CLAY** |
| **100** | **120** | **RED SANDSTONE** |
| **120** | **140** | **FRACTURED YELLOW LIMESTONE** |
| **140** | **155** | **PURPLE ROCK** |
| **155** | **195** | **BROKEN YELLOW LIMESTONE W/B 2 GPM** |
| **195** | **215** | **RED CLAY** |
| **215** | **225** | **BLUE ROCK W/B 5 GPM** |
| **225** | **232** | **BLACK LIMESTONE** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 NEW PLASTIC 0 - 167** |
| **4.5 NEW SCREEN MFG. 167 - 227 .050** |
| **4.5 NEW PLASTIC 227 - 232** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #62952

| | | | |
|---|---|---|---|
| Owner: | **STONELAKE HOMES,LLC** | Owner Well #: | **No Data** |
| Address: | **12400 HWY. 71 W.,STE.350 PMB # AUSTIN, TX 78738** | Grid #: | **57-40-7** |
| Well Location: | **12400 HWY 71 WEST STE. 350 PMB#254 AUSTIN, TX 78738** | Latitude: | **30° 24' 22" N** |
| | | Longitude: | **098° 06' 26" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **5/24/2005** Drilling End Date: **5/24/2005**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8.625** | **0** | **40** |
| **6.5** | **40** | **180** |

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **40** | **12 CEMENT** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **N/A**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **WELL DRILLED FIRST**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **4 BURLAP,PVC 40',80',120',140'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 10 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **45** | **TRINITY** |

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: **CENTRAL TEXAS DRILLING,INC.**

**2520 HWY. 290 WEST**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **AARON GLASS** License Number: **4227**

Comments: **Amended 8/2/05 Ref.# 1854**

**Report Amended on by Request #1854**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **TOP SOIL** |
| **2** | **5** | **TAN LIMESTONE** |
| **5** | **8** | **RED LIMESTONE** |
| **8** | **35** | **RED/TAN LIMESTONE** |
| **35** | **55** | **TAN LIMESTONE** |
| **55** | **57** | **BROWN SAND W/ROCK** |
| **57** | **62** | **GRAY/RED LIMESTONE** |
| **62** | **85** | **GRAY/RED/TAN LIMESTONE** |
| **85** | **90** | **BLUE CLAY W/RED** |
| **90** | **100** | **BLUE/GRAY CLAY** |
| **100** | **105** | **GRAY CLAY/RED CLAY** |
| **105** | **110** | **GRAY CLAY/RED CLAY W/TAN** |
| **110** | **118** | **GRAY LIMESTONE** |
| **118** | **120** | **GRAY/CLAY (W/OIL FILM)** |
| **120** | **135** | **GRAY/RED CLAY** |
| **135** | **150** | **RED/TAN SAND** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **5" OD N PVC SDR17 +3 TO 180 .020** | | | |

| | | |
|---|---|---|
| **150** | **175** | **TRINITY SAND & GRAVEL** |
| **175** | **180** | **RED W/RED CLAY** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #64164

| | | | |
|---|---|---|---|
| Owner: | **Jenny Pia Stanley** | Owner Well #: | **1** |
| Address: | **25114 River Rd.<br>Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **25114 River Rd.<br>Spicewood, TX 78669** | Latitude: | **30° 26' 17" N** |
| | | Longitude: | **098° 04' 54" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **5/12/2005** Drilling End Date: **5/12/2005**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **215** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **100** | **215** | **Gravel** | **3/8" Pea** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **12** |

Seal Method: **Pressure Tremmie**

Sealed By: **Driller**

Distance to Property Line (ft.): **30**

Distance to Septic Field or other concentrated contamination (ft.): **60**

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

Method of Verification: **landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Gravel - See above**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 40 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **110 - 205** | **Trinity** |

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: **APEX Drilling Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker, P.G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **3** | **Top Soil** |
| **3** | **23** | **Tan Limestone** |
| **23** | **53** | **Grey Limestone** |
| **53** | **95** | **Grey Clay** |
| **95** | **110** | **Red Sandstone** |
| **110** | **120** | **Gravel** |
| **120** | **140** | **Red Sandstone** |
| **140** | **200** | **Gravel** |
| **200** | **215** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5"OD) New PVC +2' to 145' SDR17** |
| **4.5" (5"OD) New Slotted PVC 145' to 205' .035** |
| **4.5" (5"OD) New PVC 205' to 215' SDR17** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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**P.O. Box 12157**
**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #64169

| | | | |
|---|---|---|---|
| Owner: | **Ron Stanley** | Owner Well #: | **1** |
| Address: | **25110 River Rd.<br>Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **25110 River Rd.<br>Spicewood, TX 78669** | Latitude: | **30° 26' 15" N** |
| | | Longitude: | **098° 04' 54" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **5/13/2005** Drilling End Date: **5/13/2005**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **215** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **100** | **215** | **Gravel** | **3/8" Pea** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **12** |

Seal Method: **Pressure Tremmie**

Sealed By: **Driller**

Distance to Property Line (ft.): **10**

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

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

Method of Verification: **landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Gravel - See above**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 40 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **110 - 205** | **Trinity** |

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: **APEX Drilling Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker, P.G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **Top Soil** |
| **2** | **30** | **Tan Limestone** |
| **30** | **57** | **Grey Limestone** |
| **57** | **97** | **Grey Clay** |
| **97** | **110** | **Red Sandstone** |
| **110** | **130** | **Gravel** |
| **130** | **145** | **Red Clay** |
| **145** | **205** | **Gravel** |
| **205** | **215** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5"OD) New PVC +2' to 145' SDR17** |
| **4.5" (5"OD) New Slotted PVC 145' to 205' .035** |
| **4.5" (5"OD) New PVC 205' to 215' SDR17** |

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# STATE OF TEXAS WELL REPORT for Tracking #66308

| | | | |
|---|---|---|---|
| Owner: | **OLYMPIA HOMES** | Owner Well #: | **No Data** |
| Address: | **2227 O'BAN DRIVE SPICEWOOD, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **3005 FALL CRK. EST. SPICEWOOD, TX 78669** | Latitude: | **30° 24' 14" N** |
| | | Longitude: | **098° 06' 27" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **4/19/2005** Drilling End Date: **4/19/2005**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8.75** | **0** | **40** |
| **6.5** | **40** | **200** |

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **40** | **15 CEMENT** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **N/A**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **WELL DRILLED FIRST**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **5 BURLAP, PVC 40,90,130,150,170**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 3-5 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **40** | **TRINITY** |

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: **CENTRAL TEXAS DRILLING, INC.**

**2520 HWY. 290 WEST**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **AARON GLASS** License Number: **4227**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **TOP SOIL** |
| **2** | **4** | **RED CLAY** |
| **4** | **12** | **RED CLAY** |
| **12** | **18** | **RED W/TAN W/RED CLAY** |
| **18** | **25** | **TAN W/RED ROCK** |
| **25** | **55** | **TAN LIMESTONE** |
| **55** | **60** | **TAN SAND STRIPS** |
| **60** | **75** | **GRAY LIMESTONE** |
| **75** | **85** | **GRAY W/TAN LIMESTONE** |
| **85** | **105** | **BLUE CLAY** |
| **105** | **110** | **BLUE CLAY W/RED** |
| **110** | **135** | **BLUE CLAY W/GRAY ROCK** |
| **135** | **150** | **RED SAND & GRAVEL** |
| **150** | **155** | **RED CLAY W/GRAY CLAY** |
| **155** | **165** | **RED/TAN LIMESTONE** |
| **165** | **170** | **RED W/RED CLAY** |
| **170** | **200** | **RED SAND W/GRAVEL** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **5" OD N PVC SDR17 +2 TO 200 .020** | | | |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #67465

| | | | |
|---|---|---|---|
| Owner: | **Brad Johnson** | Owner Well #: | **1** |
| Address: | **2605 Del Rio Dr.<br>Austin, TX 78733** | Grid #: | **57-40-4** |
| | | Latitude: | **30° 25' 44" N** |
| Well Location: | **517 Nomad Dr.<br>Spicewood, TX 78669** | Longitude: | **098° 05' 37" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **8/29/2005** Drilling End Date: **8/29/2005**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **100** |
| **6.5** | **100** | **200** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **9 / Bentonite** |

Seal Method: **Pressure Tremmie**

Sealed By: **Driller**

Distance to Property Line (ft.): **8**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 105', 100'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 45 - 50 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **105 - 180** | **Trinity** |

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: **APEX Drilling Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker, P.G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **30** | **Tan Limestone** |
| **30** | **40** | **Grey Limestone** |
| **40** | **90** | **Blue Clay** |
| **90** | **105** | **Red Clay** |
| **105** | **137** | **Red Sandstone with Red Clay** |
| **137** | **180** | **Gravel (H2O)** |
| **180** | **200** | **Tan-Blue Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5"OD) New PVC +2' to 140' Sch40** |
| **4.5" (5"OD) New Slotted PVC 140' to 180' .035** |
| **4.5" (5"OD) New PVC 180' to 200' Sch40** |

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# STATE OF TEXAS WELL REPORT for Tracking #72623

| | | | |
|---|---|---|---|
| Owner: | **LISA SCHELLENBERG** | Owner Well #: | **No Data** |
| Address: | **702 LAKEWAY DR.<br>AUSTIN, TX 78734** | Grid #: | **57-40-4** |
| Well Location: | **RED BRANGUS<br>SPICEWOOD, TX 78669** | Latitude: | **30° 25' 33" N** |
| | | Longitude: | **098° 06' 11" W** |
| Well County: | **Travis** | Elevation: | **875 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **11/22/2005** Drilling End Date: **11/22/2005**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **10** |
| **6.75** | **10** | **270** |

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **8** | **6 CEMENT** |
| **8** | **10** | **1 HOLEPLUG** |

Seal Method: **SLURRIED & POURED**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **NOT YET INSTALLED**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **NEOPRENE 10**
**NEOPRENE 180**

Type of Pump: **DID NOT SET**

Well Tests: **Jetted** **Yield: 3.5 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Yes**

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

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

Company Information: **BEE CAVE DRILLING, INC.**

**185 ANGELFIRE DR.**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **BOBBY ROBERTS** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **TOPSOIL** |
| **1** | **8** | **CALICHE** |
| **8** | **11** | **WHITE SAND** |
| **11** | **15** | **YELLOW CLAY** |
| **15** | **20** | **GREY CLAY** |
| **20** | **43** | **RED CLAY** |
| **43** | **55** | **WHITE ROCK W/B 1 GPM TDS 530** |
| **55** | **60** | **BLUE CLAY** |
| **60** | **83** | **WHITE ROCK** |
| **83** | **90** | **YELLOW CLAY** |
| **90** | **105** | **GREY LIMESTONE** |
| **105** | **130** | **GREY CLAY** |
| **130** | **176** | **RED SANDSTONE** |
| **176** | **225** | **WHITE & RED ROCK W/B 3.4 GPM TDS 840** |
| **225** | **230** | **RED CLAY** |
| **230** | **235** | **RED ROCK** |
| **235** | **245** | **RED CLAY** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 NEW PLASTIC 0 - 185** |
| **4.5 NEW SCREEN MFG. 185 - 225 .05** |

| | | |
|---|---|---|
| **245** | **270** | **RED ROCK & BLUE CLAY** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #72645

| | | | |
|---|---|---|---|
| Owner: | **BPI** | Owner Well #: | **No Data** |
| Address: | **P. O. BOX 92109<br>AUSTIN, TX 78709** | Grid #: | **57-39-6** |
| Well Location: | **LOT 15, GRANITE RIDGE<br>SPICEWOOD, TX 78669** | Latitude: | **30° 27' 02" N** |
| | | Longitude: | **098° 08' 20" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **11/8/2005** Drilling End Date: **11/8/2005**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8.625** | **0** | **50** |
| **7** | **50** | **220** |

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **50** | **8 CEMENT** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **N/A**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **WELL DRILLED FIRST**

Surface Completion: **Surface Sleeve Installed**

Water Level: **159 ft.** below land surface on **2005-11-11** Measurement Method: **Unknown**

Packers: **5 BURLAP, PVC, RUBBER 50,130,150,170,210**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 5-7 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **30** | **TRINITY** |

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: **CENTRAL TEXAS DRILLING, INC.**

**2520 HWY. 290 WEST**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **AARON GLASS** License Number: **4227**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **TOP SOIL** |
| **2** | **18** | **CALICHE** |
| **18** | **20** | **BLUE LIMESTONE** |
| **20** | **100** | **GRAY LIMESTONE** |
| **100** | **108** | **TAN LIMESTONE** |
| **108** | **118** | **TAN/BROWN/HARD SANDSTONE** |
| **118** | **120** | **TAN W/YELLOW CLAY** |
| **120** | **125** | **YELLOW/RED CLAY** |
| **125** | **135** | **RED CLAY** |
| **135** | **138** | **RED CLAY W/BLUE CLAY** |
| **138** | **140** | **RED SHELL W/BROWN SAND** |
| **140** | **145** | **RED SANDSTONE** |
| **145** | **148** | **BLUE CLAY** |
| **148** | **155** | **RED CLAY** |
| **155** | **165** | **RED/YELLOW CLAY** |
| **165** | **170** | **TAN LIMESTONE** |
| **170** | **172** | **RED CLAY W/TAN LIMESTONE** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **5" OD N PVC SDR17 +2 TO 220** | | | |
| **170 TO 210 .020** | | | |

| | | |
|---|---|---|
| **172** | **185** | **TAN LIMESTONE** |
| **185** | **210** | **GRAY/BROWN LIMESTONE** |
| **210** | **220** | **GRAY CLAY** |

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# STATE OF TEXAS WELL REPORT for Tracking #78808

| | | | |
|---|---|---|---|
| Owner: | **LINDY SEGALL** | Owner Well #: | **No Data** |
| Address: | **6718 SILVERMINE DR. #604<br>AUSTIN, TX 78736** | Grid #: | **57-40-4** |
| | | Latitude: | **30° 26' 57" N** |
| Well Location: | **11610 CR 404<br>SPICEWOOD, TX 78669** | Longitude: | **098° 07' 03" W** |
| Well County: | **Burnet** | Elevation: | **884 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **2/28/2006** Drilling End Date: **2/28/2006**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **11** |
| **6.75** | **11** | **250** |

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **11** | **8 CEMENT** |

Seal Method: **SLURRIED & POURED**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **NOT YET INSTALLED**

Surface Completion: **Surface Sleeve Installed**

Water Level: **169 ft.** below land surface on **2006-03-02** Measurement Method: **Unknown**

Packers: **NEOPRENE 70**
**NEOPRENE 165**
**NEOPRENE 170**

Type of Pump: **Submersible** Pump Depth (ft.): **240**

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

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Yes**

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

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

Company Information: **BEE CAVE DRILLING, INC.**

**185 ANGELFIRE DR.**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **BOBBY ROBERTS** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **TOPSOIL** |
| **2** | **6** | **CALICHE** |
| **6** | **15** | **WHITE ROCK** |
| **15** | **28** | **TAN SAND** |
| **28** | **67** | **RED CLAY** |
| **67** | **95** | **WHITE ROCK W/B 3 GPM TDS 500** |
| **95** | **120** | **GREY ROCK** |
| **120** | **165** | **GREY CLAY** |
| **165** | **245** | **RED ROCK W/B 5 GPM TDS 560** |
| **245** | **250** | **GOLD CLAY** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 NEW PLASTIC 0 - 210** |
| **4.5 NEW SCREEN MFG. 210 - 250 .050** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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# STATE OF TEXAS WELL REPORT for Tracking #82004

| | | | |
|---|---|---|---|
| Owner: | **Will Snyder** | Owner Well #: | **No Data** |
| Address: | **21814 Highway 71 W. Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **21814 Highway 71 W. Spicewood, TX 78669** | Latitude: | **30° 24' 30" N** |
| | | Longitude: | **098° 05' 52" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **4/26/2004** Drilling End Date: **4/26/2004**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **8** | **0** | **325** |

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **100** | **21 Cement** |

Seal Method: **Trimmie Pressure**

Sealed By: **B. Strong**

Distance to Property Line (ft.): **7**

Distance to Septic Field or other concentrated contamination (ft.): **no septic**

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

Method of Verification: **Tape**

Surface Completion: **Surface Sleeve Installed**

Water Level: **219 ft.** below land surface on **2004-04-26** Measurement Method: **Unknown**

Packers: **Rubber 100'**

Type of Pump: **No Data**

Well Tests: **Estimated** **Yield: 18 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

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

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

Company Information: **Highland Drilling, Inc.**

**309 Frazier Street**
**Tow, TX 78672**

Driller Name: **Bryan Strong** License Number: **54563**

Comments: **$dfs**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **25** | **Caliche** |
| **25** | **55** | **Blue Shale** |
| **55** | **110** | **Caliche** |
| **110** | **145** | **Limestone** |
| **145** | **162** | **Sandstone** |
| **162** | **182** | **Blue Shale** |
| **182** | **187** | **Limestone** |
| **187** | **275** | **Gray Sandstone** |
| **275** | **320** | **Brown Sandstone** |
| **320** | **325** | **Gummy Blue Shale** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **5** | **New** | **PVC** | **0 305 Sch40** |
| **5** | **New** | **Perf.** | **305 325 Sch40** |

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# STATE OF TEXAS WELL REPORT for Tracking #84738

| | | | |
|---|---|---|---|
| Owner: | **Summit Buiders** | Owner Well #: | **1** |
| Address: | **P. O. 340277<br>Austin, TX 78734** | Grid #: | **57-40-4** |
| Well Location: | **25400 Love Drive<br>Spicewood, TX 78669** | Latitude: | **30° 26' 14" N** |
| | | Longitude: | **098° 05' 15" W** |
| Well County: | **Travis** | Elevation: | **674 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **5/2/2006** Drilling End Date: **5/3/2006**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **120** |
| **7** | **120** | **200** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **120** | **42** |

Seal Method: **Unknown**

Sealed By: **Unknown**

Distance to Property Line (ft.): **40**

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

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

Method of Verification: **measured**

Surface Completion: **Surface Sleeve Installed**

Water Level: **82 ft.** below land surface on **2006-05-11** Measurement Method: **Unknown**

Packers: **NEOPHRENE 120**

Type of Pump: **Submersible** Pump Depth (ft.): **180**

Well Tests: **Estimated** **Yield: 10 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **135-180** | **Trinity** |

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: **Associated Drilling Company**

**P.O. Box 1060**
**Manchaca, TX 78652**

Driller Name: **James Benoit / 4064wi** License Number: **4064**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **black topsoil** |
| **1** | **65** | **yellow limestone** |
| **65** | **95** | **gray limestone** |
| **95** | **110** | **tan limestone** |
| **110** | **135** | **red sandstone** |
| **135** | **180** | **broken sandstone** |
| **180** | **200** | **hard tan limestone** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **new** | **plastic** | **-2 200 SDR17** |
| **screen from 135-200** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #87938

| | | | |
|---|---|---|---|
| Owner: | **Smith Phillips 66** | Owner Well #: | **MW 21** |
| Address: | **1213 E. University Denton, TX 76207** | Grid #: | **19-56-1** |
| Well Location: | **1213 E. University Denton, TX 76027** | Latitude: | **33° 14' 01" N** |
| | | Longitude: | **097° 06' 58" W** |
| Well County: | **Denton** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Monitor** |

Drilling Start Date: **7/6/2006** Drilling End Date: **7/6/2006**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8.25** | **0** | **25** |

Drilling Method: **Hollow Stem Auger**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **3** | **24** | **Gravel** | **16/30** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **2** | **1 cement** |
| **2** | **3** | **1 bentonite** |

Seal Method: **Gravity Feed**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Surface Slab Installed**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **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: **W.E.S.T. Drilling**

**101 Industrial Dr.**
**Waxahachie, TX 75165**

Driller Name: **Robert Flair** License Number: **2948**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **15** | **Sand Br** |
| **15** | **20** | **Clay, Sand Br** |
| **20** | **25** | **Clay, Sand Gr** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **2** | **New** | **PVC** | **Riser sch 40 0-5'** |
| **2** | **New** | **PVC** | **Screen .010 5'-24'** |

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# STATE OF TEXAS WELL REPORT for Tracking #88585

| | | | |
|---|---|---|---|
| Owner: | **Cotie Properties** | Owner Well #: | **1** |
| Address: | **1403 Hargis Creek Trail<br>Austin, TX 78628** | Grid #: | **57-40-4** |
| | | Latitude: | **30° 25' 47" N** |
| Well Location: | **Red Brangus, Lot # 11<br>Spicewood, TX 78669** | Longitude: | **098° 05' 47" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **4/18/2005** Drilling End Date: **4/18/2005**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6** | **20** | **205** |

Drilling Method: **Air Rotary**

Borehole Completion: **Backfilled**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

Sealed By: **Unknown**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **N/A**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 0 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **N/A** | **Trinity** |

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: **Apex Drilling, Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker P.G.** License Number: **54516**

Comments: **Backfilled with 2' Cement Cap**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **25** | **Tan-Grey Limestone** |
| **25** | **35** | **Grey Limestone w/ Clay** |
| **35** | **75** | **Grey Clay** |
| **75** | **140** | **Red Clay w/ Sandstone** |
| **140** | **150** | **Gravel** |
| **150** | **152** | **Turquiose Clay** |
| **152** | **205** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #88588

| | | | |
|---|---|---|---|
| Owner: | **Cotie Properties** | Owner Well #: | **2** |
| Address: | **1403 Hargis Creek Trail<br>Austin, TX 78628** | Grid #: | **57-40-4** |
| Well Location: | **Red Brangus, Lot # 11<br>Spicewood, TX 78669** | Latitude: | **30° 25' 43" N** |
| | | Longitude: | **098° 05' 45" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **4/19/2005** Drilling End Date: **4/19/2005**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6** | **20** | **205** |

Drilling Method: **Air Rotary**

Borehole Completion: **Backfilled**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

Sealed By: **Unknown**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **N/A**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 0 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **N/A** | **Trinity** |

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: **Apex Drilling, Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker P.G.** License Number: **54516**

Comments: **Backfilled with 2' Cement Cap**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **37** | **Tan-Grey Limestone** |
| **37** | **45** | **Grey Limestone** |
| **45** | **55** | **Grey Limestone w/ Clay** |
| **55** | **90** | **Grey Clay** |
| **90** | **104** | **Red Sandstone w/ Clay** |
| **104** | **115** | **Gravel** |
| **115** | **140** | **Sandy Clay** |
| **140** | **165** | **Gravel** |
| **165** | **170** | **Turquoise Clay** |
| **170** | **205** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #88589

| | | | |
|---|---|---|---|
| Owner: | **Cotie Properties** | Owner Well #: | **3** |
| Address: | **1403 Hargis Creek Trail<br>Austin, TX 78628** | Grid #: | **57-40-4** |
| | | Latitude: | **30° 25' 41" N** |
| Well Location: | **Red Brangus, Lot # 11<br>Spicewood, TX 78669** | Longitude: | **098° 05' 49" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **4/20/2005** Drilling End Date: **4/20/2005**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6** | **20** | **205** |

Drilling Method: **Air Hammer; Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 102', 100', 20'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 1.9 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **102-180** | **Trinity** |

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: **Apex Drilling, Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker P.G.** License Number: **54516**

Comments: **Backfilled with 2' Cement Cap**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **Top Soil** |
| **2** | **28** | **Tan-White Limestone** |
| **28** | **40** | **Grey Limestone** |
| **40** | **85** | **Blue Clay** |
| **85** | **88** | **Tan Limestone** |
| **88** | **102** | **Red Clay** |
| **102** | **106** | **Gravel** |
| **106** | **118** | **Clay** |
| **118** | **135** | **Tan Limestone** |
| **135** | **142** | **Clay** |
| **142** | **165** | **Gravel** |
| **165** | **180** | **Tan Limestone w/ Clay** |
| **180** | **205** | **Tan-Blue Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5" OD) New PVC +2' to 125' Sch40** |
| **4.5" (5"OD) New Slotted 125' to 165' .035** |
| **4.5" (5"OD) New PVC 165' to 205 Sch40** |

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# STATE OF TEXAS WELL REPORT for Tracking #90499

| | | | |
|---|---|---|---|
| Owner: | **Lou Harris** | Owner Well #: | **1** |
| Address: | **312 CR 420<br>Spicewood, TX 78669** | Grid #: | **57-40-1** |
| Well Location: | **312 CR 420<br>Spicewood, TX 78669** | Latitude: | **30° 27' 36" N** |
| | | Longitude: | **098° 06' 53" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **4/26/2006** Drilling End Date: **4/26/2006**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6** | **20** | **210** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 98', 95', 20'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 8 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **98 - 190** | **Trinity** |

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: **APEX Drilling, Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker, P.G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **20** | **Tan Clay** |
| **20** | **34** | **White-Tan Limestone** |
| **34** | **60** | **Grey Limestone** |
| **60** | **98** | **Blue Clay** |
| **98** | **112** | **Red Clay** |
| **112** | **122** | **Gravel** |
| **122** | **145** | **Red Clay** |
| **145** | **190** | **Gravel** |
| **190** | **210** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5"OD) New PVC +2' to 150' Sch40** |
| **4.5" (5"OD) New Slotted 150' to 190' .035** |
| **4.5" (5"OD) New PVC 190' to 210' Sch40** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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# STATE OF TEXAS WELL REPORT for Tracking #91343

| | | | |
|---|---|---|---|
| Owner: | **Austin Classic Builders** | Owner Well #: | **No Data** |
| Address: | **100 Spanish Oak Trail<br>Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **1129 Lake Shore Dr<br>Spicewood, TX 78669** | Latitude: | **30° 26' 31" N** |
| | | Longitude: | **098° 04' 43" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **7/25/2006** Drilling End Date: **7/25/2006**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **100** |
| **6.5** | **100** | **200** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **11 of Portland** |

Seal Method: **Pressure Tremmie**

Sealed By: **Apex Drilling, Inc.**

Distance to Property Line (ft.): **5**

Distance to Septic Field or other concentrated contamination (ft.): **80**

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 105', 100'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 45 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **75-181** | **Trinity** |

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: **Apex Drilling, Inc**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker P.G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **8** | **Gravel** |
| **8** | **30** | **Tan Limestone** |
| **30** | **65** | **Grey Limestone w/ Clay** |
| **65** | **95** | **Red Clay** |
| **95** | **98** | **Gravel** |
| **98** | **118** | **Clay** |
| **118** | **157** | **Gravel** |
| **157** | **181** | **Sand-Red-Tan** |
| **181** | **200** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5" OD) New PVC +2 to 120' Sch40** |
| **4.5" (5" OD) New Slotted PVC 120' to 180' .035** |
| **4.5" (5" OD) New PVC 180' to 200' Sch40** |

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# STATE OF TEXAS WELL REPORT for Tracking #91533

| | | | |
|---|---|---|---|
| Owner: | **Donald Gilde** | Owner Well #: | **No Data** |
| Address: | **21918 Briarcliff Dr<br>Spicewood, TX 78669** | Grid #: | **57-40-1** |
| Well Location: | **201 Red Bluff Rd Lot # 36<br>Spicewood, TX 78669** | Latitude: | **30° 27' 33" N** |
| | | Longitude: | **098° 07' 07" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **6/12/2006** Drilling End Date: **6/12/2006**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6** | **20** | **180** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **5 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 75', 70', 20'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 1/2 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **120-160** | **Trinity** |

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: **Apex Drilling, Inc**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker P.G.** License Number: **54516**

Comments: **Assigned SWN 57-40-104 by TWDB on 6/13/2012.**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **30** | **Grey & Tan Limestone** |
| **30** | **45** | **Grey Limestone** |
| **45** | **75** | **Grey Clay** |
| **75** | **85** | **Red Sandstone** |
| **85** | **90** | **Gravel** |
| **90** | **100** | **Red Sandstone** |
| **100** | **160** | **Gravel** |
| **160** | **165** | **Tan clay** |
| **165** | **180** | **Grey Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5" OD) New PVC +2' to 120' Sch40** |
| **4.5" (5" OD) New Slotted 120' to 160' .035** |
| **4.5" (5" OD) New PVC 160' to 180' Sch40** |

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# STATE OF TEXAS WELL REPORT for Tracking #93629

| | | | |
|---|---|---|---|
| Owner: | **Wendy Kucera** | Owner Well #: | **1** |
| Address: | **16714 Forest Way<br>Austin, TX 78734** | Grid #: | **57-39-6** |
| Well Location: | **2809-A Fall Creek Rd<br>Spicewood, TX 78669** | Latitude: | **30° 25' 07" N** |
| | | Longitude: | **098° 07' 38" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **7/21/2006** Drilling End Date: **7/21/2006**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **260** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 158', 154', 20'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 15 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **158-255** | **Trinity** |

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: **Apex Drilling, Inc**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker P.G.** License Number: **54516**

Comments: **updated lat/long and county by TWDB on 2/14/08 - BA**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **4** | **Clay** |
| **4** | **15** | **Caliche** |
| **15** | **25** | **Red Clay** |
| **25** | **70** | **White Limestone** |
| **70** | **90** | **Grey Limestone** |
| **90** | **136** | **Blue Clay** |
| **136** | **158** | **Black-Grey Sand** |
| **158** | **183** | **Tan-Red Sand** |
| **183** | **240** | **Gravel** |
| **240** | **255** | **Tan Limestone** |
| **255** | **260** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5" OD) New PVC +2' to 180' Sch40** |
| **4.5" (5" OD) New Slotted PVC 180' to 220' .035** |
| **4.5" (5" OD) New PVC 220' to 240' Sch40** |
| **4.5" (5" OD) New Slotted PVC 240' to 260' .035** |

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# STATE OF TEXAS WELL REPORT for Tracking #93631

| | | | |
|---|---|---|---|
| Owner: | **MULLER CUSTOM HOMES** | Owner Well #: | **No Data** |
| Address: | **2600 GRACY FARMS #101<br>AUSTIN, TX 78758** | Grid #: | **57-56-4** |
| Well Location: | **231 DOS LAGOS<br>DRIPPING SPRINGS, TX 78620** | Latitude: | **30° 12' 14" N** |
| | | Longitude: | **098° 07' 17" W** |
| Well County: | **Hays** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **5/25/2006** Drilling End Date: **5/25/2006**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8.625** | **0** | **50** |
| **6.5** | **50** | **450** |

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **50** | **6 CEMENT** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **N/A**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **WELL DRILLED FIRST**

Surface Completion: **Surface Sleeve Installed**

Water Level: **295.6 ft.** below land surface on **2006-05-27** Measurement Method: **Unknown**

Packers: **4 BURLAP, PVC, RUBBER 50',290',310',410'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 75+ GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **60** | **MIDDLE TRINITY** |

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: **CENTRAL TEXAS DRILLING, INC.**

**2520 HWY. 290 WEST**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **AARON GLASS** License Number: **4227**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| **0** | **1** | **TOP SOIL** |
| **1** | **15** | **CALICHE** |
| **15** | **18** | **BLUE LIMESTONE** |
| **18** | **150** | **GRAY LIMESTONE** |
| **150** | **190** | **GRAY/TAN LIMESTONE** |
| **190** | **230** | **GRAY LIMESTONE** |
| **GRAY CLAY STRIPS** | | |
| **230** | **290** | **GRAY LIMESTONE** |
| **290** | **315** | **TAN LIMESTONE** |
| **315** | **390** | **GRAY/TAN LIMESTONE** |
| **390** | **400** | **BROWN LIMESTONE** |
| **400** | **405** | **BLUE CLAY** |
| **405** | **410** | **BLUE CLAY W/TAN** |
| **LIMESTONE** | | |
| **410** | **415** | **TAN/GRAY/WHITE** |
| **LIMESTONE** | | |
| **415** | **450** | **BROWN LIMESTONE** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **5" OD** | **N** | **PVC SDR17** | **+3 TO 450** |
| **5" OD** | **N** | **PVC SDR17** | **SLOT 330 TO 350 .032** |
| **5" OD** | **N** | **PVC SDR17** | **SLOT 370 TO 390 .032** |
| **5" OD** | **N** | **PVC SDR17** | **SLOT 410 TO 450 .032** |

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# STATE OF TEXAS WELL REPORT for Tracking #93632

| | | | |
|---|---|---|---|
| Owner: | **Wendy Kucera** | Owner Well #: | **2** |
| Address: | **16714 Forest Way<br>Austin, TX 78734** | Grid #: | **57-39-6** |
| Well Location: | **2809-A Fall Creek Rd<br>Spicewood, TX 78669** | Latitude: | **30° 25' 07" N** |
| | | Longitude: | **098° 07' 38" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **7/22/2006** Drilling End Date: **7/22/2006**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **260** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 155', 150', 20'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 15 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **155-260** | **Trinity** |

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: **Apex Drilling, Inc**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker P.G.** License Number: **54516**

Comments: **updated lat/long and county by TWDB on 2/14/08 - BA**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **Top Soil** |
| **2** | **25** | **Red Sand-Clay** |
| **25** | **60** | **White Limestone** |
| **60** | **85** | **Grey Limestone** |
| **85** | **130** | **Clay** |
| **130** | **136** | **Red Sandstone** |
| **136** | **145** | **Grey Sand** |
| **145** | **155** | **Tan Limestone** |
| **155** | **260** | **Gravel** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5" OD) New PVC +2' to 200' Sch40** |
| **4.5" (5" OD) New Slotted PVC 200' to 260' .035** |

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# STATE OF TEXAS WELL REPORT for Tracking #95936

| | | | |
|---|---|---|---|
| Owner: | **Andy Petrach** | Owner Well #: | **2** |
| Address: | **3004 Fall Creek Estates Rd Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **3004 Fall Creek Estates Rd Spicewood, TX 78669** | Latitude: | **30° 24' 22" N** |
| | | Longitude: | **098° 06' 59" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **5/25/2006** Drilling End Date: **5/25/2006**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6** | **20** | **200** |

Drilling Method: **Air Rotary**

Borehole Completion: **Backfilled**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

Sealed By: **Unknown**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 0 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **Trinity** |

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: **Apex Drilling, Inc**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker, P.G.** License Number: **54516**

Comments: **Backfilled w/ 2' Cement Cap**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **38** | **Tan Limestone** |
| **38** | **55** | **Grey Limestone w/ Clay** |
| **55** | **98** | **Grey Clay** |
| **98** | **110** | **Red Clay/Sandstone** |
| **110** | **115** | **Grey Sand** |
| **115** | **120** | **Gravel** |
| **120** | **145** | **Red Sandstone** |
| **145** | **195** | **Gravel** |
| **195** | **200** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #99843

| | | | |
|---|---|---|---|
| Owner: | **CASTLETOP RANCH** | Owner Well #: | **No Data** |
| Address: | **COX'S CROSSING SPICEWOOD, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **25800 COX'S CROSSING SPICEWOOD, TX 78669** | Latitude: | **30° 26' 33" N** |
| | | Longitude: | **098° 04' 59" W** |
| Well County: | **Travis** | Elevation: | **734 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **11/16/2006** Drilling End Date: **11/16/2006**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **11** |
| **6.75** | **11** | **170** |

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **6** | **4** |
| **6** | **11** | **4** |

Seal Method: **SLURRIED & POURED**

Sealed By: **CESAR RAMOS**

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

Distance to Septic Field or other concentrated contamination (ft.): **250**

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

Method of Verification: **STEEL TAPE**

Surface Completion: **Surface Sleeve Installed**

Water Level: **78 ft.** below land surface on **2006-11-20** Measurement Method: **Unknown**

Packers: **NEOPRENE 13**
**NEOPRENE 95**
**NEOPRENE 100**

Type of Pump: **Submersible** Pump Depth (ft.): **160**

Well Tests: **Jetted** **Yield: 50 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Yes**

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

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

Company Information: **BEE CAVE DRILLING**

**185 ANGELFIRE DR**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **JIM BLAIR 54416**

License Number: **54416**

Apprentice Name: **CESAR RAMOS**

Apprentice Number: **3090**

Comments: **Amended 1/22/07 ref#4180**

**Report Amended on by Request #4180**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **TOPSOIL** |
| **2** | **20** | **TAN SHALE** |
| **20** | **48** | **TAN SANDSTONE** |
| **48** | **58** | **BROWN ROCK** |
| **58** | **65** | **BROWN SANDSTONE** |
| **65** | **69** | **BROWN CLAY** |
| **69** | **100** | **BROWN SANDSTONE** |
| **100** | **167** | **BROWN ROCK W/B 50 GPM TDS 650** |
| **167** | **170** | **YELLOW CLAY** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 NEW PLASTIC 0-105** |
| **4.5 NEW SCREEN MFG. 105-165 .050** |
| **4.5 NEW PLASTIC 165-170** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #100952

| | | | |
|---|---|---|---|
| Owner: | **Wes Brockhoeft c/o Action Water Wells** | Owner Well #: | **1** |
| Address: | **100 Spanish Oak Trail<br>Spicewood, TX 78669** | Grid #: | **57-39-9** |
| | | Latitude: | **30° 24' 45" N** |
| Well Location: | **Wild River Ranch / 2809 Fall Creek Rd.<br>Spicewood, TX 78669** | Longitude: | **098° 07' 45" W** |
| | | Elevation: | **No Data** |
| Well County: | **Travis** | | |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **12/8/2006** Drilling End Date: **12/8/2006**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.75** | **20** | **220** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 145', 140', 20'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 8 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **150 - 200** | **Trinity** |

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: **APEX Drilling, Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **10** | **Tan Limestone** |
| **10** | **35** | **Red Clay & White Limestone** |
| **35** | **73** | **White Limestone** |
| **73** | **120** | **Grey Limestone with Clay** |
| **120** | **150** | **Grey Limestone with Clay** |
| **150** | **200** | **Gravel H2O** |
| **200** | **210** | **Tan Clay** |
| **210** | **220** | **Grey Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5"OD) New PVC +2' to 160' Sch40** |
| **4.5" (5"OD) New Slotted PVC 160' to 200' .035** |
| **4.5" (5"OD) New PVC 200' to 220' Sch40** |

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# STATE OF TEXAS WELL REPORT for Tracking #102754

| | | | |
|---|---|---|---|
| Owner: | **BRANDY & EDWARDO SALMERON** | Owner Well #: | **No Data** |
| Address: | **12501 CR 404<br>SPICEWOOD, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **12501 CR 404<br>SPICEWOOD, TX 78669** | Latitude: | **30° 27' 22.78" N** |
| | | Longitude: | **098° 06' 40.01" W** |
| Well County: | **Burnet** | Elevation: | **908 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **12/8/2006** Drilling End Date: **12/8/2006**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **11** |
| **6.75** | **11** | **285** |

Drilling Method: **Air Hammer**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **9** | **5** |
| **9** | **11** | **1** |

Seal Method: **SLURRIED & POURED**

Sealed By: **CESAR RAMOS**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **NOT YET INSTALLED**

Surface Completion: **Surface Sleeve Installed**

Water Level: **118 ft.** below land surface on **2006-12-11** Measurement Method: **Unknown**

Packers: **NEOPRENE 11**
**NEOPRENE 105**
**NEOPRENE 235**
**NEOPRENE 240**

Type of Pump: **Submersible** Pump Depth (ft.): **260**

Well Tests: **Jetted** **Yield: 7 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Yes**

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

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

Company Information: **BEE CAVE DRILLING**

**185 ANGELFIRE DRIVE**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **Jim Blair** License Number: **54416**

Comments: **No Data**

**Report Amended on 3/17/2025 by Request #44639**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **10** | **WHITE ROCK** |
| **10** | **30** | **GRAY LIMESTONE** |
| **30** | **70** | **YELLOW SANDSTONE** |
| **70** | **85** | **RED SANDSTONE** |
| **85** | **100** | **RED CLAY** |
| **100** | **130** | **WHITE ROCK W/B 4 GPM** |
| **130** | **145** | **GRAY ROCK** |
| **145** | **195** | **GRAY CLAY** |
| **195** | **200** | **GRAY ROCK** |
| **200** | **235** | **RED CLAY** |
| **235** | **275** | **BROWN ROCK W/B 3 GPM** |
| **275** | **285** | **GOLD CLAY** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 NEW PLASTIC 0-242** |
| **4.5 NEW SCREEN MFG. 242-282 .050** |
| **4.5 NEW PLASTIC 282-285** |

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# STATE OF TEXAS WELL REPORT for Tracking #103092

| | | | |
|---|---|---|---|
| Owner: | **DAVE BIEHN** | Owner Well #: | **No Data** |
| Address: | **26904 Founders Place<br>Spicewood, TX 78669** | Grid #: | **57-40-1** |
| Well Location: | **26904 Founders Place<br>Spicewood, TX 78669** | Latitude: | **30° 28' 03" N** |
| | | Longitude: | **098° 05' 42" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **10/20/2006** Drilling End Date: **10/20/2006**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **30** |
| **6** | **30** | **320** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **30** | **6** |

Seal Method: **Slurry**

Sealed By: **Central Texas Drilling**

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

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

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

Method of Verification: **Owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **3 Packers at 30', 110', 115'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 8 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **40** | **Trinity** |

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: **Central Texas Drilling Inc.**

**500 Southland Drive**
**Burnet, TX 78611**

Driller Name: **Frank Glass** License Number: **1313**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| **000** | **001** | **Top soil** |
| **001** | **020** | **Caliche** |
| **020** | **100** | **Blue lime** |
| **100** | **115** | **Clay brown** |
| **115** | **160** | **Large gravel** |
| **160** | **200** | **Blue clay** |
| **200** | **320** | **Smithwick shale or Marble Falls** |
| **limestone** | | |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5"** | **New** | **Plastic** | **+2-320 17 & 40** |
| **60' Screen** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #105073

| | | | |
|---|---|---|---|
| Owner: | **ROBERT DAY** | Owner Well #: | **No Data** |
| Address: | **111 Cloudland Court Spicewood, TX 78669** | Grid #: | **57-40-1** |
| Well Location: | **111 Cloudland Court Spicewood, TX 78669** | Latitude: | **30° 27' 38" N** |
| | | Longitude: | **098° 06' 24" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

****This well has been plugged**** **Plugging Report Tracking #37418**

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **1/10/2007** Drilling End Date: **1/10/2007**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **20** |
| **6** | **20** | **260** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

Sealed By: **Unknown**

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

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

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

Method of Verification: **Owner**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

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

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **30** | **Trinity** |

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: **Western Water Wells LLC**

**500 Southland Drive**
**Burnet, TX 78611**

Driller Name: **Frank Glass** License Number: **1313**

Comments: **Well to be plugged.**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **3** | **Top soil** |
| **3** | **55** | **Caliche & clay** |
| **55** | **75** | **Cow creek white porous lime** |
| **75** | **140** | **Gray lime & Hammond** |
| **140** | **225** | **Red clay & gravel Trinity** |
| **225** | **245** | **Yellow clay** |
| **245** | **260** | **Smithwick** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #108237

| | | | |
|---|---|---|---|
| Owner: | **BECKY MADISON** | Owner Well #: | **No Data** |
| Address: | **1251 LAKESHORE DR SPICEWOOD, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **25219 RIVER RD SPICEWOOD, TX 78669** | Latitude: | **30° 26' 26.83" N** |
| | | Longitude: | **098° 04' 48.43" W** |
| Well County: | **Travis** | Elevation: | **750 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **3/13/2007** Drilling End Date: **3/13/2007**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **12** |
| **6.75** | **12** | **210** |

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **6** | **4** |
| **6** | **12** | **5** |

Seal Method: **SLURRIED & POURED**

Sealed By: **CESAR RAMOS**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **NOT YET INSTALLED**

Surface Completion: **Surface Sleeve Installed**

Water Level: **122 ft.** below land surface on **2007-03-13** Measurement Method: **Unknown**

Packers: **NEOPRENE 12**
**NEOPRENE 125**
**NEOPRENE 135**

Type of Pump: **Submersible** Pump Depth (ft.): **200**

Well Tests: **Jetted** **Yield: 15 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Yes**

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

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

Company Information: **BEE CAVE DRILLING**

**185 ANGELFIRE DR**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **Jim Blair** License Number: **54416**

Comments: **No Data**

**Report Amended on 7/31/2023 by Request #40056**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **3** | **WHITE ROCK** |
| **3** | **7** | **TAN SANDSTONE** |
| **7** | **40** | **WHITE ROCK** |
| **40** | **53** | **YELLOW ROCK** |
| **53** | **56** | **GRAY ROCK** |
| **56** | **70** | **BLUE SHALE** |
| **70** | **80** | **RED SHALE** |
| **80** | **96** | **BLACK SHALE** |
| **96** | **130** | **RED SANDSTONE** |
| **130** | **210** | **RED ROCK W/B 15 GPM TDS 610** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 NEW PLASTIC 0-140** |
| **4.5 NEW SCREEN MFG 140-200 .050** |
| **4.5 NEW PLASTIC 200-21** |

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# STATE OF TEXAS WELL REPORT for Tracking #111526

| | | | |
|---|---|---|---|
| Owner: | **LARRY EISENBERG** | Owner Well #: | **No Data** |
| Address: | **3004 SPARKLING BROOK LN AUSTIN, TX 78746** | Grid #: | **57-40-5** |
| Well Location: | **25204 SUNSET RIVER CR SPICEWOOD, TX 78669** | Latitude: | **30° 26' 38" N** |
| | | Longitude: | **098° 04' 43" W** |
| Well County: | **Travis** | Elevation: | **800 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **4/12/2007** Drilling End Date: **4/12/2007**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **12** |
| **8** | **12** | **170** |

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **2** | **2** |
| **2** | **105** | **9** |

Seal Method: **PRESSURE CEMENTED**

Sealed By: **CESAR RAMOS**

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

Distance to Septic Field or other concentrated contamination (ft.): **86**

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

Method of Verification: **STEEL TAPE**

Surface Completion: **Surface Sleeve Installed**

Water Level: **90 ft.** below land surface on **2007-04-14** Measurement Method: **Unknown**

Packers: **NEOPRENE 105**
**NEOPRENE 110**
**NEOPRENE 128**
**NEOPRENE 130**

Type of Pump: **Submersible** Pump Depth (ft.): **160**

Well Tests: **Jetted** **Yield: 30 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Yes**

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

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

Company Information: **BEE CAVE DRILLING**

**185 ANGELFIRE DR**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **JIM BLAIR** License Number: **54416**

Apprentice Name: **CESAR RAMOS** Apprentice Number: **57534**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **TOPSOIL** |
| **2** | **28** | **TAN ROCK** |
| **28** | **38** | **GREY ROCK** |
| **38** | **90** | **BLUE SHALE** |
| **90** | **115** | **BLACK ROCK** |
| **115** | **130** | **RED CLAY** |
| **130** | **170** | **RED ROCK W/B 30 GPM TDS 690** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 NEW PLASTIC 0-130** |
| **4.5 NEW SCREEN MFG. 130-170 .050** |

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**P.O. Box 12157**
**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #117473

| | | | |
|---|---|---|---|
| Owner: | **Paul Hopkins** | Owner Well #: | **1** |
| Address: | **3200 Fall Creek Estate<br>Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **3200 Fall Creek Estate<br>Spicewood, TX 78669** | Latitude: | **30° 24' 12" N** |
| | | Longitude: | **098° 06' 43" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **4/18/2007** Drilling End Date: **4/18/2007**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.75** | **20** | **225** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

Sealed By: **Unknown**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Unknown** **Yield: 0 GPM**

Plug Information:

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

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **104-215** | **Trinity** |

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: **Apex Drilling, Inc**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew J Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **34** | **Tan Limestone** |
| **34** | **65** | **Grey Limestone w/ Clay** |
| **65** | **98** | **Blue Clay** |
| **98** | **104** | **Red Clay** |
| **104** | **118** | **Gravel** |
| **118** | **135** | **Clay** |
| **135** | **165** | **Gravel** |
| **165** | **185** | **White Limestone** |
| **185** | **215** | **Gravel** |
| **215** | **225** | **Blue Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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# STATE OF TEXAS WELL REPORT for Tracking #117475

| | | | |
|---|---|---|---|
| Owner: | **Paul Hopkins** | Owner Well #: | **2** |
| Address: | **3200 Fall Creek Estate<br>Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **3200 Fall Creek Estate<br>Spicewood, TX 78669** | Latitude: | **30° 24' 11" N** |
| | | Longitude: | **098° 06' 43" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **4/19/2007** Drilling End Date: **4/19/2007**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.75** | **20** | **210** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

Sealed By: **Unknown**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Unknown** **Yield: 0 GPM**

Plug Information:

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

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **Trinity** |

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: **Apex Drilling, Inc**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew J Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **22** | **Tan Limestone** |
| **22** | **49** | **Grey Limestone** |
| **49** | **90** | **Clay** |
| **90** | **110** | **Red Clay** |
| **110** | **115** | **Gravel** |
| **115** | **125** | **Red Clay** |
| **125** | **165** | **Gravel** |
| **165** | **210** | **Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #121336

| | | | |
|---|---|---|---|
| Owner: | **STEVE HUGHES** | Owner Well #: | **No Data** |
| Address: | **1251 LAKESHORE DR SPICEWOOD, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **1231 LAKESHORE DR SPICEWOOD, TX 78669** | Latitude: | **30° 26' 40" N** |
| | | Longitude: | **098° 04' 28" W** |
| Well County: | **Travis** | Elevation: | **853 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **8/27/2007** Drilling End Date: **8/27/2007**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **10** | **0** | **140** |

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

| Annular Seal Data: | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| | **0** | **2** | **2** |
| | **2** | **100** | **16** |

Seal Method: **PRESSURE CEMENTED**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **NOT YET INSTALLED**

Surface Completion: **Surface Sleeve Installed**

Water Level: **55 ft.** below land surface on **2007-08-28** Measurement Method: **Unknown**

Packers: **NEOPRENE 100**
**NEOPRENE 118**
**NEOPRENE 120**

Type of Pump: **Submersible** Pump Depth (ft.): **126**

Well Tests: **Jetted** **Yield: 80 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Yes**

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

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

Company Information: **BEE CAVE DRILLING INC**

**185 ANGELFIRE DR**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **BOBBY ROBERTS** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **TOPSOIL** |
| **1** | **2** | **SURFACE ROCK** |
| **2** | **14** | **BROWN GRAVEL** |
| **14** | **35** | **TAN LIMESTONE** |
| **35** | **70** | **BLUE SHALE** |
| **70** | **80** | **RED SHALE** |
| **80** | **115** | **RED CLAY** |
| **115** | **140** | **RED ROCK W/B 80 GPM TDS 660** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **NEW** | **PLASTIC** | **0-120** |
| **4.5** | **NEW** | **SCREEN MFG** | **120-140 .050** |

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# STATE OF TEXAS WELL REPORT for Tracking #127312

| | | | |
|---|---|---|---|
| Owner: | **Chris Milam** | Owner Well #: | **No Data** |
| Address: | **2327 Cuernavaca<br>Austin, TX 78733** | Grid #: | **57-39-9** |
| | | Latitude: | **30° 24' 57" N** |
| Well Location: | **2701 Fall Creek Rd.<br>Spicewood, TX 78669** | Longitude: | **098° 07' 32" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **5/10/2005** Drilling End Date: **5/11/2005**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **20** |
| **6.5** | **20** | **185** |

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **6** |

Seal Method: **Hand Poured**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **280**

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

Method of Verification: **Tape Measure**

Surface Completion: **Surface Sleeve Installed**

Water Level: **71 ft.** below land surface on **2005-03-11** Measurement Method: **Unknown**

Packers: **Shale Trap 145**

Type of Pump: **No Data**

Well Tests: **Estimated** **Yield: 30 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

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

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

Company Information: **Tom Arnold Drilling**

**1147 CR 170**
**Round Rock, TX 78664**

Driller Name: **Tommy D. Arnold** License Number: **2096**

Comments: **Logged by DT$**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil and Loose Rock** |
| **1** | **6** | **Cemented Gravel** |
| **6** | **11** | **White Limestone** |
| **11** | **18** | **Yellow Sandstone** |
| **18** | **40** | **White Sandstone** |
| **40** | **48** | **Gray Sandstone** |
| **48** | **69** | **Purple Shale** |
| **69** | **79** | **Gray Sandstone** |
| **79** | **86** | **Blue Shale** |
| **86** | **90** | **Gray Sandstone** |
| **90** | **120** | **Red Shale** |
| **120** | **165** | **Cemented Gravel** |
| **165** | **185** | **Blue Shale** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **6** | **N** | **Plastic** | **0/120** |
| **4 1/2** | **N** | **Plastic** | **0/185** |
| **Perf.** | | | **145/165** |

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# STATE OF TEXAS WELL REPORT for Tracking #131575

| | | | |
|---|---|---|---|
| Owner: | **TODD COPENHAVER** | Owner Well #: | **No Data** |
| Address: | **1403 HARGIS CREEK TR AUSTIN, TX 78717** | Grid #: | **57-40-5** |
| Well Location: | **1209 LAKESHORE DR SPICEWOOD, TX 78669** | Latitude: | **30° 26' 28" N** |
| | | Longitude: | **098° 04' 40" W** |
| Well County: | **Travis** | Elevation: | **741 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **12/1/2007** Drilling End Date: **12/1/2007**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **12** |
| **8** | **12** | **155** |

Drilling Method: **Air Hammer**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **2** | **3** |
| **2** | **105** | **16** |

Seal Method: **PRESSURE CEMENTED**

Sealed By: **CESAR RAMOS**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **NOT YET INSTALLED**

Surface Completion: **Surface Sleeve Installed**

Water Level: **55 ft.** below land surface on **2007-12-04** Measurement Method: **Unknown**

Packers: **NEOPRENE 105**
**NEOPRENE 107**
**NEOPRENE 125**
**NEOPRENE 127**

Type of Pump: **Submersible** Pump Depth (ft.): **140**

Well Tests: **Jetted** **Yield: 100 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Yes**

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

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

Company Information: **BEE CAVE DRILLING INC**

**185 ANGEL FIRE DR**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **JIM BLAIR** License Number: **54416**

Apprentice Name: **CESAR RAMOS** Apprentice Number: **57534**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **TOPSOIL** |
| **1** | **20** | **CALICHE** |
| **20** | **75** | **BLUE SHALE** |
| **75** | **125** | **RED SANDSTONE** |
| **125** | **155** | **RED ROCK W/B 100 GPM TDS 730** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 NEW PLASTIC 0-135** |
| **4.5 NEW SCREEN MFG 135-155 .050** |

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# STATE OF TEXAS WELL REPORT for Tracking #139600

| | | | |
|---|---|---|---|
| Owner: | **RICK SCHATZ** | Owner Well #: | **No Data** |
| Address: | **23526 HWY 71 W<br>SPICEWOOD, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **HWY 71 W<br>SPICEWOOD, TX 78669** | Latitude: | **30° 24' 48" N** |
| | | Longitude: | **098° 07' 17" W** |
| Well County: | **Travis** | Elevation: | **821 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **3/26/2008** Drilling End Date: **3/26/2008**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **12** |
| **7** | **12** | **195** |

Drilling Method: **Air Hammer**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **6** | **6** |
| **6** | **12** | **5** |

Seal Method: **SLURRIED & POURED**

Sealed By: **BOBBY ROBERTS**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **NOT YET INSTALLED**

Surface Completion: **Surface Sleeve Installed**

Water Level: **138 ft.** below land surface on **2008-03-27** Measurement Method: **Unknown**

Packers: **NEOPRENE 12**
**NEOPRENE 136**
**NEOPRENE 141**

Type of Pump: **Submersible** Pump Depth (ft.): **180**

Well Tests: **Jetted** **Yield: 7 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Yes**

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

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

Company Information: **BEE CAVE DRILLING INC**

**185 ANGELFIRE DR**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **JIM BLAIR** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **TOPSOIL** |
| **2** | **12** | **CALICHE** |
| **12** | **30** | **GRAY LIMESTONE** |
| **30** | **35** | **GREY SHALE** |
| **35** | **45** | **TAN ROCK** |
| **45** | **105** | **GREY CLAY** |
| **105** | **135** | **RED CLAY** |
| **135** | **192** | **TAN ROCK W/B 7 GPM TDS 1700** |
| **192** | **195** | **BLUE SHALE** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **NEW** | **PLASTIC** | **0-155** |
| **4.5** | **NEW** | **SCREEN** | **MFG 155-195 .050** |

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# STATE OF TEXAS WELL REPORT for Tracking #141907

| | | | |
|---|---|---|---|
| Owner: | **LARRY ROTHER** | Owner Well #: | **No Data** |
| Address: | **3601 MISTY CREEK<br>AUSTIN, TX 78735** | Grid #: | **57-39-6** |
| Well Location: | **12700 HWY 71<br>SPICEWOOD, TX 78669** | Latitude: | **30° 25' 45" N** |
| | | Longitude: | **098° 07' 39" W** |
| Well County: | **Travis** | Elevation: | **1000 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **4/16/2008** Drilling End Date: **4/16/2008**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **12** |
| **6.75** | **12** | **375** |

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **6** | **6** |
| **6** | **12** | **5** |

Seal Method: **SLURRIED & POURED**

Sealed By: **BOBBY ROBERTS**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **NOT YET INSTALLED**

Surface Completion: **Surface Sleeve Installed**

Water Level: **288 ft.** below land surface on **2008-04-17** Measurement Method: **Unknown**

Packers: **NEOPRENE 12**
**NEOPRENE 290**
**NEOPRENE 295**

Type of Pump: **Submersible** Pump Depth (ft.): **360**

Well Tests: **Jetted** **Yield: 15 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Yes**

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

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

Company Information: **BEE CAVE DRILLING INC**

**185 ANGELFIRE DR**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **JIM BLAIR** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **TOPSOIL** |
| **2** | **19** | **CALICHE** |
| **19** | **130** | **GRAY LIMESTONE** |
| **130** | **195** | **BROWN CLAY** |
| **195** | **230** | **WHITE ROCK** |
| **230** | **280** | **GRAY SHALE** |
| **280** | **285** | **GRAY ROCK** |
| **285** | **355** | **BROWN ROCK W/B 15 GPM** |
| **355** | **357** | **RED SHALE** |
| **357** | **370** | **BROWN ROCK** |
| **370** | **375** | **BLUE CLAY** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 NEW PLASTIC 0-315** |
| **4.5 NEW SCREEN MFG 315-355 .050** |
| **4.5 NEW PLASTIC 355-375** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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# STATE OF TEXAS WELL REPORT for Tracking #146397

| | | | |
|---|---|---|---|
| Owner: | **Paul Jones** | Owner Well #: | **No Data** |
| Address: | **3500 McNeil Dr<br>Austin, TX 78727** | Grid #: | **57-40-1** |
| Well Location: | **1229 CR 420<br>Spicewood, TX 78669** | Latitude: | **30° 27' 52" N** |
| | | Longitude: | **098° 06' 21" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **5/3/2008** Drilling End Date: **5/3/2008**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **200** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 120', 115', 20'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 7-8 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **127-180** | **Trinity** |

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: **Apex Drilling, Inc**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew J Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **Top Soil** |
| **2** | **10** | **Tan Limestone** |
| **10** | **34** | **Tan Limestone w/ Red Clay** |
| **34** | **80** | **Grey-Tan Limestone** |
| **80** | **102** | **Grey Clay** |
| **102** | **127** | **Red Sandstone** |
| **127** | **135** | **Gravel H2O** |
| **135** | **153** | **Sandstone** |
| **153** | **157** | **Gravel H2O** |
| **157** | **163** | **Sandstone** |
| **163** | **180** | **Gravel H2O** |
| **180** | **183** | **Turquoise Clay** |
| **183** | **200** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5" OD) New PVC +2' to 120' SDR17** |
| **4.5" (5" OD) New Slotted PVC 120' to 180' .035** |

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# STATE OF TEXAS WELL REPORT for Tracking #147063

| | | | |
|---|---|---|---|
| Owner: | **Don Bliss** | Owner Well #: | **No Data** |
| Address: | **P O Box 595<br>Spicewood, TX 78669** | Grid #: | **57-39-6** |
| | | Latitude: | **30° 27' 00" N** |
| Well Location: | **Granite Ridge<br>Spicewood, TX 78669** | Longitude: | **098° 08' 24" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **5/19/2008** Drilling End Date: **5/19/2008**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **340** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 20', 220', 265'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 7 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **265' to 317'** | **Trinity** |

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: **Apex Drilling, Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker, P.G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **12** | **Caliche** |
| **12** | **110** | **Grey Limestone** |
| **110** | **175** | **Tan Sand** |
| **175** | **198** | **White Limestone** |
| **198** | **230** | **Grey Limestone with Clay** |
| **230** | **265** | **Grey Clay** |
| **265** | **294** | **Red Clay Sandstone** |
| **294** | **317** | **Gravel H2O** |
| **317** | **340** | **Tan-Blue Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5" OD) New PVC +2 to 340' SDR17** |
| **4.5" (5" OD) New Slotted PVC 280' to 320' .035** |

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# STATE OF TEXAS WELL REPORT for Tracking #153340

| | | | |
|---|---|---|---|
| Owner: | **GEORGE DODGE** | Owner Well #: | **No Data** |
| Address: | **200 JIM DAVIDSON DR<br>SUGAR LAND, TX 77478** | Grid #: | **57-40-1** |
| Well Location: | **304 HIDDEN HILLS<br>SPICEWOOD, TX 78669** | Latitude: | **30° 27' 32.83" N** |
| Well County: | **Burnet** | Longitude: | **098° 06' 28.3" W** |
| | | Elevation: | **800 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **8/8/2008** Drilling End Date: **8/8/2008**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **12** |
| **6.75** | **12** | **195** |

Drilling Method: **Air Hammer**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **6** | **5** |
| **6** | **12** | **6** |

Seal Method: **SLURRIED & POURED**

Sealed By: **CESAR RAMOS**

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

Distance to Septic Field or other concentrated contamination (ft.): **82**

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

Method of Verification: **TAPE (CITY SEWER)**

Surface Completion: **Surface Sleeve Installed**

Water Level: **102 ft.** below land surface on **2008-08-12** Measurement Method: **Unknown**

Packers: **NEOPRENE 12**
**NEOPRENE 128**
**NEOPRENE 130**

Type of Pump: **Submersible** Pump Depth (ft.): **180**

Well Tests: **Jetted** **Yield: 2 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Yes**

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

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

Company Information: **BEE CAVE DRILLING INC**

**185 ANGELFIRE DR**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **Jim Blair** License Number: **54416**

Apprentice Name: **Cesar Ramos**

Comments: **No Data**

**Report Amended on 3/17/2025 by Request #44642**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **3** | **WHITE ROCK** |
| **3** | **25** | **GRAY LIMESTONE** |
| **25** | **55** | **TAN LIMESTONE** |
| **55** | **65** | **TAN SANDSTONE** |
| **65** | **80** | **TAN LIMESTONE** |
| **80** | **126** | **RED CLAY** |
| **126** | **145** | **WHITE ROCK W/B 2 GPM TDS 400** |
| **145** | **170** | **GRAY ROCK** |
| **170** | **195** | **GRAY SHALE** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 NEW PLASTIC 0-135** |
| **4.5 NEW SCREEN MFG 135-165 .050** |
| **4.5 NEW PLASTIC 165-195** |

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# STATE OF TEXAS WELL REPORT for Tracking #162929

| | | | |
|---|---|---|---|
| Owner: | **CLARK ASPY** | Owner Well #: | **No Data** |
| Address: | **8310 CAP OF TX HWY N, STE 490 AUSTIN, TX 78731** | Grid #: | **57-40-4** |
| | | Latitude: | **30° 26' 35" N** |
| Well Location: | **7 MATHIS CIRCLE SPICEWOOD, TX 78669** | Longitude: | **098° 05' 02" W** |
| Well County: | **Travis** | Elevation: | **715 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **11/25/2008** Drilling End Date: **11/25/2008**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **12** |
| **8** | **12** | **170** |

Drilling Method: **Air Hammer**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **20** |

Seal Method: **PRESSURE CEMENTED**

Sealed By: **CESAR RAMOS**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **NOT YET INSTALLED**

Surface Completion: **Surface Sleeve Installed**

Water Level: **68 ft.** below land surface on **2008-11-26** Measurement Method: **Unknown**

Packers: **NEOPRENE 100**
**NEOPRENE 105**
**NEOPRENE 108**

Type of Pump: **Submersible** Pump Depth (ft.): **150**

Well Tests: **Jetted** **Yield: 30 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Yes**

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

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

Company Information: **BEE CAVE DRILLING INC**

**185 ANGELFIRE DR**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **BOBBY ROBERTS** License Number: **54416**

Apprentice Name: **CESAR RAMOS** Apprentice Number: **57534**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **10** | **FILL** |
| **10** | **20** | **TAN SHALE** |
| **20** | **40** | **SAND** |
| **40** | **60** | **RED SANDSTONE** |
| **60** | **90** | **BLACK ROCK** |
| **90** | **105** | **BLUE SHALE** |
| **105** | **120** | **GREY ROCK** |
| **120** | **170** | **GRAVEL W/B 30 GPM TDS 600** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **NEW** | **PLASTIC** | **0-130** |
| **4.5** | **NEW** | **SCREEN MFG** | **130-170** |

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# STATE OF TEXAS WELL REPORT for Tracking #171112

| | | | |
|---|---|---|---|
| Owner: | **Faught, Sybil** | Owner Well #: | **Faught#1** |
| Address: | **40703 Balcones Woods Drive<br>Austin, TX 78759** | Grid #: | **57-40-4** |
| Well Location: | **25209 Lakeview Drive<br>Spicewood, TX 78669** | Latitude: | **30° 25' 46" N** |
| | | Longitude: | **098° 05' 35" W** |
| Well County: | **Travis** | Elevation: | **616 ft. above sea level** |

****This well has been plugged**** **Plugging Report Tracking #65508**

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **2/2/2009** Drilling End Date: **2/16/2009**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **200** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **70** | **140** | **Gravel** | |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **2** | **45** | **11PL1QUCIKGELCL** |
| **45** | **70** | **1BENSEALCLAY** |

Seal Method: **PRESSURE GROUT**

Sealed By: **Driller**

Distance to Property Line (ft.): **11**

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

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

Method of Verification: **MEASURED**

Surface Completion: **Pitless Adapter Used**

Water Level: **76 ft.** below land surface on **2009-02-04** Measurement Method: **Unknown**

Packers: **GRAVEL PACKED**

Type of Pump: **Submersible** Pump Depth (ft.): **130**

Well Tests: **Pump** **Yield: 1 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **80-140** | **GOOD** |

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: **WHISENANT & LYLE WATER SERVICES**

**P.O. BOX 525**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **MARTIN D LINGLE** License Number: **54813**

Apprentice Name: **GARY S TUCKER** Apprentice Number: **58291**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **topsoil** |
| **1** | **3** | **white limstone hard** |
| **3** | **7** | **gray limestone** |
| **7** | **10** | **yellow limestone** |
| **10** | **15** | **white gray limestone** |
| **15** | **20** | **white limestone yellow clay** |
| **20** | **25** | **red green blue clay** |
| **25** | **45** | **white limestone hard** |
| **45** | **50** | **black clay green** |
| **50** | **112** | **red sand clay** |
| **112** | **128** | **white limestone hard** |
| **128** | **168** | **brown clay** |
| **168** | **195** | **blue green red clay** |
| **195** | **200** | **black clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **N** | **PVC-SDR 17IB** | **+1 - 80** |
| **4.5** | **N** | **SDR-SLOTTED.032** | **80 - 140** |

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# STATE OF TEXAS WELL REPORT for Tracking #171128

| | | | |
|---|---|---|---|
| Owner: | **Faught, Sybil** | Owner Well #: | **Faught#2** |
| Address: | **40703 Balcones Woods Drive<br>Austin, TX 78759** | Grid #: | **57-40-4** |
| | | Latitude: | **30° 25' 44" N** |
| Well Location: | **25209 Lakeview Drive<br>Spicewood, TX 78669** | Longitude: | **098° 05' 40" W** |
| Well County: | **Travis** | Elevation: | **700 ft. above sea level** |
| | | | ****Plugged Within 48 Hours**** |

****This well has been plugged**** **Plugging Report Tracking #123550**

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **2/16/2009** Drilling End Date: **2/16/2009**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **8** | **0** | **120** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **2** | **1PortlandCement** |
| **2** | **120** | **Dry Cuttings** |

Seal Method: **Pour**

Sealed By: **Driller**

Distance to Property Line (ft.): **11**

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

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

Method of Verification: **MEASURED**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

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

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

Company Information: **Whisenant & Lyle Water Service**

**P.O. Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Martin D Lingle** License Number: **54813**

Apprentice Name: **Gary S Tucker** Apprentice Number: **58291**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **topsoil** |
| **1** | **15** | **white rock sand** |
| **15** | **17** | **white limestone hard** |
| **17** | **60** | **red sand clay** |
| **60** | **65** | **red shale** |
| **65** | **85** | **white limestone hard** |
| **85** | **120** | **brown blue red clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #182186

| | | | |
|---|---|---|---|
| Owner: | **C.R.I. Development, attn: Mike Jennings** | Owner Well #: | **No Data** |
| Address: | **2007 Big Canyon Drive Austin, TX 78746** | Grid #: | **57-40-4** |
| Well Location: | **801 Paleface Ranch Rd S Spicewood, TX 78669** | Latitude: | **30° 25' 46" N** |
| Well County: | **Travis** | Longitude: | **098° 06' 22" W** |
| | | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **10/19/2004** Drilling End Date: **10/19/2004**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **30** |
| **6** | **30** | **260** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **30** | **6** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **2 PVC and burlap, 30' and 130'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 2-4 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **30** | **Trinity** |

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: **Western Water Wells, LLC**

**500 Southland Drive**
**Burnet, TX 78611**

Driller Name: **Frank A. Glass** License Number: **1313**

Comments: **$scd**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **3** | **topsoil** |
| **3** | **22** | **clay** |
| **22** | **30** | **blue lime** |
| **30** | **55** | **white lime** |
| **55** | **120** | **gray lime and clay** |
| **120** | **200** | **red beds Trinity** |
| **200** | **260** | **blue clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **5** | **OD** | **N plastic** | **+2-260 sch40** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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# STATE OF TEXAS WELL REPORT for Tracking #184974

| | | | |
|---|---|---|---|
| Owner: | **Carl Jones** | Owner Well #: | **1** |
| Address: | **2525 Bainbridge Street<br>Odessa, TX 79762** | Grid #: | **57-40-4** |
| Well Location: | **24017 Haynie Flat Road<br>Spicewood, TX 78669** | Latitude: | **30° 27' 17" N** |
| | | Longitude: | **098° 05' 00" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **5/27/2009** Drilling End Date: **5/28/2009**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **8** | **0** | **205** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **125** | **30** |

Seal Method: **Tremie**

Sealed By: **ADC**

Distance to Property Line (ft.): **31**

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

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

Method of Verification: **measured**

Surface Completion: **Surface Sleeve Installed**

Water Level: **97 ft.** below land surface on **2009-06-13** Measurement Method: **Unknown**

Packers: **neophrene/burlap 125'**

Type of Pump: **Submersible** Pump Depth (ft.): **100**

Well Tests: **Estimated** **Yield: 10 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **125'-205'** | **Trinity** |

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: **Associated Drilling Co.**

**PO Box 1060**
**Manchaca, TX 78652**

Driller Name: **Byron Benoit** License Number: **1955**

Apprentice Name: **Frank Barnard** Apprentice Number: **56366**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **topsoil** |
| **1** | **125** | **tan lime** |
| **125** | **205** | **broken red sandstone** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5" New Plastic -2' to 205' sdr17** | | | |
| **slotted 125'-205'** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #185363

Owner: **HARRY NETTI**

Address: **3 ASHBROOK PLACE AUSTIN, TX 78738**

Well Location: **3000 FALL CREEK ESTATES DR. SPICEWOOD, TX 78669**

Well County: **Travis**

Owner Well #: **001**

Grid #: **57-40-7**

Latitude: **30° 24' 25" N**

Longitude: **098° 06' 56" W**

Elevation: **813 ft. above sea level**

****Plugged Within 48 Hours****

****This well has been plugged****

**Plugging Report Tracking #124614**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **5/19/2009** Drilling End Date: **5/19/2009**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **12** |
| **6.75** | **12** | **230** |

Drilling Method: **Air Hammer**

Borehole Completion: **Unknown**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

Sealed By: **Unknown**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **NONE**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 0 GPM**

Plug Information:

| *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **0 - 1 TOPSOIL** | | |
| **1 - 3 CEMENT (2)** | | |

| | | |
|---|---|---|
| **3 - 230 CUTTINGS** | | |

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: **BEE CAVE DRILLING INC**

**185 ANGELFIRE DR**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **BOBBY ROBERTS** License Number: **54416**

Apprentice Name: **CESAR RAMOS** Apprentice Number: **57534**

Comments: **Amended 7/20/09 Ref.#7314**

**Report Amended on by Request #7314**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| *Top (ft.)* | *Bottom (ft.)* | *Description* |
|---|---|---|
| **0** | **1** | **TOPSOIL** |
| **1** | **28** | **GREY ROCK** |
| **28** | **30** | **CAVE** |
| **30** | **65** | **ROCK** |
| **65** | **100** | **CLAY** |
| **100** | **105** | **SANDSTONE** |
| **105** | **150** | **CLAY** |
| **150** | **220** | **ROCK** |
| **220** | **230** | **CLAY** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| *Dia. (in.)* | *New/Used* | *Type* | *Setting From/To (ft.)* |
|---|---|---|---|
| **NONE** | | | |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #185366

| | | | |
|---|---|---|---|
| Owner: | **HARRY NETTI** | Owner Well #: | **002** |
| Address: | **3 ASHBROOK PLACE<br>AUSTIN, TX 78738** | Grid #: | **57-40-7** |
| Well Location: | **3000 FALL CREEK ESTATES DR.<br>SPICEWOOD, TX 78669** | Latitude: | **30° 24' 25" N** |
| | | Longitude: | **098° 05' 56" W** |
| Well County: | **Travis** | Elevation: | **813 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **5/19/2009** Drilling End Date: **5/19/2009**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **12** |
| **6.75** | **12** | **265** |

Drilling Method: **Air Hammer**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **6** | **5 CEMENT** |
| **6** | **12** | **4 BENTONITE** |

Seal Method: **SLURRIED & POURED**

Sealed By: **CESAR RAMOS**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **NOT YET INSTALLED**

Surface Completion: **Surface Sleeve Installed**

Water Level: **154 ft.** below land surface on **2009-05-21** Measurement Method: **Unknown**

Packers: **NEOPRENE 12**
**NEOPRENE 145**
**NEOPRENE 150**

Type of Pump: **Submersible** Pump Depth (ft.): **240**

Well Tests: **Jetted** **Yield: 2 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

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

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

Company Information: **BEE CAVE DRILLING INC**

**185 ANGELFIRE DR**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **BOBBY ROBERTS** License Number: **54416**

Apprentice Name: **CESAR RAMOS** Apprentice Number: **57534**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **TOPSOIL** |
| **1** | **65** | **WHITE ROCK** |
| **65** | **105** | **BLUE SHALE** |
| **105** | **115** | **RED SANDSTONE** |
| **115** | **165** | **SAND & GRAVEL W/B 2 GPM** |
| **165** | **185** | **BLACK ROCK** |
| **185** | **191** | **PURPLE SHALE** |
| **191** | **230** | **TAN CLAY** |
| **230** | **250** | **BLUE CLAY** |
| **250** | **265** | **GREY SHALE** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 NEW PLASTIC 0 - 150** |
| **4.5 NEW SCREEN MFG. 150 - 190 .050** |
| **4.5 NEW PLASTIC 190 - 265** |

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# STATE OF TEXAS WELL REPORT for Tracking #188861

| | | | |
|---|---|---|---|
| Owner: | **Richard Ragland** | Owner Well #: | **No Data** |
| Address: | **1133 CR 420<br>Spicewood, TX 78669** | Grid #: | **57-40-1** |
| | | Latitude: | **30° 27' 49" N** |
| Well Location: | **1133 CR 4420<br>Spicewood, TX 78669** | Longitude: | **098° 06' 30" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |
| | | ****Plugged Within 48 Hours**** | |

****This well has been plugged**** **Plugging Report Tracking #124928**

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **7/20/2009** Drilling End Date: **7/20/2009**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **6.75** | **0** | **155** |

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **15** | **1 cement** |

Seal Method: **gravity cemented**

Sealed By: **Driller**

Distance to Property Line (ft.): **>75**

Distance to Septic Field or other concentrated contamination (ft.): **125**

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

Method of Verification: **estimated**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **none**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 0 GPM**

| | *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Plug Information: | **no casing 0 - 15 cement 1 sack** | | |

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **n/a** | **n/a** |

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: **L & L Drilling Co.**

**P.O. Box 217**
**Hye, TX 78635**

Driller Name: **Gregory A. Smith** License Number: **1595**

Apprentice Name: **Lynette Smith** Apprentice Number: **56980**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **topsoil** |
| **1** | **9** | **yellow clay** |
| **9** | **14** | **white limestone & caliche** |
| **14** | **16** | **yellow limestone & caliche** |
| **16** | **38** | **gray limestone & gray shale** |
| **38** | **54** | **gray limestone** |
| **54** | **74** | **gray shale & clay** |
| **74** | **76** | **gray limestone with some brown** |
| **76** | **88** | **gray shale & clay** |
| **88** | **109** | **brown & red clay** |
| **109** | **112** | **gravel** |
| **124** | **128** | **gravel** |
| **128** | **146** | **red, white & brown limestone** |
| **146** | **147** | **gravel** |
| **147** | **151** | **red, white & brown limestone** |
| **151** | **155** | **yellow shale** |
| **1112** | **124** | **red clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **none** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #188862

| | | | |
|---|---|---|---|
| Owner: | **Richard Ragland** | Owner Well #: | **No Data** |
| Address: | **1133 CR 420<br>Spicewood, TX 78669** | Grid #: | **57-40-1** |
| Well Location: | **1133 CR 4420<br>Spicewood, TX 78669** | Latitude: | **30° 27' 51" N** |
| | | Longitude: | **098° 06' 28" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **7/20/2009** Drilling End Date: **7/20/2009**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8.75** | **0** | **25** |
| **6.75** | **25** | **185** |

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **25** | **2 cement** |

Seal Method: **gravity cemented**

Sealed By: **Driller**

Distance to Property Line (ft.): **>75**

Distance to Septic Field or other concentrated contamination (ft.): **125**

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

Method of Verification: **estimated**

Surface Completion: **Surface Sleeve Installed**

Water Level: **170 ft.** below land surface on **2009-07-20** Measurement Method: **Unknown**

Packers: **poor boy 25'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 2 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **145** | **800 TDS** |

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: **L & L Drilling Co.**

**P.O. Box 217**
**Hye, TX 78635**

Driller Name: **Gregory A. Smith** License Number: **1595**

Apprentice Name: **Lynette Smith** Apprentice Number: **56980**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **topsoil** |
| **1** | **3** | **brown clay** |
| **3** | **8** | **yellow limestone & caliche** |
| **8** | **13** | **yellow clay** |
| **13** | **18** | **yellow limestone** |
| **18** | **21** | **gray limestone** |
| **21** | **23** | **gray shale & clay** |
| **23** | **26** | **black limestone** |
| **26** | **37** | **gray limestone** |
| **37** | **39** | **gray & brown limestone** |
| **39** | **56** | **gray limestone** |
| **56** | **89** | **gray shale & clay with layers of gray limestone** |
| **89** | **104** | **red clay** |
| **104** | **106** | **gravel** |
| **106** | **128** | **red clay** |
| **128** | **129** | **gravel** |
| **129** | **134** | **red, white & brown limestone** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **5** | **new** | **plastic** | **solid 0 - 104 0.265** |
| **5** | **new** | **plastic** | **slotted 104 - 108 0.265** |
| **5** | **new** | **plastic** | **solid 108 - 125 0.265** |
| **5** | **new** | **plastic** | **slotted 125 - 165 0.265** |
| **5** | **new** | **plastic** | **solid 165 - 185 0.265** |

| | | |
|---|---|---|
| **134** | **137** | **yellow limestone** |
| **137** | **147** | **red, white & brown limestone** |
| **145** | **165** | **water 2 gpm** |
| **147** | **150** | **gravel** |
| **150** | **163** | **gravel & red, white & brown limestone** |
| **163** | **185** | **yellow shale** |

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# STATE OF TEXAS WELL REPORT for Tracking #194388

Owner: **LARRY CONWELL**

Address: **109 DUCK DRIVE LAKEWAY, TX 78734**

Well Location: **26601 HWY 71 WEST SPICEWOOD, TX 78669**

Well County: **Travis**

Owner Well #: **001**

Grid #: **57-40-7**

Latitude: **30° 24' 58" N**

Longitude: **098° 07' 22" W**

Elevation: **840 ft. above sea level**

****Plugged Within 48 Hours****

****This well has been plugged****

**Plugging Report Tracking #125283**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **8/7/2009** Drilling End Date: **8/7/2009**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **10** | **0** | **12** |

Drilling Method: **Air Hammer; Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

Sealed By: **CESAR RAMOS**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 0 GPM**

Plug Information:

| *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **0 5 4 CEMENT** | | |
| **5 230 CUTTINGS** | | |

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Yes**

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

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

Company Information: **BEE CAVE DRILLING**

**185 ANGEL FIRE DR.**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **JIM BLAIR** License Number: **54416**

Apprentice Name: **CESAR RAMOS** Apprentice Number: **3090**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| **0** | **1** | **TOPSOIL** |
| **1** | **12** | **CALICHE** |
| **12** | **60** | **TAN ROCK** |
| **60** | **90** | **BLUE SHALE** |
| **90** | **100** | **RED SHALE** |
| **100** | **130** | **RED SHALE AND RED SANDSTONE** |
| **130** | **188** | **BLACK, BROWN, AND WHITE ROCK** |
| **188** | **230** | **YELLOW AND TAN CLAY** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #194390

| | | | |
|---|---|---|---|
| Owner: | **LARRY CONWELL** | Owner Well #: | **002** |
| Address: | **109 DUCK DRIVE<br>LAKEWAY, TX 78734** | Grid #: | **57-40-7** |
| Well Location: | **26601 HWY. 71 WEST<br>SPICEWOOD, TX 78669** | Latitude: | **30° 24' 58" N** |
| | | Longitude: | **098° 07' 22" W** |
| Well County: | **Travis** | Elevation: | **811 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **8/7/2009** Drilling End Date: **8/7/2009**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **12** |
| **6.75** | **12** | **185** |

Drilling Method: **Air Hammer; Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **10** | **8 CEMENT** |
| **10** | **50** | **15 BENTONITE** |

Seal Method: **SLURRIED & POURED**

Sealed By: **CESAR RAMOS**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

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

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Yes**

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

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

Company Information: **BEE CAVE DRILLING**

**185 ANGEL FIRE DR.**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **JIM BLAIR** License Number: **54416**

Apprentice Name: **CESAR RAMOS** Apprentice Number: **3090**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| **0** | **8** | **SURFACE ROCK** |
| **8** | **12** | **WHITE ROCK** |
| **12** | **30** | **GREY ROCK** |
| **30** | **90** | **BLUE SHALE** |
| **90** | **105** | **RED SHALE** |
| **105** | **110** | **SAND** |
| **110** | **165** | **BLACK, BROWN, AND WHITE** |
| **ROCK WB 5GPM** | | |
| **165** | **185** | **YELLOW AND TAN CLAY** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **NEW** | **PLASTIC** | **0 125** |
| **4.5** | **NEW** | **SCREEN MFG.** | **125 165** |
| **4.5** | **NEW** | **PLASTIC** | **165 185** |

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# STATE OF TEXAS WELL REPORT for Tracking #197486

| | | | |
|---|---|---|---|
| Owner: | **Chip Buerger** | Owner Well #: | **No Data** |
| Address: | **2809 N. Buerger Road<br>Austin, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **2510 Fall Creek Road<br>Spicewood, TX** | Latitude: | **30° 24' 22" N** |
| | | Longitude: | **098° 07' 19" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **1/24/2005** Drilling End Date: **1/24/2005**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **30** |
| **6** | **30** | **210** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **30** | **7** |

Seal Method: **Slurry**

Sealed By: **Western Water Wells**

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

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

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

Method of Verification: **owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **2 PVC & Burlap 30',140'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 5-8 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **20** | **Trinity** |

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: **Western Water Wells, LLC**

**500 Southland Drive**
**Burnet, TX 78611**

Driller Name: **Frank Glass** License Number: **1313**

Comments: **$dfs**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **12** | **Clay** |
| **12** | **40** | **Brown Crystal Lime** |
| **40** | **50** | **Blue Lime,hard** |
| **50** | **80** | **Gray Lime and Blue Clay** |
| **80** | **115** | **Hammond** |
| **115** | **135** | **Red and Blue Clay** |
| **135** | **140** | **Gravel** |
| **140** | **210** | **Red Bed Trinity** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **5 New Plastic +2 210 40 & 17** |

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# STATE OF TEXAS WELL REPORT for Tracking #199176

| | | | |
|---|---|---|---|
| Owner: | **Jim Madigan** | Owner Well #: | **No Data** |
| Address: | **20808 B Hwy 71<br>Spicewood, TX 78669** | Grid #: | **57-40-1** |
| | | Latitude: | **30° 28' 06" N** |
| Well Location: | **1020 CR 414<br>Spicewood, TX 78669** | Longitude: | **098° 06' 53" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **7/16/2009** Drilling End Date: **7/16/2009**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **165** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 103, 100, 20**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 1 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **103-145** | **Trinity** |

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: **Apex Drilling, Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker, P.G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **8** | **White Limestone** |
| **8** | **21** | **Sand and Clay** |
| **21** | **40** | **Tan & White Limestone** |
| **40** | **72** | **Clay** |
| **72** | **85** | **Red Clay** |
| **85** | **95** | **Gravel** |
| **95** | **103** | **Red Clay & Sand** |
| **103** | **145** | **Gravel & H2O** |
| **145** | **165** | **Tan & Blue Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5" OD) New PVC + 2' to 105' SDR17** |
| **4.5" (5" OD) New Slotted PVC 105' to 145' .035** |
| **4.5" (5" OD) New PVC 145' to 165' SDR17** |

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# STATE OF TEXAS WELL REPORT for Tracking #200198

| | | | |
|---|---|---|---|
| Owner: | **Austin Golf Club- Irrigation** | Owner Well #: | **TestWell#24** |
| Address: | **25400 HWY 71 W Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **25400 HWY 71 W Spicewood, TX 78669** | Latitude: | **30° 24' 46" N** |
| | | Longitude: | **098° 06' 45" W** |
| Well County: | **Travis** | Elevation: | **763 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Irrigation** |

Drilling Start Date: **10/20/2009** Drilling End Date: **10/20/2009**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **6.75** | **0** | **202** |

Drilling Method: **Air Hammer**

Borehole Completion: **Unknown**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

Sealed By: **Unknown**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Unknown**

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

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

Company Information: **Whisenant & Lyle Water Service Inc**

**P.O. Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Martin D Lingle** License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **topsoil** |
| **2** | **20** | **white limestone hard** |
| **20** | **70** | **grey limestone granite** |
| **70** | **100** | **clay shale grey** |
| **100** | **140** | **red clay red granite** |
| **140** | **200** | **granite gravel** |
| **200** | **202** | **black clay (smith wick)** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #200203

| | | | |
|---|---|---|---|
| Owner: | **Austin Golf Club- Irrigation** | Owner Well #: | **TestWell#25** |
| Address: | **25400 HWY 71 W Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **25400 HWY 71 W Spicewood, TX 78669** | Latitude: | **30° 24' 42" N** |
| | | Longitude: | **098° 05' 51" W** |
| Well County: | **Travis** | Elevation: | **764 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Irrigation** |

Drilling Start Date: **10/20/2009** Drilling End Date: **10/20/2009**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **6.75** | **0** | **245** |

Drilling Method: **Air Hammer**

Borehole Completion: **Unknown**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

Sealed By: **Unknown**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Unknown**

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

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

Company Information: **Whisenant & Lyle Water Services Inc**

**P.O. Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Martin D Lingle** License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **3** | **topsoil** |
| **3** | **11** | **white limestone hard** |
| **11** | **15** | **red granite sandstone** |
| **15** | **20** | **white brown limestone** |
| **20** | **30** | **brown limestone** |
| **30** | **40** | **brown white limestone** |
| **40** | **70** | **grey limestone** |
| **70** | **80** | **grey shale limestone** |
| **80** | **109** | **brown shale grey limestone** |
| **109** | **205** | **red granite gravel** |
| **205** | **218** | **brown limestone** |
| **218** | **220** | **blue shale** |
| **220** | **245** | **red granite sandstone** |
| **245** | **250** | **black (smith wick)** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #202458

| | | | |
|---|---|---|---|
| Owner: | **ENCINO HOMES** | Owner Well #: | **001** |
| Address: | **110 WINCHESTER<br>DRIPPING SPRINGS, TX 78620** | Grid #: | **57-40-4** |
| Well Location: | **LOT 3 PALEFACE RANCH RD<br>SPICEWOOD, TX 78669** | Latitude: | **30° 26' 27" N** |
| | | Longitude: | **098° 06' 43" W** |
| Well County: | **Travis** | Elevation: | **795 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **11/19/2009** Drilling End Date: **11/19/2009**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **12** |
| **6.75** | **12** | **190** |

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **10** | **8 CEMENT** |
| **10** | **17** | **4 BENTONITE** |

Seal Method: **SLURRIED & POURED**

Sealed By: **CESAR RAMOS**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **NOT YET INSTALLED**

Surface Completion: **Surface Sleeve Installed**

Water Level: **16 ft.** below land surface on **2009-11-25** Measurement Method: **Unknown**

Packers: **1 NEOPRENE 17Æ**

Type of Pump: **Submersible** Pump Depth (ft.): **70**

Well Tests: **Jetted** **Yield: 15 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Yes**

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

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

Company Information: **BEE CAVE DRILLING**

**185 ANGEL FIRE DR.**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **JIM BLAIR** License Number: **54416**

Apprentice Name: **CESAR RAMOS** Apprentice Number: **3090**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **TOPSOIL** |
| **2** | **15** | **CALICHE** |
| **15** | **60** | **WHITE ROCK W/B 15 GPM TDS 400** |
| **60** | **100** | **BLUE SHALE** |
| **100** | **125** | **TAN CLAY** |
| **125** | **140** | **BLACK ROCK** |
| **140** | **150** | **TAN CLAY** |
| **150** | **180** | **RED ROCK** |
| **180** | **190** | **BLUE SHALE** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **NEW** | **PLASTIC** | **0 20** |
| **4.5** | **NEW** | **PLASTIC** | **20 60 .050** |
| **4.5** | **NEW** | **PLASTIC** | **60 80** |

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# STATE OF TEXAS WELL REPORT for Tracking #202492

Owner: **ENCINO HOMES**

Address: **110 WINCHESTER**
**DRIPPING SPRINGS, TX 78620**

Well Location: **LOT 3 PALEFACE RANCH RD.**
**SPICEWOOD, TX 78669**

Well County: **Travis**

Owner Well #: **002**

Grid #: **57-40-4**

Latitude: **30° 26' 29" N**

Longitude: **098° 05' 53" W**

Elevation: **796 ft. above sea level**

****Plugged Within 48 Hours****

****This well has been plugged****

**Plugging Report Tracking #125869**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **11/19/2009** Drilling End Date: **11/19/2009**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **12** |
| **6.75** | **12** | **230** |

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

Sealed By: **CESAR RAMOS**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Jetted** **No Test Data Specified**

Plug Information:

| *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **0 1 TOPSOIL** | | |
| **1 3 CEMEMT 2** | | |

| | | |
|---|---|---|
| **3 230 CUTTINGS** | | |

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: **BEE CAVE DRILLING**

**185 ANGEL FIRE DR.**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **JIM BLAIR** License Number: **54416**

Apprentice Name: **CESAR RAMOS** Apprentice Number: **3090**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| *Top (ft.)* | *Bottom (ft.)* | *Description* |
|---|---|---|
| **0** | **2** | **TOPSOIL** |
| **2** | **15** | **CALICHE** |
| **15** | **25** | **WHITE ROCK** |
| **25** | **75** | **GRAY LIMESTONE** |
| **75** | **105** | **GRAY CLAY** |
| **105** | **120** | **TAN CLAY** |
| **120** | **150** | **RED CLAY** |
| **150** | **157** | **RED ROCK** |
| **157** | **165** | **TAN CLAY** |
| **165** | **200** | **BLUE CLAY** |
| **200** | **210** | **GRAVEL** |
| **210** | **230** | **BLUE CLAY** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| *Dia. (in.)* | *New/Used* | *Type* | *Setting From/To (ft.)* |
|---|---|---|---|
| **No Data** | | | |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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**P.O. Box 12157**
**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #207661

| | | | |
|---|---|---|---|
| Owner: | **Joe Wyatt** | Owner Well #: | **WLB-01** |
| Address: | **2917 Marina Shores Drive<br>Spicewood, TX 78669** | Grid #: | **57-40-1** |
| Well Location: | **Marina Shores Drive<br>Spicewood, TX 78669** | Latitude: | **30° 28' 15" N** |
| | | Longitude: | **098° 05' 45" W** |
| Well County: | **Travis** | Elevation: | **758 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Monitor** |

Drilling Start Date: **12/16/2009** Drilling End Date: **12/16/2009**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **4** | **0** | **30** |

Drilling Method: **Bored**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **5** | **30** | **Gravel** | **20/40 Sand** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **2** | **1 Ready Mix** |
| **2** | **5** | **1 Bentonite** |
| **5** | **30** | **3 Bags Sand** |

Seal Method: **Poured**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Surface Slab Installed**

Water Level: **22.2 ft.** below land surface on **2009-12-16** Measurement Method: **Unknown**

Packers: **None**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

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

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

Company Information: **Holt Engineering, Inc.**

**2220 Barton Skyway**
**Austin, TX 78704**

Driller Name: **John Webb** License Number: **3023**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| **0** | **.1** | **Brick Pavers** |
| **.1** | **.3** | **Sand Base** |
| **.3** | **5** | **Fill-Tan & light brown** |
| **5** | **23.3** | **Limestone, tan & light brown** |
| **23.3** | **30** | **Clay, greenish tan** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **2"** | **New** | **Plastic** | **0 Ft. to 10 Ft.** |
| **2"** | **New** | **Slotted** | **10 Ft. to 30 Ft.** |

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# STATE OF TEXAS WELL REPORT for Tracking #207669

| | | | |
|---|---|---|---|
| Owner: | **Joe Wyatt** | Owner Well #: | **WLB-02** |
| Address: | **2917 Marina Shores Drive Spicewood, TX 78669** | Grid #: | **57-40-1** |
| Well Location: | **Marina Shores Drive Spicewood, TX 78669** | Latitude: | **30° 28' 14" N** |
| | | Longitude: | **098° 05' 44" W** |
| Well County: | **Travis** | Elevation: | **758 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Monitor** |

Drilling Start Date: **12/16/2009** Drilling End Date: **12/16/2009**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **4** | **0** | **35** |

Drilling Method: **Bored**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **3** | **35** | **Gravel** | **20/40 Sand** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **2** | **1 Ready Mix** |
| **2** | **3** | **1 Bentonite** |
| **3** | **35** | **3.5 Bags Sand** |

Seal Method: **Poured**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Surface Slab Installed**

Water Level: **34.7 ft.** below land surface on **2009-12-18** Measurement Method: **Unknown**

Packers: **None**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

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

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

Company Information: **Holt Engineering, Inc.**

**2220 Barton Skyway**
**Austin, TX 78704**

Driller Name: **John Webb** License Number: **3023**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **0.1** | **Asphalt** |
| **0.1** | **0.9** | **Base Tan** |
| **0.9** | **1.4** | **Fill Light brown** |
| **1.4** | **2** | **Clayey silt Tan** |
| **2** | **28.5** | **Limestone Tan** |
| **28.5** | **35** | **Clayshale Gray** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **2" New Plastic 0 Ft. to 10 Ft.** |
| **2" New Slotted 10 Ft. to 35 Ft.** |

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# STATE OF TEXAS WELL REPORT for Tracking #217963

| | | | |
|---|---|---|---|
| Owner: | **SHERRY ELLENBOGEN** | Owner Well #: | **001** |
| Address: | **1327 LAKESHORE DR. SPICEWOOD, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **1327 LAKESHORE DR. SPICEWOOD, TX 78669** | Latitude: | **30° 26' 44" N** |
| | | Longitude: | **098° 04' 59" W** |
| Well County: | **Travis** | Elevation: | **716 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **4/14/2010** Drilling End Date: **4/14/2010**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **12** |
| **8** | **12** | **15** |

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **2** | **3 CEMENT** |
| **2** | **85** | **9 CEMENT** |

Seal Method: **PRESSURE CEMENTED**

Sealed By: **Driller**

Distance to Property Line (ft.): **150**

Distance to Septic Field or other concentrated contamination (ft.): **80**

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

Method of Verification: **STEEL TAPE**

Surface Completion: **Surface Sleeve Installed**

Water Level: **31 ft.** below land surface on **2010-04-15** Measurement Method: **Unknown**

Packers: **1 NEOPRENE 85**
**1 NEOPRENE 87**

Type of Pump: **Submersible** Pump Depth (ft.): **90**

Well Tests: **Jetted** **Yield: 150 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Yes**

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

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

Company Information: **BEE CAVE DRILLING**

**185 ANGLE FIRE DR.**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **BOBBY ROBERTS** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **TOPSOIL** |
| **2** | **10** | **FILL** |
| **10** | **45** | **BROWN CLAY** |
| **45** | **60** | **BROWN ROCK** |
| **60** | **70** | **BROWN SHALE** |
| **70** | **80** | **BROWN ROCK** |
| **80** | **85** | **BROWN CLAY** |
| **85** | **105** | **BROWN ROCK W/B 150 TDS 500** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **NEW** | **PLASTIC** | **0 TO 85** |
| **4.5** | **NEW** | **SCREEN MFG** | **85 TO 105 .050** |

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# STATE OF TEXAS WELL REPORT for Tracking #219164

| | | | |
|---|---|---|---|
| Owner: | **Billy Meyer** | Owner Well #: | **1** |
| Address: | **P O Box 8157<br>Llano, TX 76714** | Grid #: | **57-40-7** |
| Well Location: | **3220 Fall Creek Estates<br>Spicewood, TX 78669** | Latitude: | **30° 24' 13" N** |
| | | Longitude: | **098° 06' 44" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **5/18/2010** Drilling End Date: **5/18/2010**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **225** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 140, 135, 100, 20**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 2 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **101-210** | **Trinity** |

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: **Apex Drilling, Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker, P.G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Topsoil** |
| **1** | **38** | **Tan Limestone** |
| **38** | **57** | **Gray & Tan Limestone** |
| **57** | **101** | **Gray Limestone w/Clay** |
| **101** | **141** | **Red Sandstone** |
| **141** | **210** | **Gravel** |
| **210** | **225** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5" OD) New PVC + 2' to 150' SDR17** |
| **4.5" (5" OD) New Slotted PVC 150' to 210' .035** |
| **4.5" (5" OD) New PVC 210' to 225' SDR17** |

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# STATE OF TEXAS WELL REPORT for Tracking #221177

| | | | |
|---|---|---|---|
| Owner: | **Pat Di Iorio** | Owner Well #: | **1** |
| Address: | **3525 Katy Hockley Rd<br>Katy, TX 77493** | Grid #: | **57-40-4** |
| Well Location: | **25215 Lakeview Dr<br>Spicewood, TX 78669** | Latitude: | **30° 25' 51" N** |
| | | Longitude: | **098° 05' 22" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **6/2/2010** Drilling End Date: **6/2/2010**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **8** | **0** | **125** |

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

Borehole Completion: **Straight Wall**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **84** | **9 of Portland** |

Seal Method: **Pressure Tremmie**

Sealed By: **Driller**

Distance to Property Line (ft.): **6**

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 84, 80**

Type of Pump: **No Data**

Well Tests: **Estimated** **Yield: 25 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **Trinity** |

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: **Apex Drilling, Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **5** | **Gravel** |
| **5** | **17** | **Sand** |
| **17** | **20** | **Gravel** |
| **20** | **48** | **Red Sandy Clay** |
| **48** | **55** | **Red Sand** |
| **55** | **66** | **Red Sandstone & Clay** |
| **66** | **67** | **Turquoise Clay** |
| **67** | **71** | **Red Clay** |
| **71** | **82** | **Tan Limestone** |
| **82** | **84** | **Tan Clay** |
| **84** | **105** | **Gravel & H2O** |
| **105** | **115** | **Tan Clay** |
| **115** | **125** | **Blue Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5" OD) New PVC + 2' to 85' SDR17** |
| **4.5" (5" OD) New Slotted PVC 85' to 105' .035** |
| **4.5" (5" OD) New PVC 105' to 125' SDR17** |

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# STATE OF TEXAS WELL REPORT for Tracking #221198

| | | | |
|---|---|---|---|
| Owner: | **Charles Meek** | Owner Well #: | **No Data** |
| Address: | **2809M Fall Creek Road Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **2809M Fall Creek Road Spicewood, TX 78669** | Latitude: | **30° 24' 02" N** |
| | | Longitude: | **098° 07' 11" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **1/13/2010** Drilling End Date: **1/13/2010**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **20** |
| **6.5** | **20** | **265** |

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **6** |

Seal Method: **hand poured**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **300**

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

Method of Verification: **tape measure**

Surface Completion: **Surface Sleeve Installed**

Water Level: **70 ft.** below land surface on **2010-01-13** Measurement Method: **Unknown**

Packers: **shale trap 180',20'**

Type of Pump: **Submersible none** Pump Depth (ft.): **200**

Well Tests: **Pump** **Yield: 0 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

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

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

Company Information: **Tom Arnold Drilling**

**2750 South A. W. Grimes Blvd**
**Round Rock, TX 78664**

Driller Name: **Tommy Arnold** License Number: **2096**

Comments: **^NK**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **top soil** |
| **1** | **3** | **red clay** |
| **3** | **12** | **yellow sand** |
| **12** | **33** | **yellow sandstone** |
| **33** | **36** | **red shale** |
| **36** | **39** | **yellow sandstone** |
| **39** | **42** | **red clay** |
| **42** | **67** | **yellow sandstone** |
| **67** | **84** | **gray sandstone** |
| **84** | **109** | **blue shale** |
| **109** | **117** | **red clay** |
| **117** | **140** | **blue clay** |
| **140** | **147** | **red clay** |
| **147** | **151** | **purple shale** |
| **151** | **170** | **red shale** |
| **170** | **180** | **red sandstone** |
| **180** | **220** | **cemented gravel** |
| **220** | **235** | **white limestone** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **6** | **New** | **Plastic** | **0-20** |
| **4.5** | **New** | **Plastic** | **0-265** |
| **4.5** | | **Perf.** | **205-235** |

| | | |
|---|---|---|
| **235** | **265** | **blue shale** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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# STATE OF TEXAS WELL REPORT for Tracking #222768

| | | | |
|---|---|---|---|
| Owner: | **MIKE TYSON** | Owner Well #: | **No Data** |
| Address: | **2704 FALL CREEK ESTATES DR. SPICEWOOD, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **2704 FALL CREEK ESTATES DR. SPICEWOOD, TX 78669** | Latitude: | **30° 24' 35" N** |
| | | Longitude: | **098° 06' 57" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **4/26/2010** Drilling End Date: **4/26/2010**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **30** |
| **6.5** | **30** | **240** |

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **40** | **10 CEMENT** |
| **0** | **40** | **6 VOLCLAY** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **N/A**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **WELL DRILLED FIRST**

Surface Completion: **Surface Sleeve Installed**

Water Level: **187 ft.** below land surface on **2010-04-26** Measurement Method: **Unknown**

Packers: **5 BURLAP,PVC,RUBBER 40',100',120',160',200'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 2-3 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **30** | **TRINITY** |

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: **CENTEX PUMP & SUPPLY, INC.**

**2520 HWY. 290 WEST**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **AARON GLASS** License Number: **4227**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| 0 | 1 | TOP SOIL |
| 1 | 10 | TAN LIMESTONE/CALICHE |
| 10 | 30 | GRAY/TAN LIMESTONE |
| 30 | 50 | GRAY LIMESTONE |
| 50 | 60 | GRAY LIMESTONE W/CLAY |
| 60 | 70 | GRAY LIMESTONE |
| 70 | 95 | HAMMETT CLAY |
| 95 | 120 | RED CLAY |
| 120 | 130 | RED SANDSTONE |
| 130 | 160 | SAND & GRAVEL W/CLAY |
| | | STRIPS |
| 160 | 210 | SAND & GRAVEL |
| 210 | 220 | SAND W/CLAY STRIPS |
| 220 | 240 | BLUE/YELLOW CLAY |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| 5" | OD | N SDR17 PVC | +3 TO 240 |
| 5" | OD | N SDR17 PVC SLOT | 160 TO 200 .032 |

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# STATE OF TEXAS WELL REPORT for Tracking #222818

| | | | |
|---|---|---|---|
| Owner: | **David & Sue Williams** | Owner Well #: | **3** |
| Address: | **25211 W. Hwy 71 Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **25211 W. Hwy 71 Spicewood, TX 78669** | Latitude: | **30° 24' 10" N** |
| | | Longitude: | **098° 06' 12" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **6/18/2010** Drilling End Date: **6/21/2010**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **120** |
| **8** | **120** | **265** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **120** | **49** |

Seal Method: **Tremie**

Sealed By: **ADC**

Distance to Property Line (ft.): **500+**

Distance to Septic Field or other concentrated contamination (ft.): **200+**

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

Method of Verification: **measured**

Surface Completion: **Surface Sleeve Installed**

Water Level: **165 ft.** below land surface on **2010-07-01** Measurement Method: **Unknown**

Packers: **neophrene 120'**

Type of Pump: **Submersible** Pump Depth (ft.): **240**

Well Tests: **Estimated** **Yield: 12 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **140'-227'** | **Trinity** |

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: **Associated Drilling Co.**

**P.O. Box 1060**
**Manchaca, TX 78652**

Driller Name: **Byron Benoit** License Number: **1955**

Apprentice Name: **Frank Barnard** Apprentice Number: **56366**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **topsoil** |
| **1** | **47** | **tan caliche** |
| **47** | **140** | **gray limestone** |
| **140** | **227** | **broken red sandstone** |
| **227** | **265** | **shale** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" new plastic -2' to 265' sdr17** |
| **slotted 140'-227'** |

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# STATE OF TEXAS WELL REPORT for Tracking #223672

| | | | |
|---|---|---|---|
| Owner: | **MIKE LANGSTON** | Owner Well #: | **No Data** |
| Address: | **3225 FALL CREEK ESTATES DRIVE SPICEWOOD, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **3225 FALL CREEK ESTATES DRIVE SPICEWOOD, TX 78669** | Latitude: | **30° 24' 21" N** |
| | | Longitude: | **098° 06' 38" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **5/7/2010** Drilling End Date: **5/7/2010**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **30** |
| **6.5** | **30** | **225** |

Drilling Method: **Air Hammer**

Borehole Completion: **CASED**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **30** | **8 CEMENT** |
| **0** | **30** | **3 VOLCLAY** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **N/A**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **WELL DRILLED FIRST**

Surface Completion: **Surface Sleeve Installed**

Water Level: **130 ft.** below land surface on **2010-05-07** Measurement Method: **Unknown**

Packers: **4 BURLAP, PVC, RUBBER 30',120',130',160'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 2 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **40** | **TRINIT** |

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: **CENTEX PUMP & SUPPLY, INC.**

**2520 HWY. 290 WEST**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **AARON GLASS** License Number: **4227**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| **0** | **1** | **TOP SOIL** |
| **1** | **10** | **RED CLAY** |
| **10** | **20** | **RED/TAN LIMESTONE** |
| **20** | **55** | **WHITE/TAN LIMESTONE** |
| **55** | **60** | **TAN LIMESTONE** |
| **60** | **70** | **GRAY LIMESTONE** |
| **70** | **80** | **GRAY W/TAN LIMESTONE** |
| **80** | **120** | **HAMMET CLAY** |
| **120** | **130** | **HAMMET CLAY W/RED CLAY** |
| **130** | **150** | **GRAVEL** |
| **150** | **160** | **RED LIMESTONE W/CLAY** |
| **STRIPS** | | |
| **160** | **220** | **SAND & GRAVEL** |
| **220** | **225** | **BLUE CLAY** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **5"** | **OD** | **N SDR17 PVC** | **+3 TO 225** |
| **5"** | **OD** | **N SDR17 PVC SLOT** | **140 TO 220 .032** |

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# STATE OF TEXAS WELL REPORT for Tracking #224060

| | | | |
|---|---|---|---|
| Owner: | **CHRIS COKINS** | Owner Well #: | **No Data** |
| Address: | **325 RR 620 S.<br>AUSTIN, TX 78734** | Grid #: | **57-40-5** |
| Well Location: | **1211 LAKESHORE DRIVE<br>SPICEWOOD, TX 78669** | Latitude: | **30° 26' 29" N** |
| | | Longitude: | **098° 04' 39" W** |
| Well County: | **Travis** | Elevation: | **720 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **7/20/2010** Drilling End Date: **7/20/2010**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **12** |
| **8** | **12** | **150** |

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **1** | **5** | **3 CEMENT** |
| **5** | **100** | **13 BENTONITE** |

Seal Method: **PRESSURE CEMENTED**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **NOT YET INSTALLED**

Surface Completion: **Pitless Adapter Used**

Water Level: **54 ft.** below land surface on **2010-07-20** Measurement Method: **Unknown**

Packers: **NEOPRENE 110**
**NEOPRENE 115**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 100 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

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

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

Company Information: **BEE CAVE DRILLING INC**

**185 ANGEL FIRE DR.**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **DUKE, ALONZO W III** License Number: **58544**

Comments: **Amended 8/26/10 Ref.# 8360**

**Report Amended on by Request #8360**

**Report Amended on by Request #8361**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| **0-3** | | **TOPSOIL** |
| **3-49** | | **CALICHE** |
| **49-61** | | **BLUE SHALE** |
| **61-** | **150** | **RED SANDSTONE** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **NEW** | **PLASTIC** | **0-120** |
| **4.5** | **NEW** | **PERF** | **120-150 .050** |

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# STATE OF TEXAS WELL REPORT for Tracking #227938

| | | | |
|---|---|---|---|
| Owner: | **Sybil Faught** | Owner Well #: | **Faught #4** |
| Address: | **4703 Balcones Woods Dr<br>Austin, TX 78759** | Grid #: | **57-40-4** |
| Well Location: | **25209 Lakeview Dr.<br>Spicewood, TX 78669** | Latitude: | **30° 25' 46" N** |
| | | Longitude: | **098° 05' 21" W** |
| Well County: | **Travis** | Elevation: | **732 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **8/3/2010** Drilling End Date: **8/10/2010**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **8** | **0** | **160** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|---|
| Filter Pack Intervals: | **60** | **140** | **Gravel** | |

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **60** | **1 hl plg 12ptld** |

Seal Method: **Pressure Grout**

Sealed By: **Driller**

Distance to Property Line (ft.): **22**

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

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

Method of Verification: **measured**

Surface Completion: **Pitless Adapter Used**

Water Level: **55 ft.** below land surface on **2010-08-10** Measurement Method: **Unknown**

Packers: **Gravel Packed**

Type of Pump: **Submersible** Pump Depth (ft.): **130**

Well Tests: **Pump** **Yield: 7.5 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **40' 140** | **Good** |

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: **Whisenant & Lyle Water Services**

**PO Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top soil** |
| **1** | **2** | **White Limestone hard** |
| **2** | **3** | **Yellow limestone** |
| **3** | **7** | **White Limestone hard** |
| **7** | **30** | **Brown limestone clay** |
| **30** | **35** | **Brown tan limestone hard** |
| **35** | **37** | **Gray shale** |
| **37** | **42** | **Brown Limestone** |
| **42** | **45** | **Gray Limestone** |
| **45** | **55** | **White limestone hard** |
| **55** | **58** | **Red sandstone** |
| **58** | **60** | **Red sandstone clay** |
| **60** | **100** | **Red sandstone** |
| **100** | **140** | **White limestone hard** |
| **140** | **160** | **Brown shale clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 N PVC-SDR 17IB +1' - 80'** |
| **4.5 N PVC SDR 17 slotted 032 80' - 140'** |

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# STATE OF TEXAS WELL REPORT for Tracking #227962

| | | | |
|---|---|---|---|
| Owner: | **Sybil Faught** | Owner Well #: | **Faught #3 test** |
| Address: | **4703 Balcones Woods Dr.<br>Austin, TX 78759** | Grid #: | **57-40-4** |
| Well Location: | **25209 Lakeview Dr<br>Spicewood, TX 78669** | Latitude: | **30° 25' 46" N** |
| | | Longitude: | **098° 05' 21" W** |
| Well County: | **Travis** | Elevation: | **736 ft. above sea level** |
| | | | ****Plugged Within 48 Hours**** |

****This well has been plugged**** **Plugging Report Tracking #128251**

Type of Work: **New Well** Proposed Use: **Test Well**

Drilling Start Date: **7/30/2010** Drilling End Date: **7/30/2010**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **8** | **0** | **200** |

Drilling Method: **Air Rotary**

Borehole Completion: **Plug**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **6 portland** |
| **20** | **200** | **PlugDryCuttings** |

Seal Method: **Pressure grout**

Sealed By: **Whisenant & Lyle Water Services**

Distance to Property Line (ft.): **22**

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

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

Method of Verification: **measured**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Unknown** **Yield: 0 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

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

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

Company Information: **Whisenant & Lyle Water Services**

**PO Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **topsoil** |
| **1** | **3** | **white limestone hard** |
| **3** | **5** | **gray limestone** |
| **5** | **15** | **white gray limestone** |
| **15** | **17** | **red clay** |
| **17** | **19** | **brown clay** |
| **19** | **25** | **red clay sandstone** |
| **25** | **40** | **white-red sandstone hard** |
| **40** | **47** | **brown limestone** |
| **47** | **112** | **red sandstone red clay** |
| **112** | **137** | **white limestone hard** |
| **137** | **200** | **brown clay shale** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **Plug hole - Dry - Pulled back with dry cuttings same day** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #228772

| | | | |
|---|---|---|---|
| Owner: | **Z-Lab, Inc.** | Owner Well #: | **No Data** |
| Address: | **1223 Paleface Ranch Spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **1223 Paleface Ranch Spicewood, TX 78669** | Latitude: | **30° 25' 30" N** |
| | | Longitude: | **098° 06' 30" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **7/28/2010** Drilling End Date: **7/28/2010**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8.62** | **0** | **20** |
| **6.75** | **20** | **215** |

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **1** | **3** | **0.5 cement** |
| **3** | **20** | **2 bentonite** |

Seal Method: **tremi pipe pressure grouting**

Sealed By: **Driller**

Distance to Property Line (ft.): **80**

Distance to Septic Field or other concentrated contamination (ft.): **n/a**

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

Method of Verification: **estimated**

Surface Completion: **Pitless Adapter Used**

Water Level: **16.5 ft.** below land surface on **2010-07-28** Measurement Method: **Unknown**

Packers: **poor boy 22'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 22 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **22, 32, 45, 175, 189** | **400 TDS** |

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: **L & L Drilling Co.**

**P.O. Box 217**
**Hye, TX 78635**

Driller Name: **Gregory A. Smith** License Number: **1595**

Apprentice Name: **Lynette Smith** Apprentice Number: **56980**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **black topsoil** |
| **2** | **7** | **white limestone & caliche** |
| **7** | **56** | **white & light brown limestone** |
| **22** | **24** | **water 2 gpm** |
| **32** | **45** | **water 8 gpm** |
| **45** | **56** | **water 10 gpm** |
| **56** | **73** | **gray limestone** |
| **73** | **111** | **gray clay** |
| **111** | **116** | **brown clay** |
| **116** | **139** | **red clay & white limestone** |
| **139** | **142** | **gravel** |
| **142** | **172** | **gray & red clay** |
| **172** | **202** | **red, yellow, brown & white limestone** |
| **175** | **176** | **water 1 gpm** |
| **189** | **194** | **water 1 gpm** |
| **202** | **210** | **blue shale** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **5** | **new** | **plastic** | **solid 0 - 22 0.265** |
| **5** | **new** | **plastic** | **slotted 22 - 55 0.265** |
| **5** | **new** | **plastic** | **solid 55 - 175 0.265** |
| **5** | **new** | **plastic** | **slotted 175 - 195 0.265** |
| **5** | **new** | **plastic** | **solid 195 - 215 0.265** |

| | | |
|---|---|---|
| **210** | **215** | **smithwick shale** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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**P.O. Box 12157**
**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #228776

| | | | |
|---|---|---|---|
| Owner: | **Z-Lab, Inc.** | Owner Well #: | **No Data** |
| Address: | **1223 Paleface Ranch Spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **1223 Paleface Ranch Spicewood, TX 78669** | Latitude: | **30° 25' 14" N** |
| | | Longitude: | **098° 06' 21" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **7/30/2010** Drilling End Date: **7/30/2010**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8.62** | **0** | **20** |
| **6.75** | **20** | **201** |

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **1** | **3** | **0.5 cement** |
| **3** | **20** | **2 bentonite** |

Seal Method: **tremi pipe pressure grouting**

Sealed By: **Driller**

Distance to Property Line (ft.): **90**

Distance to Septic Field or other concentrated contamination (ft.): **n/a**

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

Method of Verification: **estimated**

Surface Completion: **Pitless Adapter Used**

Water Level: **133.5 ft.** below land surface on **2010-07-30** Measurement Method: **Unknown**

Packers: **poor boy 20'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 4 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **152, 157** | **500 TDS, 6 grains hardness** |

Chemical Analysis Made: **Yes**

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

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

Company Information: **L & L Drilling Co.**

**P.O. Box 217**
**Hye, TX 78635**

Driller Name: **Gregory A. Smith** License Number: **1595**

Apprentice Name: **Lynette Smith** Apprentice Number: **56980**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **black topsoil** |
| **2** | **5** | **brown limestone** |
| **5** | **17** | **white limestone & caliche** |
| **17** | **36** | **white & brown limestone** |
| **36** | **48** | **gray limestone** |
| **48** | **96** | **gray clay** |
| **96** | **139** | **red clay** |
| **139** | **175** | **white limestone & red & gray** |
| **152** | **153** | **water 2 gpm** |
| **157** | **158** | **water 2 gpm** |
| **175** | **201** | **smithwick shale** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **5 new plastic solid 0 - 135 0.265** |
| **5 new plastic slotted 135 - 175 0.265** |
| **5 new plastic solid 175 - 201 0.265** |

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# STATE OF TEXAS WELL REPORT for Tracking #250203

| | | | |
|---|---|---|---|
| Owner: | **Robert Shebesta** | Owner Well #: | **1** |
| Address: | **650 CR 450<br>Burnet, TX 78611** | Grid #: | **57-40-1** |
| | | Latitude: | **30° 27' 53" N** |
| Well Location: | **650 CR 420<br>Burnet, TX 78611** | Longitude: | **098° 06' 52" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **3/15/2011** Drilling End Date: **3/15/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **165** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 85, 80, 25, 20**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **108-150** | **Trinity** |

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: **Apex Drilling, Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Topsoil** |
| **1** | **4** | **Red Clay** |
| **4** | **42** | **Tan, Gray Limestone** |
| **42** | **75** | **Gray Clay** |
| **75** | **108** | **Red Sandstone** |
| **108** | **110** | **Gravel** |
| **110** | **118** | **Red Sandstone** |
| **118** | **150** | **Gravel & H2O** |
| **150** | **165** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5" OD) New PVC + 2' to 90' SDR17** |
| **4.5" (5" OD) New Slotted PVC 90' to 150' .035** |
| **4.5" (5" OD) New PVC 150' to 165' SDR17** |

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# STATE OF TEXAS WELL REPORT for Tracking #252679

| | | | |
|---|---|---|---|
| Owner: | **Lee Stone** | Owner Well #: | **#1** |
| Address: | **1037 Lakeshore<br>Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **1037 Lakeshore<br>Spicewood, TX 78669** | Latitude: | **30° 26' 21" N** |
| | | Longitude: | **098° 04' 42" W** |
| Well County: | **Travis** | Elevation: | **722 ft. above sea level** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **3/4/2011** Drilling End Date: **3/4/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **12** |
| **8** | **12** | **100** |
| **6.75** | **100** | **150** |

Drilling Method: **Air Hammer; Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **12** | **6 / Concrete** |
| **12** | **100** | **20 / Bentonite** |

Seal Method: **Trimmie pipe - Slurry and poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **N/A**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **Tape - wheel**

Surface Completion: **Pitless Adapter Used**

Water Level: **No Data**

Packers: **Neoprene 100' and 105'**

Type of Pump: **Submersible** Pump Depth (ft.): **140**

Well Tests: **Jetted** **Yield: 50 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **100** | **Fresh** |

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: **Bee Cave Drilling**

**185 Angelfire Drive**
**Dripping Springs, TX 78620**

Driller Name: **Charles Coffindaffer #58658** License Number: **58658**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| **0** | **1** | **Topsoil** |
| **1** | **3** | **Tan limestone** |
| **3** | **7** | **Red caliche** |
| **7** | **25** | **Grey limestone** |
| **25** | **70** | **Grey clay** |
| **70** | **100** | **Red clay** |
| **100** | **150** | **Trinty-1st H2O 50 gpm** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **New** | **Plastic** | **0 to 110'** |
| **4.5** | **New** | **Screen , Mfg.** | **110' to 150' .050** |

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# STATE OF TEXAS WELL REPORT for Tracking #253127

| | | | |
|---|---|---|---|
| Owner: | **Brandi Severence** | Owner Well #: | **No Data** |
| Address: | **25709 Paleface Shore Dr. Spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **25709 Paleface Shore Dr. Spicewood, TX 78669** | Latitude: | **30° 26' 08" N** |
| | | Longitude: | **098° 05' 31" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **4/27/2011** Drilling End Date: **4/27/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **217** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 155,150,140,20**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 30 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **157-195** | **Trinity** |

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: **Apex Drilling, Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Topsoil** |
| **1** | **37** | **White Limestone** |
| **37** | **45** | **Tan Limestone** |
| **45** | **55** | **Gray Limestone** |
| **55** | **99** | **Blue Clay** |
| **99** | **122** | **Red Clay** |
| **122** | **134** | **Sandstone & Red Clay** |
| **134** | **157** | **White Limestone & Clay** |
| **157** | **178** | **Gravel & H2O** |
| **178** | **195** | **Gravel (Big) & H2O** |
| **195** | **217** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5'' (5'' OD) New PVC + 2' to 157' SDR17** |
| **4.5'' (5'' OD) New Slotted PVC 157' to 197' .035** |
| **4.5'' (5'' OD) New PVC 197' to 217' SDR17** |

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# STATE OF TEXAS WELL REPORT for Tracking #259536

| | | | |
|---|---|---|---|
| Owner: | **Rucker Ashmore** | Owner Well #: | **#1** |
| Address: | **25242 Paleface Lake Drive Spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **25242 Paleface Lake Drive Spicewood, TX 78669** | Latitude: | **30° 25' 22" N** |
| | | Longitude: | **098° 05' 39" W** |
| Well County: | **Travis** | Elevation: | **765 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Irrigation** |

Drilling Start Date: **5/18/2011** Drilling End Date: **5/19/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **10** |
| **8** | **10** | **350** |

Drilling Method: **Air Hammer; Air Rotary**

Borehole Completion: **Filter Packed; Open Hole**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **100** | **350** | **Gravel** | **3/8"** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **1** | **3** | **2 / Concrete** |
| **3** | **100** | **16 / Portland** |
| **100** | **103** | **1 / Bentonite** |

Seal Method: **Trimmie pipe - Slurrry and poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **N/A**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **Tape - wheel**

Surface Completion: **Pitless Adapter Used**

Water Level: **No Data**

Packers: **N/A**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 2 GPM**

Plug Information:

| Description (number of sacks & material) | Top Depth (ft.) | Bottom Depth (ft.) |
|---|---|---|
| **N/A** | | |

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **Fresh** |

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: **Bee Cave Drilling**

**185 Angelfire Drive**
**Dripping Springs, TX 78620**

Driller Name: **Charles Coffindaffer #58658**

License Number: **58658**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **Topsoil** |
| **2** | **15** | **White limestone** |
| **15** | **45** | **Grey limestone** |
| **45** | **100** | **Grey clay** |
| **100** | **105** | **Red clay** |
| **105** | **200** | **Red rock** |
| **200** | **300** | **Tan shale** |
| **300** | **350** | **Black rock** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 New Plastic 0 to 150'** |
| **4.5 New Screen , Mfg. 150' to 350' .050** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #259543

| | | | |
|---|---|---|---|
| Owner: | **Rucker Ashmore** | Owner Well #: | **#2** |
| Address: | **25242 Paleface Lake Drive Spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **25242 Paleface Lake Drive Spicewood, TX 78669** | Latitude: | **30° 25' 22" N** |
| | | Longitude: | **098° 05' 39" W** |
| Well County: | **Travis** | Elevation: | **765 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Irrigation** |

Drilling Start Date: **5/20/2011** Drilling End Date: **5/23/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **10** |
| **8** | **10** | **350** |

Drilling Method: **Air Hammer; Air Rotary**

Borehole Completion: **Filter Packed; Open Hole**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **100** | **350** | **Gravel** | **3/8"** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **1** | **3** | **2 / Concrete** |
| **3** | **100** | **16 / Portland** |
| **100** | **103** | **1 / Bentonite** |

Seal Method: **Trimmie pipe - Slurry and poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **N/A**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **Tape - wheel**

Surface Completion: **Pitless Adapter Used**

Water Level: **No Data**

Packers: **N/A**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 3 GPM**

Plug Information:

| Description (number of sacks & material) | Top Depth (ft.) | Bottom Depth (ft.) |
|---|---|---|
| **N/A** | | |

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **Fresh** |

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: **Bee Cave Drilling**

**185 Angelfire Drive**
**Dripping Springs, TX 78620**

Driller Name: **Charles Coffindaffer #58658**

License Number: **58658**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **Topsoil** |
| **2** | **15** | **White limestone** |
| **15** | **45** | **Grey limestone** |
| **45** | **100** | **Grey clay** |
| **100** | **105** | **Red clay** |
| **105** | **200** | **Red rock** |
| **200** | **300** | **Tan shale** |
| **300** | **350** | **Black rock** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 New Plastic 0 to 150'** |
| **4.5 New Screen , Mfg. 150' to 350' .050** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #261764

| | | | |
|---|---|---|---|
| Owner: | **Rucker Ashmore** | Owner Well #: | **#3** |
| Address: | **25242 Paleface Lake Drive Spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **25242 Paleface Lake Drive Spicewood, TX 78669** | Latitude: | **30° 25' 22" N** |
| | | Longitude: | **098° 05' 39" W** |
| Well County: | **Travis** | Elevation: | **765 ft. above sea level** |

Type of Work: **New Well** Proposed Use: **Irrigation**

Drilling Start Date: **6/2/2011** Drilling End Date: **6/3/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **10** |
| **8** | **10** | **350** |

Drilling Method: **Air Hammer; Air Rotary**

Borehole Completion: **Filter Packed; Open Hole**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **100** | **350** | **Gravel** | **3/8 "** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **1** | **100** | **19 / Cement** |

Seal Method: **Trimmie pipe - Slurry and poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **10**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **Tape - wheel**

Surface Completion: **Pitless Adapter Used**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **340**

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

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **Fresh** |

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: **Bee Cave Drilling**

**185 Angelfire Drive**
**Dripping Springs, TX 78620**

Driller Name: **Charles Coffindaffer #58658** License Number: **58658**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Topsoil** |
| **1** | **25** | **Tanish rock** |
| **25** | **75** | **Tan clay** |
| **75** | **300** | **Tanish rock** |
| **300** | **350** | **Greyish rock** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 New Plastic 0 to 150'** |
| **4.5 New Screen , Mfg. 150' to 350' .050** |

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# STATE OF TEXAS WELL REPORT for Tracking #261824

| | | | |
|---|---|---|---|
| Owner: | **Steve Cook** | Owner Well #: | **#1** |
| Address: | **12000 Starcrest Drive Ste. 107 San Antonio, TX 78247** | Grid #: | **57-40-4** |
| Well Location: | **North Paleface Ranch Road Spicewood, TX 78669** | Latitude: | **30° 27' 01" N** |
| | | Longitude: | **098° 06' 15" W** |
| Well County: | **Travis** | Elevation: | **823 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Irrigation** |

Drilling Start Date: **6/22/2011** Drilling End Date: **6/23/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **10** |
| **6.75** | **10** | **250** |

Drilling Method: **Air Hammer; Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **1** | **100** | **21 / Cement** |

Seal Method: **Trimmie pipe - Slurry and poured**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **Tape - wheel**

Surface Completion: **Pitless Adapter Used**

Water Level: **No Data**

Packers: **Neoprene 100'**
**Neoprene 130' and 135'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 10 GPM**

Plug Information:

| *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **N/A** | | |

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **Fresh** |

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: **Bee Cave Drilling**

**185 Angelfire Drive**
**Dripping Springs, TX 78620**

Driller Name: **Charles Coffindaffer #58658** License Number: **58658**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **3** | **Topsoil** |
| **3** | **10** | **Tan limestone** |
| **10** | **55** | **Red rock** |
| **55** | **65** | **White sandstone** |
| **65** | **75** | **Brown / tan limestone** |
| **75** | **85** | **Grey rock** |
| **85** | **100** | **Grey clay** |
| **100** | **105** | **Black rock** |
| **105** | **120** | **Grey clay** |
| **120** | **125** | **Red clay** |
| **125** | **140** | **Red rock** |
| **140** | **170** | **Red sandstone** |
| **170** | **250** | **Multi color rock** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 New Plastic 0 to 210'** |
| **4.5 New Screen , Mfg. 210' to 250'** |

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# STATE OF TEXAS WELL REPORT for Tracking #261828

| | | | |
|---|---|---|---|
| Owner: | **Steve Cook** | Owner Well #: | **#2** |
| Address: | **12000 Starcrest Drive Ste. 107 San Antonio, TX 78247** | Grid #: | **57-40-4** |
| Well Location: | **North Paleface Ranch Road Spicewood, TX 78669** | Latitude: | **30° 27' 01" N** |
| | | Longitude: | **098° 06' 15" W** |
| Well County: | **Travis** | Elevation: | **823 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Irrigation** |

Drilling Start Date: **6/23/2011** Drilling End Date: **6/23/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **10** |
| **6.75** | **10** | **85** |

Drilling Method: **Air Hammer; Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **1** | **20** | **10 / Concrete** |

Seal Method: **Unknown**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **Tape - wheel**

Surface Completion: **Pitless Adapter Used**

Water Level: **No Data**

Packers: **Neoprene 20'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 10 GPM**

Plug Information:

| *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **N/A** | | |

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **Fresh** |

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: **Bee Cave Drilling**

**185 Angelfire Drive**
**Dripping Springs, TX 78620**

Driller Name: **Charles Coffindaffer #58658** License Number: **58658**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| 0 | 3 | Topsoil |
| 3 | 10 | Tan limestone |
| 10 | 55 | Red rock |
| 55 | 65 | White sandstone |
| 65 | 75 | Brown / tan limestone |
| 75 | 85 | Grey rock |
| 85 | | Grey clay |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| 4.5 | New | Plastic | 0 to 65' |
| 4.5 | New | Screen , Mfg. | 65' to 85' .050 |

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# STATE OF TEXAS WELL REPORT for Tracking #268320

| | | | |
|---|---|---|---|
| Owner: | **Austin Golf Club** | Owner Well #: | **TW#2** |
| Address: | **24900 Hwy 71 W<br>Spicewood, TX 78669** | Grid #: | **57-40-7** |
| | | Latitude: | **30° 24' 45" N** |
| Well Location: | **24900 Hwy 71 W<br>Spicewood, TX 78669** | Longitude: | **098° 06' 12" W** |
| Well County: | **Travis** | Elevation: | **822 ft. above sea level** |
| | | | ****Plugged Within 48 Hours**** |

****This well has been plugged**** **Plugging Report Tracking #133044**

Type of Work: **New Well** Proposed Use: **Irrigation**

Drilling Start Date: **9/14/2011** Drilling End Date: **9/14/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **6.25** | **0** | **230** |

Drilling Method: **Air Hammer**

Borehole Completion:

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **230** | **4bnslcy6prtln** |

Seal Method: **Unknown**

Sealed By: **Unknown**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **0 ft.** below land surface on **No Data** Measurement Method: **Unknown**

Packers: **0**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Plug Information:

| *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **0-20 6 Portland** | | |
| **20-230 4 Benseal clay** | | |

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: **Whisenant & Lyle Water Services**

**PO Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **20** | **White Limestone Hard** |
| **20** | **30** | **Dark Gray limestone** |
| **30** | **60** | **Light gray limestone** |
| **60** | **90** | **Gray clay Shale** |
| **90** | **110** | **Gray brown clay** |
| **110** | **160** | **Red clay sandstone** |
| **160** | **220** | **Calcite** |
| **220** | **230** | **Brown Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **Plug Well** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #268325

| | | | |
|---|---|---|---|
| Owner: | **Austin Golf Club** | Owner Well #: | **TW#3** |
| Address: | **24900 Hwy. 71 W<br>Spicewood, TX 78669** | Grid #: | **57-40-7** |
| | | Latitude: | **30° 24' 43" N** |
| Well Location: | **24900 Hwy 71W<br>Spicewood, TX 78669** | Longitude: | **098° 06' 16" W** |
| Well County: | **Travis** | Elevation: | **823 ft. above sea level** |
| | | | ****Plugged Within 48 Hours**** |

****This well has been plugged**** **Plugging Report Tracking #133045**

Type of Work: **New Well** Proposed Use: **Irrigation**

Drilling Start Date: **9/14/2011** Drilling End Date: **9/14/2011**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **6.25** | **0** | **230** |

Drilling Method: **Air Hammer**

Borehole Completion: **Plug**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **20** | **Portland cement** |

Seal Method: **Pos. Displacement**

Sealed By: **Unknown**

Distance to Property Line (ft.): **1000**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

| Plug Information: | *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| | **0-20 6 Portland cement** | | |
| | **20-230 Backfill with/cuttings** | | |

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: **Whisenant & Lyle Water Services**

**PO Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **10** | **White Limestone hard** |
| **10** | **20** | **White brown limestone hard** |
| **20** | **30** | **White limestone hard** |
| **30** | **110** | **Brown gray limestone clay** |
| **110** | **160** | **Red clay sandstone** |
| **160** | **170** | **Brown limestone** |
| **170** | **175** | **Red Sandstone clay** |
| **175** | **230** | **Brown limestone** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **Plug** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #268472

Owner: **Austin Golf Club**

Address: **24900 Hwy 71 W Spicewood, TX 78669**

Well Location: **24900 Hwy 71 W Spicewood, TX 78669**

Well County: **Travis**

Owner Well #: **TW#8**

Grid #: **57-40-7**

Latitude: **30° 24' 31" N**

Longitude: **098° 06' 01" W**

Elevation: **825 ft. above sea level**

****Plugged Within 48 Hours****

****This well has been plugged****

**Plugging Report Tracking #133055**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **9/14/2011** Drilling End Date: **9/14/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **6.25** | **0** | **260** |

Drilling Method: **Air Hammer**

Borehole Completion: **Plug**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **6Portland** |
| **20** | **260** | **Backfill cuttin** |

Seal Method: **Pos. displacement**

Sealed By: **Driller**

Distance to Property Line (ft.): **1000+**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **Plug**

Type of Pump: **Other - Not Specified**

Well Tests: **No Test Data Specified**

Plug Information:

| *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **0-20 Portland 6 sacks** | | |
| **20-260 Backfill w/cuttings** | | |

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: **Whisenant & Lyle Water Services**

**PO Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **10** | **Brown limestone** |
| **10** | **20** | **White limestone hard** |
| **20** | **40** | **Red brown limestone** |
| **40** | **50** | **Tan limestone** |
| **50** | **60** | **White limestone hard** |
| **60** | **70** | **Brown sand limestone** |
| **70** | **145** | **Gray clay shale** |
| **145** | **210** | **Red sandstone clay** |
| **210** | **245** | **Gravel** |
| **245** | **260** | **Brown blue clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **Plug** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #270711

| | | | |
|---|---|---|---|
| Owner: | **Carl Dixon** | Owner Well #: | **No Data** |
| Address: | **3225 Fall Creek Estates Dr. Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **3225 Fall Creek Estates Dr. Spicewood, TX 78669** | Latitude: | **30° 24' 21" N** |
| | | Longitude: | **098° 06' 38" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **9/20/2011** Drilling End Date: **9/20/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **25** |
| **6.75** | **25** | **255** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **1** | **30** | **11** |

Seal Method: **gravity poured**

Sealed By: **ADC**

Distance to Property Line (ft.): **55+**

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

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

Method of Verification: **tape**

Surface Completion: **Surface Sleeve Installed**

Water Level: **170 ft.** below land surface on **2011-09-20** Measurement Method: **Unknown**

Packers: **neopreen rubber and burlap 30 and 155**

Type of Pump: **Submersible** Pump Depth (ft.): **220**

Well Tests: **Jetted** **Yield: 3-4 GPM**

Plug Information:

| *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **n/a** | | |

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **165-215** | **trinity** |

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: **Associated Drilling Inc.**

**12928 Lowden Ln.**
**Manchaca, TX 78652**

Driller Name: **James Benoit** License Number: **4064**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **3** | **topsoil/bedrock** |
| **3** | **45** | **white limestone** |
| **45** | **80** | **gray lime** |
| **80** | **95** | **gray limestone** |
| **95** | **115** | **gray lime** |
| **115** | **140** | **gray shale** |
| **140** | **145** | **red clay** |
| **145** | **170** | **red sandstone** |
| **170** | **180** | **multi-color limestone** |
| **180** | **215** | **red sandstone** |
| **215** | **235** | **yellow limestone** |
| **235** | **255** | **gray sandstone** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **5 od. new sdr17 pvc -2 to 180** |
| **5 od. new sdr17 pvc (.032) screen 180 to 220** |
| **5 od. new sdr17 pvc 220 to 255** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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# STATE OF TEXAS WELL REPORT for Tracking #272820

| | | | |
|---|---|---|---|
| Owner: | **Bryan Haye** | Owner Well #: | **#1** |
| Address: | **501 Nomad<br>Spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **501 Nomad<br>Spicewood, TX 78669** | Latitude: | **30° 25' 49" N** |
| | | Longitude: | **098° 06' 00" W** |
| Well County: | **Travis** | Elevation: | **712 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **9/30/2011** Drilling End Date: **9/30/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **10** |
| **6.75** | **10** | **240** |

Drilling Method: **Air Hammer; Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **100** | **240** | **Gravel** | **.25** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **1** | **100** | **19 / Cement** |

Seal Method: **Trimmie pipe - Slurry and poured**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **Tape - wheel**

Surface Completion: **Pitless Adapter Used**

Water Level: **No Data**

Packers: **Neoprene 100'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 2 GPM**

Plug Information:

| *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **N/A** | | |

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **Fresh** |

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: **Bee Cave Drilling**

**185 Angelfire Drive**
**Dripping Springs, TX 78620**

Driller Name: **Charles Coffindaffer #58658** License Number: **58658**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **3** | **Topsoil** |
| **3** | **7** | **White limestone** |
| **7** | **10** | **Tan caliche** |
| **10** | **20** | **Tan limestone** |
| **20** | **26** | **Multi color limestone** |
| **26** | **35** | **Grey limestone** |
| **35** | **60** | **Grey shale** |
| **60** | **65** | **Grey limestone** |
| **65** | **75** | **Grey shale** |
| **75** | **100** | **Red clay** |
| **100** | **140** | **Red sandstone** |
| **140** | **170** | **Multi color sandstone** |
| **170** | **200** | **Red clay** |
| **200** | **240** | **Brown clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **New** | **Plastic** | **0 to 120'** |
| **4.5** | **New** | **Screen , Mfg.** | **120' to 240' .050** |

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# STATE OF TEXAS WELL REPORT for Tracking #273395

| | | | |
|---|---|---|---|
| Owner: | **Austin Golf Club** | Owner Well #: | **23** |
| Address: | **24900 Hwy 71 W.<br>Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **24900 Hwy 71 W<br>Spicewood, TX 78669** | Latitude: | **30° 24' 36" N** |
| | | Longitude: | **098° 06' 11" W** |
| Well County: | **Travis** | Elevation: | **832 ft. above sea level** |

Type of Work: **New Well** Proposed Use: **Irrigation**

Drilling Start Date: **9/1/2011** Drilling End Date: **10/26/2011**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **7.875** | **0** | **230** |

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **60** | **15 ptld 1hlplg** |

Seal Method: **Pos. Displacement**

Sealed By: **Driller**

Distance to Property Line (ft.): **1000+**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **measured**

Surface Completion: **Surface Sleeve Installed**

Water Level: **184 ft.** below land surface on **2011-11-08** Measurement Method: **Unknown**

Packers: **6 Mil Poly 60**
**6 Mil poly -Shale packer 160**

Type of Pump: **Submersible** Pump Depth (ft.): **220**

Well Tests: **Jetted** **Yield: 10+ GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **160'/230'** | **Good** |

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: **Whisenant & Lyle Water Services**

**PO Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **8** | **Topsoil** |
| **8** | **40** | **White limestone hard** |
| **40** | **45** | **White brown limestone hard** |
| **45** | **48** | **Brown limestone** |
| **48** | **100** | **Gray limestone/ gray shale** |
| **100** | **118** | **Gray clay shale** |
| **118** | **145** | **Red clay calcite** |
| **145** | **228** | **Conglomerate** |
| **228** | **230** | **Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **New** | **PVC-SDR 17IB +2/** | **160'** |
| **4.5** | **New** | **PVC-17 Slotted .035** | **160'/230'** |

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# STATE OF TEXAS WELL REPORT for Tracking #274163

| | | | |
|---|---|---|---|
| Owner: | **CASTLETOP RANCH** | Owner Well #: | **No Data** |
| Address: | **3600 N.CAP.OF TX.HWY.BLDG.B AUSTIN, TX 78746** | Grid #: | **57-40-4** |
| Well Location: | **25800 COX CROSSINGS RD. SPICEWOOD, TX 78669** | Latitude: | **30° 26' 24" N** |
| | | Longitude: | **098° 05' 12" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Irrigation**

Drilling Start Date: **11/3/2011** Drilling End Date: **11/3/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **40** |
| **6** | **40** | **170** |

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **90** | **8 CEMENT** |
| **0** | **90** | **4 VOLCLAY** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **N/A**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **WELL DRILLED FIRST**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **3 BURLAP, PVC 90',100',150'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 35-40 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **60** | **TRINITY** |

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: **CENTEX PUMP & SUPPLY, INC.**

**2520 HWY. 290 WEST**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **AARON GLASS** License Number: **4227**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **TOP SOIL** |
| **1** | **10** | **CALICHE/TAN LIMESTONE** |
| **10** | **30** | **TAN LIMESTONE** |
| **30** | **35** | **TAN CLAY** |
| **35** | **70** | **RED LIMESTONE** |
| **70** | **90** | **TAN LIMESTONE & RED CLAY** |
| **90** | **160** | **RED SAND & GRAVEL** |
| **160** | **165** | **YELLOW CLAY** |
| **165** | **170** | **BLUE CLAY** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **5" OD N SDR17 PVC +3 TO 170** | | | |
| **5" OD N SDR17 PVC SLOT 90 TO 150 .032** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #277354

| | | | |
|---|---|---|---|
| Owner: | **James Davidson** | Owner Well #: | **No Data** |
| Address: | **25707 Paleface Shore Dr. Spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **25707 Paleface Shore Dr. Spicewood, TX 78669** | Latitude: | **30° 26' 12" N** |
| | | Longitude: | **098° 05' 31" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **11/14/2011** Drilling End Date: **11/14/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **220** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 94, 90, 80, 20**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 1/3 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **94-200** | **Trinity** |

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: **Apex Drilling, Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker, P. G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **36** | **Tan/White Limestone** |
| **36** | **55** | **Grey/Tan Limestone** |
| **55** | **94** | **Grey Clay** |
| **94** | **153** | **Red Sandstone** |
| **153** | **200** | **Gravel** |
| **200** | **220** | **Tan/Blue Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5'' (5'' OD) New PVC + 2' to 160' SDR17** |
| **4.5'' (5'' OD) New Slotted PVC 160' to 200' .035** |
| **4.5'' (5'' OD) New PVC 200' to 220' SDR17** |

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# STATE OF TEXAS WELL REPORT for Tracking #278643

| | | | |
|---|---|---|---|
| Owner: | **Austin Golf Club** | Owner Well #: | **#1** |
| Address: | **24900 Hwy 71 West Spicewood, TX 78669** | Grid #: | **57-40-7** |
| | | Latitude: | **30° 24' 31" N** |
| Well Location: | **25400 Hwy 71 West Spicewood, TX 78669** | Longitude: | **098° 06' 05" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **10/31/2011** Drilling End Date: **10/31/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **260** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 145, 160, 20**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 17-18 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **145-245** | **Trinity** |

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: **Apex Drilling, Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew J. Jackson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **12** | **Tan Limestone** |
| **12** | **39** | **Red Sand w/Clay** |
| **39** | **76** | **Tan/White Limestone** |
| **76** | **101** | **Grey Limestone** |
| **101** | **145** | **Grey Clay** |
| **145** | **176** | **Red Sandstone** |
| **176** | **187** | **Gravel** |
| **187** | **202** | **Red Sandstone** |
| **202** | **245** | **Gravel** |
| **245** | **260** | **Fracture / Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5'' (5'' OD) New PVC + 2' to 185' SDR17** |
| **4.5'' (5'' OD) New Slotted PVC 185' to 245' .035** |
| **4.5'' (5'' OD) New PVC 245' to 260' SDR17** |

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# STATE OF TEXAS WELL REPORT for Tracking #278921

| | | | |
|---|---|---|---|
| Owner: | **Bob Gray** | Owner Well #: | **No Data** |
| Address: | **P O Box 161973<br>Austin, TX 78716** | Grid #: | **57-39-6** |
| | | Latitude: | **30° 25' 12" N** |
| Well Location: | **2809 Fall Creek Rd.<br>Spicewood, TX 78669** | Longitude: | **098° 07' 45" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **6/1/2011** Drilling End Date: **6/2/2011**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **8** | **0** | **210** |

Drilling Method: **Unknown**

Borehole Completion: **Unknown**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **130** | **21 Neat/Portlan** |

Seal Method: **Pressure Tremmie**

Sealed By: **Driller**

Distance to Property Line (ft.): **150**

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **N/a**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 8 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **102-190** | **Trinity** |

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: **Apex Drilling, Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **5** | **Tan Limestone** |
| **5** | **18** | **Red Clay** |
| **18** | **62** | **Tan Limestone** |
| **62** | **69** | **Grey Limestone w/Clay** |
| **69** | **94** | **Grey Clay** |
| **94** | **98** | **Grey Limestone** |
| **98** | **102** | **Grey Clay w/Sand** |
| **102** | **125** | **Red Sandstone** |
| **125** | **149** | **Red/White Limestone** |
| **149** | **190** | **Gravel** |
| **190** | **210** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5'' (5'' OD) New PVC + 2' to 130' SDR17** |
| **4.5'' (5'' OD) New Slotted PVC 130' to 190' .035** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #278922

| | | | |
|---|---|---|---|
| Owner: | **Austin Golf Club** | Owner Well #: | **2** |
| Address: | **24900 Hwy 71 West Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **25400 Hwy 71 West Spicewood, TX 78669** | Latitude: | **30° 24' 34" N** |
| | | Longitude: | **098° 06' 14" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **11/1/2011** Drilling End Date: **11/1/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **225** |

Drilling Method: **Air Rotary**

Borehole Completion: **Unknown**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| | | **N/A** |

Seal Method: **N/A**

Sealed By: **N/A**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **N/a**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 0 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **N/A** | **Trinity** |

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: **Apex Drilling, Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| **Dry Backfill** | | |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **N/a** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #279161

| | | | |
|---|---|---|---|
| Owner: | **Jorn Budde C/O Action Water Wells** | Owner Well #: | **No Data** |
| Address: | **100 Spanish Oak Trail<br>Spicewood, TX 78669** | Grid #: | **57-39-9** |
| Well Location: | **2910 Fall Creek Rd.<br>Spicewood, TX 78669** | Latitude: | **30° 24' 54" N** |
| | | Longitude: | **098° 07' 45" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **4/5/2010** Drilling End Date: **4/5/2010**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.25** | **20** | **305** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 197, 190, 20**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 10 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **197-290** | **Trinity** |

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: **Apex Drilling, Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker, P. G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **60** | **Tan Limestone** |
| **60** | **82** | **Red Sandstone** |
| **82** | **95** | **Red Clay** |
| **95** | **110** | **Tan Limestone w/Sand** |
| **110** | **197** | **Grey Limestone** |
| **197** | **245** | **Red Sandstone** |
| **245** | **290** | **Gravel** |
| **290** | **305** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5'' (5'' OD) New PVC + 2' to 210' SDR17** |
| **4.5'' (5'' OD) New Slotted PVC 210' to 230' .035** |
| **4.5'' (5'' OD) New PVC 230' to 250' SDR17** |
| **4.5'' (5'' OD) New Slotted PVC 250' to 270' .035** |
| **4.5'' (5'' OD) New PVC 270' to 290' SDR17** |

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# STATE OF TEXAS WELL REPORT for Tracking #279444

| | | | |
|---|---|---|---|
| Owner: | **Billy Meyer** | Owner Well #: | **No Data** |
| Address: | **P O Box 8157<br>Waco, TX 76714** | Grid #: | **57-40-7** |
| Well Location: | **3220 Fall Creek Rd.<br>Spicewood, TX 78669** | Latitude: | **30° 24' 12" N** |
| | | Longitude: | **098° 06' 46" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **5/19/2011** Drilling End Date: **5/19/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.25** | **20** | **232** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 115, 105, 20**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 1.5 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **115-210** | **Trinity** |

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: **Apex Drilling, Inc.**

**PO Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker, P. G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **35** | **Tan Limestone** |
| **35** | **57** | **Grey Limestone** |
| **57** | **100** | **Grey Clay** |
| **100** | **115** | **Red Sandstone** |
| **115** | **125** | **Gravel** |
| **125** | **145** | **Red Sandstone** |
| **145** | **165** | **Gravel** |
| **165** | **180** | **Red Sandstone** |
| **180** | **210** | **Gravel** |
| **210** | **232** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5'' (5'' OD) New PVC + 2' to 172' SDR17** |
| **4.5'' (5'' OD) New Slotted PVC 172' to 212' .035** |

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# STATE OF TEXAS WELL REPORT for Tracking #279590

| | | | |
|---|---|---|---|
| Owner: | **Ed Brooks** | Owner Well #: | **No Data** |
| Address: | **2731 Fall Creek Rd.<br>Spicewood, TX 78669** | Grid #: | **57-39-6** |
| Well Location: | **2731 Fall Creek Rd<br>Spicewood, TX 78669** | Latitude: | **30° 25' 01" N** |
| | | Longitude: | **098° 07' 32" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **7/18/2011** Drilling End Date: **7/18/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.25** | **20** | **185** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Apex Drilling, Inc**

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

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 4 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **132-185** | **Trinity** |

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: **Apex Drilling, Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker, P. G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **40** | **Tan Limestone** |
| **40** | **45** | **Grey/Tan Limestone** |
| **45** | **82** | **Grey Clay** |
| **82** | **132** | **Red Sandstone** |
| **132** | **165** | **Gravel H2O** |
| **165** | **185** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5'' (5'' OD) New PVC + 2' to 105' SDR17** |
| **4.5'' (5'' OD) New Slotted PVC 105' to 115' .035** |
| **4.5'' (5'' OD) New PVC 115' to 185' SDR17** |

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# STATE OF TEXAS WELL REPORT for Tracking #279911

| | | | |
|---|---|---|---|
| Owner: | **Austin Golf Club** | Owner Well #: | **#3** |
| Address: | **24900 Hwy 71 West Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **25400 Hwy 71 West Spicewood, TX 78669** | Latitude: | **30° 24' 47" N** |
| | | Longitude: | **098° 05' 59" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **11/1/2011** Drilling End Date: **11/2/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **210** |

Drilling Method: **Air Rotary**

Borehole Completion: **Unknown**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| | | **N/A** |

Seal Method: **Unknown**

Sealed By: **N/A**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **N/A**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 0 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| - | **Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker, P. G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| **Dry-Backfill** | | |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **N/A** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #280188

| | | | |
|---|---|---|---|
| Owner: | **Austin Golf Club** | Owner Well #: | **#4** |
| Address: | **24900 Hwy 71 West Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **25400 Hwy 71 West Spicewood, TX 78669** | Latitude: | **30° 24' 41" N** |
| | | Longitude: | **098° 06' 01" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **11/6/2011** Drilling End Date: **11/6/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **220** |

Drilling Method: **Air Rotary**

Borehole Completion: **Unknown**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| | | **N/a** |

Seal Method: **Unknown**

Sealed By: **N/A**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **N/a**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 0 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **N/A** | **Trinity** |

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: **Apexx Drilling, Inc.**

**P.O.Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker, P. G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **3** | **Red Clay** |
| **3** | **37** | **White/Tan Limestone** |
| **37** | **67** | **Grey/Tan Limestone** |
| **67** | **114** | **Grey Clay** |
| **114** | **167** | **Red Sandstone** |
| **167** | **213** | **Gravel** |
| **213** | **215** | **Tourquoise Clay** |
| **215** | **220** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **N/a** | | | |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #280190

| | | | |
|---|---|---|---|
| Owner: | **Austin Golf Club** | Owner Well #: | **#5** |
| Address: | **24900 Hwy 71 West Spicewood, TX 78669** | Grid #: | **57-40-7** |
| | | Latitude: | **30° 24' 36" N** |
| Well Location: | **25400 Hwy 71 West Spicewood, TX 78669** | Longitude: | **098° 06' 03" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **11/7/2011** Drilling End Date: **11/7/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **225** |

Drilling Method: **Air Rotary**

Borehole Completion: **Unknown**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| | | **N/A** |

Seal Method: **Unknown**

Sealed By: **N/a**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **N/a**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 0 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **N/a** | **Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker, P. G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **48** | **Tan Limestone** |
| **48** | **58** | **Grey/Tan Limestone** |
| **58** | **125** | **Grey Clay** |
| **125** | **160** | **Red Sanstone** |
| **160** | **222** | **Gravel** |
| **222** | **223** | **Tourquoise Clay** |
| **223** | **225** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **N/A** | | | |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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# STATE OF TEXAS WELL REPORT for Tracking #280192

| | | | |
|---|---|---|---|
| Owner: | **Austin Golf Club** | Owner Well #: | **#6** |
| Address: | **24900 Hwy 71 West Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **25400 Hwy 71 West Spicewood, TX 78669** | Latitude: | **30° 24' 41" N** |
| | | Longitude: | **098° 05' 44" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **11/8/2011** Drilling End Date: **11/8/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **215** |

Drilling Method: **Air Rotary**

Borehole Completion: **Unknown**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| | | **N/a** |

Seal Method: **Unknown**

Sealed By: **N/a**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **N/a**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 0 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **N/a** | **Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker, P. G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| **Dry** | | |
| **000-001 Top Soil** | | |
| **001-035 Tan Limestone** | | |
| **035-065 Grey Limestone** | | |
| **065-102 Grey Clay** | | |
| **102-125 Red Sandstone** | | |
| **125-130 Gravel** | | |
| **130-141 Red Sanstone** | | |
| **141-146 Gravel** | | |
| **146-171 Red Sandstone** | | |
| **171-210 Gravel** | | |
| **210-215 Tan Clay** | | |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **N/a** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #280197

| | | | |
|---|---|---|---|
| Owner: | **Austin Golf Club** | Owner Well #: | **#9** |
| Address: | **24900 Hwy 71 West Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **25400 Hwy 71 West Spicewood, TX 78669** | Latitude: | **30° 24' 44" N** |
| | | Longitude: | **098° 05' 55" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **12/30/2011** Drilling End Date: **12/30/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **215** |

Drilling Method: **Air Rotary**

Borehole Completion: **Unknown**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| | | **N/a** |

Seal Method: **Unknown**

Sealed By: **N/a**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **N/a**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 0 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **N/a** | **Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker, P. G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| **Dry-Backfill** | | |
| **000-001 Top Soil** | | |
| **001-035 Tan Limestone** | | |
| **035-067 Grey/Tan Limestone** | | |
| **067-115 Grey Clay** | | |
| **115-186 Red Sandstone** | | |
| **186-210 Gravel** | | |
| **210-215 Tan Clay** | | |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **N/a** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #280364

| | | | |
|---|---|---|---|
| Owner: | **Todd & Penelope Kemper** | Owner Well #: | **No Data** |
| Address: | **25216 River Rd.<br>Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **25216 River Rd.<br>Spicewood, TX 78669** | Latitude: | **30° 26' 23" N** |
| | | Longitude: | **098° 04' 55" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **12/21/2011** Drilling End Date: **12/21/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **100** |
| **6.5** | **100** | **225** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **11 of Portland** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **10**

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 125, 120, 100**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 25 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **125-210** | **Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker, P. G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **41** | **Tan Limestone** |
| **41** | **52** | **Tan/Grey Limestone** |
| **52** | **96** | **Grey Clay** |
| **96** | **115** | **Red Sandstone** |
| **115** | **119** | **Gravel** |
| **119** | **125** | **Red Sandstone** |
| **125** | **133** | **Gravel** |
| **133** | **147** | **Red Sandstone** |
| **147** | **210** | **Sand/Gravel** |
| **210** | **212** | **Tourquoise Clay** |
| **212** | **225** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5'' (5'' OD) New PVC + 2' to 150' SDR17** |
| **4.5'' (5'' OD) New Slotted PVC 150' to 210' .035** |
| **4.5'' (5'' OD) New PVC 210' to 225' SDR17** |

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# STATE OF TEXAS WELL REPORT for Tracking #280863

| | | | |
|---|---|---|---|
| Owner: | **Andrew Jackson** | Owner Well #: | **No Data** |
| Address: | **25315 Hwy 71 West<br>Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **No Data** | Latitude: | **30° 24' 21" N** |
| | | Longitude: | **098° 06' 24" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **12/7/2011** Drilling End Date: **12/7/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **245** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 140, 145, 20**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 4 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **132-225** | **Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G. Becker, P. G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **31** | **Tan Limestone w/Red Clay** |
| **31** | **58** | **Tan/White Limestone** |
| **58** | **132** | **Grey/Tan Limestone** |
| **132** | **180** | **Red Sandstone** |
| **180** | **225** | **Gravel** |
| **225** | **245** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5'' (5'' OD) New PVC + 2' to 165' SDR17** |
| **4.5'' (5'' OD) New Slotted PVC 165' to 225' .035** |
| **4.5'' (5'' OD) New PVC 225' to 245' SDR17** |

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# STATE OF TEXAS WELL REPORT for Tracking #281349

| | | | |
|---|---|---|---|
| Owner: | **Lakecliff Country Club** | Owner Well #: | **1** |
| Address: | **1700 Kahala Sunset Drive Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **1700 Kahala Sunset Drive Spicewood, TX 78669** | Latitude: | **30° 27' 16" N** |
| | | Longitude: | **098° 04' 38" W** |
| Well County: | **Travis** | Elevation: | **809 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Irrigation** |

Drilling Start Date: **2/29/2012** Drilling End Date: **3/13/2012**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9.875** | **0** | **220** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **16** | **220** | **Gravel** | |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **116** | **15ptln2hlpl2bns** |

Seal Method: **Pos. Displacement**

Sealed By: **Driller**

Distance to Property Line (ft.): **200+**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **Measured**

Surface Completion: **Surface Sleeve Installed**

Water Level: **153 ft.** below land surface on **2012-03-06** Measurement Method: **Unknown**

Packers: **Gravel Pack**

Type of Pump: **Submersible** Pump Depth (ft.): **200**

Well Tests: **Pump** **Yield: 30 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **160-220** | **Good** |

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: **Whisenant & Lyle Water Services**

**P.O. Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **4** | **Topsoil** |
| **4** | **18** | **Brown Red Limestone** |
| **18** | **19** | **Yellow White Limestone** |
| **19** | **28** | **White Limestone** |
| **28** | **29** | **Yellow Limestone** |
| **29** | **39** | **Yellow White Limestone** |
| **39** | **40** | **Void** |
| **40** | **45** | **Brown Limestone** |
| **45** | **70** | **Gray Limestone** |
| **70** | **75** | **Brown Clay** |
| **75** | **83** | **Gray Limestone** |
| **83** | **86** | **Blue Clay** |
| **86** | **140** | **Sand Brown Limestone** |
| **140** | **155** | **Red Clay Sand** |
| **155** | **218** | **Red Sand Big Rock** |
| **218** | **240** | **Black Clay-Smith Wick** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **6.9** | **New** | **PVC-SDR 17IB** | **+2'/106'** |
| **6.9** | **New** | **PVC-17 Slotted .035** | **160'/220'** |

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# STATE OF TEXAS WELL REPORT for Tracking #281847

| | | | |
|---|---|---|---|
| Owner: | **david raring** | Owner Well #: | **No Data** |
| Address: | **481 scenic ridge spicewood, TX** | Grid #: | **57-40-1** |
| Well Location: | **481 scenic ridge spicewood, TX** | Latitude: | **30° 27' 42" N** |
| | | Longitude: | **098° 06' 12" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Closed-Loop Geothermal**

Drilling Start Date: **2/15/2012** Drilling End Date: **2/16/2012**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **4.5** | **0** | **300** |

Drilling Method: **Air Rotary**

Borehole Completion: **bh 20**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | | | **9** |

Seal Method: **tremipe**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Unknown**

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

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

Company Information: **geothermal advantage**

**3200 nottingham dr**
**mckinney, TX 75070**

Driller Name: **freddie wright**

License Number: **58667**

Comments: **4 wells**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **1** | **5** | **Clay** |
| **5** | **300** | **chale** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #282444

| | | | |
|---|---|---|---|
| Owner: | **Charles Meek** | Owner Well #: | **No Data** |
| Address: | **2809 Fall Creek Rd. #M Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **2809 Fall Creek Rd. #M Spicewood, TX 78669** | Latitude: | **30° 24' 00" N** |
| | | Longitude: | **098° 07' 10" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Irrigation** |

Drilling Start Date: **11/1/2011** Drilling End Date: **11/9/2011**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **20** |
| **6.5** | **20** | **245** |

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **6** |

Seal Method: **Hand Poured**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **300**

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

Method of Verification: **Tape Measure**

Surface Completion: **Surface Sleeve Installed**

Water Level: **44 ft.** below land surface on **2011-11-09** Measurement Method: **Unknown**

Packers: **Shale Trap 45'-20'**

Type of Pump: **Submersible** Pump Depth (ft.): **200**

Well Tests: **Pump** **Yield: 5 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

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

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

Company Information: **Tom Arnold Drilling**

**2750 S. A.W. Grimes Blvd.**
**Round Rock, TX 78664**

Driller Name: **Tommy Arnold** License Number: **2096**

Comments: **^EAD**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **topsoil** |
| **1** | **3** | **red clay** |
| **3** | **9** | **yellow sand & sandstone** |
| **9** | **33** | **yellow sandstone** |
| **33** | **34** | **red shale** |
| **34** | **44** | **white limestone** |
| **44** | **101** | **gray limestone** |
| **101** | **130** | **blue & red clay** |
| **130** | **148** | **red sandstone** |
| **148** | **162** | **gray shale** |
| **162** | **170** | **white limestone** |
| **170** | **188** | **cemented gravel** |
| **188** | **211** | **red sandstone** |
| **211** | **220** | **blue shale** |
| **211** | **220** | **red sandstone** |
| **220** | **245** | **blue shale** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4 1/2" N Plastic 0'-245'** | | | |
| **Perf. 45'-65'** | | | |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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# STATE OF TEXAS WELL REPORT for Tracking #283991

| | | | |
|---|---|---|---|
| Owner: | **COUNTRY CLUB AT LAKESIDE** | Owner Well #: | **No Data** |
| Address: | **1900 CLUBHOUSE HILL DRIVE SPICEWOOD, TX 78669** | Grid #: | **57-40-1** |
| Well Location: | **1900 CLUBHOUSE HILL DRIVE SPICEWOOD, TX 78669** | Latitude: | **30° 27' 39" N** |
| | | Longitude: | **098° 06' 05" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Test Well** |

Drilling Start Date: **1/30/2012** Drilling End Date: **1/30/2012**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **18** |
| **6.25** | **18** | **210** |

Drilling Method: **Air Hammer**

Borehole Completion: **Open Hole**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **18** | **4 BENTONITE** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **N/A**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **OWNER**

Surface Completion: **Surface Sleeve Installed**

Water Level: **160 ft.** below land surface on **2012-01-30** Measurement Method: **Unknown**

Packers: **N/A**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 8-10 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **60** | **TRINITY** |

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: **CENTEX PUMP & SUPPLY, INC.**

**2520 HWY. 290 WEST**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **AARON GLASS** License Number: **4227**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| **0** | **2** | **TOP SOIL** |
| **2** | **15** | **TAN LIMESTONE** |
| **15** | **20** | **RED LIMESTONE W/CLAY** |
| **20** | **30** | **TAN W/RED LIMESTONE** |
| **30** | **40** | **TAN LIMESTONE** |
| **40** | **65** | **GRAY LIMESTONE** |
| **65** | **75** | **TAN W/GRAY LIMESTONE** |
| **75** | **80** | **BLUE/GRAY LIMESTONE** |
| **80** | **90** | **BLUE/GRAY LIMESTONE** |
| | | **W/CLAY** |
| **90** | **125** | **BLUE/GRAY LIMESTONE** |
| | | **W/RED CLAY** |
| **125** | **135** | **RED LIMESTONE W/RED** |
| | | **SANDSTONE** |
| **135** | **140** | **RED SAND W/GRAVEL STRIPS** |
| **140** | **155** | **SAND W/RED CLAY** |
| **155** | **195** | **RED SAND & GRAVEL** |
| **195** | **210** | **BLUE CLAY STRIPS** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **6 1/4"** | **N** | **SCH. 40 PVC** | **+2 TO 18'** |

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# STATE OF TEXAS WELL REPORT for Tracking #286612

| | | | |
|---|---|---|---|
| Owner: | **WAYNE MOCK** | Owner Well #: | **1** |
| Address: | **LOT 29,BLOCK b,SECTION 1<br>MARBLE FALLS, TX 78654** | Grid #: | **57-40-6** |
| Well Location: | **ROCK CANYON COVE<br>MARBLE FALLS, TX 78654** | Latitude: | **30° 27' 12.83" N** |
| | | Longitude: | **098° 02' 15.52" W** |
| Well County: | **Travis** | Elevation: | **740 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **5/7/2012** Drilling End Date: **5/9/2012**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9.75** | **0** | **40** |
| **6.25** | **40** | **220** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **10** |

Seal Method: **PRESSURE CEMENTED**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Surface Sleeve Installed**

Water Level: **103 ft.** below land surface on **2012-05-09** Measurement Method: **Unknown**

Packers: **RUBBER 100'**
**RUBBER 180'**

Type of Pump: **Submersible** Pump Depth (ft.): **200**

Well Tests: **Jetted** **Yield: 35 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **TRINITY** |

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: **HILL COUNTRY WATER WELL**

**POBOX 220**
**BRIGGS, TX 78608**

Driller Name: **Joe McDearmon** License Number: **2334**

Comments: **No Data**

**Report Amended on 3/17/2025 by Request #44629**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **12** | **CALICHE** |
| **12** | **14** | **YELLOW CLAY** |
| **14** | **24** | **SAND** |
| **24** | **30** | **GRAVEL** |
| **30** | **50** | **WHITE LIME** |
| **50** | **120** | **GRAY LIME** |
| **120** | **160** | **RED SHALE** |
| **160** | **180** | **SANSTONE** |
| **180** | **190** | **BROWN SANDSTONE** |
| **190** | **195** | **SANDSTONE** |
| **195** | **200** | **TRINITY SAND** |
| **200** | **205** | **SANDSTONE** |
| **205** | **210** | **TRINITY SAND** |
| **210** | **220** | **ELLENBERG** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **NEW** | **PLASTIC** | **0/180 SDR17** |
| **4.5** | **NEW** | **SCREEN** | **200/220 .032** |

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# STATE OF TEXAS WELL REPORT for Tracking #293782

| | | | |
|---|---|---|---|
| Owner: | **JONATHEN CLARK** | Owner Well #: | **No Data** |
| Address: | **3225 FALL CREEK RD. SPICEWOOD, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **3225 FALL CREEK RD. SPICEWOOD, TX 78669** | Latitude: | **30° 24' 02" N** |
| | | Longitude: | **098° 07' 03" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **5/2/2012** Drilling End Date: **5/2/2012**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **50** |
| **6.25** | **50** | **220** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **1** | **50** | **7 CEMENT** |
| **1** | **50** | **VOLCLAY** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **N/A**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **OWNER**

Surface Completion: **Surface Sleeve Installed**

Water Level: **136 ft.** below land surface on **2012-05-02** Measurement Method: **Unknown**

Packers: **BURLAP & PLASTIC 120', 110', 50'**

Type of Pump: **Submersible** Pump Depth (ft.): **210**

Well Tests: **Jetted** **Yield: 5-7 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **120-205** | **TRINITY** |

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: **CENTEX PUMP & SUPPLY, INC.**

**2520 HWY. 290 WEST**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **JAMES BENOIT** License Number: **4227**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **10** | **RED SANDY LIME** |
| **10** | **35** | **YELLOW LIME** |
| **35** | **80** | **GRAY LIME** |
| **80** | **110** | **GRAY SHALE** |
| **110** | **120** | **RED CLAY** |
| **120** | **140** | **RED SANDSTONE** |
| **140** | **155** | **MULTI COLORED LIMESTONE** |
| **155** | **185** | **RED SANDSTONE** |
| **185** | **205** | **YELLOW LIMESTONE** |
| **205** | **220** | **GRAY CLAY** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **5** | **N** | **SDR17** | **-2 TO 150** |
| **5** | **N** | **SDR17 (SCREEN)** | **150 TO 210 .032** |
| **5** | **N** | **SDR17** | **210 TO** |

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# STATE OF TEXAS WELL REPORT for Tracking #293783

| | | | |
|---|---|---|---|
| Owner: | **JONATHAN CLARK** | Owner Well #: | **No Data** |
| Address: | **3225 FALL CREEK RD. SPICEWOOD, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **3225 FALL CREEK RD. SPICEWOOD, TX 78669** | Latitude: | **30° 24' 02" N** |
| | | Longitude: | **098° 07' 03" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **5/2/2012** Drilling End Date: **5/2/2012**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **50** |
| **6.25** | **50** | **220** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **1** | **50** | **7 CEMENT** |
| **1** | **50** | **VOLCLAY** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **N/A**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **OWNER**

Surface Completion: **Surface Sleeve Installed**

Water Level: **136 ft.** below land surface on **2012-05-02** Measurement Method: **Unknown**

Packers: **BURLAP & PLASTIC 120', 110', 50'**

Type of Pump: **Submersible** Pump Depth (ft.): **210**

Well Tests: **Jetted** **Yield: 5-7 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **120-205** | **TRINITY** |

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: **CENTEX PUMP & SUPPLY, INC.**

**2520 HWY. 290 WEST**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **JAMES BENOIT** License Number: **4227**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **10** | **RED SANDY LIME** |
| **10** | **35** | **YELLOW LIME** |
| **35** | **80** | **GRAY LIME** |
| **80** | **110** | **GRAY SHALE** |
| **110** | **120** | **RED CLAY** |
| **120** | **140** | **RED SANDSTONE** |
| **140** | **155** | **MULTI COLORED LIMESTONE** |
| **155** | **185** | **RED SANDSTONE** |
| **185** | **205** | **YELLOW LIMESTONE** |
| **205** | **220** | **GRAY CLAY** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **5** | **N** | **SDR17** | **-2 TO 150** |
| **5** | **N** | **SDR17 (SCREEN)** | **150 TO 210 .032** |
| **5** | **N** | **SDR17** | **210 TO** |

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# STATE OF TEXAS WELL REPORT for Tracking #298268

| | | | |
|---|---|---|---|
| Owner: | **BADGER CUSTOM HOMES** | Owner Well #: | **No Data** |
| Address: | **106 HIGH VISTA CIRCLE AUSTIN, TX 78737** | Grid #: | **57-40-5** |
| Well Location: | **25308 RIVER RD. SPICEWOOD, TX 78669** | Latitude: | **30° 26' 35" N** |
| | | Longitude: | **098° 04' 56" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **7/25/2012** Drilling End Date: **7/25/2012**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **90** |
| **6** | **90** | **190** |

Drilling Method: **Air Hammer**

Borehole Completion: **CASED**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **90** | **10 CEMENT** |
| **0** | **90** | **4 VOLCLAY** |

Seal Method: **PRESSURE TRIMMIE CEMENTING**

Sealed By: **Driller**

Distance to Property Line (ft.): **N/A**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

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

Method of Verification: **WELL DRILLED FIRST**

Surface Completion: **Surface Sleeve Installed**

Water Level: **115.6 ft.** below land surface on **2012-07-25** Measurement Method: **Unknown**

Packers: **3 BURLAP, PVC 90', 100', 110'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 15 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **60** | **TRINITY** |

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: **CENTEX PUMP & SUPPLY, INC.**

**2520 HWY. 290 WEST**
**DRIPPING SPRINGS, TX 78620**

Driller Name: **AARON GLASS** License Number: **4227**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| | | **0-1 TOP SOIL** |
| | | **1-18 TAN LIMESTONE** |
| | | **18-50 GRAY CLAY W/HAMMETT** |
| | | **CLAY** |
| | | **50-55 GRAY CLAY W/RED CLAY** |
| | | **55-70 GRAY LIMESTONE W/CLAY** |
| | | **STRIPS** |
| | | **70-72 GRAY/TAN LIMESTONE** |
| | | **72-75 RED CLAY** |
| | | **75-90 RED SAND & CLAY STRIPS** |
| | | **90-110 RED/TAN SAND & GRAVEL** |
| | | **110-125 RED CLAY** |
| | | **125-190 SAND & GRAVEL** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| | | | **5" OD N SDR17 PVC +3 TO 190** |
| | | | **5" OD N SDR17 PVC SLOT 130 TO 190 .032** |

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# STATE OF TEXAS WELL REPORT for Tracking #304430

| | | | |
|---|---|---|---|
| Owner: | **David Beilhar** | Owner Well #: | **1** |
| Address: | **1223 Pale Face Ranch Road Spicewood, TX** | Grid #: | **57-40-4** |
| Well Location: | **1223 Pale Face Ranch Raod Spicewood, TX** | Latitude: | **30° 25' 00" N** |
| | | Longitude: | **098° 06' 00" W** |
| Well County: | **Travis** | Elevation: | **823 ft. above sea level** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **11/12/2012** Drilling End Date: **11/18/2012**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.75** | **20** | **605** |

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **-2** | **20** | **12 cement** |

Seal Method: **poured slurry**

Sealed By: **charles Bulfer**

Distance to Property Line (ft.): **300+**

Distance to Septic Field or other concentrated contamination (ft.): **300+**

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

Method of Verification: **owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **145 ft.** below land surface on **2012-11-18** Measurement Method: **Unknown**

Packers: **rubber at 20 ft**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **fresh** |

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: **walden Drilling**

**1690 CR 102**
**LLANO, TX 78643**

Driller Name: **Charles A. Bulfer** License Number: **58222**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **14** | **limestone sand and gravel** |
| **14** | **69** | **brown limestone and streaks of black clay** |
| **69** | **132** | **limestone and red clay** |
| **132** | **195** | **brown limestone and clay,190 feet hit water** |
| **195** | **605** | **brown clay with small streaks of sand** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **sdr 17** | **plastic** | **new** |
| **400 ft to 605** | **perf. .125** | | |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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# STATE OF TEXAS WELL REPORT for Tracking #304431

| | | | |
|---|---|---|---|
| Owner: | **David Beilhar** | Owner Well #: | **1** |
| Address: | **1223 Pale Face Ranch Road Spicewood, TX** | Grid #: | **57-40-4** |
| Well Location: | **1223 Pale Face Ranch Raod Spicewood, TX** | Latitude: | **30° 25' 00" N** |
| | | Longitude: | **098° 06' 00" W** |
| Well County: | **Travis** | Elevation: | **823 ft. above sea level** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **11/12/2012** Drilling End Date: **11/18/2012**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.75** | **20** | **605** |

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **-2** | **20** | **12 cement** |

Seal Method: **poured slurry**

Sealed By: **charles Bulfer**

Distance to Property Line (ft.): **300+**

Distance to Septic Field or other concentrated contamination (ft.): **300+**

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

Method of Verification: **owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **145 ft.** below land surface on **2012-11-18** Measurement Method: **Unknown**

Packers: **rubber at 20 ft**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **fresh** |

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: **walden Drilling**

**1690 CR 102**
**LLANO, TX 78643**

Driller Name: **Charles A. Bulfer** License Number: **58222**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **14** | **limestone sand and gravel** |
| **14** | **69** | **brown limestone and streaks of black clay** |
| **69** | **132** | **limestone and red clay** |
| **132** | **195** | **brown limestone and clay,190 feet hit water** |
| **195** | **605** | **brown clay with small streaks of sand** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **sdr 17** | **plastic** | **new** |
| **400 ft to 605** | **perf. .125** | | |

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# STATE OF TEXAS WELL REPORT for Tracking #309265

| | | | |
|---|---|---|---|
| Owner: | **Pete Webster** | Owner Well #: | **No Data** |
| Address: | **12601 Bee Caves Pkwy #224<br>Austin, TX 78738** | Grid #: | **57-40-4** |
| Well Location: | **23800 Pedernales Canyon Trail<br>Spicewood, TX 78669** | Latitude: | **30° 25' 51" N** |
| | | Longitude: | **098° 05' 39" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **1/11/2013** Drilling End Date: **1/11/2013**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **282** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 of Portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 195', 190', 70', 20'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 20 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **197-262** | **Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Topsoil** |
| **1** | **29** | **Tan Limestone** |
| **29** | **110** | **Gray Limestone** |
| **110** | **154** | **Gray Clay** |
| **154** | **197** | **Red Sandstone** |
| **197** | **201** | **Gravel** |
| **201** | **232** | **Red Sandstone** |
| **232** | **262** | **Gravel **H2O** |
| **262** | **282** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5" OD) New PVC +2' to 202' SDR17** |
| **4.5" (5" OD) New Slotted PVC 202' to 262' .035** |
| **4.5" (5" OD) New PVC 262' to 282 SDR17** |

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# STATE OF TEXAS WELL REPORT for Tracking #314465

| | | | |
|---|---|---|---|
| Owner: | **David Beilhar** | Owner Well #: | **2** |
| Address: | **1223 Pale Face Ranch Road Spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **1223 Pale Face Ranch Road Spicewood, TX 78669** | Latitude: | **30° 25' 12" N** |
| | | Longitude: | **098° 06' 17" W** |
| Well County: | **Travis** | Elevation: | **823 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **3/21/2013** Drilling End Date: **3/22/2013**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8.75** | **0** | **180** |

Drilling Method: **Air Hammer; Air Rotary**

Borehole Completion: **Filter Packed; Straight Wall**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **10** | **180** | **Gravel** | **3/8** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **-2** | **10** | **3** |

Seal Method: **poured slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **150+**

Distance to Septic Field or other concentrated contamination (ft.): **300+**

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

Method of Verification: **owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **130 ft.** below land surface on **2013-03-21** Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 10+ GPM with 0 ft. drawdown after .5 hours**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **160** | **good** |

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: **Walden Drilling Inc**

**1690 cr 102**
**Llano, TX 78643**

Driller Name: **Scott Purcell** License Number: **59335**

Apprentice Name: **Eddie Screws**

Comments: **Jetted estimate of 10 + gpm before packing with gravel. Heavy Clay zone and gravel may slow estimated gpm.**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **14** | **limestone** |
| **14** | **69** | **brown lime with black clay** |
| **69** | **130** | **limestone with red clay** |
| **130** | **180** | **brown lime with clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **5** | **new** | **sdr 17** | **+2 -140** |
| **5** | **new** | **sdr 17** | **140-180 slotted .125** |

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# STATE OF TEXAS WELL REPORT for Tracking #316394

| | | | |
|---|---|---|---|
| Owner: | **Joe Beck C/O Austin Golf Club** | Owner Well #: | **10** |
| Address: | **24900 Hyw 71 W<br>Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **25400 Hwy 71 W<br>Spicewood, TX 78669** | Latitude: | **30° 24' 34" N** |
| | | Longitude: | **098° 06' 03" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Irrigation**

Drilling Start Date: **7/11/2012** Drilling End Date: **7/17/2012**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **660** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

Sealed By: **Unknown**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Unknown** **Yield: 0 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **Trinity** |

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: **APEX Drilling Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker P.G.** License Number: **54516**

Comments: **Back Field W/ 2' Cement Cap**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **26** | **Tan White Limestone** |
| **26** | **61** | **Gray Tan Limestone** |
| **61** | **105** | **Gray Clay** |
| **105** | **138** | **Red Sandstone** |
| **138** | **145** | **Gravel** |
| **145** | **162** | **Red Sandstone** |
| **162** | **210** | **Gravel** |
| **210** | **252** | **Tan Clay** |
| **252** | **660** | **Gray Limestone W/ Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #324857

| | | | |
|---|---|---|---|
| Owner: | **Sheila & Craig Nickels** | Owner Well #: | **No Data** |
| Address: | **4300 Travis Peak Trail<br>Marble falls, TX 78654** | Grid #: | **57-40-1** |
| Well Location: | **marble falls, TX 78654** | Latitude: | **30° 27' 42" N** |
| | | Longitude: | **098° 05' 59" W** |
| Well County: | **Burnet** | Elevation: | **784 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Closed-Loop Geothermal** |

Drilling Start Date: **7/1/2013** Drilling End Date: **7/7/2013**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **4.5** | **0** | **300** |

Drilling Method: **Air Hammer; Air Rotary**

Borehole Completion: **BH20**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **300** | **9 BH20** |

Seal Method: **Tremite**

Sealed By: **Freddie Wright**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Unknown**

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

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

Company Information: **Geothermal Advantage**

**2425 Brenham Dr**
**McKinney, TX 75070**

Driller Name: **Michael Wright** License Number: **58690**

Comments: **6 Geothermal Bore Holes**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **7** | **top soil** |
| **8** | **300** | **hard sandstone/shale** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #342767

| | | | |
|---|---|---|---|
| Owner: | **Mark Sitterle** | Owner Well #: | **1** |
| Address: | **2400 Cliff Point<br>Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **2400 Cliff Point<br>Spicewood, TX 78669** | Latitude: | **30° 27' 15" N** |
| | | Longitude: | **098° 04' 31" W** |
| Well County: | **Travis** | Elevation: | **535 ft. above sea level** |

Type of Work: **New Well** Proposed Use: **Irrigation**

Drilling Start Date: **9/17/2013** Drilling End Date: **9/23/2013**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **240** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **124** | **240** | **Gravel** | |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **124** | **1hlp5bns6TypH** |

Seal Method: **Pos. Displacement**

Sealed By: **Driller**

Distance to Property Line (ft.): **35**

Distance to Septic Field or other concentrated contamination (ft.): **300+**

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

Method of Verification: **Measured**

Surface Completion: **Pitless Adapter Used**

Water Level: **124 ft.** below land surface on **2013-09-18** Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **180**

Well Tests: **Jetted** **Yield: 15+ GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **160/230** | **Good** |

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: **Whisenant & Lyle Water Services**

**P.O. Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Apprentice Name: **Travis Haffelder**

Comments: **TDS 500**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **Topsoil** |
| **2** | **18** | **White Brown Yellow Limestone** |
| **18** | **20** | **Brown Limestone** |
| **20** | **30** | **Tan Brown Limestone** |
| **30** | **40** | **Gray Limestone wet** |
| **40** | **43** | **Brown Limestone** |
| **43** | **74** | **Gray Limestone** |
| **74** | **76** | **Brown Shale** |
| **76** | **85** | **Gray Limestone Shale** |
| **85** | **110** | **Red Sandstone Rock** |
| **110** | **140** | **Brown Limestone Rock** |
| **140** | **230** | **Brown Rock** |
| **230** | **240** | **Gravel Black Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **New** | **PVC-SDR 17IB** | **+2'/180'** |
| **4.5** | **New** | **PVC-17 Slotted .035** | **180'/240'** |

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# STATE OF TEXAS WELL REPORT for Tracking #342864

| | | | |
|---|---|---|---|
| Owner: | **Rod Sellers** | Owner Well #: | **1** |
| Address: | **P.O. Box 890649<br>Houston, TX 77289** | Grid #: | **57-40-5** |
| Well Location: | **25714 Cliff Circle<br>Spicewood, TX 78669** | Latitude: | **30° 27' 21" N** |
| | | Longitude: | **098° 04' 26" W** |
| Well County: | **Travis** | Elevation: | **768 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Irrigation** |

Drilling Start Date: **9/24/2013** Drilling End Date: **9/25/2013**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **8** | **0** | **220** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|---|
| Filter Pack Intervals: | **100** | **220** | **Gravel** | |

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **177** | **2hlpg5bnsl9TypH** |

Seal Method: **Pos. Displacement**

Sealed By: **Driller**

Distance to Property Line (ft.): **5**

Distance to Septic Field or other concentrated contamination (ft.): **250+**

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

Method of Verification: **Measured**

Surface Completion: **Pitless Adapter Used**

Water Level: **144 ft.** below land surface on **2013-09-26** Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **180**

Well Tests: **Jetted** **Yield: 15+ GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **160/220** | **Good** |

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: **Whisenant & Lyle Water Services**

**P.O. Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Apprentice Name: **Travis Haffelder**

Comments: **TDS 500**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Topsoil** |
| **1** | **22** | **White Limestone** |
| **22** | **45** | **Brown Limestone Sand Wet** |
| **45** | **95** | **Gray Limestone Shale** |
| **95** | **118** | **Red Sandstone Sand** |
| **118** | **160** | **Red Brown Sandstone** |
| **160** | **216** | **Brown Sandstone Rock** |
| **216** | **220** | **Gray Black Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 New PVC-SDR 17IB +2'/160'** |
| **4.5 New PVC-17 Slotted .035 160'/220'** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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**P.O. Box 12157**
**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #342868

| | | | |
|---|---|---|---|
| Owner: | **Bill Thomas** | Owner Well #: | **1** |
| Address: | **25616 Kahala Sunset Ct. Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **25616 Kahala Sunset Ct. Spicewood, TX 78669** | Latitude: | **30° 27' 11" N** |
| | | Longitude: | **098° 04' 26" W** |
| Well County: | **Travis** | Elevation: | **793 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Irrigation** |

Drilling Start Date: **9/25/2013** Drilling End Date: **9/27/2013**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **8** | **0** | **260** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|---|
| Filter Pack Intervals: | **123** | **200** | **Gravel** | |

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **127** | **1hlpg5bnsl6TypH** |

Seal Method: **Pos. Displacement**

Sealed By: **Driller**

Distance to Property Line (ft.): **6**

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

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

Method of Verification: **Measured**

Surface Completion: **Pitless Adapter Used**

Water Level: **167 ft.** below land surface on **2013-09-26** Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **200**

Well Tests: **Jetted** **Yield: 20+ GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **200/260** | **Good** |

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: **Whisenant & Lyle Water Services**

**P.O. Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Apprentice Name: **Travis Haffelder**

Comments: **TDS 500**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| **0** | **1/2** | **Topsoil** |
| **1/2** | **6** | **Red Clay Sand** |
| **6** | **18** | **Red Sandstone White Limestone** |
| **18** | **20** | **Brown Limestone** |
| **20** | **45** | **White Limestone** |
| **45** | **47** | **Brown Sandstone White Limestone** |
| **47** | **53** | **Brown Limestone** |
| **53** | **110** | **Gray Limestone** |
| **110** | **135** | **Red Sandstone** |
| **135** | **137** | **Brown Sandstone** |
| **137** | **200** | **Red Rock Sandstone** |
| **200** | **250** | **Brown Limestone** |
| **250** | **260** | **Black Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **New** | **PVC-SDR 17IB** | **+2'/200'** |
| **4.5** | **New** | **PVC-17 Slotted .035** | **200'/260'** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #342870

| | | | |
|---|---|---|---|
| Owner: | **John & Sheryl Scott** | Owner Well #: | **1** |
| Address: | **25617 Kahala Sunset Ct.<br>Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **25617 Kahala Sunset Ct<br>Spicewood, TX 78669** | Latitude: | **30° 27' 10" N** |
| | | Longitude: | **098° 04' 26" W** |
| Well County: | **Travis** | Elevation: | **793 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Irrigation** |

Drilling Start Date: **9/18/2013** Drilling End Date: **9/23/2013**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **8** | **0** | **280** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|---|
| Filter Pack Intervals: | **164** | **280** | **Gravel** | |

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **153** | **1hlpg6bnsl6TypH** |

Seal Method: **Pos. Displacement**

Sealed By: **Driller**

Distance to Property Line (ft.): **8**

Distance to Septic Field or other concentrated contamination (ft.): **300+**

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

Method of Verification: **Measured**

Surface Completion: **Pitless Adapter Used**

Water Level: **163 ft.** below land surface on **2013-09-18** Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **240**

Well Tests: **Jetted** **Yield: 15+ GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **230/275** | **Good** |

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: **Whisenant & Lyle Water Services**

**P.O. Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Apprentice Name: **Travis Haffelder**

Comments: **TDS 500**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Caliche** |
| **1** | **5** | **Red Sandstone** |
| **5** | **8** | **Brown Sandstone** |
| **8** | **10** | **Gray Brown Sandstone** |
| **10** | **12** | **Brown Red Limestone** |
| **12** | **18** | **Red Sandstone** |
| **18** | **20** | **Brown Limestone** |
| **20** | **21** | **Red Shale** |
| **21** | **23** | **Brown Limestone** |
| **23** | **30** | **Light Brown Red Sandstone** |
| **30** | **32** | **Yellow Limestone** |
| **32** | **50** | **White Limestone** |
| **50** | **55** | **Brown Red Sand** |
| **55** | **95** | **Gray Limestone** |
| **95** | **97** | **Brown Red Shale** |
| **97** | **115** | **Gray Limestone** |
| **115** | **117** | **Red Sandstone** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 New PVC-SDR 17IB +2'/240'** |
| **4.5 New PVC-17 Slotted .035 240'/280'** |

| | | |
|---|---|---|
| **117** | **140** | **Brown Red Sandstone** |
| **140** | **145** | **Rock Red Sandstone** |
| **145** | **200** | **Red Sandstone** |
| **200** | **275** | **Brown Rock Sandstone** |
| **275** | **280** | **Gray & Black Clay** |

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# STATE OF TEXAS WELL REPORT for Tracking #342989

| | | | |
|---|---|---|---|
| Owner: | **Mary Beth Meier** | Owner Well #: | **1** |
| Address: | **349 Scenic Ridge Dr<br>Spicewood, TX 78669** | Grid #: | **57-39-6** |
| Well Location: | **Mary Beth<br>TX** | Latitude: | **30° 26' 47" N** |
| | | Longitude: | **098° 08' 24" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **8/5/2013** Drilling End Date: **8/5/2013**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.25** | **20** | **395** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 235,230,30,20**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 2 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **315-375** | **Trinity** |

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: **APEX Drilling Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker P.G.** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Topsoil** |
| **1** | **24** | **Tan Limestone** |
| **24** | **165** | **Gray Tan Limestone** |
| **165** | **175** | **Gray Sand** |
| **175** | **258** | **Red Clay w/ Sand** |
| **258** | **315** | **Tan Limestone** |
| **315** | **336** | **Red Sandstone** |
| **336** | **375** | **Gravel** |
| **375** | **395** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5OD) New PVC +2 to 235 SDR 17** |
| **4.5" (5OD) Slotted 235 to 255 .035** |
| **4.5" (5OD) New PVC 255 to 335 SDR 17** |
| **4.5" (5OD) Slotted 335 to 375 .035** |
| **4.5" (5OD) New PVC 375 to 395 SDR 17** |

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# STATE OF TEXAS WELL REPORT for Tracking #342990

| | | | |
|---|---|---|---|
| Owner: | **Mary Beth Meier** | Owner Well #: | **2** |
| Address: | **349 Scenic Ridge Dr<br>Spicewood, TX 78669** | Grid #: | **57-39-6** |
| Well Location: | **Mary Beth<br>TX** | Latitude: | **30° 26' 47" N** |
| | | Longitude: | **098° 08' 15" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **8/7/2013** Drilling End Date: **8/7/2013**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.25** | **20** | **401** |

Drilling Method: **Air Rotary**

Borehole Completion: **Unknown**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

Sealed By: **Unknown**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **Trinity** |

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: **APEX Drilling Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker P.G.** License Number: **54516**

Comments: **Backfill**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| **000** | **001** | **Topsoil** |
| **001** | **028** | **Tan Limestone** |
| **028** | **205** | **Gray Limestone w/ Clay** |
| **205** | **248** | **Red Clay-Sand** |
| **248** | **350** | **Tan Limestone** |
| **350** | **395** | **Red Sandstone** |
| **395** | **398** | **Red Sandstone Gravel** |
| **398** | **401** | **Tan Clay** |
| **DRY** | | **Backfill** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5"** | **(5OD)** | **New PVC** | **+2 to 235 SDR 17** |
| **4.5"** | **(5OD)** | **Slotted** | **235 to 255 .035** |
| **4.5"** | **(5OD)** | **New PVC** | **255 to 335 SDR 17** |
| **4.5"** | **(5OD)** | **Slotted** | **335 to 375 .035** |
| **4.5"** | **(5OD)** | **New PVC** | **375 to 395 SDR 17** |

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# STATE OF TEXAS WELL REPORT for Tracking #343517

| | | | |
|---|---|---|---|
| Owner: | **Zolton Papp** | Owner Well #: | **No Data** |
| Address: | **3713 Bee Creek<br>Spicewood, TX 78669** | Grid #: | **57-39-6** |
| | | Latitude: | **30° 25' 32" N** |
| Well Location: | **12804 S Hwy 71<br>Spicewood, TX 78669** | Longitude: | **098° 07' 48" W** |
| Well County: | **Blanco** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **9/19/2013** Drilling End Date: **9/19/2013**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.25** | **20** | **297** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 port** |

Seal Method: **Slurry**

Sealed By: **APEX Drillin Inc.**

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

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

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

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 210,205,30,20**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 4.5 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **211-277** | **Trinity** |

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: **APEX Drilling Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker P.G.** License Number: **54516**

Comments: **Amended at driller's request (well location address and county). Unable to utilize amendment request system - 10/31/13 - DT**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **18** | **Tan Limestone** |
| **18** | **36** | **Gray Tan Limestone** |
| **36** | **105** | **Red Limestone w/ Sand** |
| **105** | **135** | **White Limestone** |
| **135** | **157** | **Gray Tan Limestone** |
| **157** | **194** | **Gray Clay** |
| **194** | **211** | **Red Sandstone** |
| **211** | **277** | **Gravel H2o** |
| **277** | **297** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5 (5OD)** | **New** | **PVC** | **+2 to 217 SDR 17** |
| **4.5 (5OD)** | **Slotted** | | **217 to 277 .035** |
| **4.5 (5OD)** | **New** | **PVC** | **277 to 297 SDR 17** |

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# STATE OF TEXAS WELL REPORT for Tracking #343750

| | | | |
|---|---|---|---|
| Owner: | **Julie Queenson** | Owner Well #: | **2** |
| Address: | **2601 Fall Creek Estates Dr. Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **2601 Fall Creek Estates Dr. Spicewood, TX 78669** | Latitude: | **30° 24' 36" N** |
| | | Longitude: | **098° 06' 44" W** |
| Well County: | **Travis** | Elevation: | **839 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **8/23/2013** Drilling End Date: **8/23/2013**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **10** |
| **8.5** | **10** | **260** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **100** | **260** | **Gravel** | **3/8"** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **5** | **2 cement** |
| **5** | **50** | **16 bentonite** |

Seal Method: **slurry and pour**

Sealed By: **Steve Stewart**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Water Level: **202 ft.** below land surface on **2013-08-29** Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **240**

Well Tests: **Pump** **Yield: 7 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **Trinity** |

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: **Bee Cave Drilling, Inc.**

**185 Angel Fire Dr.**
**Dripping Springs, TX 78620**

Driller Name: **Jim Blair** License Number: **54416**

Apprentice Name: **Steve Stewart**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **6** | **topsoil** |
| **6** | **16** | **pink limestone** |
| **16** | **55** | **white limestone (hard)** |
| **55** | **110** | **gray limestone** |
| **110** | **140** | **gray shale** |
| **140** | **145** | **brown shale** |
| **145** | **175** | **brown & red shale w/ white rock** |
| **175** | **195** | **red shale w/ tan rock** |
| **195** | **248** | **lost circulation firm rock** |
| **248** | **260** | **lost circulation clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **new** | **sdr-17** | **0 180** |
| **4.5** | **new** | **perf** | **180 260** |

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# STATE OF TEXAS WELL REPORT for Tracking #350471

| | | | |
|---|---|---|---|
| Owner: | **Mike Delamore** | Owner Well #: | **No Data** |
| Address: | **1313 Majesctic Hill Blvd Spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **1117 Starlight Canyon Ct. Spicewood, TX 78669** | Latitude: | **30° 27' 16" N** |
| | | Longitude: | **098° 06' 22" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **10/25/2013** Drilling End Date: **10/25/2013**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.25** | **20** | **300** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 port** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

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

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 215,210,105,20**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 2-3 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **216-279** | **L Trinity** |

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: **APEX Drilling Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker P.G** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **8** | **Tan Limestone** |
| **8** | **8** | **Gray Tan Limestone** |
| **8** | **81** | **Tan Limestone w/Sand** |
| **81** | **111** | **Red Sandstone w/ clay** |
| **111** | **127** | **Tan Limestone** |
| **127** | **164** | **Gray Tan Limestone** |
| **164** | **196** | **Gray Clay** |
| **196** | **216** | **Red Sandstone** |
| **216** | **224** | **Gravel H2o** |
| **224** | **236** | **Red Sandstone** |
| **236** | **279** | **Gravel H2o** |
| **279** | **300** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5OD) New PVC +2 to 225 SDR 17** |
| **4.5" (5OD) New Slotted 225 to 285 .035** |
| **4.5" (5OD) New PVC 285 to 300 SDR 17** |

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# STATE OF TEXAS WELL REPORT for Tracking #352933

| | | | |
|---|---|---|---|
| Owner: | **Russell Griffen & Ray Windsor** | Owner Well #: | **No Data** |
| Address: | **4507 Navajo Path<br>Austin, TX 78745** | Grid #: | **57-40-1** |
| Well Location: | **Lot 16 ( Oak Rd ) Shady Creek Ranches<br>Spicewood, TX 78669** | Latitude: | **30° 27' 47" N** |
| | | Longitude: | **098° 07' 10.23" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **8/20/2005** Drilling End Date: **8/20/2005**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.5** | **20** | **170** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

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

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

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 104,100,20**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 4-5 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **104-145** | **Trinity** |

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: **APEX Drilling Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

**Report Amended on 3/17/2025 by Request #44641**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **8** | **Tan Limestone** |
| **8** | **30** | **Gray Sandstone** |
| **30** | **37** | **Tan-White Limestone** |
| **37** | **75** | **Gray Clay** |
| **75** | **104** | **Red Sandstone w/ Clay** |
| **104** | **108** | **Gravel** |
| **108** | **117** | **Sandy Clay** |
| **117** | **145** | **Gravel H2o** |
| **145** | **165** | **Tan Clay** |
| **165** | **170** | **Blue Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5" (5OD) New PVC +2 to 170 SDR17** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #352968

| | | | |
|---|---|---|---|
| Owner: | **Jairo Lopez** | Owner Well #: | **No Data** |
| Address: | **1113 Ave. D<br>Marble Falls, TX 78611** | Grid #: | **57-39-6** |
| Well Location: | **12649 St Hwy 71<br>Spicewood, TX 78669** | Latitude: | **30° 25' 26" N** |
| | | Longitude: | **098° 07' 54" W** |
| Well County: | **Blanco** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **1/13/2014** Drilling End Date: **1/13/2014**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.25** | **20** | **230** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **4 portland** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **50+**

Distance to Septic Field or other concentrated contamination (ft.): **100+**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 150,140,30,20**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 3 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **163-210** | **Trinity** |

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: **APEX Drilling Inc.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Michael G Becker P.G** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **12** | **Black Dirt** |
| **12** | **18** | **Tan Limestone w Sand** |
| **18** | **35** | **Red Clay** |
| **35** | **43** | **Tan White Limestone w / Clay** |
| **43** | **83** | **Tan White Limestone** |
| **83** | **85** | **Gray Tan Limestone** |
| **85** | **125** | **Gray Clay** |
| **125** | **163** | **Red Sandstone** |
| **163** | **210** | **Gravel H2o** |
| **210** | **212** | **Turquoise Clay** |
| **212** | **230** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" (5OD) New PVC +2 to 150 SDR17** |
| **4.5" (5OD) New Slotted 150 to 210 .035** |
| **4.5" (5OD) New PVC 210 to 230 SDR17** |

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# STATE OF TEXAS WELL REPORT for Tracking #356159

| | | | |
|---|---|---|---|
| Owner: | **Bart Jones** | Owner Well #: | **1** |
| Address: | **25630 Cliff Crossing<br>Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **25630 Cliff Crossing<br>Spicewood, TX 78669** | Latitude: | **30° 27' 20" N** |
| | | Longitude: | **098° 04' 23" W** |
| Well County: | **Travis** | Elevation: | **731 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Irrigation** |

Drilling Start Date: **2/21/2014** Drilling End Date: **2/24/2014**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **8.5** | **0** | **200** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|---|
| Filter Pack Intervals: | **140** | **200** | **Gravel** | |

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **140** | **10bns/7hlp/3tyH** |

Seal Method: **Pos. Displacement**

Sealed By: **Driller**

Variance Number: **032-14**

Distance to Property Line (ft.): **20**

Distance to Septic Field or other concentrated contamination (ft.): **6**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **Measured**

Surface Completion: **Unknown**

Water Level: **112 ft.** below land surface on **2014-02-24** Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 15-18 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **140/200** | **Good** |

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: **Whisenant & Lyle Water Services**

**P.O. Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Apprentice Name: **Travis Haffelder**

Comments: **TDS 650**
**Variance 032-14**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Topsoil** |
| **1** | **6** | **White Limestone Hard** |
| **6** | **7** | **Brown Limestone** |
| **7** | **15** | **Brown White Limestone Hard** |
| **15** | **17** | **Brown Sandstone** |
| **17** | **32** | **Gray Limestone** |
| **32** | **55** | **Gray Limestone** |
| **55** | **60** | **Gray Shale** |
| **60** | **62** | **Brown Sandstone** |
| **62** | **80** | **Gray Limestone** |
| **80** | **90** | **Red Sandstone Damp** |
| **90** | **92** | **Blue Shale Gravel** |
| **92** | **120** | **Red Sandstone** |
| **120** | **140** | **Gravel Red Sandstone** |
| **140** | **198** | **Gravel & Rock** |
| **198** | **200** | **Blue Shale Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **New** | **PVC-SDR 17IB** | **+2'/140'** |
| **4.5** | | **PVC-17 Slotted .035** | **140'/200'** |

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# STATE OF TEXAS WELL REPORT for Tracking #365692

| | | | |
|---|---|---|---|
| Owner: | **John Morgan** | Owner Well #: | **No Data** |
| Address: | **25222 River Rd.<br>Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **25116 River Rd.<br>Spicewood, TX 78669** | Latitude: | **30° 26' 17" N** |
| | | Longitude: | **098° 04' 54" W** |
| Well County: | **Travis** | Elevation: | **755 ft. above sea level** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **4/15/2014** Drilling End Date: **4/16/2014**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **10** |
| **8** | **10** | **225** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **100** | **225** | **Gravel** | **3/8"** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **26 cement** |

Seal Method: **pressure cemented**

Sealed By: **Steve Stewart**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Water Level: **153 ft.** below land surface on **2014-04-16** Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **not set yet**

Well Tests: **Jetted** **Yield: 15 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **Trinity** |

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: **Bee Cave Drilling, Inc.**

**185 Angel Fire Dr.**
**Dripping Springs, TX 78620**

Driller Name: **Jim Blair** License Number: **54416**

Comments: **Amended 7/7/14 Ref.# 12071**

**Report Amended on by Request #12071**

**Report Amended on by Request #12073**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **4** | **topsoil** |
| **4** | **12** | **tan caliche** |
| **12** | **40** | **tan limestone** |
| **40** | **100** | **gray limestone** |
| **100** | **130** | **red & gray clay** |
| **130** | **155** | **Trinity gravel wb** |
| **155** | **198** | **sandstone & gravel wb 15 gpm** |
| **198** | **225** | **yellow clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **new** | **sdr-17** | **0 120** |
| **4.5** | **new** | **perf** | **120 200** |
| **4.5** | **new** | **sdr-17** | **200 225** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #365693

| | | | |
|---|---|---|---|
| Owner: | **John Morgan** | Owner Well #: | **No Data** |
| Address: | **25222 River Rd.<br>Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **25228 River Rd.<br>Spicewood, TX 78669** | Latitude: | **30° 26' 25" N** |
| | | Longitude: | **098° 04' 56" W** |
| Well County: | **Travis** | Elevation: | **774 ft. above sea level** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **4/16/2014** Drilling End Date: **4/16/2014**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **10** |
| **8.5** | **10** | **210** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **100** | **210** | **Gravel** | **3/8"** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **21 cement** |

Seal Method: **pressure cemented**

Sealed By: **Steve Stewart**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Water Level: **147 ft.** below land surface on **2014-04-17** Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **200**

Well Tests: **Jetted** **Yield: 10 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **Trinity** |

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: **Bee Cave Drilling, Inc.**

**185 Angel Fire Dr.**
**Dripping Springs, TX 78620**

Driller Name: **Jim Blair** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **topsoil** |
| **1** | **6** | **tan limestone** |
| **6** | **35** | **hard white rock** |
| **35** | **40** | **yellow limestone** |
| **40** | **70** | **gray limestone** |
| **70** | **100** | **gray clay** |
| **100** | **130** | **red clay** |
| **130** | **145** | **red clay & gravel** |
| **145** | **200** | **red & tan trinity gravel wb 10 gpm** |
| **200** | **210** | **yellow clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **new** | **sdr-17** | **0 120** |
| **4.5** | **new** | **perf** | **120 200** |
| **4.5** | **new** | **sdr-17** | **200 210** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #365694

| | | | |
|---|---|---|---|
| Owner: | **John Morgan** | Owner Well #: | **No Data** |
| Address: | **25222 River Rd.<br>Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **25222 River Rd.<br>Spicewood, TX 78669** | Latitude: | **30° 26' 24" N** |
| | | Longitude: | **098° 04' 57" W** |
| Well County: | **Travis** | Elevation: | **774 ft. above sea level** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **4/16/2014** Drilling End Date: **4/16/2014**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **10** |
| **8.5** | **10** | **210** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **100** | **210** | **Gravel** | **3/8"** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **25 cement** |

Seal Method: **pressure cementing**

Sealed By: **Steve Stewart**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Water Level: **149 ft.** below land surface on **2014-04-17** Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **200**

Well Tests: **Jetted** **Yield: 10 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **Trinity** |

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: **Bee Cave Drilling, Inc.**

**185 Angel Fire Dr.**
**Dripping Springs, TX 78620**

Driller Name: **Jim Blair** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **6** | **topsoil** |
| **6** | **10** | **white limestone** |
| **10** | **48** | **hard white rock** |
| **48** | **60** | **gray limestone** |
| **60** | **105** | **gray clay** |
| **105** | **125** | **red clay** |
| **125** | **145** | **gravel & clay** |
| **145** | **200** | **sandstone & gravel wb 10 gpm** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **new** | **sdr-17** | **0 120** |
| **4.5** | **new** | **perf** | **120 200** |
| **4.5** | **new** | **sdr-17** | **200 210** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #366269

| | | | |
|---|---|---|---|
| Owner: | **Terry Neiman** | Owner Well #: | **No Data** |
| Address: | **PO Box 4007<br>Horseshoe Bay, TX 78657** | Grid #: | **57-40-5** |
| Well Location: | **25264 Kahala Sunset Court<br>Spicewood, TX 78669** | Latitude: | **30° 27' 11" N** |
| | | Longitude: | **098° 04' 27" W** |
| Well County: | **Travis** | Elevation: | **771 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Irrigation** |

Drilling Start Date: **6/2/2014** Drilling End Date: **6/4/2014**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **8.75** | **0** | **240** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|---|
| Filter Pack Intervals: | **154** | **240** | **Gravel** | |

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **154** | **2 3/8hp12bs2ptl** |

Seal Method: **Pos. displacement**

Sealed By: **Driller**

Variance Number: **064-14**

Distance to Property Line (ft.): **15**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **Measured**

Surface Completion: **Pitless Adapter Used**

Water Level: **160 ft.** below land surface on **2014-06-02** Measurement Method: **Unknown**

Packers: **Gravel Pack**

Type of Pump: **Submersible** Pump Depth (ft.): **200**

Well Tests: **Jetted** **Yield: 10-15 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **140-240** | **Good TDS 470** |

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: **Whisenant & Lyle Water Services**

**PO Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Apprentice Name: **Travis Haffelder** Apprentice Number: **58603**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Topsoil** |
| **1** | **3** | **Red tan sandstone** |
| **3** | **4** | **White limestone** |
| **4** | **10** | **Brown tan limestone sandstone** |
| **10** | **21** | **Red tan sand clay** |
| **21** | **24** | **White limestone** |
| **24** | **44** | **White brown sandstone** |
| **44** | **51** | **Brown sandstone** |
| **51** | **85** | **Gray limestone** |
| **85** | **90** | **Gray shale** |
| **90** | **95** | **Red gray shale** |
| **95** | **113** | **Gray sandstone** |
| **113** | **130** | **Red sandstone** |
| **130** | **230** | **Brown sandstone rock** |
| **230** | **240** | **Blue brown shale** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5 New PVC-SDR 17IB +2 to 160** |
| **4.5 New PVC-17 Slotted .035 160 to 220** |
| **4.5 New PVC-SDR 17IB 220 to 240** |

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# STATE OF TEXAS WELL REPORT for Tracking #369054

| | | | |
|---|---|---|---|
| Owner: | **Holzapfel** | Owner Well #: | **No Data** |
| Address: | **26804 masters parkway spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **26804 masters parkway spicewood, TX 78669** | Latitude: | **30° 27' 01" N** |
| | | Longitude: | **098° 05' 01" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| | | ****Plugged Within 48 Hours**** | |

****This well has been plugged**** **Plugging Report Tracking #147051**

Type of Work: **New Well** Proposed Use: **Closed-Loop Geothermal**

Drilling Start Date: **5/17/2014** Drilling End Date: **5/23/2014**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **4.5** | **0** | **250** |

Drilling Method: **Air Hammer**

Borehole Completion: **Filter Packed**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|---|
| Filter Pack Intervals: | **20** | **250** | **Gravel** | **3/8** |

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **20** | **3 bentonite** |

Seal Method: **Poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **50**

Distance to Septic Field or other concentrated contamination (ft.): **100**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **owner**

Surface Completion: **Alternative Procedure Used**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Unknown**

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: **Sarris well Drilling**

**p o box**
**austin, TX 78760**

Driller Name: **Anthony Sarris** License Number: **58870**

Comments: **drilled 5 new geothermal closed loop wells 0-250**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) | To (ft) | Description |
|---|---|---|
| **0** | **3** | **ft clay** |
| **3** | **250** | **rock and limestone** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **one** | **inch** | **new polyethlene pipe** | **0 -250** |

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# STATE OF TEXAS WELL REPORT for Tracking #379880

| | | | |
|---|---|---|---|
| Owner: | **Paul Motheral** | Owner Well #: | **No Data** |
| Address: | **26100 Country Side Dr<br>Spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **1116 Saddlebrook Canyon Ct<br>Spicewood, TX 78669** | Latitude: | **30° 27' 19" N** |
| | | Longitude: | **098° 06' 05" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **8/15/2014** Drilling End Date: **8/15/2014**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **70** |
| **6.25** | **70** | **145** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **60** | **3ben 1 port** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **5+**

Distance to Septic Field or other concentrated contamination (ft.): **50+**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap/Neoprene 60**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 16 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **60-117** | **M Trinity** |

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: **APEX Drilling INC.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **16** | **Tan Limestone** |
| **16** | **18** | **Gray Tan Limestone** |
| **18** | **58** | **Tan Limestone** |
| **58** | **60** | **Red Clay** |
| **60** | **72** | **Red Tan Sandstone** |
| **72** | **76** | **Sand** |
| **76** | **82** | **Red Tan Sandstone** |
| **82** | **103** | **Tan Limestone w Red Clay** |
| **103** | **117** | **Tan White Limestone** |
| **117** | **144** | **Gray Limestone** |
| **144** | **145** | **Gray Limestone w Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **4.5" ( 5OD ) New PVC +2' to 65' SDR17** |
| **4.5" ( 5OD ) New Slotted 65' to 85' .035** |
| **4.5" ( 5OD ) New PVC 85' to 105' SDR17** |
| **4.5" ( 5OD ) New Slotted 105' to 125' .035** |
| **4.5" ( 5OD ) New PVC 125' to 145' SDR17** |

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# STATE OF TEXAS WELL REPORT for Tracking #380214

Owner: **Aqua Texas Inc.**

Address: **1106 Clayton Lane, Suite 400W**
**Austin, TX 78723**

Well Location: **Barton Creek**
**TX**

Well County: **Travis**

Owner Well #: **1**

Grid #: **57-40-4**

Latitude: **30° 27' 20" N**

Longitude: **098° 06' 15" W**

Elevation: **No Data**

****Plugged Within 48 Hours****

****This well has been plugged****

**Plugging Report Tracking #97872**

Type of Work: **New Well**

Proposed Use: **Test Well**

Drilling Start Date: **9/15/2014** Drilling End Date: **9/15/2014**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.25** | **20** | **320** |

Drilling Method: **Air Rotary**

Borehole Completion: **Plugged**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **320** | **18 Benseal** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 2.6 GPM**

Plug Information:

| *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **None 320 3 18 Benseal** | | |
| **3 0 1 Portland** | | |

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **110-271** | **Trinity** |

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: **APEX Drilling INC.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **9** | **Tan Limestone** |
| **9** | **41** | **Gray Tan Limestone** |
| **41** | **55** | **Tan Limestone w Sand** |
| **55** | **110** | **Red Sandstone w Clay** |
| **110** | **122** | **Tan White Limestone H2o 1.6gpm** |
| **122** | **153** | **Gray Tan Limestone** |
| **153** | **195** | **Gray Clay ( Hammet )** |
| **170** | **271** | **Torques Clay** |
| **195** | **220** | **Red Sandstone** |
| **220** | **225** | **Gravel** |
| **225** | **270** | **Red Sandstone & Gravel H2o 1gpm** |
| **271** | **295** | **Tan Clay** |
| **295** | **320** | **Gray Clay ( Smithwick )** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #380217

| | | | |
|---|---|---|---|
| Owner: | **Aqua Texas Inc.** | Owner Well #: | **2** |
| Address: | **1106 Clayton Lane, Suite 400W<br>Austin, TX 78723** | Grid #: | **57-40-4** |
| | | Latitude: | **30° 27' 13" N** |
| Well Location: | **Barton Creek<br>TX** | Longitude: | **098° 06' 09" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| | | | ****Plugged Within 48 Hours**** |

****This well has been plugged**** **Plugging Report Tracking #97873**

Type of Work: **New Well** Proposed Use: **Test Well**

Drilling Start Date: **9/16/2014** Drilling End Date: **9/16/2014**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.25** | **20** | **263** |

Drilling Method: **Air Rotary**

Borehole Completion: **Plugged**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **263** | **14 Benseal** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 7.3 GPM**

Plug Information:

| *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **None 263 3 14 Benseal** | | |
| **3 0 1 Portland** | | |

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **55-223** | **Trinity** |

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: **APEX Drilling INC.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **Top Soil** |
| **2** | **33** | **Tan Red Sandstone w Clay** |
| **33** | **42** | **Red Clay** |
| **42** | **55** | **Red Clay Tan Limestone** |
| **55** | **80** | **Tan White Limestone 4gpm** |
| **80** | **107** | **Gray Tan Limestone** |
| **107** | **140** | **Gray Clay** |
| **140** | **179** | **Red Sandstone** |
| **179** | **193** | **Red Sandstone w gravel** |
| **193** | **223** | **Gravel 3.3gpm** |
| **223** | **225** | **Turquoise Clay** |
| **225** | **258** | **Tan Clay** |
| **258** | **263** | **Gray Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #389265

| | | | |
|---|---|---|---|
| Owner: | **Mark Shank** | Owner Well #: | **No Data** |
| Address: | **3405 Wendy Lane<br>Dallas, TX 75214** | Grid #: | **57-40-4** |
| | | Latitude: | **30° 25' 46" N** |
| Well Location: | **25515 Red Brangus Rd<br>Spicewood, TX 78669** | Longitude: | **098° 05' 42" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **2/19/2015** Drilling End Date: **2/19/2015**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **15** |
| **6.25** | **15** | **245** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

Sealed By: **Unknown**

Distance to Property Line (ft.): **50+**

Distance to Septic Field or other concentrated contamination (ft.): **100+**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **Land Owner**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Unknown**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **Unknown**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **APEX Drilling INC.**

**P O Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| From (ft) To (ft) Description |
|---|
| **000-001 Top Soil** |
| **001-+016 Tan LS** |
| **016-036 Gray Tan LS** |
| **036-071 Gray Clay** |
| **071-098 Red SS** |
| **098-118 Gravel** |
| **118-147 Red SS** |
| **147168 Tan Clay** |
| **168-177 Gray Clay** |
| **177-198 Red Tan Clay** |
| **198-238 Tan Gray Green Clay** |
| **238-245 Blue Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) New/Used Type Setting From/To (ft.) |
|---|
| **No Data** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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# STATE OF TEXAS WELL REPORT for Tracking #394995

| | | | |
|---|---|---|---|
| Owner: | **Tom Etheredge** | Owner Well #: | **No Data** |
| Address: | **500 Paleface Ranch Rd. S. Spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **500 Paleface Ranch Rd. S. Spicewood, TX 78669** | Latitude: | **30° 26' 14" N** |
| | | Longitude: | **098° 06' 25" W** |
| Well County: | **Travis** | Elevation: | **817 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **3/24/2015** Drilling End Date: **3/24/2015**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **9** |
| **8.5** | **9** | **225** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **90** | **225** | **Gravel** | **3/8"** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **40** | **6 cement** |
| **40** | **90** | **4 bentonite** |

Seal Method: **slurried & poured**

Sealed By: **Derek Scott**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Water Level: **145 ft.** below land surface on **No Data** Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **195**

Well Tests: **Jetted** **Yield: 15 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **Trinity** |

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: **Bee Cave Drilling, Inc.**

**185 Angel Fire Dr.**
**Dripping Springs, TX 78620**

Driller Name: **Jim Blair** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **5** | **topsoil** |
| **5** | **15** | **tan limestone & clay** |
| **15** | **20** | **red clay** |
| **20** | **70** | **tan sandstone** |
| **70** | **110** | **clay** |
| **110** | **140** | **red sandstone & clay** |
| **140** | **190** | **trinity mix w/ gravel wb** |
| **190** | **225** | **red clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **new** | **sdr-17** | **0 225** |
| **perf** | | | **140 - 200** |

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# STATE OF TEXAS WELL REPORT for Tracking #400260

| | | | |
|---|---|---|---|
| Owner: | **Mark Cleveland** | Owner Well #: | **No Data** |
| Address: | **25205 Pedernales Canyon Trail Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **25215 Pedernales Canyon Trail Spicewood, TX 78669** | Latitude: | **30° 24' 00" N** |
| | | Longitude: | **098° 06' 28" W** |
| Well County: | **Travis** | Elevation: | **766 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **6/17/2015** Drilling End Date: **6/18/2015**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **9** |
| **8.5** | **9** | **210** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **100** | **210** | **Gravel** | **3/8"** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **15** | **3 cement** |
| **15** | **100** | **14 bentonite** |

Seal Method: **pressure cemented**

Sealed By: **Derek Scott**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Water Level: **96 ft.** below land surface on **No Data** Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **180**

Well Tests: **Jetted** **Yield: 2 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **Trinity** |

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: **Bee Cave Drilling, Inc.**

**185 Angel Fire Dr.**
**Dripping Springs, TX 78620**

Driller Name: **Jim Blair** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **3** | **topsoil** |
| **3** | **30** | **tan limestone** |
| **30** | **70** | **gray limestone w/ shale** |
| **70** | **100** | **brown limestone** |
| **100** | **170** | **red sandstone & gravel wb 2 gpm 1000tds** |
| **170** | **190** | **red sandstone & clay** |
| **190** | **210** | **gray clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **new** | **sdr-17** | **0 210 perf 130-210** |

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# STATE OF TEXAS WELL REPORT for Tracking #400701

| | | | |
|---|---|---|---|
| Owner: | **Aqua Texas** | Owner Well #: | **BCLakesideTW** |
| Address: | **3209 Hillbilly Ln<br>Austin, TX 78669** | Grid #: | **57-40-1** |
| | | Latitude: | **30° 27' 41" N** |
| Well Location: | **26413 Sailpoint Ct.<br>Spicewood, TX 78669** | Longitude: | **098° 05' 26" W** |
| Well County: | **Travis** | Elevation: | **765 ft. above sea level** |
| | | | ****Plugged Within 48 Hours**** |

****This well has been plugged**** **Plugging Report Tracking #151258**

Type of Work: **New Well** Proposed Use: **Test Well**

Drilling Start Date: **7/21/2015** Drilling End Date: **7/28/2015**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8.75** | **0** | **420** |

Drilling Method: **Air Rotary**

Borehole Completion: **Plugged**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **-1** | **15** | **3 Cement** |
| **15** | **420** | **53 Bentonite** |

Seal Method: **Pos. Displacement**

Sealed By: **Driller**

Distance to Property Line (ft.): **50+**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **Measured**

Surface Completion: **Unknown**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 15 GPM**

Plug Information:

| *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **-1 to 15 3 Cement** | | |
| **15-420 53 Bentonite** | | |

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **120/180** | **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: **Whisenant & Lyle Water Services**

**PO Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Brice Bormann** License Number: **54855**

Apprentice Name: **Tyler Loman**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **1** | **25** | **Gray Limestone** |
| **25** | **50** | **Tan Limestone** |
| **50** | **80** | **Shale** |
| **80** | **120** | **Brown Limestone** |
| **120** | **180** | **Gravel** |
| **180** | **420** | **Shale** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #401733

Owner: **Amelia Bryant**

Address: **1400 CR 420 Spicewood, TX 78669**

Well Location: **1400 CR 420 Spicewood, TX 78669**

Well County: **Burnet**

Owner Well #: **TW#1**

Grid #: **57-40-1**

Latitude: **30° 27' 58" N**

Longitude: **098° 06' 20" W**

Elevation: **854 ft. above sea level**

****Plugged Within 48 Hours****

****This well has been plugged****

**Plugging Report Tracking #151478**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **7/10/2015** Drilling End Date: **7/10/2015**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **7.875** | **0** | **200** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data: **No Data**

Seal Method: **Pour**

Sealed By: **Driller**

Distance to Property Line (ft.): **51**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **Measured**

Surface Completion: **Unknown**

Water Level: **0 ft.** below land surface on **2015-07-10** Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Plug Information:

| *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **2 to 200 Backfill Cutting** | | |
| **0 to 2 2 Portland cement** | | |

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: **Whisenant & Lyle Water Services**

**PO Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Comments: **No Data**

**Report Amended on 11/30/2015 by Request #15252**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **0** | **Plug** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #402044

| | | | |
|---|---|---|---|
| Owner: | **Amelia Bryant** | Owner Well #: | **Well#2** |
| Address: | **1400 CR 420<br>Spicewood, TX 78669** | Grid #: | **57-40-1** |
| Well Location: | **1400 CR 420<br>Spicewood, TX 78669** | Latitude: | **30° 28' 01.42" N** |
| | | Longitude: | **098° 06' 20.16" W** |
| Well County: | **Burnet** | Elevation: | **779 ft. above sea level** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **7/2/2015** Drilling End Date: **7/8/2015**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **7.875** | **0** | **180** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **60** | **10 cement** |

Seal Method: **Pos Displacement**

Sealed By: **Driller**

Distance to Property Line (ft.): **51**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **measured**

Surface Completion: **Surface Sleeve Installed**

Water Level: **114 ft.** below land surface on **2015-07-06** Measurement Method: **Unknown**

Packers: **Shale Packer 65**
**6Mil Poly 70**
**Shale Packer 75**
**6Mil Poly 80**

Type of Pump: **Submersible** Pump Depth (ft.): **160**

Well Tests: **Jetted** **Yield: .5 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **60-180** | **Good TDS 600** |

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: **Whisenant & Lyle Water Services**

**PO Box 525**
**Dripping Springs, TX 78620**

Driller Name: **Brice Bormann** License Number: **54855**

Apprentice Name: **Tyler Loman**

Comments: **No Data**

**Report Amended on 11/30/2015 by Request #15262**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **topsoil** |
| **1** | **5** | **brown sandy loam** |
| **5** | **60** | **gray red sandstone shale** |
| **60** | **175** | **rock gravel sand** |
| **175** | **180** | **smith wick clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **4.5** | **New** | **PVC-SDR 17IB** | **+2-140** |
| **4.5** | **New** | **PVC-17 Slotted** | **140-180 .032** |

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# STATE OF TEXAS WELL REPORT for Tracking #414548

| | | | |
|---|---|---|---|
| Owner: | **Luke Blair** | Owner Well #: | **1** |
| Address: | **5940 Lomita Verde Cir.<br>Austin, TX 78749** | Grid #: | **57-40-4** |
| Well Location: | **26806 Hwy 71 W.<br>Spicewood, TX 78669** | Latitude: | **30° 25' 29.24" N** |
| | | Longitude: | **098° 07' 26.55" W** |
| Well County: | **Travis** | Elevation: | **946 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **1/14/2016** Drilling End Date: **1/14/2016**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **10** |
| **8.5** | **10** | **340** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **50** | **340** | **Gravel** | **3/8** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **Cement 3 Bags/Sacks** |
| **20** | **50** | **Bentonite 6 Bags/Sacks** |

Seal Method: **Poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **120 ft.** below land surface on **2016-01-15** Measurement Method: **Electric Line**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **300**

Well Tests: **Jetted** **Yield: 8 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Bee Cave Drilling, Inc.**

**185 Angel Fire Dr.**
**Dripping Springs, TX 78620**

Driller Name: **Jim Blair** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **Topsoil and Loose Rock** |
| **2** | **6** | **Tan Clay** |
| **6** | **10** | **Tan Lime** |
| **10** | **60** | **Grey Lime** |
| **60** | **75** | **Grey Shale** |
| **75** | **110** | **Red/Grey Clay** |
| **110** | **190** | **Red and Tan Sand W/B 130-170 3GPM 450TDS** |
| **190** | **245** | **Grey Clay** |
| **245** | **320** | **Trinity Mix W/B 8GPM** |
| **320** | **340** | **Trinity Mix/Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | | **New Plastic (PVC)** | **SDR-17** | **-2** | **340** |
| **4.5** | **Perforated or Slotted** | **New Plastic (PVC)** | **SDR-17** | **280** | **340** |

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# STATE OF TEXAS WELL REPORT for Tracking #417990

| | | | |
|---|---|---|---|
| Owner: | **Luke Blair** | Owner Well #: | **1** |
| Address: | **PO Box 341659<br>Austin, TX 78734** | Grid #: | **57-40-7** |
| | | Latitude: | **30° 24' 57.95" N** |
| Well Location: | **26601 Hwy 71 W<br>Spicewood, TX 78669** | Longitude: | **098° 07' 26.43" W** |
| Well County: | **Travis** | Elevation: | **820 ft. above sea level** |

****This well has been plugged**** **Plugging Report Tracking #158605**

Type of Work: **New Well** Proposed Use: **Test Well**

Drilling Start Date: **2/2/2016** Drilling End Date: **2/3/2016**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **220** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **80** | **220** | **Gravel** | **3/8"** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **2** | **Cement 2 Bags/Sacks** |
| **2** | **80** | **Bentonite 10 Bags/Sacks** |

Seal Method: **Poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **42 ft.** below land surface on **2016-02-24** Measurement Method: **Electric Line**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Pump** **Yield: 1 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Bee Cave Drilling, Inc.**

**185 Angel Fire Dr.**
**Dripping Springs, TX 78620**

Driller Name: **Jim Blair** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Topsoil** |
| **1** | **5** | **Tan Lime** |
| **5** | **10** | **Tan Lime and Red Clay** |
| **10** | **20** | **White Sandstone** |
| **20** | **40** | **Tan Lime** |
| **40** | **50** | **Grey and Tan Lime** |
| **50** | **85** | **Gray Clay** |
| **85** | **115** | **Gray Clay w/ Grey Sandstone** |
| **115** | **125** | **Red Clay** |
| **125** | **140** | **Trinity Mix, Fracs 130-140** |
| **140** | **150** | **Trinity Mix w/ Clay** |
| **150** | **170** | **Trinity Mix W/B** |
| **170** | **190** | **Gravel W/B** |
| **190** | **220** | **Red/Blue Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR-17** | **-2** | **120** |
| **4.5** | **Perforated or Slotted** | **New Plastic (PVC)** | **SDR-17** | **120** | **220** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #421110

| | | | |
|---|---|---|---|
| Owner: | **Eric Debner** | Owner Well #: | **No Data** |
| Address: | **600 Twisted Oaks<br>Horseshoe Bay , TX 78657** | Grid #: | **57-40-4** |
| | | Latitude: | **30° 25' 57" N** |
| Well Location: | **25583 Pedernales Pt<br>Spicewood, TX 78669** | Longitude: | **098° 05' 37" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **4/15/2016** Drilling End Date: **4/15/2016**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **85** |
| **6.25** | **85** | **187** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **5** | **Portland 2 Bags/Sacks** |
| **5** | **85** | **Benseal 6 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **50+**

Distance to Septic Field or other concentrated contamination (ft.): **50+**

Distance to Septic Tank (ft.): **50+**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 85 ft.**
**Burlap/Neoprene at 90 ft.**

Type of Pump: **No Data**

Well Tests: **Pump** **Yield: 5 1/2 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **85 - 167** | **Trinity - TDS 920** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

**The driller did certify that while drilling, deepening or otherwise altering the above described well, injurious water or constituents was encountered and the landowner or person having the well drilled was informed that such well must be completed or plugged in such a manner as to avoid injury or pollution.**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

**Report Amended on 3/9/2023 by Request #38895**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **45** | **Tan White LS** |
| **45** | **52** | **Gray LS w/ Clay** |
| **52** | **85** | **Gray Clay** |
| **85** | **145** | **Red SS** |
| **145** | **167** | **Gravel** |
| **167** | **187** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **107** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **107** | **167** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **167** | **187** |

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**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #425170

| | | | |
|---|---|---|---|
| Owner: | **Tyler O'Brian** | Owner Well #: | **No Data** |
| Address: | **P O Box 634<br>Spicewood , TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **3200 Fall Creek Estates Dr<br>Spicewood, TX 78669** | Latitude: | **30° 24' 16" N** |
| | | Longitude: | **098° 06' 49" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **6/21/2016** Drilling End Date: **6/21/2016**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **15** |
| **6.25** | **15** | **220** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **Portland 4 Bags/Sacks** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **50+**

Distance to Septic Field or other concentrated contamination (ft.): **100+**

Distance to Septic Tank (ft.): **50**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap / Neoprene at 20 ft.**
**Burlap / Neoprene at 30 ft.**
**Burlap / Neoprene at 115 ft.**
**Burlap / Neoprene at 120 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 2 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **120 - 200** | **Trinity - TDS 740** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **10** | **Tan LS Red Clay** |
| **10** | **32** | **Tan White LS** |
| **32** | **67** | **Gray Tan LS** |
| **67** | **112** | **Gray Clay** |
| **112** | **120** | **Red SS** |
| **120** | **125** | **Gravel** |
| **125** | **157** | **Red SS** |
| **157** | **200** | **Gravel** |
| **200** | **201** | **Turquoise Clay** |
| **201** | **220** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **140** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **140** | **200** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **200** | **220** |

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# STATE OF TEXAS WELL REPORT for Tracking #438698

| | | | |
|---|---|---|---|
| Owner: | **Paul D. & Cynthia G. Jones** | Owner Well #: | **No Data** |
| Address: | **1229 CR 420<br>Spicewood, TX 78669** | Grid #: | **57-40-1** |
| Well Location: | **1229 CR 420<br>Spicewood, TX 78669** | Latitude: | **30° 27' 54" N** |
| | | Longitude: | **098° 06' 21" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **10/20/2016** Drilling End Date: **10/20/2016**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **15** |
| **6.25** | **15** | **180** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **Portland 4 Bags/Sacks** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **50+**

Distance to Septic Field or other concentrated contamination (ft.): **100+**

Distance to Septic Tank (ft.): **50+**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 20 ft.**
**Burlap/Neoprene at 30 ft.**
**Burlap/Neoprene at 85 ft.**
**Burlap/Neoprene at 90 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 2.5 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **85 - 160** | **Trinity - TDS 600** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **20** | **Tan Red LS** |
| **20** | **52** | **Gray LS** |
| **52** | **58** | **Gray Clay** |
| **58** | **160** | **Red SS** |
| **160** | **161** | **Tortoise Clay** |
| **161** | **180** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **100** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **100** | **160** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **160** | **180** |

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# STATE OF TEXAS WELL REPORT for Tracking #447531

| | | | |
|---|---|---|---|
| Owner: | **Tyler O'Brian** | Owner Well #: | **1** |
| Address: | **P O Box 634<br>Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **3200 Fall Creek Estate Dr<br>Spicewood, TX 78611** | Latitude: | **30° 24' 13" N** |
| | | Longitude: | **098° 06' 52" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Number of Wells Drilled: | **2** | | |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **3/6/2017** Drilling End Date: **3/6/2017**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **18** |
| **6.25** | **18** | **205** |

Drilling Method: **Air Rotary**

Borehole Completion: **Back Filled 2' Cement Cap ( DRY )**

Annular Seal Data: **No Data**

Seal Method: **Unknown**

Sealed By: **Driller**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Unknown** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **DRY Hole**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **3** | **Tan LS Red Clay** |
| **3** | **29** | **Tan White LS** |
| **29** | **54** | **Gray Tan LS** |
| **54** | **104** | **Gray LS w/ Clay** |
| **104** | **115** | **Red SS** |
| **115** | **125** | **Gravel** |
| **125** | **135** | **Red SS** |
| **135** | **200** | **Gravel** |
| **200** | **202** | **Turquoise Clay** |
| **202** | **205** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #447537

Owner: **Tyler O'Brain**

Address: **P O Box 634**
**Spicewood , TX 78669**

Well Location: **3200 Fall Creek Estate Dr**
**Spicewood, TX 78669**

Well County: **Travis**

Number of Wells Drilled: **2**

Owner Well #: **2**

Grid #: **57-40-7**

Latitude: **30° 24' 15" N**

Longitude: **098° 06' 49" W**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **3/7/2017** Drilling End Date: **3/7/2017**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **50** |
| **6.25** | **50** | **210** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **30** | **2 Benseal 1 Portland 3 Bags/Sacks** |

Seal Method: **Pressure Tremie**

Sealed By: **Driller**

Distance to Property Line (ft.): **10**

Distance to Septic Field or other concentrated contamination (ft.): **50+**

Distance to Septic Tank (ft.): **50+**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 30 ft.**
**Burlap/Neoprene at 155 ft.**
**Burlap/Neoprene at 158 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 3.5 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **30 - 190** | **Trinity - TDS 410** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **7** | **Tan LS w/ Red Clay** |
| **7** | **42** | **Tan White LS** |
| **42** | **65** | **Gray Tan LS** |
| **65** | **110** | **Gray LS w/ Clay** |
| **110** | **158** | **Red SS** |
| **158** | **190** | **Gravel** |
| **190** | **191** | **Turquoise Clay** |
| **191** | **210** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **30** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **30** | **50** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **50** | **170** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **170** | **190** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **190** | **210** |

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**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #454576

| | | | |
|---|---|---|---|
| Owner: | **Frank Marquez** | Owner Well #: | **No Data** |
| Address: | **P O Box 297**<br>**Marble Falls, TX 78654** | Grid #: | **57-40-7** |
| Well Location: | **3221 Fall Creek Est. Dr**<br>**Spicewood, TX 78669** | Latitude: | **30° 24' 19" N** |
| | | Longitude: | **098° 06' 42" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **5/22/2017** Drilling End Date: **5/22/2017**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **15** |
| **6.25** | **15** | **242** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **Portland 4 Bags/Sacks** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **50**

Distance to Septic Field or other concentrated contamination (ft.): **50**

Distance to Septic Tank (ft.): **100**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 20 ft.**
**Burlap/Neoprene at 30 ft.**
**Burlap/Neoprene at 140 ft.**
**Burlap/Neoprene at 150 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 1 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **152 - 242** | **Trinity - TDS 810** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

**Report Amended on 7/21/2017 by Request #22259**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **17** | **Tan Red LS** |
| **17** | **45** | **Tan LS** |
| **45** | **71** | **Gray Tan LS** |
| **71** | **113** | **Gray LS w/ Clay** |
| **113** | **152** | **Red SS** |
| **152** | **162** | **Red SS w/ Gravel** |
| **162** | **206** | **Gravel** |
| **206** | **215** | **Chert** |
| **215** | **222** | **Sand** |
| **222** | **242** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **162** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **162** | **222** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **222** | **242** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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**P.O. Box 12157**
**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #457629

| | | | |
|---|---|---|---|
| Owner: | **Kristin Bevis** | Owner Well #: | **No Data** |
| Address: | **P O Box 12992**<br>**Austin , TX 78711** | Grid #: | **57-40-4** |
| Well Location: | **1320 Lakeshore Dr**<br>**Spicewood, TX 78669** | Latitude: | **30° 26' 42" N** |
| | | Longitude: | **098° 05' 04" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **6/29/2017** Drilling End Date: **6/29/2017**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **95** |
| **6.25** | **95** | **205** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **95** | **6 Benseal 2 Portland 8 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **20**

Distance to Septic Field or other concentrated contamination (ft.): **50+**

Distance to Septic Tank (ft.): **50+**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 95 ft.**
**Burlap/Neoprene at 97 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 25 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **95 - 185** | **Trinity TDS-500** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **20** | **Tan LS** |
| **20** | **32** | **Gray Tan LS** |
| **32** | **64** | **Gray Clay** |
| **64** | **95** | **Red SS** |
| **95** | **185** | **Gravel** |
| **185** | **205** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **125** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **125** | **185** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **185** | **205** |

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# STATE OF TEXAS WELL REPORT for Tracking #458570

| | | | |
|---|---|---|---|
| Owner: | **Action Water Well Service ( Budde )** | Owner Well #: | **No Data** |
| Address: | **100 Spanish Oak Trail<br>Spicewood , TX 78669** | Grid #: | **57-39-6** |
| Well Location: | **Fall Creek Est.<br>Spicewood, TX 78669** | Latitude: | **30° 25' 04" N** |
| | | Longitude: | **098° 07' 40" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **6/23/2017** Drilling End Date: **6/23/2017**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **15** |
| **6.25** | **15** | **232** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **Portland 4 Bags/Sacks** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **50**

Distance to Septic Field or other concentrated contamination (ft.): **50+**

Distance to Septic Tank (ft.): **100+**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 20 ft.**
**Burlap/Neoprene at 25 ft.**
**Burlap/Neoprene at 45 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 5.5 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **45 - 204** | **Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **5** | **Tan Clay** |
| **5** | **32** | **Red Clay** |
| **32** | **45** | **Tan Red LS w/ Clay** |
| **45** | **72** | **Tan LS** |
| **72** | **118** | **Gray Tan LS** |
| **118** | **156** | **Red SS** |
| **156** | **204** | **Gravel** |
| **204** | **205** | **Turquoise Clay** |
| **205** | **232** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **52** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **52** | **72** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **72** | **172** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **172** | **212** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **212** | **232** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #474708

| | | | |
|---|---|---|---|
| Owner: | **Brian Parker** | Owner Well #: | **No Data** |
| Address: | **1335 Lakeshore Dr.<br>Spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **1335 Lakeshore Dr.<br>Spicewood, TX 78669** | Latitude: | **30° 26' 47.8" N** |
| | | Longitude: | **098° 05' 02.54" W** |
| Well County: | **Travis** | Elevation: | **708 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **3/3/2018** Drilling End Date: **3/3/2018**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **8** |
| **8.5** | **8** | **200** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **100** | **200** | **Gravel** | **3/8"** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **98** | **Cement 30 Bags/Sacks** |
| **98** | **100** | **Bentonite 2 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **40 ft.** below land surface on **2018-03-07**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **180**

Well Tests: **Jetted** **Yield: 50+ GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Bee Cave Drilling, Inc.**

**185 Angel Fire Dr.**
**Dripping Springs, TX 78620**

Driller Name: **Jim Blair** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **topsoil** |
| **1** | **8** | **tan limestone** |
| **8** | **76** | **red clay and limestone** |
| **76** | **148** | **red sandstone & rock** |
| **148** | **160** | **gray shale and clay** |
| **160** | **200** | **gray limestone & sandstone w/ gravel layers** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **sdr-17** | **0** | **140** |
| **4.5** | **Perforated or Slotted** | **New Plastic (PVC)** | **sdr-17** | **140** | **200** |

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# STATE OF TEXAS WELL REPORT for Tracking #476156

| | | | |
|---|---|---|---|
| Owner: | **Mac ( David ) Lane** | Owner Well #: | **No Data** |
| Address: | **5204 Crystal Water Dr<br>Austin , TX 78735** | Grid #: | **57-40-5** |
| Well Location: | **1215 Lakeshore Dr<br>Spicewood, TX 78669** | Latitude: | **30° 26' 29" N** |
| | | Longitude: | **098° 04' 40" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **3/1/2018** Drilling End Date: **3/1/2018**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **100** |
| **6.25** | **100** | **185** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **7 Benseal 1 Portland 8 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **5**

Distance to Septic Field or other concentrated contamination (ft.): **50**

Distance to Septic Tank (ft.): **50**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 100 ft.**
**Burlap/Neoprene at 105 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 60 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **119 - 165** | **Trinity / TDS 600** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **7** | **Tan LS** |
| **7** | **15** | **Gravel** |
| **15** | **27** | **Tan LS** |
| **27** | **50** | **Tan Red Clay** |
| **50** | **54** | **Tan LS** |
| **54** | **60** | **Gray Clay** |
| **60** | **119** | **Red SS** |
| **119** | **165** | **Gravel** |
| **165** | **185** | **Tan Red Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **105** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **105** | **165** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **165** | **185** |

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# STATE OF TEXAS WELL REPORT for Tracking #484790

| | | | |
|---|---|---|---|
| Owner: | **Lake Travis Builders ( Mead )** | Owner Well #: | **No Data** |
| Address: | **3100 Fall Creek Estates<br>Spicewood , TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **3100 Fall Creek Estates<br>Spicewood, TX 78669** | Latitude: | **30° 24' 20" N** |
| | | Longitude: | **098° 06' 57" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Unknown** |

Drilling Start Date: **6/1/2018** Drilling End Date: **6/1/2018**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **15** |
| **6.25** | **15** | **205** |

Drilling Method: **Unknown**

Borehole Completion: **Unknown**

Annular Seal Data: **No Data**

Seal Method: **Unknown**

Sealed By: **Driller**

Distance to Property Line (ft.): **Unknown**

Distance to Septic Field or other concentrated contamination (ft.): **Unknown**

Distance to Septic Tank (ft.): **Unknown**

Method of Verification: **Land Owner**

Surface Completion: **Unknown** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **Backfilled 2" Cement Cap**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **29** | **Tan LS** |
| **29** | **36** | **Gray Tan LS** |
| **36** | **44** | **Tan LS** |
| **44** | **58** | **Gray Tan LS** |
| **58** | **101** | **Gray LS w/ Clay** |
| **101** | **140** | **Red SS** |
| **140** | **183** | **Red SS w/ Gravel** |
| **183** | **200** | **Tan LS w/ Gravel** |
| **200** | **202** | **Turquoise Clay** |
| **202** | **205** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #486560

| | | | |
|---|---|---|---|
| Owner: | **Lake Travis Builders ( Mead )** | Owner Well #: | **2** |
| Address: | **P O Box 342105<br>Austin, TX 78734** | Grid #: | **57-40-7** |
| | | Latitude: | **30° 24' 20" N** |
| Well Location: | **3100 Fall Creek Estate<br>Spicewood, TX 78669** | Longitude: | **098° 06' 52" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Number of Wells Drilled: | **3** | | |

Type of Work: **Unknown** Proposed Use: **Unknown**

Drilling Start Date: **6/15/2018** Drilling End Date: **6/15/2018**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **15** |
| **6.25** | **15** | **209** |

Drilling Method: **Unknown**

Borehole Completion: **Unknown**

Annular Seal Data: **No Data**

Seal Method: **Unknown**

Sealed By: **Driller**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **DRY - Backfilled w/ 2" Cement Cap**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **1** | **2** | **Top Soil** |
| **2** | **47** | **Tan LS** |
| **47** | **58** | **Gray Tan LS** |
| **58** | **102** | **Gray Clay** |
| **102** | **121** | **Red SS** |
| **121** | **125** | **Red SS w/ Clay** |
| **125** | **142** | **Red SS** |
| **142** | **207** | **Red SS w/ Gravel** |
| **207** | **209** | **Tan LS** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #489225

| | | | |
|---|---|---|---|
| Owner: | **Lee Grote** | Owner Well #: | **No Data** |
| Address: | **25300 Pedernales Point Spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **25300 Pedernales Point Spicewood, TX 78669** | Latitude: | **30° 26' 14.91" N** |
| | | Longitude: | **098° 05' 07.7" W** |
| Well County: | **Travis** | Elevation: | **701 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **7/27/2018** Drilling End Date: **7/27/2018**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10.5** | **0** | **8.5** |
| **8.5** | **8.5** | **204** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **80** | **204** | **Gravel** | **3/8"** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **80** | **Cement 14 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 10-15 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **80 - 160** | **Trinity** |

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: **Bee Cave Drilling, Inc.**

**185 Angel Fire Dr.**
**Dripping Springs, TX 78620**

Driller Name: **Jim Blair** License Number: **54416**

Comments: **top of production zone was at 80'**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **11** | **caliche** |
| **11** | **21** | **red shale** |
| **21** | **35** | **gravel** |
| **35** | **72** | **gray limestone** |
| **72** | **92** | **gravel** |
| **92** | **111** | **shale** |
| **111** | **130** | **tan limestone** |
| **130** | **140** | **gravel** |
| **140** | **160** | **gray limestone** |
| **160** | **204** | **gray limestone w/ shale stringers** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **sdr-17** | **0** | **80** |
| **4.5** | **Perforated or Slotted** | **New Plastic (PVC)** | **sdr-17** | **80** | **200** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #491869

| | | | |
|---|---|---|---|
| Owner: | **Lake Travis Builders ( Mead )** | Owner Well #: | **3** |
| Address: | **P O Box 342105<br>Austin, TX 78734** | Grid #: | **57-40-7** |
| Well Location: | **3100 Fall Creek Pkw<br>Spicewood, TX 78669** | Latitude: | **30° 24' 20" N** |
| | | Longitude: | **098° 06' 55" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Number of Wells Drilled: | **3** | | |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **8/1/2018** Drilling End Date: **8/1/2018**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **100** |
| **6.25** | **100** | **223** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **7 Benseal 1 Portland 8 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **5**

Distance to Septic Field or other concentrated contamination (ft.): **50**

Distance to Septic Tank (ft.): **50**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 100 ft.**
**Burlap/Neoprene at 105 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: .5 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **100 - 223** | **Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

**Report Amended on 10/1/2018 by Request #26135**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top SOil** |
| **1** | **11** | **Tan LS** |
| **11** | **57** | **Gray Tan LS** |
| **57** | **100** | **Gray Clay** |
| **100** | **118** | **Red SS** |
| **118** | **203** | **Gravel** |
| **203** | **223** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **143** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **143** | **203** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **203** | **223** |

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# STATE OF TEXAS WELL REPORT for Tracking #494592

| | | | |
|---|---|---|---|
| Owner: | **Thomas Weasley Deathridge** | Owner Well #: | **No Data** |
| Address: | **100 Oaks Rd.<br>Spicewood , TX 78669** | Grid #: | **57-40-1** |
| Well Location: | **100 Oaks Rd.<br>Spicewood, TX 78669** | Latitude: | **30° 27' 38" N** |
| | | Longitude: | **098° 07' 23" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **9/28/2018** Drilling End Date: **9/28/2018**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **15** |
| **6.25** | **15** | **198** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **Portland 4 Bags/Sacks** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **50**

Distance to Septic Field or other concentrated contamination (ft.): **100**

Distance to Septic Tank (ft.): **50+**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 15 ft.**
**Burlap/Neoprene at 20 ft.**
**Burlap/Neoprene at 110 ft.**
**Burlap/Neoprene at 115 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 4 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **115 - 178** | **Trinity - TDS 720** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **10** | **Tan LS** |
| **10** | **25** | **Tan Red LS** |
| **25** | **37** | **Tan LS w/ Sand** |
| **37** | **71** | **Gray Tan LS w / Sand** |
| **71** | **105** | **Gray Clay** |
| **105** | **121** | **Red SS** |
| **121** | **178** | **Gravel** |
| **178** | **198** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **118** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **118** | **178** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **178** | **198** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #511022

| | | | |
|---|---|---|---|
| Owner: | **Jorge Burgos** | Owner Well #: | **No Data** |
| Address: | **201 N. Paleface Ranch Spicewood, TX 78669** | Grid #: | **57-40-4** |
| | | Latitude: | **30° 26' 25" N** |
| Well Location: | **201 N. Paleface Ranch Spicewood, TX 78669** | Longitude: | **098° 06' 00" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **3/19/2019** Drilling End Date: **3/19/2019**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **18** |
| **6.25** | **18** | **224** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **Portland 4 Bags/Sacks** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **50**

Distance to Septic Field or other concentrated contamination (ft.): **100**

Distance to Septic Tank (ft.): **50**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 20 ft.**
**Burlap/Neoprene at 25 ft.**
**Burlap/Neoprene at 120 ft.**
**Burlap/Neoprene at 130 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 5 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **137 - 204** | **Trinity - TDS 620** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **35** | **Tan Red LS** |
| **35** | **61** | **Tan White LS** |
| **61** | **77** | **Gray Tan LS** |
| **77** | **85** | **Gray LS w/ Clay** |
| **85** | **114** | **Gray Clay** |
| **114** | **137** | **Red LS** |
| **137** | **141** | **Gravel** |
| **141** | **160** | **Red SS** |
| **160** | **204** | **Gravel** |
| **204** | **205** | **Turquoise Clay** |
| **205** | **224** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **144** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **144** | **204** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **204** | **224** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #512433

| | | | |
|---|---|---|---|
| Owner: | **Austin Golf Club** | Owner Well #: | **No Data** |
| Address: | **24900 Hwy 71 West<br>Spicewood, TX 78669** | Grid #: | **57-40-7** |
| | | Latitude: | **30° 24' 59" N** |
| Well Location: | **2205 Paleface Ranch Rd S<br>Spicewood, TX 78669** | Longitude: | **098° 06' 07" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Public Supply** |

Drilling Start Date: **4/10/2019** Drilling End Date: **4/10/2019**

**Plans Approved by TCEQ - YES**
**PWS# 2270344**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9.87** | **0** | **137** |
| **8** | **137** | **200** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **137** | **Class H 42 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **150+**

Distance to Septic Field or other concentrated contamination (ft.): **150+**

Distance to Septic Tank (ft.): **150+**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **130 ft.** below land surface on **2019-04-11** Measurement Method: **Electric Line**

Packers: **Neoprene at 134 ft.**
**Neoprene at 135 ft.**
**Neoprene at 137 ft.**

Type of Pump: **No Data**

Well Tests: **Pump** **Yield: 25.5 GPM with 18 ft. drawdown after 36 Hrs hours**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **139 - 175** | **L. Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

**Report Amended on 11/30/2020 by Request #33170**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **14** | **Tan LS** |
| **14** | **37** | **Gray Tan LS** |
| **37** | **46** | **Gray LS / W Clay** |
| **46** | **64** | **Gray Clay** |
| **64** | **65** | **Gray LS** |
| **65** | **66** | **Gray Clay** |
| **66** | **67** | **Gray Tan LS** |
| **67** | **80** | **Gray Sandy CLay** |
| **80** | **84** | **Red Gray LS** |
| **84** | **114** | **Red SS** |
| **114** | **119** | **Sand and Gravel** |
| **119** | **120** | **Red Clay** |
| **120** | **128** | **Tan Red LS SS** |
| **128** | **139** | **Red SS** |
| **139** | **160** | **Gravel & Gray LS** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **140** |
| **5** | **Screen** | **New Plastic (PVC)** | **.035** | **140** | **180** |
| **5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **180** | **200** |

| | | |
|---|---|---|
| **160** | **165** | **Red Tan Gray LS w/ Yellow Clay** |
| **165** | **168** | **Yellow Gray Clay** |
| **168** | **169** | **Gravel and Sand** |
| **169** | **175** | **Tan White LS** |
| **175** | **178** | **Blue Clay** |
| **178** | **200** | **Tan Clay** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #512967

| | | | |
|---|---|---|---|
| Owner: | **Hugh Robertson** | Owner Well #: | **No Data** |
| Address: | **1336 Lake Shore Dr.<br>Spicewood , TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **1336 Lake Shore Dr.<br>Spicewood, TX 78669** | Latitude: | **30° 26' 42" N** |
| | | Longitude: | **098° 05' 04" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **4/19/2019** Drilling End Date: **4/19/2019**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **75** |
| **6.25** | **75** | **196** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **75** | **5 Benseal 2 Portland 7 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **7**

Distance to Septic Field or other concentrated contamination (ft.): **50**

Distance to Septic Tank (ft.): **50**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 75 ft.**
**Burlap/Neoprene at 77 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 19 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **75 - 176** | **Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **12** | **Tan LS** |
| **12** | **30** | **Gray Tan LS** |
| **30** | **52** | **Gray Clay** |
| **52** | **75** | **Red SS** |
| **75** | **176** | **Gravel and SS** |
| **176** | **177** | **Turquoise Clay** |
| **177** | **196** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **116** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **116** | **176** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **176** | **196** |

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**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #523352

| | | | |
|---|---|---|---|
| Owner: | **William Brady** | Owner Well #: | **No Data** |
| Address: | **P O Box 721<br>Spicewood, TX 78669** | Grid #: | **57-40-1** |
| | | Latitude: | **30° 28' 05" N** |
| Well Location: | **880 CR 414<br>Spicewood, TX 78669** | Longitude: | **098° 06' 58" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **8/2/2019** Drilling End Date: **8/2/2019**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **68** |
| **6.25** | **68** | **170** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **68** | **5 Benseal 1 Portland 6 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **10**

Distance to Septic Field or other concentrated contamination (ft.): **50**

Distance to Septic Tank (ft.): **50**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 68 ft.**
**Burlap/Neoprene at 70 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 1 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **68 - 151** | **Trinity - TDS 720** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top SOil** |
| **1** | **17** | **Tan LS** |
| **17** | **20** | **Gray Tan LS** |
| **20** | **37** | **White LS** |
| **37** | **68** | **Gray LS w/ Clay** |
| **68** | **81** | **Red SS** |
| **81** | **85** | **Gravel** |
| **85** | **118** | **Red SS** |
| **118** | **150** | **Gravel** |
| **150** | **151** | **Tortoise Clay** |
| **151** | **165** | **Tan Clay** |
| **165** | **170** | **Gray Shale** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **90** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **90** | **150** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **150** | **170** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #532030

| | | | |
|---|---|---|---|
| Owner: | **Delton Glass** | Owner Well #: | **1** |
| Address: | **12620 Pauls Valley Road<br>Austin, TX 78737** | Grid #: | **57-40-7** |
| Well Location: | **2618 Fall Creek Estate Drive<br>Spicewood, TX 78669** | Latitude: | **30° 24' 43.62" N** |
| | | Longitude: | **098° 06' 57.06" W** |
| Well County: | **Travis** | Elevation: | **829 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **11/1/2019** Drilling End Date: **11/1/2019**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **50** |
| **6.25** | **50** | **225** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **-1** | **50** | **5 cement 4 bentonite Bags/Sacks** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **65**

Distance to Septic Field or other concentrated contamination (ft.): **unknown**

Distance to Septic Tank (ft.): **unknown**

Method of Verification: **owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **150 ft.** below land surface on **2019-11-01** Measurement Method: **Sonic/Radar**

Packers: **burlap and plastic 125', 105'**
**Burlap at 50 ft.**

Type of Pump: **Submersible**

Well Tests: **Estimated** **Yield: 1 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **130 - 220** | **hosston trinity** |

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: **Associated Drilling Inc**

**PO Box 673**
**Dripping Springs, TX 78620**

Driller Name: **James Benoit** License Number: **4064**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **5** | **topsoil** |
| **5** | **75** | **white blue lime** |
| **75** | **135** | **grey lime and shale** |
| **135** | **160** | **red clay and sandstone** |
| **160** | **200** | **white limestone** |
| **200** | **225** | **yellow clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **sdr17** | **-3** | **145** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **sdr17 0.020** | **145** | **185** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **sdr17** | **185** | **225** |

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# STATE OF TEXAS WELL REPORT for Tracking #532031

| | | | |
|---|---|---|---|
| Owner: | **Delton Glass** | Owner Well #: | **2** |
| Address: | **12620 Pauls Valley Road<br>Austin, TX 78737** | Grid #: | **57-40-7** |
| Well Location: | **2618 Fall Creek Estate Drive<br>Spicewood, TX 78669** | Latitude: | **30° 24' 45.24" N** |
| | | Longitude: | **098° 06' 55.38" W** |
| Well County: | **Travis** | Elevation: | **823 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **11/1/2019** Drilling End Date: **11/1/2019**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **50** |
| **6.25** | **50** | **225** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **-1** | **50** | **5 cement 4 bentonite Bags/Sacks** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **+65**

Distance to Septic Field or other concentrated contamination (ft.): **unknown**

Distance to Septic Tank (ft.): **unknown**

Method of Verification: **owner**

Surface Completion: **No Data** **Surface Completion by Driller**

Water Level: **45 ft.** below land surface on **2019-11-01** Measurement Method: **Sonic/Radar**

Packers: **burlap and plastic 145', 125'**

Type of Pump: **Submersible**

Well Tests: **Estimated** **Yield: 2-3 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **140 - 225** | **hosston trinity** |

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: **Associated Drilling Inc**

**PO Box 673**
**Dripping Springs, TX 78620**

Driller Name: **James Benoit** License Number: **4064**

Comments: **This well is close to HWY 71**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **topsoil** |
| **2** | **65** | **white yellow limestone** |
| **65** | **70** | **grey limestone** |
| **70** | **130** | **grey lime and shale** |
| **130** | **165** | **red clay** |
| **165** | **205** | **white tan limestone** |
| **205** | **225** | **yellow and red clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **sdr17** | **-3** | **165** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **sdr17 0.020** | **165** | **205** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **sdr17** | **205** | **225** |

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# STATE OF TEXAS WELL REPORT for Tracking #532132

| | | | |
|---|---|---|---|
| Owner: | **Mike Lorenz** | Owner Well #: | **No Data** |
| Address: | **25409 Mathis Circle<br>Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **25409 Mathis Circle<br>Spicewood, TX 78669** | Latitude: | **30° 26' 34" N** |
| | | Longitude: | **098° 04' 59" W** |
| Well County: | **Travis** | Elevation: | **737 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **12/5/2019** Drilling End Date: **12/5/2019**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10.5** | **0** | **10** |
| **8.5** | **10** | **100** |
| **6.75** | **100** | **175** |

Drilling Method: **Air Rotary**

Borehole Completion: **Perforated or Slotted**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **90** | **Cement 18** |
| **90** | **100** | **Bentonite 3** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **40**

Distance to Septic Field or other concentrated contamination (ft.): **120**

Distance to Septic Tank (ft.): **100**

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Water Level: **No Data**

Packers: **Rubber at 100 ft.**
**Rubber at 102 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 70 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Bee Cave Drilling, Inc.**

**185 Angel Fire Dr.**
**Dripping Springs, TX 78620**

Driller Name: **jim blair**

License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **Topsoil** |
| **2** | **15** | **gravel/sand** |
| **15** | **40** | **tan shale** |
| **40** | **50** | **brown shale** |
| **50** | **55** | **dark grey shale** |
| **55** | **60** | **tan sandstone** |
| **60** | **65** | **grey limestone/clay** |
| **65** | **75** | **red sandstone** |
| **75** | **80** | **black rock** |
| **80** | **90** | **shale** |
| **90** | **125** | **gravel wb 20-25 gpm at 700 tds** |
| **125** | **170** | **gravel wb 50 gpm at 560 tds** |
| **170** | **175** | **tan clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **sdr-17** | **0** | **115** |
| **4.5** | **Perforated or Slotted** | **New Plastic (PVC)** | **sdr-17** | **115** | **175** |

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# STATE OF TEXAS WELL REPORT for Tracking #538042

| | | | |
|---|---|---|---|
| Owner: | **Sean and April Girard** | Owner Well #: | **No Data** |
| Address: | **P O Box 341<br>Spicewood, TX 78669** | Grid #: | **57-39-3** |
| Well Location: | **10571 CR 404<br>Spicewood, TX 78669** | Latitude: | **30° 27' 51.04" N** |
| | **Burnet Co App 7320** | Longitude: | **098° 07' 44.35" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **1/30/2020** Drilling End Date: **1/30/2020**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8.5** | **0** | **100** |
| **6.25** | **100** | **295** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **7 Benseal 2 Portland 9 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **5**

Distance to Septic Field or other concentrated contamination (ft.): **50**

Distance to Septic Tank (ft.): **50**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 100 ft.**
**Burlap/Neoprene at 105 ft.**
**Burlap/Neoprene at 200 ft.**
**Burlap/Neoprene at 205 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 4-5 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **216 - 275** | **Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

**Report Amended on 3/17/2025 by Request #44637**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **36** | **Tan LS** |
| **36** | **60** | **Gray Tan LS** |
| **60** | **141** | **Red Tan LS w/ Clay** |
| **141** | **176** | **Gray Tan LS** |
| **176** | **200** | **Gray Clay** |
| **200** | **210** | **Red SS** |
| **210** | **275** | **Red SS and Gravel** |
| **275** | **295** | **Red Gray Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **215** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **215** | **275** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **275** | **295** |

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# STATE OF TEXAS WELL REPORT for Tracking #538512

| | | | |
|---|---|---|---|
| Owner: | **Alejandra Paredon** | Owner Well #: | **No Data** |
| Address: | **25104 Lakeview Dr.<br>Spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **25104 Lakeview Dr.<br>Spicewood, TX 78669** | Latitude: | **30° 26' 08.6" N** |
| | | Longitude: | **098° 05' 26.2" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **2/24/2020** Drilling End Date: **2/24/2020**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **100** |
| **6.125** | **100** | **230** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data: **No Data**

Seal Method: **CUTTINGS/ CEMENT**

Sealed By: **CTD**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data** **Surface Completion NOT by Driller**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Plug Information:

| *Description (number of sacks & material)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **Cement** | **0** | **5** |
| **Cuttings** | **5** | **230** |

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

**The driller did certify that while drilling, deepening or otherwise altering the above described well, injurious water or constituents was encountered and the landowner or person having the well drilled was informed that such well must be completed or plugged in such a manner as to avoid injury or pollution.**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Centex Pump & Supply, Inc.**

**2520 Hwy. 290 West**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **SAND/ROCK** |
| **20** | **25** | **GRAY LIMESTONE** |
| **25** | **60** | **GRAY W/ CLAY LIMESTONE** |
| **60** | **65** | **RED CLAY** |
| **65** | **85** | **GRAY LIMESTONE/CLAY** |
| **85** | **120** | **RED SAND/ GRAVEL** |
| **120** | **125** | **BROWN CLAY** |
| **125** | **190** | **RED BROWN** |
| **190** | **230** | **YELLOW CLAY** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #543926

| | | | |
|---|---|---|---|
| Owner: | **Action Water Well Service ( Frakes )** | Owner Well #: | **No Data** |
| Address: | **100 Spanish Oak Trail<br>Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **1289 Lakeshore Dr<br>Spicewood, TX 78669** | Latitude: | **30° 26' 38" N** |
| | | Longitude: | **098° 04' 53" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **5/5/2020** Drilling End Date: **5/5/2020**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **60** |
| **6.25** | **60** | **192** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **60** | **5 Benseal 1 Portland 6 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **5**

Distance to Septic Field or other concentrated contamination (ft.): **50**

Distance to Septic Tank (ft.): **50**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 55 ft.**
**Burlap/Neoprene at 60 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 40 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **60 - 172** | **Trinity - TDS 650** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **27** | **Tan LS** |
| **27** | **30** | **Gray LS w/ Clay** |
| **30** | **56** | **Gray Clay** |
| **56** | **90** | **Red SS** |
| **90** | **93** | **Gravel** |
| **93** | **104** | **Red SS** |
| **104** | **172** | **Sand & Gravel** |
| **172** | **173** | **Turquoise Clay** |
| **173** | **192** | **Tan Red Gray Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **112** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **112** | **172** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **172** | **192** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #548603

| | | | |
|---|---|---|---|
| Owner: | **Lakecliff Racquet Club** | Owner Well #: | **No Data** |
| Address: | **25609 Kahala Sunset Ct Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **25609 Kahala Sunset Ct Spicewood, TX 78669** | Latitude: | **30° 27' 19" N** |
| | | Longitude: | **098° 04' 42" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **5/7/2020** Drilling End Date: **5/7/2020**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **8.5** | **0** | **246** |

Drilling Method: **Air Rotary**

Borehole Completion: **3/8 Pea Gravel 100-246**

Annular Seal Data: **No Data**

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **15**

Distance to Septic Field or other concentrated contamination (ft.): **50**

Distance to Septic Tank (ft.): **50**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 60+ GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **107 - 226** | **Trinity - TDS 650** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **22** | **Ta Red LS** |
| **22** | **47** | **Tan LS** |
| **47** | **80** | **Gray Tan LS** |
| **80** | **107** | **Gray Clay** |
| **107** | **128** | **Red SS** |
| **128** | **159** | **Gravel** |
| **159** | **169** | **Red SS** |
| **169** | **226** | **Gravel** |
| **226** | **246** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **166** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **166** | **226** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **226** | **246** |

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# STATE OF TEXAS WELL REPORT for Tracking #551963

| | | | |
|---|---|---|---|
| Owner: | **HWY 71 Land, LLC** | Owner Well #: | **2** |
| Address: | **PO Box 91882<br>Austin, TX 78709** | Grid #: | **57-39-6** |
| Well Location: | **12700 HWY 71<br>Spicewood, TX 78669** | Latitude: | **30° 25' 45.27" N** |
| | | Longitude: | **098° 07' 52.71" W** |
| | **Through Gate 1/2 mile up hill on left side of road** | Elevation: | **927 ft. above sea level** |
| Well County: | **Burnet** | | |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **8/12/2020** Drilling End Date: **8/13/2020**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **10** |
| **7.875** | **10** | **345** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **12** | **Cement 8 Bags/Sacks** |
| **165** | **185** | **Bentonite 15 Bags/Sacks** |

Seal Method: **Poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **650 ft**

Distance to Septic Field or other concentrated contamination (ft.): **500+ ft**

Distance to Septic Tank (ft.): **500+ ft**

Method of Verification: **gps**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **260 ft.** below land surface, and **0 GPM** artesian flow on **2020-08-17** Measurement Method: **Sonic/Radar**

Packers: **Rubber at 185 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **320**

Well Tests: **Jetted** **Yield: 5 GPM with 50 ft. drawdown after 4 hours**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **190 - 320** | **fresh** |

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: **BULLS EYE SERVICES LLC**

**PO BOX 1408**
**PEARSALL, TX 78061**

Driller Name: **Danny J. Busa** License Number: **60065**

Comments: **CTGCD Well number 7568**

**Report Amended on 9/2/2020 by Request #32592**

**Report Amended on 9/4/2020 by Request #32618**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **3** | **topsoil** |
| **3** | **28** | **rock** |
| **28** | **45** | **grey clay** |
| **45** | **103** | **red clay** |
| **103** | **150** | **white limestone** |
| **150** | **185** | **grey clay/rock** |
| **185** | **320** | **gravel/sand** |
| **320** | **345** | **grey/blue clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | | **New Plastic (PVC)** | **sdr 17** | **2** | **285** |
| **4.5** | | **New Plastic (PVC)** | **sdr17 0.016** | **285** | **325** |
| **4.5** | | **New Plastic (PVC)** | **sdr17** | **325** | **345** |

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# STATE OF TEXAS WELL REPORT for Tracking #551966

| | | | |
|---|---|---|---|
| Owner: | **HWY 71 Land, LLC** | Owner Well #: | **3** |
| Address: | **PO Box 91882**<br>**Austin, TX 78709** | Grid #: | **57-39-6** |
| Well Location: | **12700 HWY 71**<br>**Spicewood, TX 78669** | Latitude: | **30° 25' 40.5" N** |
| | | Longitude: | **098° 07' 45" W** |
| | **Through Gate 1/4 mile up hill turn left follow road 1/4 mile to well** | Elevation: | **987 ft. above sea level** |
| Well County: | **Burnet** | | |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **8/17/2020** Drilling End Date: **8/18/2020**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **10** |
| **7.875** | **10** | **355** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **12** | **Cement 8 Bags/Sacks** |
| **185** | **205** | **Bentonite 15 Bags/Sacks** |

Seal Method: **Poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **650 ft**

Distance to Septic Field or other concentrated contamination (ft.): **500+ ft**

Distance to Septic Tank (ft.): **500+ ft**

Method of Verification: **gps**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **266 ft.** below land surface, and **0 GPM** artesian flow on **2020-08-17** Measurement Method: **Sonic/Radar**

Packers: **Rubber at 205 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 10 GPM with 50 ft. drawdown after 4 hours**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **210 - 335** | **fresh** |

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: **BULLS EYE SERVICES LLC**

**PO BOX 1408**
**PEARSALL, TX 78061**

Driller Name: **Danny J. Busa** License Number: **60065**

Comments: **CTGCD Well number 7569**

**Report Amended on 9/4/2020 by Request #32617**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **3** | **topsoil** |
| **3** | **28** | **rock** |
| **28** | **45** | **grey clay with layered rock** |
| **45** | **103** | **red clay** |
| **103** | **150** | **white limestone** |
| **150** | **185** | **grey clay/rock** |
| **185** | **225** | **white limestone** |
| **225** | **285** | **red sandy clay** |
| **285** | **335** | **sand/gravel mix** |
| **335** | **355** | **red clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | | **New Plastic (PVC)** | **sdr 17** | **2** | **295** |
| **4.5** | | **New Plastic (PVC)** | **sdr17 0.016** | **295** | **335** |
| **4.5** | | **New Plastic (PVC)** | **sdr17** | **335** | **355** |

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# STATE OF TEXAS WELL REPORT for Tracking #551973

| | | | |
|---|---|---|---|
| Owner: | **HWY 71 Land, LLC** | Owner Well #: | **4** |
| Address: | **PO Box 91882**<br>**Austin, TX 78709** | Grid #: | **57-39-6** |
| Well Location: | **12700 HWY 71**<br>**Spicewood, TX 78669** | Latitude: | **30° 25' 42.63" N** |
| | | Longitude: | **098° 07' 55.8" W** |
| Well County: | **Burnet** | Elevation: | **898 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **8/19/2020** Drilling End Date: **8/20/2020**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10** | **0** | **10** |
| **7.875** | **10** | **290** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **12** | **Cement 8 Bags/Sacks** |
| **185** | **205** | **Bentonite 15 Bags/Sacks** |

Seal Method: **Poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **300 ft**

Distance to Septic Field or other concentrated contamination (ft.): **500+ ft**

Distance to Septic Tank (ft.): **500+ ft**

Method of Verification: **gps**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **175 ft.** below land surface, and **0 GPM** artesian flow on **2020-08-21** Measurement Method: **Sonic/Radar**

Packers: **Rubber at 205 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 10 GPM with 50 ft. drawdown after 4 hours**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **210 - 275** | **fresh** |

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: **BULLS EYE SERVICES LLC**

**PO BOX 1408**
**PEARSALL, TX 78061**

Driller Name: **Danny J. Busa** License Number: **60065**

Comments: **CTGCD Well number 7570**

**Report Amended on 9/4/2020 by Request #32616**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **3** | **topsoil** |
| **3** | **28** | **caliche** |
| **28** | **80** | **grey clay with layered rock** |
| **80** | **145** | **white limestone** |
| **145** | **200** | **grey and red clay** |
| **200** | **275** | **Red sand and gravel mix** |
| **275** | **290** | **Grey Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | | **New Plastic (PVC)** | **sdr 17** | **2** | **240** |
| **4.5** | | **New Plastic (PVC)** | **sdr17 0.016** | **240** | **280** |
| **4.5** | | **New Plastic (PVC)** | **sdr17** | **280** | **290** |

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# STATE OF TEXAS WELL REPORT for Tracking #553035

| | | | |
|---|---|---|---|
| Owner: | **William Huynh** | Owner Well #: | **No Data** |
| Address: | **1352 Lakeshore Dr<br>Spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **1352 Lakeshore Dr<br>Spicewood, TX 78669** | Latitude: | **30° 26' 48" N** |
| | | Longitude: | **098° 05' 06" W** |
| Well County: | **Travis** | Elevation: | **706 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **7/29/2020** Drilling End Date: **7/30/2020**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10.625** | **0** | **10** |
| **8.5** | **10** | **100** |
| **6.75** | **100** | **170** |

Drilling Method: **Air Rotary**

Borehole Completion: **Perforated or Slotted**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **2** | **8** | **Cement 2** |
| **8** | **100** | **Bentonite 9** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **25**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Water Level: **54 ft.** below land surface on **2020-09-03** Measurement Method: **Electric Line**

Packers: **Rubber at 100 ft.**
**Rubber at 105 ft.**
**Rubber at 110 ft.**
**Rubber at 115 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **160**

Well Tests: **Jetted** **Yield: 20+ GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Bee Cave Drilling, Inc.**

**185 Angel Fire Dr.**
**Dripping Springs, TX 78620**

Driller Name: **jim blair** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **topsoil** |
| **2** | **18** | **sand/sandstone** |
| **18** | **22** | **grey clay** |
| **22** | **30** | **limestone w/clay** |
| **30** | **90** | **red limestone** |
| **90** | **105** | **hard limestone** |
| **105** | **160** | **tan sandstone** |
| **160** | **170** | **grey clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **sdr-17** | **0** | **120** |
| **4.5** | **Perforated or Slotted** | **New Plastic (PVC)** | **sdr-17** | **120** | **170** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #555318

| | | | |
|---|---|---|---|
| Owner: | **John Knox** | Owner Well #: | **No Data** |
| Address: | **2400 Fall Creek<br>Spicewood , TX 78669** | Grid #: | **57-39-6** |
| Well Location: | **2400 Fall Creek<br>Spicewood, TX 78669** | Latitude: | **30° 25' 11" N** |
| | | Longitude: | **098° 07' 38" W** |
| Well County: | **Travis** | Elevation: | **830 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **8/20/2020** Drilling End Date: **8/20/2020**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10.625** | **0** | **10** |
| **8.5** | **10** | **50** |
| **6.75** | **50** | **205** |

Drilling Method: **Air Rotary**

Borehole Completion: **Perforated or Slotted**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **40** | **Cement 9** |
| **40** | **50** | **Bentonite 2** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **80**

Distance to Septic Field or other concentrated contamination (ft.): **300**

Distance to Septic Tank (ft.): **250**

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Water Level: **No Data**

Packers: **Rubber at 50 ft.**
**Rubber at 55 ft.**
**Rubber at 115 ft.**
**Rubber at 120 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 3-4 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Bee Cave Drilling, Inc.**

**185 Angel Fire Dr.**
**Dripping Springs, TX 78620**

Driller Name: **jim blair** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **10** | **tan limestone** |
| **10** | **60** | **tan / white limestone** |
| **60** | **120** | **grey limestone / clay** |
| **120** | **200** | **red sandstone wb 3-4 gpm at 760 tds** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **sdr-17** | **0** | **125** |
| **4.5** | **Perforated or Slotted** | **New Plastic (PVC)** | **sdr-17** | **125** | **205** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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**P.O. Box 12157**
**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #559779

| | | | |
|---|---|---|---|
| Owner: | **David June** | Owner Well #: | **No Data** |
| Address: | **14622 Carols Way Dr.<br>Houston , TX 77070** | Grid #: | **57-40-4** |
| Well Location: | **521 Nomad Dr<br>Spicewood, TX 78669** | Latitude: | **30° 25' 44" N** |
| | | Longitude: | **098° 05' 37" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **11/12/2020** Drilling End Date: **11/12/2020**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8.5** | **0** | **100** |
| **6.25** | **100** | **196** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **7 Benseal 2 Portland 9 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **10**

Distance to Septic Field or other concentrated contamination (ft.): **50**

Distance to Septic Tank (ft.): **50**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 100 ft.**
**Burlap/Neoprene at 105 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 25 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **105 - 176** | **Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **S. Travis Co**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **20** | **Tan White LS** |
| **20** | **40** | **Gray LS** |
| **40** | **55** | **Gray LS w/ Clay** |
| **55** | **60** | **Brown Clay** |
| **60** | **76** | **Gray LS w/ Clay** |
| **76** | **132** | **Red SS** |
| **132** | **138** | **Gravel Red SS** |
| **138** | **142** | **Gravel W/ Sand** |
| **142** | **174** | **Gravel W/ Sand** |
| **174** | **176** | **Turquoise Clay** |
| **176** | **196** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **116** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **116** | **176** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **176** | **196** |

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**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #560551

| | | | |
|---|---|---|---|
| Owner: | **John Knox** | Owner Well #: | **No Data** |
| Address: | **2400 Fall Creek<br>Spicewood, TX 78669** | Grid #: | **57-39-6** |
| Well Location: | **2400 Fall Creek<br>Spicewood, TX 78669** | Latitude: | **30° 25' 09" N** |
| | | Longitude: | **098° 07' 39" W** |
| Well County: | **Travis** | Elevation: | **824 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **10/28/2020** Drilling End Date: **10/28/2020**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10.625** | **0** | **10** |
| **8.5** | **10** | **50** |
| **6.75** | **50** | **170** |

Drilling Method: **Air Rotary**

Borehole Completion: **Perforated or Slotted**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **40** | **Cement 7** |
| **40** | **50** | **Bentonite 3** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **80+**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Water Level: **No Data**

Packers: **Rubber at 50 ft.**
**Rubber at 55 ft.**
**Rubber at 85 ft.**
**Rubber at 90 ft.**

Type of Pump: **Submersible**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Bee Cave Drilling, Inc.**

**185 Angel Fire Dr.**
**Dripping Springs, TX 78620**

Driller Name: **jim blair** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **4** | **topsoil** |
| **4** | **5** | **clay** |
| **5** | **50** | **tan / white limestone** |
| **50** | **90** | **grey clay / strips of limestone** |
| **90** | **170** | **red sandstone** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **sdr-17** | **0** | **110** |
| **4.5** | **Perforated or Slotted** | **New Plastic (PVC)** | **sdr-17** | **110** | **170** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #563205

| | | | |
|---|---|---|---|
| Owner: | **Ryan Nesloney** | Owner Well #: | **No Data** |
| Address: | **1215 Lakeshore Dr<br>Spicewood , TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **1215 Lakeshore Dr<br>Spicewood, TX 78669** | Latitude: | **30° 26' 30" N** |
| | | Longitude: | **098° 04' 41" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **12/28/2020** Drilling End Date: **12/28/2020**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8.5** | **0** | **100** |
| **6.5** | **100** | **185** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **7 Benseal 2 Portland 9 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **15**

Distance to Septic Field or other concentrated contamination (ft.): **50**

Distance to Septic Tank (ft.): **50**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 100 ft.**
**Burlap/Neoprene at 105 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 60 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **118 - 166** | **L. Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **S. Travis Co**
**Reg. ONLY**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **5** | **Tan LS** |
| **5** | **22** | **Gravel** |
| **22** | **37** | **Gray Red Clay** |
| **37** | **42** | **Tan LS** |
| **42** | **58** | **Gray LS** |
| **58** | **118** | **Red SS** |
| **118** | **165** | **Gravel** |
| **165** | **166** | **Turquoise Clay** |
| **166** | **185** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **105** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **105** | **165** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **165** | **185** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #564213

| | | | |
|---|---|---|---|
| Owner: | **John Knox** | Owner Well #: | **No Data** |
| Address: | **2400 Fall Creek Rd<br>Spicewood , TX 78669** | Grid #: | **57-39-6** |
| Well Location: | **2400 Fall Creek Rd<br>Spicewood, TX 78669** | Latitude: | **30° 25' 09" N** |
| | | Longitude: | **098° 07' 39" W** |
| Well County: | **Travis** | Elevation: | **824 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **12/1/2020** Drilling End Date: **12/1/2020**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10.625** | **0** | **10** |
| **8.5** | **10** | **260** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **50** | **260** | **Gravel** | **3/8** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **40** | **Cement 7** |
| **40** | **50** | **Bentonite 2** |

Seal Method: **Poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **70**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 3 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Bee Cave Drilling, Inc.**

**185 Angel Fire Dr.**
**Dripping Springs, TX 78620**

Driller Name: **jim blair** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **4** | **topsoil** |
| **4** | **6** | **clay** |
| **6** | **50** | **tan / white limestone** |
| **50** | **90** | **grey clay / strips of grey limestone** |
| **90** | **175** | **red sandstone wb 3 gpm** |
| **175** | **250** | **tan limestone / grey clay strips** |
| **250** | **260** | **grey clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **sdr-17** | **0** | **120** |
| **4.5** | **Perforated or Slotted** | **New Plastic (PVC)** | **sdr-17** | **120** | **260** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #571040

| | | | |
|---|---|---|---|
| Owner: | **Glenville Development LLC** | Owner Well #: | **No Data** |
| Address: | **20808 W. Hwy 71<br>Spicewood , TX 78669** | Grid #: | **57-40-1** |
| Well Location: | **600 CR 414<br>( Lot 4 )<br>Spicewood, TX 78669** | Latitude: | **30° 28' 00" N** |
| | | Longitude: | **098° 07' 09" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **3/18/2021** Drilling End Date: **3/18/2021**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **18** |
| **6.25** | **18** | **165** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **Portland 4 Bags/Sacks** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **50+**

Distance to Septic Field or other concentrated contamination (ft.): **100+**

Distance to Septic Tank (ft.): **50+**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 20 ft.**
**Burlap/Neoprene at 25 ft.**
**Burlap/Neoprene at 70 ft.**
**Burlap/Neoprene at 75 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 5 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **105 - 145** | **Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Johnson Jackson** License Number: **54989**

Comments: **CTGCD # 7897**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **18** | **Tan LS** |
| **18** | **40** | **Gray Tan LS** |
| **40** | **72** | **Hammet Clay** |
| **72** | **75** | **Red SS** |
| **75** | **95** | **Gravel /Red SS** |
| **95** | **105** | **Red SS** |
| **105** | **145** | **Gravel/W Sand** |
| **145** | **146** | **Turquoise Clay** |
| **146** | **165** | **Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **85** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **85** | **145** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **145** | **165** |

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**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #586295

| | | | |
|---|---|---|---|
| Owner: | **Gary Wier** | Owner Well #: | **No Data** |
| Address: | **P O Box 268<br>Spicewood , TX 78611** | Grid #: | **57-40-1** |
| Well Location: | **293 Oaks Rd<br>Spicewood, TX 78669** | Latitude: | **30° 27' 38" N** |
| | | Longitude: | **098° 07' 19" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **10/6/2021** Drilling End Date: **10/6/2021**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.25** | **20** | **200** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **Portland 4 Bags/Sacks** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **50+**

Distance to Septic Field or other concentrated contamination (ft.): **100+**

Distance to Septic Tank (ft.): **50+**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 20 ft.**
**Burlap/Neoprene at 25 ft.**
**Burlap/Neoprene at 105 ft.**
**Burlap/Neoprene at 110 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 1.6 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **112 - 180** | **Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Comments: **CTGCD # 8288**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top SOil** |
| **1** | **11** | **Tan LS w /Red Clay** |
| **11** | **17** | **White Tan LS** |
| **17** | **30** | **Tan LS w/ Sand** |
| **30** | **37** | **Gray LS** |
| **37** | **48** | **Gray LS w/ Clay** |
| **48** | **59** | **Gray Tan LS** |
| **59** | **64** | **Gray Tan LS w/ CLay** |
| **64** | **98** | **Hammet Clay** |
| **98** | **112** | **Red SS** |
| **112** | **135** | **Red SS w / Gravel** |
| **135** | **180** | **Gravel** |
| **180** | **198** | **Tan Clay** |
| **198** | **200** | **Gray Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **120** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **120** | **180** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **180** | **200** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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# STATE OF TEXAS WELL REPORT for Tracking #595029

| | | | |
|---|---|---|---|
| Owner: | **Glenville Development LLC** | Owner Well #: | **No Data** |
| Address: | **20808 W Hwy 71**<br>**Spicewood , TX 78669** | Grid #: | **57-40-1** |
| Well Location: | **600 CR 414**<br>**Lot # 3**<br>**Spicewood, TX 78669** | Latitude: | **30° 27' 59" N** |
| | | Longitude: | **098° 07' 11" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **1/14/2022** Drilling End Date: **1/14/2022**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.25** | **20** | **157** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **Portland 4 Bags/Sacks** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **50+**

Distance to Septic Field or other concentrated contamination (ft.): **100+**

Distance to Septic Tank (ft.): **50+**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 20 ft.**
**Burlap/Neoprene at 25 ft.**
**Burlap/Neoprene at 77 ft.**
**Burlap/Neoprene at 80 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 4 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **81 - 137** | **Trinity TDS -400** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Apprentice Name: **Alfonso Rodriguez Jr.** Apprentice Number: **60952**

Comments: **CTGCD # 8445**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top SOil** |
| **1** | **5** | **White Tan LS** |
| **5** | **7** | **Gravel w/ Sand** |
| **7** | **12** | **Tan Gray LS** |
| **12** | **35** | **Gray LS** |
| **35** | **70** | **Hammet Clay** |
| **70** | **81** | **Red SS** |
| **81** | **102** | **Red SS w/ Gravel** |
| **102** | **137** | **Gravel w/ Sand** |
| **137** | **157** | **Turquoise Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **77** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **77** | **137** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **137** | **157** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #600456

| | | | |
|---|---|---|---|
| Owner: | **Lloyd Helms** | Owner Well #: | **No Data** |
| Address: | **26000 Master Parkway<br>Spicewood , TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **25646 Pedernales Point Dr<br>Spicewood, TX 78669** | Latitude: | **30° 26' 01" N** |
| | | Longitude: | **098° 05' 37" W** |
| Well County: | **Travis** | Elevation: | **No Data** |

Type of Work: **Unknown** Proposed Use: **Unknown**

Drilling Start Date: **3/18/2022** Drilling End Date: **3/18/2022**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **92** |
| **6.25** | **92** | **180** |

Drilling Method: **Unknown**

Borehole Completion: **Unknown**

Annular Seal Data: **No Data**

Seal Method: **Unknown**

Sealed By: **Driller**

Distance to Property Line (ft.): **UNKNOWN**

Distance to Septic Field or other concentrated contamination (ft.): **UNKNOWN**

Distance to Septic Tank (ft.): **UNKNOWN**

Method of Verification: **No Data**

Surface Completion: **Unknown** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Apprentice Name: **Alfonso Rodriguez Jr.** Apprentice Number: **60952**

Comments: **SWTCGCD - Approved**

**DRY**
**Backfilled 2' Cement Cap**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **27** | **White Tan LS** |
| **27** | **36** | **Tan LS** |
| **36** | **53** | **Gray Tan LS** |
| **53** | **92** | **Gray Clay ( Hammet )** |
| **92** | **106** | **Red SS** |
| **106** | **112** | **Red Tan SS** |
| **112** | **149** | **Red Tan LS w/ Gravel** |
| **149** | **175** | **Gravel** |
| **175** | **180** | **Turquoise Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #603201

| | | | |
|---|---|---|---|
| Owner: | **Forestar Real Estate Group Inc** | Owner Well #: | **2** |
| Address: | **2221 E. Lamar Blvd. Arlington, TX 76006** | Grid #: | **57-40-4** |
| | | Latitude: | **30° 26' 10.71" N** |
| Well Location: | **316 Paleface Point Dr Spicewood, TX 78669** | Longitude: | **098° 05' 52.32" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **3/28/2022** Drilling End Date: **3/29/2022**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8.75** | **0** | **210** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **100** | **210** | **Gravel** | **.375** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **Cement 5 Bags/Sacks** |
| **20** | **100** | **Quilkgrout 10 Bags/Sacks** |

Seal Method: **Pumped**

Sealed By: **Driller**

Distance to Property Line (ft.): **300+**

Distance to Septic Field or other concentrated contamination (ft.): **300+**

Distance to Septic Tank (ft.): **300+**

Method of Verification: **Map**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **124 ft.** below land surface on **2022-04-04** Measurement Method: **Electric Line**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Pump** **Yield: 4 GPM with 60 ft. drawdown after 24 hours**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **Yes**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **NextGen Water Well Service**

**11911 West County Road 56**
**Midland, TX 79707**

Driller Name: **Cody Myers** License Number: **60303**

Apprentice Name: **Billy Sheckler**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **8** | **Top Soil/Clay** |
| **8** | **40** | **Limestone** |
| **40** | **110** | **Gray Shale and Clay** |
| **110** | **135** | **Sandstone** |
| **135** | **145** | **Brown Clay** |
| **145** | **200** | **Sandstone with Clay Stringers** |
| **200** | **210** | **Gray Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR 17** | **0** | **130** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **SDr 17 0.035** | **130** | **210** |

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# STATE OF TEXAS WELL REPORT for Tracking #603203

| | | | |
|---|---|---|---|
| Owner: | **Forestar Real Estate Group Inc** | Owner Well #: | **1** |
| Address: | **2221 E. Lamar Blvd. Arlington, TX 76006** | Grid #: | **57-40-4** |
| | | Latitude: | **30° 26' 12.14" N** |
| Well Location: | **316 Paleface Point Dr Spicewood, TX 78669** | Longitude: | **098° 05' 56.58" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **3/28/2022** Drilling End Date: **3/29/2022**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **8.75** | **0** | **215** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|---|
| Filter Pack Intervals: | **110** | **215** | **Gravel** | **.375** |

| | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| Annular Seal Data: | **0** | **20** | **Cement 5 Bags/Sacks** |
| | **20** | **110** | **Quikgrout 10 Bags/Sacks** |

Seal Method: **Pumped**

Sealed By: **Driller**

Distance to Property Line (ft.): **300+**

Distance to Septic Field or other concentrated contamination (ft.): **300+**

Distance to Septic Tank (ft.): **300+**

Method of Verification: **Map**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **121 ft.** below land surface on **2022-03-30** Measurement Method: **Electric Line**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **NextGen Water Well Service**

**11911 West County Road 56**
**Midland, TX 79707**

Driller Name: **Cody Myers** License Number: **60303**

Apprentice Name: **Billy Sheckler**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **6** | **Top Soil** |
| **6** | **30** | **Limestone** |
| **30** | **110** | **Gray Shale and Clay** |
| **110** | **145** | **Tan Sandstone** |
| **145** | **155** | **Brown CLay** |
| **155** | **205** | **Sandstone with clay stringers** |
| **205** | **215** | **Gray Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR 17** | **0** | **135** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **SDR 17 0.035** | **135** | **215** |

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# STATE OF TEXAS WELL REPORT for Tracking #610596

| | | | |
|---|---|---|---|
| Owner: | **Dereck Norwood** | Owner Well #: | **No Data** |
| Address: | **126 CR 420<br>Spicewood , TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **12001 CR 404<br>Spicewood, TX 78669** | Latitude: | **30° 27' 29" N** |
| | | Longitude: | **098° 07' 01" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **6/29/2022** Drilling End Date: **6/29/2022**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.25** | **20** | **213** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **Portland 4 Bags/Sacks** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **50+**

Distance to Septic Field or other concentrated contamination (ft.): **100+**

Distance to Septic Tank (ft.): **50+**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 20 ft.**
**Burlap/Neoprene at 25 ft.**
**Burlap/Neoprene at 108 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 3 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **108 - 193** | **Trinity - TDS 360** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Apprentice Name: **Alfonso Rodriguez Jr.** Apprentice Number: **60952**

Comments: **CTGCD # 8769**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **6** | **Tan Clay** |
| **6** | **14** | **Tan LS w/ Gravel** |
| **14** | **21** | **Tan KS w Red Clay** |
| **21** | **39** | **White Tan LS** |
| **39** | **53** | **Gray LS** |
| **53** | **63** | **Gray LS w/ Clay** |
| **63** | **85** | **Hammet Clay** |
| **85** | **101** | **Red SS** |
| **101** | **108** | **Red SS w/ Gravel** |
| **108** | **126** | **Sand Red SS Gravel Mix** |
| **126** | **140** | **Red SS** |
| **140** | **193** | **Gravel** |
| **193** | **213** | **Turquoise Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **133** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **133** | **193** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **193** | **213** |

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**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #616691

| | | | |
|---|---|---|---|
| Owner: | **Shumate Homes Inc.** | Owner Well #: | **No Data** |
| Address: | **3516 S. Pace Bend Rd<br>Spicewood , TX 78611** | Grid #: | **57-40-5** |
| Well Location: | **1248 Lakeshore Dr<br>Spicewood, TX 78669** | Latitude: | **30° 26' 33" N** |
| | | Longitude: | **098° 04' 46" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **8/15/2022** Drilling End Date: **8/15/2022**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **100** |
| **6.25** | **100** | **213** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **6 Benseal 5 Portland 11 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **60+**

Distance to Septic Field or other concentrated contamination (ft.): **100+**

Distance to Septic Tank (ft.): **50+**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 100 ft.**
**Burlap/Neoprene at 105 ft.**
**Burlap/Neoprene at 120 ft.**
**Burlap/Neoprene at 125 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 42 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **130 - 193** | **Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Apprentice Name: **Alfonso Rodriguez Jr** Apprentice Number: **60952**

Comments: **SW Travis Co Approved**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **7** | **Gravel** |
| **7** | **18** | **White Tan LS w/ Gravel** |
| **18** | **32** | **Gravel** |
| **32** | **45** | **Gray LS w/ Clay** |
| **45** | **77** | **Hammet Clay** |
| **77** | **130** | **Red SS** |
| **130** | **141** | **Gravel w/ Red SS ( H20 )** |
| **141** | **193** | **Gravel w/ Sand ( H2o )** |
| **193** | **213** | **Turquoise Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **133** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **133** | **193** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **193** | **213** |

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# STATE OF TEXAS WELL REPORT for Tracking #628725

| | | | |
|---|---|---|---|
| Owner: | **Odus Wittenburg Jr.** | Owner Well #: | **57405OW2** |
| Address: | **2501 Martin Rd.<br>Dripping Springs, TX 78620** | Grid #: | **57-40-5** |
| Well Location: | **1253 Lakeshor Dr.<br>Spicewood, TX 78669** | Latitude: | **30° 26' 37" N** |
| | | Longitude: | **098° 04' 49" W** |
| Well County: | **Travis** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **12/15/2022** Drilling End Date: **12/15/2022**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **100** |
| **6.125** | **100** | **190** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **Cement 14 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **15**

Distance to Septic Field or other concentrated contamination (ft.): **N/A**

Distance to Septic Tank (ft.): **N/A**

Method of Verification: **Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap at 100 ft.**
**Burlap/Plastic at 120 ft.**
**Burlap/Plastic at 130 ft.**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 25 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **130 - 190** | **Lower Trinity** |

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: **Centex Pump & Supply, Inc.**

**2520 Hwy. 290 West**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **30** | **Tan** |
| **30** | **33** | **Gray w/ Strip Clay** |
| **33** | **57** | **Gray Clay** |
| **57** | **90** | **Red Sand Stone** |
| **90** | **130** | **Red Sand Stone w/ Clay** |
| **130** | **185** | **Sand Gravel** |
| **185** | **190** | **Gray Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **130** |
| **4.5** | **Perforated or Slotted** | **New Plastic (PVC)** | **SDR17** | **130** | **190** |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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# STATE OF TEXAS WELL REPORT for Tracking #629045

| | | | |
|---|---|---|---|
| Owner: | **Tonkawa Water Supply** | Owner Well #: | **No Data** |
| Address: | **25501 Red Brangus Road Spicewood , TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **25501 Red Brangus Road Spicewood, TX 78669** | Latitude: | **30° 25' 32.44" N** |
| | | Longitude: | **098° 05' 41.17" W** |
| Well County: | **Travis** | Elevation: | **797 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Public Supply** |

Drilling Start Date: **11/29/2022** Drilling End Date: **12/2/2022**

**Plans Approved by TCEQ - YES**
**PWS# 2270116**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10.625** | **0** | **10** |
| **9** | **10** | **225** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **150** | **220** | **Gravel** | **3/8** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **150** | **Cement 52 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **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: **Bee Cave Drilling, Inc.**

**185 Angel Fire Rd.**
**Dripping Springs, TX 78620**

Driller Name: **michael scott** License Number: **59719**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **3** | **topsoil** |
| **3** | **10** | **tan limestone** |
| **10** | **70** | **grey limestone** |
| **70** | **105** | **grey shale** |
| **105** | **115** | **grey shale / red clay** |
| **115** | **125** | **gravel** |
| **125** | **170** | **red sandstone / clay** |
| **170** | **180** | **tan limestone / gravel** |
| **180** | **200** | **tan limestone / clay** |
| **200** | **220** | **tan / blue clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **5** | **Blank** | **New Plastic (PVC)** | **sch-80** | **0** | **160** |
| **5** | **Perforated or Slotted** | **New Plastic (PVC)** | **sch-80** | **160** | **220** |

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# STATE OF TEXAS WELL REPORT for Tracking #633176

| | | | |
|---|---|---|---|
| Owner: | **Jim F. Madigan** | Owner Well #: | **No Data** |
| Address: | **1020 CR 414<br>Spicewood, TX 78669** | Grid #: | **57-40-1** |
| Well Location: | **1020 CR 414<br>Spicewood, TX 78669** | Latitude: | **30° 28' 06" N** |
| | | Longitude: | **098° 06' 56" W** |
| Well County: | **Burnet** | Elevation: | **No Data** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **2/27/2023** Drilling End Date: **2/27/2023**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **8** | **0** | **20** |
| **6.25** | **20** | **165** |

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **20** | **Portland 4 Bags/Sacks** |

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **50+**

Distance to Septic Field or other concentrated contamination (ft.): **100+**

Distance to Septic Tank (ft.): **50+**

Method of Verification: **Land Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **Burlap/Neoprene at 20 ft.**
**Burlap/Neoprene at 25 ft.**
**Burlap/Neoprene at 82 ft.**
**Burlap/Neoprene at 85 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 2 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **88 - 145** | **Trinity** |

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: **Apex Drilling, Inc.**

**P.O. Box 867**
**Marble Falls, TX 78654**

Driller Name: **Andrew Jackson Johnson** License Number: **54989**

Apprentice Name: **Alfonso Rodriguez Jr.** Apprentice Number: **60952**

Comments: **CTGCD # 9060**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **1** | **Top Soil** |
| **1** | **7** | **Sandy Loam** |
| **7** | **19** | **Tan LS** |
| **19** | **27** | **Gray LS** |
| **27** | **46** | **Gray Tan LS** |
| **46** | **51** | **Gray LS w/ Clay** |
| **51** | **73** | **Hammet Clay** |
| **73** | **88** | **Red SS** |
| **88** | **94** | **Red SS w/ Gravel** |
| **94** | **113** | **Red SS w/ Sand** |
| **113** | **143** | **Tan Gravel w/ Sand H2o** |
| **143** | **165** | **Turquoise Tan Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **85** |
| **4.5** | **Screen** | **New Plastic (PVC)** | **.035** | **85** | **145** |
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **145** | **165** |

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# STATE OF TEXAS WELL REPORT for Tracking #636797

| | | | |
|---|---|---|---|
| Owner: | **Jay Raulerson** | Owner Well #: | **57404JR** |
| Address: | **115 Vicinty Trail<br>Spicewood, TX 78669** | Grid #: | **57-40-4** |
| Well Location: | **115 Vicinty Trail<br>Spicewood, TX 78669** | Latitude: | **30° 25' 53" N** |
| | | Longitude: | **098° 05' 14" W** |
| Well County: | **Travis** | Elevation: | **710 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **3/29/2023** Drilling End Date: **3/29/2023**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **100** |
| **6.13** | **100** | **250** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **Cement 12 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **50**

Distance to Septic Field or other concentrated contamination (ft.): **100**

Distance to Septic Tank (ft.): **60**

Method of Verification: **Owner**

Surface Completion: **Surface Sleeve Installed** **Surface Completion by Driller**

Water Level: **71 ft.** below land surface, and **1 GPM** artesian flow on **2023-04-04**

Measurement Method: **Electric Line**

Packers: **Burlap at 100 ft.**
**Burlap/Plastic at 120 ft.**
**Burlap/Plastic at 200 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **220**

Well Tests: **Jetted** **Yield: 1 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **210 - 250** | **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: **Centex Pump & Supply, Inc.**

**2520 Hwy. 290 West**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **10** | **Brown Tan Shale** |
| **10** | **15** | **Gray** |
| **15** | **22** | **Red Clay** |
| **22** | **90** | **Red Sandy Clay** |
| **90** | **110** | **Brown Tan** |
| **110** | **140** | **Red Sand Stone** |
| **140** | **220** | **Tan Sand w/ Gravel** |
| **220** | **240** | **Sand Gravel** |
| **240** | **250** | **Tan Shale** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **2** | **210** |
| **4.5** | **Perforated or Slotted** | **New Plastic (PVC)** | **SDR17** | **210** | **250** |

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# STATE OF TEXAS WELL REPORT for Tracking #656699

| | | | |
|---|---|---|---|
| Owner: | **Hunter Mark F 2010 Living Trust** | Owner Well #: | **57405MH2** |
| Address: | **1227 Lakeshore Dr.<br>Spicewood, TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **1227 Lakeshore Dr.<br>Spicewood, TX 78669** | Latitude: | **30° 26' 32" N** |
| | | Longitude: | **098° 04' 42" W** |
| Well County: | **Travis** | Elevation: | **743 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **12/27/2023** Drilling End Date: **12/27/2023**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **9** | **0** | **100** |
| **6.25** | **100** | **190** |

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **100** | **Cement 12 Bags/Sacks** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **5**

Distance to Septic Field or other concentrated contamination (ft.): **100+**

Distance to Septic Tank (ft.): **100+**

Method of Verification: **Owner**

Surface Completion: **Pitless Adapter Used** **Surface Completion by Driller**

Water Level: **120 ft.** below land surface on **2023-12-27**

Packers: **Burlap at 100 ft.**
**Burlap/Plastic at 110 ft.**
**Burlap/Plastic at 120 ft.**
**Burlap/Plastic at 130 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **180**

Well Tests: **Jetted** **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **130 - 190** | **Lower Trinity** |

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: **Centex Pump & Supply, Inc.**

**2520 Hwy. 290 West**
**Dripping Springs, TX 78620**

Driller Name: **Martin Lingle** License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **20** | **Caliche/Rock** |
| **20** | **65** | **Tan-Gray Strip Clay** |
| **65** | **95** | **Red Clay** |
| **95** | **120** | **Gravel w/ Red Clay** |
| **120** | **130** | **Gray Clay** |
| **130** | **160** | **Gravel** |
| **160** | **181** | **Sand & Sand Stone** |
| **181** | **190** | **Tan w/ Yellow Clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **4.5** | **Blank** | **New Plastic (PVC)** | **SDR17** | **0** | **130** |
| **4.5** | **Perforated or Slotted** | **New Plastic (PVC)** | **SDR17** | **130** | **190** |

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# STATE OF TEXAS WELL REPORT for Tracking #664544

| | | | |
|---|---|---|---|
| Owner: | **Austin Golf Club** | Owner Well #: | **PZ-2** |
| Address: | **24900 State Hwy 71<br>Spicewood, TX 78669** | Grid #: | **57-40-7** |
| Well Location: | **24900 State Highway 71 W<br>Spicewood, TX 78669** | Latitude: | **30° 24' 58" N** |
| | | Longitude: | **098° 05' 59" W** |
| Well County: | **Travis** | Elevation: | **778 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Test Well** |

Drilling Start Date: **2/28/2024** Drilling End Date: **2/28/2024**

| | *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|---|
| Borehole: | **6** | **0** | **30** |

Drilling Method: **Air Rotary**

Borehole Completion: **Screened**

| Annular Seal Data: | *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|---|
| | **0** | **2** | **Cement 2 Bags/Sacks** |
| | **2** | **3** | **Bentonite 1 Bags/Sacks** |

Seal Method: **Hand Mixed**

Sealed By: **Driller**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Surface Slab Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Austin Geo-Logic**

**1316 Ridgefield Loop**
**Round Rock, TX 78665**

Driller Name: **Hamilton L. McRae** License Number: **59656**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **2** | **30** | **white and grey limestone** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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# STATE OF TEXAS WELL REPORT for Tracking #664545

| | | | |
|---|---|---|---|
| Owner: | **Austin Golf Club** | Owner Well #: | **PZ-1** |
| Address: | **24900 W State Highway 71 Spicewood, TX 78669** | Grid #: | **57-40-7** |
| | | Latitude: | **30° 24' 55" N** |
| Well Location: | **24900 W State Highway 71 Spicewood, TX** | Longitude: | **098° 05' 57" W** |
| Well County: | **Travis** | Elevation: | **781 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Test Well** |

Drilling Start Date: **2/28/2024** Drilling End Date: **2/28/2024**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **6** | **0** | **30** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **2** | **30** | **Sand** | |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **2** | **Concrete 2 Bags/Sacks** |
| **2** | **3** | **Bentonite 1 Bags/Sacks** |

Seal Method: **Hand Mixed**

Sealed By: **Driller**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Surface Slab Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Austin Geo-Logic**

**1316 Ridgefield Loop**
**Round Rock, TX 78665**

Driller Name: **Hamilton L. McRae** License Number: **59656**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **1** | **2.5** | **Tan sandy clay** |
| **3** | **30** | **white/tan to grey limestone** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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Please include the report's Tracking Number on your written request.

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**P.O. Box 12157**
**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #676449

| | | | |
|---|---|---|---|
| Owner: | **Russell Young** | Owner Well #: | **No Data** |
| Address: | **1323 Lakeshore Drive Spicewood , TX 78669** | Grid #: | **57-40-5** |
| Well Location: | **1323 Lakeshore Drive Spicewood, TX 78669** | Latitude: | **30° 26' 43.7" N** |
| | | Longitude: | **098° 04' 57.9" W** |
| Well County: | **Travis** | Elevation: | **725 ft. above sea level** |
| Type of Work: | **New Well** | Proposed Use: | **Domestic** |

Drilling Start Date: **7/10/2024** Drilling End Date: **7/11/2024**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10.625** | **0** | **10** |
| **8.5** | **10** | **220** |

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Filter Material* | *Size* |
|---|---|---|---|
| **100** | **220** | **Gravel** | **3/8** |

Annular Seal Data:

| *Top Depth (ft.)* | *Bottom Depth (ft.)* | *Description (number of sacks & material)* |
|---|---|---|
| **0** | **10** | **Cement 4** |
| **10** | **100** | **Bentonite 12** |

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **40**

Distance to Septic Field or other concentrated contamination (ft.): **100**

Distance to Septic Tank (ft.): **100**

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Water Level: **86 ft.** below land surface on **2024-07-19** Measurement Method: **Electric Line**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **200**

Well Tests: **Jetted** **Yield: 15 GPM**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Bee Cave Drilling, Inc.**

**185 Angel Fire Rd.**
**Dripping Springs, TX 78620**

Driller Name: **Michael Scott** License Number: **59719**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **4** | **topsoil** |
| **4** | **10** | **tan limestone** |
| **10** | **100** | **grey limestone** |
| **100** | **130** | **red clay** |
| **130** | **140** | **red sand** |
| **140** | **160** | **tan limestone / gravel** |
| **160** | **180** | **grey clay / limestone** |
| **180** | **200** | **tan sandstone / grey clay wb 15+gpm** |
| **200** | **220** | **tan limestone** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia (in.) | Type | Material | Sch./Gage | Top (ft.) | Bottom (ft.) |
|---|---|---|---|---|---|
| **5** | **Blank** | **New Plastic (PVC)** | | **0** | **180** |
| **5** | **Screen** | **New Plastic (PVC)** | | **180** | **220** |

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**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #679858

| | | | |
|---|---|---|---|
| Owner: | **Charles H. Morrison** | Owner Well #: | **No Data** |
| Address: | **2902 Greenlee Dr<br>Austin, TX 78703** | Grid #: | **57-40-7** |
| | | Latitude: | **30° 24' 51.3" N** |
| Well Location: | **Paleface Ranch Rd<br>Spicewood, TX 78669** | Longitude: | **098° 06' 37.26" W** |
| Well County: | **Travis** | Elevation: | **811 ft. above sea level** |
| | | | ****Plugged Within 48 Hours**** |

****This well has been plugged**** **Plugging Report Tracking #240782**

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **9/9/2024** Drilling End Date: **9/10/2024**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10.625** | **0** | **10** |
| **8.5** | **10** | **350** |

Drilling Method: **Air Rotary**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Tremie**

Sealed By: **Driller**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Bee Cave Drilling, Inc.**

**185 Angel Fire Rd.**
**Dripping Springs, TX 78620**

Driller Name: **Michael Scott** License Number: **59719**

Comments: **plugged**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **2** | **topsoil** |
| **2** | **10** | **white limestone** |
| **10** | **110** | **grey / white limestone** |
| **110** | **130** | **grey / red clay** |
| **130** | **200** | **tan sandstone /partial returns** |
| **200** | **280** | **red / tan clay partial returns** |
| **280** | **350** | **no returns** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

**IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY**

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**Austin, TX 78711**
**(512) 334-5540**

# STATE OF TEXAS WELL REPORT for Tracking #681979

| | | | |
|---|---|---|---|
| Owner: | **Charles H. Morrison** | Owner Well #: | **SWTCGCD#57407MF** |
| Address: | **2902 Greenlee Dr.<br>Austin, TX 78703** | Grid #: | **57-40-7** |
| Well Location: | **Paleface Ranch Rd<br>Spicewood, TX 78669** | Latitude: | **30° 24' 48.46" N** |
| | | Longitude: | **098° 06' 29.56" W** |
| Well County: | **Travis** | Elevation: | **797 ft. above sea level** |
| | | | ****Plugged Within 48 Hours**** |

****This well has been plugged**** **Plugging Report Tracking #241402**

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **10/17/2024** Drilling End Date: **10/18/2024**

Borehole:

| *Diameter (in.)* | *Top Depth (ft.)* | *Bottom Depth (ft.)* |
|---|---|---|
| **10.625** | **0** | **10** |
| **8.5** | **10** | **350** |

Drilling Method: **Air Rotary**

Borehole Completion: **Plugged**

Annular Seal Data: **No Data**

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **No Data**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

| Strata Depth (ft.) | Water Type |
|---|---|
| **No Data** | **No Data** |

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Bee Cave Drilling, Inc.**

**185 Angel Fire Rd.**
**Dripping Springs, TX 78620**

Driller Name: **michael scott** License Number: **59719**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

| Top (ft.) | Bottom (ft.) | Description |
|---|---|---|
| **0** | **10** | **white limestone** |
| **10** | **20** | **grey / white limestone** |
| **20** | **100** | **grey limestone / shale mix** |
| **100** | **120** | **red clay / sandstone mix** |
| **120** | **170** | **red clay / tan sandstone** |
| **170** | **180** | **gravel mix wb .5gpm** |
| **180** | **240** | **red clay / tan limestone** |
| **240** | **350** | **grey clay** |

Casing:
BLANK PIPE & WELL SCREEN DATA

| Dia. (in.) | New/Used | Type | Setting From/To (ft.) |
|---|---|---|---|
| **No Data** | | | |

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**Austin, TX 78711**
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# Attachment 17

Groundwater Quality Technical Report

To Be Provided Later

# Attachment 18

Soil Map

United States Department of Agriculture

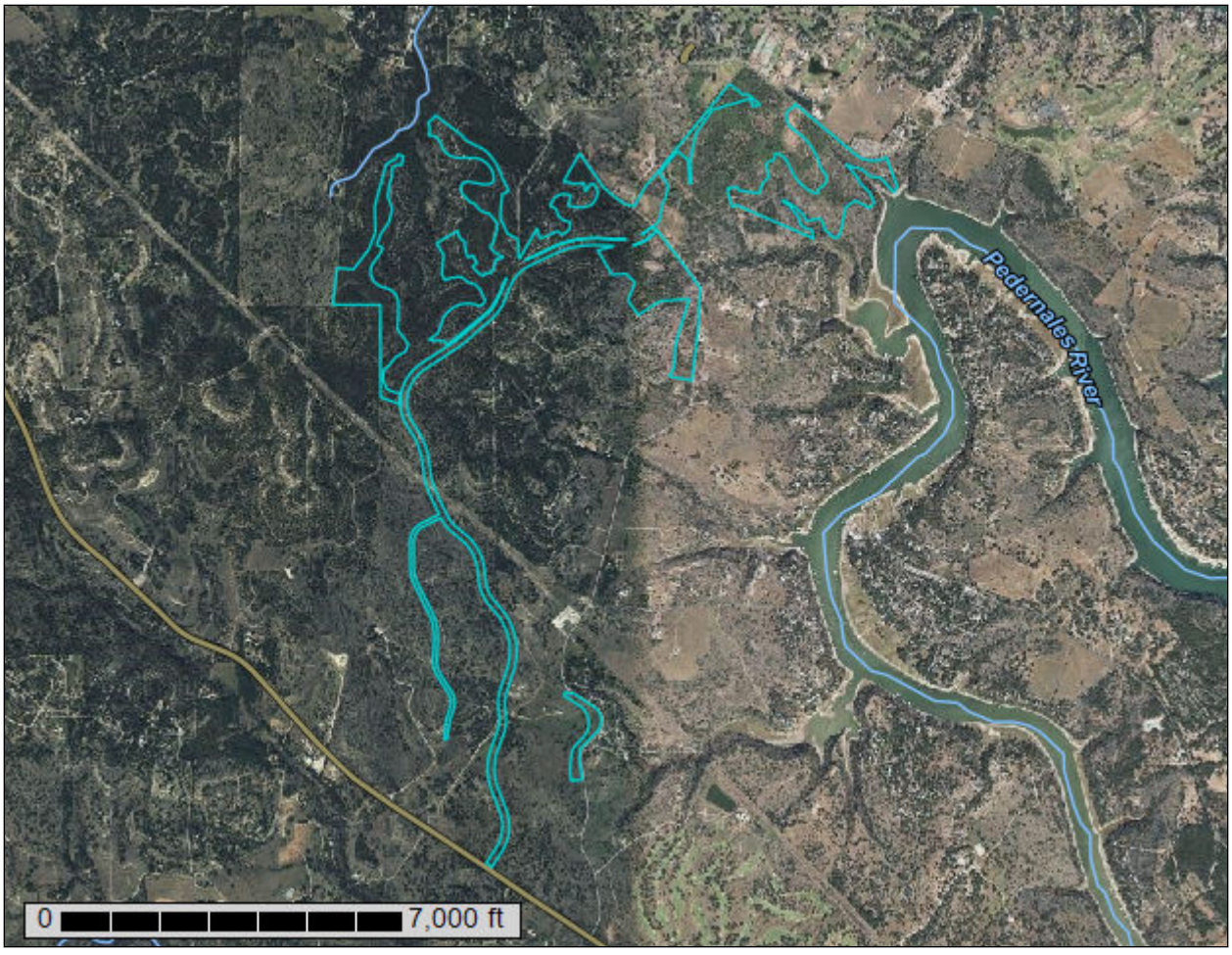
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Blanco and Burnet Counties, Texas, and Travis County, Texas

## Soip Map




March 3, 2025

# Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

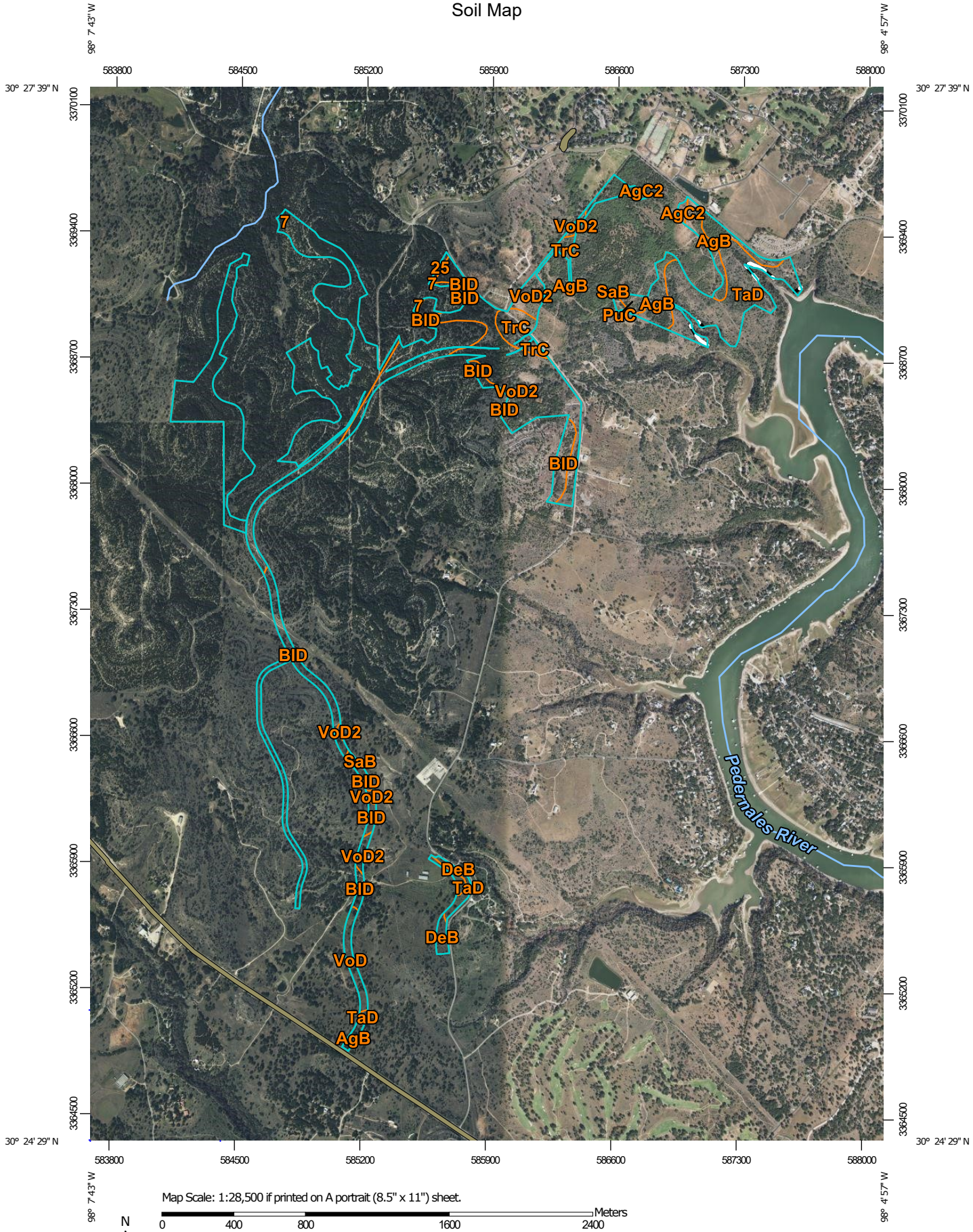
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report
## Soil Map



## MAP LEGEND

**Area of Interest (AOI)**

- Area of Interest (AOI)

**Soils**

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

**Special Point Features**

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

**Water Features**

- Streams and Canals

**Transportation**

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

**Background**

- Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at scales ranging from 1:24,000 to 1:31,700.

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: Blanco and Burnet Counties, Texas
Survey Area Data: Version 21, Aug 30, 2024

Soil Survey Area: Travis County, Texas
Survey Area Data: Version 26, Aug 30, 2024

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 2, 2016—Nov 25, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

## MAP LEGEND

## MAP INFORMATION

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 |
|---|---|---|---|
| 7 | Brackett-Real association, 10 to 30 percent slopes | 119.8 | 31.9% |
| 25 | Krum clay, 3 to 5 percent slopes | 1.0 | 0.3% |
| **Subtotals for Soil Survey Area** | | **120.9** | **32.2%** |
| **Totals for Area of Interest** | | **375.1** | **100.0%** |

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| AgB | Altoga silty clay, 1 to 3 percent slopes | 19.5 | 5.2% |
| AgC2 | Altoga silty clay, 3 to 6 percent slopes, moderately eroded | 1.2 | 0.3% |
| BlD | Brackett-Rock outcrop complex, 1 to 12 percent slopes | 62.5 | 16.7% |
| DeB | Denton silty clay, 1 to 3 percent slopes | 5.0 | 1.3% |
| PuC | Purves clay, 1 to 5 percent slopes | 10.7 | 2.8% |
| SaB | San Saba clay, 1 to 2 percent slopes | 2.6 | 0.7% |
| TaD | Eckrant very stony clay, 5 to 18 percent slopes | 53.0 | 14.1% |
| TrC | Travis soils, 1 to 5 percent slopes | 18.6 | 5.0% |
| VoD | Volente silty clay loam, 1 to 8 percent slopes | 6.2 | 1.7% |
| VoD2 | Volente silty clay loam, 1 to 8 percent slopes, moderately eroded | 75.0 | 20.0% |
| **Subtotals for Soil Survey Area** | | **254.2** | **67.8%** |
| **Totals for Area of Interest** | | **375.1** | **100.0%** |

# Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the

characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered

practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

# Blanco and Burnet Counties, Texas

## 7—Brackett-Real association, 10 to 30 percent slopes

### Map Unit Setting

*National map unit symbol:* 2t271
*Elevation:* 670 to 2,000 feet
*Mean annual precipitation:* 30 to 37 inches
*Mean annual air temperature:* 64 to 68 degrees F
*Frost-free period:* 230 to 265 days
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Brackett and similar soils:* 58 percent
*Real and similar soils:* 30 percent
*Minor components:* 12 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Brackett

#### Setting

*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder, backslope, footslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Parent material:* Residuum weathered from limestone

#### Typical profile

*A - 0 to 6 inches:* gravelly clay loam
*Bk - 6 to 14 inches:* gravelly clay loam
*Cr - 14 to 60 inches:* bedrock

#### Properties and qualities

*Slope:* 10 to 30 percent
*Depth to restrictive feature:* 10 to 20 inches to paralithic bedrock
*Drainage class:* Well drained
*Runoff class:* High
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high (0.06 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 90 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* Very low (about 1.8 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 7e
*Hydrologic Soil Group:* D
*Ecological site:* R081CY362TX - Steep Adobe 29-35 PZ
*Hydric soil rating:* No

**Description of Real**

**Setting**

*Landform:* Ridges
*Landform position (two-dimensional):* Backslope, footslope
*Landform position (three-dimensional):* Side slope, base slope
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Parent material:* Residuum weathered from limestone

**Typical profile**

*A - 0 to 8 inches:* gravelly clay loam
*Ak - 8 to 15 inches:* extremely gravelly clay loam
*Cr - 15 to 60 inches:* bedrock

**Properties and qualities**

*Slope:* 10 to 30 percent
*Depth to restrictive feature:* 8 to 19 inches to paralithic bedrock
*Drainage class:* Well drained
*Runoff class:* Medium
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high (0.06 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 70 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* Very low (about 1.2 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 7e
*Hydrologic Soil Group:* D
*Ecological site:* R081CY362TX - Steep Adobe 29-35 PZ
*Hydric soil rating:* No

**Minor Components**

**Tarpley**

*Percent of map unit:* 3 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Summit
*Landform position (three-dimensional):* Interfluve
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Ecological site:* R081CY361TX - Redland 29-35 PZ
*Hydric soil rating:* No

**Doss**

*Percent of map unit:* 3 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Ecological site:* R081CY574TX - Shallow 29-35 PZ

*Hydric soil rating:* No

**Eckrant**

*Percent of map unit:* 3 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Summit, shoulder, backslope, footslope
*Landform position (three-dimensional):* Interfluve, side slope
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Ecological site:* R081CY363TX - Steep Rocky 29-35 PZ
*Hydric soil rating:* No

**Rock outcrop**

*Percent of map unit:* 3 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Summit, shoulder, backslope, footslope
*Landform position (three-dimensional):* Interfluve, side slope
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Hydric soil rating:* No

## 25—Krum clay, 3 to 5 percent slopes

**Map Unit Setting**

*National map unit symbol:* 2t2j6
*Elevation:* 620 to 1,820 feet
*Mean annual precipitation:* 31 to 37 inches
*Mean annual air temperature:* 65 to 69 degrees F
*Frost-free period:* 230 to 250 days
*Farmland classification:* All areas are prime farmland

**Map Unit Composition**

*Krum and similar soils:* 90 percent
*Minor components:* 10 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Krum**

**Setting**

*Landform:* Stream terraces
*Landform position (three-dimensional):* Riser
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Parent material:* Calcareous silty and clayey alluvium derived from limestone

**Typical profile**

*A - 0 to 13 inches:* clay
*Bk1 - 13 to 27 inches:* clay
*Bk2 - 27 to 40 inches:* clay
*Ck - 40 to 80 inches:* clay

**Properties and qualities**

*Slope:* 3 to 5 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* High
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 50 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Sodium adsorption ratio, maximum:* 3.0
*Available water supply, 0 to 60 inches:* Moderate (about 9.0 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3e
*Hydrologic Soil Group:* C
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

**Minor Components**

**Bolar**

*Percent of map unit:* 5 percent
*Landform:* Hillslopes
*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

**Doss**

*Percent of map unit:* 3 percent
*Landform:* Hillslopes
*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Ecological site:* R081CY574TX - Shallow 29-35 PZ
*Hydric soil rating:* No

**Lewisville**

*Percent of map unit:* 2 percent
*Landform:* Stream terraces
*Landform position (three-dimensional):* Riser
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

# Travis County, Texas

## AgB—Altoga silty clay, 1 to 3 percent slopes

### Map Unit Setting

*National map unit symbol:* 2tr6s
*Elevation:* 330 to 970 feet
*Mean annual precipitation:* 34 to 38 inches
*Mean annual air temperature:* 66 to 69 degrees F
*Frost-free period:* 238 to 278 days
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Altoga and similar soils:* 95 percent
*Minor components:* 5 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Altoga

#### Setting

*Landform:* Stream terraces
*Landform position (three-dimensional):* Riser
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Parent material:* Calcareous clayey alluvium derived from mudstone

#### Typical profile

*Ap - 0 to 5 inches:* silty clay
*Bk - 5 to 40 inches:* silty clay
*C - 40 to 80 inches:* silty clay loam

#### Properties and qualities

*Slope:* 1 to 3 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* High
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 75 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* High (about 10.2 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3e
*Hydrologic Soil Group:* C
*Ecological site:* R086AY007TX - Southern Clay Loam
*Hydric soil rating:* No

### Minor Components

#### Houston black

*Percent of map unit:* 5 percent

*Landform:* Ridges
*Landform position (two-dimensional):* Summit, shoulder
*Landform position (three-dimensional):* Interfluve
*Microfeatures of landform position:* Circular gilgai
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Ecological site:* R086AY011TX - Southern Blackland
*Hydric soil rating:* No

## AgC2—Altoga silty clay, 3 to 6 percent slopes, moderately eroded

### Map Unit Setting

*National map unit symbol:* f525
*Elevation:* 500 to 1,500 feet
*Mean annual precipitation:* 28 to 40 inches
*Mean annual air temperature:* 64 to 70 degrees F
*Frost-free period:* 230 to 270 days
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Altoga, moderately eroded, and similar soils:* 95 percent
*Minor components:* 5 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Altoga, Moderately Eroded

#### Setting

*Landform:* Stream terraces
*Landform position (three-dimensional):* Riser
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Parent material:* Clayey alluvium derived from mixed sources

#### Typical profile

*H1 - 0 to 5 inches:* silty clay
*H2 - 5 to 24 inches:* silty clay loam
*H3 - 24 to 60 inches:* silty clay loam

#### Properties and qualities

*Slope:* 3 to 6 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* Medium
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 75 percent
*Available water supply, 0 to 60 inches:* High (about 10.2 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3e
*Hydrologic Soil Group:* B
*Ecological site:* R086AY007TX - Southern Clay Loam
*Hydric soil rating:* No

**Minor Components**

**Unnamed**

*Percent of map unit:* 5 percent
*Hydric soil rating:* No

## BID—Brackett-Rock outcrop complex, 1 to 12 percent slopes

**Map Unit Setting**

*National map unit symbol:* 2yltz
*Elevation:* 820 to 1,330 feet
*Mean annual precipitation:* 33 to 37 inches
*Mean annual air temperature:* 65 to 69 degrees F
*Frost-free period:* 220 to 260 days
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Brackett and similar soils:* 68 percent
*Rock outcrop:* 20 percent
*Minor components:* 12 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Brackett**

**Setting**

*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder, backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Parent material:* Residuum weathered from limestone

**Typical profile**

*A - 0 to 6 inches:* gravelly clay loam
*Bw - 6 to 18 inches:* clay loam
*Cr - 18 to 60 inches:* bedrock

**Properties and qualities**

*Slope:* 1 to 12 percent
*Depth to restrictive feature:* 10 to 20 inches to paralithic bedrock
*Drainage class:* Well drained
*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high (0.06 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 90 percent
*Gypsum, maximum content:* 5 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* Very low (about 2.4 inches)

**Interpretive groups**
*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 6e
*Hydrologic Soil Group:* D
*Ecological site:* R081CY355TX - Adobe 29-35 PZ
*Hydric soil rating:* No

## Description of Rock Outcrop

**Setting**
*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder
*Landform position (three-dimensional):* Interfluve
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Parent material:* Limestone

**Typical profile**
*R - 0 to 48 inches:* bedrock

**Properties and qualities**
*Slope:* 3 to 12 percent
*Depth to restrictive feature:* 0 to 2 inches to lithic bedrock
*Runoff class:* High
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high (0.06 to 1.98 in/hr)

**Interpretive groups**
*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 8
*Hydrologic Soil Group:* D
*Hydric soil rating:* No

## Minor Components

**San saba**
*Percent of map unit:* 4 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Footslope, toeslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Linear
*Across-slope shape:* Concave
*Ecological site:* R081CY356TX - Blackland 29-35 PZ
*Hydric soil rating:* No

**Volente**
*Percent of map unit:* 4 percent
*Landform:* Ridges

*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Linear
*Across-slope shape:* Concave
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

**Eckrant**

*Percent of map unit:* 4 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder, backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Ecological site:* R081CY363TX - Steep Rocky 29-35 PZ
*Hydric soil rating:* No

## DeB—Denton silty clay, 1 to 3 percent slopes

**Map Unit Setting**

*National map unit symbol:* 2t26l
*Elevation:* 570 to 1,870 feet
*Mean annual precipitation:* 31 to 36 inches
*Mean annual air temperature:* 65 to 68 degrees F
*Frost-free period:* 220 to 260 days
*Farmland classification:* All areas are prime farmland

**Map Unit Composition**

*Denton and similar soils:* 88 percent
*Minor components:* 12 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Denton**

**Setting**

*Landform:* Hillslopes
*Landform position (two-dimensional):* Toeslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Parent material:* Silty and clayey slope alluvium over residuum weathered from limestone

**Typical profile**

*A - 0 to 14 inches:* silty clay
*Bw - 14 to 25 inches:* silty clay
*Bk - 25 to 33 inches:* silty clay
*Ck - 33 to 36 inches:* gravelly silty clay
*R - 36 to 80 inches:* bedrock

**Properties and qualities**

*Slope:* 1 to 3 percent
*Depth to restrictive feature:* 22 to 60 inches to lithic bedrock
*Drainage class:* Well drained
*Runoff class:* High
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 80 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* Low (about 4.3 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3s
*Hydrologic Soil Group:* D
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

**Minor Components**

**Krum**

*Percent of map unit:* 6 percent
*Landform:* Drainageways
*Landform position (two-dimensional):* Toeslope
*Landform position (three-dimensional):* Tread
*Down-slope shape:* Linear
*Across-slope shape:* Concave
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

**Doss**

*Percent of map unit:* 4 percent
*Landform:* Hillslopes
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Ecological site:* R081BY343TX - Shallow 23-31 PZ
*Hydric soil rating:* No

**Anhalt**

*Percent of map unit:* 2 percent
*Landform:* Hillslopes
*Landform position (two-dimensional):* Toeslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Ecological site:* R081CY358TX - Deep Redland 29-35 PZ
*Hydric soil rating:* No

## PuC—Purves clay, 1 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 2ylvf
*Elevation:* 400 to 1,800 feet
*Mean annual precipitation:* 33 to 37 inches
*Mean annual air temperature:* 65 to 69 degrees F
*Frost-free period:* 220 to 260 days
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Purves and similar soils:* 90 percent
*Minor components:* 10 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Purves

#### Setting

*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder, backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Parent material:* Residuum weathered from limestone

#### Typical profile

*Ak1 - 0 to 10 inches:* clay
*Ak2 - 10 to 16 inches:* clay
*Bk - 16 to 19 inches:* clay
*R - 19 to 40 inches:* bedrock

#### Properties and qualities

*Slope:* 1 to 5 percent
*Depth to restrictive feature:* 8 to 20 inches to lithic bedrock
*Drainage class:* Well drained
*Runoff class:* Medium
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.57 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 50 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Sodium adsorption ratio, maximum:* 1.0
*Available water supply, 0 to 60 inches:* Very low (about 2.4 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 4s
*Hydrologic Soil Group:* D

*Ecological site:* R081CY574TX - Shallow 29-35 PZ
*Hydric soil rating:* No

**Minor Components**

**Eckrant**
*Percent of map unit:* 4 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Ecological site:* R081CY360TX - Low Stony Hill 29-35 PZ
*Hydric soil rating:* No

**Brackett**
*Percent of map unit:* 3 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder, backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Ecological site:* R081CY355TX - Adobe 29-35 PZ
*Hydric soil rating:* No

**Doss**
*Percent of map unit:* 2 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Ecological site:* R081CY574TX - Shallow 29-35 PZ
*Hydric soil rating:* No

**Rock outcrop**
*Percent of map unit:* 1 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Hydric soil rating:* No

## SaB—San Saba clay, 1 to 2 percent slopes

**Map Unit Setting**
*National map unit symbol:* 2ylv0
*Elevation:* 800 to 1,300 feet
*Mean annual precipitation:* 30 to 35 inches
*Mean annual air temperature:* 65 to 69 degrees F

*Frost-free period:* 220 to 260 days
*Farmland classification:* All areas are prime farmland

**Map Unit Composition**

*San saba and similar soils:* 95 percent
*Minor components:* 5 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of San Saba**

**Setting**

*Landform:* Ridges
*Landform position (two-dimensional):* Footslope, toeslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Parent material:* Calcareous clayey slope alluvium and/or residuum weathered from limestone and/or marl over hard residuum weathered from limestone

**Typical profile**

*A - 0 to 22 inches:* clay
*Bss - 22 to 38 inches:* clay
*R - 38 to 80 inches:* bedrock

**Properties and qualities**

*Slope:* 1 to 2 percent
*Depth to restrictive feature:* 24 to 40 inches to lithic bedrock
*Drainage class:* Moderately well drained
*Runoff class:* Very high
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 15 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Sodium adsorption ratio, maximum:* 2.0
*Available water supply, 0 to 60 inches:* Low (about 5.7 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3s
*Hydrologic Soil Group:* D
*Ecological site:* R081CY358TX - Deep Redland 29-35 PZ
*Hydric soil rating:* No

**Minor Components**

**Volente**

*Percent of map unit:* 3 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Footslope, toeslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

**Speck**

*Percent of map unit:* 2 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Ecological site:* R081CY361TX - Redland 29-35 PZ
*Hydric soil rating:* No

## TaD—Eckrant very stony clay, 5 to 18 percent slopes

**Map Unit Setting**

*National map unit symbol:* 2xmt6
*Elevation:* 450 to 1,350 feet
*Mean annual precipitation:* 30 to 35 inches
*Mean annual air temperature:* 66 to 69 degrees F
*Frost-free period:* 220 to 270 days
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Eckrant and similar soils:* 90 percent
*Minor components:* 10 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Eckrant**

**Setting**

*Landform:* Ridges
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Parent material:* Residuum weathered from limestone

**Typical profile**

*A1 - 0 to 5 inches:* very stony clay
*A2 - 5 to 8 inches:* extremely flaggy clay
*R - 8 to 30 inches:* bedrock

**Properties and qualities**

*Slope:* 5 to 18 percent
*Depth to restrictive feature:* 6 to 14 inches to lithic bedrock
*Drainage class:* Well drained
*Runoff class:* High
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.57 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 40 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* Very low (about 0.5 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 7s
*Hydrologic Soil Group:* D
*Ecological site:* R081CY360TX - Low Stony Hill 29-35 PZ
*Hydric soil rating:* No

**Minor Components**

**Rock outcrop**

*Percent of map unit:* 5 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Hydric soil rating:* No

**Brackett**

*Percent of map unit:* 5 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Ecological site:* R081CY355TX - Adobe 29-35 PZ
*Hydric soil rating:* No

## TrC—Travis soils, 1 to 5 percent slopes

**Map Unit Setting**

*National map unit symbol:* f66f
*Elevation:* 300 to 1,200 feet
*Mean annual precipitation:* 32 to 36 inches
*Mean annual air temperature:* 64 to 70 degrees F
*Frost-free period:* 240 to 270 days
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Travis and similar soils:* 95 percent
*Minor components:* 5 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Travis**

**Setting**

*Landform:* Stream terraces

*Landform position (three-dimensional):* Tread, riser
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Parent material:* Loamy alluvium of pleistocene age derived from mixed sources

**Typical profile**

*H1 - 0 to 14 inches:* fine sandy loam
*H2 - 14 to 50 inches:* sandy clay
*H3 - 50 to 75 inches:* gravelly sandy clay loam

**Properties and qualities**

*Slope:* 1 to 5 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* Medium
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Sodium adsorption ratio, maximum:* 30.0
*Available water supply, 0 to 60 inches:* Moderate (about 7.1 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3e
*Hydrologic Soil Group:* C
*Ecological site:* R087AY005TX - Sandy Loam
*Hydric soil rating:* No

**Minor Components**

**Unnamed**

*Percent of map unit:* 5 percent
*Hydric soil rating:* No

## VoD—Volente silty clay loam, 1 to 8 percent slopes

**Map Unit Setting**

*National map unit symbol:* 2ynhg
*Elevation:* 400 to 1,400 feet
*Mean annual precipitation:* 32 to 35 inches
*Mean annual air temperature:* 65 to 69 degrees F
*Frost-free period:* 230 to 260 days
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Volente and similar soils:* 75 percent
*Minor components:* 25 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Volente

### Setting

*Landform:* Ridges
*Landform position (two-dimensional):* Footslope, toeslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Parent material:* Calcareous clayey colluvium and/or alluvium derived from limestone

### Typical profile

*A - 0 to 22 inches:* silty clay loam
*BA - 22 to 36 inches:* silty clay
*Bw - 36 to 46 inches:* silty clay
*Ck - 46 to 59 inches:* clay loam

### Properties and qualities

*Slope:* 1 to 8 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* High
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.57 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 10 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* High (about 10.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 4e
*Hydrologic Soil Group:* C
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

## Minor Components

### Lewisville

*Percent of map unit:* 15 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Base slope, tread
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

### Brackett

*Percent of map unit:* 5 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder, backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Linear

*Across-slope shape:* Convex
*Ecological site:* R081CY355TX - Adobe 29-35 PZ
*Hydric soil rating:* No

**Eckrant**

*Percent of map unit:* 2 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder, backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Ecological site:* R081CY360TX - Low Stony Hill 29-35 PZ
*Hydric soil rating:* No

**Orif**

*Percent of map unit:* 2 percent
*Landform:* Drainageways
*Landform position (three-dimensional):* Tread
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Ecological site:* R081CY561TX - Loamy Bottomland 29-35 PZ
*Hydric soil rating:* No

**Rock outcrop**

*Percent of map unit:* 1 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Toeslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Hydric soil rating:* No

## VoD2—Volente silty clay loam, 1 to 8 percent slopes, moderately eroded

**Map Unit Setting**

*National map unit symbol:* 2ylvd
*Elevation:* 400 to 1,400 feet
*Mean annual precipitation:* 32 to 35 inches
*Mean annual air temperature:* 65 to 69 degrees F
*Frost-free period:* 230 to 260 days
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Volente, moderately eroded, and similar soils:* 75 percent
*Minor components:* 25 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Volente, Moderately Eroded**

**Setting**

*Landform:* Ridges

*Landform position (two-dimensional):* Footslope, toeslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Parent material:* Calcareous clayey colluvium and/or alluvium derived from limestone

**Typical profile**

*A - 0 to 13 inches:* silty clay loam
*BA - 13 to 27 inches:* silty clay
*Bw - 27 to 37 inches:* silty clay
*Ck - 37 to 59 inches:* clay loam

**Properties and qualities**

*Slope:* 1 to 8 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* High
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.57 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 10 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* High (about 10.4 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 4e
*Hydrologic Soil Group:* C
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

**Minor Components**

**Lewisville**

*Percent of map unit:* 10 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

**Altoga**

*Percent of map unit:* 10 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Ecological site:* R086AY007TX - Southern Clay Loam
*Hydric soil rating:* No

**Brackett**

*Percent of map unit:* 5 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder, backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Ecological site:* R081CY355TX - Adobe 29-35 PZ
*Hydric soil rating:* No

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# Glossary

Many of the terms relating to landforms, geology, and geomorphology are defined in more detail in the following National Soil Survey Handbook link: “National Soil Survey Handbook.”

**ABC soil**

A soil having an A, a B, and a C horizon.

**Ablation till**

Loose, relatively permeable earthy material deposited during the downwasting of nearly static glacial ice, either contained within or accumulated on the surface of the glacier.

**AC soil**

A soil having only an A and a C horizon. Commonly, such soil formed in recent alluvium or on steep, rocky slopes.

**Aeration, soil**

The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

**Aggregate, soil**

Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

**Alkali (sodic) soil**

A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

**Alluvial cone**

A semiconical type of alluvial fan having very steep slopes. It is higher, narrower, and steeper than a fan and is composed of coarser and thicker layers of material deposited by a combination of alluvial episodes and (to a much lesser degree) landslides (debris flow). The coarsest materials tend to be concentrated at the apex of the cone.

**Alluvial fan**

A low, outspread mass of loose materials and/or rock material, commonly with gentle slopes. It is shaped like an open fan or a segment of a cone. The material was deposited by a stream at the place where it issues from a narrow mountain valley or upland valley or where a tributary stream is near or at its junction with the main stream. The fan is steepest near its apex, which points upstream, and slopes gently and convexly outward (downstream) with a gradual decrease in gradient.

**Alluvium**

Unconsolidated material, such as gravel, sand, silt, clay, and various mixtures of these, deposited on land by running water.

**Alpha,alpha-dipyridyl**

A compound that when dissolved in ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction implies reducing conditions and the likely presence of redoximorphic features.

**Animal unit month (AUM)**

The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

**Aquic conditions**

Current soil wetness characterized by saturation, reduction, and redoximorphic features.

**Argillic horizon**

A subsoil horizon characterized by an accumulation of illuvial clay.

**Arroyo**

The flat-floored channel of an ephemeral stream, commonly with very steep to vertical banks cut in unconsolidated material. It is usually dry but can be transformed into a temporary watercourse or short-lived torrent after heavy rain within the watershed.

**Aspect**

The direction toward which a slope faces. Also called slope aspect.

**Association, soil**

A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

**Available water capacity (available moisture capacity)**

The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

*Very low:* 0 to 3
*Low:* 3 to 6
*Moderate:* 6 to 9
*High:* 9 to 12
*Very high:* More than 12

**Backslope**

The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

**Backswamp**

A flood-plain landform. Extensive, marshy or swampy, depressed areas of flood plains between natural levees and valley sides or terraces.

**Badland**

A landscape that is intricately dissected and characterized by a very fine drainage network with high drainage densities and short, steep slopes and narrow interfluves. Badlands develop on surfaces that have little or no vegetative cover overlying unconsolidated or poorly cemented materials (clays, silts, or sandstones) with, in some cases, soluble minerals, such as gypsum or halite.

**Bajada**

A broad, gently inclined alluvial piedmont slope extending from the base of a mountain range out into a basin and formed by the lateral coalescence of a series of alluvial fans. Typically, it has a broadly undulating transverse profile, parallel to the mountain front, resulting from the convexities of component fans. The term is generally restricted to constructional slopes of intermontane basins.

**Basal area**

The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

**Base saturation**

The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

**Base slope (geomorphology)**

A geomorphic component of hills consisting of the concave to linear (perpendicular to the contour) slope that, regardless of the lateral shape, forms an apron or wedge at the bottom of a hillside dominated by colluvium and slope-wash sediments (for example, slope alluvium).

**Bedding plane**

A planar or nearly planar bedding surface that visibly separates each successive layer of stratified sediment or rock (of the same or different lithology)

from the preceding or following layer; a plane of deposition. It commonly marks a change in the circumstances of deposition and may show a parting, a color difference, a change in particle size, or various combinations of these. The term is commonly applied to any bedding surface, even one that is conspicuously bent or deformed by folding.

**Bedding system**

A drainage system made by plowing, grading, or otherwise shaping the surface of a flat field. It consists of a series of low ridges separated by shallow, parallel dead furrows.

**Bedrock**

The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

**Bedrock-controlled topography**

A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.

**Bench terrace**

A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.

**Bisequum**

Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.

**Blowout (map symbol)**

A saucer-, cup-, or trough-shaped depression formed by wind erosion on a preexisting dune or other sand deposit, especially in an area of shifting sand or loose soil or where protective vegetation is disturbed or destroyed. The adjoining accumulation of sand derived from the depression, where recognizable, is commonly included. Blowouts are commonly small.

**Borrow pit (map symbol)**

An open excavation from which soil and underlying material have been removed, usually for construction purposes.

**Bottom land**

An informal term loosely applied to various portions of a flood plain.

**Boulders**

Rock fragments larger than 2 feet (60 centimeters) in diameter.

**Breaks**

A landscape or tract of steep, rough or broken land dissected by ravines and gullies and marking a sudden change in topography.

**Breast height**

An average height of 4.5 feet above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

**Brush management**

Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

**Butte**

An isolated, generally flat-topped hill or mountain with relatively steep slopes and talus or precipitous cliffs and characterized by summit width that is less than the height of bounding escarpments; commonly topped by a caprock of resistant material and representing an erosion remnant carved from flat-lying rocks.

**Cable yarding**

A method of moving felled trees to a nearby central area for transport to a processing facility. Most cable yarding systems involve use of a drum, a pole, and wire cables in an arrangement similar to that of a rod and reel used for fishing. To reduce friction and soil disturbance, felled trees generally are reeled in while one end is lifted or the entire log is suspended.

**Calcareous soil**

A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

**Caliche**

A general term for a prominent zone of secondary carbonate accumulation in surficial materials in warm, subhumid to arid areas. Caliche is formed by both geologic and pedologic processes. Finely crystalline calcium carbonate forms a nearly continuous surface-coating and void-filling medium in geologic (parent) materials. Cementation ranges from weak in nonindurated forms to very strong in indurated forms. Other minerals (e.g., carbonates, silicate, and sulfate) may occur as accessory cements. Most petrocalcic horizons and some calcic horizons are caliche.

**California bearing ratio (CBR)**

The load-supporting capacity of a soil as compared to that of standard crushed limestone, expressed as a ratio. First standardized in California. A soil having a CBR of 16 supports 16 percent of the load that would be supported by standard crushed limestone, per unit area, with the same degree of distortion.

**Canopy**

The leafy crown of trees or shrubs. (See Crown.)

**Canyon**

A long, deep, narrow valley with high, precipitous walls in an area of high local relief.

**Capillary water**

Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

**Catena**

A sequence, or “chain,” of soils on a landscape that formed in similar kinds of parent material and under similar climatic conditions but that have different characteristics as a result of differences in relief and drainage.

**Cation**

An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

**Cation-exchange capacity**

The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

**Catsteps**

See Terracettes.

**Cement rock**

Shaly limestone used in the manufacture of cement.

**Channery soil material**

Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a channer.

**Chemical treatment**

Control of unwanted vegetation through the use of chemicals.

**Chiseling**

Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

**Cirque**

A steep-walled, semicircular or crescent-shaped, half-bowl-like recess or hollow, commonly situated at the head of a glaciated mountain valley or high on the side of a mountain. It was produced by the erosive activity of a mountain glacier. It commonly contains a small round lake (tarn).

**Clay**

As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

**Clay depletions**

See Redoximorphic features.

**Clay film**

A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

**Clay spot (map symbol)**

A spot where the surface texture is silty clay or clay in areas where the surface layer of the soils in the surrounding map unit is sandy loam, loam, silt loam, or coarser.

**Claypan**

A dense, compact subsoil layer that contains much more clay than the overlying materials, from which it is separated by a sharply defined boundary. The layer restricts the downward movement of water through the soil. A claypan is commonly hard when dry and plastic and sticky when wet.

**Climax plant community**

The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

**Coarse textured soil**

Sand or loamy sand.

**Cobble (or cobblestone)**

A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.

**Cobbly soil material**

Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.

**COLE (coefficient of linear extensibility)**

See Linear extensibility.

**Colluvium**

Unconsolidated, unsorted earth material being transported or deposited on side slopes and/or at the base of slopes by mass movement (e.g., direct gravitational action) and by local, unconcentrated runoff.

**Complex slope**

Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

**Complex, soil**

A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

**Concretions**

See Redoximorphic features.

**Conglomerate**

A coarse grained, clastic sedimentary rock composed of rounded or subangular rock fragments more than 2 millimeters in diameter. It commonly has a matrix of sand and finer textured material. Conglomerate is the consolidated equivalent of gravel.

**Conservation cropping system**

Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

**Conservation tillage**

A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

**Consistence, soil**

Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the “Soil Survey Manual.”

**Contour stripcropping**

Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

**Control section**

The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.

**Coprogenous earth (sedimentary peat)**

A type of limnic layer composed predominantly of fecal material derived from aquatic animals.

**Corrosion (geomorphology)**

A process of erosion whereby rocks and soil are removed or worn away by natural chemical processes, especially by the solvent action of running water, but also by other reactions, such as hydrolysis, hydration, carbonation, and oxidation.

**Corrosion (soil survey interpretations)**

Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.

**Cover crop**

A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.

**Crop residue management**

Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

**Cropping system**

Growing crops according to a planned system of rotation and management practices.

**Cross-slope farming**

Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.

**Crown**

The upper part of a tree or shrub, including the living branches and their foliage.

**Cryoturbate**

A mass of soil or other unconsolidated earthy material moved or disturbed by frost action. It is typically coarser than the underlying material.

**Cuesta**

An asymmetric ridge capped by resistant rock layers of slight or moderate dip (commonly less than 15 percent slopes); a type of homocline produced by differential erosion of interbedded resistant and weak rocks. A cuesta has a long, gentle slope on one side (dip slope) that roughly parallels the inclined beds; on the other side, it has a relatively short and steep or clifflike slope (scarp) that cuts through the tilted rocks.

**Culmination of the mean annual increment (CMAI)**

The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

**Cutbanks cave**

The walls of excavations tend to cave in or slough.

**Decreasers**

The most heavily grazed climax range plants. Because they are the most palatable, they are the first to be destroyed by overgrazing.

**Deferred grazing**

Postponing grazing or resting grazing land for a prescribed period.

**Delta**

A body of alluvium having a surface that is fan shaped and nearly flat; deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.

**Dense layer**

A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

**Depression, closed (map symbol)**

A shallow, saucer-shaped area that is slightly lower on the landscape than the surrounding area and that does not have a natural outlet for surface drainage.

**Depth, soil**

Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

**Desert pavement**

A natural, residual concentration or layer of wind-polished, closely packed gravel, boulders, and other rock fragments mantling a desert surface. It forms where wind action and sheetwash have removed all smaller particles or where rock fragments have migrated upward through sediments to the surface. It typically protects the finer grained underlying material from further erosion.

**Diatomaceous earth**

A geologic deposit of fine, grayish siliceous material composed chiefly or entirely of the remains of diatoms.

**Dip slope**

A slope of the land surface, roughly determined by and approximately conforming to the dip of the underlying bedrock.

**Diversion (or diversion terrace)**

A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

**Divided-slope farming**

A form of field stripcropping in which crops are grown in a systematic arrangement of two strips, or bands, across the slope to reduce the hazard of water erosion. One strip is in a close-growing crop that provides protection from erosion, and the other strip is in a crop that provides less protection from erosion. This practice is used where slopes are not long enough to permit a full stripcropping pattern to be used.

**Drainage class (natural)**

Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained,* and *very poorly drained*. These classes are defined in the “Soil Survey Manual.”

**Drainage, surface**

Runoff, or surface flow of water, from an area.

**Drainageway**

A general term for a course or channel along which water moves in draining an area. A term restricted to relatively small, linear depressions that at some time move concentrated water and either do not have a defined channel or have only a small defined channel.

**Draw**

A small stream valley that generally is shallower and more open than a ravine or gulch and that has a broader bottom. The present stream channel may appear inadequate to have cut the drainageway that it occupies.

**Drift**

A general term applied to all mineral material (clay, silt, sand, gravel, and boulders) transported by a glacier and deposited directly by or from the ice or transported by running water emanating from a glacier. Drift includes unstratified material (till) that forms moraines and stratified deposits that form outwash plains, eskers, kames, varves, and glaciofluvial sediments. The term is generally applied to Pleistocene glacial deposits in areas that no longer contain glaciers.

**Drumlin**

A low, smooth, elongated oval hill, mound, or ridge of compact till that has a core of bedrock or drift. It commonly has a blunt nose facing the direction from which the ice approached and a gentler slope tapering in the other direction. The longer axis is parallel to the general direction of glacier flow. Drumlins are products of streamline (laminar) flow of glaciers, which molded the subglacial floor through a combination of erosion and deposition.

**Duff**

A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.

**Dune**

A low mound, ridge, bank, or hill of loose, windblown granular material (generally sand), either barren and capable of movement from place to place or covered and stabilized with vegetation but retaining its characteristic shape.

**Earthy fill**

See Mine spoil.

**Ecological site**

An area where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. An ecological site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other ecological sites in kind and/or proportion of species or in total production.

**Eluviation**

The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

**Endosaturation**

A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.

**Eolian deposit**

Sand-, silt-, or clay-sized clastic material transported and deposited primarily by wind, commonly in the form of a dune or a sheet of sand or loess.

**Ephemeral stream**

A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.

**Episaturation**

A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.

**Erosion**

The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.

**Erosion (accelerated)**

Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.

**Erosion (geologic)**

Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

**Erosion pavement**

A surficial lag concentration or layer of gravel and other rock fragments that remains on the soil surface after sheet or rill erosion or wind has removed the finer soil particles and that tends to protect the underlying soil from further erosion.

**Erosion surface**

A land surface shaped by the action of erosion, especially by running water.

**Escarpment**

A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Most commonly applied to cliffs produced by differential erosion. Synonym: scarp.

**Escarpment, bedrock (map symbol)**

A relatively continuous and steep slope or cliff, produced by erosion or faulting, that breaks the general continuity of more gently sloping land surfaces. Exposed material is hard or soft bedrock.

**Escarpment, nonbedrock (map symbol)**

A relatively continuous and steep slope or cliff, generally produced by erosion but in some places produced by faulting, that breaks the continuity of more gently sloping land surfaces. Exposed earthy material is nonsoil or very shallow soil.

**Esker**

A long, narrow, sinuous, steep-sided ridge of stratified sand and gravel deposited as the bed of a stream flowing in an ice tunnel within or below the ice (subglacial) or between ice walls on top of the ice of a wasting glacier and left

behind as high ground when the ice melted. Eskers range in length from less than a kilometer to more than 160 kilometers and in height from 3 to 30 meters.

**Extrusive rock**

Igneous rock derived from deep-seated molten matter (magma) deposited and cooled on the earth's surface.

**Fallow**

Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

**Fan remnant**

A general term for landforms that are the remaining parts of older fan landforms, such as alluvial fans, that have been either dissected or partially buried.

**Fertility, soil**

The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

**Fibric soil material (peat)**

The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

**Field moisture capacity**

The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity,* or *capillary capacity*.

**Fill slope**

A sloping surface consisting of excavated soil material from a road cut. It commonly is on the downhill side of the road.

**Fine textured soil**

Sandy clay, silty clay, or clay.

**Firebreak**

An area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of firefighters and equipment. Designated roads also serve as firebreaks.

**First bottom**

An obsolete, informal term loosely applied to the lowest flood-plain steps that are subject to regular flooding.

**Flaggy soil material**

Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.

**Flagstone**

A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

**Flood plain**

The nearly level plain that borders a stream and is subject to flooding unless protected artificially.

**Flood-plain landforms**

A variety of constructional and erosional features produced by stream channel migration and flooding. Examples include backswamps, flood-plain splays, meanders, meander belts, meander scrolls, oxbow lakes, and natural levees.

**Flood-plain splay**

A fan-shaped deposit or other outspread deposit formed where an overloaded stream breaks through a levee (natural or artificial) and deposits its material (commonly coarse grained) on the flood plain.

**Flood-plain step**

An essentially flat, terrace-like alluvial surface within a valley that is frequently covered by floodwater from the present stream; any approximately horizontal surface still actively modified by fluvial scour and/or deposition. May occur individually or as a series of steps.

**Fluvial**

Of or pertaining to rivers or streams; produced by stream or river action.

**Foothills**

A region of steeply sloping hills that fringes a mountain range or high-plateau escarpment. The hills have relief of as much as 1,000 feet (300 meters).

**Footslope**

The concave surface at the base of a hillslope. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).

**Forb**

Any herbaceous plant not a grass or a sedge.

**Forest cover**

All trees and other woody plants (underbrush) covering the ground in a forest.

**Forest type**

A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.

**Fragipan**

A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.

**Genesis, soil**

The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

**Gilgai**

Commonly, a succession of microbasins and microknolls in nearly level areas or of microvalleys and microridges parallel with the slope. Typically, the microrelief of clayey soils that shrink and swell considerably with changes in moisture content.

**Glaciofluvial deposits**

Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur in the form of outwash plains, valley trains, deltas, kames, eskers, and kame terraces.

**Glaciolacustrine deposits**

Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are bedded or laminated.

**Gleyed soil**

Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.

**Graded stripcropping**

Growing crops in strips that grade toward a protected waterway.

**Grassed waterway**

A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.

**Gravel**

Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

**Gravel pit (map symbol)**

An open excavation from which soil and underlying material have been removed and used, without crushing, as a source of sand or gravel.

**Gravelly soil material**

Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.

**Gravelly spot (map symbol)**

A spot where the surface layer has more than 35 percent, by volume, rock fragments that are mostly less than 3 inches in diameter in an area that has less than 15 percent rock fragments.

**Green manure crop (agronomy)**

A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.

**Ground water**

Water filling all the unblocked pores of the material below the water table.

**Gully (map symbol)**

A small, steep-sided channel caused by erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage whereas a rill is of lesser depth and can be smoothed over by ordinary tillage.

**Hard bedrock**

Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.

**Hard to reclaim**

Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.

**Hardpan**

A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

**Head slope (geomorphology)**

A geomorphic component of hills consisting of a laterally concave area of a hillside, especially at the head of a drainageway. The overland waterflow is converging.

**Hemic soil material (mucky peat)**

Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

**High-residue crops**

Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.

**Hill**

A generic term for an elevated area of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline. Slopes are generally more than 15 percent. The distinction between a hill and a mountain is arbitrary and may depend on local usage.

**Hillslope**

A generic term for the steeper part of a hill between its summit and the drainage line, valley flat, or depression floor at the base of a hill.

**Horizon, soil**

A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the “Soil Survey Manual.” The major horizons of mineral soil are as follows:

*O horizon:* An organic layer of fresh and decaying plant residue.

*L horizon:* A layer of organic and mineral limnic materials, including coprogenous earth (sedimentary peat), diatomaceous earth, and marl.

*A horizon:* The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

*E horizon:* The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

*B horizon:* The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

*C horizon:* The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

*Cr horizon:* Soft, consolidated bedrock beneath the soil.

*R layer:* Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

*M layer:* A root-limiting subsoil layer consisting of nearly continuous, horizontally oriented, human-manufactured materials.

*W layer:* A layer of water within or beneath the soil.

**Humus**

The well decomposed, more or less stable part of the organic matter in mineral soils.

**Hydrologic soil groups**

Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties include depth to a seasonal high water table, the infiltration rate, and depth to a layer that significantly restricts the downward movement of water. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

**Igneous rock**

Rock that was formed by cooling and solidification of magma and that has not been changed appreciably by weathering since its formation. Major varieties include plutonic and volcanic rock (e.g., andesite, basalt, and granite).

**Illuviation**

The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

**Impervious soil**

A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

**Increasers**

Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasers commonly are the shorter plants and the less palatable to livestock.

**Infiltration**

The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

**Infiltration capacity**

The maximum rate at which water can infiltrate into a soil under a given set of conditions.

**Infiltration rate**

The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

**Intake rate**

The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

*Very low:* Less than 0.2
*Low:* 0.2 to 0.4
*Moderately low:* 0.4 to 0.75
*Moderate:* 0.75 to 1.25
*Moderately high:* 1.25 to 1.75
*High:* 1.75 to 2.5
*Very high:* More than 2.5

**Interfluve**

A landform composed of the relatively undissected upland or ridge between two adjacent valleys containing streams flowing in the same general direction. An elevated area between two drainageways that sheds water to those drainageways.

**Interfluve (geomorphology)**

A geomorphic component of hills consisting of the uppermost, comparatively level or gently sloping area of a hill; shoulders of backwearing hillslopes can narrow the upland or can merge, resulting in a strongly convex shape.

**Intermittent stream**

A stream, or reach of a stream, that does not flow year-round but that is commonly dry for 3 or more months out of 12 and whose channel is generally below the local water table. It flows only during wet periods or when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

**Invaders**

On range, plants that encroach into an area and grow after the climax vegetation has been reduced by grazing. Generally, plants invade following disturbance of the surface.

**Iron depletions**

See Redoximorphic features.

**Irrigation**

Application of water to soils to assist in production of crops. Methods of irrigation are:

*Basin:* Water is applied rapidly to nearly level plains surrounded by levees or dikes.

*Border:* Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.

*Controlled flooding:* Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.

*Corrugation:* Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.

*Drip (or trickle):* Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

*Furrow:* Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.

*Sprinkler:* Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

*Subirrigation:* Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.

*Wild flooding:* Water, released at high points, is allowed to flow onto an area without controlled distribution.

**Kame**

A low mound, knob, hummock, or short irregular ridge composed of stratified sand and gravel deposited by a subglacial stream as a fan or delta at the margin of a melting glacier; by a supraglacial stream in a low place or hole on the surface of the glacier; or as a ponded deposit on the surface or at the margin of stagnant ice.

**Karst (topography)**

A kind of topography that formed in limestone, gypsum, or other soluble rocks by dissolution and that is characterized by closed depressions, sinkholes, caves, and underground drainage.

**Knoll**

A small, low, rounded hill rising above adjacent landforms.

**Ksat**

See Saturated hydraulic conductivity.

**Lacustrine deposit**

Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

**Lake plain**

A nearly level surface marking the floor of an extinct lake filled by well sorted, generally fine textured, stratified deposits, commonly containing varves.

**Lake terrace**

A narrow shelf, partly cut and partly built, produced along a lakeshore in front of a scarp line of low cliffs and later exposed when the water level falls.

**Landfill (map symbol)**

An area of accumulated waste products of human habitation, either above or below natural ground level.

**Landslide**

A general, encompassing term for most types of mass movement landforms and processes involving the downslope transport and outward deposition of soil and rock materials caused by gravitational forces; the movement may or may not involve saturated materials. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

**Large stones**

Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

**Lava flow (map symbol)**

A solidified, commonly lobate body of rock formed through lateral, surface outpouring of molten lava from a vent or fissure.

**Leaching**

The removal of soluble material from soil or other material by percolating water.

**Levee (map symbol)**

An embankment that confines or controls water, especially one built along the banks of a river to prevent overflow onto lowlands.

**Linear extensibility**

Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at $^{1}/_{3}$- or $^{1}/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

**Liquid limit**

The moisture content at which the soil passes from a plastic to a liquid state.

**Loam**

Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

**Loess**

Material transported and deposited by wind and consisting dominantly of silt-sized particles.

**Low strength**

The soil is not strong enough to support loads.

**Low-residue crops**

Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

**Marl**

An earthy, unconsolidated deposit consisting chiefly of calcium carbonate mixed with clay in approximately equal proportions; formed primarily under freshwater lacustrine conditions but also formed in more saline environments.

**Marsh or swamp (map symbol)**

A water-saturated, very poorly drained area that is intermittently or permanently covered by water. Sedges, cattails, and rushes are the dominant vegetation in marshes, and trees or shrubs are the dominant vegetation in swamps. Not used in map units where the named soils are poorly drained or very poorly drained.

**Mass movement**

A generic term for the dislodgment and downslope transport of soil and rock material as a unit under direct gravitational stress.

**Masses**

See Redoximorphic features.

**Meander belt**

The zone within which migration of a meandering channel occurs; the flood-plain area included between two imaginary lines drawn tangential to the outer bends of active channel loops.

**Meander scar**

A crescent-shaped, concave or linear mark on the face of a bluff or valley wall, produced by the lateral erosion of a meandering stream that impinged upon and undercut the bluff.

**Meander scroll**

One of a series of long, parallel, close-fitting, crescent-shaped ridges and troughs formed along the inner bank of a stream meander as the channel migrated laterally down-valley and toward the outer bank.

**Mechanical treatment**

Use of mechanical equipment for seeding, brush management, and other management practices.

**Medium textured soil**

Very fine sandy loam, loam, silt loam, or silt.

**Mesa**

A broad, nearly flat topped and commonly isolated landmass bounded by steep slopes or precipitous cliffs and capped by layers of resistant, nearly horizontal rocky material. The summit width is characteristically greater than the height of the bounding escarpments.

**Metamorphic rock**

Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement at depth in the earth’s crust. Nearly all such rocks are crystalline.

**Mine or quarry (map symbol)**

An open excavation from which soil and underlying material have been removed and in which bedrock is exposed. Also denotes surface openings to underground mines.

**Mine spoil**

An accumulation of displaced earthy material, rock, or other waste material removed during mining or excavation. Also called earthy fill.

**Mineral soil**

Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

**Minimum tillage**

Only the tillage essential to crop production and prevention of soil damage.

**Miscellaneous area**

A kind of map unit that has little or no natural soil and supports little or no vegetation.

**Miscellaneous water (map symbol)**

Small, constructed bodies of water that are used for industrial, sanitary, or mining applications and that contain water most of the year.

**Moderately coarse textured soil**

Coarse sandy loam, sandy loam, or fine sandy loam.

**Moderately fine textured soil**

Clay loam, sandy clay loam, or silty clay loam.

**Mollic epipedon**

A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.

**Moraine**

In terms of glacial geology, a mound, ridge, or other topographically distinct accumulation of unsorted, unstratified drift, predominantly till, deposited primarily by the direct action of glacial ice in a variety of landforms. Also, a general term for a landform composed mainly of till (except for kame moraines, which are composed mainly of stratified outwash) that has been deposited by a glacier. Some types of moraines are disintegration, end, ground, kame, lateral, recessional, and terminal.

**Morphology, soil**

The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

**Mottling, soil**

Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few, common,* and *many;* size—*fine, medium,* and *coarse;* and contrast—*faint, distinct,* and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium,* from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse,* more than 15 millimeters (about 0.6 inch).

**Mountain**

A generic term for an elevated area of the land surface, rising more than 1,000 feet (300 meters) above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can

occur as a single, isolated mass or in a group forming a chain or range. Mountains are formed primarily by tectonic activity and/or volcanic action but can also be formed by differential erosion.

**Muck**

Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

**Mucky peat**

See Hemic soil material.

**Mudstone**

A blocky or massive, fine grained sedimentary rock in which the proportions of clay and silt are approximately equal. Also, a general term for such material as clay, silt, claystone, siltstone, shale, and argillite and that should be used only when the amounts of clay and silt are not known or cannot be precisely identified.

**Munsell notation**

A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

**Natric horizon**

A special kind of argillic horizon that contains enough exchangeable sodium to have an adverse effect on the physical condition of the subsoil.

**Neutral soil**

A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

**Nodules**

See Redoximorphic features.

**Nose slope (geomorphology)**

A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent. Nose slopes consist dominantly of colluvium and slope-wash sediments (for example, slope alluvium).

**Nutrient, plant**

Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

**Organic matter**

Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:

*Very low:* Less than 0.5 percent
*Low:* 0.5 to 1.0 percent
*Moderately low:* 1.0 to 2.0 percent
*Moderate:* 2.0 to 4.0 percent
*High:* 4.0 to 8.0 percent
*Very high:* More than 8.0 percent

**Outwash**

Stratified and sorted sediments (chiefly sand and gravel) removed or “washed out” from a glacier by meltwater streams and deposited in front of or beyond the end moraine or the margin of a glacier. The coarser material is deposited nearer to the ice.

**Outwash plain**

An extensive lowland area of coarse textured glaciofluvial material. An outwash plain is commonly smooth; where pitted, it generally is low in relief.

**Paleoterrace**

An erosional remnant of a terrace that retains the surface form and alluvial deposits of its origin but was not emplaced by, and commonly does not grade to, a present-day stream or drainage network.

**Pan**

A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan, fragipan, claypan, plowpan,* and *traffic pan*.

**Parent material**

The unconsolidated organic and mineral material in which soil forms.

**Peat**

Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

**Ped**

An individual natural soil aggregate, such as a granule, a prism, or a block.

**Pedisediment**

A layer of sediment, eroded from the shoulder and backslope of an erosional slope, that lies on and is being (or was) transported across a gently sloping erosional surface at the foot of a receding hill or mountain slope.

**Pedon**

The smallest volume that can be called “a soil.” A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

**Percolation**

The movement of water through the soil.

**Perennial water (map symbol)**

Small, natural or constructed lakes, ponds, or pits that contain water most of the year.

**Permafrost**

Ground, soil, or rock that remains at or below 0 degrees C for at least 2 years. It is defined on the basis of temperature and is not necessarily frozen.

**pH value**

A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

**Phase, soil**

A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

**Piping**

Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

**Pitting**

Pits caused by melting around ice. They form on the soil after plant cover is removed.

**Plastic limit**

The moisture content at which a soil changes from semisolid to plastic.

**Plasticity index**

The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

**Plateau (geomorphology)**

A comparatively flat area of great extent and elevation; specifically, an extensive land region that is considerably elevated (more than 100 meters) above the adjacent lower lying terrain, is commonly limited on at least one side by an abrupt descent, and has a flat or nearly level surface. A comparatively large part of a plateau surface is near summit level.

**Playa**

The generally dry and nearly level lake plain that occupies the lowest parts of closed depressions, such as those on intermontane basin floors. Temporary flooding occurs primarily in response to precipitation and runoff. Playa deposits are fine grained and may or may not have a high water table and saline conditions.

**Plinthite**

The sesquioxide-rich, humus-poor, highly weathered mixture of clay with quartz and other diluents. It commonly appears as red mottles, usually in platy, polygonal, or reticulate patterns. Plinthite changes irreversibly to an ironstone hardpan or to irregular aggregates on repeated wetting and drying, especially if it is exposed also to heat from the sun. In a moist soil, plinthite can be cut with a spade. It is a form of laterite.

**Plowpan**

A compacted layer formed in the soil directly below the plowed layer.

**Ponding**

Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

**Poorly graded**

Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

**Pore linings**

See Redoximorphic features.

**Potential native plant community**

See Climax plant community.

**Potential rooting depth (effective rooting depth)**

Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

**Prescribed burning**

Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.

**Productivity, soil**

The capability of a soil for producing a specified plant or sequence of plants under specific management.

**Profile, soil**

A vertical section of the soil extending through all its horizons and into the parent material.

**Proper grazing use**

Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and

promotes the accumulation of litter and mulch necessary to conserve soil and water.

**Rangeland**

Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.

**Reaction, soil**

A measure of acidity or alkalinity of a soil, expressed as pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

*Ultra acid:* Less than 3.5
*Extremely acid:* 3.5 to 4.4
*Very strongly acid:* 4.5 to 5.0
*Strongly acid:* 5.1 to 5.5
*Moderately acid:* 5.6 to 6.0
*Slightly acid:* 6.1 to 6.5
*Neutral:* 6.6 to 7.3
*Slightly alkaline:* 7.4 to 7.8
*Moderately alkaline:* 7.9 to 8.4
*Strongly alkaline:* 8.5 to 9.0
*Very strongly alkaline:* 9.1 and higher

**Red beds**

Sedimentary strata that are mainly red and are made up largely of sandstone and shale.

**Redoximorphic concentrations**

See Redoximorphic features.

**Redoximorphic depletions**

See Redoximorphic features.

**Redoximorphic features**

Redoximorphic features are associated with wetness and result from alternating periods of reduction and oxidation of iron and manganese compounds in the soil. Reduction occurs during saturation with water, and oxidation occurs when the soil is not saturated. Characteristic color patterns are created by these processes. The reduced iron and manganese ions may be removed from a soil if vertical or lateral fluxes of water occur, in which case there is no iron or manganese precipitation in that soil. Wherever the iron and manganese are oxidized and precipitated, they form either soft masses or hard concretions or nodules. Movement of iron and manganese as a result of redoximorphic processes in a soil may result in redoximorphic features that are defined as follows:

1. Redoximorphic concentrations.—These are zones of apparent accumulation of iron-manganese oxides, including:
   A. Nodules and concretions, which are cemented bodies that can be removed from the soil intact. Concretions are distinguished from nodules on the basis of internal organization. A concretion typically has concentric layers that are visible to the naked eye. Nodules do not have visible organized internal structure; *and*
   B. Masses, which are noncemented concentrations of substances within the soil matrix; *and*
   C. Pore linings, i.e., zones of accumulation along pores that may be either coatings on pore surfaces or impregnations from the matrix adjacent to the pores.
2. Redoximorphic depletions.—These are zones of low chroma (chromas less than those in the matrix) where either iron-manganese oxides alone or both iron-manganese oxides and clay have been stripped out, including:
   A. Iron depletions, i.e., zones that contain low amounts of iron and manganese oxides but have a clay content similar to that of the adjacent matrix; *and*
   B. Clay depletions, i.e., zones that contain low amounts of iron, manganese, and clay (often referred to as silt coatings or skeletans).
3. Reduced matrix.—This is a soil matrix that has low chroma *in situ* but undergoes a change in hue or chroma within 30 minutes after the soil material has been exposed to air.

**Reduced matrix**

See Redoximorphic features.

**Regolith**

All unconsolidated earth materials above the solid bedrock. It includes material weathered in place from all kinds of bedrock and alluvial, glacial, eolian, lacustrine, and pyroclastic deposits.

**Relief**

The relative difference in elevation between the upland summits and the lowlands or valleys of a given region.

**Residuum (residual soil material)**

Unconsolidated, weathered or partly weathered mineral material that accumulated as bedrock disintegrated in place.

**Rill**

A very small, steep-sided channel resulting from erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. A rill generally is not an obstacle to wheeled vehicles and is shallow enough to be smoothed over by ordinary tillage.

**Riser**

The vertical or steep side slope (e.g., escarpment) of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural, steplike landforms, such as successive stream terraces.

**Road cut**

A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

**Rock fragments**

Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

**Rock outcrop (map symbol)**

An exposure of bedrock at the surface of the earth. Not used where the named soils of the surrounding map unit are shallow over bedrock or where “Rock outcrop” is a named component of the map unit.

**Root zone**

The part of the soil that can be penetrated by plant roots.

**Runoff**

The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

**Saline soil**

A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.

**Saline spot (map symbol)**

An area where the surface layer has an electrical conductivity of 8 mmhos/cm more than the surface layer of the named soils in the surrounding map unit. The surface layer of the surrounding soils has an electrical conductivity of 2 mmhos/cm or less.

**Sand**

As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

**Sandstone**

Sedimentary rock containing dominantly sand-sized particles.

**Sandy spot (map symbol)**

A spot where the surface layer is loamy fine sand or coarser in areas where the surface layer of the named soils in the surrounding map unit is very fine sandy loam or finer.

**Sapric soil material (muck)**

The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

**Saturated hydraulic conductivity (Ksat)**

The ease with which pores of a saturated soil transmit water. Formally, the proportionality coefficient that expresses the relationship of the rate of water movement to hydraulic gradient in Darcy's Law, a law that describes the rate of water movement through porous media. Commonly abbreviated as "Ksat." Terms describing saturated hydraulic conductivity are:

*Very high:* 100 or more micrometers per second (14.17 or more inches per hour)

*High:* 10 to 100 micrometers per second (1.417 to 14.17 inches per hour)

*Moderately high:* 1 to 10 micrometers per second (0.1417 inch to 1.417 inches per hour)

*Moderately low:* 0.1 to 1 micrometer per second (0.01417 to 0.1417 inch per hour)

*Low:* 0.01 to 0.1 micrometer per second (0.001417 to 0.01417 inch per hour)

*Very low:* Less than 0.01 micrometer per second (less than 0.001417 inch per hour).

To convert inches per hour to micrometers per second, multiply inches per hour by 7.0572. To convert micrometers per second to inches per hour, multiply micrometers per second by 0.1417.

**Saturation**

Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

**Scarification**

The act of abrading, scratching, loosening, crushing, or modifying the surface to increase water absorption or to provide a more tillable soil.

**Sedimentary rock**

A consolidated deposit of clastic particles, chemical precipitates, or organic remains accumulated at or near the surface of the earth under normal low temperature and pressure conditions. Sedimentary rocks include consolidated equivalents of alluvium, colluvium, drift, and eolian, lacustrine, and marine deposits. Examples are sandstone, siltstone, mudstone, claystone, shale, conglomerate, limestone, dolomite, and coal.

**Sequum**

A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

**Series, soil**

A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

**Severely eroded spot (map symbol)**

An area where, on the average, 75 percent or more of the original surface layer has been lost because of accelerated erosion. Not used in map units in which “severely eroded,” “very severely eroded,” or “gullied” is part of the map unit name.

**Shale**

Sedimentary rock that formed by the hardening of a deposit of clay, silty clay, or silty clay loam and that has a tendency to split into thin layers.

**Sheet erosion**

The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

**Short, steep slope (map symbol)**

A narrow area of soil having slopes that are at least two slope classes steeper than the slope class of the surrounding map unit.

**Shoulder**

The convex, erosional surface near the top of a hillslope. A shoulder is a transition from summit to backslope.

**Shrink-swell**

The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

**Shrub-coppice dune**

A small, streamlined dune that forms around brush and clump vegetation.

**Side slope (geomorphology)**

A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel. Side slopes are dominantly colluvium and slope-wash sediments.

**Silica**

A combination of silicon and oxygen. The mineral form is called quartz.

**Silica-sesquioxide ratio**

The ratio of the number of molecules of silica to the number of molecules of alumina and iron oxide. The more highly weathered soils or their clay fractions in warm-temperate, humid regions, and especially those in the tropics, generally have a low ratio.

**Silt**

As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

**Siltstone**

An indurated silt having the texture and composition of shale but lacking its fine lamination or fissility; a massive mudstone in which silt predominates over clay.

**Similar soils**

Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

**Sinkhole (map symbol)**

A closed, circular or elliptical depression, commonly funnel shaped, characterized by subsurface drainage and formed either by dissolution of the surface of underlying bedrock (e.g., limestone, gypsum, or salt) or by collapse of underlying caves within bedrock. Complexes of sinkholes in carbonate-rock terrain are the main components of karst topography.

**Site index**

A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

**Slickensides (pedogenic)**

Grooved, striated, and/or glossy (shiny) slip faces on structural peds, such as wedges; produced by shrink-swell processes, most commonly in soils that have a high content of expansive clays.

**Slide or slip (map symbol)**

A prominent landform scar or ridge caused by fairly recent mass movement or descent of earthy material resulting from failure of earth or rock under shear stress along one or several surfaces.

**Slope**

The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance.

**Slope alluvium**

Sediment gradually transported down the slopes of mountains or hills primarily by nonchannel alluvial processes (i.e., slope-wash processes) and characterized by particle sorting. Lateral particle sorting is evident on long slopes. In a profile sequence, sediments may be distinguished by differences in size and/or specific gravity of rock fragments and may be separated by stone lines. Burnished peds and sorting of rounded or subrounded pebbles or cobbles distinguish these materials from unsorted colluvial deposits.

**Slow refill**

The slow filling of ponds, resulting from restricted water transmission in the soil.

**Slow water movement**

Restricted downward movement of water through the soil. See Saturated hydraulic conductivity.

**Sodic (alkali) soil**

A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

**Sodic spot (map symbol)**

An area where the surface layer has a sodium adsorption ratio that is at least 10 more than that of the surface layer of the named soils in the surrounding map unit. The surface layer of the surrounding soils has a sodium adsorption ratio of 5 or less.

**Sodicity**

The degree to which a soil is affected by exchangeable sodium. Sodicity is expressed as a sodium adsorption ratio (SAR) of a saturation extract, or the ratio of $Na^{+}$ to $Ca^{++} + Mg^{++}$. The degrees of sodicity and their respective ratios are:

*Slight:* Less than 13:1
*Moderate:* 13-30:1
*Strong:* More than 30:1

**Sodium adsorption ratio (SAR)**

A measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration.

**Soft bedrock**

Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

**Soil**

A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief and by the passage of time.

**Soil separates**

Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

*Very coarse sand:* 2.0 to 1.0
*Coarse sand:* 1.0 to 0.5
*Medium sand:* 0.5 to 0.25
*Fine sand:* 0.25 to 0.10
*Very fine sand:* 0.10 to 0.05
*Silt:* 0.05 to 0.002
*Clay:* Less than 0.002

**Solum**

The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

**Spoil area (map symbol)**

A pile of earthy materials, either smoothed or uneven, resulting from human activity.

**Stone line**

In a vertical cross section, a line formed by scattered fragments or a discrete layer of angular and subangular rock fragments (commonly a gravel- or cobble-sized lag concentration) that formerly was draped across a topographic surface and was later buried by additional sediments. A stone line generally caps material that was subject to weathering, soil formation, and erosion before burial. Many stone lines seem to be buried erosion pavements, originally formed by sheet and rill erosion across the land surface.

**Stones**

Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

**Stony**

Refers to a soil containing stones in numbers that interfere with or prevent tillage.

**Stony spot (map symbol)**

A spot where 0.01 to 0.1 percent of the soil surface is covered by rock fragments that are more than 10 inches in diameter in areas where the surrounding soil has no surface stones.

**Strath terrace**

A type of stream terrace; formed as an erosional surface cut on bedrock and thinly mantled with stream deposits (alluvium).

**Stream terrace**

One of a series of platforms in a stream valley, flanking and more or less parallel to the stream channel, originally formed near the level of the stream; represents the remnants of an abandoned flood plain, stream bed, or valley floor produced during a former state of fluvial erosion or deposition.

**Stripcropping**

Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.

**Structure, soil**

The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are:

*Platy:* Flat and laminated

*Prismatic:* Vertically elongated and having flat tops

*Columnar:* Vertically elongated and having rounded tops

*Angular blocky:* Having faces that intersect at sharp angles (planes)

*Subangular blocky:* Having subrounded and planar faces (no sharp angles)

*Granular:* Small structural units with curved or very irregular faces

Structureless soil horizons are defined as follows:

*Single grained:* Entirely noncoherent (each grain by itself), as in loose sand

*Massive:* Occurring as a coherent mass

**Stubble mulch**

Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

**Subsoil**

Technically, the B horizon; roughly, the part of the solum below plow depth.

**Subsoiling**

Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

**Substratum**

The part of the soil below the solum.

**Subsurface layer**

Any surface soil horizon (A, E, AB, or EB) below the surface layer.

**Summer fallow**

The tillage of uncropped land during the summer to control weeds and allow storage of moisture in the soil for the growth of a later crop. A practice common in semiarid regions, where annual precipitation is not enough to produce a crop every year. Summer fallow is frequently practiced before planting winter grain.

**Summit**

The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.

**Surface layer**

The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the “plow layer,” or the “Ap horizon.”

**Surface soil**

The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

**Talus**

Rock fragments of any size or shape (commonly coarse and angular) derived from and lying at the base of a cliff or very steep rock slope. The accumulated mass of such loose broken rock formed chiefly by falling, rolling, or sliding.

**Taxadjuncts**

Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

**Terminal moraine**

An end moraine that marks the farthest advance of a glacier. It typically has the form of a massive arcuate or concentric ridge, or complex of ridges, and is underlain by till and other types of drift.

**Terrace (conservation)**

An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field

generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

**Terrace (geomorphology)**

A steplike surface, bordering a valley floor or shoreline, that represents the former position of a flood plain, lake, or seashore. The term is usually applied both to the relatively flat summit surface (tread) that was cut or built by stream or wave action and to the steeper descending slope (scarp or riser) that has graded to a lower base level of erosion.

**Terracettes**

Small, irregular steplike forms on steep hillslopes, especially in pasture, formed by creep or erosion of surficial materials that may be induced or enhanced by trampling of livestock, such as sheep or cattle.

**Texture, soil**

The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying “coarse,” “fine,” or “very fine.”

**Thin layer**

Otherwise suitable soil material that is too thin for the specified use.

**Till**

Dominantly unsorted and nonstratified drift, generally unconsolidated and deposited directly by a glacier without subsequent reworking by meltwater, and consisting of a heterogeneous mixture of clay, silt, sand, gravel, stones, and boulders; rock fragments of various lithologies are embedded within a finer matrix that can range from clay to sandy loam.

**Till plain**

An extensive area of level to gently undulating soils underlain predominantly by till and bounded at the distal end by subordinate recessional or end moraines.

**Tilth, soil**

The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

**Toeslope**

The gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.

**Topsoil**

The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

**Trace elements**

Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

**Tread**

The flat to gently sloping, topmost, laterally extensive slope of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural steplike landforms, such as successive stream terraces.

**Tuff**

A generic term for any consolidated or cemented deposit that is 50 percent or more volcanic ash.

**Upland**

An informal, general term for the higher ground of a region, in contrast with a low-lying adjacent area, such as a valley or plain, or for land at a higher elevation than the flood plain or low stream terrace; land above the footslope zone of the hillslope continuum.

**Valley fill**

The unconsolidated sediment deposited by any agent (water, wind, ice, or mass wasting) so as to fill or partly fill a valley.

**Variegation**

Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

**Varve**

A sedimentary layer or a lamina or sequence of laminae deposited in a body of still water within a year. Specifically, a thin pair of graded glaciolacustrine layers seasonally deposited, usually by meltwater streams, in a glacial lake or other body of still water in front of a glacier.

**Very stony spot (map symbol)**

A spot where 0.1 to 3.0 percent of the soil surface is covered by rock fragments that are more than 10 inches in diameter in areas where the surface of the surrounding soil is covered by less than 0.01 percent stones.

**Water bars**

Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

**Weathering**

All physical disintegration, chemical decomposition, and biologically induced changes in rocks or other deposits at or near the earth's surface by atmospheric or biologic agents or by circulating surface waters but involving essentially no transport of the altered material.

**Well graded**

Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

**Wet spot (map symbol)**

A somewhat poorly drained to very poorly drained area that is at least two drainage classes wetter than the named soils in the surrounding map unit.

**Wilting point (or permanent wilting point)**

The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

**Windthrow**

The uprooting and tipping over of trees by the wind.

# Attachment 19

Soil Analysis

To Be Provided Later

# Attachment 20

Water Balance

Water Balance Calculations

| Month | Average Precipitation | Average Runoff | Average Infiltrated Rainfall (Ri) | EvapoTranspiration | Required Leaching | Total Water Needs (5)+(6) | Effluent Needed in Root Zone (7)-(4) | Evaporation from Reservoir Surface | Effluent to be Applied to Land (8)/K | Consumption from Reservoir (9)+(10) |
|---|---|---|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| January | 1.66 | 0.37 | 1.29 | 1.35 | 0.01 | 1.36 | 0.07 | 0.05 | 0.08 | 0.12 |
| February | 1.92 | 0.51 | 1.41 | 1.35 | 0.00 | 1.35 | 0.00 | 0.05 | 0.00 | 0.05 |
| March | 2.08 | 0.61 | 1.47 | 3.42 | 0.32 | 3.74 | 2.27 | 0.06 | 2.67 | 2.73 |
| April | 2.49 | 0.88 | 1.61 | 4.05 | 0.39 | 4.44 | 2.84 | 0.07 | 3.34 | 3.40 |
| May | 4.20 | 2.21 | 1.99 | 7.47 | 0.88 | 8.35 | 6.36 | 0.12 | 7.48 | 7.60 |
| June | 3.31 | 1.48 | 1.82 | 7.74 | 0.96 | 8.70 | 6.87 | 0.09 | 8.09 | 8.18 |
| July | 1.91 | 0.51 | 1.40 | 8.01 | 1.07 | 9.08 | 7.67 | 0.05 | 9.03 | 9.08 |
| August | 2.11 | 0.63 | 1.48 | 5.04 | 0.57 | 5.61 | 4.13 | 0.06 | 4.86 | 4.92 |
| September | 3.23 | 1.42 | 1.80 | 6.21 | 0.71 | 6.92 | 5.12 | 0.09 | 6.02 | 6.11 |
| October | 3.43 | 1.58 | 1.85 | 4.86 | 0.49 | 5.35 | 3.50 | 0.10 | 4.11 | 4.21 |
| November | 2.23 | 0.70 | 1.52 | 2.43 | 0.15 | 2.58 | 1.06 | 0.06 | 1.24 | 1.30 |
| December | 1.70 | 0.39 | 1.31 | 1.08 | 0.00 | 1.08 | 0.00 | 0.05 | 0.00 | 0.05 |
| Total | 30.27 | 11.31 | 18.96 | 53.01 | 5.54 | 58.55 | 39.88 | 0.84 | 46.92 | 47.76 |
| Column Note References | a) | b) | Ri | c) | d) | | | e) | f) | g) |

(All Units are Inches of Water per Acre of Irrigated Area)

| | |
|---|---|
| Irrigation Efficiency (K) = | 0.85 |
| Curve number (N) = | 80 |
| S = | 2.50 |
| Ce = | 1.39 |
| CI = | 10 |

Water Balance Calculation Notes:

Column (2):
Up-to-date rainfall and evaporation data sets are available from the Texas Natural Resource Information System.

Column (3):
Runoff should be determined by an acceptable method such as the Soil Conservation Service method found in SCS Technical Release No. 55.
A curve number (N) of 80 is appropriate for continuous grass planted in hydrologic soil group D.
Potential maximum retention after runoff begins (S) = 1000/N - 10 = 2.5

Column (5):
Source of values is the "Bulletin 6019, Consumptive Use of Water by Major Crops in Texas," Texas Board of Water Engineers. Applied 90% of the listed values for alfalfa as noted on Table 5.

Column (6):
In low rainfall areas, this is the required leaching to avoid salinity build-up in the soil is calculated using the following equation:
L = Ce (E-Ri) / (Cl-Ce)
Where:
Ce = Electrical Conductivity of Effluent = 1.39 mmhos/cm
E = Evapotranspiration
Ri = Infiltrated Rainfall
Cl= Maximum Allowable Conductivity of Soil Solution (Value obtained from 30 TAC 309.20, Table 3) = 10

Column (9):
Net Average Evaporation from Reservoir Surface.

Column (10):
K is the irrigation efficiency. K value is 0.85 unless specific information is provided to support a different value.

Column (11):
The total of this column is the maximum allowable application rate in acre-inch per acre per year.

Storage Volume Calculations

| Month | Effluent Received for Application or Storage | Mean Rainfall Distribution* | Rainfall Highest Year in Past 25 Year | Runoff Highest Year in Past 25 Year | Infiltrated Rainfall (14b)-(15) | Available Water (13)+(16) | Distribution of Mean* | Net 25 Year Low Evaporation from Reservoir Surface | Storage | Accumulated Storage | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (12) | (13) | (14a) | (14b) | (15) | (16) | (17) | (18a) | (18b) | (19) | (20) | |
| January | 1.53 | 5.58% | 2.63 | 0.98 | 1.65 | 3.18 | 3.97% | | 1.53 | 1.38 | |
| February | 1.38 | 6.51% | 3.07 | 1.30 | 1.77 | 3.15 | 4.53% | | 1.38 | 2.76 | |
| March | 1.53 | 6.94% | 3.27 | 1.45 | 1.81 | 3.34 | 6.94% | | -0.73 | 2.03 | |
| April | 1.48 | 8.83% | 4.16 | 2.18 | 1.99 | 3.46 | 8.43% | | -1.41 | 0.61 | END |
| May | 1.53 | 13.52% | 6.37 | 4.12 | 2.25 | 3.78 | 9.00% | | -5.65 | -5.04 | |
| June | 1.48 | 10.74% | 5.06 | 2.95 | 2.11 | 3.59 | 11.80% | | -6.26 | -11.30 | |
| July | 1.53 | 6.21% | 2.93 | 1.19 | 1.73 | 3.26 | 13.80% | | -7.11 | -18.42 | |
| August | 1.53 | 7.05% | 3.32 | 1.50 | 1.83 | 3.35 | 13.38% | | -2.93 | -21.35 | |
| September | 1.48 | 10.90% | 5.14 | 3.01 | 2.12 | 3.60 | 10.07% | | -4.17 | -25.51 | |
| October | 1.53 | 10.76% | 5.07 | 2.95 | 2.12 | 3.64 | 8.19% | | -2.27 | -2.27 | START |
| November | 1.48 | 7.10% | 3.34 | 1.51 | 1.83 | 3.31 | 5.75% | | 0.60 | -1.67 | |
| December | 1.53 | 5.86% | 2.76 | 1.08 | 1.69 | 3.22 | 4.13% | | 1.53 | -0.15 | |
| Total | 17.98 | 100.0% | 47.12 | 24.22 | 22.90 | 40.88 | 100.0% | 0.00 | -25.51 | 2.76 | |

(All Units are Inches of Water per Acre of Irrigated Area)

| | | |
|---|---|---|
| Maximum Monthly Avg Application Rate = | 3.98 | in/month |
| Daily Average Flow to Irrigation Field = | 255,500 | gallons/day |
| Irrigation Surface Area = | 191.00 | acres |
| Worst (Highest) Annual Rainfall in Past 25 Years = | 47.12 | in |
| Lagoon/Pond Surface Area = | 5.30 | acres |
| Lowest Annual Evaporation in Past 25 Years = | 43.61 | in |

| | | |
|---|---|---|
| Storage Volume Requirement = | 43.95 | ac-ft |
| Storage Volume Requirement = | 14,318,583 | gal |

*Data collected from https://waterdatafortexas.org/lake-evaporation-rainfall

Storage Volume Calculation Notes:

Column (13): Maximum values for Column (13) are the value (total) of Column (11) divided by 12.

Column (14b): Annual rainfall amount from the highest year in past 25 years of data. Total rainfall is then distributed proportional to monthly averages.

Column (15): Using rainfall figures in Column (14), calculate runoff with the same method used in Column (3).

Column (18b): Lowest annual evaporation in past 25 years from reservoir surface. Distribute annual value proportionally to monthly average evaporation expressed in inches per irrigated acre.

Column (19): Storage = [(13) – (18b)]-{[(7)-(16)]/K}. If the term {[(7)-(16)]/K} is negative, then the value for storage = [(13)-(18b)]. Irrigation efficiency is 0.85 unless specific information is provided to support a different value.

Column (20): To allow for the worst condition, the summation of storage is obtained by adding the values obtained in Column (19), beginning with the first consecutive month of positive values (START) and ending before incorporating the first month of negative values (END).

# Attachment 21

Recharge Feature Plan

To Be Provided Later

# Attachment 22

Soil Evaluation

To Be Provided Later

# Attachment 23

Site Preparation Plan

March 3, 2025

# Site Preparation Plan

Thomas Ranch WWTP

Spicewood, Texas

The following Site Preparation Plan composed by WWD Engineering in 2025 establishes what steps need to be taken in order to properly prepare the surface irrigation site and guard against any site-specific limitations.

The WWD plan found no significant limitations that could not be easily mitigated. The site will be properly graded to eliminate any stormwater run-on from upstream areas and to promote efficient run-off from the surface irrigation area. Of the fourteen profile holes that were evaluated by WWD in Attachment 18, Soil Sampling/Testing, of this permit, no restrictive horizons were found. If necessary, soil will be imported to maintain the appropriate soil column depths and allow for optimal nutrient uptake. The minimal herbaceous and smaller woody vegetation currently located on site will be removed during construction, and the proper turf grasses will be planted in its place.




Behnaz Jalili, PhD, P.E.
KIMLEY-HORN AND ASSOCIATES, INC.
Texas Firm No. 928

Attachments:

Thomas Ranch Soil Sampling/Testing

# Attachment 24

Soil Sampling/Testing

To Be Provided Later

# Attachment 25

FEMA Flood Plain Map

K:\SAU_WR\069406207_Thomas Ranch TLAP\CAD\EXHIBITS\FEMA Floodplain Map\Thomas Ranch_Flood Map.dwg 3/4/2025 12:35 PM

PALEFACE RANCH RD

BURNET COUNTY

TRAVIS COUNTY

STATE HWY 71

LEGEND

NORTH

GRAPHIC SCALE IN FEET
0 325 750 1500

EXISTING PARCEL

TREATMENT FACILITY PROPERTY BOUNDARY

LAND DISPOSAL AREAS

FEMA 1%
FEMA 1%

FEMA 100-YR FLOODPLAIN

SHEET

| | |
|---|---|
| DATE: | MARCH 2025 |
| DESIGN: | IMC |
| DRAWN: | BJ |
| CHECKED: | IMC |
| KHA NO.: | 069406207 |

FEMA FLOOD MAP

THOMAS RANCH
WWTP TLAP

THIS DOCUMENT IS INCOMPLETE AND IS RELEASED TEMPORARILY FOR INTERIM REVIEW ONLY. IT IS NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

IAN CLEMENTS P.E.
SERIAL NO. 126771
DATE: SEPTEMBER 2024

Kimley»Horn
Firm No. F-928
5301 Southwest Pkwy, Bldg 3, Suite 100, Austin TX, 78735 P:512-646-2237

| No. | Revision | By | Date |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

Kimley»Horn

April 22, 2025

Abesha Michael
Applications Review and Processing Team (MC148)
Water Quality Division
Texas Commission on Environmental Quality

**RE:** **Application for Proposed Permit No.: WQ0016769001**
**Applicant Name: Arete Thomas Ranch Holdings, LLC (CN606373215)**
**Site Name: Thomas Ranch WWTP (RN112190822)**
**Type of Application: New**

Dear Abesha Michael,

Thank you for reviewing the permit application and informing us of the additional information needed in the Notice of Deficiency letter dated April 8, 2025. The responses to your comments are as follows:

1. Four hard copies of the whole application have been delivered to 12100 Park 35 Circle, Bldg F, Austin, TX 78753. See attached proof of receipt (Attachment *"Proof of Receipt of Hard Copy Submission"*). The original copy, including the wet signature, will be mailed to the same address at the earliest convenience.

2. The name of the county has been added to Section III, Item 25 of the Core Data Form (CDF). See Attachment "*10400 Core Data Form".*

3. A public viewing location has been provided for both Burnet County and Travis County. The viewing location in Travis County will be the Laura Bush Community Library (9411 Bee Caves Rd., Austin, TX 78733). See Attachment *"Page 6_Public Viewing Location"*.

4. The Plain Language Summary (PLS) has been updated to reflect the final phase flow of 510,000 gallons per day. See Attachment *"Summary of Application in Plain Language".*

5. The translated Spanish NORI has been provided as an attachment to this document. See Attachment *"WQ0016769001_Spanish NORI.docx".*

6. Arete Thomas Ranch Holdings, LLC is the owner of the land where the treatment facility will be located, not Mr. Thomas Hogan. His name has been removed from Section 9, Item D of the Administrative Report. See Attachment *"Pages 7-8_Land Ownership".*

7. Arete Thomas Ranch Holdings, LLC is the owner of the effluent disposal sites, not Mr. Thomas Hogan. His name has been removed from Section 9, Item E of the Administrative Report. See Attachment *"Pages 7-8_Land Ownership".*

8. Documentation has been provided that confirms Thomas Hogan and Rebecca Buchan as authorized signatories for Arete Thomas Ranch Holdings, LLC under 30 TAC 305.44. Attachment *"Pages from Arete Thomas Ranch Holdings, LLC - Operating Agreement (12.01.21) (Executed)"*

states that Arete Collective, LP is a Working Member of Arete Thomas Ranch Holdings, LLC, and has exclusive responsibility for day-to-day management and operation of the business. Attachment *"Pages from Areté Collective LP - AR Limited Partnership Agreement (Executed) (10.01.22)"* states that the General Partner of Arete Collective, LP (AC Management GP, LLC) has the right to act on behalf of the entity. Lastly, Attachment *"Arete - AC Management Manager Consent (Appointing Arete Officers) (Executed) (07.13.22)"* appoints Rebecca Buchan and Thomas Hogan as officers of AC Management GP, LLC.

9. The Affected Landowners Map is attached to this document (Attachment *"20250304_Thomas Ranch_Affected Landowners Map"*).

10. The mailing labels were provided with the hard copies that were delivered to 12100 Park 35 Circle, Bldg F, Austin, TX 78753 on April 8th, 2025. The mailing labels in Microsoft Word Format have also been attached to this document as Attachments *"Landowners 01.docx"*, *"Landowners 02.docx"*, and *"Landowners 03.docx"*.

11. We find no errors or omissions in the portion of the NORI provided. The Travis County public viewing location can be added as: Laura Bush Community Library, Front Desk, 9411 Bee Caves Rd., Austin, TX, 78733.

12. The translated Spanish NORI has been provided as an attachment to this document. See Attachment *"WQ0016769001_Spanish NORI.docx"*.

You may contact me with any requests or questions at behnaz.jalili@kimley-horn.com or by phone at 512-518-5596.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

Texas Firm No. 928

Behnaz Jalili

Behnaz Jalili, PhD, P.E.

**Attachments:**

Proof of Receipt of Hard Copy Submission
10400 Core Data Form
Page 6_Public Viewing Location
Summary of Application in Plain Language
WQ0016769001_Spanish NORI.docx
Pages 7-8_Land Ownership
Pages from Arete Thomas Ranch Holdings, LLC - Operating Agreement (12.01.21) (Executed)
Pages from Areté Collective LP - AR Limited Partnership Agreement (Executed) (10.01.22)
Arete - AC Management Manager Consent (Appointing Arete Officers) (Executed) (07.13.22)
20250304_Thomas Ranch_Affected Landowners Map
Landowners 01.docx
Landowners 02.docx
Landowners 03.docx

Docusign Envelope ID: 18D53C78-530B-4F7F-B4A3-FFBFDE8383AC

TCEQ Use Only

# TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

## SECTION I: General Information

**1. Reason for Submission** (*If other is checked please describe in space provided.*)

☒ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.*)

☐ Renewal (*Core Data Form should be submitted with the renewal form*) ☐ Other

| **2. Customer Reference Number** (*if issued*) | Follow this link to search for CN or RN numbers in Central Registry** | **3. Regulated Entity Reference Number** (*if issued*) |
|---|---|---|
| **CN** | | **RN** |

## SECTION II: Customer Information

**4. General Customer Information** | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy)

☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

***The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).***

**6. Customer Legal Name** (*If an individual, print last name first: eg: Doe, John*) — *If new Customer, enter previous Customer below:*

Arete Thomas Ranch Holdings, LLC

| **7. TX SOS/CPA Filing Number** | **8. TX State Tax ID** (11 digits) | **9. Federal Tax ID** (9 digits) | **10. DUNS Number** (*if applicable*) |
|---|---|---|---|
| 804367904 | 32082433494 | 42-2785650 | N/A |

**11. Type of Customer:** ☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

**12. Number of Employees**
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

**13. Independently Owned and Operated?**
☐ **Yes** ☐ **No**

**14. Customer Role** (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **15. Mailing Address:** | C/O Allen Boone Humphries Robinson LLP | | | | | | |
| | 919 Congress AVE, STE 1500 | | | | | | |
| | **City** | Austin | **State** | TX | **ZIP** | 78701 | **ZIP + 4** 2156 |

| **16. Country Mailing Information** (*if outside USA*) | **17. E-Mail Address** (*if applicable*) |
|---|---|
| | ian.clements@kimley-horn.com |

Docusign Envelope ID: 18D53C78-530B-4F7F-B4A3-FFBFDE8383AC

| 18. Telephone Number | 19. Extension or Code | 20. Fax Number *(if applicable)* |
|---|---|---|
| ( 737 ) 241-9266 | | ( ) - |

## SECTION III: Regulated Entity Information

**21. General Regulated Entity Information** *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

***The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).***

**22. Regulated Entity Name** *(Enter name of the site where the regulated action is taking place.)*

Thomas Ranch WWTP

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **23. Street Address of the Regulated Entity:** ***(No PO Boxes)*** | | | | | | | |
| | **City** | | **State** | | **ZIP** | | **ZIP + 4** |
| **24. County** | | | | | | | |

**If no Street Address is provided, fields 25-28 are required.**

| | | | | | |
|---|---|---|---|---|---|
| **25. Description to Physical Location:** | Approximately 1.2 miles northwest of the intersection of State Hwy 71 and Paleface Ranch Rd., in Travis County, TX. | | | | |
| **26. Nearest City** | | | **State** | **Nearest ZIP Code** | |
| Austin | | | TX | 78669 | |

***Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).***

| **27. Latitude (N) In Decimal:** | 30.426025 | | **28. Longitude (W) In Decimal:** | -98.109841 | |
|---|---|---|---|---|---|
| Degrees | Minutes | Seconds | Degrees | Minutes | Seconds |
| 30 | 25 | 34 | -98 | 6 | 35 |

| **29. Primary SIC Code** (4 digits) | **30. Secondary SIC Code** (4 digits) | **31. Primary NAICS Code** (5 or 6 digits) | **32. Secondary NAICS Code** (5 or 6 digits) |
|---|---|---|---|
| 9511 | | 221310 | |

**33. What is the Primary Business of this entity?** *(Do not repeat the SIC or NAICS description.)*

Wastewater Treatment

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **34. Mailing Address:** | **C/O Allen Boone Humphries Robinson LLP** | | | | | | |
| | **919 Congress AVE, STE 1500** | | | | | | |
| | **City** | **Austin** | **State** | **TX** | **ZIP** | **78701** | **ZIP + 4** | **2156** |
| **35. E-Mail Address:** | **ian.clements@kimley-horn.com** | | | | | | |

| 36. Telephone Number | 37. Extension or Code | 38. Fax Number *(if applicable)* |
|---|---|---|
| **( 737 ) 241-9266** | | ( ) - |

**39. TCEQ Programs and ID Numbers** Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

| | | | | |
|---|---|---|---|---|
| ☐ Dam Safety | ☐ Districts | ☐ Edwards Aquifer | ☐ Emissions Inventory Air | ☐ Industrial Hazardous Waste |
| | | | | |
| ☐ Municipal Solid Waste | ☐ New Source Review Air | ☐ OSSF | ☐ Petroleum Storage Tank | ☐ PWS |
| | | | | |
| ☐ Sludge | ☐ Storm Water | ☐ Title V Air | ☐ Tires | ☐ Used Oil |
| | | | | |
| ☐ Voluntary Cleanup | ☒ Wastewater | ☐ Wastewater Agriculture | ☐ Water Rights | ☐ Other: |
| | | | | |

## SECTION IV: Preparer Information

| **40. Name:** | Behnaz Jalili | **41. Title:** | Project Manager |
|---|---|---|---|

| **42. Telephone Number** | **43. Ext./Code** | **44. Fax Number** | **45. E-Mail Address** |
|---|---|---|---|
| ( 512 ) 518-5596 | | ( ) - | Behnaz.Jalili@kimley-horn.com |

## SECTION V: Authorized Signature

**46.** By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

| **Company:** | Arete Thomas Ranch Holdings, LLC | **Job Title:** | Manager |
|---|---|---|---|
| **Name** *(In Print):* | Rebecca Buchan | **Phone:** | (801)-550-3484 |
| **Signature:** | DocuSigned by: Rebecca Buchan 03A053CA05034A9... | **Date:** | 4/21/2025 |

Mailing Address: 5301 Southwest Parkway, Building 2, Suite 100 City, State, Zip Code: Austin, TX 78735

Phone No.: 512-518-5596 E-mail Address: Behnaz.jalili@kimley-horn.com

**B. Method for Receiving Notice of Receipt and Intent to Obtain a Water Quality Permit Package**

Indicate by a check mark the preferred method for receiving the first notice and instructions:

☒ E-mail Address

☐ Fax

☒ Regular Mail

**C. Contact permit to be listed in the Notices**

Prefix: Ms. Last Name, First Name: Jalili, Behnaz

Title: Project Engineer Credential: PhD, P.E.

Organization Name: Kimley-Horn and Associates, Inc.

Mailing Address: 5301 Southwest Parkway, Building 2, Suite 100 City, State, Zip Code: Austin, TX 78735

Phone No.: 512-518-5596 E-mail Address: Behnaz.jalili@kimley-horn.com

**D. Public Viewing Information**

*If the facility or outfall is located in more than one county, a public viewing place for each county must be provided.*

Public building name: Spicewood Community Library

Location within the building: Front Desk

Physical Address of Building: 1011 Spur 191

City: Spicewood County: Burnet

Contact (Last Name, First Name): James, Rita

Phone No.: 830-693-7892 Ext.: Click to enter text.

Public building name: Laura Bush Community Library

Location within the building: Front Desk

Physical Address of Building: 9411 Bee Caves Rd

City: Austin County: Travis

Contact (Last Name, First Name): Click to enter text.

Phone No.: 512-327-3045 Ext.: Click to enter text.

**E. Bilingual Notice Requirements**

This information **is required** for **new, major amendment, minor amendment or minor modification, and renewal** applications.

This section of the application is only used to determine if alternative language notices will be needed. Complete instructions on publishing the alternative language notices will be in your public notice package.

Please call the bilingual/ESL coordinator at the nearest elementary and middle schools and

obtain the following information to determine whether an alternative language notices are required.

1. Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?

   ☐ Yes ☒ No

   If **no**, publication of an alternative language notice is not required; **skip to** Section 9 below.

2. Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?

   ☐ Yes ☒ No

3. Do the students at these schools attend a bilingual education program at another location?

   ☐ Yes ☒ No

4. Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC §89.1205(g)?

   ☐ Yes ☒ No

5. If the answer is **yes** to **question 1, 2, 3, or 4**, public notices in an alternative language are required. Which language is required by the bilingual program?

**F. Plain Language Summary Template**

Complete the Plain Language Summary (TCEQ Form 20972) and include as an attachment.

**Attachment:** Attachment 3

**G. Public Involvement Plan Form**

Complete the Public Involvement Plan Form (TCEQ Form 20960) for each application for a **new permit or major amendment to a permit** and include as an attachment.

**Attachment:** Attachment 4

## Section 9. Regulated Entity and Permitted Site Information (Instructions Page 29)

**A.** If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. **RN** Click to enter text.

Search the TCEQ's Central Registry at http://www15.tceq.texas.gov/crpub/ to determine if the site is currently regulated by TCEQ.

**B.** Name of project or site (the name known by the community where located):

Thomas Ranch Wastewater Treatment Plant

**C.** Owner of treatment facility: Arete Thomas Ranch Holdings, LLC

Ownership of Facility: ☐ Public ☒ Private ☐ Both ☐ Federal

**D.** Owner of land where treatment facility is or will be:

Prefix: Click to enter text. Last Name, First Name: Click to enter text.

Title: Click to enter text. Credential: Click to enter text.

Organization Name: Arete Thomas Ranch Holdings, LLC

Mailing Address: C/O Allen Boone Humphries Robinson LLP, 919 Congress AVE, STE 1500
City, State, Zip Code: Austin, TX 78701-2156

Phone No.: 737-241-9266 E-mail Address: ian.clements@kimley-horn.com

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

**Attachment:** Click to enter text.

**E.** Owner of effluent disposal site:

Prefix: Click to enter text. Last Name, First Name: Click to enter text.

Title: Click to enter text. Credential: Click to enter text.

Organization Name: Arete Thomas Ranch Holdings, LLC

Mailing Address: C/O Allen Boone Humphries Robinson LLP, 919 Congress AVE, STE 1500
City, State, Zip Code: Austin, TX 78701-2156

Phone No.: 737-241-9266 E-mail Address: ian.clements@kimley-horn.com

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

**Attachment:** Click to enter text.

**F.** Owner sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant)::

Prefix: Click to enter text. Last Name, First Name: Click to enter text.

Title: Click to enter text. Credential: Click to enter text.

Organization Name: Click to enter text.

Mailing Address: Click to enter text. City, State, Zip Code: Click to enter text.

Phone No.: Click to enter text. E-mail Address: Click to enter text.

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

**Attachment:** Click to enter text.

## Section 10. TPDES Discharge Information (Instructions Page 31)

**A.** Is the wastewater treatment facility location in the existing permit accurate?

☐ Yes ☐ No

If **no**, **or a new permit application**, please give an accurate description:

Click to enter text.

**B.** Are the point(s) of discharge and the discharge route(s) in the existing permit correct?

☐ Yes ☐ No

If **no**, **or a new or amendment permit application**, provide an accurate description of the

point of discharge and the discharge route to the nearest classified segment as defined in 30 TAC Chapter 307:

Click to enter text.

City nearest the outfall(s): Click to enter text.

County in which the outfalls(s) is/are located: Click to enter text.

C. Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?

☐ Yes ☐ No

If yes, indicate by a check mark if:

☐ Authorization granted ☐ Authorization pending

For new and amendment applications, provide copies of letters that show proof of contact and the approval letter upon receipt.

Attachment: Click to enter text.

D. For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: Click to enter text.

## Section 11. TLAP Disposal Information (Instructions Page 32)

A. For TLAPs, is the location of the effluent disposal site in the existing permit accurate?

☐ Yes ☐ No

If no, or a new or amendment permit application, provide an accurate description of the disposal site location:

The spray irrigation fields will be located within the proposed Arete Thomas Ranch subdivision, approximately 1.2 miles northwest of the intersection of Paleface Ranch Road and State Highway 71, near the city of Austin, in Travis County, Texas 78669 ,and 0.9 miles northwest of intersection of Paleface Ranch Road and Haynie Flat Road, near the city of Spicewood, Burnet County, Texas 78669.

B. City nearest the disposal site: City of Austin

C. County in which the disposal site is located: Travis County, Burnet County

D. For TLAPs, describe the routing of effluent from the treatment facility to the disposal site:

Route is from the effluent pump station to the irrigation lake and from the irrigation lake to the irrigation area.

E. For TLAPs, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: Pedernales River

## Section 12. Miscellaneous Information (Instructions Page 32)

A. Is the facility located on or does the treated effluent cross American Indian Land?

**ACTION BY WRITTEN CONSENT OF THE MANAGERS OF AC MANAGEMENT GP, LLC**

**THE UNDERSIGNED**, being the managers of AC Management GP, LLC, a Utah limited liability company (the "**Company**"), hereby adopt the following resolutions by written consent:

**WHEREAS,** the Company is the general partner of Areté Collective, LP ("**Areté**'"); and

**WHEREAS,** the Company, in its capacity as the general partner of Arete', desires to appoint certain individuals to act as officers of Areté for the purpose of overseeing the day-to-day administration of the business of Areté.

**A. APPOINTMENT OF OFFICERS**

**RESOLVED**, that the following individuals are hereby appointed to serve as executive officers of Areté, to carry out the day-to-day administration of the business of Areté, subject to the direction and oversight of the Company:

| Name | Title |
|---|---|
| Rebecca Buchan | Chief Executive Officer |
| Thomas Hogan | Chief Financial Officer |
| Joey Buchan | President, Secretary and Treasurer |
| Faith Hogan | Chief Talent Officer |
| Kerry Hing | Chief Operating Officer |

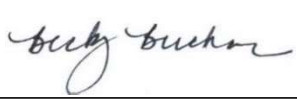
**B. AUTHORIZATION OF PAST AND FURTHER ACTIONS**

**RESOLVED,** that the executive officers appointed herein are, and each of them hereby is, authorized and directed, for and on behalf of Areté, to execute all documents and take such further action as they may deem necessary, appropriate or advisable to effect the purposes of the foregoing resolution; and

**RESOLVED FURTHER**, that any and all actions heretofore taken by any executive officer in connection with the carrying out of the business of Areté are hereby ratified, adopted, approved and confirmed in all respects as authorized acts in the name and on behalf of Areté.

**IN WITNESS WHEREOF**, the undersigned, being all of the managers of the Company, do hereby adopt the foregoing resolutions by Written Consent. This Action may be executed in counterparts and delivered by facsimile or other electronic transmission, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

**MANAGERS OF THE COMPANY:**



By: _____
Name: Rebecca Buchan
Date: 7/13/2022



By: _____
Name: Thomas Hogan
Date: 7/13/2022

# Comisión de Calidad Ambiental del Estado de Texas

**AVISO DE RECIBO DE LA SOLICITUD Y**
**EL INTENTO DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA**

**PERMISO PROPUESTO NO. WQ00**

**SOLICITUD.** *Arete Thomas Ranch Holdings, LLC C/O Allen Boone Humphries Robinson LLP, 919 Congress Avenue, Suite 1500, Austin, Texas 78701* ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para el propuesto Permiso No. WQ0016769001 de disposición de aguas residuales para autorizar la disposición de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de *510,000* galones por día mediante *aplicación superficial y riego.* La planta y el área de disposición estarán ubicados *aproximadamente a 1,2 millas al noroeste de la intersección de Paleface Ranch Road y State Highway 71, cerca de la ciudad de Austin,* en el Condado de *Travis*, Texas *78669.* La TCEQ recibió esta solicitud el *7 de abril de 2025*. La solicitud para el permiso estará disponible para leerla y copiarla en *Spicewood Community Library, Recepción, 1011 Spur 191, Spicewood, en el condado de Burnet y en Laura Bush Community Library, Recepción, 9411 Bee Caves Rd., Austin, en el condado de Travis* antes de la fecha de publicación de este aviso en el periódico. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications.
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=-98.10984,30.426025&level=18*

*[Include the following non-italicized sentence if the facility is located in the Coastal Management Program boundary. The Coastal Management Program boundary is the area along the Texas Coast of the Gulf of México as depicted on the map in 31 TAC §503.1 and includes part or all of the following counties: Cameron, Willacy, Kenedy, Kleberg, Nueces, San Patricio, Aransas, Refugio, Calhoun, Victoria, Jackson, Matagorda, Brazoria, Galveston, Harris, Chambers, Jefferson y Orange.]* El Director Ejecutivo de la TCEQ ha revisado esta medida para ver si está de acuerdo con los objetivos y las regulaciones del Programa de Administración Costero de Texas (CMP) de acuerdo con las regulaciones del Consejo Coordinador de la Costa (CCC) y ha determinado que la acción es conforme con las metas y regulaciones pertinentes del CMP.

**AVISO DE IDIOMA ALTERNATIVO.** El aviso de idioma alternativo en español está disponible en https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications.

**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.**

**LISTA DE CORREO.** Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos del solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado especifico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

**INFORMACIÓN DISPONIBLE EN LÍNEA.** Para detalles sobre el estado de la solicitud, favor de visitar la Base de Datos Integrada de los Comisionados en www.tceq.texas.gov/goto/cid. Para buscar en la base de datos, utilizar el número de permiso para esta solicitud que aparece en la parte superior de este aviso.

**CONTACTOS E INFORMACIÓN A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía http://www14.tceq.texas.gov/epic/eComment/ o por escrito dirigidos a la Comisión de Texas de Calidad Ambiental, Oficial de la Secretaría (Office of Chief Clerk), MC-105, P.O. Box 13087, Austin, Texas 78711-3087.** Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Para obtener más información acerca de esta solicitud de permiso o el proceso de permisos, llame al programa de educación pública de la TCEQ, gratis, al 1-800-687-4040. Si desea información en Español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional del *Arete Thomas Ranch Holdings, LLC* a la dirección indicada arriba o llamando a *Ms. Behnaz Jalili, PhD, P.E., Kimley-Horn and Associates, Inc.* al *512-518-5596*.

Fecha de emisión: *[Date notice issued]*

**CONFIDENTIAL**

# ARETÉ COLLECTIVE, LP

## AMENDED AND RESTATED LIMITED PARTNERSHIP AGREEMENT

**October 1, 2022**

THE PARTNERSHIP INTERESTS REPRESENTED BY THIS AMENDED AND RESTATED AGREEMENT OF LIMITED PARTNERSHIP HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR UNDER ANY OTHER APPLICABLE SECURITIES LAWS. SUCH UNITS MAY NOT BE SOLD, ASSIGNED, PLEDGED, TRANSFERRED OR OTHERWISE DISPOSED OF AT ANY TIME WITHOUT EFFECTIVE REGISTRATION UNDER SUCH ACT AND LAWS OR AN EXEMPTION THEREFROM, AND IN COMPLIANCE WITH THE OTHER RESTRICTIONS ON TRANSFERABILITY SET FORTH HEREIN.

CERTAIN OF THE PARTNERSHIP INTERESTS REPRESENTED BY THIS AGREEMENT OF LIMITED PARTNERSHIP MAY ALSO BE SUBJECT TO ADDITIONAL RESTRICTIONS ON TRANSFER, VESTING PROVISIONS, REPURCHASE OPTIONS, OFFSET RIGHTS AND FORFEITURE PROVISIONS SET FORTH HEREIN AND/OR IN A SEPARATE AGREEMENT WITH THE INITIAL HOLDER OF SUCH PARTNERSHIP INTERESTS. A COPY OF ANY SUCH AGREEMENT MAY BE OBTAINED FROM THE PARTNERSHIP BY THE HOLDER OF SUCH PARTNERSHIP INTERESTS UPON WRITTEN REQUEST AND WITHOUT CHARGE.

**ARETÉ COLLECTIVE, LP**
**AMENDED AND RESTATED LIMITED PARTNERSHIP AGREEMENT**

THIS AMENDED AND RESTATED LIMITED PARTNERSHIP AGREEMENT of Areté Collective, LP, a Utah limited partnership (the "**Partnership**"), is entered into as of October 1, 2022, by and among the General Partner and the Limited Partners.

**WHEREAS**, the Partnership was formed pursuant to the filing of a certificate of limited partnership with the Secretary of State of the State of Utah on May 28, 2021 (the "**Certificate**");

**WHEREAS**, the Partnership, the General Partner and certain Limited Partners executed and delivered that certain Limited Partnership Agreement, dated effective as of May 28, 2021 (the "**Original Partnership Agreement**");

**WHEREAS**, the Partnership, the General Partner and the Limited Partners desire, and have agreed, to enter into this Agreement to amend, restate and supersede the Original Partnership Agreement in its entirety as set forth in this Agreement; and

**WHEREAS**, in connection with the above-referenced transactions, the parties hereto desire to enter into this Agreement to set forth their agreements concerning the Partnership.

**NOW, THEREFORE**, in consideration of the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound, hereby agree as follows:

## ARTICLE I

## DEFINITIONS

Capitalized terms used but not otherwise defined herein shall have the following meanings:

"**Additional Limited Partner**" means a Person admitted to the Partnership as a Partner pursuant to Section 10.2.

"**Affiliate**" of any particular Person means (i) any other Person controlling, controlled by or under common control or common investment management with such particular Person, where "control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person whether through the ownership of voting securities, by contract or otherwise, and such "control" shall be conclusively presumed if any Person owns ten percent (10%) or more of the voting capital stock or other equity securities, directly or indirectly, of any other Person and/or (ii) if such Person (other than the Partnership) is a partnership (including limited partnership) or limited liability company, any partner or member thereof.

"**Agreement**" means this Amended and Restated Limited Partnership Agreement, as the same may be further amended, restated, modified or waived from time to time in accordance with the terms hereof.

"**Applicable Tax Rate**" means, for any calendar year, the highest maximum combined marginal federal, state and local income tax rate applicable to any Unitholder (or any pass-through Holder's partners or members and including any Taxes imposed under Code Section 1411) residing in the United States but taking into account the character of the Partnership's and its Subsidiaries' income and the deductibility (to

"**Family Group**" means, as to any particular Person, (i) such Person's spouse and descendants (whether natural or adopted), (ii) any trust solely for the benefit of such Person and/or such Person's spouse and/or descendants and (iii) any partnerships, corporations or limited liability companies where the only partners, shareholders or members are such Person and/or such Person's spouse, descendants and/or trusts referred to in clause (ii) of this definition.

"**Founding Holder Sale Option**" has the meaning set forth in Section 9.12(a).

"**Founding Holders**" means each of Rebecca Buchan, Joey Buchan or Thomas Hogan.

"**FINRA**" means the Financial Industry Regulatory Authority.

"**First Holder Notice**" has the meaning set forth in Section 9.11(a)(iii).

"**Fiscal Year**" means the twelve (12) month period ending on December 31, or such other annual accounting period as may be established by the General Partner or as required by the Code.

"**Forfeiture Allocations**" has the meaning set forth in Section 4.3.

"**Fully-Diluted Basis**" means the aggregate number of Units outstanding at any time, which shall be equal to (i) the Class A Units outstanding at such time, plus (ii) the number of Incentive Units outstanding at such time.

"**GAAP**" means United States generally accepted accounting principles, consistently applied.

"**General Partner**" means AC Management GP, LLC, a Utah limited liability company, in its capacity as the general partner of the Partnership.

"**General Partner Interest**" means, with respect to a General Partner, the non-economic interest in the Partnership held by such General Partner.

"**Good Reason**" shall have the meaning assigned to such term in the applicable Executive Partner's employment agreement with the Partnership or any of its Subsidiaries; provided, however, if such Executive Partner does not have an employment agreement with the Partnership or any of its Subsidiaries or such term is not defined in such employment agreement, then such Executive Partner shall not be eligible to be treated as having terminated employment or other service with the Partnership or any of its Subsidiaries for Good Reason.

"**Governmental Entity**" means (i) any federal, state, local, municipal, non-U.S. or other government, (ii) any governmental or quasi-governmental authority of any nature (including any governmental agency, branch, department, official, entity or self-regulatory organization and any court or other tribunal), (iii) any body exercising, or entitled to exercise, any administrative, executive, judicial, legislative, police, regulatory or taxing authority or power of any nature, including any arbitral tribunal, or (iv) any agency, authority, general partner, bureau, commission, department, office or instrumentality of any nature whatsoever of any federal, state, province, local, municipal or non-U.S. government or other political subdivision or otherwise, or any officer or official thereof with requisite authority.

"**Guaranteed Payments**" has the meaning set forth in Section 4.9.

"**Holder**" means any Unitholder or any Person that retains voting control of any Units Transferred in accordance with Section 9.1.

any payment to a Governmental Entity that is specifically attributable to a Unitholder (including income allocable to such Unitholder) or a Unitholder's status as such (including federal or state withholding taxes, state personal property taxes, state unincorporated business taxes and taxes arising under Section 1446(f) of the Code) or "imputed underpayment" (within the meaning of Code Section 6225) properly attributed to such Unitholder in accordance with this Agreement, then such Unitholder shall indemnify the Partnership in full for (and contribute to the Partnership) in full for the entire amount paid (including interest, penalties and related expenses). The General Partner may offset Distributions to which a Unitholder is otherwise entitled under this Agreement against such Unitholder's obligation to indemnify the Partnership under this Section 4.8. A Unitholder's obligation to indemnify and make contributions to the Partnership under this Section 4.8 shall survive the termination, dissolution, liquidation and winding up of the Partnership, and for purposes of this Section 4.8, the Partnership shall be treated as continuing in existence. For the avoidance of doubt, any imputed underpayment (or any similar state or local Tax amounts) or penalties and interest related thereto and payable by the Partnership or any fiscally transparent entity in which the Partnership owns an interest shall be treated as specifically attributable to the Unitholders and the General Partner shall use commercially reasonable efforts to allocate the burden of (or any diminution in distributable proceeds resulting from) any such Taxes, penalties or interest to those Unitholders to whom such amounts are specifically attributable (whether as a result of their status, actions, inactions or otherwise), as determined in accordance with Section 8.3 of this Agreement by the General Partner. Each Unitholder shall furnish to the Partnership from time to time all such information as is required by applicable law for purposes of determining the Partnership's obligations in respect of any Tax withholdings or otherwise reasonably requested by the Partnership Representative to the extent necessary for making such determinations (including, without limitation (i) certificates in the form prescribed by the Code, including Forms W-8 and W-9 and (ii) any information or documentation otherwise required by any current or future Treasury Regulation or official interpretations with respect to Code Section 1446(f)).

4.9 Guaranteed Payments. Notwithstanding anything contained herein to the contrary, the General Partner from time to time may cause the Partnership to make annual (or other periodic) payments ("**Guaranteed Payments**") to the Holders of Class A Units, in such amounts and to such Holders of Class A Units as may be determined by the General Partner. To the extent the General Partner establishes such periodic amounts, each Holder of Class A Units subject to receipt of a Guaranteed Payment may, upon notice to the General Partner, request payment of its undrawn amount from time to time during the applicable period. Such requested amounts shall be paid by the Partnership within five (5) business days of such request. In any event, all undrawn amounts with respect to a Holder of Class A Units that were not subject to a payment request shall be paid no later than the close of the period with respect to which such periodic amount applies. The General Partner, with the consent of all Holders of Class A Units, may establish such other procedures for making Guaranteed Payments and/or determining the amount thereof, whether or not consistent with the above, as the General Partner may determine. For the avoidance of doubt, Guaranteed Payments shall not be treated as Distributions under this Agreement and shall not be offset against Distributions to which a holder of Class A Units is entitled under Section 4.2 or otherwise under this Agreement.

## ARTICLE V

## MANAGEMENT

5.1 Authority of General Partner. The management and administration of the Partnership shall be vested exclusively in the General Partner. The General Partner shall have all of the rights and powers of a general partner as provided under the Partnership Act and as otherwise provided by law, and any action taken by the General Partner shall constitute the act of and serve to bind the Partnership. Without limiting the generality of the foregoing, the General Partner shall exercise all rights and powers of the Partnership (whether such rights and powers are granted to the Partnership under the terms of an agreement to which

the Partnership is a party, arise as a result of the Partnership's ownership of securities or otherwise), including to (w) make distributions and sell assets of the Partnership or enter into any agreement regarding, and approve on behalf of the Partnership and all of the Holders, a Sale of the Partnership, or any merger, consolidation or other acquisition, disposition, reorganization or recapitalization transaction involving the Partnership or any of its Subsidiaries, (x) delegate such management duties and responsibilities to such other Person or Persons designated by it as it may determine (including Affiliates of the General Partner or any of its beneficial owners, equityholders and other related Persons), (y) amend or consent to an amendment, restatement, modification or waiver of any Employment Agreement, any Equity Agreement or this Agreement and to take actions, give or withhold consents or approvals, waive or require the satisfaction of conditions or make determinations, opinions, judgments or other decisions that are granted to the Partnership or any of its Subsidiaries under any Equity Agreement or any Subsidiary's constituent documents and (z) employ, on behalf of the Partnership, such Persons (including accountants and attorneys) as it deems advisable for the conduct of the business of the Partnership, on such terms and for such compensation as the General Partner may determine. The General Partner shall have the right to determine the timing, amount and other terms of any equity investment in the Partnership and to effect amendments to this Agreement in order to effectuate such equity investments.

5.2 Purchase of Units. Subject to the provisions of this Agreement and the terms of any other agreement to which the Partnership may be bound, the General Partner may cause the Partnership to purchase or otherwise acquire Units; provided that this provision shall not in and of itself obligate any Unitholder to sell any Units to the Partnership. So long as any such Units are owned by the Partnership such Units will not be considered issued or outstanding for any purpose.

5.3 Limitation of Liability.

(a) Waiver of Liability. Except as otherwise provided herein or in any agreement entered into by such Person and the Partnership or any of its Subsidiaries and to the maximum extent permitted by the Utah Act, no present or former officer or General Partner nor any such officer or General Partner's Affiliates, employees, agents or representatives shall be liable to the Partnership or to any Partner for any act or omission performed or omitted by such Person in its capacity as an officer or General Partner; provided that, except as otherwise provided herein, such limitation of liability shall not apply to the extent the act or omission was attributable to such Person's gross negligence, willful misconduct, bad faith, fraud or knowing violation of law, in each case as determined by a final judgment, order or decree of an arbitrator or a court of competent jurisdiction (which is not appealable or with respect to which the time for appeal therefrom has expired and no appeal has been perfected). Each officer and General Partner shall be entitled to rely upon the advice of legal counsel, independent public accountants and other experts, including financial advisors, and any act of or failure to act by such officer or General Partner in good faith reliance on such advice shall in no event subject such officer or General Partner or any of such officer or General Partner's Affiliates, employees, agents or representatives to liability to the Partnership or any Partner.

(b) General Partner Discretion. Whenever in this Agreement or any other agreement contemplated herein the General Partner is permitted or required to take any action or to make a decision or determination, the General Partner shall take such action or make such decision or determination in its sole discretion, unless another standard is expressly set forth herein or therein. Whenever in this Agreement or any other agreement contemplated herein the General Partner is permitted or required to take any action or to make a decision or determination in its "sole discretion" or "discretion," with "complete discretion" or under a grant of similar authority or latitude, the General Partner shall be entitled to consider such interests and factors as the General Partner desires (including the interests of the General Partner's Affiliates as Unitholders) so long as the General Partner does not act in bad faith.

(c) Good Faith and Other Standards. Whenever in this Agreement or any other agreement contemplated herein the General Partner is permitted or required to take any action or to make a decision or determination in its "good faith" or under another express standard, the General Partner shall act under such express standard and, to the extent permitted by applicable law, shall not be subject to any other or different standards imposed by this Agreement or any other agreement contemplated herein and, notwithstanding anything contained herein to the contrary, so long as the General Partner acts in good faith, the resolution, action or terms so made, taken or provided by the General Partner shall not constitute a breach of this Agreement or any other agreement contemplated herein or impose liability upon the General Partner or any of the General Partner's Affiliates, employees, agents or representatives. With respect to any action taken or decision or determination made by the General Partner, it shall be presumed that the General Partner acted in good faith and in compliance with this Agreement and the Utah Act and any Person bringing, pleading or prosecuting any claim with respect to any action taken or decision or determination made by the General Partner shall have the burden of overcoming such presumption; provided that, for the avoidance of doubt, this sentence shall not be deemed to increase or place any duty of care or loyalty on the General Partner.

(d) Limitation of Duties; Conflict of Interest. To the maximum extent permitted by applicable law, the Partnership and each Partner and Unitholder hereby waives any claim or cause of action against the General Partner and each Partner (other than claims or causes of action against any Executive Partner or Executive in his or her capacity as an officer, board member, employee or service provider of the Partnership or any of its Subsidiaries) and their respective Affiliates, employees, agents and representatives for any breach of any fiduciary duty to the Partnership or its Partners or Unitholders or any of the Partnership's Subsidiaries by any such Person, including as may result from any conflict of interest, including a conflict of interest between the Partnership or its Partners or Unitholders or any of the Partnership's Subsidiaries and such Person or otherwise, any breach of loyalty or any breach of the duty of care; provided that, with respect to actions or omissions by the General Partner, such waiver shall not apply to the extent the act or omission was attributable to the General Partner's gross negligence, willful misconduct, bad faith, fraud or knowing violation of law, in each case as determined by a final judgment, order or decree of an arbitrator or a court of competent jurisdiction (which is not appealable or with respect to which the time for appeal therefrom has expired and no appeal has been perfected). Each Partner and Unitholder acknowledges and agrees that in the event of any such conflict of interest, each such Person (in the absence of bad faith) may act in the best interests of such Person or its Affiliates, employees, agents and representatives. No Partner (other than any Executive Partner or Executive in his or her capacity as an officer, board member, employee or service provider of the Partnership or any of its Subsidiaries) shall be obligated to give any consideration to any interest of or factors affecting the Partnership or any of its Subsidiaries or the Partnership's Partners or Unitholders, or to recommend or take any action in its capacity as a Partner that prefers the interests of the Partnership or any of its Subsidiaries or the Partnership's Partners or Unitholders over the interests of such Person or its Affiliates, employees, agents or representatives, and each of the Partnership and each Partner and Unitholder hereby waives the fiduciary duty, if any, of such Person to the Partnership or its Partners or Unitholders, including in the event of any such conflict of interest or otherwise; provided that, with respect to actions or omissions by the General Partner, such waiver shall not apply to the extent the act or omission was attributable to the General Partner's gross negligence, willful misconduct, bad faith, fraud or knowing violation of law, in each case as determined by a final judgment, order or decree of an arbitrator or a court of competent jurisdiction (which is not appealable or with respect to which the time for appeal therefrom has expired and no appeal has been perfected). The provisions of this Agreement, to the extent that they restrict the duties (including fiduciary duties) and liabilities of an Indemnified Person otherwise existing at law or in equity, are agreed by the Partnership, each Partner and each Unitholder to replace such other duties and liabilities of such Indemnified Person. Except as expressly set forth herein or in another agreement between such Indemnified Person and the Partnership or any of its Subsidiaries, to the fullest extent permitted by applicable law no Indemnified Person will have any fiduciary

duties to the Partnership, any Partner or any Unitholder and will otherwise not have any obligations other than such obligations as specifically provided by this Agreement or any such other agreement.

(e) Designation and Duties of Officers. The General Partner may from time to time designate individuals as officers of the Partnership and any such officers shall have such authority and perform such duties as the General Partner may from time to time delegate to them and shall serve at the will of the General Partner. The officers of the Partnership and its Subsidiaries, in the performance of their duties as such, shall owe to the Partnership and its Subsidiaries fiduciary duties (including of loyalty and due care) of the type owed by the officers of a corporation to such corporation and its stockholders under the laws of the State of Utah.

(f) Effect on Other Agreements. This Section 5.3 shall not in any way affect, limit or modify any Person's duties, liabilities or obligations under any Equity Agreement, Employment Agreement, confidentiality agreement, noncompetition agreement, non-solicitation agreement or any similar agreement with the Partnership or any of its Subsidiaries.

## ARTICLE VI

## RIGHTS AND OBLIGATIONS OF UNITHOLDERS AND PARTNERS

6.1 Limitation of Liability; Return of Distributions. Except as otherwise provided by the Utah Act, the debts, obligations and liabilities of the Partnership, whether arising in contract, tort or otherwise, shall be solely the debts, obligations and liabilities of the Partnership and no Unitholder or Partner shall be obligated personally for any such debt, obligation or liability of the Partnership solely by reason of being a Unitholder or acting as a Partner of the Partnership, other than such Unitholder's obligation to make Capital Contributions to the Partnership pursuant to the terms and conditions hereof or of any Equity Agreement or any other agreement respecting the issuance and sale or grant of Equity Securities. Except as expressly set forth in this Agreement or as otherwise required by law, no Unitholder shall be obligated by this Agreement to return any Distribution or Tax Distribution to the Partnership or pay the amount of any Distribution or Tax Distribution for the account of the Partnership or to any creditor of the Partnership; provided that a Unitholder shall be required to return to the Partnership any Distribution or Tax Distribution made to it in clear and manifest accounting or similar error (which the General Partner may elect to effectuate through reductions in subsequent Distributions or Tax Distributions to such other Unitholders). Notwithstanding the foregoing sentence, if any court of competent jurisdiction holds that, notwithstanding this Agreement, any Unitholder is obligated to return or pay any part of any Distribution or Tax Distribution, then such obligation shall bind such Unitholder alone and not any other Unitholder or any Partner; provided that if any Unitholder is required to return all or any portion of any Distribution or Tax Distribution under circumstances that are not unique to such Unitholder but that would have been applicable to other Unitholders if such Unitholders had been named in the action against the Unitholder in question (such as where a Distribution or Tax Distribution was made to all Unitholders and rendered the Partnership insolvent, but only one Unitholder was sued for the return of such Distribution or Tax Distribution), then the Unitholder that was required to return or repay the Distribution or Tax Distribution (or any portion thereof) shall be entitled to reimbursement from the other Unitholders that were not required to return the Distribution or Tax Distribution made to them based on each such Unitholder's share of the Distribution or Tax Distribution in question (which the General Partner may elect to effectuate through reductions in subsequent Distributions or Tax Distributions to such other Unitholders). The provisions of the immediately preceding sentence are solely for the benefit of the Unitholders and shall not be construed as benefiting any third party. The amount of any Distribution or Tax Distribution returned to the Partnership by a Unitholder or paid by a Unitholder for the account of the Partnership or to a creditor of the Partnership shall be added to the account or accounts from which it was subtracted when it was distributed to such Unitholder. The preceding sentences of this Section 6.1 shall constitute a compromise to which all

**IN WITNESS WHEREOF**, the undersigned have duly executed or caused to be duly executed on their behalf this Amended and Restated Limited Partnership Agreement as of the date first written above.

**GENERAL PARTNER:**

**AC MANAGEMENT GP, LLC**

By: _____
Name: Thomas Hogan
Title: Manager

**IN WITNESS WHEREOF**, the undersigned have duly executed or caused to be duly executed on their behalf this Amended and Restated Limited Partnership Agreement as of the date first written above.

**LIMITED PARTNERS:**

REBECCA BUCHAN AND JOEY BUCHAN, JOINT TENANTS, as joint tenants with right of survivorship

By:_____
Rebecca Buchan

By:_____
Joey Buchan

DENTON HOUSE HOLDCO, INC.

By:_____
Name: Rebecca Buchan
Its: President

THOMAS HOGAN

By:_____
Thomas Hogan

# OPERATING AGREEMENT
# FOR
# ARETÉ THOMAS RANCH HOLDINGS, LLC

This Limited Liability Company Operating Agreement (this "**Agreement**") is made as of the 1st day of December 2021, by Areté Thomas Ranch Holdings, LLC, a Utah limited liability company (the "**Company**"), and Areté Collective, LP, a Utah limited partnership ("**Working Member**"), and Thomas Ranch Wasatch, LLC, a Utah limited liability company ("**Capital Member**"), (each a "**Member**," and collectively, the "**Members**"), with reference to the following facts.

A. The Members desire to form a company for the express purchase of acquiring ownership of certain real property referred to as "The Thomas Ranch" and more particularly described on Exhibit A hereto (the "**Property**") and developing such property for eventual commercialization.

B. The Members have formed a Utah limited liability company in accordance with Title 48, Chapter 3a, of the Utah Code, sometimes known as the Utah Revised Uniform Limited Liability Company Act (the "**Act**"), for the purposes and on the terms, covenants and conditions set forth herein.

C. The Members have caused to be executed a Certificate of Organization for the Company under the Act and have forthwith delivered and caused the same to be filed with the Division of Corporations and Commercial Code of the Department of Commerce, State of Utah.

D. The Members have each reviewed this Agreement, in its entirety, and desire to cause the same to be adopted as and for the Operating Agreement of the Company, in accordance with the Act.

NOW, THEREFORE, the Members by this Agreement set forth the limited liability company operating agreement for the Company upon the terms and subject to the condition of this Agreement.

## ARTICLE I. ORGANIZATIONAL MATTERS.

**1.1. Name.** The name of the Company shall be "Areté Thomas Ranch Holdings, LLC." The Company may conduct business under that name or any other name approved by the Board.

**1.2. Term.** The term of the Company shall commence on the date of the filing of the Certificate of Organization with the Division of Corporations and Commercial Code of the Department of Commerce, State of Utah and shall continue until the Company is dissolved in accordance with this Agreement or by law.

**1.3. Office and Agent.** The Company shall continuously maintain an office and registered agent in the State of Utah as required by the Act. The principal office of the Company shall be at 4670 South Holladay Village Plaza, Suite 200, Salt Lake City, UT 84117, or such location as the Members may determine. The registered agent shall be as stated in the Certificate of Formation or as otherwise determined by the Board.

**1.4. Business of the Company.** The Company shall engage solely in the business of, directly or indirectly, through one or more entities: (a) purchasing, owning, financing, refinancing, rehabilitating, developing, operating, leasing, managing, holding for investment, exchanging, selling, and disposing of certain real property known as the "Thomas Ranch" located in Austin, TX and more particularly described on Exhibit A hereto (the

i. File any voluntary petition for the Company under the United States Code, the Bankruptcy Act, or seek the protection of any other Federal or State bankruptcy or insolvency law or debtor relief statute.

j. Guaranty the payment of any money, or debt of another person, or guaranty the performance of any other obligation of another person.

k. Grant any general power of attorney or other unlimited authority to act on behalf or in the name of the Company.

l. Make any other decision or take any other action which by any provision of this Agreement is required to be approved by the Board.

m. Do any act in contravention of this Agreement.

**4.4. Working Member**

a. **Working Member Responsibilities**.

1. The Working Member shall have exclusive responsibility and authority for the day-to-day management and operation of the business and affairs of the Company in accordance with the Approved Budget and the direction of the Board. The Working Member accepts and agrees to perform its duties and undertake its responsibilities set forth in this Agreement.

2. Additionally, the Working Member shall have development management responsibilities and shall serve as the "**Development Manager**" for the Property and shall provide the Development Management Services set forth on Exhibit C hereto. The Working Member shall prepare the Annual Budget and submit it to the Board for approval. The Working Member shall work to develop the Property within the Approved Budget.

b. **Limitation on Authority of Working Member for Major Decisions**. Notwithstanding any provision of this Agreement to the contrary, the Working Member shall not, in the exercise of its general control and decision-making authority take or cause the Company to take any Major Decision set forth in Section 4.3, without in each instance first obtaining approval of the Board.

c. **Employees**. All persons engaged by the Working Member in connection with its services hereunder shall be either Working Member's employees or its agents or independent contractors and, in any event, shall not be employees of the Company. The Working Member shall be solely responsible for the salaries of its employees and any employee benefits to which such employees may claim to be entitled.

d. **Removal of Working Member**.

1. Notwithstanding anything in this Agreement to the contrary, if a Removal Event has occurred in the good faith determination of the Capital Member, the Capital Member shall have the unilateral right, by written notice to the Working Member given at any time after obtaining actual awareness of the occurrence of the Removal Event (such notice, the "**Removal Notice**"), to remove the Working Member from managing the Company and to designate a new manager of the Company or become the replacement working member of the Company. The Removal Notice shall specify with particularity the basis for removal and

shall become effective the later of: (i) ten (10) days after the date of the Removal Notice; or (ii) the date set forth in the Removal Notice (the "**Removal Date**").

2. Working Member's Rights Upon Removal. If the Working Member is removed, as of the Removal Date:

   (i) The powers and authorities granted to the Working Member hereunder shall terminate and be of no force or effect; and

   (ii) The Capital Member shall have the power and authority to propose and unilaterally approve all actions which would otherwise constitute Major Decisions without the necessity for obtaining any consent or approval of the Working Member or the Board.

3. "**Removal Event**" shall mean any of the following:

   (i) The Working Member commits an act involving fraud, willful misconduct, or gross negligence in connection with any of its obligations hereunder or breaches Section 4.3 and fails to cure such breach within ten (10) days written notice of such breach.

   (ii) The misappropriation of funds or property of the Company by the Working Member or any Affiliate of the Working Member; provided that if the Working Member: (i) makes full restitution to the Company within fourteen (14) days of becoming aware of such event; and (ii) takes appropriate action to ensure that the individual who committed such act is: (A) no longer employed by the Working Member or the Affiliate; and (B) no longer otherwise acting on behalf of the Working Member or such Affiliate with respect to the Property, the Company, or the Working Member, then such event shall not constitute a Removal Event.

   (iii) The filing of a petition for bankruptcy by the Working Member or a Dissolution Event of the Working Member occurs.

   (iv) The Working Member makes a general assignment for the benefit of creditors.

**4.5. Capital Member Responsibilities.** The Capital Member shall be responsible for raising capital through the issuance of preferred equity securities in the Company and/or through debt financing for the purpose of providing working capital to the Company, acquiring ownership to the Property and for commercializing, developing, marketing and selling the Property as set forth in Exhibit D, Capital Member Services.

**4.6. Payment of Fees for Services Provided.** In return for the services provided by Working Member and Capital Member set forth above in Section 4.4 and Section 4.5, they shall be compensated as follows:

a. **Development Management Services**. In consideration of the provision of the Development Management Services, the Company shall pay a development management fee equal to five percent (5%) of the Development Costs for Horizontal and Vertical Improvements for the Property (the "**Development Management Fee"**). One percentage point (1% point) of the Development Management Fee shall l be paid directly to the Working Member at the end of each calendar month. The remaining four percentage points (4% points) of the Development Management Fee shall be

INTENDING TO BE BOUND, all of the Members of Areté Thomas Ranch Holdings, LLC, have executed this Agreement, effective as of the date written above.

MEMBERS:

**ARETÉ COLLECTIVE, LP**

By: ~~Rebecca Buchan~~ THOMAS HOLGUIN
Its: Chief ~~Executive~~ FINANCIAL Officer

**THOMAS RANCH WASATCH, LLC**

By: Dell Loy Hansen
Its: Manager

INTENDING TO BE BOUND, all of the Members of Areté Thomas Ranch Holdings, LLC, have executed this Agreement, effective as of the date written above.

MEMBERS:

**ARETÉ COLLECTIVE, LP**

By: Rebecca Buchan
Its: Chief Executive Officer

**THOMAS RANCH WASATCH, LLC**

By: Dell Loy Hansen
Its: Manager

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

# SUMMARY OF APPLICATION IN PLAIN LANGUAGE FOR TPDES OR TLAP PERMIT APPLICATIONS

## Summary of Application (in plain language) Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary of your facility and application as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. You may modify the template as necessary to accurately describe your facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how you will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements. After filling in the information for your facility delete these instructions.

If you are subject to the alternative language notice requirements in 30 TAC Section 39.426, **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package**. For your convenience, a Spanish template has been provided below.

**ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS 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.*

Arete Thomas Ranch, LLC (CN606373215) proposes to operate Thomas Ranch WWTP (RN112190822), a wastewater treatment plant and surface spray irrigation system to dispose of treated effluent. The facility will be located at approximately 1.2 miles northwest of the intersection of State Hwy 71 and Paleface Ranch Rd., in Spicewood, Travis County, Texas 78669. This is a TLAP application to authorize the disposal of treated wastewater at a volume not to exceed 510,000 gallons per day via a surface spray irrigation system on approximately 191 acres. This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain five-day carbonaceous biochemical oxygen demand ($CBOD_5$), total suspended solids (TSS), ammonia nitrogen ($NH_3$-N), total phosphorus, and *Escherichia coli*. Domestic wastewater will be treated by a headworks screen, an aeration basin, a clarifier, an aerobic digester, a chlorine contact chamber, a disk filter, and then disposed of through a surface spray irrigation system.

**PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES o TLAP**

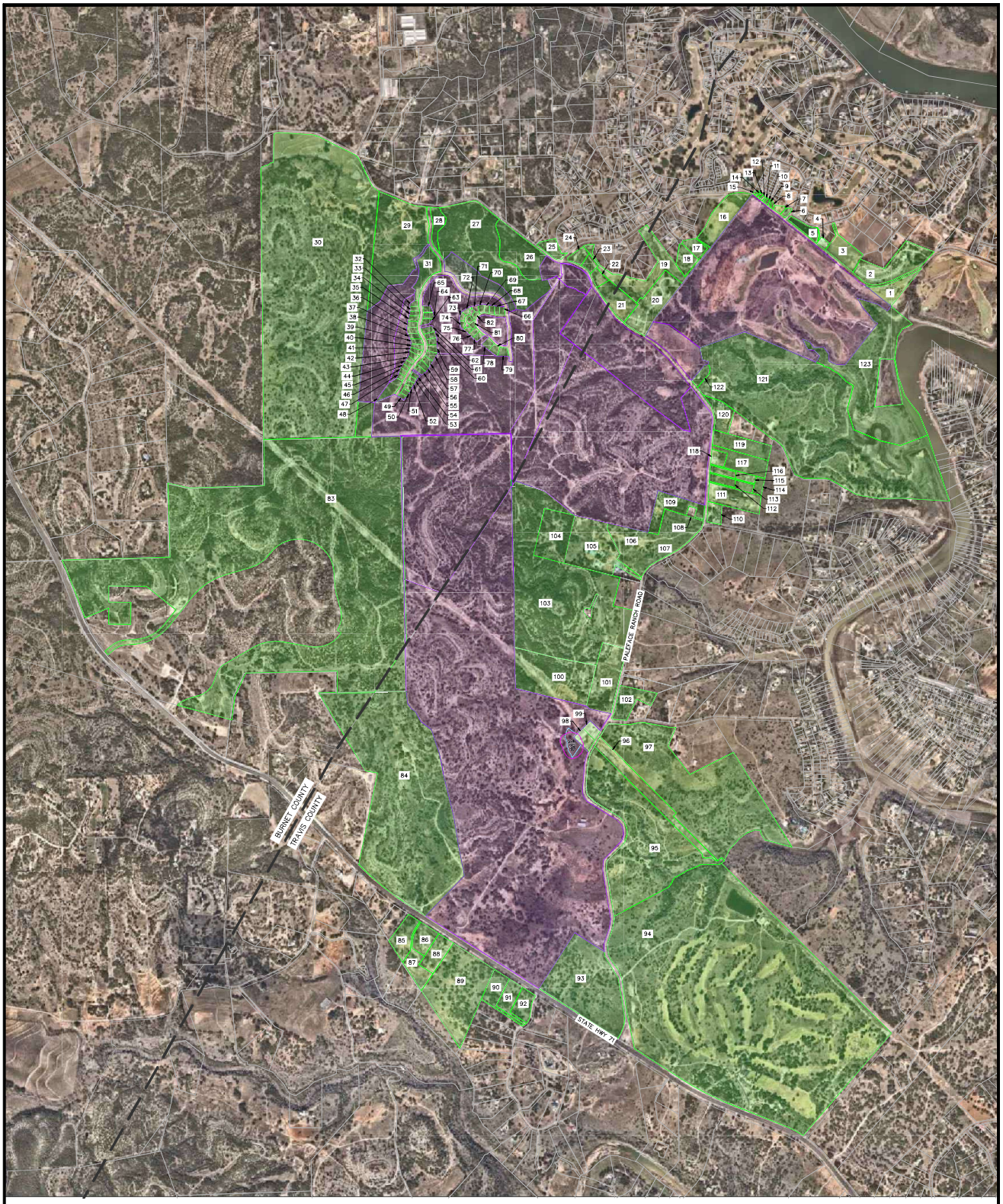
**AGUAS RESIDUALES** DOMÉSTICAS /**AGUAS PLUVIALES**

*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.*

Arete Thomas Ranch, LLC (CN606373215) propone operar Thomas Ranch WWTP (RN112190822), una planta de tratamiento de aguas residuales y sistema de riego por aspersión superficial para disposición del efluente tratado. La instalación estará ubicada en aproximadamente 1,2 millas al noroeste de la intersección de State Hwy 71 y Paleface Ranch Rd , en estará, Condado de Travis, Texas 78669. Esta es una solicitud TLAP para autorizar la eliminación de aguas residuales tratadas en un volumen que no exceda los 510,000 galones por día a través de un sistema de riego por aspersión de superficie en aproximadamente 191 acres.Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno carbonoso, sólidos suspendidos totales, nitrógeno amoniacal, fósforo total y *Escherichia coli*. Aguas residuales domésticas . están tratado por una criba de cabecera, un estanque de aireación, un clarificador, un digestor aeróbico, una cámara de contacto de cloro, un filtro de discos, para luego ser eliminado a través de un sistema de riego por aspersión superficial.

K:\SAU_MR\069406207_Thomas Ranch TLAP\CAD\EXHIBITS\20250218_Affected Landowners Map\Thomas Ranch_Affected Landowners Map.dwg 3/4/2025 10:07 AM




NORTH

GRAPHIC SCALE IN FEET
0 500 1000 2000

LEGEND

- EXISTING PARCEL
- TREATMENT FACILITY PROPERTY BOUNDARY
- 150' BUFFER ZONE
- EFFLUENT DISPOSAL SITE PROPERTY BOUNDARIES
- AFFECTED LANDOWNERS' PROPERTY BOUNDARIES
- XX LANDOWNER ID SEE ATTACHED LANDOWNER LIST

| | |
|---|---|
| DATE: | MARCH 2025 |
| DESIGN: | IMC |
| DRAWN: | BJ |
| CHECKED: | IMC |
| KHA NO.: | 069406207 |

SHEET

AFFECTED LANDOWNERS MAP

THOMAS RANCH WWTP TLAP

THIS DOCUMENT IS INCOMPLETE AND IS RELEASED TEMPORARILY FOR INTERIM REVIEW ONLY. IT IS NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

IAN CLEMENTS P.E.
SERIAL NO. 126771
DATE: SEPTEMBER 2024

Kimley»Horn
Firm No. F-928
5301 Southwest Pkwy, Bldg 3, Suite 100, Austin TX, 78735 P:512-646-2237

| No. | Revision | By | Date |
|---|---|---|---|
| | | | |

LORALOMA BORROWER 1 LLC (2012201)
4670 HOLLIDAY VILLAGE PLZ STE 200
SALT LAKE CITY UT 84117-5291

SW RV PARK LLC (1950604)
413 W 14TH ST STE 208
NEW YORK NY 10014-1023

STROH JOHANN (1679278)
2712 SCARLET OAKS DR
PEARLAND TX 77581-1430

BARTON CREEK RESORT LLC (1371382)
4001 MAPLE AVE STE 500
DALLAS TX 75219-3241

AQUA TEXAS INC (539574)
1106 CLAYTON LN STE 400W
AUSTIN TX 78723-2476

RASHID SOFIA (1752848)
1001 MARLY WAY
AUSTIN TX 78733-3274

CULLEY ROBERT DOUGLAS (316347)
10811 SANS SOUCI PL
AUSTIN TX 78759-5151

LAKE TRAVIS ENCLAVE LLC (1714202)
PO BOX 4263
HORSESHOE BAY TX 78657-4263

LAKE TRAVIS ENCLAVE LLC (1714202)
PO BOX 4263
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PO BOX 4263
HORSESHOE BAY TX 78657-4263

BARTON CREEK RESORT LLC (1371382)
4001 MAPLE AVE STE 500
DALLAS TX 75219-3241

MOTHERAL PAUL H (316416)
1116 SADDLEBROOK CANYON CT
SPICEWOOD TX 78669-1507

KANDY LYDIA SUSAN & (1888991)
3005 MISTY HEIGHTS CV
PFLUGERVILLE TX 78660-3591

CHILDRESS GARY (1445158)
1715 CLUBHHOUSE HILL DR
SPICEWOOD TX 78669-1361

FIRST NATIONAL BANK (1529699)
2305 MANGUM RD
HOUSTON TX 77092-8117

TOM LESLIE LARRY LLC (1729670)
2110 EAGLE CT
SAN ANGELO TX 76904-8064

TOM LESLIE LARRY LLC (1729670)
2110 EAGLE CT
SAN ANGELO TX 76904-8064

CAYMUS HOMES LLC
C/O JAY ELKINS
8904 TIOMBE BEND
AUSTIN, TX 78749

OVERLOOK MARKET LLC
4206 WATERS EDGE COVE
AUSTIN, TX 78731

PATEL PRAKSHA & RUPAL PARMAR
2104 BRIGHTON PARK DR
BAKERSFIELD, CA 93311

ARETE THOMAS RANCH HOLDINGS LLC
ATTN REBECCA BUCHAN
4670 S HOLLADAY VILLAGE PLAZA STE 200
HOLLIDAY, UT 84117

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ATTN REBECCA BUCHAN
4670 S HOLLADAY VILLAGE PLAZA STE 200
HOLLIDAY, UT 84117

JAYCO HOLDINGS II LTD
602 FALL RIVER RD
HOUSTON, TX 77024

ARETE THOMAS RANCH HOLDINGS LLC
ATTN REBECCA BUCHAN
4670 S HOLLADAY VILLAGE PLAZA STE 200
HOLLIDAY, UT 84117

ONX-CANYON WEST LLC
% ONX INC
3200 EARHART DR
CARROLTON, TX 75006

REMINGTON PREMIER LLC (2016358)
595 S RIVERWOODS PKWY STE 400
LOGAN UT 84321

LUNECKI DANIEL K & AUDREY L (113426)
15401 ROCK CREEK
AUSTIN TX 78734-1528

GLASS DELTON (1763855)
401 CAROL ANN DR
AUSTIN TX 78737

SCAMARDO BRIAN A (1456367)
PSC 489 BOX 589
APO AE 09751-0006

SCAMARDO LUKE P & BRIAN A (1346543)
13323 TROTTING PATH
HELOTES TX 78023-4590

MORRISON GARY E INVESTMENTS LTD (1263601)
336 S CONGRESS AVE STE 100
AUSTIN TX 78704-1265

AUSTIN GOLF CLUB (532807)
24900 STATE HIGHWAY 71 W
SPICEWOOD TX 78669-2656

BEILHARZ DAVID & AMY (402615)
1890 JOY RIDGE RD
OCCIDENTAL CA 95465-9215

BEILHARZ DAVID C (1717823)
1223 PALEFACE RANCH RD
SPICEWOOD TX 78669-1392

ETHEREDGE PHILIP LANGDON & (197913)
1401 W 39TH 1/2 ST
AUSTIN TX 78756-3907

LCRA TRANSMISSION SERVICES (299659)
3700 LAKE AUSTIN BLVD
AUSTIN TX 78703-3504

PEDERNALES ELECTRIC (127038)
PO BOX 1
JOHNSON CITY TX 78636-0001

RAMSEY FOSTER & DOVIE IRREVOCABLE TRUST THE (1561171)
PO BOX 309
SPICEWOOD TX 78669-0309

RAMSEY FOSTER & DOVIE IRREVOCABLE TRUST THE (1561171)
PO BOX 309
SPICEWOOD TX 78669-0309

THOMPSON DAVID R & JEANNE A (315640)
26106 RED BRANGUS RD
SPICEWOOD TX 78669-6679

RAMSEY FOSTER & DOVIE IRREVOCABLE TRUST THE (1561171)
PO BOX 309
SPICEWOOD TX 78669-0309

RAMSEY FOSTER & DOVIE IRREVOCABLE TRUST THE(1561171)
PO BOX 309
SPICEWOOD TX 78669-0309

ATRH EQUESTRIAN LLC (1971167)
4670 HOLLIDAY VILLAGE PLZ STE 200
HOLLADAY UT 84117-5291

ARETE THOMAS RANCH HOLDINGS LLC (1989259)
4670 S HOLLADAY VILLAGE PLAZA STE 200
SALT LAKE CITY UT 84117-5291

WPP THOMAS RANCH LLC ETAL (1984159)
595 S 80 E STE 400
LOGAN UT 84321

HILL GENEVA & STEVE (316195)
102 N PALEFACE RANCH RD
SPICEWOOD TX 78669-1339

ARETE THOMAS RANCH HOLDINGS LLC (1989259)
4670 S HOLLADAY VILLAGE PLAZA STE 200
SALT LAKE CITY UT 84117-5291

NAUMANN GLORIA & SHANNON KERLEY (1616251)
109 N PALEFACE RANCH RD
SPICEWOOD TX 78669-1339

BURGOS-VENCES JORGE & (1722328)
1909 CRAZY HORSE PASS
AUSTIN TX 78734-3114

DRMTX INVESTMENTS LLC (1894147)
9060 LONG POINT ROAD
HOUSTON TX 77055-4610

DRMTX INVESTMENTS LLC (1931559)
7635 TIBURON TRL
SUGAR LAND TX 77479-6158

ZLEEP LLC (1914617)
237 PALEFACE RANCH RD S
SPICEWOOD TX 78669-1786

O'MEARA-ARROYO TRUST (1985430)
237 S PALEFACE RANCH RD
SPICEWOOD TX 78669-1786

BONIECKI GARY TRUST (1994422)
233 N PALEFACE RANCH RD
SPICEWOOD TX 78669

CASTLETOP RANCH (316199)
25800 COX CROSSING RD
SPICEWOOD TX 78669-1480

PEDERNALES EMERGENCY SERVICES (507152)
801 BEE CREEK RD
SPICEWOOD TX 78669-2186

CASTLETOP RANCH (316199)
25800 COX CROSSING RD
SPICEWOOD TX 78669-1480

TEAGUE EMITT ERNEST (VLB) (316206)
26317 COX CROSSING RD
SPICEWOOD TX 78669-1338

CASTLETOP RANCH LTD (316200)
3600 N CAPITAL OF TEXAS HWY 320B
AUSTIN TX 78746-3314

LORALOMA BORROWER 1 LLC (2012201)
4670 HOLLIDAY VILLAGE PLZ STE 200
SALT LAKE CITY UT 84117-5291

LORALOMA BORROWER 1 LLC (2012201)
4670 HOLLIDAY VILLAGE PLZ STE 200
SALT LAKE CITY UT 84117-5291

Kimley»Horn

RECEIVED
APR 08 2025
WATER QUALITY DIVISION
TCEQ

April 7, 2025

Texas Commission on Environmental Quality
Applications Review and Processing Team (MC 148)
Building F, Room 2101
12100 Park 35 Circle
Austin, Texas 78753

**RE:** ***Texas Land Application Permit (TLAP) Application for the Thomas Ranch Wastewater Treatment Plant***

Dear Water Quality Team:

This letter serves to transmit the TLAP application for the Thomas Ranch Wastewater Treatment Plant.

The permit application follows this letter within the following attachments:

| | |
|---|---|
| **10053 – Administrative Report 1.0** | |
| Attachment 1. | Copy of Permit Fee |
| Attachment 2. | 10400 – TCEQ Core Data Form |
| Attachment 3. | 20972 – Summary of Application in Plain Language |
| Attachment 4. | 20960 – Public Involvement Plan Form |
| Attachment 5. | Original USGS Topographic Map |
| Attachment 6. | Affected Landowners Map and Landowner List |
| Attachment 7. | Original Photographs and Plot Plan |
| Attachment 8. | Buffer Zone Map |
| **10054 – Technical Report 1.0** | |
| Attachment 9. | Process Flow Diagram |
| Attachment 10. | Site Drawing and WWTP Site Plan |
| **10054 – Technical Report 1.1** | |
| Attachment 11. | Design Calculations and Plant Features |
| Attachment 12. | Wind Rose |
| Attachment 13. | Solids Management Plan |
| **10054 – Domestic Worksheet 3.0** | |
| Attachment 14. | Pond Liner Certification |
| Attachment 15. | Annual Cropping Plan |
| Attachment 16. | Well Reports |
| Attachment 17. | Groundwater Quality Technical Report |
| Attachment 18. | Soil Map |
| Attachment 19. | Soil Analysis |
| **10054 – Domestic Worksheet 3.1** | |
| Attachment 20. | Water Balance |
| Attachment 21. | Recharge Feature Plan |
| Attachment 22. | Soil Evaluation |
| Attachment 23. | Site Preparation Plan |
| Attachment 24. | Soil Sampling/Testing |
| Attachment 25. | FEMA Flood Plain Map |

**From:** Jalili, Behnaz
**To:** Sara Holmes
**Cc:** Hannah Zellner; Clements, Ian; Greener, Lily
**Subject:** RE: Preliminary comments - WQ0016769001 Thomas Ranch WWTF
**Date:** Tuesday, April 29, 2025 2:59:14 PM
**Attachments:** 20250429_TCEQ-Technical NOD Response.pdf
20250423 - Thomas Ranch Water Balance.pdf
20250429 - Site Drawing.pdf
20250429 - Thomas Ranch_Well Map_Pace Bend.pdf
Page 31 - Land Application Sites.pdf
Page 32 - Flood and Runoff Protection.pdf

---

Good afternoon,

Thank you so much for reviewing our permit application. I have attached the response to the technical NOD and associated attachments.

Please let me know if you have any questions or comments.

Thank you,

**Behnaz Jalili, Ph.D., P.E. (TX)**
**Kimley-Horn** | 5301 Southwest Parkway, Building 2, Suite 100, Austin, TX 78735
Direct: **512 518 5596** | Mobile: **806 507 0323**
*Connect with us*: Twitter | LinkedIn | Facebook | Instagram | Kimley-Horn.com

---

**From:** Sara Holmes <Sara.Holmes@tceq.texas.gov>
**Sent:** Tuesday, April 15, 2025 12:01 PM
**To:** Clements, Ian <Ian.Clements@kimley-horn.com>; Jalili, Behnaz <Behnaz.Jalili@kimley-horn.com>
**Cc:** Hannah Zellner <Hannah.Zellner@Tceq.Texas.Gov>
**Subject:** Preliminary comments - WQ0016769001 Thomas Ranch WWTF

> Some people who received this message don't often get email from sara.holmes@tceq.texas.gov. Learn why this is important

Good afternoon,

The Water Quality Assessment (WQA) Team of the Texas Commission on Environmental Quality has completed a preliminary review of the permit application information and identified deficiencies (attached) that must be addressed before the WQA Team can continue with the technical review. The deficient item(s) will require your response in a timely, complete, and accurate manner.

An accurate and complete revised permit application is essential for making recommendations to the commission regarding whether this permit should be issued. Based on the information provided in the application, the executive director does not

have sufficient information to make a recommendation. Therefore, you must send updated technically complete and accurate information within **14 days** (April 29, 2025) of the date of this email.

Any revisions can be sent electronically to me (WQA Team Agronomist) or Hannah Zellner (WQA Team Geologist). If you have any questions, please feel free to contact either Hannah or me.

Thank you,

Sara Holmes
Natural Resource Specialist III
Water Quality Assessment Team
12100 Park 35 Circle
Austin, TX 78753
512-239-4534

Kimley»Horn

April 29, 2025

Sara Holmes and Hannah Zellner
Water Quality Assessment Team
Texas Commission on Environmental Quality

RE: Thomas Ranch WWTP
Permit No.: WQ0016769001
Applicant For A New Permit
Technical Completeness Review

Dear Sara Holmes and Hannah Zelner,

Thank you for reviewing the permit application for technical completeness and informing us of the additional information needed in the letter sent on April 15th, 2025. The responses to your comments are as follows:

1. Domestic Worksheet 3.0, Section 6. Well and Map Information – Intermittent streams and tributaries to the Pedernales River and the Pedernales River itself are shown on the USGS map. Please provide a 100-ft buffer between land application areas and waters in the state. Please indicate this buffer on the USGS map and the site map.
   Response: A 100' buffer is now shown on the USGS map (Attachment "*20250429 - Thomas Ranch_Well Map_Pace Bend*") and on the Site Drawing (Attachment "*20250429 - Site Drawing*").

2. Domestic Worksheet 3.0, Section 7. Groundwater Quality – Please provide this report.
   Response: The groundwater quality technical report is being finalized and will be provided as soon as it is complete.

3. Domestic Worksheet 3.0, Section 2. Land Application Site(s) – Please note that this table only includes one of the proposed flow phases (260,000 GPD). Please include the Final Phase flow (510,000 GPD) if that is the intention for this permit and clarify if the acres will be phased out with the flow phases.
   Response: The initial phase is 260,000 gpd and will require an irrigation area of 97.12 acres. The final phase is 510,000 gpd and will require an irrigation area of 190.4 acres. Page 31 of the Technical Report has been updated and included as an attachment to this document. See Attachment "*Page 31 – Land Application Sites*".

4. Domestic Worksheet 3.0, Section 4. Flood and Runoff Protection – Please fill out the last two boxes of this section.
   Response: The last two boxes of Domestic Worksheet 3.0, Section 4 have been filled out. See Attachment "*Page 32 – Flood and Runoff Protection*".

5. Domestic Worksheet 3.0, Section 8. Soil Map and Soil Analyses – Please submit soil lab analyses. Note that analyses are acceptable as long as the test date is less than one year of the submission of the application.

   Response: Soil samples have been taken and are currently under analysis; we are awaiting results. The report will be provided as soon as we receive them.

6. Domestic Worksheet 3.1, Section 1. Surface Disposal – Please include a design total N loading rate, soil conductivity, and method of application to Part A. of Section 1.

   Response: Soil samples have been taken and are currently under analysis; we are awaiting results. The report will be provided as soon as we receive them.

7. Domestic Worksheet 3.1, Water Balance – The column 5 values for perennial grasses (90% of alfalfa) from Table 5 of Bulletin 6019 should come from Subdivision 7C, with a total of 44.28 inches. Please correct this column.

   Response: Column 5 of the Water Balance has been corrected to have the evapotranspiration values from Table 5 of Bulletin 6019, Subdivision 7C. See Attachment "*20250423 - Thomas Ranch Water Balance*".

You may contact me with any requests or questions at behnaz.jalili@kimley-horn.com or by phone at 512-518-5596.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

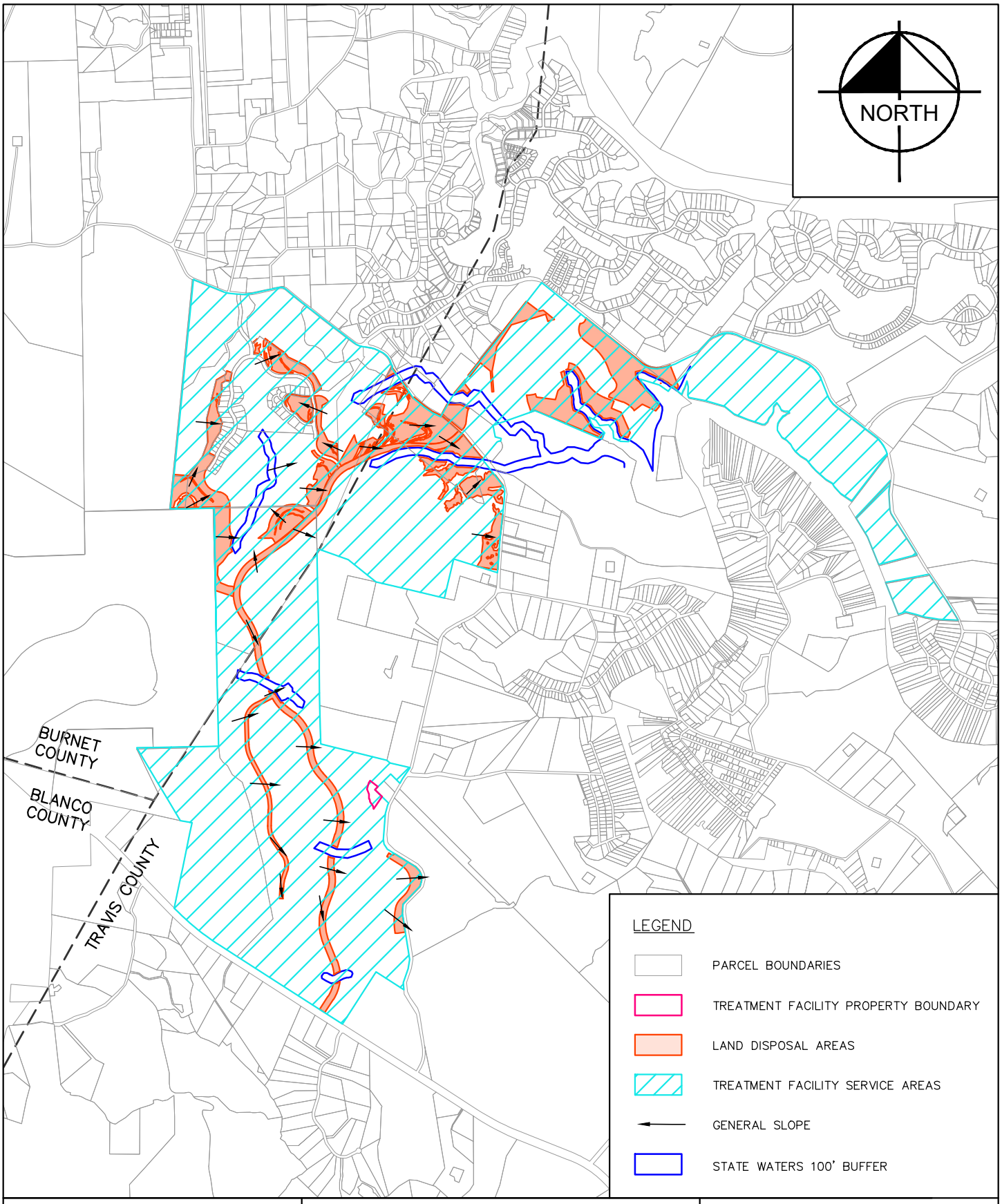
Texas Firm No. 928

Behnaz Jalili

Behnaz Jalili, PhD, P.E.

**Att**achments:

20250429 - Thomas Ranch_Well Map_Pace Bend
20250429 - Site Drawing
Page 31 – Land Application Sites
Page 32 – Flood and Runoff Protection
20250423 – Thomas Ranch Water Balance




GRAPHIC SCALE IN FEET

0 1500 3000 6000

# THOMAS RANCH
## SITE DRAWING
APRIL 2025

Kimley»Horn
5301 Southwest Pkwy, Building 2, Suite 100
Austin, Texas 78735
512-646-2237
State of Texas Registration No. F-928

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

**PACE BEND QUADRANGLE**
**TEXAS**
**7.5-MINUTE SERIES**




**Produced by the United States Geological Survey**
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 14R

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, September 2016 - November 2016
Roads.....U.S. Census Bureau, 2015 - 2019
Names.....GNIS, 1979 - 2021
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2021
Boundaries.....Multiple sources; see metadata file 2019 - 2021

Wetlands.....FWS National Wetlands Inventory Not Available

MN
GN
0°29'
9 MILS
3°54'
69 MILS
UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000-m Square ID
NU
Grid Zone Designation
14R

SCALE 1:24 000
1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 20 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard.

TEXAS
QUADRANGLE LOCATION

1 2 3
4 5
6 7 8
ADJOINING QUADRANGLES
1 Smithwick
2 Travis Peak
3 Nameless
4 Spicewood
5 Mansfield Dam
6 Hammetts Crossing
7 Shingle Hills
8 Bee Cave

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

**PACE BEND, TX**
**2022**

# USGS TOPOGRAPHIC MAP
# PACE BEND QUADRANGLE

## THOMAS RANCH WWTP

APRIL 2025

N

Legend

WWTP Site

1-Mile Radius Offset

Well - BRACS Database

Well - TWDB Groundwater

Well - Well Reports

Well - Plugging Reports

Proposed Irrigation Areas

State Waters 100' Buffer

Kimley»Horn
Expect More. Experience Better.

# DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.0: LAND DISPOSAL OF EFFLUENT

The following is required for renewal, new, and amendment permit applications.

## Section 1. Type of Disposal System (Instructions Page 68)

Identify the method of land disposal:

- ☒ Surface application
- ☒ Irrigation
- ☐ Drip irrigation system
- ☐ Evaporation
- ☐ Subsurface application
- ☐ Subsurface soils absorption
- ☐ Subsurface area drip dispersal system
- ☐ Evapotranspiration beds
- ☐ Other (describe in detail): Click to enter text.

NOTE: All applicants without authorization or proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0.

For existing authorizations, provide Registration Number: N/A

## 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 Overseeded with Rye | 97.1 | 260,000 | Yes |
| Bermuda Overseeded with Rye | 190.4 | 510,000 | Yes |
| | | | |
| | | | |
| | | | |
| | | | |

## 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 |
|---|---|---|---|---|
| 1 | 5.3 | 23 | 500'x520' | synthetic liner |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Attach a copy of a liner certification that was prepared, signed, and sealed by a Texas licensed professional engineer for each pond.

Attachment: Attachment 14

## Section 4. Flood and Runoff Protection (Instructions Page 68)

Is the land application site within the 100-year frequency flood level?

☐ Yes ☒ No

If yes, describe how the site will be protected from inundation.

N/A

Provide the source used to determine the 100-year frequency flood level:

FEMA Product ID: NFHL_48_20250223

Provide a description of tailwater controls and rainfall run-on controls used for the land application site.

The proposed WWTP site is located approximately 1 mile southeast of the proposed irrigation areas and generally slopes towards the south. The proposed irrigation areas span over an area of approximately a one-mile radius and this land generally slopes towards the southeast. The existing grade on both the proposed WWTP site and the proposed irrigation areas effectively eliminate run-on. Run-off of stormwater is minimized to only it's pre-existing amount and intensity by maintaining the natural gentle slope. Irrigation practices prevent run-off of effluent by rotating dosing beds to prevent soil saturation.

Water Balance Calculations

| Month | Average Precipitation | Average Runoff | Average Infiltrated Rainfall (Ri) | EvapoTranspiration | Required Leaching | Total Water Needs (5)+(6) | Effluent Needed in Root Zone (7)-(4) | Evaporation from Reservoir Surface | Effluent to be Applied to Land (8)/K | Consumption from Reservoir (9)+(10) |
|---|---|---|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| January | 1.66 | 0.37 | 1.29 | 0.81 | 0.00 | 0.81 | 0.00 | 0.05 | 0.00 | 0.05 |
| February | 1.92 | 0.51 | 1.41 | 1.17 | 0.00 | 1.17 | 0.00 | 0.05 | 0.00 | 0.05 |
| March | 2.08 | 0.61 | 1.47 | 2.79 | 0.21 | 3.00 | 1.54 | 0.06 | 1.81 | 1.87 |
| April | 2.49 | 0.88 | 1.61 | 3.42 | 0.29 | 3.71 | 2.10 | 0.07 | 2.47 | 2.54 |
| May | 4.20 | 2.21 | 1.99 | 6.12 | 0.67 | 6.79 | 4.79 | 0.12 | 5.64 | 5.76 |
| June | 3.31 | 1.48 | 1.82 | 6.48 | 0.75 | 7.23 | 5.41 | 0.09 | 6.36 | 6.46 |
| July | 1.91 | 0.51 | 1.40 | 6.66 | 0.85 | 7.51 | 6.11 | 0.05 | 7.18 | 7.24 |
| August | 2.11 | 0.63 | 1.48 | 4.59 | 0.50 | 5.09 | 3.61 | 0.06 | 4.25 | 4.31 |
| September | 3.23 | 1.42 | 1.80 | 5.13 | 0.54 | 5.67 | 3.86 | 0.09 | 4.54 | 4.63 |
| October | 3.43 | 1.58 | 1.85 | 4.05 | 0.36 | 4.41 | 2.56 | 0.10 | 3.01 | 3.10 |
| November | 2.23 | 0.70 | 1.52 | 2.07 | 0.09 | 2.16 | 0.64 | 0.06 | 0.75 | 0.81 |
| December | 1.70 | 0.39 | 1.31 | 0.99 | 0.00 | 0.99 | 0.00 | 0.05 | 0.00 | 0.05 |
| Total | 30.27 | 11.31 | 18.96 | 44.28 | 4.26 | 48.54 | 30.62 | 0.84 | 36.02 | 36.86 |
| Column Note References | a) | b) | Ri | c) | d) | | | e) | f) | g) |

(All Units are Inches of Water per Acre of Irrigated Area)

| | |
|---|---|
| Irrigation Efficiency (K) = | 0.85 |
| Curve number (N) = | 80 |
| S = | 2.50 |
| Ce = | 1.39 |
| CI = | 10 |

Water Balance Calculation Notes:

Column (2):
Up-to-date rainfall and evaporation data sets are available from the Texas Natural Resource Information System.

Column (3):
Runoff should be determined by an acceptable method such as the Soil Conservation Service method found in SCS Technical Release No. 55.
A curve number (N) of 80 is appropriate for continuous grass planted in hydrologic soil group D.
Potential maximum retention after runoff begins (S) = 1000/N - 10 = 2.5

Column (5):
Source of values is the "Bulletin 6019, Consumptive Use of Water by Major Crops in Texas" - Area 7C, Texas Board of Water Engineers. Applied 90% of the listed values for alfalfa as noted on Table 5.

Column (6):
In low rainfall areas, this is the required leaching to avoid salinity build-up in the soil is calculated using the following equation:
$L = Ce (E-Ri) / (Cl-Ce)$
Where:
Ce = Electrical Conductivity of Effluent = 1.39 mmhos/cm
E = Evapotranspiration
Ri = Infiltrated Rainfall
Cl= Maximum Allowable Conductivity of Soil Solution (Value obtained from 30 TAC 309.20, Table 3) = 10

Column (9):
Net Average Evaporation from Reservoir Surface.

Column (10):
K is the irrigation efficiency. K value is 0.85 unless specific information is provided to support a different value.

Column (11):
The total of this column is the maximum allowable application rate in acre-inch per acre per year.

Storage Volume Calculations

| Month | Effluent Received for Application or Storage | Mean Rainfall Distribution* | Rainfall Highest Year in Past 25 Year | Runoff Highest Year in Past 25 Year | Infiltrated Rainfall (14b)-(15) | Available Water (13)+(16) | Distribution of Mean* | Net 25 Year Low Evaporation from Reservoir Surface | Storage | Accumulated Storage | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (12) | (13) | (14a) | (14b) | (15) | (16) | (17) | (18a) | (18b) | (19) | (20) | |
| January | 1.53 | 5.58% | 2.63 | 0.98 | 1.65 | 3.18 | 3.97% | | 1.53 | 2.98 | |
| February | 1.38 | 6.51% | 3.07 | 1.30 | 1.77 | 3.15 | 4.53% | | 1.38 | 4.36 | |
| March | 1.53 | 6.94% | 3.27 | 1.45 | 1.81 | 3.34 | 6.94% | | 0.13 | 4.49 | |
| April | 1.48 | 8.83% | 4.16 | 2.18 | 1.99 | 3.46 | 8.43% | | -0.55 | 3.93 | END |
| May | 1.53 | 13.52% | 6.37 | 4.12 | 2.25 | 3.78 | 9.00% | | -3.81 | 0.13 | |
| June | 1.48 | 10.74% | 5.06 | 2.95 | 2.11 | 3.59 | 11.80% | | -4.54 | -4.41 | |
| July | 1.53 | 6.21% | 2.93 | 1.19 | 1.73 | 3.26 | 13.80% | | -5.27 | -9.68 | |
| August | 1.53 | 7.05% | 3.32 | 1.50 | 1.83 | 3.35 | 13.38% | | -2.32 | -12.00 | |
| September | 1.48 | 10.90% | 5.14 | 3.01 | 2.12 | 3.60 | 10.07% | | -2.69 | -14.69 | |
| October | 1.53 | 10.76% | 5.07 | 2.95 | 2.12 | 3.64 | 8.19% | | -1.17 | -1.17 | START |
| November | 1.48 | 7.10% | 3.34 | 1.51 | 1.83 | 3.31 | 5.75% | | 1.09 | -0.07 | |
| December | 1.53 | 5.86% | 2.76 | 1.08 | 1.69 | 3.22 | 4.13% | | 1.53 | 1.45 | |
| Total | 17.98 | 100.0% | 47.12 | 24.22 | 22.90 | 40.88 | 100.0% | 0.00 | -14.69 | 4.49 | |

(All Units are Inches of Water per Acre of Irrigated Area)

| | | |
|---|---|---|
| Maximum Monthly Avg Application Rate = | 3.07 | in/month |
| Daily Average Flow to Irrigation Field = | 255,500 | gallons/day |
| Irrigation Surface Area = | 191.00 | acres |
| Worst (Highest) Annual Rainfall in Past 25 Years = | 47.12 | in |
| Lagoon/Pond Surface Area = | 5.30 | acres |
| Lowest Annual Evaporation in Past 25 Years = | 43.61 | in |

| | | |
|---|---|---|
| Storage Volume Requirement = | 71.42 | ac-ft |
| Storage Volume Requirement = | 23,270,058 | gal |

*Data collected from https://waterdatafortexas.org/lake-evaporation-rainfall

Storage Volume Calculation Notes:

Column (13): Maximum values for Column (13) are the value (total) of Column (11) divided by 12.

Column (14b): Annual rainfall amount from the highest year in past 25 years of data. Total rainfall is then distributed proportional to monthly averages.

Column (15): Using rainfall figures in Column (14), calculate runoff with the same method used in Column (3).

Column (18b): Lowest annual evaporation in past 25 years from reservoir surface. Distribute annual value proportionally to monthly average evaporation expressed in inches per irrigated acre.

Column (19): Storage = [(13) – (18b)]-{[(7)-(16)]/K}. If the term {[(7)-(16)]/K} is negative, then the value for storage = [(13)-(18b)]. Irrigation efficiency is 0.85 unless specific information is provided to support a different value.

Column (20): To allow for the worst condition, the summation of storage is obtained by adding the values obtained in Column (19), beginning with the first consecutive month of positive values (START) and ending before incorporating the first month of negative values (END).

| | |
|---|---|
| **From:** | Jalili, Behnaz |
| **To:** | Sara Holmes |
| **Cc:** | Hannah Zellner; Clements, Ian; Greener, Lily |
| **Subject:** | RE: WQ0016769001 - Thomas Ranch WWTP NOD |
| **Date:** | Thursday, May 8, 2025 9:30:41 AM |
| **Attachments:** | Page 31 - Land Application Sites.pdf<br>Page 37 - Surface Disposal.pdf<br>Soil Analysis_Thomas Ranch.pdf<br>Groundwater Quality Technical Report_Thomas Ranch.pdf<br>20250508_TCEQ-Technical NOD Response.pdf |

---

Good morning,

I've attached the response to the latest NOD letter and the associated attachments.

Please let me know if you have any questions.

Thank you,

**Behnaz Jalili, Ph.D., P.E. (TX)**
**Kimley-Horn** | 5301 Southwest Parkway, Building 2, Suite 100, Austin, TX 78735
Direct: **512 518 5596** | Mobile: **806 507 0323**
*Connect with us*: Twitter | LinkedIn | Facebook | Instagram | Kimley-Horn.com

---

**From:** Sara Holmes <Sara.Holmes@tceq.texas.gov>
**Sent:** Thursday, May 8, 2025 8:50 AM
**To:** Jalili, Behnaz <Behnaz.Jalili@kimley-horn.com>
**Cc:** Hannah Zellner <Hannah.Zellner@Tceq.Texas.Gov>; Clements, Ian <Ian.Clements@kimley-horn.com>
**Subject:** WQ0016769001 - Thomas Ranch WWTP NOD

Good morning,

We have received the application for WQ0016769001 – Thomas Ranch WWTP, for technical review, and it is missing information necessary to complete our review. Please provide the updated information listed above in the attachment of this email within 14 days or by May 22, 2025.

Any revised pages can be sent electronically. If you have any questions, please feel free to contact either Hannah Zellner or myself.

Thank you,

Sara Holmes
Natural Resource Specialist III
Water Quality Assessment Team
12100 Park 35 Circle
Austin, TX 78753
512-239-4534

THOMAS RANCH WWTP
PERMIT NO. WQ0016769001
APPLICATION FOR A NEW PERMIT
Technical Completeness Review

Please address the following items:

GEOLOGY

1. Domestic Worksheet 3.0, Section 7. Groundwater Quality – Please provide this report.

AGRONOMY

2. Domestic Worksheet 3.0, Section 8. Soil Map and Soil Analyses – Please submit soil lab analyses. Note that analyses are acceptable as long as the test date is less than one year of the submission of the application.

3. Domestic Worksheet 3.1, Section 1. Surface Disposal – Please include a design total N loading rate, soil conductivity, and method of application to Part A. of Section 1.

For geology/groundwater-related questions, please contact Hannah Zellner, P.G. via email at Hannah.Zellner@tceq.texas.gov (preferred) or at 512-239-2908. For agronomy-related questions, please contact Sara Holmes via email at Sara.Holmes@tceq.texas.gov (preferred) or at 512-239-4534.

May 8, 2025

Sara Holmes and Hannah Zellner
Water Quality Assessment Team
Texas Commission on Environmental Quality

**RE:** **Thomas Ranch WWTP**
**Permit No.: WQ0016769001**
**Applicant For A New Permit**
**Technical Completeness Review: Follow-Up**

Dear Sara Holmes and Hannah Zelner,

Thank you for reviewing the permit application for technical completeness and informing us of the additional information needed in the letter sent on May 8th, 2025. The responses to your comments are as follows:

GEOLOGY

1. Domestic Worksheet 3.0, Section 7. Groundwater Quality – Please provide this report.

   **Response:** See Attachment "*Groundwater Quality Technical Report Thomas Ranch*".

AGRONOMY

2. Domestic Worksheet 3.0, Section 8. Soil Map and Soil Analyses – Please submit soil lab analyses. Note that analyses are acceptable as long as the test date is less than one year of the submission of the application.

   **Response:** See Attachment "*Soil Analysis Thomas Ranch*".

3. Domestic Worksheet 3.1, Section 1. Surface Disposal – Please include a design total N loading rate, soil conductivity, and method of application to Part A. of Section 1.

   **Response:** Section 1 of Domestic Worksheet 3.1 has been revised with the requested information. See Attachment "*Page 37 – Surface Disposal*".

4. For Worksheet 3.0, Section 2, in Table 3.0(1), what is the intended land use for both of the phases (golf course, hayland, park, etc.)?

   **Response:** Table 3.0(1) in Worksheet 3.0, Section 2 has been revised to include the land use for both phases. See Attachment, "*Page 31 – Land Application Sites*".

You may contact me with any requests or questions at behnaz.jalili@kimley-horn.com or by phone at 512-518-5596.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

Texas Firm No. 928

Behnaz Jalili

Behnaz Jalili, PhD, P.E.

**Attachments:**

Groundwater Quality Technical Report Thomas Ranch
Soil Analysis Thomas Ranch
Page 37 – Surface Disposal
Page 31 – Land Application Sites

# DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.0: LAND DISPOSAL OF EFFLUENT

The following is required for renewal, new, and amendment permit applications.

## Section 1. Type of Disposal System (Instructions Page 68)

Identify the method of land disposal:

- ☒ Surface application
- ☒ Irrigation
- ☐ Drip irrigation system
- ☐ Evaporation
- ☐ Subsurface application
- ☐ Subsurface soils absorption
- ☐ Subsurface area drip dispersal system
- ☐ Evapotranspiration beds
- ☐ Other (describe in detail): Click to enter text.

NOTE: All applicants without authorization or proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0.

For existing authorizations, provide Registration Number: N/A

## 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 Overseeded with Rye; Golf Course & Open Space | 97.1 | 260,000 | Yes |
| Bermuda Overseeded with Rye; Golf Course & Open Space | 190.4 | 510,000 | Yes |
| | | | |
| | | | |
| | | | |
| | | | |

# 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: 191

Design application frequency:

hours/day 8 hours/day And days/week 7 days/week

Land grade (slope):

average percent (%): 10

maximum percent (%): 20

Design application rate in acre-feet/acre/year: 3

Design total nitrogen loading rate, in lbs N/acre/year: 75 - 95

Soil conductivity (mmhos/cm): 0.056 – 0.193

Method of application: Spray Irrigation

Attach a separate engineering report with the water balance and storage volume calculations, method of application, irrigation efficiency, and nitrogen balance.

Attachment: Attachment 20

B. Evaporation ponds

Daily average effluent flow into ponds, in gallons per day: Click to enter text.

Attach a separate engineering report with the water balance and storage volume calculations.

Attachment: Click to enter text.

C. Evapotranspiration beds

Number of beds: Click to enter text.

Area of bed(s), in acres: Click to enter text.

Depth of bed(s), in feet: Click to enter text.

Void ratio of soil in the beds: Click to enter text.

Storage volume within the beds, in acre-feet: Click to enter text.

Attach a separate engineering report with the water balance and storage volume calculations, and a description of the lining.

Attachment: Click to enter text.

**THOMAS RANCH**

**SOILS EVALUATIONPrepared for:**

**Kimley-Horn**
**10814 Jollyville Road, Avallon IV, Suite**
**200 Austin, TX 78759**

**Prepared by:**

**WWD Engineering**
***FIRM F-12009***
**9217 W. Hwy 290, Suite 110**
**Austin Texas 78736**
**(512) 288-2111**

**April 28, 2025**



# Soils Site Investigation for Thomas Ranch
# Development Travis and Burnet Counties, Texas

## INTRODUCTION

WWD Engineering is providing technical services to support Kimley-Horn Engineering in preparing a Texas Land Application Permit (TLAP) wastewater permit application. This system is to include a surface spray irrigation system on the proposed future development known as the Thomas Ranch (the "Site"). The site is located in Travis and Burnet Counties.

The site is not located in the Edwards Aquifer Recharge or Contributing Zone. We are proposing to utilize a spray irrigation disposal method at this site. The treated effluent irrigation system will utilize a spray irrigation management system to allow for accurate control of the proposed surface spray treated effluent irrigation system.

A site investigation was performed to obtain information to evaluate the soils and assist in the design of the spray irrigation system. This report summarizes the findings of this investigation.

## Site Details

### Geology

According to the Geologic Atlas of Texas, Llano Sheet, this site is located on the Upper Glen Rose (Kgr(u)), the Lower Glen Rose, (Kgr(l)), Hammett Shale and Cow Creek Limestone, Undivided (Kch) and the Hensell Sand (Kh) formations, as described below by Barnes, et. al (1981).

**Upper Glen Rose Limestone (Kgru)**
"Limestone, dolomite, and marl in alternating resistant and recessive beds forming stairstep topography; limestone, aphanitic to fine-grained, hard to soft and marly, light-gray to yellowish-gray; dolomite, fine-grained, porous, yellowish-brown; marine megafossils include molluscan steinkems, rudistids, oysters, and echinoids; upper part relatively thinner bedded, more dolomitic and less fossiliferous than lower part, thickness about 220 feet."

**Lower Glen Rose Limestone (Kgrl)**
"Limestone, dolomite, and marl in alternating resistant and recessive beds forming stairsteps topography; limestone, aphanitic to fine-grained, hard to soft and marly, light-gray to yellowish-gray; dolomite, fine-grained, porous, yellowish-brown; marine megafossils include molluscan steinkems, rudistids, oysters, and echinoids; lower part more massive and about 160 feet thick, includes at top Corbula Bed."

**Hammett Shale and Cow Creek Limestone undivided (Kch)**
"Cow Creek Limestone, essentially a coquinite in which many of the fossils are dissolved, resulting in a honeycomb appearance, massively bedded with large-scale crossbeds prominent in some areas, sand and pebbles present and more abundant shoreward, white to off-white: mostly forms scarp; thickness up to about 60 feet, thins westward onlapping Paleozoic rocks. Hammett Shale, sandy and silty, medium-gray, weathers greenish-gray: oyster beds common in transition zone at top; at base scattered pebbles and cobbles chiefly of Ellenburger rocks bored by mollusks' thickness 60 feet: westward onlaps Paleozoic rocks."

**Hensell Sand (Kh)**
"sand, silt, clay, and conglomerate: conglomerate, cemented, composed chiefly of pebbles and cobbles of Paleozoic and Precambrian rocks; sand, silt, and clay mostly friable except where calcareous; mostly red and gray; cycads locally; thickness up to 200+, locally absent where Glen Rose laps directly on to Paleozoic rocks: forms shoreward fades of Glen Rose Limestone. Occupies essentially same position as the Antlers Sand north of the high area of Paleozoic rocks south of Brady on the Brownwood. Sheet. [sic] South of this high area of Paleozoic rocks on the Brownwood Sheet, for consistency, the rocks mapped as Antlers should have been shown as Hensell."

### USDA-Soil Survey

A soils map is located in the Appendix of this document. According to the results of the site investigation and visual observations, the soils at this site consists of clay loam, gravelly clay loam, cobbly clay and alluvium.

**Test Hole Selection**

Erin Banks, P.E., selected fourteen representative sites within the areas proposed for the wastewater treatment and disposal areas and representing the soils in the TLAP areas. However, hole 3 was not able to be dug due to the recently constructed golf course in that location.

It is virtually impossible to try and establish a sampling regime that will sufficiently allow for coverage of inclusional features within the application areas. However, if any of these features are discovered at the time of construction, these areas will be noted and sufficiently evaluated to determine their relevance to the construction and ultimate performance of the treated effluent application sites. The soil descriptions will be followed by pictures for each hole.

**Test Hole #1**

**Vegetation Characteristics**

There was very little woody vegetation present at this site, there were some large and small oak in the peripheral of the areas, therefore, there was virtually <5% canopy cover. There was 50% herbaceous plant growth in the immediate area of this hole and 50% cover. Surficial stoniness was estimated at <5%. The litter layer coverage was estimated at 0%. Slope of this area was 2-4%.

**Soil Characteristics**

Total soil depth was 30 inches where digging stopped. The profile consisted of two horizons. The primary rooting depth in the hole was 6 inches with no secondary rooting depth.

Depth of the 1st horizon was 0-22 inches. The 1st horizon consisted of a topsoil, silty clay loam material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was a red/brown color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% limestone fragments.

Depth of the 2nd horizon was 22-30 inches. The 2nd horizon consisted of caliche material. The 2nd horizon consisted of a material that was blocky in texture and structure. The material in the 2nd horizon was tan/gray in color. There was no mottling evident in the 2nd horizon. The 2nd horizon consisted of <15% limestone fragments. The boundary between the 1st horizon and the 2nd horizon was level. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



**Test Hole #2**

**Vegetation Characteristics**

The woody vegetation of this site consisted of 5% vegetation or canopy cover. There was 40% herbaceous plant growth in the immediate area of this hole and 40% cover. Surficial stoniness was estimated at 0%. The litter layer coverage was estimated at 0%. Slope of this area was 2-4%.

**Soil Characteristics**

Total soil depth was 30 inches where digging stopped. The profile consisted of two horizons. The primary rooting depth in the hole was 4 inches with no secondary rooting.

Depth of the 1st horizon was 0-12 inches. The 1st horizon consisted of silty clay loam material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was a red/brown color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% limestone fragments.

Depth of the 2nd horizon was 12-30 inches. The 2nd horizon consisted of a silty caliche material. The 2nd horizon consisted of a material that was blocky in texture and structure. The material in the 2nd horizon was tan/gray in color. There was no mottling evident in the 2nd horizon. The 2nd horizon consisted of <20% limestone fragments. The boundary between the 1st horizon and the 2nd horizon was level. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



**Test Hole #4**

**Vegetation Characteristics**

The woody vegetation of this site consisted of little vegetation and 25% canopy cover. There was 60% herbaceous plant growth in the immediate area of this hole and 60% cover. Surficial stoniness was estimated at 15%. The litter layer coverage was estimated at 0%. Slope of this area was 4-8%.

**Soil Characteristics**

Total soil depth was 30 inches where digging stopped. The profile consisted of two horizons. The primary rooting depth in the hole was 6 inches with no secondary rooting.

Depth of the 1st horizon was 0-6 inches. The 1st horizon consisted of silty clay loam material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was a lt brown color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <15% limestone fragments.

Depth of the 2nd horizon was 6-30 inches. The 2nd horizon consisted of a caliche material. The 2nd horizon consisted of a material that was blocky in texture and structure. The material in the 2nd horizon was tan/gray in color. There was no mottling evident in the 2nd horizon. The 2nd horizon consisted of <20% limestone fragments. The boundary between the 1st horizon and the 2nd horizon was level. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



**Test Hole #5**

**Vegetation Characteristics**

The woody vegetation of this site consisted of small oak and juniper with 10% canopy cover. There was 30% herbaceous plant growth in the immediate area of this hole and 30% cover. Surficial stoniness was estimated at 0%. The litter layer coverage was estimated at 0%. Slope of this area was 2-4%.

**Soil Characteristics**

Total soil depth was 24 inches where refusal was achieved. The profile consisted of one horizon. The primary rooting depth in the hole was 6 inches with no secondary rooting. Depth of the 1st horizon was 0-24 inches. The 1st horizon consisted of a silty clay loam material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was a red brown color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% limestone fragments. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



**Test Hole #6**

**Vegetation Characteristics**

The was little vegetation at this site with 10% canopy cover. There was 90% herbaceous plant growth in the immediate area of this hole and 90% cover. Surficial stoniness was estimated at 0%. The litter layer coverage was estimated at 0%. Slope of this area was 2%-4%.

**Soil Characteristics**

Total soil depth was 20 inches where refusal was achieved. The profile consisted of two horizons. The primary rooting depth in the hole was 4 inches with no secondary rooting depth.

Depth of the 1st horizon was 0-20 inches. The 1st horizon consisted of clay loam material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was a brown color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% limestone fragments. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



**Test Hole #7**

**Vegetation Characteristics**

There were no signs of woody vegetation of this site. There is 0% canopy cover. There was 40% herbaceous plant growth in the immediate area of this hole and 40% cover. Surficial stoniness was estimated at 20%. The litter layer coverage was estimated at 0%. Slope of this area was 3-5%.

**Soil Characteristics**

Total soil depth was 30 inches where digging stopped. The profile consisted of two horizons. The primary rooting depth in the hole was 4 inches with no secondary rooting.

Depth of the 1st horizon was 0-24 inches. The 1st horizon consisted of a silty clay loam material. The 1st horizon consisted of a material that was course in texture and structure. The material in the 1st horizon was a red/brown color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% limestone fragments.

Depth of the 2nd horizon was 24-30 inches. The 2nd horizon consisted of caliche material. The 2nd horizon consisted of a material that was blocky in texture and structure. The material in the 2nd horizon was tan/gray in color. There was no mottling evident in the 2nd horizon. The 2nd horizon consisted of <20% limestone fragments. The boundary between the 1st horizon and the 2nd horizon was level. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



**Test Hole #8**

**Vegetation Characteristics**

The woody vegetation of this site consisted of large oak, small oak and juniper with 40% canopy cover and 40% woody. There was 30% herbaceous plant growth in the immediate area of this hole and 30% cover. Surficial stoniness was estimated at 10%. The litter layer coverage was estimated at 0%. Slope of this area was 3%-5%.

**Soil Characteristics**

Total soil depth was 12 inches where refusal was achieved. The profile consisted of one horizon. The primary rooting depth in the hole was 4 inches with no secondary rooting.

Depth of the 1st horizon was 0-12 inches. The 1st horizon consisted of a silty clay loam material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was a brown color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% limestone fragments. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



**Test Hole #9**

**Vegetation Characteristics**

The woody vegetation of this site consisted of large oak, small oak and juniper with 40% canopy cover and 40% woody. There was 20% herbaceous plant growth in the immediate area of this hole and 20% canopy cover. Surficial stoniness was estimated at 25%. The litter layer coverage was estimated at 0%. Slope of this area was 6%-8%.

**Soil Characteristics**

Total soil depth was 30 inches where digging stopped. The profile consisted of two horizons. The primary rooting depth in the hole was 6 inches with no secondary rooting.

Depth of the 1st horizon was 0-6 inches. The 1st horizon consisted of a silty clay loam material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was a brown color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% limestone fragments.

Depth of the 2nd horizon was 6-30 inches. The 2nd horizon consisted of caliche material. The 2nd horizon consisted of a material that was blocky in texture and structure. The material in the 2nd horizon was tan/gray in color. There was no mottling evident in the 2nd horizon. The 2nd horizon consisted of <20% limestone fragments. The boundary between the 1st horizon and the 2nd horizon was level. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



**Test Hole #10**

**Vegetation Characteristics**

The woody vegetation of this site consisted of large oak, small oak and juniper with 50% canopy cover and 50% woody. There was 20% herbaceous plant growth in the immediate area of this hole and 20% cover. Surficial stoniness was estimated at 10%. The litter layer coverage was estimated at 0%. Slope of this area was 3%-5%.

**Soil Characteristics**

Total soil depth was 10 inches where refusal was achieved. The profile consisted of one horizon. The primary rooting depth in the hole was 4 inches with no secondary rooting.

Depth of the 1st horizon was 0-10 inches. The 1st horizon consisted of a silty clay loam material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was a brown color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% limestone fragments. The boundary was level. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



**Test Hole #11**

**Vegetation Characteristics**

The woody vegetation of this site consisted of large oak, small oak and juniper with 40% canopy cover and 40% woody. There was <10% herbaceous plant growth in the immediate area of this hole and <10% cover. Surficial stoniness was estimated at 20%. The litter layer coverage was estimated at 0%. Slope of this area was 4-6%.

**Soil Characteristics**

Total soil depth was 18 inches where refusal was achieved. The profile consisted of one horizon. The primary rooting depth in the hole was 4 inches with no secondary rooting.

Depth of the 1st horizon was 0-18 inches. The 1st horizon consisted of a silty clay loam material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was a brown color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <20% limestone fragments. The boundary on the 1st horizon was level. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



**Test Hole #12**

**Vegetation Characteristics**

The woody vegetation of this site consisted of large oak, small oak and juniper with 40% canopy cover and 50% woody. There was 30% herbaceous plant growth in the immediate area of this hole and 30% cover. Surficial stoniness was estimated at 10%. The litter layer coverage was estimated at 0%. Slope of this area was 3%-6%.

**Soil Characteristics**

Total soil depth was 30 inches where digging stopped. The profile consisted of two horizons. The primary rooting depth in the hole was 6 inches and secondary rooting was at 12 inches

Depth of the 1st horizon was 0-12 inches. The 1st horizon consisted of a silty clay loam material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was a brown color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% limestone fragments.

Depth of the 2nd horizon was 12-30 inches. The 2nd horizon consisted of a caliche material. The 2nd horizon consisted of a material that was blocky in texture and structure. The material in the 2nd horizon was tan in color. There was no mottling evident in the 2nd horizon. The 2nd horizon consisted of <15% limestone fragments. The boundary between the 1st horizon and the 2nd horizon was level. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



**Test Hole #13**

**Vegetation Characteristics**

The woody vegetation of this site consisted of juniper with 10% canopy cover. There was 30% herbaceous plant growth in the immediate area of this hole and 20% cover. Surficial stoniness was estimated at 0%. The litter layer coverage was estimated at 0%. Slope of this area was 2%-4%.

**Soil Characteristics**

Total soil depth was 30 inches where digging stopped. The profile consisted of one horizon. The primary rooting depth in the hole was 8 inches with no secondary rooting.

Depth of the 1st horizon was 0-30 inches. The 1st horizon consisted of a clay loam material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was a dk brown color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% limestone fragments. The boundary on the 1st horizon was level. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



**Test Hole #14**

**Vegetation Characteristics**

The woody vegetation of this site consisted of large oak, small oak and juniper with 50% canopy cover. There was 50% herbaceous plant growth in the immediate area of this hole and 50% cover. Surficial stoniness was estimated at 15%. The litter layer coverage was estimated at 0%. Slope of this area was 5%-8%.

**Soil Characteristics**

Total soil depth was 30 inches where digging stopped. The profile consisted of one horizon. The primary rooting depth in the hole was 8 inches with no secondary rooting.

Depth of the 1st horizon was 0-30 inches. The 1st horizon consisted of a clay loam material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was a brown color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% limestone fragments. The boundary on the 1st horizon was level. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



# USDA Soil Survey Map and Report

United States Department of Agriculture

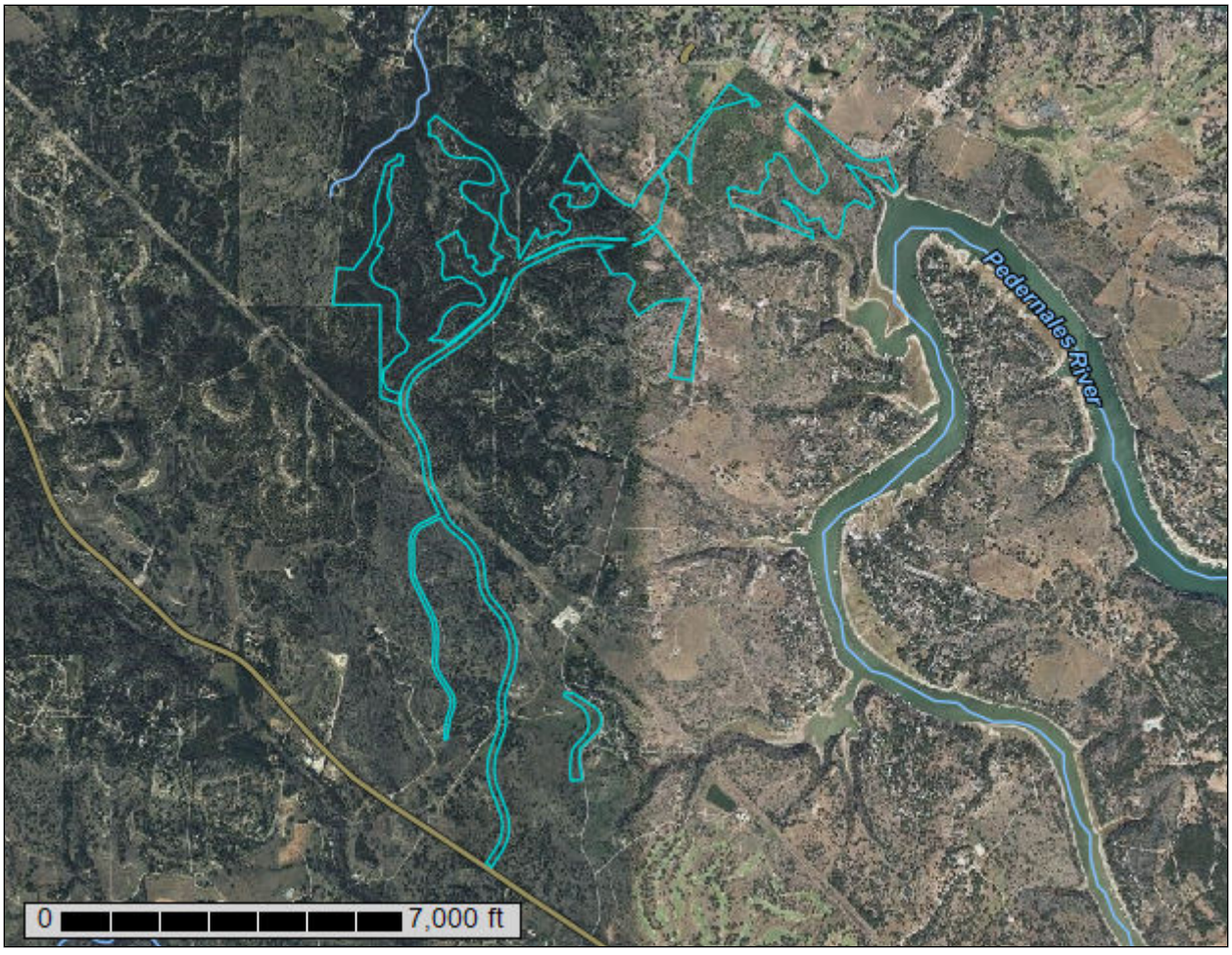
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Blanco and Burnet Counties, Texas, and Travis County, Texas

## Soip Map




March 3, 2025

# Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

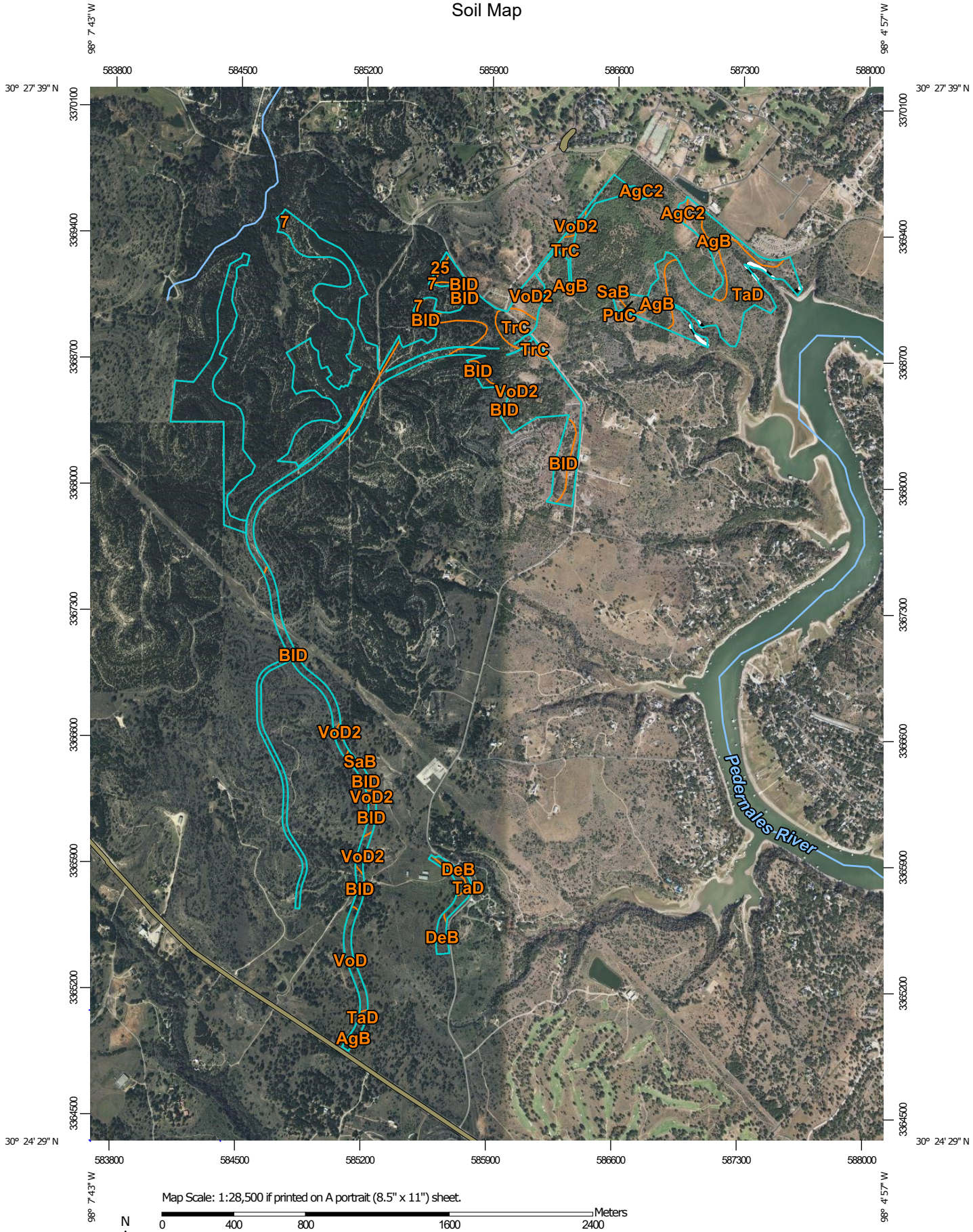
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report
## Soil Map



## MAP LEGEND

**Area of Interest (AOI)**

- Area of Interest (AOI)

**Soils**

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

**Special Point Features**

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

**Water Features**

- Streams and Canals

**Transportation**

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

**Background**

- Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at scales ranging from 1:24,000 to 1:31,700.

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: Blanco and Burnet Counties, Texas
Survey Area Data: Version 21, Aug 30, 2024

Soil Survey Area: Travis County, Texas
Survey Area Data: Version 26, Aug 30, 2024

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 2, 2016—Nov 25, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

## MAP LEGEND

## MAP INFORMATION

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 |
|---|---|---|---|
| 7 | Brackett-Real association, 10 to 30 percent slopes | 119.8 | 31.9% |
| 25 | Krum clay, 3 to 5 percent slopes | 1.0 | 0.3% |
| **Subtotals for Soil Survey Area** | | **120.9** | **32.2%** |
| **Totals for Area of Interest** | | **375.1** | **100.0%** |

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| AgB | Altoga silty clay, 1 to 3 percent slopes | 19.5 | 5.2% |
| AgC2 | Altoga silty clay, 3 to 6 percent slopes, moderately eroded | 1.2 | 0.3% |
| BlD | Brackett-Rock outcrop complex, 1 to 12 percent slopes | 62.5 | 16.7% |
| DeB | Denton silty clay, 1 to 3 percent slopes | 5.0 | 1.3% |
| PuC | Purves clay, 1 to 5 percent slopes | 10.7 | 2.8% |
| SaB | San Saba clay, 1 to 2 percent slopes | 2.6 | 0.7% |
| TaD | Eckrant very stony clay, 5 to 18 percent slopes | 53.0 | 14.1% |
| TrC | Travis soils, 1 to 5 percent slopes | 18.6 | 5.0% |
| VoD | Volente silty clay loam, 1 to 8 percent slopes | 6.2 | 1.7% |
| VoD2 | Volente silty clay loam, 1 to 8 percent slopes, moderately eroded | 75.0 | 20.0% |
| **Subtotals for Soil Survey Area** | | **254.2** | **67.8%** |
| **Totals for Area of Interest** | | **375.1** | **100.0%** |

# Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the

characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered

practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

# Blanco and Burnet Counties, Texas

## 7—Brackett-Real association, 10 to 30 percent slopes

### Map Unit Setting

*National map unit symbol:* 2t271
*Elevation:* 670 to 2,000 feet
*Mean annual precipitation:* 30 to 37 inches
*Mean annual air temperature:* 64 to 68 degrees F
*Frost-free period:* 230 to 265 days
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Brackett and similar soils:* 58 percent
*Real and similar soils:* 30 percent
*Minor components:* 12 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Brackett

#### Setting

*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder, backslope, footslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Parent material:* Residuum weathered from limestone

#### Typical profile

*A - 0 to 6 inches:* gravelly clay loam
*Bk - 6 to 14 inches:* gravelly clay loam
*Cr - 14 to 60 inches:* bedrock

#### Properties and qualities

*Slope:* 10 to 30 percent
*Depth to restrictive feature:* 10 to 20 inches to paralithic bedrock
*Drainage class:* Well drained
*Runoff class:* High
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high (0.06 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 90 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* Very low (about 1.8 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 7e
*Hydrologic Soil Group:* D
*Ecological site:* R081CY362TX - Steep Adobe 29-35 PZ
*Hydric soil rating:* No

**Description of Real**

**Setting**

*Landform:* Ridges
*Landform position (two-dimensional):* Backslope, footslope
*Landform position (three-dimensional):* Side slope, base slope
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Parent material:* Residuum weathered from limestone

**Typical profile**

*A - 0 to 8 inches:* gravelly clay loam
*Ak - 8 to 15 inches:* extremely gravelly clay loam
*Cr - 15 to 60 inches:* bedrock

**Properties and qualities**

*Slope:* 10 to 30 percent
*Depth to restrictive feature:* 8 to 19 inches to paralithic bedrock
*Drainage class:* Well drained
*Runoff class:* Medium
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high (0.06 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 70 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* Very low (about 1.2 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 7e
*Hydrologic Soil Group:* D
*Ecological site:* R081CY362TX - Steep Adobe 29-35 PZ
*Hydric soil rating:* No

**Minor Components**

**Tarpley**

*Percent of map unit:* 3 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Summit
*Landform position (three-dimensional):* Interfluve
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Ecological site:* R081CY361TX - Redland 29-35 PZ
*Hydric soil rating:* No

**Doss**

*Percent of map unit:* 3 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Ecological site:* R081CY574TX - Shallow 29-35 PZ

*Hydric soil rating:* No

**Eckrant**

*Percent of map unit:* 3 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Summit, shoulder, backslope, footslope
*Landform position (three-dimensional):* Interfluve, side slope
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Ecological site:* R081CY363TX - Steep Rocky 29-35 PZ
*Hydric soil rating:* No

**Rock outcrop**

*Percent of map unit:* 3 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Summit, shoulder, backslope, footslope
*Landform position (three-dimensional):* Interfluve, side slope
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Hydric soil rating:* No

## 25—Krum clay, 3 to 5 percent slopes

**Map Unit Setting**

*National map unit symbol:* 2t2j6
*Elevation:* 620 to 1,820 feet
*Mean annual precipitation:* 31 to 37 inches
*Mean annual air temperature:* 65 to 69 degrees F
*Frost-free period:* 230 to 250 days
*Farmland classification:* All areas are prime farmland

**Map Unit Composition**

*Krum and similar soils:* 90 percent
*Minor components:* 10 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Krum**

**Setting**

*Landform:* Stream terraces
*Landform position (three-dimensional):* Riser
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Parent material:* Calcareous silty and clayey alluvium derived from limestone

**Typical profile**

*A - 0 to 13 inches:* clay
*Bk1 - 13 to 27 inches:* clay
*Bk2 - 27 to 40 inches:* clay
*Ck - 40 to 80 inches:* clay

**Properties and qualities**

*Slope:* 3 to 5 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* High
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 50 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Sodium adsorption ratio, maximum:* 3.0
*Available water supply, 0 to 60 inches:* Moderate (about 9.0 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3e
*Hydrologic Soil Group:* C
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

**Minor Components**

**Bolar**

*Percent of map unit:* 5 percent
*Landform:* Hillslopes
*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

**Doss**

*Percent of map unit:* 3 percent
*Landform:* Hillslopes
*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Ecological site:* R081CY574TX - Shallow 29-35 PZ
*Hydric soil rating:* No

**Lewisville**

*Percent of map unit:* 2 percent
*Landform:* Stream terraces
*Landform position (three-dimensional):* Riser
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

# Travis County, Texas

## AgB—Altoga silty clay, 1 to 3 percent slopes

### Map Unit Setting

*National map unit symbol:* 2tr6s
*Elevation:* 330 to 970 feet
*Mean annual precipitation:* 34 to 38 inches
*Mean annual air temperature:* 66 to 69 degrees F
*Frost-free period:* 238 to 278 days
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Altoga and similar soils:* 95 percent
*Minor components:* 5 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Altoga

#### Setting

*Landform:* Stream terraces
*Landform position (three-dimensional):* Riser
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Parent material:* Calcareous clayey alluvium derived from mudstone

#### Typical profile

*Ap - 0 to 5 inches:* silty clay
*Bk - 5 to 40 inches:* silty clay
*C - 40 to 80 inches:* silty clay loam

#### Properties and qualities

*Slope:* 1 to 3 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* High
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 75 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* High (about 10.2 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3e
*Hydrologic Soil Group:* C
*Ecological site:* R086AY007TX - Southern Clay Loam
*Hydric soil rating:* No

### Minor Components

#### Houston black

*Percent of map unit:* 5 percent

*Landform:* Ridges
*Landform position (two-dimensional):* Summit, shoulder
*Landform position (three-dimensional):* Interfluve
*Microfeatures of landform position:* Circular gilgai
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Ecological site:* R086AY011TX - Southern Blackland
*Hydric soil rating:* No

## AgC2—Altoga silty clay, 3 to 6 percent slopes, moderately eroded

### Map Unit Setting

*National map unit symbol:* f525
*Elevation:* 500 to 1,500 feet
*Mean annual precipitation:* 28 to 40 inches
*Mean annual air temperature:* 64 to 70 degrees F
*Frost-free period:* 230 to 270 days
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Altoga, moderately eroded, and similar soils:* 95 percent
*Minor components:* 5 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Altoga, Moderately Eroded

#### Setting

*Landform:* Stream terraces
*Landform position (three-dimensional):* Riser
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Parent material:* Clayey alluvium derived from mixed sources

#### Typical profile

*H1 - 0 to 5 inches:* silty clay
*H2 - 5 to 24 inches:* silty clay loam
*H3 - 24 to 60 inches:* silty clay loam

#### Properties and qualities

*Slope:* 3 to 6 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* Medium
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 75 percent
*Available water supply, 0 to 60 inches:* High (about 10.2 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3e
*Hydrologic Soil Group:* B
*Ecological site:* R086AY007TX - Southern Clay Loam
*Hydric soil rating:* No

**Minor Components**

**Unnamed**

*Percent of map unit:* 5 percent
*Hydric soil rating:* No

## BID—Brackett-Rock outcrop complex, 1 to 12 percent slopes

**Map Unit Setting**

*National map unit symbol:* 2yltz
*Elevation:* 820 to 1,330 feet
*Mean annual precipitation:* 33 to 37 inches
*Mean annual air temperature:* 65 to 69 degrees F
*Frost-free period:* 220 to 260 days
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Brackett and similar soils:* 68 percent
*Rock outcrop:* 20 percent
*Minor components:* 12 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Brackett**

**Setting**

*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder, backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Parent material:* Residuum weathered from limestone

**Typical profile**

*A - 0 to 6 inches:* gravelly clay loam
*Bw - 6 to 18 inches:* clay loam
*Cr - 18 to 60 inches:* bedrock

**Properties and qualities**

*Slope:* 1 to 12 percent
*Depth to restrictive feature:* 10 to 20 inches to paralithic bedrock
*Drainage class:* Well drained
*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high (0.06 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 90 percent
*Gypsum, maximum content:* 5 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* Very low (about 2.4 inches)

**Interpretive groups**
*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 6e
*Hydrologic Soil Group:* D
*Ecological site:* R081CY355TX - Adobe 29-35 PZ
*Hydric soil rating:* No

## Description of Rock Outcrop

**Setting**
*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder
*Landform position (three-dimensional):* Interfluve
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Parent material:* Limestone

**Typical profile**
*R - 0 to 48 inches:* bedrock

**Properties and qualities**
*Slope:* 3 to 12 percent
*Depth to restrictive feature:* 0 to 2 inches to lithic bedrock
*Runoff class:* High
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high (0.06 to 1.98 in/hr)

**Interpretive groups**
*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 8
*Hydrologic Soil Group:* D
*Hydric soil rating:* No

## Minor Components

**San saba**
*Percent of map unit:* 4 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Footslope, toeslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Linear
*Across-slope shape:* Concave
*Ecological site:* R081CY356TX - Blackland 29-35 PZ
*Hydric soil rating:* No

**Volente**
*Percent of map unit:* 4 percent
*Landform:* Ridges

*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Linear
*Across-slope shape:* Concave
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

**Eckrant**

*Percent of map unit:* 4 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder, backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Ecological site:* R081CY363TX - Steep Rocky 29-35 PZ
*Hydric soil rating:* No

## DeB—Denton silty clay, 1 to 3 percent slopes

**Map Unit Setting**

*National map unit symbol:* 2t26l
*Elevation:* 570 to 1,870 feet
*Mean annual precipitation:* 31 to 36 inches
*Mean annual air temperature:* 65 to 68 degrees F
*Frost-free period:* 220 to 260 days
*Farmland classification:* All areas are prime farmland

**Map Unit Composition**

*Denton and similar soils:* 88 percent
*Minor components:* 12 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Denton**

**Setting**

*Landform:* Hillslopes
*Landform position (two-dimensional):* Toeslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Parent material:* Silty and clayey slope alluvium over residuum weathered from limestone

**Typical profile**

*A - 0 to 14 inches:* silty clay
*Bw - 14 to 25 inches:* silty clay
*Bk - 25 to 33 inches:* silty clay
*Ck - 33 to 36 inches:* gravelly silty clay
*R - 36 to 80 inches:* bedrock

**Properties and qualities**

*Slope:* 1 to 3 percent
*Depth to restrictive feature:* 22 to 60 inches to lithic bedrock
*Drainage class:* Well drained
*Runoff class:* High
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 80 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* Low (about 4.3 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3s
*Hydrologic Soil Group:* D
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

**Minor Components**

**Krum**

*Percent of map unit:* 6 percent
*Landform:* Drainageways
*Landform position (two-dimensional):* Toeslope
*Landform position (three-dimensional):* Tread
*Down-slope shape:* Linear
*Across-slope shape:* Concave
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

**Doss**

*Percent of map unit:* 4 percent
*Landform:* Hillslopes
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Ecological site:* R081BY343TX - Shallow 23-31 PZ
*Hydric soil rating:* No

**Anhalt**

*Percent of map unit:* 2 percent
*Landform:* Hillslopes
*Landform position (two-dimensional):* Toeslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Ecological site:* R081CY358TX - Deep Redland 29-35 PZ
*Hydric soil rating:* No

## PuC—Purves clay, 1 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 2ylvf
*Elevation:* 400 to 1,800 feet
*Mean annual precipitation:* 33 to 37 inches
*Mean annual air temperature:* 65 to 69 degrees F
*Frost-free period:* 220 to 260 days
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Purves and similar soils:* 90 percent
*Minor components:* 10 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Purves

#### Setting

*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder, backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Parent material:* Residuum weathered from limestone

#### Typical profile

*Ak1 - 0 to 10 inches:* clay
*Ak2 - 10 to 16 inches:* clay
*Bk - 16 to 19 inches:* clay
*R - 19 to 40 inches:* bedrock

#### Properties and qualities

*Slope:* 1 to 5 percent
*Depth to restrictive feature:* 8 to 20 inches to lithic bedrock
*Drainage class:* Well drained
*Runoff class:* Medium
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.57 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 50 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Sodium adsorption ratio, maximum:* 1.0
*Available water supply, 0 to 60 inches:* Very low (about 2.4 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 4s
*Hydrologic Soil Group:* D

*Ecological site:* R081CY574TX - Shallow 29-35 PZ
*Hydric soil rating:* No

**Minor Components**

**Eckrant**
*Percent of map unit:* 4 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Ecological site:* R081CY360TX - Low Stony Hill 29-35 PZ
*Hydric soil rating:* No

**Brackett**
*Percent of map unit:* 3 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder, backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Ecological site:* R081CY355TX - Adobe 29-35 PZ
*Hydric soil rating:* No

**Doss**
*Percent of map unit:* 2 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Ecological site:* R081CY574TX - Shallow 29-35 PZ
*Hydric soil rating:* No

**Rock outcrop**
*Percent of map unit:* 1 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Hydric soil rating:* No

## SaB—San Saba clay, 1 to 2 percent slopes

**Map Unit Setting**
*National map unit symbol:* 2ylv0
*Elevation:* 800 to 1,300 feet
*Mean annual precipitation:* 30 to 35 inches
*Mean annual air temperature:* 65 to 69 degrees F

*Frost-free period:* 220 to 260 days
*Farmland classification:* All areas are prime farmland

**Map Unit Composition**

*San saba and similar soils:* 95 percent
*Minor components:* 5 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of San Saba**

**Setting**

*Landform:* Ridges
*Landform position (two-dimensional):* Footslope, toeslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Parent material:* Calcareous clayey slope alluvium and/or residuum weathered from limestone and/or marl over hard residuum weathered from limestone

**Typical profile**

*A - 0 to 22 inches:* clay
*Bss - 22 to 38 inches:* clay
*R - 38 to 80 inches:* bedrock

**Properties and qualities**

*Slope:* 1 to 2 percent
*Depth to restrictive feature:* 24 to 40 inches to lithic bedrock
*Drainage class:* Moderately well drained
*Runoff class:* Very high
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 15 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Sodium adsorption ratio, maximum:* 2.0
*Available water supply, 0 to 60 inches:* Low (about 5.7 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3s
*Hydrologic Soil Group:* D
*Ecological site:* R081CY358TX - Deep Redland 29-35 PZ
*Hydric soil rating:* No

**Minor Components**

**Volente**

*Percent of map unit:* 3 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Footslope, toeslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

**Speck**

*Percent of map unit:* 2 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Ecological site:* R081CY361TX - Redland 29-35 PZ
*Hydric soil rating:* No

## TaD—Eckrant very stony clay, 5 to 18 percent slopes

**Map Unit Setting**

*National map unit symbol:* 2xmt6
*Elevation:* 450 to 1,350 feet
*Mean annual precipitation:* 30 to 35 inches
*Mean annual air temperature:* 66 to 69 degrees F
*Frost-free period:* 220 to 270 days
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Eckrant and similar soils:* 90 percent
*Minor components:* 10 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Eckrant**

**Setting**

*Landform:* Ridges
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Parent material:* Residuum weathered from limestone

**Typical profile**

*A1 - 0 to 5 inches:* very stony clay
*A2 - 5 to 8 inches:* extremely flaggy clay
*R - 8 to 30 inches:* bedrock

**Properties and qualities**

*Slope:* 5 to 18 percent
*Depth to restrictive feature:* 6 to 14 inches to lithic bedrock
*Drainage class:* Well drained
*Runoff class:* High
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.57 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 40 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* Very low (about 0.5 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 7s
*Hydrologic Soil Group:* D
*Ecological site:* R081CY360TX - Low Stony Hill 29-35 PZ
*Hydric soil rating:* No

**Minor Components**

**Rock outcrop**

*Percent of map unit:* 5 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Hydric soil rating:* No

**Brackett**

*Percent of map unit:* 5 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Linear
*Ecological site:* R081CY355TX - Adobe 29-35 PZ
*Hydric soil rating:* No

## TrC—Travis soils, 1 to 5 percent slopes

**Map Unit Setting**

*National map unit symbol:* f66f
*Elevation:* 300 to 1,200 feet
*Mean annual precipitation:* 32 to 36 inches
*Mean annual air temperature:* 64 to 70 degrees F
*Frost-free period:* 240 to 270 days
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Travis and similar soils:* 95 percent
*Minor components:* 5 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Travis**

**Setting**

*Landform:* Stream terraces

*Landform position (three-dimensional):* Tread, riser
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Parent material:* Loamy alluvium of pleistocene age derived from mixed sources

**Typical profile**

*H1 - 0 to 14 inches:* fine sandy loam
*H2 - 14 to 50 inches:* sandy clay
*H3 - 50 to 75 inches:* gravelly sandy clay loam

**Properties and qualities**

*Slope:* 1 to 5 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* Medium
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Sodium adsorption ratio, maximum:* 30.0
*Available water supply, 0 to 60 inches:* Moderate (about 7.1 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3e
*Hydrologic Soil Group:* C
*Ecological site:* R087AY005TX - Sandy Loam
*Hydric soil rating:* No

**Minor Components**

**Unnamed**

*Percent of map unit:* 5 percent
*Hydric soil rating:* No

## VoD—Volente silty clay loam, 1 to 8 percent slopes

**Map Unit Setting**

*National map unit symbol:* 2ynhg
*Elevation:* 400 to 1,400 feet
*Mean annual precipitation:* 32 to 35 inches
*Mean annual air temperature:* 65 to 69 degrees F
*Frost-free period:* 230 to 260 days
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Volente and similar soils:* 75 percent
*Minor components:* 25 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Volente

### Setting

*Landform:* Ridges
*Landform position (two-dimensional):* Footslope, toeslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Parent material:* Calcareous clayey colluvium and/or alluvium derived from limestone

### Typical profile

*A - 0 to 22 inches:* silty clay loam
*BA - 22 to 36 inches:* silty clay
*Bw - 36 to 46 inches:* silty clay
*Ck - 46 to 59 inches:* clay loam

### Properties and qualities

*Slope:* 1 to 8 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* High
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.57 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 10 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* High (about 10.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 4e
*Hydrologic Soil Group:* C
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

## Minor Components

### Lewisville

*Percent of map unit:* 15 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Base slope, tread
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

### Brackett

*Percent of map unit:* 5 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder, backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Linear

*Across-slope shape:* Convex
*Ecological site:* R081CY355TX - Adobe 29-35 PZ
*Hydric soil rating:* No

**Eckrant**

*Percent of map unit:* 2 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder, backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Ecological site:* R081CY360TX - Low Stony Hill 29-35 PZ
*Hydric soil rating:* No

**Orif**

*Percent of map unit:* 2 percent
*Landform:* Drainageways
*Landform position (three-dimensional):* Tread
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Ecological site:* R081CY561TX - Loamy Bottomland 29-35 PZ
*Hydric soil rating:* No

**Rock outcrop**

*Percent of map unit:* 1 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Toeslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Hydric soil rating:* No

## VoD2—Volente silty clay loam, 1 to 8 percent slopes, moderately eroded

**Map Unit Setting**

*National map unit symbol:* 2ylvd
*Elevation:* 400 to 1,400 feet
*Mean annual precipitation:* 32 to 35 inches
*Mean annual air temperature:* 65 to 69 degrees F
*Frost-free period:* 230 to 260 days
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Volente, moderately eroded, and similar soils:* 75 percent
*Minor components:* 25 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Volente, Moderately Eroded**

**Setting**

*Landform:* Ridges

*Landform position (two-dimensional):* Footslope, toeslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Concave
*Across-slope shape:* Linear
*Parent material:* Calcareous clayey colluvium and/or alluvium derived from limestone

**Typical profile**

*A - 0 to 13 inches:* silty clay loam
*BA - 13 to 27 inches:* silty clay
*Bw - 27 to 37 inches:* silty clay
*Ck - 37 to 59 inches:* clay loam

**Properties and qualities**

*Slope:* 1 to 8 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Runoff class:* High
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.57 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 10 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* High (about 10.4 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 4e
*Hydrologic Soil Group:* C
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

**Minor Components**

**Lewisville**

*Percent of map unit:* 10 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Ecological site:* R081CY357TX - Clay Loam 29-35 PZ
*Hydric soil rating:* No

**Altoga**

*Percent of map unit:* 10 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Base slope
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Ecological site:* R086AY007TX - Southern Clay Loam
*Hydric soil rating:* No

**Brackett**

*Percent of map unit:* 5 percent
*Landform:* Ridges
*Landform position (two-dimensional):* Shoulder, backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Ecological site:* R081CY355TX - Adobe 29-35 PZ
*Hydric soil rating:* No

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# Glossary

Many of the terms relating to landforms, geology, and geomorphology are defined in more detail in the following National Soil Survey Handbook link: “National Soil Survey Handbook.”

**ABC soil**

A soil having an A, a B, and a C horizon.

**Ablation till**

Loose, relatively permeable earthy material deposited during the downwasting of nearly static glacial ice, either contained within or accumulated on the surface of the glacier.

**AC soil**

A soil having only an A and a C horizon. Commonly, such soil formed in recent alluvium or on steep, rocky slopes.

**Aeration, soil**

The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

**Aggregate, soil**

Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

**Alkali (sodic) soil**

A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

**Alluvial cone**

A semiconical type of alluvial fan having very steep slopes. It is higher, narrower, and steeper than a fan and is composed of coarser and thicker layers of material deposited by a combination of alluvial episodes and (to a much lesser degree) landslides (debris flow). The coarsest materials tend to be concentrated at the apex of the cone.

**Alluvial fan**

A low, outspread mass of loose materials and/or rock material, commonly with gentle slopes. It is shaped like an open fan or a segment of a cone. The material was deposited by a stream at the place where it issues from a narrow mountain valley or upland valley or where a tributary stream is near or at its junction with the main stream. The fan is steepest near its apex, which points upstream, and slopes gently and convexly outward (downstream) with a gradual decrease in gradient.

**Alluvium**

Unconsolidated material, such as gravel, sand, silt, clay, and various mixtures of these, deposited on land by running water.

**Alpha,alpha-dipyridyl**

A compound that when dissolved in ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction implies reducing conditions and the likely presence of redoximorphic features.

**Animal unit month (AUM)**

The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

**Aquic conditions**

Current soil wetness characterized by saturation, reduction, and redoximorphic features.

**Argillic horizon**

A subsoil horizon characterized by an accumulation of illuvial clay.

**Arroyo**

The flat-floored channel of an ephemeral stream, commonly with very steep to vertical banks cut in unconsolidated material. It is usually dry but can be transformed into a temporary watercourse or short-lived torrent after heavy rain within the watershed.

**Aspect**

The direction toward which a slope faces. Also called slope aspect.

**Association, soil**

A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

**Available water capacity (available moisture capacity)**

The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

*Very low:* 0 to 3
*Low:* 3 to 6
*Moderate:* 6 to 9
*High:* 9 to 12
*Very high:* More than 12

**Backslope**

The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

**Backswamp**

A flood-plain landform. Extensive, marshy or swampy, depressed areas of flood plains between natural levees and valley sides or terraces.

**Badland**

A landscape that is intricately dissected and characterized by a very fine drainage network with high drainage densities and short, steep slopes and narrow interfluves. Badlands develop on surfaces that have little or no vegetative cover overlying unconsolidated or poorly cemented materials (clays, silts, or sandstones) with, in some cases, soluble minerals, such as gypsum or halite.

**Bajada**

A broad, gently inclined alluvial piedmont slope extending from the base of a mountain range out into a basin and formed by the lateral coalescence of a series of alluvial fans. Typically, it has a broadly undulating transverse profile, parallel to the mountain front, resulting from the convexities of component fans. The term is generally restricted to constructional slopes of intermontane basins.

**Basal area**

The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

**Base saturation**

The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

**Base slope (geomorphology)**

A geomorphic component of hills consisting of the concave to linear (perpendicular to the contour) slope that, regardless of the lateral shape, forms an apron or wedge at the bottom of a hillside dominated by colluvium and slope-wash sediments (for example, slope alluvium).

**Bedding plane**

A planar or nearly planar bedding surface that visibly separates each successive layer of stratified sediment or rock (of the same or different lithology)

from the preceding or following layer; a plane of deposition. It commonly marks a change in the circumstances of deposition and may show a parting, a color difference, a change in particle size, or various combinations of these. The term is commonly applied to any bedding surface, even one that is conspicuously bent or deformed by folding.

**Bedding system**

A drainage system made by plowing, grading, or otherwise shaping the surface of a flat field. It consists of a series of low ridges separated by shallow, parallel dead furrows.

**Bedrock**

The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

**Bedrock-controlled topography**

A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.

**Bench terrace**

A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.

**Bisequum**

Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.

**Blowout (map symbol)**

A saucer-, cup-, or trough-shaped depression formed by wind erosion on a preexisting dune or other sand deposit, especially in an area of shifting sand or loose soil or where protective vegetation is disturbed or destroyed. The adjoining accumulation of sand derived from the depression, where recognizable, is commonly included. Blowouts are commonly small.

**Borrow pit (map symbol)**

An open excavation from which soil and underlying material have been removed, usually for construction purposes.

**Bottom land**

An informal term loosely applied to various portions of a flood plain.

**Boulders**

Rock fragments larger than 2 feet (60 centimeters) in diameter.

**Breaks**

A landscape or tract of steep, rough or broken land dissected by ravines and gullies and marking a sudden change in topography.

**Breast height**

An average height of 4.5 feet above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

**Brush management**

Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

**Butte**

An isolated, generally flat-topped hill or mountain with relatively steep slopes and talus or precipitous cliffs and characterized by summit width that is less than the height of bounding escarpments; commonly topped by a caprock of resistant material and representing an erosion remnant carved from flat-lying rocks.

**Cable yarding**

A method of moving felled trees to a nearby central area for transport to a processing facility. Most cable yarding systems involve use of a drum, a pole, and wire cables in an arrangement similar to that of a rod and reel used for fishing. To reduce friction and soil disturbance, felled trees generally are reeled in while one end is lifted or the entire log is suspended.

**Calcareous soil**

A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

**Caliche**

A general term for a prominent zone of secondary carbonate accumulation in surficial materials in warm, subhumid to arid areas. Caliche is formed by both geologic and pedologic processes. Finely crystalline calcium carbonate forms a nearly continuous surface-coating and void-filling medium in geologic (parent) materials. Cementation ranges from weak in nonindurated forms to very strong in indurated forms. Other minerals (e.g., carbonates, silicate, and sulfate) may occur as accessory cements. Most petrocalcic horizons and some calcic horizons are caliche.

**California bearing ratio (CBR)**

The load-supporting capacity of a soil as compared to that of standard crushed limestone, expressed as a ratio. First standardized in California. A soil having a CBR of 16 supports 16 percent of the load that would be supported by standard crushed limestone, per unit area, with the same degree of distortion.

**Canopy**

The leafy crown of trees or shrubs. (See Crown.)

**Canyon**

A long, deep, narrow valley with high, precipitous walls in an area of high local relief.

**Capillary water**

Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

**Catena**

A sequence, or “chain,” of soils on a landscape that formed in similar kinds of parent material and under similar climatic conditions but that have different characteristics as a result of differences in relief and drainage.

**Cation**

An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

**Cation-exchange capacity**

The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

**Catsteps**

See Terracettes.

**Cement rock**

Shaly limestone used in the manufacture of cement.

**Channery soil material**

Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a channer.

**Chemical treatment**

Control of unwanted vegetation through the use of chemicals.

**Chiseling**

Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

**Cirque**

A steep-walled, semicircular or crescent-shaped, half-bowl-like recess or hollow, commonly situated at the head of a glaciated mountain valley or high on the side of a mountain. It was produced by the erosive activity of a mountain glacier. It commonly contains a small round lake (tarn).

**Clay**

As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

**Clay depletions**

See Redoximorphic features.

**Clay film**

A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

**Clay spot (map symbol)**

A spot where the surface texture is silty clay or clay in areas where the surface layer of the soils in the surrounding map unit is sandy loam, loam, silt loam, or coarser.

**Claypan**

A dense, compact subsoil layer that contains much more clay than the overlying materials, from which it is separated by a sharply defined boundary. The layer restricts the downward movement of water through the soil. A claypan is commonly hard when dry and plastic and sticky when wet.

**Climax plant community**

The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

**Coarse textured soil**

Sand or loamy sand.

**Cobble (or cobblestone)**

A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.

**Cobbly soil material**

Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.

**COLE (coefficient of linear extensibility)**

See Linear extensibility.

**Colluvium**

Unconsolidated, unsorted earth material being transported or deposited on side slopes and/or at the base of slopes by mass movement (e.g., direct gravitational action) and by local, unconcentrated runoff.

**Complex slope**

Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

**Complex, soil**

A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

**Concretions**

See Redoximorphic features.

**Conglomerate**

A coarse grained, clastic sedimentary rock composed of rounded or subangular rock fragments more than 2 millimeters in diameter. It commonly has a matrix of sand and finer textured material. Conglomerate is the consolidated equivalent of gravel.

**Conservation cropping system**

Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

**Conservation tillage**

A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

**Consistence, soil**

Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the “Soil Survey Manual.”

**Contour stripcropping**

Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

**Control section**

The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.

**Coprogenous earth (sedimentary peat)**

A type of limnic layer composed predominantly of fecal material derived from aquatic animals.

**Corrosion (geomorphology)**

A process of erosion whereby rocks and soil are removed or worn away by natural chemical processes, especially by the solvent action of running water, but also by other reactions, such as hydrolysis, hydration, carbonation, and oxidation.

**Corrosion (soil survey interpretations)**

Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.

**Cover crop**

A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.

**Crop residue management**

Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

**Cropping system**

Growing crops according to a planned system of rotation and management practices.

**Cross-slope farming**

Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.

**Crown**

The upper part of a tree or shrub, including the living branches and their foliage.

**Cryoturbate**

A mass of soil or other unconsolidated earthy material moved or disturbed by frost action. It is typically coarser than the underlying material.

**Cuesta**

An asymmetric ridge capped by resistant rock layers of slight or moderate dip (commonly less than 15 percent slopes); a type of homocline produced by differential erosion of interbedded resistant and weak rocks. A cuesta has a long, gentle slope on one side (dip slope) that roughly parallels the inclined beds; on the other side, it has a relatively short and steep or clifflike slope (scarp) that cuts through the tilted rocks.

**Culmination of the mean annual increment (CMAI)**

The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

**Cutbanks cave**

The walls of excavations tend to cave in or slough.

**Decreasers**

The most heavily grazed climax range plants. Because they are the most palatable, they are the first to be destroyed by overgrazing.

**Deferred grazing**

Postponing grazing or resting grazing land for a prescribed period.

**Delta**

A body of alluvium having a surface that is fan shaped and nearly flat; deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.

**Dense layer**

A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

**Depression, closed (map symbol)**

A shallow, saucer-shaped area that is slightly lower on the landscape than the surrounding area and that does not have a natural outlet for surface drainage.

**Depth, soil**

Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

**Desert pavement**

A natural, residual concentration or layer of wind-polished, closely packed gravel, boulders, and other rock fragments mantling a desert surface. It forms where wind action and sheetwash have removed all smaller particles or where rock fragments have migrated upward through sediments to the surface. It typically protects the finer grained underlying material from further erosion.

**Diatomaceous earth**

A geologic deposit of fine, grayish siliceous material composed chiefly or entirely of the remains of diatoms.

**Dip slope**

A slope of the land surface, roughly determined by and approximately conforming to the dip of the underlying bedrock.

**Diversion (or diversion terrace)**

A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

**Divided-slope farming**

A form of field stripcropping in which crops are grown in a systematic arrangement of two strips, or bands, across the slope to reduce the hazard of water erosion. One strip is in a close-growing crop that provides protection from erosion, and the other strip is in a crop that provides less protection from erosion. This practice is used where slopes are not long enough to permit a full stripcropping pattern to be used.

**Drainage class (natural)**

Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained,* and *very poorly drained*. These classes are defined in the “Soil Survey Manual.”

**Drainage, surface**

Runoff, or surface flow of water, from an area.

**Drainageway**

A general term for a course or channel along which water moves in draining an area. A term restricted to relatively small, linear depressions that at some time move concentrated water and either do not have a defined channel or have only a small defined channel.

**Draw**

A small stream valley that generally is shallower and more open than a ravine or gulch and that has a broader bottom. The present stream channel may appear inadequate to have cut the drainageway that it occupies.

**Drift**

A general term applied to all mineral material (clay, silt, sand, gravel, and boulders) transported by a glacier and deposited directly by or from the ice or transported by running water emanating from a glacier. Drift includes unstratified material (till) that forms moraines and stratified deposits that form outwash plains, eskers, kames, varves, and glaciofluvial sediments. The term is generally applied to Pleistocene glacial deposits in areas that no longer contain glaciers.

**Drumlin**

A low, smooth, elongated oval hill, mound, or ridge of compact till that has a core of bedrock or drift. It commonly has a blunt nose facing the direction from which the ice approached and a gentler slope tapering in the other direction. The longer axis is parallel to the general direction of glacier flow. Drumlins are products of streamline (laminar) flow of glaciers, which molded the subglacial floor through a combination of erosion and deposition.

**Duff**

A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.

**Dune**

A low mound, ridge, bank, or hill of loose, windblown granular material (generally sand), either barren and capable of movement from place to place or covered and stabilized with vegetation but retaining its characteristic shape.

**Earthy fill**

See Mine spoil.

**Ecological site**

An area where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. An ecological site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other ecological sites in kind and/or proportion of species or in total production.

**Eluviation**

The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

**Endosaturation**

A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.

**Eolian deposit**

Sand-, silt-, or clay-sized clastic material transported and deposited primarily by wind, commonly in the form of a dune or a sheet of sand or loess.

**Ephemeral stream**

A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.

**Episaturation**

A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.

**Erosion**

The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.

**Erosion (accelerated)**

Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.

**Erosion (geologic)**

Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

**Erosion pavement**

A surficial lag concentration or layer of gravel and other rock fragments that remains on the soil surface after sheet or rill erosion or wind has removed the finer soil particles and that tends to protect the underlying soil from further erosion.

**Erosion surface**

A land surface shaped by the action of erosion, especially by running water.

**Escarpment**

A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Most commonly applied to cliffs produced by differential erosion. Synonym: scarp.

**Escarpment, bedrock (map symbol)**

A relatively continuous and steep slope or cliff, produced by erosion or faulting, that breaks the general continuity of more gently sloping land surfaces. Exposed material is hard or soft bedrock.

**Escarpment, nonbedrock (map symbol)**

A relatively continuous and steep slope or cliff, generally produced by erosion but in some places produced by faulting, that breaks the continuity of more gently sloping land surfaces. Exposed earthy material is nonsoil or very shallow soil.

**Esker**

A long, narrow, sinuous, steep-sided ridge of stratified sand and gravel deposited as the bed of a stream flowing in an ice tunnel within or below the ice (subglacial) or between ice walls on top of the ice of a wasting glacier and left

behind as high ground when the ice melted. Eskers range in length from less than a kilometer to more than 160 kilometers and in height from 3 to 30 meters.

**Extrusive rock**

Igneous rock derived from deep-seated molten matter (magma) deposited and cooled on the earth's surface.

**Fallow**

Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

**Fan remnant**

A general term for landforms that are the remaining parts of older fan landforms, such as alluvial fans, that have been either dissected or partially buried.

**Fertility, soil**

The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

**Fibric soil material (peat)**

The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

**Field moisture capacity**

The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity,* or *capillary capacity*.

**Fill slope**

A sloping surface consisting of excavated soil material from a road cut. It commonly is on the downhill side of the road.

**Fine textured soil**

Sandy clay, silty clay, or clay.

**Firebreak**

An area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of firefighters and equipment. Designated roads also serve as firebreaks.

**First bottom**

An obsolete, informal term loosely applied to the lowest flood-plain steps that are subject to regular flooding.

**Flaggy soil material**

Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.

**Flagstone**

A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

**Flood plain**

The nearly level plain that borders a stream and is subject to flooding unless protected artificially.

**Flood-plain landforms**

A variety of constructional and erosional features produced by stream channel migration and flooding. Examples include backswamps, flood-plain splays, meanders, meander belts, meander scrolls, oxbow lakes, and natural levees.

**Flood-plain splay**

A fan-shaped deposit or other outspread deposit formed where an overloaded stream breaks through a levee (natural or artificial) and deposits its material (commonly coarse grained) on the flood plain.

**Flood-plain step**

An essentially flat, terrace-like alluvial surface within a valley that is frequently covered by floodwater from the present stream; any approximately horizontal surface still actively modified by fluvial scour and/or deposition. May occur individually or as a series of steps.

**Fluvial**

Of or pertaining to rivers or streams; produced by stream or river action.

**Foothills**

A region of steeply sloping hills that fringes a mountain range or high-plateau escarpment. The hills have relief of as much as 1,000 feet (300 meters).

**Footslope**

The concave surface at the base of a hillslope. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).

**Forb**

Any herbaceous plant not a grass or a sedge.

**Forest cover**

All trees and other woody plants (underbrush) covering the ground in a forest.

**Forest type**

A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.

**Fragipan**

A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.

**Genesis, soil**

The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

**Gilgai**

Commonly, a succession of microbasins and microknolls in nearly level areas or of microvalleys and microridges parallel with the slope. Typically, the microrelief of clayey soils that shrink and swell considerably with changes in moisture content.

**Glaciofluvial deposits**

Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur in the form of outwash plains, valley trains, deltas, kames, eskers, and kame terraces.

**Glaciolacustrine deposits**

Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are bedded or laminated.

**Gleyed soil**

Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.

**Graded stripcropping**

Growing crops in strips that grade toward a protected waterway.

**Grassed waterway**

A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.

**Gravel**

Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

**Gravel pit (map symbol)**

An open excavation from which soil and underlying material have been removed and used, without crushing, as a source of sand or gravel.

**Gravelly soil material**

Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.

**Gravelly spot (map symbol)**

A spot where the surface layer has more than 35 percent, by volume, rock fragments that are mostly less than 3 inches in diameter in an area that has less than 15 percent rock fragments.

**Green manure crop (agronomy)**

A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.

**Ground water**

Water filling all the unblocked pores of the material below the water table.

**Gully (map symbol)**

A small, steep-sided channel caused by erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage whereas a rill is of lesser depth and can be smoothed over by ordinary tillage.

**Hard bedrock**

Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.

**Hard to reclaim**

Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.

**Hardpan**

A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

**Head slope (geomorphology)**

A geomorphic component of hills consisting of a laterally concave area of a hillside, especially at the head of a drainageway. The overland waterflow is converging.

**Hemic soil material (mucky peat)**

Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

**High-residue crops**

Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.

**Hill**

A generic term for an elevated area of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline. Slopes are generally more than 15 percent. The distinction between a hill and a mountain is arbitrary and may depend on local usage.

**Hillslope**

A generic term for the steeper part of a hill between its summit and the drainage line, valley flat, or depression floor at the base of a hill.

**Horizon, soil**

A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the “Soil Survey Manual.” The major horizons of mineral soil are as follows:

*O horizon:* An organic layer of fresh and decaying plant residue.

*L horizon:* A layer of organic and mineral limnic materials, including coprogenous earth (sedimentary peat), diatomaceous earth, and marl.

*A horizon:* The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

*E horizon:* The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

*B horizon:* The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

*C horizon:* The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

*Cr horizon:* Soft, consolidated bedrock beneath the soil.

*R layer:* Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

*M layer:* A root-limiting subsoil layer consisting of nearly continuous, horizontally oriented, human-manufactured materials.

*W layer:* A layer of water within or beneath the soil.

**Humus**

The well decomposed, more or less stable part of the organic matter in mineral soils.

**Hydrologic soil groups**

Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties include depth to a seasonal high water table, the infiltration rate, and depth to a layer that significantly restricts the downward movement of water. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

**Igneous rock**

Rock that was formed by cooling and solidification of magma and that has not been changed appreciably by weathering since its formation. Major varieties include plutonic and volcanic rock (e.g., andesite, basalt, and granite).

**Illuviation**

The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

**Impervious soil**

A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

**Increasers**

Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasers commonly are the shorter plants and the less palatable to livestock.

**Infiltration**

The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

**Infiltration capacity**

The maximum rate at which water can infiltrate into a soil under a given set of conditions.

**Infiltration rate**

The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

**Intake rate**

The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

*Very low:* Less than 0.2
*Low:* 0.2 to 0.4
*Moderately low:* 0.4 to 0.75
*Moderate:* 0.75 to 1.25
*Moderately high:* 1.25 to 1.75
*High:* 1.75 to 2.5
*Very high:* More than 2.5

**Interfluve**

A landform composed of the relatively undissected upland or ridge between two adjacent valleys containing streams flowing in the same general direction. An elevated area between two drainageways that sheds water to those drainageways.

**Interfluve (geomorphology)**

A geomorphic component of hills consisting of the uppermost, comparatively level or gently sloping area of a hill; shoulders of backwearing hillslopes can narrow the upland or can merge, resulting in a strongly convex shape.

**Intermittent stream**

A stream, or reach of a stream, that does not flow year-round but that is commonly dry for 3 or more months out of 12 and whose channel is generally below the local water table. It flows only during wet periods or when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

**Invaders**

On range, plants that encroach into an area and grow after the climax vegetation has been reduced by grazing. Generally, plants invade following disturbance of the surface.

**Iron depletions**

See Redoximorphic features.

**Irrigation**

Application of water to soils to assist in production of crops. Methods of irrigation are:

*Basin:* Water is applied rapidly to nearly level plains surrounded by levees or dikes.

*Border:* Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.

*Controlled flooding:* Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.

*Corrugation:* Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.

*Drip (or trickle):* Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

*Furrow:* Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.

*Sprinkler:* Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

*Subirrigation:* Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.

*Wild flooding:* Water, released at high points, is allowed to flow onto an area without controlled distribution.

**Kame**

A low mound, knob, hummock, or short irregular ridge composed of stratified sand and gravel deposited by a subglacial stream as a fan or delta at the margin of a melting glacier; by a supraglacial stream in a low place or hole on the surface of the glacier; or as a ponded deposit on the surface or at the margin of stagnant ice.

**Karst (topography)**

A kind of topography that formed in limestone, gypsum, or other soluble rocks by dissolution and that is characterized by closed depressions, sinkholes, caves, and underground drainage.

**Knoll**

A small, low, rounded hill rising above adjacent landforms.

**Ksat**

See Saturated hydraulic conductivity.

**Lacustrine deposit**

Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

**Lake plain**

A nearly level surface marking the floor of an extinct lake filled by well sorted, generally fine textured, stratified deposits, commonly containing varves.

**Lake terrace**

A narrow shelf, partly cut and partly built, produced along a lakeshore in front of a scarp line of low cliffs and later exposed when the water level falls.

**Landfill (map symbol)**

An area of accumulated waste products of human habitation, either above or below natural ground level.

**Landslide**

A general, encompassing term for most types of mass movement landforms and processes involving the downslope transport and outward deposition of soil and rock materials caused by gravitational forces; the movement may or may not involve saturated materials. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

**Large stones**

Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

**Lava flow (map symbol)**

A solidified, commonly lobate body of rock formed through lateral, surface outpouring of molten lava from a vent or fissure.

**Leaching**

The removal of soluble material from soil or other material by percolating water.

**Levee (map symbol)**

An embankment that confines or controls water, especially one built along the banks of a river to prevent overflow onto lowlands.

**Linear extensibility**

Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at $^{1}/_{3}$- or $^{1}/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

**Liquid limit**

The moisture content at which the soil passes from a plastic to a liquid state.

**Loam**

Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

**Loess**

Material transported and deposited by wind and consisting dominantly of silt-sized particles.

**Low strength**

The soil is not strong enough to support loads.

**Low-residue crops**

Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

**Marl**

An earthy, unconsolidated deposit consisting chiefly of calcium carbonate mixed with clay in approximately equal proportions; formed primarily under freshwater lacustrine conditions but also formed in more saline environments.

**Marsh or swamp (map symbol)**

A water-saturated, very poorly drained area that is intermittently or permanently covered by water. Sedges, cattails, and rushes are the dominant vegetation in marshes, and trees or shrubs are the dominant vegetation in swamps. Not used in map units where the named soils are poorly drained or very poorly drained.

**Mass movement**

A generic term for the dislodgment and downslope transport of soil and rock material as a unit under direct gravitational stress.

**Masses**

See Redoximorphic features.

**Meander belt**

The zone within which migration of a meandering channel occurs; the flood-plain area included between two imaginary lines drawn tangential to the outer bends of active channel loops.

**Meander scar**

A crescent-shaped, concave or linear mark on the face of a bluff or valley wall, produced by the lateral erosion of a meandering stream that impinged upon and undercut the bluff.

**Meander scroll**

One of a series of long, parallel, close-fitting, crescent-shaped ridges and troughs formed along the inner bank of a stream meander as the channel migrated laterally down-valley and toward the outer bank.

**Mechanical treatment**

Use of mechanical equipment for seeding, brush management, and other management practices.

**Medium textured soil**

Very fine sandy loam, loam, silt loam, or silt.

**Mesa**

A broad, nearly flat topped and commonly isolated landmass bounded by steep slopes or precipitous cliffs and capped by layers of resistant, nearly horizontal rocky material. The summit width is characteristically greater than the height of the bounding escarpments.

**Metamorphic rock**

Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement at depth in the earth’s crust. Nearly all such rocks are crystalline.

**Mine or quarry (map symbol)**

An open excavation from which soil and underlying material have been removed and in which bedrock is exposed. Also denotes surface openings to underground mines.

**Mine spoil**

An accumulation of displaced earthy material, rock, or other waste material removed during mining or excavation. Also called earthy fill.

**Mineral soil**

Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

**Minimum tillage**

Only the tillage essential to crop production and prevention of soil damage.

**Miscellaneous area**

A kind of map unit that has little or no natural soil and supports little or no vegetation.

**Miscellaneous water (map symbol)**

Small, constructed bodies of water that are used for industrial, sanitary, or mining applications and that contain water most of the year.

**Moderately coarse textured soil**

Coarse sandy loam, sandy loam, or fine sandy loam.

**Moderately fine textured soil**

Clay loam, sandy clay loam, or silty clay loam.

**Mollic epipedon**

A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.

**Moraine**

In terms of glacial geology, a mound, ridge, or other topographically distinct accumulation of unsorted, unstratified drift, predominantly till, deposited primarily by the direct action of glacial ice in a variety of landforms. Also, a general term for a landform composed mainly of till (except for kame moraines, which are composed mainly of stratified outwash) that has been deposited by a glacier. Some types of moraines are disintegration, end, ground, kame, lateral, recessional, and terminal.

**Morphology, soil**

The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

**Mottling, soil**

Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few, common,* and *many;* size—*fine, medium,* and *coarse;* and contrast—*faint, distinct,* and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium,* from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse,* more than 15 millimeters (about 0.6 inch).

**Mountain**

A generic term for an elevated area of the land surface, rising more than 1,000 feet (300 meters) above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can

occur as a single, isolated mass or in a group forming a chain or range. Mountains are formed primarily by tectonic activity and/or volcanic action but can also be formed by differential erosion.

**Muck**

Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

**Mucky peat**

See Hemic soil material.

**Mudstone**

A blocky or massive, fine grained sedimentary rock in which the proportions of clay and silt are approximately equal. Also, a general term for such material as clay, silt, claystone, siltstone, shale, and argillite and that should be used only when the amounts of clay and silt are not known or cannot be precisely identified.

**Munsell notation**

A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

**Natric horizon**

A special kind of argillic horizon that contains enough exchangeable sodium to have an adverse effect on the physical condition of the subsoil.

**Neutral soil**

A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

**Nodules**

See Redoximorphic features.

**Nose slope (geomorphology)**

A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent. Nose slopes consist dominantly of colluvium and slope-wash sediments (for example, slope alluvium).

**Nutrient, plant**

Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

**Organic matter**

Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:

*Very low:* Less than 0.5 percent
*Low:* 0.5 to 1.0 percent
*Moderately low:* 1.0 to 2.0 percent
*Moderate:* 2.0 to 4.0 percent
*High:* 4.0 to 8.0 percent
*Very high:* More than 8.0 percent

**Outwash**

Stratified and sorted sediments (chiefly sand and gravel) removed or “washed out” from a glacier by meltwater streams and deposited in front of or beyond the end moraine or the margin of a glacier. The coarser material is deposited nearer to the ice.

**Outwash plain**

An extensive lowland area of coarse textured glaciofluvial material. An outwash plain is commonly smooth; where pitted, it generally is low in relief.

**Paleoterrace**

An erosional remnant of a terrace that retains the surface form and alluvial deposits of its origin but was not emplaced by, and commonly does not grade to, a present-day stream or drainage network.

**Pan**

A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan, fragipan, claypan, plowpan,* and *traffic pan*.

**Parent material**

The unconsolidated organic and mineral material in which soil forms.

**Peat**

Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

**Ped**

An individual natural soil aggregate, such as a granule, a prism, or a block.

**Pedisediment**

A layer of sediment, eroded from the shoulder and backslope of an erosional slope, that lies on and is being (or was) transported across a gently sloping erosional surface at the foot of a receding hill or mountain slope.

**Pedon**

The smallest volume that can be called “a soil.” A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

**Percolation**

The movement of water through the soil.

**Perennial water (map symbol)**

Small, natural or constructed lakes, ponds, or pits that contain water most of the year.

**Permafrost**

Ground, soil, or rock that remains at or below 0 degrees C for at least 2 years. It is defined on the basis of temperature and is not necessarily frozen.

**pH value**

A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

**Phase, soil**

A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

**Piping**

Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

**Pitting**

Pits caused by melting around ice. They form on the soil after plant cover is removed.

**Plastic limit**

The moisture content at which a soil changes from semisolid to plastic.

**Plasticity index**

The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

**Plateau (geomorphology)**

A comparatively flat area of great extent and elevation; specifically, an extensive land region that is considerably elevated (more than 100 meters) above the adjacent lower lying terrain, is commonly limited on at least one side by an abrupt descent, and has a flat or nearly level surface. A comparatively large part of a plateau surface is near summit level.

**Playa**

The generally dry and nearly level lake plain that occupies the lowest parts of closed depressions, such as those on intermontane basin floors. Temporary flooding occurs primarily in response to precipitation and runoff. Playa deposits are fine grained and may or may not have a high water table and saline conditions.

**Plinthite**

The sesquioxide-rich, humus-poor, highly weathered mixture of clay with quartz and other diluents. It commonly appears as red mottles, usually in platy, polygonal, or reticulate patterns. Plinthite changes irreversibly to an ironstone hardpan or to irregular aggregates on repeated wetting and drying, especially if it is exposed also to heat from the sun. In a moist soil, plinthite can be cut with a spade. It is a form of laterite.

**Plowpan**

A compacted layer formed in the soil directly below the plowed layer.

**Ponding**

Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

**Poorly graded**

Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

**Pore linings**

See Redoximorphic features.

**Potential native plant community**

See Climax plant community.

**Potential rooting depth (effective rooting depth)**

Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

**Prescribed burning**

Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.

**Productivity, soil**

The capability of a soil for producing a specified plant or sequence of plants under specific management.

**Profile, soil**

A vertical section of the soil extending through all its horizons and into the parent material.

**Proper grazing use**

Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and

promotes the accumulation of litter and mulch necessary to conserve soil and water.

**Rangeland**

Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.

**Reaction, soil**

A measure of acidity or alkalinity of a soil, expressed as pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

*Ultra acid:* Less than 3.5
*Extremely acid:* 3.5 to 4.4
*Very strongly acid:* 4.5 to 5.0
*Strongly acid:* 5.1 to 5.5
*Moderately acid:* 5.6 to 6.0
*Slightly acid:* 6.1 to 6.5
*Neutral:* 6.6 to 7.3
*Slightly alkaline:* 7.4 to 7.8
*Moderately alkaline:* 7.9 to 8.4
*Strongly alkaline:* 8.5 to 9.0
*Very strongly alkaline:* 9.1 and higher

**Red beds**

Sedimentary strata that are mainly red and are made up largely of sandstone and shale.

**Redoximorphic concentrations**

See Redoximorphic features.

**Redoximorphic depletions**

See Redoximorphic features.

**Redoximorphic features**

Redoximorphic features are associated with wetness and result from alternating periods of reduction and oxidation of iron and manganese compounds in the soil. Reduction occurs during saturation with water, and oxidation occurs when the soil is not saturated. Characteristic color patterns are created by these processes. The reduced iron and manganese ions may be removed from a soil if vertical or lateral fluxes of water occur, in which case there is no iron or manganese precipitation in that soil. Wherever the iron and manganese are oxidized and precipitated, they form either soft masses or hard concretions or nodules. Movement of iron and manganese as a result of redoximorphic processes in a soil may result in redoximorphic features that are defined as follows:

1. Redoximorphic concentrations.—These are zones of apparent accumulation of iron-manganese oxides, including:
   A. Nodules and concretions, which are cemented bodies that can be removed from the soil intact. Concretions are distinguished from nodules on the basis of internal organization. A concretion typically has concentric layers that are visible to the naked eye. Nodules do not have visible organized internal structure; *and*
   B. Masses, which are noncemented concentrations of substances within the soil matrix; *and*
   C. Pore linings, i.e., zones of accumulation along pores that may be either coatings on pore surfaces or impregnations from the matrix adjacent to the pores.
2. Redoximorphic depletions.—These are zones of low chroma (chromas less than those in the matrix) where either iron-manganese oxides alone or both iron-manganese oxides and clay have been stripped out, including:
   A. Iron depletions, i.e., zones that contain low amounts of iron and manganese oxides but have a clay content similar to that of the adjacent matrix; *and*
   B. Clay depletions, i.e., zones that contain low amounts of iron, manganese, and clay (often referred to as silt coatings or skeletans).
3. Reduced matrix.—This is a soil matrix that has low chroma *in situ* but undergoes a change in hue or chroma within 30 minutes after the soil material has been exposed to air.

**Reduced matrix**

See Redoximorphic features.

**Regolith**

All unconsolidated earth materials above the solid bedrock. It includes material weathered in place from all kinds of bedrock and alluvial, glacial, eolian, lacustrine, and pyroclastic deposits.

**Relief**

The relative difference in elevation between the upland summits and the lowlands or valleys of a given region.

**Residuum (residual soil material)**

Unconsolidated, weathered or partly weathered mineral material that accumulated as bedrock disintegrated in place.

**Rill**

A very small, steep-sided channel resulting from erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. A rill generally is not an obstacle to wheeled vehicles and is shallow enough to be smoothed over by ordinary tillage.

**Riser**

The vertical or steep side slope (e.g., escarpment) of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural, steplike landforms, such as successive stream terraces.

**Road cut**

A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

**Rock fragments**

Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

**Rock outcrop (map symbol)**

An exposure of bedrock at the surface of the earth. Not used where the named soils of the surrounding map unit are shallow over bedrock or where “Rock outcrop” is a named component of the map unit.

**Root zone**

The part of the soil that can be penetrated by plant roots.

**Runoff**

The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

**Saline soil**

A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.

**Saline spot (map symbol)**

An area where the surface layer has an electrical conductivity of 8 mmhos/cm more than the surface layer of the named soils in the surrounding map unit. The surface layer of the surrounding soils has an electrical conductivity of 2 mmhos/cm or less.

**Sand**

As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

**Sandstone**

Sedimentary rock containing dominantly sand-sized particles.

**Sandy spot (map symbol)**

A spot where the surface layer is loamy fine sand or coarser in areas where the surface layer of the named soils in the surrounding map unit is very fine sandy loam or finer.

**Sapric soil material (muck)**

The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

**Saturated hydraulic conductivity (Ksat)**

The ease with which pores of a saturated soil transmit water. Formally, the proportionality coefficient that expresses the relationship of the rate of water movement to hydraulic gradient in Darcy's Law, a law that describes the rate of water movement through porous media. Commonly abbreviated as "Ksat." Terms describing saturated hydraulic conductivity are:

*Very high:* 100 or more micrometers per second (14.17 or more inches per hour)

*High:* 10 to 100 micrometers per second (1.417 to 14.17 inches per hour)

*Moderately high:* 1 to 10 micrometers per second (0.1417 inch to 1.417 inches per hour)

*Moderately low:* 0.1 to 1 micrometer per second (0.01417 to 0.1417 inch per hour)

*Low:* 0.01 to 0.1 micrometer per second (0.001417 to 0.01417 inch per hour)

*Very low:* Less than 0.01 micrometer per second (less than 0.001417 inch per hour).

To convert inches per hour to micrometers per second, multiply inches per hour by 7.0572. To convert micrometers per second to inches per hour, multiply micrometers per second by 0.1417.

**Saturation**

Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

**Scarification**

The act of abrading, scratching, loosening, crushing, or modifying the surface to increase water absorption or to provide a more tillable soil.

**Sedimentary rock**

A consolidated deposit of clastic particles, chemical precipitates, or organic remains accumulated at or near the surface of the earth under normal low temperature and pressure conditions. Sedimentary rocks include consolidated equivalents of alluvium, colluvium, drift, and eolian, lacustrine, and marine deposits. Examples are sandstone, siltstone, mudstone, claystone, shale, conglomerate, limestone, dolomite, and coal.

**Sequum**

A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

**Series, soil**

A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

**Severely eroded spot (map symbol)**

An area where, on the average, 75 percent or more of the original surface layer has been lost because of accelerated erosion. Not used in map units in which “severely eroded,” “very severely eroded,” or “gullied” is part of the map unit name.

**Shale**

Sedimentary rock that formed by the hardening of a deposit of clay, silty clay, or silty clay loam and that has a tendency to split into thin layers.

**Sheet erosion**

The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

**Short, steep slope (map symbol)**

A narrow area of soil having slopes that are at least two slope classes steeper than the slope class of the surrounding map unit.

**Shoulder**

The convex, erosional surface near the top of a hillslope. A shoulder is a transition from summit to backslope.

**Shrink-swell**

The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

**Shrub-coppice dune**

A small, streamlined dune that forms around brush and clump vegetation.

**Side slope (geomorphology)**

A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel. Side slopes are dominantly colluvium and slope-wash sediments.

**Silica**

A combination of silicon and oxygen. The mineral form is called quartz.

**Silica-sesquioxide ratio**

The ratio of the number of molecules of silica to the number of molecules of alumina and iron oxide. The more highly weathered soils or their clay fractions in warm-temperate, humid regions, and especially those in the tropics, generally have a low ratio.

**Silt**

As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

**Siltstone**

An indurated silt having the texture and composition of shale but lacking its fine lamination or fissility; a massive mudstone in which silt predominates over clay.

**Similar soils**

Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

**Sinkhole (map symbol)**

A closed, circular or elliptical depression, commonly funnel shaped, characterized by subsurface drainage and formed either by dissolution of the surface of underlying bedrock (e.g., limestone, gypsum, or salt) or by collapse of underlying caves within bedrock. Complexes of sinkholes in carbonate-rock terrain are the main components of karst topography.

**Site index**

A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

**Slickensides (pedogenic)**

Grooved, striated, and/or glossy (shiny) slip faces on structural peds, such as wedges; produced by shrink-swell processes, most commonly in soils that have a high content of expansive clays.

**Slide or slip (map symbol)**

A prominent landform scar or ridge caused by fairly recent mass movement or descent of earthy material resulting from failure of earth or rock under shear stress along one or several surfaces.

**Slope**

The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance.

**Slope alluvium**

Sediment gradually transported down the slopes of mountains or hills primarily by nonchannel alluvial processes (i.e., slope-wash processes) and characterized by particle sorting. Lateral particle sorting is evident on long slopes. In a profile sequence, sediments may be distinguished by differences in size and/or specific gravity of rock fragments and may be separated by stone lines. Burnished peds and sorting of rounded or subrounded pebbles or cobbles distinguish these materials from unsorted colluvial deposits.

**Slow refill**

The slow filling of ponds, resulting from restricted water transmission in the soil.

**Slow water movement**

Restricted downward movement of water through the soil. See Saturated hydraulic conductivity.

**Sodic (alkali) soil**

A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

**Sodic spot (map symbol)**

An area where the surface layer has a sodium adsorption ratio that is at least 10 more than that of the surface layer of the named soils in the surrounding map unit. The surface layer of the surrounding soils has a sodium adsorption ratio of 5 or less.

**Sodicity**

The degree to which a soil is affected by exchangeable sodium. Sodicity is expressed as a sodium adsorption ratio (SAR) of a saturation extract, or the ratio of $Na^{+}$ to $Ca^{++} + Mg^{++}$. The degrees of sodicity and their respective ratios are:

*Slight:* Less than 13:1
*Moderate:* 13-30:1
*Strong:* More than 30:1

**Sodium adsorption ratio (SAR)**

A measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration.

**Soft bedrock**

Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

**Soil**

A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief and by the passage of time.

**Soil separates**

Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

*Very coarse sand:* 2.0 to 1.0
*Coarse sand:* 1.0 to 0.5
*Medium sand:* 0.5 to 0.25
*Fine sand:* 0.25 to 0.10
*Very fine sand:* 0.10 to 0.05
*Silt:* 0.05 to 0.002
*Clay:* Less than 0.002

**Solum**

The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

**Spoil area (map symbol)**

A pile of earthy materials, either smoothed or uneven, resulting from human activity.

**Stone line**

In a vertical cross section, a line formed by scattered fragments or a discrete layer of angular and subangular rock fragments (commonly a gravel- or cobble-sized lag concentration) that formerly was draped across a topographic surface and was later buried by additional sediments. A stone line generally caps material that was subject to weathering, soil formation, and erosion before burial. Many stone lines seem to be buried erosion pavements, originally formed by sheet and rill erosion across the land surface.

**Stones**

Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

**Stony**

Refers to a soil containing stones in numbers that interfere with or prevent tillage.

**Stony spot (map symbol)**

A spot where 0.01 to 0.1 percent of the soil surface is covered by rock fragments that are more than 10 inches in diameter in areas where the surrounding soil has no surface stones.

**Strath terrace**

A type of stream terrace; formed as an erosional surface cut on bedrock and thinly mantled with stream deposits (alluvium).

**Stream terrace**

One of a series of platforms in a stream valley, flanking and more or less parallel to the stream channel, originally formed near the level of the stream; represents the remnants of an abandoned flood plain, stream bed, or valley floor produced during a former state of fluvial erosion or deposition.

**Stripcropping**

Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.

**Structure, soil**

The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are:

*Platy:* Flat and laminated

*Prismatic:* Vertically elongated and having flat tops

*Columnar:* Vertically elongated and having rounded tops

*Angular blocky:* Having faces that intersect at sharp angles (planes)

*Subangular blocky:* Having subrounded and planar faces (no sharp angles)

*Granular:* Small structural units with curved or very irregular faces

Structureless soil horizons are defined as follows:

*Single grained:* Entirely noncoherent (each grain by itself), as in loose sand

*Massive:* Occurring as a coherent mass

**Stubble mulch**

Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

**Subsoil**

Technically, the B horizon; roughly, the part of the solum below plow depth.

**Subsoiling**

Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

**Substratum**

The part of the soil below the solum.

**Subsurface layer**

Any surface soil horizon (A, E, AB, or EB) below the surface layer.

**Summer fallow**

The tillage of uncropped land during the summer to control weeds and allow storage of moisture in the soil for the growth of a later crop. A practice common in semiarid regions, where annual precipitation is not enough to produce a crop every year. Summer fallow is frequently practiced before planting winter grain.

**Summit**

The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.

**Surface layer**

The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the “plow layer,” or the “Ap horizon.”

**Surface soil**

The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

**Talus**

Rock fragments of any size or shape (commonly coarse and angular) derived from and lying at the base of a cliff or very steep rock slope. The accumulated mass of such loose broken rock formed chiefly by falling, rolling, or sliding.

**Taxadjuncts**

Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

**Terminal moraine**

An end moraine that marks the farthest advance of a glacier. It typically has the form of a massive arcuate or concentric ridge, or complex of ridges, and is underlain by till and other types of drift.

**Terrace (conservation)**

An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field

generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

**Terrace (geomorphology)**

A steplike surface, bordering a valley floor or shoreline, that represents the former position of a flood plain, lake, or seashore. The term is usually applied both to the relatively flat summit surface (tread) that was cut or built by stream or wave action and to the steeper descending slope (scarp or riser) that has graded to a lower base level of erosion.

**Terracettes**

Small, irregular steplike forms on steep hillslopes, especially in pasture, formed by creep or erosion of surficial materials that may be induced or enhanced by trampling of livestock, such as sheep or cattle.

**Texture, soil**

The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying “coarse,” “fine,” or “very fine.”

**Thin layer**

Otherwise suitable soil material that is too thin for the specified use.

**Till**

Dominantly unsorted and nonstratified drift, generally unconsolidated and deposited directly by a glacier without subsequent reworking by meltwater, and consisting of a heterogeneous mixture of clay, silt, sand, gravel, stones, and boulders; rock fragments of various lithologies are embedded within a finer matrix that can range from clay to sandy loam.

**Till plain**

An extensive area of level to gently undulating soils underlain predominantly by till and bounded at the distal end by subordinate recessional or end moraines.

**Tilth, soil**

The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

**Toeslope**

The gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.

**Topsoil**

The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

**Trace elements**

Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

**Tread**

The flat to gently sloping, topmost, laterally extensive slope of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural steplike landforms, such as successive stream terraces.

**Tuff**

A generic term for any consolidated or cemented deposit that is 50 percent or more volcanic ash.

**Upland**

An informal, general term for the higher ground of a region, in contrast with a low-lying adjacent area, such as a valley or plain, or for land at a higher elevation than the flood plain or low stream terrace; land above the footslope zone of the hillslope continuum.

**Valley fill**

The unconsolidated sediment deposited by any agent (water, wind, ice, or mass wasting) so as to fill or partly fill a valley.

**Variegation**

Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

**Varve**

A sedimentary layer or a lamina or sequence of laminae deposited in a body of still water within a year. Specifically, a thin pair of graded glaciolacustrine layers seasonally deposited, usually by meltwater streams, in a glacial lake or other body of still water in front of a glacier.

**Very stony spot (map symbol)**

A spot where 0.1 to 3.0 percent of the soil surface is covered by rock fragments that are more than 10 inches in diameter in areas where the surface of the surrounding soil is covered by less than 0.01 percent stones.

**Water bars**

Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

**Weathering**

All physical disintegration, chemical decomposition, and biologically induced changes in rocks or other deposits at or near the earth's surface by atmospheric or biologic agents or by circulating surface waters but involving essentially no transport of the altered material.

**Well graded**

Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

**Wet spot (map symbol)**

A somewhat poorly drained to very poorly drained area that is at least two drainage classes wetter than the named soils in the surrounding map unit.

**Wilting point (or permanent wilting point)**

The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

**Windthrow**

The uprooting and tipping over of trees by the wind.

# Profile Hole Information Sheets

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| Project | Thomas Ranch | Profile Hole # | 1 | County | Travis | Date | 4/7/2025 |
|---|---|---|---|---|---|---|---|

| | | |
|---|---|---|
| 1 | Total Depth of Profile hole | 30" |
| 2 | Primary Rooting Depth | 6" |
| 3 | Secondary Rooting Depth | NA |
| 4 | Horizons Descriptions Shall Include | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| A | Depth of Horizon | 0-22" | A | Depth of Horizon | 22-30" | A | Depth of Horizon | |
| B | Soil Texture | SILTY CLAY LOAM | B | Soil Texture | CALICHE | B | Soil Texture | |
| C | Soil Structure | COARSE | C | Soil Structure | BLOCKY | C | Soil Structure | |
| D | Soil Color | RED/BROWN | D | Soil Color | TAN/GRAY | D | Soil Color | |
| E | Mottling | NA | E | Mottling | NA | E | Mottling | |
| F | Percent Coarse Fragments | <10% | F | Percent Coarse Fragments | <15% | F | Percent Coarse Fragments | |

| | | |
|---|---|---|
| 5 | Boundary Descriptions (Soil Horizons) | LEVEL |
| 6 | Restrictive Horizons | N/A |
| 7 | Potential Water Bearing Zones | None |
| 8 | Active Water Bearing Zones | None |

**Site Characteristics**

| Vegetation | | | | Surface Fragments | Litter | Slope Type |
|---|---|---|---|---|---|---|
| Large Oak | 0% | <5 % Woody | 50 % Herbaceous | <5 % Visible | 0 % | 2 % - 4 % |
| Juniper | 0% | <5 % Canopy Cover | 50 % Cover | | | |
| Small Oak | 0% | | | | | |

Comments Pictures Y Refusal at: N/A Stopped Digging at: 30 inches

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| Project | Thomas Ranch | Profile Hole # | 2 | County | Travis | Date | 4/7/2025 |
|---|---|---|---|---|---|---|---|

| | | |
|---|---|---|
| 1 | Total Depth of Profile hole | 30" |
| 2 | Primary Rooting Depth | 4" |
| 3 | Secondary Rooting Depth | NA |
| 4 | Horizons Descriptions Shall Include | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| A | Depth of Horizon | 0-12" | A | Depth of Horizon | 12-30" | A | Depth of Horizon | |
| B | Soil Texture | SILTY CLAY LOAM | B | Soil Texture | CALICHE | B | Soil Texture | |
| C | Soil Structure | COARSE | C | Soil Structure | BLOCKY | C | Soil Structure | |
| D | Soil Color | RED/BROWN | D | Soil Color | TAN/GRAY | D | Soil Color | |
| E | Mottling | NA | E | Mottling | NA | E | Mottling | |
| F | Percent Coarse Fragments | <10% | F | Percent Coarse Fragments | <20% | F | Percent Coarse Fragments | |

| | | |
|---|---|---|
| 5 | Boundary Descriptions (Soil Horizons) | LEVEL |
| 6 | Restrictive Horizons | N/A |
| 7 | Potential Water Bearing Zones | None |
| 8 | Active Water Bearing Zones | None |

**Site Characteristics**

| Vegetation | | | | Surface Fragments | Litter | Slope Type |
|---|---|---|---|---|---|---|
| Large Oak | 0% | <5 % Woody | 40 % Herbaceous | 0 % Visible | 0 % | 2 % - 4 % |
| Juniper | <5% | <5 % Canopy Cover | 40 % Cover | | | |
| Small Oak | 0% | | | | | |

Comments Pictures Y Refusal at: N/A Stopped Digging at: 30 inches

Project Thomas Ranch Profile Hole # 3 County Travis Date _____

NOT USED - ON CONSTRUCTED GOLF COURSE

1 Total Depth of Profile hole _____
2 Primary Rooting Depth _____
3 Secondary Rooting Depth _____
4 Horizons Descriptions Shall Include

| | | | | | |
|---|---|---|---|---|---|
| A Depth of Horizon | | A Depth of Horizon | | A Depth of Horizon | |
| B Soil Texture | | B Soil Texture | | B Soil Texture | |
| C Soil Structure | | C Soil Structure | | C Soil Structure | |
| D Soil Color | | D Soil Color | | D Soil Color | |
| E Mottling | | E Mottling | | E Mottling | |
| F Percent Coarse Fragments | | F Percent Coarse Fragments | | F Percent Coarse Fragments | |

5 Boundary Descriptions (Soil Horizons) _____
6 Restrictive Horizons _____
7 Potential Water Bearing Zones _____
8 Active Water Bearing Zones _____

**Site Characteristics**

Vegetation

Large Oak _____ _____ % Woody _____ % Herbaceous

Juniper _____ _____ % Canopy Cover _____ % Cover

Small Oak _____

Surface Fragments _____ % Visible

Litter _____ %

Slope Type _____ % - _____ %

Comments Pictures _____ Refusal at: _____ Stopped Digging at: _____ inches

wwdengineering

| Project | Thomas Ranch | Profile Hole # | 4 | County | Travis | Date | 4/8/2025 |
|---|---|---|---|---|---|---|---|

| | | |
|---|---|---|
| 1 | Total Depth of Profile hole | 30" |
| 2 | Primary Rooting Depth | 6" |
| 3 | Secondary Rooting Depth | NA |
| 4 | Horizons Descriptions Shall Include | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| A | Depth of Horizon | 0-6" | A | Depth of Horizon | 6-30" | A | Depth of Horizon | |
| B | Soil Texture | SILTY CLAY LOAM | B | Soil Texture | CALICHE | B | Soil Texture | |
| C | Soil Structure | COARSE | C | Soil Structure | BLOCKY | C | Soil Structure | |
| D | Soil Color | LT BROWN | D | Soil Color | TAN/GRAY | D | Soil Color | |
| E | Mottling | NA | E | Mottling | NA | E | Mottling | |
| F | Percent Coarse Fragments | <15% | F | Percent Coarse Fragments | <20% | F | Percent Coarse Fragments | |

| | | |
|---|---|---|
| 5 | Boundary Descriptions (Soil Horizons) | LEVEL |
| 6 | Restrictive Horizons | N/A |
| 7 | Potential Water Bearing Zones | None |
| 8 | Active Water Bearing Zones | None |

**Site Characteristics**

| Vegetation | | | | Surface Fragments | Litter | Slope Type |
|---|---|---|---|---|---|---|
| Large Oak | <10% | 25 % Woody | 60 % Herbaceous | 15 % Visible | 0 % | 4 % - 8 % |
| Juniper | 15% | 25 % Canopy Cover | 60 % Cover | | | |
| Small Oak | <10% | | | | | |

Comments Pictures Y Refusal at: N/A Stopped Digging at: 30 inches

wwdengineering

| Project | Thomas Ranch | Profile Hole # | 5 | County | Travis | Date | 4/7/2025 |
|---|---|---|---|---|---|---|---|

| | | |
|---|---|---|
| 1 Total Depth of Profile hole | 24" | |
| 2 Primary Rooting Depth | 6" | |
| 3 Secondary Rooting Depth | NA | |
| 4 Horizons Descriptions Shall Include | | |

| | | | | | |
|---|---|---|---|---|---|
| A Depth of Horizon | 0-24" | A Depth of Horizon | | A Depth of Horizon | |
| B Soil Texture | SILTY CLAY LOAM | B Soil Texture | | B Soil Texture | |
| C Soil Structure | COARSE | C Soil Structure | | C Soil Structure | |
| D Soil Color | RED/BROWN | D Soil Color | | D Soil Color | |
| E Mottling | NA | E Mottling | | E Mottling | |
| F Percent Coarse Fragments | <10% | F Percent Coarse Fragments | | F Percent Coarse Fragments | |

| | |
|---|---|
| 5 Boundary Descriptions (Soil Horizons) | LEVEL |
| 6 Restrictive Horizons | LEVEL |
| 7 Potential Water Bearing Zones | None |
| 8 Active Water Bearing Zones | None |

**Site Characteristics**

| Vegetation | | | | Surface Fragments | Litter | Slope Type |
|---|---|---|---|---|---|---|
| Large Oak | 0% | <10 % Woody | 30 % Herbaceous | 0 % Visible | 0 % | 2 % - 4 % |
| Juniper | <10% | <10 % Canopy Cover | 30 % Cover | | | |
| Small Oak | 0% | | | | | |

Comments Pictures Y Refusal at: 24 Stopped Digging at: _____ inches

wwdengineering

| Project | Thomas Ranch | Profile Hole # | 6 | County | Travis | Date | 4/7/2025 |
|---|---|---|---|---|---|---|---|

| | | |
|---|---|---|
| 1 Total Depth of Profile hole | 20" | |
| 2 Primary Rooting Depth | 4" | |
| 3 Secondary Rooting Depth | NA | |
| 4 Horizons Descriptions Shall Include | | |

| | | | | | |
|---|---|---|---|---|---|
| A Depth of Horizon | 0-20" | A Depth of Horizon | | A Depth of Horizon | |
| B Soil Texture | CLAY LOAM | B Soil Texture | | B Soil Texture | |
| C Soil Structure | COARSE | C Soil Structure | | C Soil Structure | |
| D Soil Color | DK BROWN | D Soil Color | | D Soil Color | |
| E Mottling | NA | E Mottling | | E Mottling | |
| F Percent Coarse Fragments | <10% | F Percent Coarse Fragments | | F Percent Coarse Fragments | |

| | |
|---|---|
| 5 Boundary Descriptions (Soil Horizons) | LEVEL |
| 6 Restrictive Horizons | LEVEL |
| 7 Potential Water Bearing Zones | None |
| 8 Active Water Bearing Zones | None |

**Site Characteristics**

| Vegetation | | | | Surface Fragments | Litter | Slope Type |
|---|---|---|---|---|---|---|
| Large Oak | <5% | <10 % Woody | 90 % Herbaceous | 0 % Visible | 0 % | 2 % - 4 % |
| Juniper | <5% | <10 % Canopy Cover | 90 % Cover | | | |
| Small Oak | 0% | | | | | |

Comments Pictures Y Refusal at: 20 Stopped Digging at: _____ inches

wwdengineering

| Project | Thomas Ranch | Profile Hole # | 7 | County | Travis | Date | 4/8/2025 |
|---|---|---|---|---|---|---|---|

| | | |
|---|---|---|
| 1 | Total Depth of Profile hole | 30" |
| 2 | Primary Rooting Depth | 4" |
| 3 | Secondary Rooting Depth | NA |
| 4 | Horizons Descriptions Shall Include | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| A | Depth of Horizon | 0-24" | A | Depth of Horizon | 24-30" | A | Depth of Horizon | |
| B | Soil Texture | SILTY CLAY LOAM | B | Soil Texture | CALICHE | B | Soil Texture | |
| C | Soil Structure | COARSE | C | Soil Structure | BLOCKY | C | Soil Structure | |
| D | Soil Color | RED/BROWN | D | Soil Color | TAN/GRAY | D | Soil Color | |
| E | Mottling | NA | E | Mottling | NA | E | Mottling | |
| F | Percent Coarse Fragments | <10% | F | Percent Coarse Fragments | <20% | F | Percent Coarse Fragments | |

| | | |
|---|---|---|
| 5 | Boundary Descriptions (Soil Horizons) | LEVEL |
| 6 | Restrictive Horizons | N/A |
| 7 | Potential Water Bearing Zones | None |
| 8 | Active Water Bearing Zones | None |

**Site Characteristics**

| Vegetation | | | | Surface Fragments | Litter | Slope Type |
|---|---|---|---|---|---|---|
| Large Oak | 0% | 0 % Woody | 40 % Herbaceous | 20 % Visible | 0 % | 3 % - 5 % |
| Juniper | 0% | 0 % Canopy Cover | 40 % Cover | | | |
| Small Oak | 0% | | | | | |

Comments Pictures Y Refusal at: N/A Stopped Digging at: 30 inches

wwdengineering

| Project | Thomas Ranch | Profile Hole # | 8 | County | Burnet | Date | 4/8/2025 |
|---|---|---|---|---|---|---|---|

| | | |
|---|---|---|
| 1 Total Depth of Profile hole | 12" | |
| 2 Primary Rooting Depth | 4" | |
| 3 Secondary Rooting Depth | NA | |
| 4 Horizons Descriptions Shall Include | | |

| | | | | | |
|---|---|---|---|---|---|
| A Depth of Horizon | 0-12" | A Depth of Horizon | | A Depth of Horizon | |
| B Soil Texture | SILTY CLAY LOAM | B Soil Texture | | B Soil Texture | |
| C Soil Structure | COARSE | C Soil Structure | | C Soil Structure | |
| D Soil Color | RED/BROWN | D Soil Color | | D Soil Color | |
| E Mottling | NA | E Mottling | | E Mottling | |
| F Percent Coarse Fragments | <10% | F Percent Coarse Fragments | | F Percent Coarse Fragments | |

| | |
|---|---|
| 5 Boundary Descriptions (Soil Horizons) | LEVEL |
| 6 Restrictive Horizons | N/A |
| 7 Potential Water Bearing Zones | None |
| 8 Active Water Bearing Zones | None |

**Site Characteristics**

| Vegetation | | | | Surface Fragments | Litter | Slope Type |
|---|---|---|---|---|---|---|
| Large Oak | <15% | 40 % Woody | 30 % Herbaceous | 10 % Visible | 0 % | 3 % - 5 % |
| Juniper | 25% | 40 % Canopy Cover | 30 % Cover | | | |
| Small Oak | <15% | | | | | |

Comments Pictures Y Refusal at: 12" Stopped Digging at: _____ inches

wwdengineering

| Project | Thomas Ranch | Profile Hole # | 9 | County | Burnet | Date | 4/8/2025 |
|---|---|---|---|---|---|---|---|

| | | |
|---|---|---|
| 1 | Total Depth of Profile hole | 30" |
| 2 | Primary Rooting Depth | 6" |
| 3 | Secondary Rooting Depth | 10" |
| 4 | Horizons Descriptions Shall Include | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| A | Depth of Horizon | 0-6" | A | Depth of Horizon | 6-30" | A | Depth of Horizon | |
| B | Soil Texture | SILTY CLAY LOAM | B | Soil Texture | CALICHE | B | Soil Texture | |
| C | Soil Structure | COARSE | C | Soil Structure | BLOCKY | C | Soil Structure | |
| D | Soil Color | BROWN | D | Soil Color | TAN/GRAY | D | Soil Color | |
| E | Mottling | NA | E | Mottling | NA | E | Mottling | |
| F | Percent Coarse Fragments | <10% | F | Percent Coarse Fragments | <20% | F | Percent Coarse Fragments | |

| | | |
|---|---|---|
| 5 | Boundary Descriptions (Soil Horizons) | LEVEL |
| 6 | Restrictive Horizons | N/A |
| 7 | Potential Water Bearing Zones | None |
| 8 | Active Water Bearing Zones | None |

**Site Characteristics**

| Vegetation | | | | Surface Fragments | Litter | Slope Type |
|---|---|---|---|---|---|---|
| Large Oak | <10 | 40 % Woody | 20 % Herbaceous | 25 % Visible | 0 % | 6 % - 8 % |
| Juniper | 40% | 40 % Canopy Cover | 20 % Cover | | | |
| Small Oak | 10% | | | | | |

Comments Pictures Y Refusal at: N/A Stopped Digging at: 30 inches

wwdengineering

Project: Thomas Ranch | Profile Hole #: 10 | County: Burnet | Date: 4/8/2025

| | | |
|---|---|---|
| 1 | Total Depth of Profile hole | 10" |
| 2 | Primary Rooting Depth | 4" |
| 3 | Secondary Rooting Depth | NA |
| 4 | Horizons Descriptions Shall Include | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A | Depth of Horizon | 0-10" | A | Depth of Horizon | | A | Depth of Horizon | |
| B | Soil Texture | SILTY CLAY LOAM | B | Soil Texture | | B | Soil Texture | |
| C | Soil Structure | COARSE | C | Soil Structure | | C | Soil Structure | |
| D | Soil Color | BROWN | D | Soil Color | | D | Soil Color | |
| E | Mottling | NA | E | Mottling | | E | Mottling | |
| F | Percent Coarse Fragments | <10% | F | Percent Coarse Fragments | | F | Percent Coarse Fragments | |

| | | |
|---|---|---|
| 5 | Boundary Descriptions (Soil Horizons) | LEVEL |
| 6 | Restrictive Horizons | N/A |
| 7 | Potential Water Bearing Zones | None |
| 8 | Active Water Bearing Zones | None |

**Site Characteristics**

| Vegetation | | | | Surface Fragments | Litter | Slope Type |
|---|---|---|---|---|---|---|
| Large Oak | <5% | 50 % Woody | 20 % Herbaceous | 10 % Visible | 0 % | 3 % - 5 % |
| Juniper | 50% | 50 % Canopy Cover | 20 % Cover | | | |
| Small Oak | <5% | | | | | |

Comments: Pictures: Y | Refusal at: 10" | Stopped Digging at: _____ inches

wwdengineering

Project: Thomas Ranch | Profile Hole #: 11 | County: Travis | Date: 4/8/2025

| | | |
|---|---|---|
| 1 | Total Depth of Profile hole | 18" |
| 2 | Primary Rooting Depth | 4" |
| 3 | Secondary Rooting Depth | NA |
| 4 | Horizons Descriptions Shall Include | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| A | Depth of Horizon | 0-18" | A | Depth of Horizon | | A | Depth of Horizon | |
| B | Soil Texture | SILTY CLAY LOAM | B | Soil Texture | | B | Soil Texture | |
| C | Soil Structure | COARSE | C | Soil Structure | | C | Soil Structure | |
| D | Soil Color | BROWN | D | Soil Color | | D | Soil Color | |
| E | Mottling | NA | E | Mottling | | E | Mottling | |
| F | Percent Coarse Fragments | <20% | F | Percent Coarse Fragments | | F | Percent Coarse Fragments | |

| | | |
|---|---|---|
| 5 | Boundary Descriptions (Soil Horizons) | LEVEL |
| 6 | Restrictive Horizons | N/A |
| 7 | Potential Water Bearing Zones | None |
| 8 | Active Water Bearing Zones | None |

**Site Characteristics**

| Vegetation | | | | | Surface Fragments | Litter | Slope Type |
|---|---|---|---|---|---|---|---|
| Large Oak | <10% | 40 % Woody | <10 | % Herbaceous | 20 % Visible | 0 % | 4 % - 6 % |
| Juniper | 30% | 40 % Canopy Cover | <10 | % Cover | | | |
| Small Oak | <10% | | | | | | |

Comments: Pictures: Y | Refusal at: 18" | Stopped Digging at: _____ inches

wwdengineering

| Project | Thomas Ranch | Profile Hole # | 12 | County | Travis | Date | 4/8/2025 |
|---|---|---|---|---|---|---|---|

| | | |
|---|---|---|
| 1 Total Depth of Profile hole | 30" | |
| 2 Primary Rooting Depth | 6" | |
| 3 Secondary Rooting Depth | 12" | |
| 4 Horizons Descriptions Shall Include | | |

| | | | | | |
|---|---|---|---|---|---|
| A Depth of Horizon | 0-12" | A Depth of Horizon | 12-30" | A Depth of Horizon | |
| B Soil Texture | SILTY CLAY LOAM | B Soil Texture | CALICHE | B Soil Texture | |
| C Soil Structure | COARSE | C Soil Structure | BLOCKY | C Soil Structure | |
| D Soil Color | BROWN | D Soil Color | TAN | D Soil Color | |
| E Mottling | NA | E Mottling | NA | E Mottling | |
| F Percent Coarse Fragments | <10% | F Percent Coarse Fragments | <15% | F Percent Coarse Fragments | |

| | |
|---|---|
| 5 Boundary Descriptions (Soil Horizons) | LEVEL |
| 6 Restrictive Horizons | N/A |
| 7 Potential Water Bearing Zones | None |
| 8 Active Water Bearing Zones | None |

**Site Characteristics**

| Vegetation | | | | Surface Fragments | Litter | Slope Type |
|---|---|---|---|---|---|---|
| Large Oak | <10 | 50 % Woody | 30 % Herbaceous | 10 % Visible | 0 % | 3 % - 6 % |
| Juniper | 20% | 40 % Canopy Cover | 30 % Cover | | | |
| Small Oak | 10% | | | | | |

Comments Pictures Y Refusal at: N/A Stopped Digging at: 30 inches

wwdengineering

Project: Thomas Ranch | Profile Hole #: 13 | County: Travis | Date: 4/7/2025

| | | |
|---|---|---|
| 1 Total Depth of Profile hole | 30" | |
| 2 Primary Rooting Depth | 8" | |
| 3 Secondary Rooting Depth | NA | |
| 4 Horizons Descriptions Shall Include | | |

| | | | | | |
|---|---|---|---|---|---|
| A Depth of Horizon | 0-30" | A Depth of Horizon | | A Depth of Horizon | |
| B Soil Texture | CLAY LOAM | B Soil Texture | | B Soil Texture | |
| C Soil Structure | COARSE | C Soil Structure | | C Soil Structure | |
| D Soil Color | DK BROWN | D Soil Color | | D Soil Color | |
| E Mottling | NA | E Mottling | | E Mottling | |
| F Percent Coarse Fragments | <10% | F Percent Coarse Fragments | | F Percent Coarse Fragments | |

| | |
|---|---|
| 5 Boundary Descriptions (Soil Horizons) | LEVEL |
| 6 Restrictive Horizons | N/A |
| 7 Potential Water Bearing Zones | None |
| 8 Active Water Bearing Zones | None |

**Site Characteristics**

| Vegetation | | | | Surface Fragments | Litter | Slope Type |
|---|---|---|---|---|---|---|
| Large Oak | 0% | 20 % Woody | 30 % Herbaceous | 0 % Visible | 0 % | 2 % - 4 % |
| Juniper | <10% | 10 % Canopy Cover | 20 % Cover | | | |
| Small Oak | 0% | | | | | |

Comments: Pictures: Y | Refusal at: | Stopped Digging at: 30 inches

wwdengineering

Project: Thomas Ranch | Profile Hole #: 14 | County: Burnet | Date: 4/8/2025

| | | |
|---|---|---|
| 1 Total Depth of Profile hole | 30" | |
| 2 Primary Rooting Depth | 8" | |
| 3 Secondary Rooting Depth | NA | |
| 4 Horizons Descriptions Shall Include | | |

| | | | | | |
|---|---|---|---|---|---|
| A Depth of Horizon | 0-30" | A Depth of Horizon | | A Depth of Horizon | |
| B Soil Texture | CLAY LOAM | B Soil Texture | | B Soil Texture | |
| C Soil Structure | COARSE | C Soil Structure | | C Soil Structure | |
| D Soil Color | DK BROWN | D Soil Color | | D Soil Color | |
| E Mottling | NA | E Mottling | | E Mottling | |
| F Percent Coarse Fragments | <10% | F Percent Coarse Fragments | | F Percent Coarse Fragments | |

| | |
|---|---|
| 5 Boundary Descriptions (Soil Horizons) | LEVEL |
| 6 Restrictive Horizons | N/A |
| 7 Potential Water Bearing Zones | None |
| 8 Active Water Bearing Zones | None |

**Site Characteristics**

| Vegetation | | | | Surface Fragments | Litter | Slope Type |
|---|---|---|---|---|---|---|
| Large Oak | <15% | 50 % Woody | 50 % Herbaceous | 15 % Visible | 0 % | 5 % - 8 % |
| Juniper | 40% | 50 % Canopy Cover | 50 % Cover | | | |
| Small Oak | <15% | | | | | |

Comments: Pictures: Y | Refusal at: | Stopped Digging at: 30 inches

## Soil Sampling Results

- Thomas Ranch Comp1 is a composite sample obtained in the 0”-6” Range from test pits 1, 2, 4, 5, 6, 7 and 8.
- Thomas Ranch Comp2 is a composite sample obtained in the 0”-6” Range from test pits 9, 10, 11, 12, 13, and 14.
- Thomas Ranch Comp3 is a composite sample obtained in the 6”-18” Range from test pits 1, 2, 4, 5, 6, 7 and 8.
- Thomas Ranch Comp4 is a composite sample obtained in the 6”-18” Range from test pits 9, 10, 11, 12, 13, and 14.
- Thomas Ranch Comp5 is a composite sample obtained in the 18”-30” Range from test pits 1, 2, 4, 5, 6, and 7.
- Thomas Ranch Comp6 is a composite sample obtained in the 18”-30” Range from test pits 9, 12, and 13.
- Thomas Ranch Samp1 is from test pit #1 @ 18”
- Thomas Ranch Samp2 is from test pit #1 @ 28”
- Thomas Ranch Samp3 is from test pit #2 @ 6”
- Thomas Ranch Samp4 is from test pit #4 @ 8”
- Thomas Ranch Samp5 is from test pit #6 @ 6”
- Thomas Ranch Samp6 is from test pit #7 @ 16”
- Thomas Ranch Samp7 is from test pit #11 @ 10”
- Thomas Ranch Samp8 is from test pit #13 @ 15”
- Thomas Ranch Samp9 is from test pit #14 @ 10”
- Thomas Ranch Samp10 is from test pit #9 @ 6”

# Soil Analysis Report

**Soil, Water and Forage Testing Laboratory**
**Department of Soil and Crop Sciences**
**2478 TAMU**
**College Station, TX 77843-2478**
**(979)321-5960**

**Visit our website: http://soiltesting.tamu.edu**

**Report generated for:**
**WWD Engineering**
**Thomas Ranch**
**9217 Hwy 290 West, Suite 110**
**AUSTIN, TX 78676**

**Sample received on: 4/11/2025**
**Printed on: 4/22/2025**
**Area Represented: not provided**

**Travis & Burnet County**
**Laboratory Number: 684418**
**Customer Sample ID: Thosmas Ranch Comp 1**
**Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (3 HAY CUTTINGS-2 TONS/A AVG.)**

| Analysis | Results | CL* | Units | ExLow VLow Low Mod High VHigh Excess. | Nutrient Recommended |
|---|---|---|---|---|---|
| pH | 8.0 | (5.8) | - | Mod. Alkaline | |
| Conductivity | 203 | (-) | umho/cm | None | |
| Nitrate-N | 8 | (-) | ppm** | | 80 lbs N/acre |
| Phosphorus | 7 | (50) | ppm | | 105 lbs P2O5/acre |
| Potassium | 262 | (150) | ppm | | 0 lbs K20/acre |
| Calcium | 9,064 | (180) | ppm | | 0 lbs Ca/acre |
| Magnesium | 347 | (50) | ppm | | 0 lbs Mg/acre |
| Sulfur | 69 | (13) | ppm | | 0 lbs S/acre |
| Sodium | 52 | (-) | ppm | | |
| Iron | | | | | |
| Zinc | | | | | |
| Manganese | | | | | |
| Copper | | | | | |
| Boron | 1.46 | (1.30) | ppm | | 0 lbs B/acre |
| Limestone Requirement | | | | | 0.00 tons 100ECCE/acre |

| Detailed Salinity Test (Saturated Paste Extract) | | | | |
|---|---|---|---|---|
| pH | 7.9 | | | |
| Conductivity | 0.49 | mmhos/cm | | |
| Sodium | 5 | ppm | 0.211 | meq/L |
| Potassium | 2 | ppm | 0.039 | meq/L |
| Calcium | 112 | ppm | 5.589 | meq/L |
| Magnesium | 13 | ppm | 1.069 | meq/L |
| SAR | 0.12 | | | |
| SSP | 3.05 | | | |

| Total N | 1627 | ppm |
|---|---|---|

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

**Nitrogen:** Apply an additional 100 lbs/A of nitrogen for each subsequent hay cuttings.

**Online fertilizer calculators to determine appropriate fertilizers and application rates.**
**http://soiltesting.tamu.edu**

Methods: pH and conductivity/ 2:1; nitrate-N/Cd-red.; P, K, Ca, Mg, Na, S and B/Mehlich 3 by ICP; Fe, Zn, Mn, and Cu/DTPA by ICP.

# Soil Analysis Report

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**Report generated for:**
**WWD Engineering**
**Thomas Ranch**
**9217 Hwy 290 West, Suite 110**
**AUSTIN, TX 78676**

**Sample received on: 4/11/2025**
**Printed on: 4/22/2025**
**Area Represented: not provided**

**Travis & Burnet County**
**Laboratory Number: 684419**
**Customer Sample ID: Thosmas Ranch Comp 2**
**Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (3 HAY CUTTINGS-2 TONS/A AVG.)**

| Analysis | Results | CL* | Units | ExLow VLow Low Mod High VHigh Excess. | Nutrient Recommended |
|---|---|---|---|---|---|
| **pH** | **8.4** | (5.8) | - | **Mod. Alkaline** | |
| **Conductivity** | **111** | (-) | umho/cm | **None** CL* | |
| **Nitrate-N** | **2** | (-) | ppm** | | **95** lbs N/acre |
| **Phosphorus** | **6** | (50) | ppm | | **110** lbs P2O5/acre |
| **Potassium** | **171** | (150) | ppm | | **0** lbs K20/acre |
| **Calcium** | **13,557** | (180) | ppm | | **0** lbs Ca/acre |
| **Magnesium** | **238** | (50) | ppm | | **0** lbs Mg/acre |
| **Sulfur** | **102** | (13) | ppm | | **0** lbs S/acre |
| **Sodium** | **55** | (-) | ppm | | |
| **Iron** | | | | | |
| **Zinc** | | | | | |
| **Manganese** | | | | | |
| **Copper** | | | | | |
| **Boron** | **1.45** | (1.30) | ppm | | **0** lbs B/acre |
| **Limestone Requirement** | | | | | **0.00** tons 100ECCE/acre |

| Detailed Salinity Test (Saturated Paste Extract) | | | | |
|---|---|---|---|---|
| **pH** | **7.9** | | | |
| **Conductivity** | **0.63** | mmhos/cm | | |
| **Sodium** | **5** | ppm | **0.218** | meq/L |
| **Potassium** | **5** | ppm | **0.140** | meq/L |
| **Calcium** | **144** | ppm | **7.186** | meq/L |
| **Magnesium** | **14** | ppm | **1.118** | meq/L |
| **SAR** | **0.11** | | | |
| **SSP** | **2.51** | | | |

| Total N | 1845 | ppm |
|---|---|---|

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

**Nitrogen:** Apply an additional 100 lbs/A of nitrogen for each subsequent hay cuttings.

**Online fertilizer calculators to determine appropriate fertilizers and application rates.**
**http://soiltesting.tamu.edu**

Methods: pH and conductivity/ 2:1; nitrate-N/Cd-red.; P, K, Ca, Mg, Na, S and B/Mehlich 3 by ICP; Fe, Zn, Mn, and Cu/DTPA by ICP.

# Soil Analysis Report

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**College Station, TX 77843-2478**
**(979)321-5960**

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**Report generated for:**
**WWD Engineering**
**Thomas Ranch**
**9217 Hwy 290 West, Suite 110**
**AUSTIN, TX 78676**

**Sample received on: 4/11/2025**
**Printed on: 4/22/2025**
**Area Represented: not provided**

**Travis & Burnet County**
**Laboratory Number: 684420**
**Customer Sample ID: Thosmas Ranch Comp 3**
**Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (3 HAY CUTTINGS-2 TONS/A AVG.)**

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. |
|---|---|---|---|---|---|---|---|---|---|---|
| **pH** | **8.8** | (5.8) | - | **Strongly Alkaline** | | | | | | |
| **Conductivity** | **100** | (-) | umho/cm | **None** | | | | CL* | | **Nutrient Recommended** |
| **Nitrate-N** | **1** | (-) | ppm** | | | | | | | **95** lbs N/acre |
| **Phosphorus** | **3** | (50) | ppm | | | | | | | **115** lbs P2O5/acre |
| **Potassium** | **132** | (150) | ppm | | | | | | | **25** lbs K20/acre |
| **Calcium** | **14,969** | (180) | ppm | | | | | | | **0** lbs Ca/acre |
| **Magnesium** | **554** | (50) | ppm | | | | | | | **0** lbs Mg/acre |
| **Sulfur** | **111** | (13) | ppm | | | | | | | **0** lbs S/acre |
| **Sodium** | **76** | (-) | ppm | | | | | | | |
| **Iron** | | | | | | | | | | |
| **Zinc** | | | | | | | | | | |
| **Manganese** | | | | | | | | | | |
| **Copper** | | | | | | | | | | |
| **Boron** | **0.86** | (1.30) | ppm | | | | | | | **0** lbs B/acre |
| **Limestone Requirement** | | | | | | | | | | **0.00** tons 100ECCE/acre |

| Detailed Salinity Test (Saturated Paste Extract) | | | | |
|---|---|---|---|---|
| **pH** | **8.0** | | | |
| **Conductivity** | **0.36** | mmhos/cm | | |
| **Sodium** | **6** | ppm | **0.280** | meq/L |
| **Potassium** | **1** | ppm | **0.030** | meq/L |
| **Calcium** | **68** | ppm | **3.368** | meq/L |
| **Magnesium** | **17** | ppm | **1.373** | meq/L |
| **SAR** | **0.18** | | | |
| **SSP** | **5.54** | | | |

| | | |
|---|---|---|
| **Total N** | **642** | ppm |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

**Nitrogen:** Apply an additional 100 lbs/A of nitrogen for each subsequent hay cuttings.

**Online fertilizer calculators to determine appropriate fertilizers and application rates.**
**http://soiltesting.tamu.edu**

Methods: pH and conductivity/ 2:1; nitrate-N/Cd-red.; P, K, Ca, Mg, Na, S and B/Mehlich 3 by ICP; Fe, Zn, Mn, and Cu/DTPA by ICP.

# Soil Analysis Report

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**Report generated for:**
**WWD Engineering**
**Thomas Ranch**
**9217 Hwy 290 West, Suite 110**
**AUSTIN, TX 78676**

**Sample received on: 4/11/2025**
**Printed on: 4/22/2025**
**Area Represented: not provided**

**Travis & Burnet County**
**Laboratory Number: 684421**
**Customer Sample ID: Thosmas Ranch Comp 4**
**Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (3 HAY CUTTINGS-2 TONS/A AVG.)**

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. |
|---|---|---|---|---|---|---|---|---|---|---|
| **pH** | **8.7** | (5.8) | - | **Mod. Alkaline** | | | | | | |
| **Conductivity** | **173** | (-) | umho/cm | **None** | | | | CL* | | **Nutrient Recommended** |
| **Nitrate-N** | **1** | (-) | ppm** | | | | | | | **95** lbs N/acre |
| **Phosphorus** | **2** | (50) | ppm | | | | | | | **115** lbs P2O5/acre |
| **Potassium** | **94** | (150) | ppm | | | | | | | **90** lbs K20/acre |
| **Calcium** | **28,299** | (180) | ppm | | | | | | | **0** lbs Ca/acre |
| **Magnesium** | **389** | (50) | ppm | | | | | | | **0** lbs Mg/acre |
| **Sulfur** | **208** | (13) | ppm | | | | | | | **0** lbs S/acre |
| **Sodium** | **55** | (-) | ppm | | | | | | | |
| **Iron** | | | | | | | | | | |
| **Zinc** | | | | | | | | | | |
| **Manganese** | | | | | | | | | | |
| **Copper** | | | | | | | | | | |
| **Boron** | **0.79** | (1.30) | ppm | | | | | | | **0** lbs B/acre |
| **Limestone Requirement** | | | | | | | | | | **0.00** tons 100ECCE/acre |

| Total N | 680 | ppm |
|---|---|---|

**Detailed Salinity Test (Saturated Paste Extract)**

| | | | | |
|---|---|---|---|---|
| **pH** | **8.2** | | | |
| **Conductivity** | **0.36** | mmhos/cm | | |
| **Sodium** | **47** | ppm | **2.037** | meq/L |
| **Potassium** | **0** | ppm | **0.008** | meq/L |
| **Calcium** | **34** | ppm | **1.717** | meq/L |
| **Magnesium** | **13** | ppm | **1.052** | meq/L |
| **SAR** | **1.73** | | | |
| **SSP** | **42.32** | | | |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

**Nitrogen:** Apply an additional 100 lbs/A of nitrogen for each subsequent hay cuttings.

**Potassium:** Split apply potassium fertilizer if recommendation is for more than 75 lbs K2O per acre.

**Online fertilizer calculators to determine appropriate fertilizers and application rates.**
**http://soiltesting.tamu.edu**

Methods: pH and conductivity/ 2:1; nitrate-N/Cd-red.; P, K, Ca, Mg, Na, S and B/Mehlich 3 by ICP; Fe, Zn, Mn, and Cu/DTPA by ICP.

# Soil Analysis Report

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**Report generated for:**
**WWD Engineering**
**Thomas Ranch**
**9217 Hwy 290 West, Suite 110**
**AUSTIN, TX 78676**

**Sample received on: 4/11/2025**
**Printed on: 4/22/2025**
**Area Represented: not provided**

**Travis & Burnet County**
**Laboratory Number: 684422**
**Customer Sample ID: Thosmas Ranch Comp 5**
**Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (3 HAY CUTTINGS-2 TONS/A AVG.)**

| Analysis | Results | CL* | Units | ExLow VLow Low Mod High VHigh Excess. | Nutrient Recommended |
|---|---|---|---|---|---|
| **pH** | **8.6** | (5.8) | - | **Mod. Alkaline** | |
| **Conductivity** | **94** | (-) | umho/cm | **None** (CL*) | |
| **Nitrate-N** | **0** | (-) | ppm** | | **95** lbs N/acre |
| **Phosphorus** | **2** | (50) | ppm | | **115** lbs P2O5/acre |
| **Potassium** | **112** | (150) | ppm | | **60** lbs K20/acre |
| **Calcium** | **16,748** | (180) | ppm | | **0** lbs Ca/acre |
| **Magnesium** | **676** | (50) | ppm | | **0** lbs Mg/acre |
| **Sulfur** | **127** | (13) | ppm | | **0** lbs S/acre |
| **Sodium** | **30** | (-) | ppm | | |
| **Iron** | | | | | |
| **Zinc** | | | | | |
| **Manganese** | | | | | |
| **Copper** | | | | | |
| **Boron** | **0.58** | (1.30) | ppm | | **0.5** lbs B/acre |
| **Limestone Requirement** | | | | | **0.00** tons 100ECCE/acre |

| Detailed Salinity Test (Saturated Paste Extract) | | | | |
|---|---|---|---|---|
| **pH** | **8.0** | | | |
| **Conductivity** | **0.36** | mmhos/cm | | |
| **Sodium** | **7** | ppm | **0.317** | meq/L |
| **Potassium** | **2** | ppm | **0.043** | meq/L |
| **Calcium** | **55** | ppm | **2.764** | meq/L |
| **Magnesium** | **20** | ppm | **1.611** | meq/L |
| **SAR** | **0.21** | | | |
| **SSP** | **6.69** | | | |

**Total N** **436** ppm

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

**Nitrogen:** Apply an additional 100 lbs/A of nitrogen for each subsequent hay cuttings.

**Boron:** Deep rooted perennial crops may not respond due to deeper profile boron.

**Online fertilizer calculators to determine appropriate fertilizers and application rates.**
**http://soiltesting.tamu.edu**

Methods: pH and conductivity/ 2:1; nitrate-N/Cd-red.; P, K, Ca, Mg, Na, S and B/Mehlich 3 by ICP; Fe, Zn, Mn, and Cu/DTPA by ICP.

# Soil Analysis Report

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**Department of Soil and Crop Sciences**
**2478 TAMU**
**College Station, TX 77843-2478**
**(979)321-5960**

**Visit our website: http://soiltesting.tamu.edu**

**Report generated for:**
**WWD Engineering**
**Thomas Ranch**
**9217 Hwy 290 West, Suite 110**
**AUSTIN, TX 78676**

**Sample received on: 4/11/2025**
**Printed on: 4/22/2025**
**Area Represented: not provided**

**Travis & Burnet County**
**Laboratory Number: 684423**
**Customer Sample ID: Thosmas Ranch Comp 6**
**Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (3 HAY CUTTINGS-2 TONS/A AVG.)**

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **pH** | **8.6** | (5.8) | - | **Mod. Alkaline** | | | | | | | |
| **Conductivity** | **160** | (-) | umho/cm | **None** | | | | CL* | | **Nutrient Recommended** | |
| **Nitrate-N** | **0** | (-) | ppm** | | | | | | | **95** | lbs N/acre |
| **Phosphorus** | **2** | (50) | ppm | | | | | | | **115** | lbs P2O5/acre |
| **Potassium** | **138** | (150) | ppm | | | | | | | **15** | lbs K20/acre |
| **Calcium** | **19,191** | (180) | ppm | | | | | | | **0** | lbs Ca/acre |
| **Magnesium** | **532** | (50) | ppm | | | | | | | **0** | lbs Mg/acre |
| **Sulfur** | **143** | (13) | ppm | | | | | | | **0** | lbs S/acre |
| **Sodium** | **65** | (-) | ppm | | | | | | | | |
| **Iron** | | | | | | | | | | | |
| **Zinc** | | | | | | | | | | | |
| **Manganese** | | | | | | | | | | | |
| **Copper** | | | | | | | | | | | |
| **Boron** | **0.83** | (1.30) | ppm | | | | | | | **0** | lbs B/acre |
| **Limestone Requirement** | | | | | | | | | | **0.00** | tons 100ECCE/acre |

| Detailed Salinity Test (Saturated Paste Extract) | | | | |
|---|---|---|---|---|
| **pH** | **8.1** | | | |
| **Conductivity** | **0.28** | mmhos/cm | | |
| **Sodium** | **24** | ppm | **1.036** | meq/L |
| **Potassium** | **0** | ppm | **0.000** | meq/L |
| **Calcium** | **36** | ppm | **1.781** | meq/L |
| **Magnesium** | **11** | ppm | **0.904** | meq/L |
| **SAR** | **0.89** | | | |
| **SSP** | **27.83** | | | |

| | | |
|---|---|---|
| **Total N** | **509** | ppm |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

**Nitrogen:** Apply an additional 100 lbs/A of nitrogen for each subsequent hay cuttings.

**Online fertilizer calculators to determine appropriate fertilizers and application rates.**
**http://soiltesting.tamu.edu**

Methods: pH and conductivity/ 2:1; nitrate-N/Cd-red.; P, K, Ca, Mg, Na, S and B/Mehlich 3 by ICP; Fe, Zn, Mn, and Cu/DTPA by ICP.

# Soil Analysis Report

**Soil, Water and Forage Testing Laboratory**
**Department of Soil and Crop Sciences**
**2478 TAMU**
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**Report generated for:**
**WWD Engineering**
**Thomas Ranch**
**9217 Hwy 290 West, Suite 110**
**AUSTIN, TX 78676**

**Sample received on: 4/11/2025**
**Printed on: 4/22/2025**
**Area Represented: not provided**

**Travis & Burnet County**
**Laboratory Number: 684424**
**Customer Sample ID: Thosmas Ranch Sample 1**
**Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (3 HAY CUTTINGS-2 TONS/A AVG.)**

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **pH** | **8.5** | (5.8) | - | **Mod. Alkaline** | | | | | | | |
| **Conductivity** | **100** | (-) | umho/cm | **None** | | | | CL* | | | **Nutrient Recommended** |
| **Nitrate-N** | **0** | (-) | ppm** | | | | | | | | **95** lbs N/acre |
| **Phosphorus** | **2** | (50) | ppm | IIII | | | | | | | **115** lbs P2O5/acre |
| **Potassium** | **141** | (150) | ppm | IIII

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**Thomas Ranch**
**9217 Hwy 290 West, Suite 110**
**AUSTIN, TX 78676**

**Sample received on: 4/11/2025**
**Printed on: 4/22/2025**
**Area Represented: not provided**

**Travis & Burnet County**
**Laboratory Number: 684425**
**Customer Sample ID: Thosmas Ranch Sample 2**
**Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (3 HAY CUTTINGS-2 TONS/A AVG.)**

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **pH** | **8.7** | (5.8) | - | **Strongly Alkaline** | | | | | | | |
| **Conductivity** | **118** | (-) | umho/cm | **None** | | | | CL* | | | **Nutrient Recommended** |
| **Nitrate-N** | **0** | (-) | ppm** | | | | | | | | **95** lbs N/acre |
| **Phosphorus** | **1** | (50) | ppm | II | | | | | | | **120** lbs P2O5/acre |
| **Potassium** | **134** | (150) | ppm | IIII

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**Thomas Ranch**
**9217 Hwy 290 West, Suite 110**
**AUSTIN, TX 78676**

**Sample received on: 4/11/2025**
**Printed on: 4/22/2025**
**Area Represented: not provided**

**Travis & Burnet County**
**Laboratory Number: 684426**
**Customer Sample ID: Thosmas Ranch Sample 3**
**Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (3 HAY CUTTINGS-2 TONS/A AVG.)**

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. | Nutrient Recommended |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **pH** | **8.5** | (5.8) | - | **Mod. Alkaline** | | | | | | | |
| **Conductivity** | **136** | (-) | umho/cm | **None** | | | | CL* | | | |
| **Nitrate-N** | **0** | (-) | ppm** | | | | | | | | **95** lbs N/acre |
| **Phosphorus** | **4** | (50) | ppm | | | | | | | | **115** lbs P2O5/acre |
| **Potassium** | **211** | (150) | ppm | | | | | | | | **0** lbs K20/acre |
| **Calcium** | **12,699** | (180) | ppm | | | | | | | | **0** lbs Ca/acre |
| **Magnesium** | **678** | (50) | ppm | | | | | | | | **0** lbs Mg/acre |
| **Sulfur** | **96** | (13) | ppm | | | | | | | | **0** lbs S/acre |
| **Sodium** | **30** | (-) | ppm | | | | | | | | |
| **Iron** | | | | | | | | | | | |
| **Zinc** | | | | | | | | | | | |
| **Manganese** | | | | | | | | | | | |
| **Copper** | | | | | | | | | | | |
| **Boron** | **1.47** | (1.30) | ppm | | | | | | | | **0** lbs B/acre |
| **Limestone Requirement** | | | | | | | | | | | **0.00** tons 100ECCE/acre |

| Textural Analysis Test (hydrometer) | | |
|---|---|---|
| **Sand** | **23** | % |
| **Silt** | **33** | % |
| **Clay** | **44** | % |
| **Textural Class:** | **Clay** | |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

**Nitrogen:** Apply an additional 100 lbs/A of nitrogen for each subsequent hay cuttings.

**Online fertilizer calculators to determine appropriate fertilizers and application rates.**
**http://soiltesting.tamu.edu**

Methods: pH and conductivity/ 2:1; nitrate-N/Cd-red.; P, K, Ca, Mg, Na, S and B/Mehlich 3 by ICP; Fe, Zn, Mn, and Cu/DTPA by ICP.

# Soil Analysis Report

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**Report generated for:**
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**Thomas Ranch**
**9217 Hwy 290 West, Suite 110**
**AUSTIN, TX 78676**

**Sample received on: 4/11/2025**
**Printed on: 4/22/2025**
**Area Represented: not provided**

**Travis & Burnet County**
**Laboratory Number: 684427**
**Customer Sample ID: Thosmas Ranch Sample 4**
**Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (3 HAY CUTTINGS-2 TONS/A AVG.)**

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **pH** | **9.1** | (5.8) | - | **Strongly Alkaline** | | | | | | | |
| **Conductivity** | **78** | (-) | umho/cm | **None** | | | | CL* | | | **Nutrient Recommended** |
| **Nitrate-N** | **0** | (-) | ppm** | | | | | | | **95** | lbs N/acre |
| **Phosphorus** | **2** | (50) | ppm | III | | | | | | **120** | lbs P2O5/acre |
| **Potassium** | **39** | (150) | ppm | IIIIIIIIIIIIIIII | | | | | | **180** | lbs K20/acre |
| **Calcium** | **22,618** | (180) | ppm | IIIIIIIIIIIIII

TEXAS A&M AGRILIFE EXTENSION

# Soil Analysis Report

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**Thomas Ranch**
**9217 Hwy 290 West, Suite 110**
**AUSTIN, TX 78676**

**Sample received on: 4/11/2025**
**Printed on: 4/22/2025**
**Area Represented: not provided**

**Travis & Burnet County**
**Laboratory Number: 684428**
**Customer Sample ID: Thosmas Ranch Sample 5**
**Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (3 HAY CUTTINGS-2 TONS/A AVG.)**

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. | Nutrient Recommended |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **pH** | **7.5** | (5.8) | - | **Slightly Alkaline** | | | | | | | |
| **Conductivity** | **179** | (-) | umho/cm | **None** | | | | CL* | | | **Nutrient Recommended** |
| **Nitrate-N** | **12** | (-) | ppm** | | | | | | | | **75** lbs N/acre |
| **Phosphorus** | **8** | (50) | ppm | | | | | | | | **105** lbs P2O5/acre |
| **Potassium** | **366** | (150) | ppm | | | | | | | | **0** lbs K20/acre |
| **Calcium** | **5,426** | (180) | ppm | | | | | | | | **0** lbs Ca/acre |
| **Magnesium** | **424** | (50) | ppm | | | | | | | | **0** lbs Mg/acre |
| **Sulfur** | **47** | (13) | ppm | | | | | | | | **0** lbs S/acre |
| **Sodium** | **35** | (-) | ppm | | | | | | | | |
| **Iron** | | | | | | | | | | | |
| **Zinc** | | | | | | | | | | | |
| **Manganese** | | | | | | | | | | | |
| **Copper** | | | | | | | | | | | |
| **Boron** | **1.10** | (1.30) | ppm | | | | | | | | **0** lbs B/acre |
| **Limestone Requirement** | | | | | | | | | | | **0.00** tons 100ECCE/acre |

| Textural Analysis Test (hydrometer) | | |
|---|---|---|
| **Sand** | **29** | % |
| **Silt** | **23** | % |
| **Clay** | **48** | % |
| **Textural Class:** | **Clay** | |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

**Nitrogen:** Apply an additional 100 lbs/A of nitrogen for each subsequent hay cuttings.

**Online fertilizer calculators to determine appropriate fertilizers and application rates.**
**http://soiltesting.tamu.edu**

Methods: pH and conductivity/ 2:1; nitrate-N/Cd-red.; P, K, Ca, Mg, Na, S and B/Mehlich 3 by ICP; Fe, Zn, Mn, and Cu/DTPA by ICP.

# Soil Analysis Report

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**Report generated for:**
**WWD Engineering**
**Thomas Ranch**
**9217 Hwy 290 West, Suite 110**
**AUSTIN, TX 78676**

**Sample received on: 4/11/2025**
**Printed on: 4/22/2025**
**Area Represented: not provided**

**Travis & Burnet County**
**Laboratory Number: 684429**
**Customer Sample ID: Thosmas Ranch Sample 6**
**Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (3 HAY CUTTINGS-2 TONS/A AVG.)**

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **pH** | **8.6** | (5.8) | - | **Mod. Alkaline** | | | | | | | |
| **Conductivity** | **56** | (-) | umho/cm | **None** | | | | CL* | | | **Nutrient Recommended** |
| **Nitrate-N** | **0** | (-) | ppm** | | | | | | | **95** | lbs N/acre |
| **Phosphorus** | **2** | (50) | ppm | IIII | | | | | | **115** | lbs P2O5/acre |
| **Potassium** | **90** | (150) | ppm | IIIIIIIIIIIIIIIIIIIIIIIIIIIIIII | | | | | | **100** | lbs K20/acre |
| **Calcium** | **10,306** | (180) | ppm | IIIIIIIIIIIIIIIIIIII

# Soil Analysis Report

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**WWD Engineering**
**Thomas Ranch**
**9217 Hwy 290 West, Suite 110**
**AUSTIN, TX 78676**

**Sample received on: 4/11/2025**
**Printed on: 4/22/2025**
**Area Represented: not provided**

**Travis & Burnet County**
**Laboratory Number: 684430**
**Customer Sample ID: Thosmas Ranch Sample 7**
**Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (3 HAY CUTTINGS-2 TONS/A AVG.)**

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **pH** | **8.9** | (5.8) | - | **Strongly Alkaline** | | | | | | | |
| **Conductivity** | **79** | (-) | umho/cm | **None** | | | | CL* | | | **Nutrient Recommended** |
| **Nitrate-N** | **1** | (-) | ppm** | | | | | | | | **95** lbs N/acre |
| **Phosphorus** | **2** | (50) | ppm | III | | | | | | | **120** lbs P2O5/acre |
| **Potassium** | **36** | (150) | ppm | IIIIIIIIIIIIIIIII | | | | | | | **190** lbs K20/acre |
| **Calcium** | **33,113** | (180) | ppm | IIIIIIIIIIIIIII

# Soil Analysis Report

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**Report generated for:**
**WWD Engineering**
**Thomas Ranch**
**9217 Hwy 290 West, Suite 110**
**AUSTIN, TX 78676**

**Sample received on: 4/11/2025**
**Printed on: 4/22/2025**
**Area Represented: not provided**

**Travis & Burnet County**
**Laboratory Number: 684431**
**Customer Sample ID: Thosmas Ranch Sample 8**
**Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (3 HAY CUTTINGS-2 TONS/A AVG.)**

| Analysis | Results | CL* | Units | ExLow / VLow / Low / Mod / High / VHigh / Excess. | Nutrient Recommended |
|---|---|---|---|---|---|
| **pH** | **8.6** | (5.8) | - | **Mod. Alkaline** | |
| **Conductivity** | **193** | (-) | umho/cm | **None** | **Nutrient Recommended** |
| **Nitrate-N** | **0** | (-) | ppm** | | **95** lbs N/acre |
| **Phosphorus** | **2** | (50) | ppm | | **115** lbs P2O5/acre |
| **Potassium** | **234** | (150) | ppm | | **0** lbs K20/acre |
| **Calcium** | **11,447** | (180) | ppm | | **0** lbs Ca/acre |
| **Magnesium** | **994** | (50) | ppm | | **0** lbs Mg/acre |
| **Sulfur** | **88** | (13) | ppm | | **0** lbs S/acre |
| **Sodium** | **153** | (-) | ppm | | |
| **Iron** | | | | | |
| **Zinc** | | | | | |
| **Manganese** | | | | | |
| **Copper** | | | | | |
| **Boron** | **1.61** | (1.30) | ppm | | **0** lbs B/acre |
| **Limestone Requirement** | | | | | **0.00** tons 100ECCE/acre |

| Textural Analysis Test (hydrometer) | | |
|---|---|---|
| **Sand** | **23** | % |
| **Silt** | **25** | % |
| **Clay** | **52** | % |
| **Textural Class:** | **Clay** | |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

**Nitrogen:** Apply an additional 100 lbs/A of nitrogen for each subsequent hay cuttings.

**Online fertilizer calculators to determine appropriate fertilizers and application rates.**
**http://soiltesting.tamu.edu**

Methods: pH and conductivity/ 2:1; nitrate-N/Cd-red.; P, K, Ca, Mg, Na, S and B/Mehlich 3 by ICP; Fe, Zn, Mn, and Cu/DTPA by ICP.

# Soil Analysis Report

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**Thomas Ranch**
**9217 Hwy 290 West, Suite 110**
**AUSTIN, TX 78676**

**Sample received on: 4/11/2025**
**Printed on: 4/22/2025**
**Area Represented: not provided**

**Travis & Burnet County**
**Laboratory Number: 684432**
**Customer Sample ID: Thosmas Ranch Sample 9**
**Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (3 HAY CUTTINGS-2 TONS/A AVG.)**

| Analysis | Results | CL* | Units | ExLow | VLow | Low | Mod | High | VHigh | Excess. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **pH** | **8.4** | (5.8) | - | **Mod. Alkaline** | | | | | | | |
| **Conductivity** | **105** | (-) | umho/cm | **None** | | | | CL* | | | **Nutrient Recommended** |
| **Nitrate-N** | **2** | (-) | ppm** | | | | | | | | **95** lbs N/acre |
| **Phosphorus** | **5** | (50) | ppm | | | | | | | | **110** lbs P2O5/acre |
| **Potassium** | **102** | (150) | ppm | | | | | | | | **75** lbs K20/acre |
| **Calcium** | **21,732** | (180) | ppm | | | | | | | | **0** lbs Ca/acre |
| **Magnesium** | **143** | (50) | ppm | | | | | | | | **0** lbs Mg/acre |
| **Sulfur** | **170** | (13) | ppm | | | | | | | | **0** lbs S/acre |
| **Sodium** | **25** | (-) | ppm | | | | | | | | |
| **Iron** | | | | | | | | | | | |
| **Zinc** | | | | | | | | | | | |
| **Manganese** | | | | | | | | | | | |
| **Copper** | | | | | | | | | | | |
| **Boron** | **1.04** | (1.30) | ppm | | | | | | | | **0** lbs B/acre |
| **Limestone Requirement** | | | | | | | | | | | **0.00** tons 100ECCE/acre |

| Textural Analysis Test (hydrometer) | | |
|---|---|---|
| **Sand** | **47** | % |
| **Silt** | **22** | % |
| **Clay** | **31** | % |
| **Textural Class:** | **Sandy Clay Loam** | |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

**Nitrogen:** Apply an additional 100 lbs/A of nitrogen for each subsequent hay cuttings.

**Potassium:** Split apply potassium fertilizer if recommendation is for more than 75 lbs K2O per acre.

**Online fertilizer calculators to determine appropriate fertilizers and application rates.**
**http://soiltesting.tamu.edu**

Methods: pH and conductivity/ 2:1; nitrate-N/Cd-red.; P, K, Ca, Mg, Na, S and B/Mehlich 3 by ICP; Fe, Zn, Mn, and Cu/DTPA by ICP.

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**Thomas Ranch**
**9217 Hwy 290 West, Suite 110**
**AUSTIN, TX 78676**

**Sample received on: 4/11/2025**
**Printed on: 4/22/2025**
**Area Represented: not provided**

**Travis & Burnet County**
**Laboratory Number: 684433**
**Customer Sample ID: Thosmas Ranch Sample 10**
**Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (3 HAY CUTTINGS-2 TONS/A AVG.)**

| Analysis | Results | CL* | Units | ExLow VLow Low Mod High VHigh Excess. | Nutrient Recommended |
|---|---|---|---|---|---|
| **pH** | **8.3** | (5.8) | - | **Mod. Alkaline** | |
| **Conductivity** | **171** | (-) | umho/cm | **None** | |
| **Nitrate-N** | **1** | (-) | ppm** | | **95** lbs N/acre |
| **Phosphorus** | **6** | (50) | ppm | | **105** lbs P2O5/acre |
| **Potassium** | **110** | (150) | ppm | | **65** lbs K20/acre |
| **Calcium** | **22,520** | (180) | ppm | | **0** lbs Ca/acre |
| **Magnesium** | **265** | (50) | ppm | | **0** lbs Mg/acre |
| **Sulfur** | **179** | (13) | ppm | | **0** lbs S/acre |
| **Sodium** | **34** | (-) | ppm | | |
| **Iron** | | | | | |
| **Zinc** | | | | | |
| **Manganese** | | | | | |
| **Copper** | | | | | |
| **Boron** | **1.31** | (1.30) | ppm | | **0** lbs B/acre |
| **Limestone Requirement** | | | | | **0.00** tons 100ECCE/acre |

| Textural Analysis Test (hydrometer) | | |
|---|---|---|
| **Sand** | **40** | % |
| **Silt** | **25** | % |
| **Clay** | **35** | % |
| **Textural Class:** | **Clay Loam** | |

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

**Nitrogen:** Apply an additional 100 lbs/A of nitrogen for each subsequent hay cuttings.

**Online fertilizer calculators to determine appropriate fertilizers and application rates.**
**http://soiltesting.tamu.edu**

Methods: pH and conductivity/ 2:1; nitrate-N/Cd-red.; P, K, Ca, Mg, Na, S and B/Mehlich 3 by ICP; Fe, Zn, Mn, and Cu/DTPA by ICP.

# THOMAS RANCH
# TRAVIS AND BURNET COUNTIES
# GROUNDWATER QUALITY REPORT

The Thomas Ranch Development proposed sprayfields are planned to be located throughout the development in Travis and Burnet Counties, Texas. The site overlies the Upper and Lower Glenrose, Hammett Shale and Cow Creek Undivided and Hensell Sand (geologic) Formations and the Trinity Aquifer. The Trinity Aquifer is a major water source for Central Texas residents.

The water bearing formation beneath the site is the Trinity Aquifer. The Trinity Aquifer is the source for most of the wells in the vicinity of the site. Several wells were identified within one mile of the property boundary (see Well Report and Table in TLAP Application).

There are two agricultural wells located within the Site Boundary, based upon the survey and site reconnaissance. These wells have not been used in years and will be properly plugged during construction at the site. The spray areas will need to implement the best management practices necessary for locating the spray areas and implement them prior to construction of the spray areas. Most groundwater levels range from approximately over 80 to 200 feet below ground surface. In the Trinity Aquifer in the site vicinity and the saturated thickness is 100 feet. The gradient for the groundwater flow in the Trinity Aquifer in the vicinity of the site is NW-SE. The water quality in the Trinity Aquifer in the site vicinity is generally good, with total dissolved solids (TDS) ranging from 500 to 1,000 mg/l.

There were several critical environmental features (CEFs) were identified at the site in the Environmental Resource Inventory Reports (ERIs), prepared by others. The appropriate setbacks will be maintained from the spray areas to these CEFs. The clay soils underlying the site are sufficient to restrict the migration of the treated effluent from the surface soils to the water bearing formation of the Trinity Aquifer. The effluent will be applied at a rate that will not saturate the ground surface or allow downward migration of the effluent to the groundwater. The effluent will be stored in TCEQ approved ponds designed and constructed in accordance with TCEQ design requirements. Therefore, it is unlikely that the effluent, from either the spray areas or the pond will impact the groundwater quality in the Aquifer.




Erin K Banks

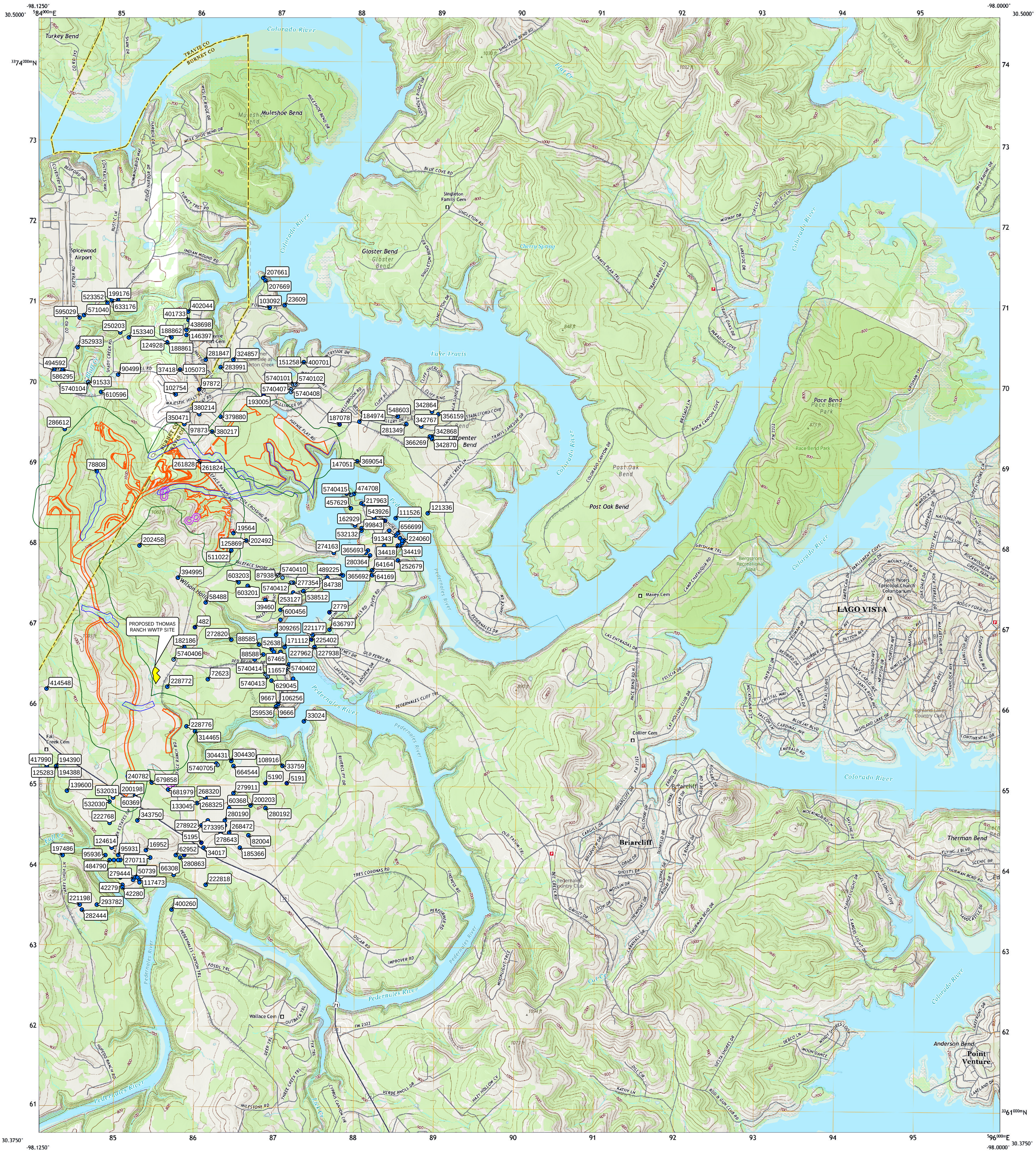
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WWD Engineering
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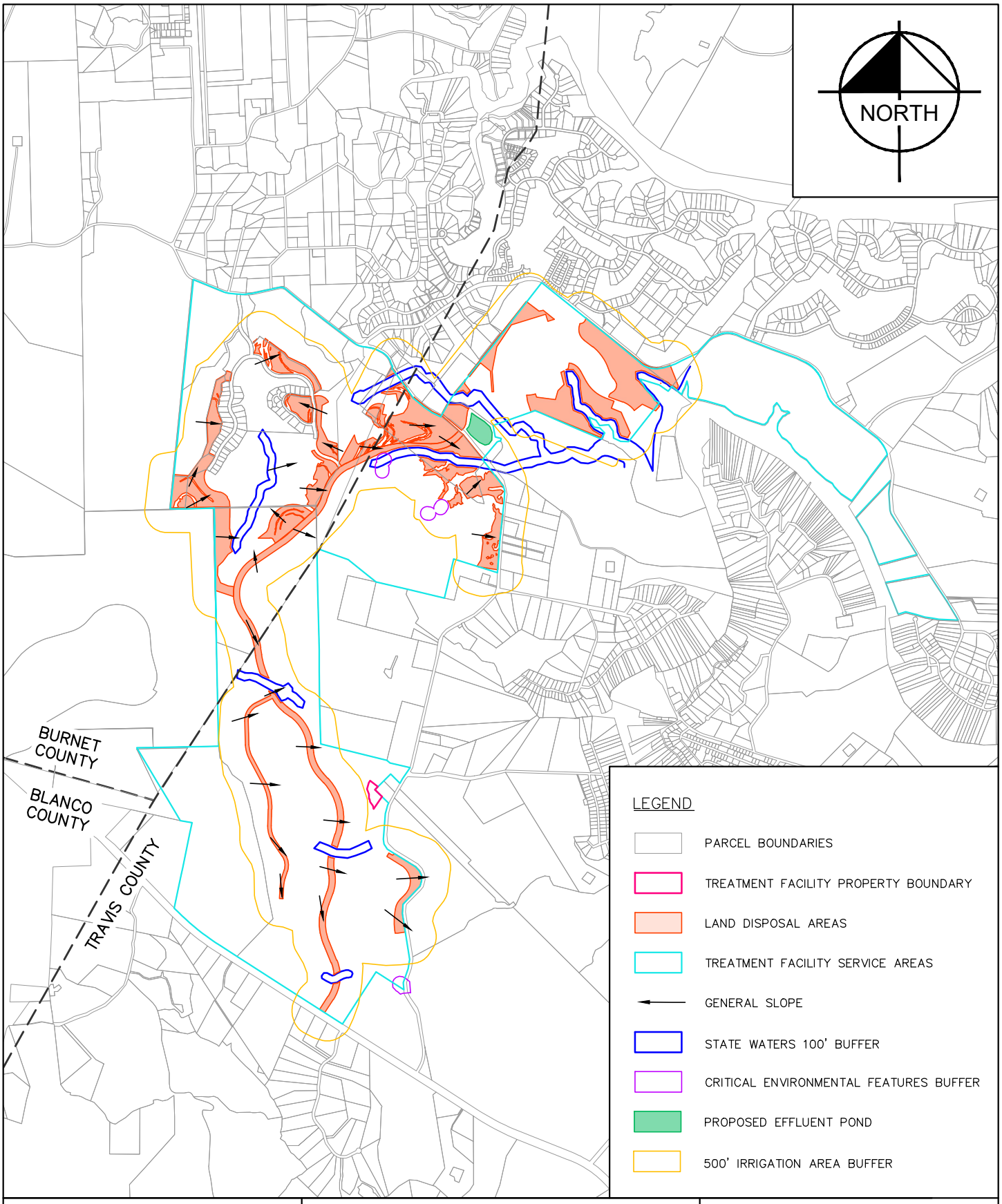
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

USGS science for a changing world

The National Map US Topo

**PACE BEND QUADRANGLE**
**TEXAS**
**7.5-MINUTE SERIES**


-98.1250°
-98.0000°
30.5000°
30.3750°
84 000mE
96 000mE
74 000mN
61 000mN
Colorado River
Lake Travis
Pedernales River
Turkey Bend
Muleshoe Bend
Gloster Bend
Singleton Family Cem
Spicewood Airport
Fall Creek Cem
Wallace Cem
Maxey Cem
Collier Cem
Carpenter Bend
Post Oak Bend
Pace Bend
Pace Bend Park
Bergstrom Recreational Area
LAGO VISTA
Saint Peters Episcopal Church Columbarium
Highland Lakes Country Club
Briarcliff
Therman Bend
Anderson Bend
Point Venture
Pedernales Country Club
TRAVIS CO
BURNET CO
PROPOSED THOMAS RANCH WWTP SITE
SINGLETON BEND RD
BLUE COVE RD
SINGLETON RD
MIDWAY DR
MUSTANG RIDGE DR
MULE SHOE BEND DR
MULESHOE BEND DR
TURKEY TREE RD
INDIAN MOUND RD
MAJESTIC HILLS BLVD
HAYNIE FLAT RD
TRAVIS LAKESIDE DR
BRASADA LN
ROCK CANYON COVE
COLORADO CANYON DR
GRISHAM TRL
CAMP CHATAUQUA RD
LAS ENTRADAS DR
PACE BEND RD N
FELICIA DR
CAT HOLLOW CLUB DR
PEDERNALES CLIFF TRL
OLD FERRY RD
LAKEVIEW DR
ANDREW DR
RIVERCLIFF DR
OLD TATUM TRL
TRES CORONAS RD
LIBERTY RD
OSCAR RD
IMPROVER RD
PERSEVERANCE RD
FOSSIL TRL
PEDERNALES CANYON TRL
MOONLIGHT TRCE
DEER TRL
TYX TRL
THREE CREEK TRL
CYPRUS CANYON CIR
VERDE KNOLL DR
HAZY HOLLOW CV
MILESTONE RD
HUPEDO RANCH RD
RED BRANCH DR
EAGLE RANGER RD
EOL CROSSING RD
PALEFACE SHORE DR
WILSON HOLLOW
RUSTIC LN
RIDGE HARBOR DR
HUMMINGBIRD WAY
COVENTRY RD
BEDFORD DR
CONTINENTAL TRL
SHADY CREEK RD
EXETER RD
CO RD 245
CO RD 4
SHAW DR
WESLEY RIDGE DR
LOOKOUT RIDGE DR
CLIFF OVERLOOK
CLIFF XING
CLIFF PL
KELLYBROOK RD
BALLINGER DR
STABLEFORD COVE
TRAVIS LAKESIDE DR
HAYNIE CREEK LN
COLORADO CANYON DR
ROCK CANYON COVE
BRASADA LN
GRISHAM TRL
PACE PAVINE DR
SINGLETON DR
TRAVIS OAKS DR
BRADISA COVE
LAKESIDE DR
TRAVIS PEAK TRL
TRAVIS BEND LN
MIDWAY DR
CIRCLE J RD
CIRCLE J LN
FM Road 1431
FM 2322
1030 ft
1032 ft
963 ft
848 ft
873 ft
1063 ft
1093 ft
890 ft
975 ft
947 ft
1094 ft
1073 ft
207661
207669
103092
23609
199176
523352
633176
571040
595029
402044
401733
438698
146397
188862
188861
124928
153340
250203
352933
494592
586295
90499
37418
105073
281847
324857
283991
151258
400701
5740101
5740102
5740407
5740408
193005
91533
610596
5740104
102754
97872
380214
350471
379880
97873
380217
286612
78808
261828
261824
147051
369054
187078
184974
548603
342864
342767
356159
281349
342868
366269
342870
5740415
474708
457629
217963
543926
111526
121336
162929
99843
656699
532132
91343
224060
274163
365693
34418
34419
280364
64164
252679
489225
365692
64169
603203
87938
5740410
277354
84738
603201
5740412
253127
538512
58488
39460
600456
2779
636797
309265
221177
225402
171112
52638
88585
272820
482
182186
5740406
88588
67465
227962
227938
5740414
11657
5740402
72623
228772
5740413
629045
9667
106256
259536
9666
33024
414548
228776
314465
417990
194390
125283
194388
139600
532031
200198
60369
532030
222768
343750
304431
304430
108916
33759
5740705
664544
5190
5191
240782
679858
681979
268320
279911
133045
268325
60368
200203
280190
280192
278922
273395
268472
5195
278643
82004
124614
95931
16952
62952
34017
185366
197486
95936
270711
280863
484790
279444
50739
66308
117473
222818
42279
42280
221198
293782
282444
400260
19564
202492
125869
202458
511022
394995
Wilson Hollow
Tarry Linda Ln
Hupedo Ranch Rd
Fall Creek Ranch Rd
Exeter Rd
Shady Creek Rd
Rustic Ln
Ridge Harbor Dr
Hummingbird Way
Coventry Rd
Bedford Dr
Continental Trl
Eagle Ranger Rd
Eol Crossing Rd
Paleface Shore Dr
Wilson Hollow
Indian Mound Rd
Majestic Hills Blvd
Haynie Flat Rd
Travis Lakeside Dr
Brasada Ln
Rock Canyon Cove
Colorado Canyon Dr
Grisham Trl
Pace Pavine Dr
Singleton Dr
Travis Oaks Dr
Bradisa Cove
Lakeside Dr
Travis Peak Trl
Travis Bend Ln
Midway Dr
Circle J Rd
Circle J Ln
Singleton Rd
Singleton Bend Rd
Blue Cove Rd
Mule Shoe Bend Dr
Muleshoe Bend Dr
Wesley Ridge Dr
Lookout Ridge Dr
Cliff Overlook
Cliff Xing
Cliff Pl
Kellybrook Rd
Ballinger Dr
Stableford Cove
Haynie Creek Ln
Mustang Ridge Dr
Turkey Tree Rd
Indian Mound Rd
Majestic Hills Blvd
Haynie Flat Rd
Travis Lakeside Dr
Brasada Ln
Rock Canyon Cove
Colorado Canyon Dr
Grisham Trl
Pace Pavine Dr
Singleton Dr
Travis Oaks Dr
Bradisa Cove
Lakeside Dr
Travis Peak Trl
Travis Bend Ln
Midway Dr
Circle J Rd
Circle J Ln
Las Entradas Dr
Pace Bend Rd N
Felicia Dr
Cat Hollow Club Dr
Pedernales Cliff Trl
Old Ferry Rd
Lakeview Dr
Andrew Dr
Rivercliff Dr
Old Tatum Trl
Tres Coronas Rd
Liberty Rd
Oscar Rd
Improver Rd
Perseverance Rd
Fossil Trl
Pedernales Canyon Trl
Moonlight Trce
Deer Trl
Tyx Trl
Three Creek Trl
Cyprus Canyon Cir
Verde Knoll Dr
Hazy Hollow Cv
Milestone Rd
Hupedo Ranch Rd
Red Branch Dr
Eagle Ranger Rd
Eol Crossing Rd
Paleface Shore Dr
Wilson Hollow
Rustic Ln
Ridge Harbor Dr
Hummingbird Way
Coventry Rd
Bedford Dr
Continental Trl
Shady Creek Rd
Exeter Rd
Co Rd 245
Co Rd 4
Shaw




GRAPHIC SCALE IN FEET

0 1500 3000 6000

# THOMAS RANCH
## SITE DRAWING
MAY 2025

Kimley»Horn
5301 Southwest Pkwy, Building 2, Suite 100
Austin, Texas 78735
512-646-2237
State of Texas Registration No. F-928

Table 3.0(3) - Water Well Data

| Well ID (State Well Number, Tracking Number, Plugging Report Number, etc.) | Well Use | Producing? | Open, Cased, Capped, or Plugged? | Proposed Best Management Practice |
|---|---|---|---|---|
| 19564 | Domestic | | | Well meets 150' setback requirments |
| 200198 | Irrigation | | | Well meets 150' setback requirments |
| 228776 | Domestic | | | Well meets 150' setback requirments |
| 78808 | Domestic | | | Well meets 150' setback requirments |
| 261824 | Irrigation | | | Plugged |
| 261828 | Irrigation | | | Plugged |
| 314465 | Domestic | | | Well meets 150' setback requirments |
| 379880 | Domestic | | | Well meets 150' setback requirments |
| 380217 | Test Well | | | Plugged |
| 511022 | Domestic | | | Well meets 150' setback requirments |
| 532030 | Domestic | | | Well meets 150' setback requirments |
| 532031 | Domestic | | | Well meets 150' setback requirments |
| 97873 | Withdrawal of Water | No | Plugged | Plugged |
| 60369 | Withdrawal of Water | No | Plugged | Plugged |
| 87938 | Withdrawal of Water | | | N/A |
| 5739905 | Domestic | | | N/A |
| 5740101 | Plugged or Destroyed | No | Plugged | N/A |
| 5740102 | Plugged or Destroyed | No | Plugged | N/A |
| 5740104 | De-watering | | | N/A |
| 5740402 | Domestic | | | N/A |
| 5740406 | Domestic | | | N/A |
| 5740407 | Public Supply | | | N/A |
| 5740408 | Plugged or Destroyed | No | Plugged | N/A |
| 5740409 | Public Supply | | | N/A |
| 5740410 | Unused | No | Plugged | N/A |
| 5740411 | Public Supply | | | N/A |
| 5740412 | Public Supply | | | N/A |
| 5740413 | Public Supply | | | N/A |
| 5740414 | Public Supply | | | N/A |
| 5740415 | Domestic | | | N/A |
| 5740705 | Public Supply | | | N/A |
| 696 | Public Supply | | | N/A |
| 9666 | Domestic | | | N/A |
| 9667 | Domestic | | | N/A |
| 11657 | Domestic | | | N/A |
| 16952 | Domestic | | | N/A |
| 23609 | Domestic | | | N/A |
| 33024 | Domestic | | | N/A |
| 33390 | Irrigation | | | N/A |
| 33759 | Domestic | | | N/A |
| 34017 | Domestic | | | N/A |
| 34418 | Domestic | | | N/A |
| 34419 | Domestic | | | N/A |
| 39388 | Domestic | | | N/A |
| 39460 | Domestic | | | N/A |
| 42279 | Domestic | | | N/A |
| 42280 | Domestic | | | N/A |
| 42870 | Domestic | | | N/A |
| 50739 | Domestic | | | N/A |
| 52638 | Domestic | | | N/A |
| 58488 | Domestic | | | N/A |
| 62952 | Domestic | | | N/A |
| 64164 | Domestic | | | N/A |
| 64169 | Domestic | | | N/A |

| Well ID (State Well Number, Tracking Number, Plugging Report Number, etc.) | Well Use | Producing? | Open, Cased, Capped, or Plugged? | Proposed Best Management Practice |
|---|---|---|---|---|
| 66308 | Domestic | | | N/A |
| 67465 | Domestic | | | N/A |
| 72623 | Domestic | | | N/A |
| 72645 | Domestic | | | N/A |
| 82004 | Domestic | | | N/A |
| 84738 | Domestic | | | N/A |
| 88585 | Domestic | | | N/A |
| 88588 | Domestic | | | N/A |
| 88589 | Domestic | | | N/A |
| 90499 | Domestic | | | N/A |
| 91343 | Domestic | | | N/A |
| 91533 | Domestic | | | N/A |

| Well ID (State Well Number, Tracking Number, Plugging Report Number, etc.) | Well Use | Producing? | Open, Cased, Capped, or Plugged? | Proposed Best Management Practice |
|---|---|---|---|---|
| 93629 | Domestic | | | N/A |
| 93632 | Domestic | | | N/A |
| 95931 | Domestic | | | N/A |
| 95936 | Domestic | | | N/A |
| 99843 | Domestic | | | N/A |
| 100952 | Domestic | | | N/A |
| 102754 | Domestic | | | N/A |
| 103092 | Domestic | | | N/A |
| 105073 | Domestic | | | N/A |
| 111526 | Domestic | | | N/A |
| 117473 | Domestic | | | N/A |
| 117475 | Domestic | | | N/A |
| 121336 | Domestic | | | N/A |
| 127312 | Domestic | | | N/A |
| 131575 | Domestic | | | N/A |
| 139600 | Domestic | | | N/A |
| 141907 | Domestic | | | N/A |
| 146397 | Domestic | | | N/A |
| 147063 | Domestic | | | N/A |
| 153340 | Domestic | | | N/A |
| 162929 | Domestic | | | N/A |
| 171112 | Domestic | | | N/A |
| 171128 | Domestic | | | N/A |
| 182186 | Domestic | | | N/A |
| 184974 | Domestic | | | N/A |
| 185363 | Domestic | | | N/A |
| 185366 | Domestic | | | N/A |
| 188861 | Domestic | | | N/A |
| 188862 | Domestic | | | N/A |
| 194388 | Domestic | | | N/A |
| 194390 | Domestic | | | N/A |
| 197486 | Domestic | | | N/A |
| 199176 | Domestic | | | N/A |
| 200203 | Irrigation | | | N/A |
| 202458 | Domestic | | | N/A |
| 202492 | Domestic | | | N/A |
| 207661 | Monitor | | | N/A |
| 207669 | Monitor | | | N/A |
| 217963 | Domestic | | | N/A |
| 219164 | Domestic | | | N/A |
| 221177 | Domestic | | | N/A |
| 221198 | Domestic | | | N/A |
| 222768 | Domestic | | | N/A |
| 222818 | Domestic | | | N/A |
| 223672 | Domestic | | | N/A |
| 224060 | Domestic | | | N/A |
| 227938 | Domestic | | | N/A |
| 227962 | Test Well | | | N/A |
| 228772 | Domestic | | | N/A |
| 250203 | Domestic | | | N/A |
| 252679 | Domestic | | | N/A |
| 253127 | Domestic | | | N/A |
| 259536 | Irrigation | | | N/A |
| 259543 | Irrigation | | | N/A |

| Well ID (State Well Number, Tracking Number, Plugging Report Number, etc.) | Well Use | Producing? | Open, Cased, Capped, or Plugged? | Proposed Best Management Practice |
|---|---|---|---|---|
| 261764 | Irrigation | | | N/A |
| 268320 | Irrigation | | | N/A |
| 268325 | Irrigation | | | N/A |
| 268472 | Irrigation | | | N/A |
| 270711 | Domestic | | | N/A |
| 272820 | Domestic | | | N/A |
| 273395 | Irrigation | | | N/A |
| 274163 | Irrigation | | | N/A |
| 277354 | Domestic | | | N/A |
| 278643 | Domestic | | | N/A |
| 278921 | Domestic | | | N/A |
| 278922 | Domestic | | | N/A |
| 279161 | Domestic | | | N/A |
| 279444 | Domestic | | | N/A |
| 279590 | Domestic | | | N/A |
| 279911 | Domestic | | | N/A |
| 280188 | Domestic | | | N/A |
| 280190 | Domestic | | | N/A |
| 280192 | Domestic | | | N/A |
| 280197 | Domestic | | | N/A |
| 280364 | Domestic | | | N/A |
| 280863 | Domestic | | | N/A |
| 281349 | Irrigation | | | N/A |
| 281847 | Closed-Loop Geothermal | | | N/A |
| 282444 | Irrigation | | | N/A |
| 283991 | Test Well | | | N/A |
| 286612 | Domestic | | | N/A |
| 293782 | Domestic | | | N/A |
| 293783 | Domestic | | | N/A |
| 298268 | Domestic | | | N/A |
| 304430 | Domestic | | | N/A |
| 304431 | Domestic | | | N/A |
| 309265 | Domestic | | | N/A |
| 316394 | Irrigation | | | N/A |
| 324857 | Closed-Loop Geothermal | | | N/A |
| 342767 | Irrigation | | | N/A |
| 342864 | Irrigation | | | N/A |
| 342868 | Irrigation | | | N/A |
| 342870 | Irrigation | | | N/A |
| 342989 | Domestic | | | N/A |
| 342990 | Domestic | | | N/A |
| 343517 | Domestic | | | N/A |
| 343750 | Domestic | | | N/A |
| 350471 | Domestic | | | N/A |
| 352933 | Domestic | | | N/A |
| 352968 | Domestic | | | N/A |
| 356159 | Irrigation | | | N/A |
| 365692 | Domestic | | | N/A |
| 365693 | Domestic | | | N/A |
| 365694 | Domestic | | | N/A |
| 366269 | Irrigation | | | N/A |
| 369054 | Closed-Loop Geothermal | | | N/A |
| 380214 | Test Well | | | N/A |
| 389265 | Domestic | | | N/A |
| 394995 | Domestic | | | N/A |
| 400260 | Domestic | | | N/A |

| Well ID (State Well Number, Tracking Number, Plugging Report Number, etc.) | Well Use | Producing? | Open, Cased, Capped, or Plugged? | Proposed Best Management Practice |
|---|---|---|---|---|
| 400701 | Test Well | | | N/A |
| 401733 | Domestic | | | N/A |
| 402044 | Domestic | | | N/A |
| 414548 | Domestic | | | N/A |
| 417990 | Test Well | | | N/A |
| 425170 | Domestic | | | N/A |
| 438698 | Domestic | | | N/A |
| 447531 | Domestic | | | N/A |
| 447537 | Domestic | | | N/A |
| 454576 | Domestic | | | N/A |
| 457629 | Domestic | | | N/A |
| 458570 | Domestic | | | N/A |
| 474708 | Domestic | | | N/A |
| 476156 | Domestic | | | N/A |
| 484790 | Unknown | | | N/A |
| 486560 | Unknown | | | N/A |
| 489225 | Domestic | | | N/A |
| 491869 | Domestic | | | N/A |
| 494592 | Domestic | | | N/A |
| 512967 | Domestic | | | N/A |
| 523352 | Domestic | | | N/A |
| 532132 | Domestic | | | N/A |
| 538042 | Domestic | | | N/A |
| 538512 | Domestic | | | N/A |
| 543926 | Domestic | | | N/A |
| 548603 | Domestic | | | N/A |
| 551973 | Domestic | | | N/A |
| 551966 | Domestic | | | N/A |
| 551963 | Domestic | | | N/A |
| 553035 | Domestic | | | N/A |
| 555318 | Domestic | | | N/A |
| 555931 | Unknown | | | N/A |
| 559779 | Domestic | | | N/A |
| 512433 | Public Supply | | | N/A |
| 560551 | Domestic | | | N/A |
| 563205 | Domestic | | | N/A |
| 564213 | Domestic | | | N/A |
| 571040 | Domestic | | | N/A |
| 586295 | Domestic | | | N/A |
| 595029 | Domestic | | | N/A |
| 600456 | Unknown | | | N/A |
| 603203 | Domestic | | | N/A |
| 603201 | Domestic | | | N/A |
| 610596 | Domestic | | | N/A |
| 616691 | Domestic | | | N/A |
| 628725 | Domestic | | | N/A |
| 629045 | Public Supply | | | N/A |
| 633176 | Domestic | | | N/A |
| 421110 | Domestic | | | N/A |
| 636797 | Domestic | | | N/A |
| 108237 | Domestic | | | N/A |
| 50664 | Domestic | | | N/A |
| 656699 | Domestic | | | N/A |
| 664544 | Test Well | | | N/A |
| 664545 | Test Well | | | N/A |
| 676449 | Domestic | | | N/A |

| Well ID (State Well Number, Tracking Number, Plugging Report Number, etc.) | Well Use | Producing? | Open, Cased, Capped, or Plugged? | Proposed Best Management Practice |
|---|---|---|---|---|
| 679858 | Domestic | | | N/A |
| 681979 | Domestic | | | N/A |
| 97872 | Withdrawal of Water | No | Plugged | N/A |
| 63993 | Withdrawal of Water | No | Plugged | N/A |
| 60368 | Withdrawal of Water | No | Plugged | N/A |
| 74847 | Withdrawal of Water | No | Plugged | N/A |
| 65508 | Withdrawal of Water | No | Plugged | N/A |
| 37418 | Withdrawal of Water | No | Plugged | N/A |
| 2779 | Withdrawal of Water | No | Plugged | N/A |
| 23102 | Withdrawal of Water | No | Plugged | N/A |
| 5190 | Withdrawal of Water | No | Plugged | N/A |
| 5191 | Withdrawal of Water | No | Plugged | N/A |
| 5194 | Withdrawal of Water | No | Plugged | N/A |
| 5195 | Withdrawal of Water | No | Plugged | N/A |
| 482 | Withdrawal of Water | No | Plugged | N/A |
| 106255 | Domestic | No | Plugged | N/A |
| 106256 | Domestic | No | Plugged | N/A |
| 108916 | Domestic | No | Plugged | N/A |
| 123550 | Domestic | No | Plugged | N/A |
| 124614 | Domestic | No | Plugged | N/A |
| 124928 | Domestic | No | Plugged | N/A |
| 125283 | Domestic | No | Plugged | N/A |
| 125869 | Domestic | No | Plugged | N/A |
| 128251 | Test Well | No | Plugged | N/A |
| 133044 | Irrigation | No | Plugged | N/A |
| 133045 | Irrigation | No | Plugged | N/A |
| 133055 | Irrigation | No | Plugged | N/A |
| 147051 | Closed-Loop Geothermal | No | Plugged | N/A |
| 151258 | Test Well | No | Plugged | N/A |
| 151478 | Domestic | No | Plugged | N/A |
| 158605 | Test Well | No | Plugged | N/A |
| 180507 | Withdrawal of Water | No | Plugged | N/A |
| 187078 | Domestic | No | Plugged | N/A |
| 193005 | Domestic | No | Plugged | N/A |
| 225402 | Domestic | No | Plugged | N/A |
| 226578 | Withdrawal of Water | No | Plugged | N/A |
| 240782 | Domestic | No | Plugged | N/A |
| 241402 | Domestic | No | Plugged | N/A |

Water Balance Calculations

| Month | Average Precipitation | Average Runoff | Average Infiltrated Rainfall (Ri) | EvapoTranspiration | Required Leaching | Total Water Needs (5)+(6) | Effluent Needed in Root Zone (7)-(4) | Evaporation from Reservoir Surface | Effluent to be Applied to Land (8)/K | Consumption from Reservoir (9)+(10) |
|---|---|---|---|---|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| January | 1.66 | 0.37 | 1.29 | 0.81 | 0.00 | 0.81 | 0.00 | 0.05 | 0.00 | 0.05 |
| February | 1.92 | 0.51 | 1.41 | 1.17 | 0.00 | 1.17 | 0.00 | 0.05 | 0.00 | 0.05 |
| March | 2.08 | 0.61 | 1.47 | 2.79 | 0.21 | 3.00 | 1.54 | 0.06 | 1.81 | 1.87 |
| April | 2.49 | 0.88 | 1.61 | 3.42 | 0.29 | 3.71 | 2.10 | 0.07 | 2.47 | 2.54 |
| May | 4.20 | 2.21 | 1.99 | 6.12 | 0.67 | 6.79 | 4.79 | 0.12 | 5.64 | 5.76 |
| June | 3.31 | 1.48 | 1.82 | 6.48 | 0.75 | 7.23 | 5.41 | 0.09 | 6.36 | 6.46 |
| July | 1.91 | 0.51 | 1.40 | 6.66 | 0.85 | 7.51 | 6.11 | 0.05 | 7.18 | 7.24 |
| August | 2.11 | 0.63 | 1.48 | 4.59 | 0.50 | 5.09 | 3.61 | 0.06 | 4.25 | 4.31 |
| September | 3.23 | 1.42 | 1.80 | 5.13 | 0.54 | 5.67 | 3.86 | 0.09 | 4.54 | 4.63 |
| October | 3.43 | 1.58 | 1.85 | 4.05 | 0.36 | 4.41 | 2.56 | 0.10 | 3.01 | 3.10 |
| November | 2.23 | 0.70 | 1.52 | 2.07 | 0.09 | 2.16 | 0.64 | 0.06 | 0.75 | 0.81 |
| December | 1.70 | 0.39 | 1.31 | 0.99 | 0.00 | 0.99 | 0.00 | 0.05 | 0.00 | 0.05 |
| Total | 30.27 | 11.31 | 18.96 | 44.28 | 4.26 | 48.54 | 30.62 | 0.84 | 36.02 | 36.86 |
| Column Note References | a) | b) | Ri | c) | d) | | | e) | f) | g) |

(All Units are Inches of Water per Acre of Irrigated Area)

| | |
|---|---|
| Irrigation Efficiency (K) = | 0.85 |
| Curve number (N) = | 80 |
| S = | 2.50 |
| Ce = | 1.39 |
| Cl = | 10 |

Water Balance Calculation Notes:

Column (2):
Up-to-date rainfall and evaporation data sets are available from the Texas Natural Resource Information System.

Column (3):
Runoff should be determined by an acceptable method such as the Soil Conservation Service method found in SCS Technical Release No. 55.
A curve number (N) of 80 is appropriate for continuous grass planted in hydrologic soil group D.
Potential maximum retention after runoff begins (S) = 1000/N - 10 = 2.5

Column (5):
Source of values is the "Bulletin 6019, Consumptive Use of Water by Major Crops in Texas" - Area 7C, Texas Board of Water Engineers. Applied 90% of the listed values for alfalfa as noted on Table 5.

Column (6):
In low rainfall areas, this is the required leaching to avoid salinity build-up in the soil is calculated using the following equation:
$L = Ce (E-Ri) / (Cl-Ce)$
Where:
Ce = Electrical Conductivity of Effluent = 1.39 mmhos/cm
E = Evapotranspiration
Ri = Infiltrated Rainfall
Cl= Maximum Allowable Conductivity of Soil Solution (Value obtained from 30 TAC 309.20, Table 3) = 10

Column (9):
Net Average Evaporation from Reservoir Surface.

Column (10):
K is the irrigation efficiency. K value is 0.85 unless specific information is provided to support a different value.

Column (11):
The total of this column is the maximum allowable application rate in acre-inch per acre per year.

Storage Volume Calculations

| Month | Effluent Received for Application or Storage | Mean Rainfall Distribution* | Rainfall Highest Year in Past 25 Year | Runoff Highest Year in Past 25 Year | Infiltrated Rainfall (14b)-(15) | Available Water (13)+(16) | Distribution of Mean* | Net 25 Year Low Evaporation from Reservoir Surface | Storage | Accumulated Storage | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (12) | (13) | (14a) | (14b) | (15) | (16) | (17) | (18a) | (18b) | (19) | (20) | |
| January | 3.05 | 5.49% | 2.59 | 0.95 | 1.64 | 4.69 | 3.97% | 1.34 | 1.71 | 1.96 | |
| February | 2.75 | 6.34% | 2.99 | 1.24 | 1.75 | 4.50 | 4.51% | 1.50 | 1.25 | 3.21 | |
| March | 3.05 | 6.86% | 3.23 | 1.43 | 1.81 | 4.85 | 6.97% | 2.35 | -0.71 | 2.50 | |
| April | 2.95 | 8.23% | 3.88 | 1.94 | 1.94 | 4.89 | 8.41% | 3.53 | -2.67 | -0.17 | END |
| May | 3.05 | 13.89% | 6.54 | 4.28 | 2.27 | 5.32 | 9.00% | 3.40 | -5.67 | -5.84 | |
| June | 2.95 | 10.92% | 5.15 | 3.02 | 2.13 | 5.08 | 11.81% | 4.82 | -7.88 | -13.71 | |
| July | 3.05 | 6.32% | 2.98 | 1.23 | 1.74 | 4.79 | 13.85% | 4.28 | -8.01 | -21.73 | |
| August | 3.05 | 6.98% | 3.29 | 1.47 | 1.82 | 4.87 | 13.40% | 5.47 | -6.27 | -28.00 | |
| September | 2.95 | 10.67% | 5.03 | 2.92 | 2.11 | 5.06 | 10.09% | 3.34 | -4.57 | -32.57 | |
| October | 3.05 | 11.34% | 5.34 | 3.20 | 2.15 | 5.20 | 8.18% | 2.40 | -2.01 | -2.01 | START |
| November | 2.95 | 7.35% | 3.46 | 1.61 | 1.86 | 4.81 | 5.71% | 1.94 | 0.65 | -1.35 | |
| December | 3.05 | 5.61% | 2.64 | 0.99 | 1.65 | 4.70 | 4.10% | 1.45 | 1.60 | 0.25 | |
| Total | 35.89 | 100.0% | 47.12 | 24.27 | 22.85 | 58.75 | 100.0% | 35.82 | -32.57 | 3.21 | |

(All Units are Inches of Water per Acre of Irrigated Area)

| | | |
|---|---|---|
| Maximum Monthly Avg Application Rate = | 3.07 | in/month |
| Daily Average Flow to Irrigation Field = | 510,000 | gallons/day |
| Irrigation Surface Area = | 191.00 | acres |
| Worst (Highest) Annual Rainfall in Past 25 Years = | 47.12 | in |
| Lagoon/Pond Surface Area = | 5.30 | acres |
| Lowest Annual Evaporation in Past 25 Years = | 43.61 | in |

| | | |
|---|---|---|
| Storage Volume Requirement = | 51.08 | ac-ft |
| Storage Volume Requirement = | 16,642,244 | gal |

*Data collected from https://waterdatafortexas.org/lake-evaporation-rainfall

Storage Volume Calculation Notes:

Column (13): Maximum values for Column (13) are the value (total) of Column (11) divided by 12.

Column (14b): Annual rainfall amount from the highest year in past 25 years of data. Total rainfall is then distributed proportional to monthly averages.

Column (15): Using rainfall figures in Column (14), calculate runoff with the same method used in Column (3).

Column (18b): Lowest annual evaporation in past 25 years from reservoir surface. Distribute annual value proportionally to monthly average evaporation expressed in inches per irrigated acre.

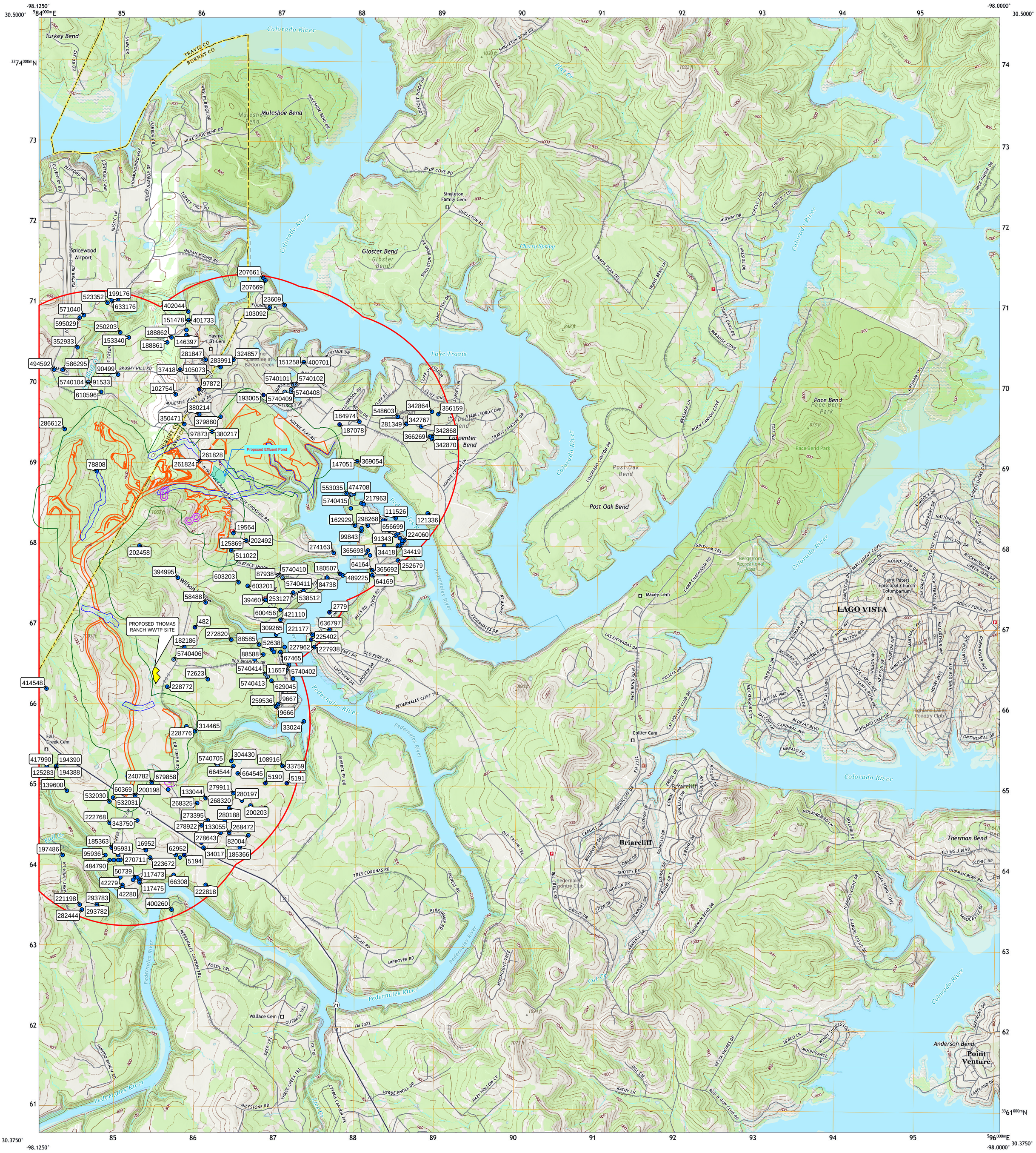
Column (19): Storage = [(13) – (18b)]-{[(7)-(16)]/K}. If the term {[(7)-(16)]/K} is negative, then the value for storage = [(13)-(18b)]. Irrigation efficiency is 0.85 unless specific information is provided to support a different value.

Column (20): To allow for the worst condition, the summation of storage is obtained by adding the values obtained in Column (19), beginning with the first consecutive month of positive values (START) and ending before incorporating the first month of negative values (END).

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

**PACE BEND QUADRANGLE**
**TEXAS**
**7.5-MINUTE SERIES**


Colorado River
Lake Travis
Pedernales River
Turkey Bend
Muleshoe Bend
Gloster Bend
Cherry Spring
Singleton Family Cem
Spicewood Airport
Haynie Flat Cem
Fall Creek Cem
Wallace Cem
Maxey Cem
Collier Cem
Pace Bend
Pace Bend Park
Post Oak Bend
Carpenter Bend
Bergstrom Recreational Area
Saint Peters Episcopal Church Columbarium
LAGO VISTA
Highland Lakes Country Club
Briarcliff
Pedernales Country Club
Therman Bend
Anderson Bend
Point Venture
Proposed Effluent Pond
PROPOSED THOMAS RANCH WWTP SITE
TRAVIS CO
BURNET CO
SINGLETON BEND RD
BLUE COVE RD
SINGLETON RD
HAYNIE FLAT RD
INDIAN MOUND RD
MAJESTIC HILLS BLVD
MULE SHOE BEND DR
TURKEY TREE RD
PALEFACE SHORE
EOL CROSSING RD
WILSON LN
OLD FERRY RD
PEDERNALES CLIFF TRL
RIVERCLIFF DR
TRES CORONAS RD
OSCAR RD
IMPROVER RD
FOSSIL TRL
PEDERNALES CANYON TRL
MILESTONE RD
VERDE KNOLL DR
OLD TATUM TRL
MIDWAY DR
GRISHAM TRL
LAS ENTRADAS DR
FM 2322
FM Road 1431
BRIARCLIFF DR
THURMAN BEND RD
LAGO VISTA
Cut-Off Creek
Hatter Creek
Red Branch
Fall Creek
Pedernales Country Club
Pedernales Cliffs Golf Course
Lake Travis Golf Course
Lakeside at Barton Creek
Cypress Canyon Cir
Three Creek Trl
Hippedo Ranch Rd
Deer Trl
Ttyx Trl
Outback Trl
Haze Hollow Cv
Kathy Ln
Rod & Gun Club Rd
Siesta Shores Dr
Moon Dance
Debco Ln
Wind Shores Loop
Lakefront Dr
Lakeland Dr
Emerald Rd
Continental Dr
Highland Lake Dr
Bluejay Blvd
Cardinal Ave
Falcon Ln
Rockingbird Ln
Mockingbird Ln
Sandcastle Dr
Flying J Blvd
Scenic Dr
Angel Song Cove
N Angel Light Dr
S Angel Light Dr
Moonlight Trce
Kathy Ln
Rod & Gun Club Rd
Pace Bend Park
Pace Bend Rd N
Pace Bend Rd S
Lakeside Dr
Travis Peak Trl
Travis Bend Ln
Travis Oaks Dr
Paradise Cove
Rock Canyon Cove
Colorado Canyon Dr
Colorado Canyon Cir
Brasada Ln
Stableford Cove
Travis Lakeside Dr
Cliff Ridge Dr
Cliff King
Cliff Overlook
Cliff Pt
Sunset Dr
Lookout Ridge Dr
Singleton Dr
Singleton Bend Dr
Singleton Rd
Blue Cove Rd
Haynie Creek Ln
Haynie Flat Rd
Lakeside Dr
Lakeshore Dr
Lakefront Dr
Shady Dr
Wesley Ridge Dr
Mule Shoe Bend Dr
Muleshoe Bend Dr
Hummingbird Way
Ridge Harbor Dr
Rustic Ln
Bedford Dr
Coventry Rd
Contractors Way
Exeter Rd
Brushy Hill Rd
Majestic Hills Blvd
Haynie Flat Rd
Rubnett Cir
Travis Cir
Stableford Cove
Brian Dr
Cliffbrook Rd
Cliff Pt
Cliff Overlook
Cliff King
Sunset Dr
Lookout Ridge Dr
Singleton Dr
Singleton Bend Rd
Blue Cove Rd
Singleton

PERMIT NO. WQ0016769001

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. Box 13087
Austin, Texas 78711-3087

PERMIT TO DISCHARGE WASTES
under provisions of Chapter 26
of the Texas Water Code

Arete Thomas Ranch Holdings, LLC

whose mailing address is

c/o Allen Boone Humphries Robinson LLP

919 Congress Avenue, Suite 1500
Austin, Texas 78701

Nature of Business Producing Waste: Domestic wastewater treatment operation, SIC Code 4952.
General Description and Location of Waste Disposal System:

Description: The Thomas Ranch Wastewater Treatment Facility consists of an activated sludge process plant using the conventional mode. Treatment units in the Interim Phase include an onsite lift station, a bar screen, three aeration basins, a final clarifier, two aerobic digesters, a disk filter, and a chlorine contact chamber. Treatment units in the Final Phase include an onsite lift station, a bar screen, six aeration basins, two final clarifiers, four aerobic digesters, a disk filter, and two chlorine contact chambers. The permittee is authorized to dispose of treated domestic wastewater effluent at a daily average flow not to exceed 0.26 million gallons per day (MGD) in the Interim Phase and 0.51 MGD in the Final Phase via surface irrigation on 191 acres of public access land. The facility includes one storage pond with a total surface area of 5.3 acres and total capacity of 51.1 acre-feet for storage of treated effluent prior to irrigation. Application rates to the irrigated land shall not exceed 3.00 acre-feet per year per acre irrigated. The irrigated crops include Bermuda grass and ryegrass.

Location: The wastewater treatment facility and disposal site are located approximately 1.2 miles northwest of the intersection of Paleface Ranch Road and State Highway 71, in Travis County, Texas 78669, and 0.9 miles northwest of the intersection of Haynie Flat Road and Paleface Ranch Road, Burnet County, Texas 78669. See Attachment A.

Drainage Area: The wastewater treatment facility and disposal site are located in the drainage basin of Pedernales River in Segment No. 1414 of the Colorado River Basin. No discharge of pollutants into water in the state is authorized by this permit.

This permit and the authorization contained herein shall expire at midnight, **five years from the date of issuance**.

ISSUED DATE:

For the Commission

**EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

**Conditions of the Permit: No discharge of pollutants into water in the state is authorized.**

A. Effluent Limitations

Character: Treated Domestic Sewage Effluent

Volume: Daily Average Flow, Interim Phase– 0.26 MGD
Daily Average Flow, Final Phase– 0.51 MGD from the treatment system

Quality: The following effluent limitations are required:

| | Effluent Concentrations (Not to Exceed) | | | |
|---|---|---|---|---|
| Parameter | Daily Average mg/l | 7-Day Average mg/l | Daily Maximum mg/ | Single Grab mg/l |
| Biochemical Oxygen Demand (5-day) | 20 | 30 | 45 | 65 |
| Total Suspended Solids | 20 | 30 | 45 | 65 |

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.

The effluent shall be chlorinated in a chlorine contact chamber to a residual of 1.0 mg/l with a minimum detention time of 20 minutes. If the effluent is to be transferred to a holding pond or tank, re-chlorination prior to the effluent being delivered into the irrigation system will be required. A trace total chlorine residual shall be maintained in the effluent at the point of irrigation application.

B. Monitoring Requirements:

| Parameter | Monitoring Frequency | Sample Type |
|---|---|---|
| Flow | Continuous | Totalizing Meter |
| Biochemical Oxygen Demand (5-day) | One/week | Grab |
| Total Suspended Solids | One/week | Grab |
| pH | One/week | Grab |
| Total Chlorine Residual | Five/week | Grab |

The monitoring shall be done after the final treatment unit and prior to storage of the treated effluent. If the effluent is land applied directly from the treatment system, monitoring shall be done after the final treatment unit and prior to land application. These records shall be maintained on a monthly basis and be available at the plant site for inspection by authorized representatives of the Commission for at least three years.

**STANDARD PERMIT CONDITIONS**

This permit is granted in accordance with the Texas Water Code and the rules and other Orders of the Commission and the laws of the State of Texas.

**DEFINITIONS**

All definitions in Section 26.001 of the Texas Water Code and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

    a. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.

    b. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with a 1 million gallons per day or greater permitted flow.

    c. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.

2. Concentration Measurements

    a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.

        i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.

        ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.

    b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.

    c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.

3. Sample Type

   a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).

   b. Grab sample - an individual sample collected in less than 15 minutes.

4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.

5. The term “sewage sludge” is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids which have not been classified as hazardous waste separated from wastewater by unit processes.

6. The term “biosolids” is defined as sewage sludge that has been tested or processed to meet Class A, Class AB, or Class B pathogen standards in 30 TAC Chapter 312 for beneficial use.

7. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

**MONITORING REQUIREMENTS**

1. Monitoring Requirements

   Monitoring results shall be collected at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling in accordance with 30 TAC §§ 319.4 - 319.12.

   As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Texas Water Code, Chapters 26, 27, and 28, and Texas Health and Safety Code, Chapter 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record or other document submitted or required to be maintained under this permit, including monitoring reports, records or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

   a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 - 319.12. Measurements, tests and calculations shall be accurately accomplished in a representative manner.

b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.

b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge or biosolids use and disposal activities, which shall be retained for a period of at least five years, monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, and records of all data used to complete the application for this permit shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, or application. This period shall be extended at the request of the Executive Director.

c. Records of monitoring activities shall include the following:

i. date, time and place of sample or measurement;
ii. identity of individual who collected the sample or made the measurement.
iii. date and time of analysis;
iv. identity of the individual and laboratory who performed the analysis;
v. the technique or method of analysis; and
vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in determining compliance with permit requirements.

5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the Regional Office and the Enforcement Division (MC 224).

7. Noncompliance Notification

   a. In accordance with 30 TAC § 305.125(9), any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Except as allowed by 30 TAC § 305.132, report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

   b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:

      i. Unauthorized discharges as defined in Permit Condition 2(g).

      ii. Any unanticipated bypass which exceeds any effluent limitation in the permit.

   c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.

   d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible.

8. In accordance with the procedures described in 30 TAC §§ 35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.

9. Changes in Discharges of Toxic Substances

   All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

   a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:

i. One hundred micrograms per liter (100 µg/L);
ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
iv. The level established by the TCEQ.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

i. Five hundred micrograms per liter (500 µg/L);
ii. One milligram per liter (1 mg/L) for antimony;
iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
iv. The level established by the TCEQ.

10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

**PERMIT CONDITIONS**

1. General

a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.

b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:

i. Violation of any terms or conditions of this permit;
ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.

b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation or suspension, or for denial of a permit renewal application or an application for a permit for another facility.

c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation which has a reasonable likelihood of adversely affecting human health or the environment.

e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.

f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§ 305.62 and 305.66 and Texas Water Code Section 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Special Provisions section of this permit.

h. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Texas Water Code §§ 7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties).

3. Inspections and Entry

a. Inspection and entry shall be allowed as prescribed in the Texas Water Code Chapters 26, 27, and 28, and Texas Health and Safety Code Chapter 361.

b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the

environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in Texas Water Code Section 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment and/or Renewal

   a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:

      i. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9;

      ii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

   b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.

   c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.

   d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.

e. In accordance with the Texas Water Code § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.

5. Permit Transfer

a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.

b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous waste storage, processing, or disposal which requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Property Rights

A permit does not convey any property rights of any sort, or any exclusive privilege.

8. Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

9. Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

10. Notice of Bankruptcy.

a. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:

i. the permittee;
ii. an entity (as that term is defined in 11 USC, § 101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or
iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.

b. This notification must indicate:

i. the name of the permittee;
ii. the permit number(s);
iii. the bankruptcy court in which the petition for bankruptcy was filed; and
iv. the date of filing of the petition.

**OPERATIONAL REQUIREMENTS**

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.

2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge or biosolids use and disposal and 30 TAC §§ 319.21 - 319.29 concerning the discharge of certain hazardous metals.

3. Domestic wastewater treatment facilities shall comply with the following provisions:

   a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.

   b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.

4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.

5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.

6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under Texas Water Code § 7.302(b)(6).

7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information specified as not confidential in 30 TAC § 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

8. Facilities which generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.

   a. Whenever flow measurements for any domestic sewage treatment facility reach 75 percent of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90 percent of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility which reaches 75 percent of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

      If in the judgement of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 219) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

   b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.

   c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any

other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.

9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.

10. Facilities which generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:

    a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.

    b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.

    c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Corrective Action Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.

    d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.

    e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.

    f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC Chapter 335 and must include the following, as it pertains to wastewater treatment and discharge:

        i. Volume of waste and date(s) generated from treatment process;
        ii. Volume of waste disposed of on-site or shipped off-site;
        iii. Date(s) of disposal;

iv. Identity of hauler or transporter;
v. Location of disposal site; and
vi. Method of final disposal.

The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.

11. For industrial facilities to which the requirements of 30 TAC Chapter 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with Chapter 361 of the Texas Health and Safety Code.

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**SLUDGE PROVISIONS**

The permittee is authorized to dispose of sludge or biosolids only at a Texas Commission on Environmental Quality (TCEQ) authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge. **The disposal of sludge or biosolids by land application on property owned, leased or under the direct control of the permittee is a violation of the permit unless the site is authorized with the TCEQ. This provision does not authorize Distribution and Marketing of Class A or Class AB Biosolids. This provision does not authorize the permittee to land apply biosolids on property owned, leased or under the direct control of the permittee.**

## SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE OR BIOSOLIDS LAND APPLICATION

### A. General Requirements

1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge or biosolids.

2. In all cases, if the person (permit holder) who prepares the sewage sludge or biosolids supplies the sewage sludge or biosolids to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge or biosolids to assure compliance with these regulations.

3. The land application of processed or unprocessed chemical toilet waste, grease trap waste, grit trap waste, milk solids, or similar non-hazardous municipal or industrial solid wastes, or any of the wastes listed in this provision combined with biosolids, WTP residuals or domestic septage is prohibited unless the grease trap waste is added at a fats, oil and grease (FOG) receiving facility as part of an anaerobic digestion process.

### B. Testing Requirements

1. Sewage sludge or biosolids shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 11) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 11) and the Enforcement Division (MC 224).

2. Biosolids shall not be applied to the land if the concentration of the pollutants exceeds the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Section I.C. of this permit.

TABLE 1

| Pollutant | Ceiling Concentration (Milligrams per kilogram)* |
|---|---|
| Arsenic | 75 |
| Cadmium | 85 |
| Chromium | 3000 |
| Copper | 4300 |
| Lead | 840 |
| Mercury | 57 |
| Molybdenum | 75 |
| Nickel | 420 |
| PCBs | 49 |
| Selenium | 100 |
| Zinc | 7500 |

* Dry weight basis

3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site must be treated by one of the following methods to ensure that the sludge meets either the Class A, Class AB or Class B biosolids pathogen requirements.

a. For sewage sludge to be classified as Class A biosolids with respect to pathogens, the density of fecal coliform in the sewage sludge must be less than 1,000 most probable number (MPN) per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge must be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met:

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC § 312.82(a)(3)(A) for specific information;

Alternative 5 (PFRP) - Sewage sludge that is used or disposed of must be treated in one of the Processes to Further Reduce Pathogens (PFRP) described in 40 CFR Part 503, Appendix B. PFRP include composting, heat drying, heat treatment, and thermophilic aerobic digestion; or

Alternative 6 (PFRP Equivalent) - Sewage sludge that is used or disposed of must be treated in a process that has been approved by the U. S. Environmental Protection Agency as being equivalent to those in Alternative 5.

b. For sewage sludge to be classified as Class AB biosolids with respect to pathogens, the density of fecal coliform in the sewage sludge must be less than 1,000 MPN per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met:

   Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 std. units and shall remain above 12 std. units for 72 hours.

   The temperature of the sewage sludge shall be above 52° Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12 std. units.

   At the end of the 72-hour period during which the pH of the sewage sludge is above 12 std. units, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50%; or

   Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(i-iii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(iv-vi) for specific information; or

   Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed.

c. Sewage sludge that meets the requirements of Class AB biosolids may be classified a Class A biosolids if a variance request is submitted in writing that is supported by substantial documentation demonstrating equivalent methods for reducing odors and written approval is granted by the executive director. The executive director may deny the variance request or revoke that approved variance if it is determined that the variance may potentially endanger human health or the environment, or create nuisance odor conditions.

d. Three alternatives are available to demonstrate compliance with Class B biosolids criteria.

Alternative 1

i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.

ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

Alternative 2 - Sewage sludge that is used or disposed of shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described in 40 CFR Part 503, Appendix B, so long as all of the following requirements are met by the generator of the sewage sludge.

i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;

iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;

iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and

v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

Alternative 3 - Sewage sludge shall be treated in an equivalent process that has been approved by the U.S. Environmental Protection Agency, so long as all of the following requirements are met by the generator of the sewage sludge.

i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;

iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;

iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and

v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition to the Alternatives 1 – 3, the following site restrictions must be met if Class B biosolids are land applied:

i. Food crops with harvested parts that touch the biosolids /soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids.

ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remain the land surface for 4 months or longer prior to incorporation into the soil.

iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of biosolids when the biosolids remain on the land surface for less than 4 months prior to incorporation into the soil.

iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of biosolids.

v. Domestic livestock shall not be allowed to graze on the land for 30 days after application of biosolids.

vi. Turf grown on land where biosolids are applied shall not be harvested for 1 year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn.

vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of biosolids.

viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of biosolids.

ix. Land application of biosolids shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.

4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following Alternatives 1 through 10 for vector attraction reduction.

Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.

Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.

Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.

Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.

Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.

Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.

Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 9 -

i. Sewage sludge shall be injected below the surface of the land.

ii. No significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.

iii. When sewage sludge that is injected below the surface of the land is Class A or Class AB with respect to pathogens, the biosolids shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

Alternative 10-

i. Biosolids applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.

ii. When biosolids that are incorporated into the soil is Class A or Class AB with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

**C. Monitoring Requirements**

| | |
|---|---|
| Toxicity Characteristic Leaching Procedure (TCLP) Test | - once during the term of this permit |
| PCBs | - once during the term of this permit |

All metal constituents and fecal coliform or *Salmonella* sp. bacteria shall be monitored at the appropriate frequency shown below, pursuant to 30 TAC § 312.46(a)(1):

| Amount of biosolids (*) metric tons per 365-day period | Monitoring Frequency |
|---|---|
| 0 to less than 290 | Once/Year |
| 290 to less than 1,500 | Once/Quarter |
| 1,500 to less than 15,000 | Once/Two Months |
| 15,000 or greater | Once/Month |

(*) *The amount of bulk biosolids applied to the land (dry wt. basis).*

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC § 312.7

Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.

Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, sewage sludge or biosolids for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.

## SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE FOR APPLICATION TO THE LAND MEETING CLASS A, CLASS AB or B BIOSOLIDS PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3

For those permittees meeting Class A, Class AB or B pathogen reduction requirements and that meet the cumulative loading rates in Table 2 below, or the Class B pathogen reduction requirements and contain concentrations of pollutants below listed in Table 3, the following conditions apply:

### A. Pollutant Limits

Table 2

| Pollutant | Cumulative Pollutant Loading Rate (pounds per acre)* |
|---|---|
| Arsenic | 36 |
| Cadmium | 35 |
| Chromium | 2677 |
| Copper | 1339 |
| Lead | 268 |
| Mercury | 15 |
| Molybdenum | Report Only |
| Nickel | 375 |
| Selenium | 89 |
| Zinc | 2500 |

Table 3

| Pollutant | Monthly Average Concentration (milligrams per kilogram)* |
|---|---|
| Arsenic | 41 |
| Cadmium | 39 |
| Chromium | 1200 |
| Copper | 1500 |
| Lead | 300 |
| Mercury | 17 |
| Molybdenum | Report Only |
| Nickel | 420 |
| Selenium | 36 |
| Zinc | 2800 |

*Dry weight basis

### B. Pathogen Control

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, shall be treated by either Class A, Class AB or Class B biosolids pathogen reduction requirements as defined above in Section I.B.3.

## C. Management Practices

1. Bulk biosolids shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge or biosolids enters a wetland or other waters in the State.

2. Bulk sewage sludge not meeting Class A biosolids requirements shall be land applied in a manner which complies with Applicability in accordance with 30 TAC §312.41 and the Management Requirements in accordance with 30 TAC § 312.44.

3. Bulk biosolids shall be applied at or below the agronomic rate of the cover crop.

4. An information sheet shall be provided to the person who receives bulk Class A or AB biosolids sold or given away. The information sheet shall contain the following information:

    a. The name and address of the person who prepared the Class A or AB biosolids that are sold or given away in a bag or other container for application to the land.

    b. A statement that application of the Class A or AB biosolids to the land is prohibited except in accordance with the instruction on the label or information sheet.

    c. The annual whole sludge application rate for the sewage sludge application rate for the biosolids that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

## D. Notification Requirements

1. If bulk biosolids are applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk biosolids are proposed to be applied. The notice shall include:

    a. The location, by street address, and specific latitude and longitude, of each land application site.

    b. The approximate time period bulk biosolids will be applied to the site.

    c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk biosolids.

## E. Record Keeping Requirements

The documents will be retained at the facility site and/or shall be readily available for review by a TCEQ representative. The person who prepares bulk sewage sludge or a biosolids material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative for a period of five years. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply.

1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.

2. A description of how the pathogen reduction requirements are met (including site restrictions for Class AB and Class B biosolids, if applicable).

3. A description of how the vector attraction reduction requirements are met.

4. A description of how the management practices listed above in Section II.C are being met.

5. The following certification statement:

   "I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC § 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC § 312.83(b) have been met for each site on which bulk biosolids are applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk biosolids shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:

   a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge or biosolids treatment activities.

   b. The location, by street address, and specific latitude and longitude, of each site on which sludge or biosolids are applied.

   c. The number of acres in each site on which bulk sludge or biosolids are applied.

   d. The date and time sludge or biosolids are applied to each site.

   e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.

   f. The total amount of sludge applied to each site in dry tons.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

**F. Reporting Requirements**

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 11) and the Enforcement Division (MC 224).

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

2. Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.

3. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.

4. The frequency of monitoring listed in Section I.C. that applies to the permittee.

5. Toxicity Characteristic Leaching Procedure (TCLP) results.

6. PCB concentration in sludge or biosolids in mg/kg.

7. Identity of hauler(s) and TCEQ transporter number.

8. Date(s) of transport.

9. Texas Commission on Environmental Quality registration number, if applicable.

10. Amount of sludge or biosolids disposal dry weight (lbs/acre) at each disposal site.

11. The concentration (mg/kg) in the sludge or biosolids of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.

12. Level of pathogen reduction achieved (Class A, Class AB or Class B).

13. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B biosolids, include information on how site restrictions were met.

14. Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.

15. Vector attraction reduction alternative used as listed in Section I.B.4.

16. Amount of sludge or biosolids transported in dry tons/year.

17. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC §

312.47(a)(5)(A)(ii) as applicable to the permittee's sludge or biosolids treatment activities, shall be attached to the annual reporting form.

18. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.

    a. The location, by street address, and specific latitude and longitude.

    b. The number of acres in each site on which bulk biosolids are applied.

    c. The date and time bulk biosolids are applied to each site.

    d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk biosolids applied to each site.

    e. The amount of biosolids (i.e., dry tons) applied to each site.

    The above records shall be maintained on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

## SECTION III. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE OR BIOSOLIDS DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL

A. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge or biosolids meet the requirements in 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.

B. If the permittee generates sewage sludge or biosolids and supplies that sewage sludge or biosolids to the owner or operator of a municipal solid waste landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.

C. Sewage sludge or biosolids shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR § 261.24. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

   Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 11) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

   The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 11) and the Enforcement Division (MC 224), by September $30_{th}$ of each year.

D. Sewage sludge or biosolids shall be tested as needed, in accordance with the requirements of 30 TAC Chapter 330.

E. Record Keeping Requirements

   The permittee shall develop the following information and shall retain the information for five years.

1. The description (including procedures followed and the results) of all liquid Paint Filter Tests performed.

2. The description (including procedures followed and results) of all TCLP tests performed.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

F. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 11) and the Enforcement Division (MC224).

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

2. Toxicity Characteristic Leaching Procedure (TCLP) results.

3. Annual sludge or biosolids production in dry tons/year.

4. Amount of sludge or biosolids disposed in a municipal solid waste landfill in dry tons/year.

5. Amount of sludge or biosolids transported interstate in dry tons/year.

6. A certification that the sewage sludge or biosolids meets the requirements of 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.

7. Identity of hauler(s) and transporter registration number.

8. Owner of disposal site(s).

9. Location of disposal site(s).

10. Date(s) of disposal.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

## SECTION IV. REQUIREMENTS APPLYING TO SLUDGE OR BIOSOLIDS TRANSPORTED TO ANOTHER FACILITY FOR FURTHER PROCESSING

These provisions apply to sludge or biosolids that is transported to another wastewater treatment facility or facility that further processes sludge or biosolids. These provisions are intended to allow transport of sludge or biosolids to facilities that have been authorized to accept sludge or biosolids. These provisions do not limit the ability of the receiving facility to determine whether to accept the sludge or biosolids, nor do they limit the ability of the receiving facility to request additional testing or documentation.

### A. General Requirements

1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC Chapter 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.

2. Sludge or biosolids may only be transported using a registered transporter or using an approved pipeline.

### B. Record Keeping Requirements

1. For sludge or biosolids transported by an approved pipeline, the permittee must maintain records of the following:

   a. the amount of sludge or biosolids transported;

   b. the date of transport;

   c. the name and TCEQ permit number of the receiving facility or facilities;

   d. the location of the receiving facility or facilities;

   e. the name and TCEQ permit number of the facility that generated the waste; and

   f. copy of the written agreement between the permittee and the receiving facility to accept sludge or biosolids.

2. For sludge or biosolids transported by a registered transporter, the permittee must maintain records of the completed trip tickets in accordance with 30 TAC § 312.145(a)(1)-(7) and amount of sludge or biosolids transported.

3. The above records shall be maintained on-site on a monthly basis and shall be made available to the TCEQ upon request. These records shall be retained for at least five years.

## C. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 11) and the Enforcement Division (MC 224).

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

2. the annual sludge or biosolids production;

3. the amount of sludge or biosolids transported;

4. the owner of each receiving facility;

5. the location of each receiving facility; and

6. the date(s) of disposal at each receiving facility.

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**SPECIAL PROVISIONS:**

1. This permit is granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend this permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, if an area-wide system is developed; to require the delivery of the wastes authorized to be collected in, treated by, or discharged from the system, to an area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment, or disposal system.

2. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations, and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.

   This Category D* facility must be operated by a chief operator or an operator holding a Class D* license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift which does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

   *A Class D Wastewater Treatment Operator license is not renewable for operators of a facility listed in 30 TAC Section 30.342(c) and must be upgraded to a Class C Wastewater Treatment Operator license or higher prior to the expiration date of the Class D license.

3. The permittee shall maintain and operate the treatment facility in order to achieve optimum efficiency of treatment capability. This shall include required monitoring of effluent flow and quality as well as appropriate grounds and building maintenance.

4. The irrigated crops include Bermuda grass (warm season) and ryegrass (cool season). Application rates to the irrigated land shall not exceed 3.00 acre-feet/acre/year. The permittee is responsible for providing equipment to determine application rates and maintaining accurate records of the volume of effluent applied. The records shall be made available for review by the Texas Commission on Environmental Quality and shall be maintained for at least three years.

5. The permittee shall use cultural practices to promote and maintain the health and propagation of the Bermuda grass and ryegrass and avoid plant lodging. The permittee shall harvest the crops (cut and remove it from the field) at least once during the year. Harvesting and mowing dates shall be recorded in a log book kept on site to be made available to TCEQ personnel upon request.

6. The permittee shall erect adequate signs stating that the irrigation water is from a non-potable water supply for any area where treated effluent is stored or where there exist hose bibs or faucets. Signs shall consist of a red slash superimposed over the international symbol for drinking water accompanied by the message “DO NOT DRINK THE WATER” in both English and Spanish. All piping transporting the effluent shall be clearly marked with these same signs.

7. Irrigation practices shall be designed and managed as to prevent ponding of effluent or contamination of ground and surface waters and to prevent the occurrence of nuisance conditions in the area. Crops or other ground cover shall be established and well maintained in the irrigation area throughout the year for effluent and nutrient uptake by the crop and to prevent pathways for effluent surfacing. Tailwater control facilities shall be provided as necessary to prevent the discharge of any effluent from the irrigated land.

8. Effluent shall not be applied for irrigation during rainfall events or when the ground is frozen or saturated.

9. The permittee shall construct and maintain earthen berms to prevent runoff from leaving the irrigation site.

10. Irrigation to treated effluent on land with a slope of 10% or greater is prohibited. Irrigation of treated shall be limited to those tracts designated on Attachment A of this permit only after proper grading has been accomplished.

11. The physical condition of the spray irrigation fields will be monitored on a weekly basis when the fields are being utilized for the purpose of wastewater irrigation. Any areas with problems such as surface runoff, surficial erosion, stressed or damaged vegetation will be recorded in the field log kept onsite and corrective measures will be initiated within 24 hours of discovery.

12. If imported soils are used, the permittee shall submit, no later than 90 days prior to construction, to the TCEQ Water Quality Assessment Team (MC 150) and the Wastewater Permitting Section (MC 148) of the Water Quality Division, a plan for review and possible revision and approval describing how the imported soils will be incorporated into the native soils and how soil erosion will be prevented in the affected areas.

13. Spray fixtures for the irrigation system shall be of such design that they cannot be operated by unauthorized personnel.

14. The permittee shall obtain representative soil samples from the root zones of the land application area. Composite sampling techniques shall be used. Each composite sample shall represent no more than 80 acres with no less than 10 to 15 subsamples representing each composite sample. Subsamples shall be composited by like sampling depth, type of crop and soil type for analysis and reporting. Soil types are soils that have like topsoil or plow layer textures. These soils shall be sampled individually from 0 to 6 inches, 6 to 18 inches and 18 to 30 inches below ground level. The permittee shall sample soils in December to February of each year. Soil samples shall be analyzed within 30 days of sample collection.

    Samples shall be analyzed annually according to the following table:

| Parameter | Method | Minimum Analytical Level (MAL) | Reporting units |
|---|---|---|---|
| pH | 2:1 (v/v) water to soil mixture | | Reported to 0.1 pH units after calibration of pH meter |
| Electrical Conductivity | 2:1 (v/v) water to soil mixture | 0.01 | dS/m (same as mmho/cm) |
| Nitrate-nitrogen | From a 1 N KCl soil extract | 1 | mg/kg (dry weight basis) |
| Total Kjeldahl Nitrogen (TKN) | For determination of Organic plus Ammonium Nitrogen. Procedures that use Mercury (Hg) are not acceptable. | 20 | mg/kg (dry weight basis) |
| Total Nitrogen | = TKN plus Nitrate-nitrogen | | mg/kg (dry weight basis) |
| Plant-available: Phosphorus | Mehlich III with inductively coupled plasma | 1 (P) | mg/kg (dry weight basis) |
| Plant-available: Potassium (K) | May be determined in the same Mehlich III extract with inductively coupled plasma | 5 (K) | mg/kg (dry weight basis) |
| Amendment addition, e.g., gypsum | | | Report in short tons/acre in the year effected |

A copy of this soil testing plan shall be provided to the analytical laboratory prior to sample analysis. The permittee shall submit the results of the annual soil sample analyses with copies of the laboratory reports and a map depicting the areas that have received wastewater within the permanent land application fields to the TCEQ Regional Office (MC Region 9), the Water Quality Assessment Team (MC 150), and the Enforcement Division (MC 224), no later than the end of September of each sampling year. If wastewater is not applied in a particular year, the permittee shall notify the same TCEQ offices and indicate that wastewater has not been applied on the approved land irrigation site(s) during that year.

15. A wastewater treatment plant unit may not be located in wetlands per 30 TAC §309.13(b).

16. The permittee shall comply with buffer zone requirements of 30 TAC §309.13(c). A wastewater treatment plant unit, defined by 30 TAC Section §309.11(9), must be located a minimum horizontal distance of 250 feet from a private well and a minimum horizontal distance of 500 feet from a public water well site, spring, or other similar sources of public drinking water, as provided by §290.41(c)(1)(C) of this title.

17. The permittee shall comply with the buffer zone requirements of 30 TAC §309.13(c), specifically regarding water wells and waters in the state. The permittee must locate the wastewater irrigation fields a minimum horizontal distance of 500 feet from public water wells, springs, or other similar sources of public drinking water; 150 feet from private water wells; and 100 feet from surface waters in the state.

18. Any new or modified wastewater pond shall be adequately lined to control seepage in accordance with 30 TAC §217.203 **and** 30 TAC §309.13(d) since the facility overlies the recharge zone of an aquifer. New or modified wastewater ponds shall not be put into service until the permittee demonstrates that the pond liners meet the requirements of 30 TAC §217.203 **and** 30 TAC §309.13(d). The permittee shall demonstrate that the number, location, and test results of samples collected for geotechnical testing are in accordance with 30 TAC §217.203(d) and (e), and that the liner has a minimum thickness of 3 feet in accordance with 30 TAC §309.13(d) since the facility overlies the recharge zone of an aquifer. The report providing this demonstration shall be submitted to the Water Quality Assessment Team (MC-150) and the TCEQ Regional Office (MC-Region 11) for review and approval prior to use of the wastewater ponds. If a synthetic liner is to be used, the liner thickness shall be a minimum of 40 mils and be constructed with an underground leak detection system with appropriate sampling points.

19. The permittee shall submit the liner certification for a newly-constructed or modified wastewater pond to the Water Quality Assessment Team (MC-150), the TCEQ Regional Office (MC-Region 11), and the TCEQ Enforcement Division (MC-224) within 30 days of completion and prior to use. The certification shall be signed and sealed by a Texas-licensed professional engineer and include a description of how the liner meets the requirements of 30 TAC §217.203 **and** 30 TAC §309.13(d).

20. Facilities for the retention of treated or untreated wastewater shall be adequately managed and lined to control seepage. At least once per month, the permittee shall inspect the sides and bottom (if visible) of the wastewater ponds for signs of damage and leakage, and any pond leak detection systems that are in service. Leaking ponds shall be removed from service, or operated in a manner to prevent discharge, until repairs are made or replacement ponds are constructed. A record of the monthly inspections shall be maintained in a field log and kept onsite for TCEQ inspection.

21. Pond liner certifications and all liner construction and repair documentation shall be maintained by the Permittee for the life of the facility and be made available for TCEQ personnel for inspection and review.

22. Permittee shall plug any abandoned water well located onsite in accordance with 16 TAC Chapter 76—Water Well Drillers and Water Well Pump Installers. Copies of the plugging report must be submitted to the Water Quality Assessment Team (MC-150) and the Region 11 (Austin) Office within 30 days of plugging the well.

23. Prior to construction of the 0.26 MGD (Interim Phase) and 0.51 MGD (Final Phase) wastewater treatment facilities, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) of the Water Quality Division, a summary transmittal letter according to the requirements in 30 TAC § 217.6(d). If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications and a final engineering design report which comply with the requirements of 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the permitted effluent limitations required on Page 2 of the permit. A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ.

24. Reporting requirements according to 30 TAC § 319.1-319.11 and any additional effluent reporting requirements contained in this permit are suspended from the effective date of the permit until plant startup or discharge, whichever occurs first, from the facility described by this permit. The permittee shall provide written notice to the TCEQ Regional Office (MC Region «REGIONNO») and the Applications Review and Processing Team (MC 148) of the Water Quality Division at least forty-five (45) days prior to plant startup or anticipated discharge, whichever occurs first, and prior to completion of each additional phase on Notification of Completion Form 20007.

25. Prior to construction of the wastewater treatment facility, the permittee shall submit sufficient evidence of legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the permittee according to 30 TAC § 309.13(e)(3). The evidence of legal restrictions shall be submitted to the Executive Director in care of the TCEQ Wastewater Permitting Section (MC 148). The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). (See Attachment B.)

26. Irrigation with effluent shall be accomplished only when the area specified is not in use.

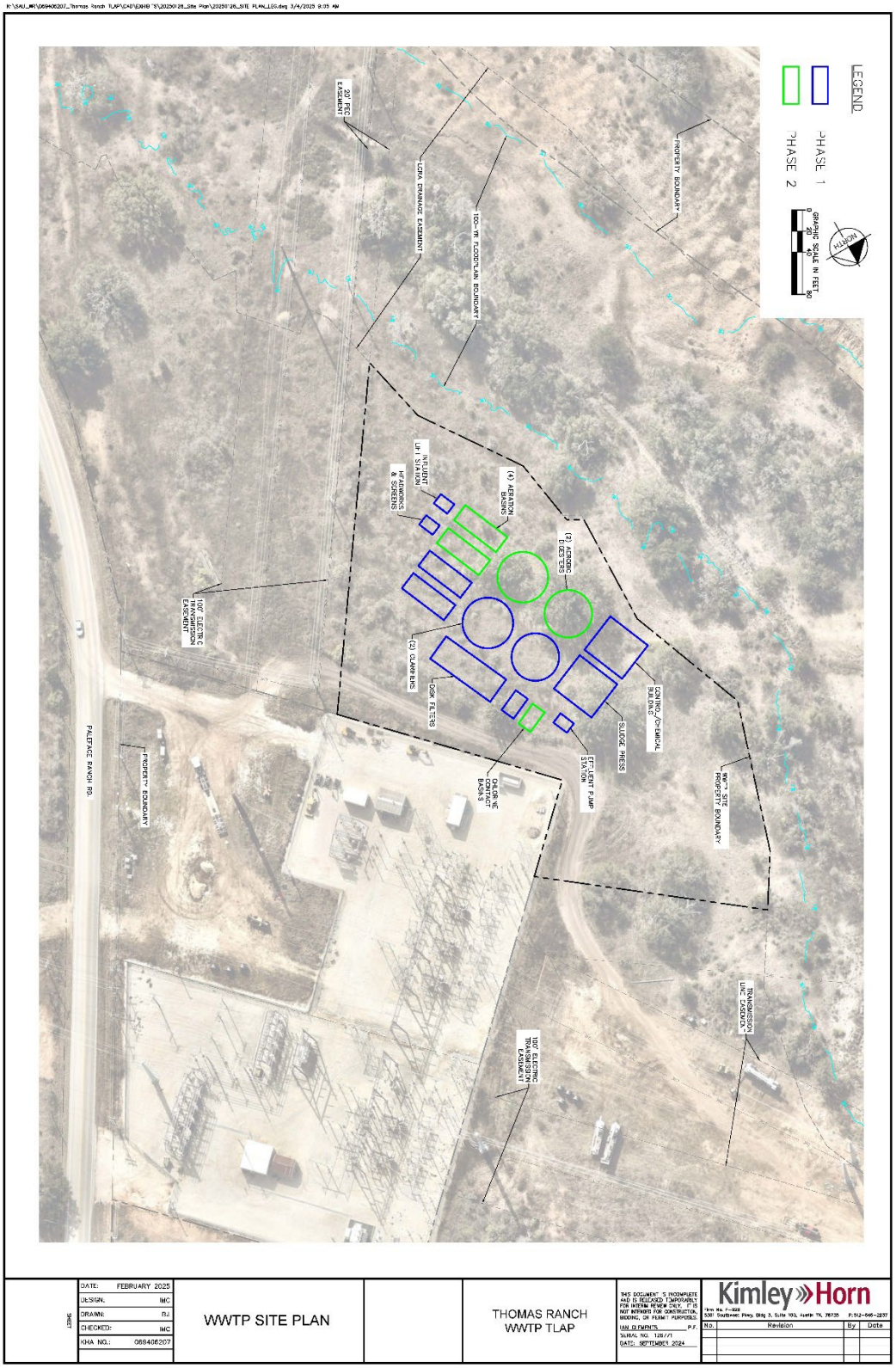
27. Holding or storage ponds shall conform to the design criteria for stabilization ponds with regard to construction and levee design and shall maintain a minimum freeboard of two feet according to 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems.

28. Permanent transmission lines shall be installed from the holding pond to each tract of land to be irrigated utilizing effluent from that pond.

29. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.

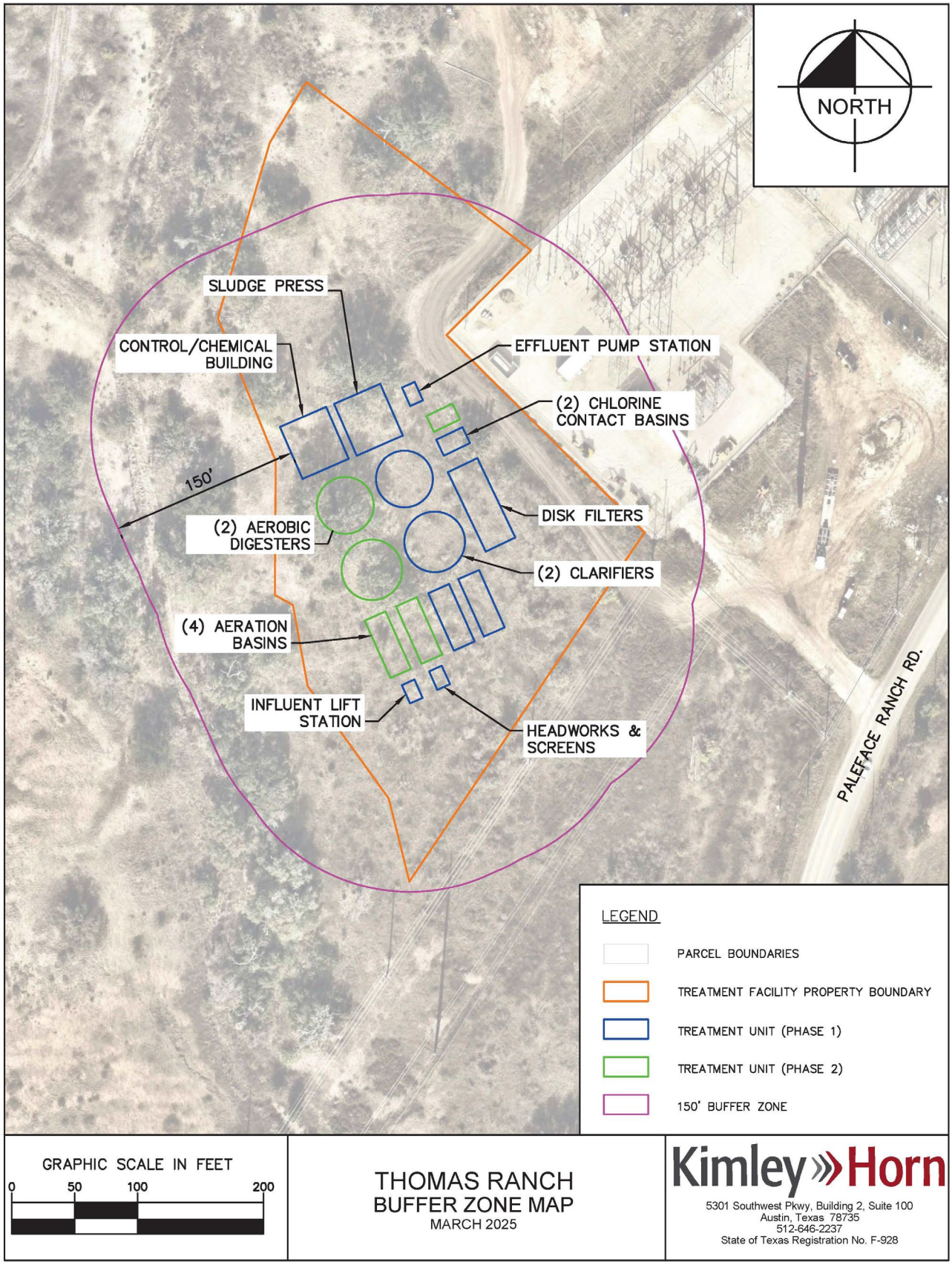
30. The permittee shall design and install storage that equals 60 days of the final phase (0.51 MGD) design flow of the facility. In addition, the permittee shall pump and haul wastewater from the facility to prevent the discharge of treated or untreated wastewater if complete shutdown of the wastewater treatment facility becomes necessary or if the storage capacity is exceeded.

**Attachment A**
**WQ0016769001, Arete Thomas Ranch Holdings, LLC**
**Site Map**




| | | | | | |
|---|---|---|---|---|---|
| SHEET | DATE: FEBRUARY 2025<br>DESIGN: IMC<br>DRAWN: RJ<br>CHECKED: IMC<br>KHA NO.: 069406207 | WWTP SITE PLAN | | THOMAS RANCH<br>WWTP TLAP | THIS DOCUMENT IS INCOMPLETE AND IS RELEASED TEMPORARILY FOR INTERIM REVIEW ONLY. IT IS NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.<br>KHA DOCUMENTS: P.F.<br>SUBMITTAL NO.: 12E/11<br>DATE: SEPTEMBER 2024 | Kimley»Horn<br>Firm No. F-928<br>500 Southwest Pkwy, Bldg 3, Suite 100, Austin TX, 78735 P: 512-646-2237<br>NO. \| Revision \| By \| Date |

**Attachment B**
**WQ0016769001, Arete Thomas Ranch Holdings, LLC**
**Buffer Zone Map**



**TECHNICAL SUMMARY AND**
**EXECUTIVE DIRECTOR'S PRELIMINARY DECISION**

DESCRIPTION OF APPLICATION

| | |
|---|---|
| Applicant: | Arete Thomas Ranch Holdings, LLC<br>TCEQ Permit No. WQ0016769001 |
| Regulated Activity: | Domestic Wastewater Permit |
| Type of Application: | New Permit |
| Request: | New Permit |
| Authority: | Texas Water Code (TWC) § 26.027; 30 Texas Administrative Code (TAC) Chapters 305, 309, 312, 319, and 30; and Commission policies. |

EXECUTIVE DIRECTOR RECOMMENDATION

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The draft permit includes an expiration date of **five years from the date of issuance,** according to 30 TAC Section 305.127(1)(C)(ii)(III), Conditions to be Determined for Individual Permits.

REASON FOR PROJECT PROPOSED

Arete Thomas Ranch Holdings, LLC has applied to the Texas Commission on Environmental Quality (TCEQ) for new Permit No. WQ0016769001 to authorize the disposal of treated domestic wastewater at a daily average flow not to exceed 0.26 million gallons per day (MGD) in the Interim phase and 0.51 MGD in the Final phase via surface irrigation on 191 acres of public access land. The facility will include one storage pond with a total surface area of 5.3 acres and total capacity of 51.1 acre-feet for storage of treated effluent prior to irrigation. The proposed wastewater treatment facility will serve the Thomas Ranch subdivision.

PROJECT DESCRIPTION AND LOCATION

The Thomas Ranch Wastewater Treatment Facility will consist of an activated sludge process plant using the conventional mode. Treatment units for the Interim Phase will include an onsite lift station, a bar screen, three aeration basins, a final clarifier, two aerobic digesters, a disk filter, and a chlorine contact chamber. Treatment units for the Final Phase will include an onsite lift station, a bar screen, six aeration basins, two final clarifiers, four aerobic digesters, a disk filter, and two chlorine contact chambers. The facility has not been constructed.

The draft permit authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

The domestic wastewater treatment facility and disposal site will be located approximately 1.2 miles northwest of the intersection of Paleface Ranch Road and State Highway 71, in Travis County, Texas 78669, and 0.9 miles northwest of the intersection of Haynie Flat Road and

Paleface Ranch Road, Burnet County, Texas 78669.

The wastewater treatment facility and disposal site will be located in the drainage basin of Pedernales River in Segment No. 1414 of the Colorado River Basin. No discharge of pollutants into water in the state is authorized by this permit.

SUMMARY OF EFFLUENT DATA

There is no effluent data since the facility has not been constructed.

DRAFT PERMIT CONDITIONS

The draft permit authorizes the disposal of treated domestic wastewater effluent at a daily average flow not to exceed 0.26 million gallons per day (MGD) in the Interim phase and 0.51 MGD in the Final phase via surface irrigation on 191 acres land. The facility includes one storage pond with a total surface area of 5.3 acres and total capacity of 51.1 acre-feet for storage of treated effluent prior to irrigation. Application rates to the irrigated land shall not exceed 3.00 acre-feet per year per acre irrigated. The irrigated crops include Bermuda grass (warm season) and ryegrass (cool season).

The effluent limitations in the draft permit, based on a daily average, are 20 mg/l biochemical oxygen demand ($BOD_5$) and 20 mg/l total suspended solids (TSS). The effluent shall contain a total chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes based on peak flow.

The permittee shall comply with the requirements of 30 TAC § 309.13(a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC § 309.13(e).

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal, and Transportation. The draft permit authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

SUMMARY OF CHANGES FROM APPLICATION

None.

BASIS FOR DRAFT PERMIT

The following items were considered in developing the draft permit:

1. Application received on April 7, 2025, and additional information received on April 22, 2025, April 29, 2025, May 8, 2025, May 23, 2025, and May 28, 2025.

3. Interoffice Memorandum from the Water Quality Assessment Team, Water Quality Assessment & Standards Section, Water Quality Division.

PROCEDURES FOR FINAL DECISION

When an application is declared administratively complete, the Chief Clerk sends a letter to the applicant advising the applicant to publish the Notice of Receipt of Application and Intent to Obtain Permit in the newspaper. In addition, the Chief Clerk instructs the applicant to place a copy of the application in a public place for review and copying in the county where the facility is or will be located. This application will be in a public place throughout the comment period. The Chief Clerk also mails this notice to any interested persons and, if required, to landowners identified in the permit application. This notice informs the public about the application and provides that an interested person may file comments on the application or request a contested case hearing or a public meeting.

Once a draft permit is completed, it is sent, along with the Executive Director's preliminary decision, as contained in the technical summary or fact sheet, to the Chief Clerk. At that time, the Notice of Application and Preliminary Decision will be mailed to the same people and published in the same newspaper as the prior notice. This notice sets a deadline for making public comments. The applicant must place a copy of the Executive Director's preliminary decision and draft permit in the public place with the application.

Any interested person may request a public meeting on the application until the deadline for filing public comments. A public meeting is intended for the taking of public comment and is not a contested case proceeding.

After the public comment deadline, the Executive Director prepares a response to all significant public comments on the application or the draft permit raised during the public comment period. The Chief Clerk then mails the Executive Director's response to comments and final decision to people who have filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that if a person is not satisfied with the Executive Director's response and decision, they can request a contested case hearing or file a request to reconsider the Executive Director's decision within 30 days after the notice is mailed.

The Executive Director will issue the permit unless a written hearing request or request for reconsideration is filed within 30 days after the Executive Director's response to comments and final decision is mailed. If a hearing request or request for reconsideration is filed, the Executive Director will not issue the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court.

If the Executive Director calls a public meeting or the Commission grants a contested case hearing as described above, the Commission will give notice of the date, time, and place of the meeting or hearing. If a hearing request or request for reconsideration is made, the Commission will consider all public comments in making its decision and shall either adopt the Executive Director's response to public comments or prepare its own response.

For additional information about this application, contact Kimberly Kendall, P.E. at (512) 239-4540.

*Kimberly Kendall*

Kimberly Kendall, P.E.
Municipal Permits Team
Wastewater Permitting Section (MC 148)

July 7, 2025

Date