



Technical Package Cover Page

This file contains the following documents:

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

* **NOTE:** This application was declared Administratively Complete before June 1, 2024. The application materials, draft permit, and technical summary or fact sheet are available for review at the Public Viewing Location provided in the NAPD.



Portada de Paquete Técnico

Este archivo contiene los siguientes documentos:

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

** **NOTA:** Esta solicitud se declaró administrativamente completa antes del 1 de junio de 2024. Los materiales de la solicitud, el proyecto de permiso, y los resumen técnico u hoja de datos están disponibles para revisión en la ubicación de consulta pública que se indica en el NAPD.

PLAIN LANGUAGE SUMMARY TLAP PERMIT

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.

WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY (CN604021980) operates Lake Pointe & Bohl's (RN102077989), a Wastewater Treatment Facility (WWTP). The facility is located at 3100 Napa Drive (LP WWTP) and 8,000ft NW of the intersection of Farm-to-Market Road and State Highway 71(Bohl's WWTP), in Austin, Travis County, Texas 78738. This application is requesting authorization for disposal of treated domestic wastewater effluent at a daily average flow not to exceed 1.0 MGD and via surface irrigation of 350 acres of public access land in the Interim I phase; a daily average flow not to exceed 1.375 MGD via surface irrigation of 350-acres of public access land and a subsurface area drip dispersal system(SADDS), where a daily average flow is not to exceed 232,590 GPD via non-public SADDS with a minimum area of 53 acres, and direct potable reuse in phase II; a daily average flow not to exceed 1.50 MGD via surface irrigation of 350-acres of public access land, where a daily average flow is not to exceed 232,590 GPD via non-public access SADDS with a minimum area of 53 acres, and direct potable reuse in phase III. In the Final phase, we request authorization to dispose of treated domestic wastewater effluent at a daily average flow not to exceed 1.8 MGD via surface irrigation of 350-acres of public access land, where a daily average flow is not to exceed 232,590 GPD via non-public access SADDS with a minimum area of 53 acres, and direct potable reuse. This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain low levels of Biochemical Oxygen Demand (5-day), Total Suspended Solids (TSS), and Ammonia Nitrogen (NH₃-N), and Escherichia coli (*E. coli*).. Domestic wastewater is treated by an activated sludge process plant using the single stage nitrification mode. Treatment units include two parallel trains consisting of a bar screen, two equalization basins, two aeration basins, two final clarifiers, two aerobic digesters, two chlorine contact chambers, and clot disk filters at the Lake Pointe Site, and another train consisting of an equalization basin, bar screen, aeration basin, final clarifier, aerobic digester, chlorine contact chamber and cloth disk filters at the Bohl's Site.

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.

WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY (CN604021980) opera Lake Pointe y Bohls. (RN102077989), un par de Plantas de Tratamiento de Aguas Residuales. La instalación está ubicada en 3100 Napa Drive (LP WWTP) y 8,000ft NW de la intersección Farm-to-Market Road y State Highway 71(Bohl's WWTP), en Austin, Condado de Travis, Texas 78738. En esta solicitud se pide autorización para verter efluentes de aguas residuales domésticas tratadas con un caudal medio diario no superior a 1.0 MGD y mediante riego superficial de 350 acres de terrenos de acceso público en la fase provisional I; un caudal medio diario no superior a 1.375 MGD mediante el riego superficial de 350 acres de terreno de acceso público y un sistema de dispersión por goteo subsuperficial (SADDs), con un caudal medio diario no superior a 232.590 GPD a través de SADDs con mínima de 53 acres, y la reutilización potable directa en la fase (DPR) II; un caudal medio diario no superior a 1.50 MGD mediante riego superficial de 350 acres de terreno de acceso público, con un caudal medio diario no superior a 232.590 GPD a través de SADDs con mínima de 53 acres, y DPR en la fase III. En la fase final, solicitamos autorización para verter efluentes de aguas residuales domésticas tratadas con un caudal medio diario no superior a 1.8 MGD mediante el riego superficial de 350 acres de terrenos de acceso público, un caudal medio diario no superará los 232.590 GPD a través de SADDs con mínima de 53 acres, y DPR. Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan niveles bajos de demanda bioquímica de oxígeno (5 días), sólidos suspendidos totales (SST), nitrógeno amoniacal (NH₃-N) y Escherichia coli.. Las aguas residuales domésticas están tratado mediante una planta de proceso de lodos activados que utiliza el modo de nitrificación de una sola etapa. Las unidades de tratamiento incluyen dos trenes paralelos formados por un tamiz de barras, dos balsas de ecualización, dos balsas de aireación, dos clarificadores finales, dos digestores aeróbicos, dos cámaras de contacto de cloro y filtros de disco de tela en el emplazamiento de Lake Pointe, y otro tren formado por una balsa de ecualización, un tamiz de barras, una balsa de aireación, un clarificador final, un digestor aeróbico, una cámara de contacto de cloro y filtros de disco de tela en el emplazamiento de Bohls.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



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

PERMIT NO. WQ0013594001

APPLICATION. West Travis County Public Utility Agency, 13215 Bee Cave Parkway Building B, Suite 110, Bee Cave, Texas 78738, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Land Application Permit (TLAP) No. WQ0013594001 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 1,800,000 gallons per day via surface irrigation of 350 acres of land, subsurface drip disposal systems (SADDs) of 53 acres of land, and direct potable reuse facility. The domestic wastewater treatment facilities and disposal areas are located at 3100 Napa Drive, Austin, and 12900 1/2 Bee Cave Parkway, Austin, in Travis County, Texas 78738 (Site A and Site B). The Effluent Pond No. 1 is located approximately 8,000 feet northwest of the intersection of Farm-to-Market Road 620 and State Highway 71, in Travis County, Texas 78738. The irrigation site (Spillman Ranch) is also located approximately 8,000 feet northwest of the intersection of Farm-to-Market Road 620 and State Highway 71, in Travis County, Texas 78738. The irrigation site (CCNG) is located approximately 2,500 feet south of the intersection of Farm-to-Market Road 620 and State Highway 71, in Travis County, Texas 78738. The Effluent Pond No. 2 and a treatment facility are located approximately 3,000 feet northwest of the intersection of Farm-to-Market Road 2244 and State Highway 71, in Travis County, Texas 78738 (Site B). The sub-surface area drip dispersal site is located on the north side of State Highway 71, west of Vail Divide, in Travis County, Texas 78738. TCEQ received this application on May 10, 2024. The permit application will be available for viewing and copying at Bee Cave City Hall, Reception Desk, 4000 Galleria Parkway, Bee Cave, 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=-97.925833,30.310833&level=18>

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

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

El aviso de idioma alternativo en español está disponible en

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

ADDITIONAL NOTICE. TCEQ's Executive Director has determined the application is administratively complete and will conduct a technical review of the application. After

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

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

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

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

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

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

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

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

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

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

Further information may also be obtained from West Travis County Public Utility Agency at the address stated above or by calling Mr. Bryce Canady, Vice President, Operations & Development, Murfee Engineering Company, Inc., at (512) 327 9204.

Issuance Date: June 21, 2024

Comisión de Calidad Ambiental del Estado de Texas



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

PERMISO NO. WQ0013594001

SOLICITUD. West Travis County Public Utility Agency, 13215 Bee Cave Parkway Building B, Suite 110, Bee Cave, Texas 78738 ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) para renovar el Permiso de Aplicación Terrestre de Texas (TLAP) No.WQ00135994001 de disposición de aguas residuales para autorizar la disposición de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 1,800,000 galones por día por medio de riego de superficie de 350 acres de tierra, un flujo por sistema de goteo subsuperficial (SADDs) de 53 acres de tierra, e instalación de reutilización potable directa. Las plantas de tratamiento de aguas domésticos residuales están ubicados en 3100 Napa Drive, Austin (Lake Pointe), y 12900 ½ Bee Cave Pkwy (Bohl's), Austin en el Condado de Travis, Texas 78738 (Site A and Site B). El Estanque de Efluentes No. 1 está ubicado aproximadamente a 8,000 pies al noroeste de la intersección de Farm-to-Market Road 620 y State Highway 71 en Travis County, Texas 78738. El sitio de irrigación (Rancho Spillman) también está ubicado aproximadamente a 8,000 pies al noroeste de la intersección de Farm-to-Market Road 620 y State Highway 71 en el Condado de Travis, Texas 78738. La zona de riego (CCNG) se encuentra aproximadamente a 2.500 pies al sur de la intersección de Farm-to-Market Road 620 y la carretera estatal 71 en el condado de Travis, Texas 78738. El Estanque de Efluentes No. 2 y una instalación de tratamiento están ubicados aproximadamente a 3,000 pies al noroeste de la intersección de Farm-to-Market Road 2244 y State Highway 71 en el Condado de Travis, Texas 78738 (Sitio B). El área subsuperficial de dispersión por goteo se encuentra en el lado norte de la carretera estatal 71, al oeste de Vail Divide, en el Condado de Travis, Texas 78738. La TCEQ recibió esta solicitud el día 10 de Mayo de 2024. La solicitud para el permiso estará disponible para leerla y copiarla en el Ayuntamiento de Bee Cave, Recepción Desk, 4000 Galleria Parkway, Bee Cave, en Condado de Travis, Texas, antes de la fecha de publicación de este aviso en el periódico. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.
<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.925833,30.310833&level=18>

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud.

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

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

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

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

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su

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

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

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

También se puede obtener información adicional del West Travis County Public Utility Agency a la dirección indicada arriba o llamando a Bryce Canady al (512) 327 9204.

Fecha de emisión 21 de junio de 2024

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



COMBINED

NOTICE OF PUBLIC MEETING

AND

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

RENEWAL

PERMIT NO. WQ0013594001

APPLICATION AND PRELIMINARY DECISION. West Travis County Public Utility Agency, 13215 Bee Cave Parkway, Building B, Suite 110, Bee Cave, Texas 78738, has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of TCEQ Permit No. WQ0013594001, which authorizes the disposal of treated domestic wastewater at a daily average flow not to exceed 1,800,000 gallons per day via surface irrigation of 350 acres of public access land; the disposal of a portion of the treated domestic wastewater at a daily average flow not to exceed 232,590 gallons per day via subsurface area drip dispersal system (SADDS) with a minimum area of 53 acres of non-public access land; and the future use of a portion of the treated domestic wastewater at a daily average flow not to exceed 567,410 gallons per day for direct potable reuse (DPR). The treated domestic wastewater shall not be used for DPR (human consumption) until all necessary approvals to use the DPR is provided by the TCEQ Water Supply Division. This permit will not authorize a discharge of pollutants into water in the state. TCEQ received this application on May 10, 2024.

The wastewater treatment facility and disposal site are located at 3100 Napa Drive, Austin, and 12900 1/2 Bee Cave Parkway, Austin, in Travis County, Texas 78738 (Site A and Site B). The Effluent Pond No. 1 is located approximately 8,000 feet northwest of the intersection of Farm-to-Market Road 620 and State Highway 71, in Travis County, Texas 78738. The irrigation site (Spillman Ranch) is also located approximately 8,000 feet northwest of the intersection of Farm-to-Market Road 620 and State Highway 71, in Travis County, Texas 78738. The irrigation site (CCNG) is located approximately 2,500 feet south of the intersection of Farm-to-Market Road 620 and State Highway 71, in Travis County, Texas 78738. The Effluent Pond No. 2 and a treatment facility are located approximately 3,000 feet northwest of the intersection of Farm-to-Market Road 2244 and State Highway 71, in Travis County, Texas 78738 (Site B). The proposed SADDS site will be located on the north side of State Highway 71, west of Vail Divide, in Travis County, Texas 78738. The wastewater treatment facilities and Effluent Pond No. 2 are located in the drainage basin of Lake Austin in Segment No. 1403 of the Colorado River Basin. The effluent disposal sites and Effluent Pond No. 1 are located in the drainage basin of Barton Creek in Segment No. 1430 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=-97.925833,30.310833&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 Bee Cave City Hall, Reception Desk, 4000 Galleria Parkway, Bee Cave, 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 TCEQ will hold a public meeting on this application due to the significant amount of public interest received.

The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. A public meeting will be held and will consist of two parts, an Informal Discussion Period and a Formal Comment Period. A public meeting is not a contested case hearing under the Administrative Procedure Act. During the Informal Discussion Period, the public will be encouraged to ask questions of the applicant and TCEQ staff concerning the permit application. The comments and questions submitted orally during the Informal Discussion Period will not be considered before a decision is reached on the permit application and no formal response will be made. Responses will be provided orally during the Informal Discussion Period. During the Formal Comment Period on the permit application, members of the public may state their formal comments orally into the official record. A written response to all timely, relevant and material, or significant comments will be prepared by the Executive Director. All formal comments will be considered before a decision is reached on the permit application. A copy of the written response will be sent to each person who submits a formal comment or who requested to be on the mailing list for this permit application and provides a mailing address. Only relevant and material issues raised during the Formal Comment Period can be considered if a contested case hearing is granted on this permit application.

The Public Meeting is to be held:

**Thursday, July 17, 2025, at 7:00 PM
Sonesta Hotel
12525 Bee Cave Parkway
Bee Cave, Texas 78738**

Persons with disabilities who need special accommodations at the meeting should call the Office of the Chief Clerk at (512) 239-3300 or 1-800-RELAY-TX (TDD) at least one week prior to the meeting.

OPPORTUNITY FOR A CONTESTED CASE HEARING. After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a response to all relevant and material, or significant public comments. **Unless the application is directly referred for a contested case hearing, the response to comments will be mailed to everyone who submitted public comments and to those persons who are**

on the mailing list for this application. If comments are received, the mailing will also provide instructions for requesting a contested case hearing or reconsideration of the Executive Director's decision. A contested case hearing is a legal proceeding similar to a civil trial in a state district court.

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

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

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. **If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period. TCEQ may act on an application to renew a permit for discharge of wastewater without providing an opportunity for a contested case hearing if certain criteria are met.**

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

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

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

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

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

Further information may also be obtained from West Travis County Public Utility Agency at the address stated above or by calling Mr. Bryce Canady, P.E., Vice President, Area Principal, Water, Consor North America, at 512-327-9204.

Issuance Date: May 30, 2025

COMISIÓN DE CALIDAD AMBIENTAL DE TEXAS



COMBINADO

AVISO DE REUNIÓN PÚBLICA

Y

ANUNCIO DE SOLICITUD Y DECISIÓN PRELIMINAR PARA LA CALIDAD DEL AGUA PERMISO DE APLICACIÓN DE TIERRAS PARA AGUAS RESIDUALES MUNICIPALES

RENOVACIÓN

PERMISO N° WQ0013594001

SOLICITUD Y DECISIÓN PRELIMINAR. West Travis County Public Utility Agency, 13215 Bee Cave Parkway, Building B, Suite 110, Bee Cave, Texas 78738, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ, por sus siglas en inglés) una renovación del Permiso N° WQ0013594001, que autoriza la eliminación de aguas residuales domésticas tratadas a un flujo promedio diario que no exceda los 1,800,000 galones por día a través del riego superficial de 350 acres de tierras de acceso público; la eliminación de una porción de las aguas residuales domésticas tratadas a un flujo promedio diario que no exceda los 232,590 galones por día a través del sistema de dispersión por goteo de área subterránea (SADDS, por sus siglas en inglés) con un área mínima de 53 acres de tierras de acceso no público; y el uso futuro de una parte de las aguas residuales domésticas tratadas a un flujo promedio diario que no exceda los 567,410 galones por día para la reutilización potable directa (DPR, por sus siglas en inglés). Las aguas residuales domésticas tratadas no se utilizarán para DPR (consumo humano) hasta que la División de Suministro de Agua de la TCEQ proporcione todas las aprobaciones necesarias para usar el DPR. Este permiso no autorizará la descarga de contaminantes en el agua del estado. TCEQ recibió esta solicitud el 10 de mayo del 2024.

La instalación de tratamiento de aguas residuales y el sitio de eliminación están ubicados en 3100 Napa Drive, Austin, y 12900 1/2 Bee Cave Parkway, Austin, en el condado de Travis, Texas 78738 (Sitio A y Sitio B). El estanque de efluentes N° 1 se encuentra aproximadamente a 8,000 pies al noroeste de la intersección de Farm-to-Market Road 620 y State Highway 71, en el Condado de Travis, Texas 78738. El sitio de riego (Spillman Ranch) también se encuentra aproximadamente a 8,000 pies al noroeste de la intersección de Farm-to-Market Road 620 y State Highway 71, en el Condado de Travis, Texas 78738. El sitio de riego (CCNG) está ubicado aproximadamente a 2,500 pies al sur de la intersección de Farm-to-Market Road 620 y State Highway 71, en el condado de Travis, Texas 78738. El Estanque de Efluentes N° 2 y una instalación de tratamiento están ubicados aproximadamente a 3,000 pies al noroeste de la intersección de Farm-to-Market Road 2244 y State Highway 71, en el Condado de Travis, Texas 78738 (Sitio B). El sitio propuesto para SADDS estará ubicado en el lado norte de la Carretera Estatal 71, al oeste de Vail Divide, en el Condado de Travis, Texas 78738. Las instalaciones de tratamiento de aguas residuales y el Estanque de Efluentes No. 2 están ubicados en la cuenca de drenaje del Lago Austin en el Segmento N° 1403 de la cuenca del río Colorado. Los sitios de disposición de efluentes y el estanque de efluentes N° 1 están ubicados en la cuenca de drenaje

de Barton Creek en el segmento No. 1430 de la cuenca del Río Colorado. Este enlace a un mapa electrónico de la ubicación general del sitio o instalación se proporciona como cortesía pública y no es parte de la solicitud o aviso. Para conocer la ubicación exacta, consulte la solicitud.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.925833,30.310833&level=18>

El Director Ejecutivo de la TCEQ ha completado el examen técnico de la solicitud y ha preparado un borrador de permiso. El borrador del permiso, de ser aprobado, establecería las condiciones bajo las cuales la instalación debe operar. El Director Ejecutivo ha tomado una decisión preliminar de que este permiso, si se expide, cumple con todos los requisitos legales y reglamentarios. La solicitud de permiso, la decisión preliminar del Director Ejecutivo y el borrador del permiso están disponibles para ver y copiar en el Ayuntamiento de Bee Cave, Reception Desk, 4000 Galleria Parkway, Bee Cave, Texas. La solicitud, incluidas las actualizaciones, y los avisos asociados están disponibles 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/plain-language-summaries-and-public-notice>.

COMENTARIO PÚBLICO / REUNIÓN PÚBLICA. Puede enviar comentarios públicos o solicitar una reunión pública sobre esta solicitud. La TCEQ llevará a cabo una reunión pública sobre esta solicitud debido a la gran cantidad de interés público recibido.

El propósito de una reunión pública es para brindar la oportunidad de enviar comentarios o hacer preguntas sobre la solicitud. Se llevará a cabo una reunión pública que constará de dos partes, un Período de Discusión Informal y un Período de Comentarios Formales. Una reunión pública no es una audiencia de caso impugnado según la Ley de Procedimiento Administrativo. Durante el Período de Discusión Informal, se alentará al público a hacer preguntas al solicitante y al personal de TCEQ sobre la solicitud de permiso. Los comentarios y preguntas presentados oralmente durante el Período de Discusión Informal no serán considerados antes de que se llegue a una decisión sobre la solicitud de permiso y no se dará una respuesta formal. Las respuestas se proporcionarán oralmente durante el Período de Discusión Informal. Durante el Período de Comentarios Formales sobre la solicitud de permiso, los miembros del público pueden expresar sus comentarios formales oralmente en el registro oficial. El Director Ejecutivo preparará una respuesta por escrito a todos los comentarios oportunos, pertinentes y sustanciales, o significativos. Todos los comentarios formales serán considerados antes de llegar a una decisión sobre la solicitud de permiso. Se enviará una copia de la respuesta por escrito a cada persona que presente un comentario formal o que haya solicitado estar en la lista de correo para esta solicitud de permiso y proporcione una dirección postal. Solo se pueden considerar las cuestiones relevantes y materiales planteadas durante el Período de Comentarios Formales si se concede una audiencia de caso impugnado sobre esta solicitud de permiso.

La Reunión Pública se llevará a cabo:

**jueves, 17 de julio del 2025 a las 7:00 PM
Sonesta Hotel
12525 Bee Cave Parkway
Bee Cave, Texas 78738**

Las personas con discapacidades que necesiten acomodaciones especiales en la reunión deben llamar a la Oficina del Secretario Oficial al (512) 239-3300 o al 1-800-RELAY-TX (TDD) al menos una semana antes de la reunión.

OPORTUNIDAD PARA UNA AUDIENCIA DE CASO IMPUGNADO. Después de la fecha límite para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios oportunos y preparará una respuesta a todos los comentarios públicos relevantes y materiales, o significativos. **A menos que la solicitud se remita directamente para una audiencia de caso impugnado, la respuesta a los comentarios se enviará por correo a todos los que presentaron comentarios públicos y a las personas que están en la lista de correo de esta solicitud. Si se reciben comentarios, el correo también proporcionará instrucciones para solicitar una audiencia de caso impugnado o una reconsideración de la decisión del Director Ejecutivo.** Una audiencia de caso impugnado es un procedimiento legal similar a un juicio civil en un tribunal de distrito estatal.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, DEBE INCLUIR LOS SIGUIENTES ELEMENTOS EN SU SOLICITUD: su nombre, dirección, número de teléfono; nombre del solicitante y número de permiso propuesto; la ubicación y distancia de su propiedad/actividades en relación con la instalación propuesta; una descripción específica de cómo se vería afectado negativamente por la instalación de una manera que no es común para el público en general; una lista de todas las cuestiones de hecho en disputa que envíe durante el período de comentarios; y la declaración "[Yo/nosotros] solicito una audiencia de caso impugnado". Si la solicitud de audiencia de caso impugnado se presenta en nombre de un grupo o asociación, la solicitud debe designar al representante del grupo para recibir correspondencia futura; identificar por nombre y dirección física a un miembro individual del grupo que se vería afectado negativamente por la instalación o actividad propuesta; proporcionar la información mencionada anteriormente con respecto a la ubicación y la distancia del miembro afectado de la instalación o actividad; explicar cómo y por qué el miembro se vería afectado; y explicar cómo los intereses que el grupo busca proteger son relevantes para el propósito del grupo.

Después del cierre de todos los períodos de comentarios y solicitudes aplicables, el Director Ejecutivo enviará la solicitud y cualquier solicitud de reconsideración o de una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración en una reunión programada de la Comisión.

La Comisión solo puede conceder una solicitud de audiencia de un caso impugnado sobre cuestiones que el solicitante presentó en sus comentarios oportunos que no fueron retirados posteriormente. **Si se concede una audiencia, el tema de una audiencia se limitará a cuestiones de hecho en disputa o preguntas mixtas de hecho y derecho relacionadas con preocupaciones relevantes y materiales sobre la calidad del agua presentadas durante el período de comentarios. La TCEQ puede actuar sobre una solicitud para renovar un permiso para la descarga de aguas residuales sin brindar la oportunidad de una audiencia de caso impugnado si se cumplen ciertos criterios.**

ACCIÓN DEL DIRECTOR EJECUTIVO. El Director Ejecutivo puede emitir la aprobación final de la solicitud a menos que se presente una solicitud de audiencia de caso impugnado a tiempo o una solicitud de reconsideración. Si se presenta una solicitud de audiencia oportuna o una solicitud de reconsideración, el Director Ejecutivo no emitirá la aprobación final del permiso y enviará la solicitud y la solicitud a los Comisionados de la TCEQ para su consideración en una reunión programada de la Comisión.

LISTA DE CORREO. Si presenta comentarios públicos, una solicitud para una audiencia de caso impugnado o una reconsideración de la decisión del Director Ejecutivo, se le agregará a la

lista de correo de esta solicitud específica para recibir avisos públicos futuros enviados por correo por la Oficina del Secretario Oficial. Además, puede solicitar ser incluido en: (1) la lista de correo permanente para un nombre de solicitante específico y un número de permiso; y/o (2) la lista de correo de un condado específico. Si desea ser incluido en la lista de correo permanente y/o del condado, especifique claramente qué lista(s) y envíe su solicitud a la Oficina del Secretario Oficial de la TCEQ a la dirección que se indica a continuación.

Todos los comentarios públicos por escrito y las solicitudes de reuniones públicas deben enviarse a Office of the Chief Clerk, MC 105, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, TX 78711-3087 o electrónicamente en www.tceq.texas.gov/goto/comment dentro de los 30 días a partir de la fecha de publicación de este aviso en el periódico.

INFORMACIÓN DISPONIBLE EN LÍNEA. Para obtener detalles sobre el estado de la solicitud, visite la Base de Datos Integrada de los Comisionados en www.tceq.texas.gov/goto/cid. Busque en la base de datos utilizando el número de permiso para esta solicitud, que se proporciona en la parte superior de este aviso.

CONTACTOS E INFORMACIÓN DE LA AGENCIA. Los comentarios y solicitudes públicas deben presentarse electrónicamente en 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 se convertirá en parte del registro de la agencia; Esto incluye direcciones de correo electrónico. Para obtener más información sobre esta solicitud de permiso o el proceso de permisos, llame al Programa de Educación Pública de la TCEQ, 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 más información de West Travis County Public Utility Agency en la dirección indicada anteriormente o llamando al Sr. Bryce Canady, P.E., Vicepresidente, Director de Área, Agua, Consor North America, al 512-327-9204.

Fecha de Emisión: 30 de mayo de 2025



PERMIT NO. WQ0013594001

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

This is a renewal of Permit No.
WQ0013594001 issued on
November 13, 2019.

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

West Travis County Public Utility Agency

whose mailing address is

13215 Bee Cave Parkway, Building B, Suite 110
Bee Cave, Texas 78738

Nature of Business Producing Waste: Domestic wastewater treatment operation, SIC Code 4952.

General Description and Location of Waste Disposal System:

Description: The Lake Pointe Wastewater Treatment Facility (Site A) consists of an activated sludge process plant using the single stage nitrification mode with a capacity of 0.675 million gallons per day (MGD). Treatment units in the Interim I phase at Site A include two parallel trains consisting of a bar screen, two equalization basins, two aeration basins, two final clarifiers, two aerobic digesters, cloth disk filters, and two chlorine contact chambers. The Bohl's Wastewater Treatment Facility (Site B) consists of an activated sludge proceed plant using the single stage nitrification mode with a capacity of 0.325 MGD. Treatment units in the Interim I phase at Site B include one concentric plant with a bar screen, an aeration basin, a final clarifier, cloth disk filters, and a chlorine contact chamber. Treatment units in the Interim II phase will include two additional parallel activated sludge treatment trains using single stage nitrification mode with a combined capacity of 1.0 MGD at Site B. The treatment trains will each consist of a bar screen, an anoxic basin, an aeration basin, a final clarifier, cloth disk filters, a chlorine contact chamber, and an aerobic digester. Following the addition of the new treatment units at Site B, the treatment facility at Site A will be decommissioned, reducing the capacity by 0.675 MGD and bringing the total capacity to 1.325 MGD. In the Interim III phase, a 0.50 MGD treatment train consisting of a bar screen, an anoxic basin, an aeration basin, a final clarifier, and a chlorine contact chamber will increase the capacity at Site B to 1.825 MGD. The 0.325 MGD concentric plant at Site B will be decommissioned, bringing the total capacity to 1.5 MGD. In the Final Phase, a 0.30 MGD treatment train consisting of a bar screen, an anoxic basin, an aeration basin, a final clarifier, and a chlorine contact chamber will increase the capacity at Site B by 0.30 MGD, bringing the final capacity to 1.8 MGD. The permittee is authorized to dispose of treated domestic wastewater effluent at a daily average flow not to exceed 1.0 MGD via surface irrigation of 350 acres of public access land in the Interim I phase; a daily average flow not to exceed

1.375 MGD via surface irrigation of 350 acres of public access land, direct potable reuse (DPR), and non-public access subsurface drip dispersal system (SADDS) in the Interim II phase; a daily average flow not to exceed 1.50 MGD via surface irrigation of 350 acres of public access land, DPR, and non-public access SADDS with a minimum area of 53 acres in the Interim III phase; and a daily average flow not to exceed 1.80 MGD via surface irrigation of 350 acres of public access land, DPR, and non-public access SADDS with a minimum area of 53 acres in the Final phase. A total daily average effluent flow not to exceed 567,410 gallons per day is authorized for DPR of which a daily average flow not to exceed 142,410 gallons per day is intended for the Interim II phase, a daily average flow not to exceed 267,410 gallons per day is intended for the Interim III phase, and a daily average flow not to exceed 567,410 gallons per day is intended for the Final phase. A total daily average effluent flow not to exceed 232,590 gallons per day is authorized for disposal via non-public access SADDS with a minimum area of 53 acres. The source of effluent for these beneficial uses shall only be the Effluent Storage Pond No. 2 into which the effluent from Bohls Wastewater Treatment Facility, Site B, Outfall 002 discharges. The treated domestic wastewater shall not be used for DPR (human consumption) until all necessary approvals to use the DPR is provided by the TCEQ Water Supply Division. The 350 acres irrigation site consists of the 200-acre Spillman Ranch site's golf course, medians, and parks and the 150-acre CCNG site's golf course. The facility includes two storage ponds for storage of treated effluent prior to irrigation. One storage pond (Effluent Pond No. 1) has a total surface area of 5 acres and total capacity of 77 acre-feet, and the other storage pond (Effluent Pond No. 2) has a total surface area of 4.5 acres and total capacity of 100 acre-feet. Surface irrigation application rates shall not exceed 3.0 acre-feet per year per acre irrigated (CCNG) and 3.4 acre-feet per year per acre irrigated (Spillman Ranch). SADDS application rates shall not exceed 0.1 gallons per square foot per day. The surface irrigated crops include Bermuda grass, ryegrass, bentgrass, and rough bluegrass for the tees, fairways and greens; buffalo grass and native indigenous species for the rough and out-of-play areas. The permittee shall maintain Bermuda grass and rye grass on the SADDS disposal site.

Location: The wastewater treatment facility and disposal site are located at 3100 Napa Drive, Austin, and 12900 1/2 Bee Cave Parkway, Austin, in Travis County, Texas 78738 (Site A and Site B). The Effluent Pond No. 1 is located approximately 8,000 feet northwest of the intersection of Farm-to-Market Road 620 and State Highway 71, in Travis County, Texas 78738. The irrigation site (Spillman Ranch) is also located approximately 8,000 feet northwest of the intersection of Farm-to-Market Road 620 and State Highway 71, in Travis County, Texas 78738. The irrigation site (CCNG) is located approximately 2,500 feet south of the intersection of Farm-to-Market Road 620 and State Highway 71, in Travis County, Texas 78738. The Effluent Pond No. 2 and a treatment facility are located approximately 3,000 feet northwest of the intersection of Farm-to-Market Road 2244 and State Highway 71, in Travis County, Texas 78738 (Site B). The proposed sub-surface area drip dispersal site will be located on the north side of State Highway 71, west of Vail Divide, in Travis County, Texas 78738. (See Attachment A.)

Drainage Area: The wastewater treatment facilities and Effluent Pond No. 2 are located in the drainage basin of Lake Austin in Segment No. 1403 of the Colorado River Basin. The effluent disposal sites and Effluent Pond No. 1 are located in the drainage basin of Barton Creek in Segment No. 1430 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 for Outfalls 001 (Site A) and 002 (Site B)

Character: Treated Domestic Sewage Effluent

Volume: Daily Average Flow – 1.0 MGD in the Interim I phase (0.675 MGD at Outfall 001, and 0.325 MGD at Outfall 002),
Daily Average Flow –1.375 MGD in the Interim II phase,
Daily Average Flow –1.50 MGD in the Interim III phase,
Daily Average Flow –1.80 MGD in the Final phase from the treatment system

Quality: The following effluent limitations are required:

<u>Parameter</u>	<u>Effluent Concentrations</u> (Not to Exceed)			
	<u>Daily Average</u> mg/l	<u>7-Day Average</u> mg/l	<u>Daily Maximum</u> mg/	<u>Single Grab</u> mg/l
Carbonaceous Biochemical Oxygen Demand (5-day)	5	N/A	N/A	35
Total Suspended Solids	5	N/A	N/A	60
Ammonia Nitrogen	2	N/A	N/A	15

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

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

B. Monitoring Requirements:

<u>Parameter</u>	<u>Monitoring Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	One/week	Composite
Total Suspended Solids	One/week	Composite

Ammonia Nitrogen	One/week	Composite
pH	One/month	Grab
Total Chlorine Residual	Five/week	Grab

The monitoring shall be done after the final treatment unit, i.e., after chlorination and before the effluent lift station, 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 annually 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

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

* Dry weight basis

3. Pathogen Control

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

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

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC § 312.82(a)(2)(A) for specific information;

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

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

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

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

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

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

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

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

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

Alternative 1

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

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

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

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

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

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

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

- i. Food crops with harvested parts that touch the biosolids /soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids.
- ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remain 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	- annually
PCBs	- annually

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

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

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

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

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

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

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

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

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

A. Pollutant Limits

Table 2

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

Table 3

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

*Dry weight basis

B. Pathogen Control

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

C. Management Practices

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

D. Notification Requirements

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

E. Record Keeping Requirements

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

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

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

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

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

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

F. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 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. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge or biosolids disposal practice.
- D. Sewage sludge or biosolids shall be tested annually 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 30th of each year.

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

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

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

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

G. Reporting Requirements

The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 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 B facility must be operated by a chief operator or an operator holding a Class B license or higher. This Category A facility must be operated by a chief operator or an operator holding a Class A license when the facility starts supplying effluent for direct potable reuse (DPR). The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift which does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

3. The permittee shall maintain and operate the treatment facility in order to achieve optimum efficiency of treatment capability. This shall include required monitoring of effluent flow and quality as well as appropriate grounds and building maintenance.
4. The permittee shall comply with the requirements of 30 TAC Section 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 Section 309.13(e). On the portion of the buffer zone not owned by the permittee, the permittee has provided documentation showing that Lake Pointe Homeowners Association lot to be a public utility easement and drainage easement. The permittee confirms that the West Travis County MUD 5 habitat preserve is subject to a federal Fish and Wildlife permit and cannot be developed. The permittee further confirms that the buffer zone for the alternate location is a restricted habitat reserve and will never be developed as a residential property (Attachments B, C, D and E).

Prior to construction of the Interim II phase (Bohls Wastewater Treatment Facility, Site B, Outfall 002), 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 C.)

5. The Total Dissolve Solids (TDS) of the irrigation effluent from the Bohls pond shall not exceed 1,000 mg/l. The irrigation effluent from the Bohls pond shall be monitored according to the following table:

Parameter	Units	Minimum Analytical Level (MAL)	Frequency
pH	standard units	Reported to 0.1 pH units after calibration of pH meter	1/six months
Electrical Conductivity	mmho/cm	0.01	1/six months
Total Dissolved Solids	mg/L	10	1/month
Water-soluble Ca, Mg, Na, K	mg/L	0.4 (Ca) 0.4 (Mg) 0.1 (Na) 0.5 (K)	1/six months
Sodium Adsorption Ratio (SAR)	unitless		1/six months
Sodium Adsorption Ratio (SAR)	$SAR = \frac{Na}{\sqrt{\frac{(Ca + Mg)}{2}}}$		Express concentrations of Na, Ca and Mg in the water saturated paste extract in milliequivalents/liter (meq/L) to calculate the SAR.

Analysis results shall be kept in a log and shall be provided with the annual soil monitoring report each year.

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. Prior to construction of the Interim II, Interim III, and 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.
8. The permittee shall notify the TCEQ Regional Office (MC Region 11) and the Applications Review and Processing Team (MC 148) of the Water Quality Division, in writing at least forty-five (45) days prior to the completion of the new Interim II, Interim III, and Final phase wastewater treatment facilities on Notification of Completion Form 20007.
9. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.

DIRECT POTABLE REUSE (DPR)

10. The authorization to use the effluent from the facility for DPR is contingent upon the approval of the DPR by the TCEQ Water Supply Division, c/o Plans and Technical Review Section (MC 159). Prior to the design and operation of the wastewater treatment facility for the use of the treated wastewater from Effluent Storage Pond No. 2 into which the effluent from Bohls Wastewater Treatment Facility, Site B, Outfall 002 discharges, in the Interim II phase and all succeeding phases, the permittee shall obtain the necessary exceptions and approvals for the direct potable reuse of that effluent from the TCEQ Water Supply Division, c/o Plans and Technical Review Section (MC 159). (See TCEQ's letter dated February 16, 2017 for a summary of the Water Supply Division approvals needed.) The permittee shall notify the TCEQ Regional Office (MC Region 11) and the TCEQ Wastewater Permitting Section, c/o Municipal Permits Team (MC 148), of the Water Quality Division, in writing, within thirty days from obtaining all the necessary exceptions and approvals for the direct potable reuse of that effluent from the TCEQ Water Supply Division, c/o Plans and Technical Review Section (MC 159).

SURFACE IRRIGATION (PUBLIC ACCESS)

11. In the spray areas, the permittee shall obtain representative soil samples from the root zones of the land application area receiving wastewater. 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.

The permittee shall provide annual soil analyses of the land application area according to the following table:

Parameter	Method	Minimum Analytical Level (MAL)	Reporting units
pH	2:1 (v/v) water to soil mixture		Reported to 0.1 pH units after calibration of pH meter
Electrical Conductivity	Obtained from the SAR water saturated paste extract	0.01	dS/m (same as mmho/cm)
Nitrate-nitrogen	From a 1 N KCl soil extract	1	mg/kg (dry weight basis)
Total Kjeldahl Nitrogen (TKN)	For determination of Organic plus Ammonium	20	mg/kg (dry weight basis)

	Nitrogen. Procedures that use Mercury (Hg) are not acceptable.		
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)
Water-soluble: Sodium (Na) Calcium (Ca) Magnesium (Mg)	Obtained from the SAR water saturated paste extract	1 (Na) 1 (Ca) 1 (Mg)	Water soluble constituents are <i>reported</i> in mg/L
Sodium Adsorption Ratio (SAR)	$SAR = \frac{Na}{\sqrt{\frac{(Ca + Mg)}{2}}}$		<p>Express <i>concentrations</i> of Na, Ca and Mg in the water saturated paste extract in milliequivalents/liter (meq/L) to calculate the SAR. The SAR value is unit less.</p> <p>If the SAR is greater than 10, amendments (e.g., gypsum) shall be added to the soil to adjust the SAR to less than 10.</p>
Amendment addition, e.g., gypsum			Report in short tons/acre in the year effected

A copy of this soil testing plan shall be provided to the analytical laboratory prior to sample analysis. The permittee shall submit the results of the annual soil sample analyses with copies of the laboratory reports and a map depicting the areas that have received wastewater within the permanent land application fields to the TCEQ Regional Office (MC Region 11), the Water Quality Assessment Team (MC 150) and the Compliance Monitoring Team (MC 224), no later than 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.

12. Application rates to the irrigated land shall not exceed 3.0 acre-feet per year per acre irrigated (CCNG site) and 3.4 acre-feet per year per acre irrigated (Spillman Ranch). The permittee is responsible for providing equipment to determine application rates and maintaining accurate records of the volume of effluent applied. These records shall be made available for review by the Texas Commission on Environmental Quality and shall be maintained for at least three years.
13. Irrigation practices shall be designed and managed to prevent ponding of effluent or contamination of ground and surface water and to prevent the occurrence of nuisance conditions in the area. Bermuda grass, ryegrass, bent grass and rough bluegrass crops shall be established and well maintained in the irrigation areas throughout the year for effluent and nutrient uptake by the crops 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.
14. The permittee shall use cultural practices to promote and maintain the health and propagation of the Bermuda grass, ryegrass, bent grass, and rough bluegrass crops and avoid plant lodging. The permittee shall harvest the crops (cut and remove it from the field) at least once during the year. Harvesting and mowing dates shall be recorded in a log book kept on site to be made available to TCEQ personnel upon request.
15. Effluent shall not be applied for irrigation during rainfall events or when the ground is frozen or saturated.
16. Spray fixtures for the irrigation system shall be of such design that they cannot be operated by unauthorized personnel.
17. Irrigation with effluent shall be accomplished only when the area specified is not in use.
18. The permittee shall maintain a long-term contract with the owner(s) of the land application site which is authorized for use in this permit, or own the land authorized for land application of treated effluent.
19. The existing wastewater ponds (Spillman and Bohls) shall be maintained and operated in a manner that prevents unauthorized discharge and contamination of groundwater. Both ponds have associated liner certifications signed and sealed by a Texas-licensed professional engineer.

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 pond sides and bottoms (if visible) for signs of damage and leakage, and any pond leak detection systems that are in service. These inspections shall be recorded in a log book maintained onsite. Leaking ponds shall be removed from service, or operated in a manner to prevent discharge, until repairs are made or replacement ponds are constructed.

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. 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 Compliance Monitoring Section (MC-224) within 30 days of completion and prior to use. The certification shall be signed and sealed by a Texas-licensed professional engineer and include a description of how the liner meets the requirements of 30 TAC §217.203 **and** 30 TAC §309.13(d) since the facility overlies the recharge zone of an aquifer.

20. The permittee shall not irrigate land with a slope greater than 10 percent as shown on Attachment F.
21. The permittee shall maintain a minimum of 150-foot buffer zone from the irrigation disposal sites to any water wells, including wells that are off-site. Prior to utilization of the facilities, all wells located on-site shall be plugged in accordance with 16 TAC Section 76.1004 (Water Well Drillers and Water Well Pump Installers – Standards for Capping and Plugging of Wells and Plugging Wells That Penetrate Injurious Water Zones).
22. The permittee shall ensure that the application areas shall have suitable soils and adequate rooting depth to enhance the establishment of the approved vegetative species.
23. A certified operator shall inspect the facility daily and maintain at the plant site a record of these inspections. These records shall be available at the plant site for inspection by authorized representatives of the commission for at least three years.

During this daily inspection the proper operation and maintenance of the wastewater treatment facilities and irrigation system shall be checked in order to prevent or abate the occurrence of nuisance odor. Any irrigation areas with problems such as surface runoff, surficial erosion, stressed or damaged vegetation shall also be recorded in the field log kept on site and correction measures will be initiated within 24 hours of discovery.
24. There shall be no construction of additional treatment tanks at Site A (see Attachment A).
25. 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.
26. Permanent transmission lines shall be installed from the holding pond to each tract of land to be irrigated utilizing effluent from that pond.
27. The permittee shall secure written approval from the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division before accepting for treatment in this facility any wastes significantly different from normal domestic wastewater. Before providing such approval, the Executive Director may require additional information regarding the nature, quantity, and treatability of the wastes.
28. The permittee shall install and maintain an automatic emergency power transfer.
29. The permittee shall use its best professional judgment to monitor and maintain operational dissolved oxygen concentrations for the aeration basins, equalization basins and sludge digesters as required by 30 TAC Chapter 217.
30. The permittee shall continue to implement its program for retail and commercial customers to address grease and rag build-up within the collection system and lift station.

SUBSURFACE AREA DRIP DISPERSAL SYSTEM (SADDS): NON-PUBLIC ACCESS

31. The permittee will maintain Bermuda grass and rye grass on the SADDS disposal site. SADDS application rates shall not exceed 0.1 gallons per square foot per day. The permittee is responsible for providing equipment to determine application rates and maintaining accurate records of the volume of effluent applied. According to the requirements of 30 TAC § 222.161(d), the permittee shall maintain records documenting all activities associated with maintaining the vegetative cover, like planting, over-seeding, mowing height, fertilizing, and harvesting. These records shall be maintained for a minimum of five years and be made available to TCEQ staff upon request.
32. Prior to construction of the subsurface area drip dispersal system, the permittee shall submit, to the TCEQ Wastewater Permitting Section (MC 148) of the Water Quality Division, an engineering report, including plans and specifications, that meets the requirements in 30 TAC Chapter 222, Subsurface Drip Dispersal Systems, Subchapter D: Design Criteria.
33. The permittee shall obtain representative soil samples from the root zones of the land application area receiving wastewater. Composite sampling techniques shall be used. Each composite sample shall represent no more than 53 acres with no less than two (2) cores per dosing bed (zone) 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 12 inches and 12 to 24 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 according to the following table:

Parameter	Method	Minimum Analytical Level (MAL)	Reporting units
pH	2:1 (v/v) water to soil mixture		Reported to 0.1 pH units after calibration of pH meter
Electrical Conductivity	Obtained from the SAR water saturated paste extract	0.01	dS/m (same as mmho/cm)
Nitrate-nitrogen	From a 1 <u>N</u> KCl soil extract	1	mg/kg (dry weight basis)
Total Kjeldahl Nitrogen (TKN)	For determination of Organic plus Ammonium Nitrogen. Procedures that use Mercury (Hg) are	20	mg/kg (dry weight basis)

	not acceptable.		
Total Nitrogen	= TKN plus Nitrate-nitrogen		mg/kg (dry weight basis)
Plant-available: Phosphorus	Mehlich III with inductively coupled plasma	1 (P)	mg/kg (dry weight basis)
Plant-available: Potassium (K) Calcium (Ca) Magnesium (Mg) Sodium (Na) Sulfur (S)	May be determined in the same Mehlich III extract with inductively coupled plasma	5 (K) 10 (Ca) 5 (Mg) 10 (Na) 1 (S)	mg/kg (dry weight basis)
Water-soluble: Sodium (Na) Calcium (Ca) Magnesium (Mg)	Obtained from the SAR water saturated paste extract	1 (Na) 1 (Ca) 1 (Mg)	Water soluble constituents are <i>reported</i> in mg/L
Sodium Adsorption Ratio (SAR)	$SAR = \frac{Na}{\sqrt{\frac{(Ca + Mg)}{2}}}$		<p>Express <i>concentrations</i> of Na, Ca and Mg in the water saturated paste extract in milliequivalents/liter (meq/L) to calculate the SAR. The SAR value is unit less.</p> <p>If the SAR is greater than 10, amendments (e.g., gypsum) shall be added to the soil to adjust the SAR to less than 10.</p>
Amendment addition, e.g., gypsum			Report in short tons/acre in the year effected

A copy of this soil testing plan shall be provided to the analytical laboratory prior to sample analysis. The permittee shall submit the results of the annual soil sample analyses with copies of the laboratory reports and a map depicting the areas that have received wastewater within the permanent land application fields to the TCEQ Regional Office (MC Region 11), the Water Quality Assessment Team (MC 150) and the Compliance Monitoring Team (MC 224), no later than September 1st 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.

34. Based on the requirements of 30 TAC § 222.151, the SADDs shall be designed and managed so as to prevent seepage or percolation out of the root zone, other than leaching in the amount required to maintain the health of the vegetative cover. Surfacing and ponding is prohibited. Creating a condition at the treatment facility or the drip dispersal zones that contributes to vector attraction or odor is prohibited.
35. The SADDs shall consist of a sufficient number of different dispersal zones. The permittee shall install the drip lines over a minimum of one foot of soil and the drip lines shall be installed at least six inches below the terrain surface. If imported soils are utilized, the permittee shall submit a plan within 90 days of permit issuance to the TCEQ Water Quality Assessment Team (MC 150) for review, revision and approval with a copy to the Wastewater Permitting Section (MC148) of the Water Quality Division describing how the imported soils will be incorporated into the native soils. In the event of effluent surfacing due to damage to the drip irrigation lines, effluent application shall be shut-off to the drip irrigation zone and public access to the zone shall be restricted.

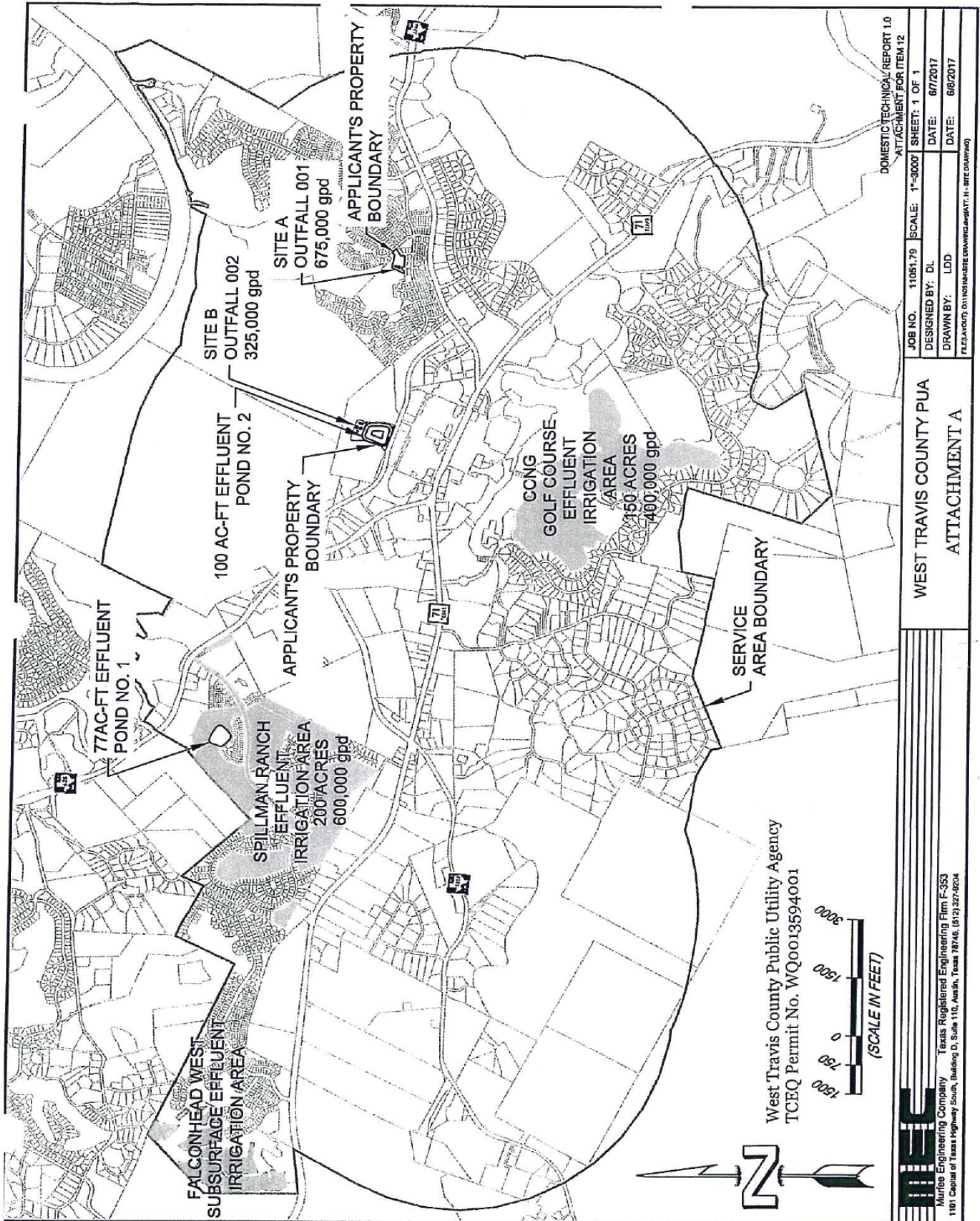
Drip dispersal lines shall be installed on the contour and lateral slopes of the tubing shall not exceed 1 percent. The permittee shall install at least one moisture sensing device located at 12 inches below the drip lines in the drip field's topographic low that will automatically shut off treated effluent to the dosing bed (zone) when the soil becomes saturated.

36. The permittee shall design and install temporary storage that equals at least three days of the design flow of the facility for times when the subsurface area drip dispersal system is out of service due to an emergency or scheduled maintenance. In addition, the permittee shall pump and haul wastewater from the facility to prevent the discharge of treated or untreated wastewater if complete shutdown of the wastewater treatment facility becomes necessary or if the storage capacity is exceeded.
37. Permanent transmission lines shall be installed from the treatment system to each drip dispersal zone of the SADDs. According to 30 TAC § 222.153, the permittee shall flush the subsurface area drip dispersal system from the dispersal zone and return the flush water to a point preceding the treatment system at least once every two months.
38. Effluent shall not be applied in subsurface drip dispersal system during rainfall events or under flooded soil conditions.
39. The permittee shall maintain a long-term contract with the owner(s) of the land application site which is authorized for use in this permit, or own the land authorized for land application of treated effluent.
40. According to 30 TAC § 222.163, Closure Requirements, the permittee shall close the system under the standards set forth in this section.
41. According to the requirements of 30 TAC § 222.43, the permittee shall notify the TCEQ Regional Office (MC Region 11) for each of the following activities:
- At least 30 days prior to the date the field layout and/or construction startup is scheduled to begin for the proposed subsurface drip irrigation system.
 - At least 30 days prior to the date that construction is projected to be complete.

- c. Within 30 days after operation of the proposed subsurface drip irrigation system.
 - d. If soils are imported, at least 30 days prior to completion of the soil importing project.
42. According to the requirements of 30 TAC § 222.45, the permittee shall submit a copy of the issued permit to the health department with jurisdiction in the area where the system is located before commencing operation of the proposed subsurface drip irrigation system. The permittee shall retain proof of delivery for the duration of the permit.
43. The permittee shall ensure that the velocity of the flush water shall be at least two feet per second at the end of each dispersal zone or return line during the flushing operation.
44. The permittee shall develop a Springs/Seeps Monitoring Plan and submit the plan to the TCEQ Water Quality Assessment Team (MC-150) for review and approval within 30 days of permit issuance. At a minimum, the plan shall include:
- a. A procedure to conduct quarterly field checks at the drip dispersal fields and down-gradient of the fields to identify emerging springs or seeps.
 - b. A procedure to sample springs or seeps in the event that springs/seeps develop after drip irrigation of effluent commences.
 - c. Quarterly field checks and sampling (if applicable) of the springs/seeps during the spring and fall sampling events shall occur after a minimum rainfall event of 0.5-inch, if possible.
 - d. Analysis of springs/seeps water for nutrients, including, but not limited to, a complete nitrogen series [(Nitrate (as N), Nitrite (as N), Total Kjeldahl Nitrogen, ammonia as N], total phosphorus, ortho-phosphate, chlorides, fecal coliform, and specific conductivity.
 - e. A record of the quarterly checks and sampling of the springs and seeps shall be maintained in a field log and kept onsite for TCEQ inspection.
 - f. Monitoring of emerging and existing springs/seeps shall continue for the life of the system.
 - g. The applicant shall submit the data from the Seeps/Springs Monitoring Plan to the Water Quality Assessment Team (MC-150) of the Water Quality Division, the TCEQ Regional Office (MC Region 11), and the Compliance Monitoring Section (MC-224) during the month of September of each year for review.
 - h. A procedure for the implementation of corrective measures to remedy the discharge if laboratory analysis indicates that wastewater is emerging as a seep or spring.
 - i. The permittee shall implement the plan upon approval by the Water Quality Assessment Team. The Executive Director may request modification of the approved plan if future information indicates that it would be necessary for the protection of the environment.
45. Any recharge features uncovered by construction activities shall be addressed in an updated and certified Recharge Feature Plan (RFP). The RFP will include the best management practices implemented that will prevent impact to recharge features from wastewater application and prevent groundwater contamination. The updated certified RFP shall be submitted to the TCEQ Water Quality Assessment Team (MC-150) and the TCEQ Regional Office (MC Region 11).
46. The permittee shall construct berms or swales that will prevent, or divert, stormwater from entering all subsurface wastewater application areas.

47. According to the requirements of 30 TAC § 222.81(a), the permittee shall locate the SADDs a minimum horizontal distance of 100 feet from surface waters in the state. The permittee shall locate the SADDs a minimum horizontal distance of 500 feet from public water wells, springs, or other similar sources of public drinking water and 150 feet from private water wells as described in 30 TAC § 309.13(c)(1). The permittee shall not locate a SADDs within a floodway according to the requirements of 30 TAC § 222.81(d).

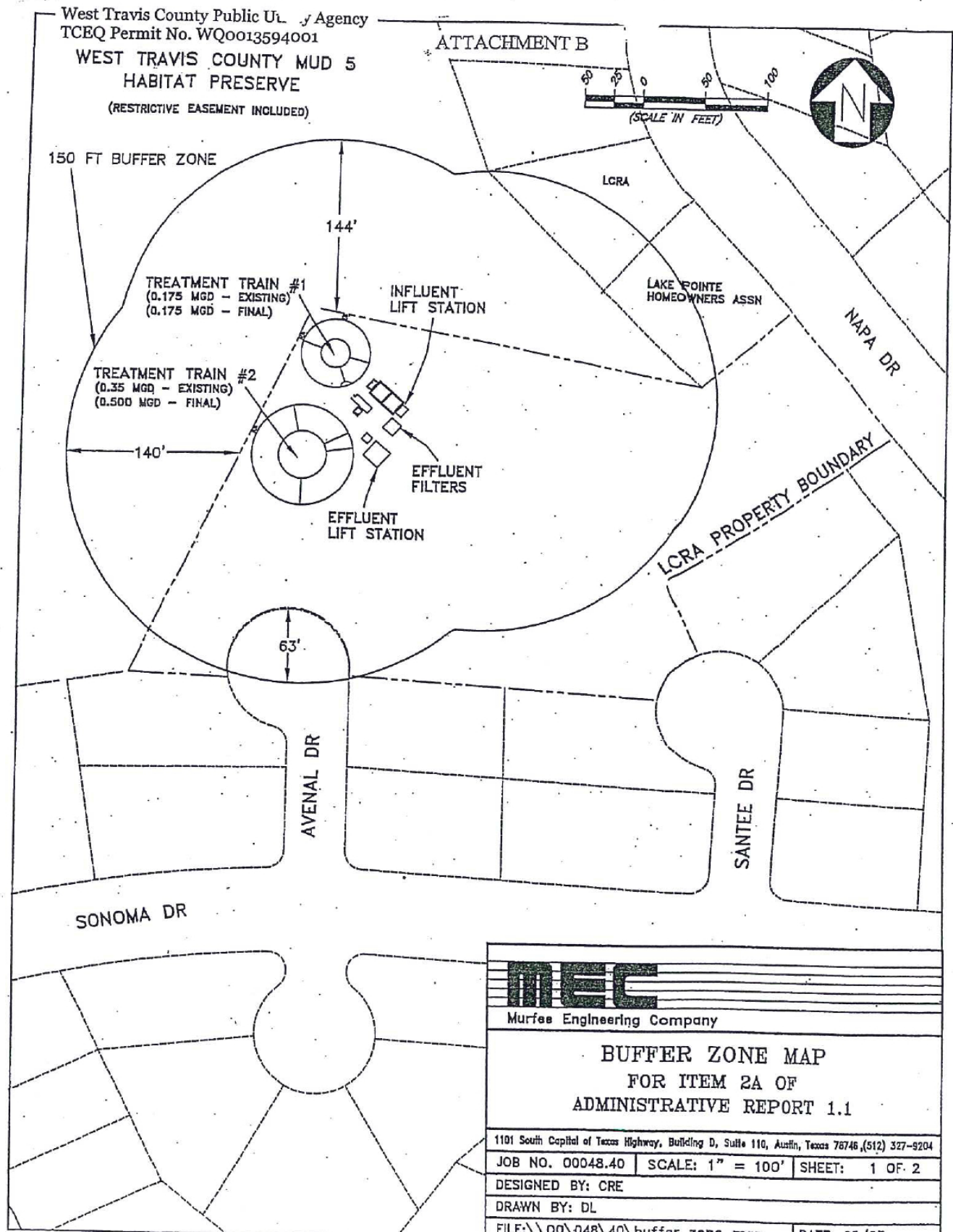
Attachment A
Site Map
WQ0013594001 – West Travis County Public Utility Agency



WEST TRAVIS COUNTY PUA
ATTACHMENT A

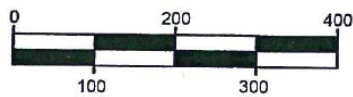
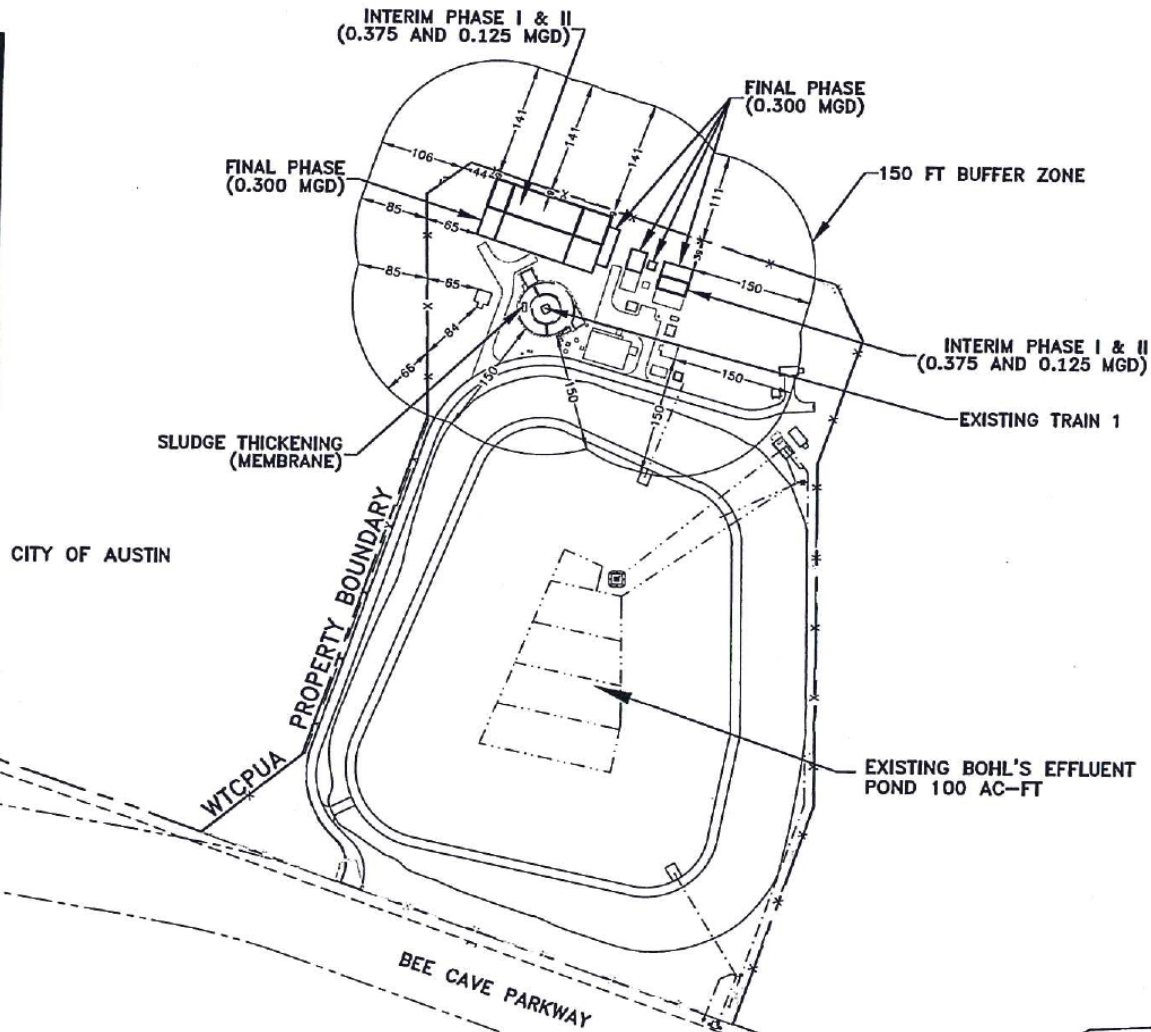
Murphy Engineering Company Texas Registered Engineering Firm F-353
 1101 Capital of Texas Highway South, Building D, Suite 110, Austin, Texas 78746, (512) 327-9204

Attachment B
Buffer Zone Map – The Lake Pointe WWTP
WQ0013594001 – West Travis County Public Utility Agency



Attachment C
Buffer Zone Map – Bohl's WWTP
WQ0013594001 – West Travis County Public Utility Agency

West Travis County Public Utility Agency
TCEQ Permit No. WQ0013594001



SCALE: 1"=200'

MEC		
Murfee Engineering Company		Texas Registered Engineering Firm F-353
BUFFER ZONE MAP - BOHL'S WWTP ATTACHMENT C		
1101 Capital of Texas Highway South, Building D, Suite 110, Austin, Texas 78746, (512) 327-9204		
JOB NO. 11-051.84	SCALE: AS NOTED	SHEET: 1 OF 1
DESIGNED BY: BC	DATE: 12/30/2017	
DRAWN BY: LDD	DATE: 2/15/2018	
FILE(LAYOUT): O:\1105184\Buffer Zone Map\Buffer Zone Map_Bohl's.dwg(8x11)		

TECHNICAL SUMMARY AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

DESCRIPTION OF APPLICATION

Applicant:	West Travis County Public Utility Agency TCEQ Permit No. WQ0013594001
Regulated Activity:	Domestic Wastewater Permit
Type of Application:	Renewal
Request:	Renewal with changes
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

West Travis County Public Utility Agency has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of Permit No. WQ0013594001 to authorize the disposal of treated domestic wastewater at a daily average flow not to exceed 1.80 million gallons per day (MGD) via surface irrigation of 350 acres of public access land; the disposal of a portion of the treated domestic wastewater at a daily average flow not to exceed 232,590 gallons per day via subsurface area drip dispersal system (SADDs) with a minimum area of 53 acres of non-public access land; and the future use of a portion of the treated domestic wastewater at a daily average flow not to exceed 567,410 gallons per day for direct potable reuse (DPR). The facility includes two storage ponds for storage of treated effluent prior to irrigation. One storage pond (Effluent Pond No. 1) has a total surface area of 5 acres and total capacity of 77 acre-feet, and the other effluent storage pond (Effluent Pond No. 2) has a total surface area of 4.5 acres and total capacity of 100 acre-feet. The existing wastewater treatment facility serves an area that is generally the extraterritorial jurisdiction (ETJ) of the City of Bee Cave.

PROJECT DESCRIPTION AND LOCATION

The Lake Pointe Wastewater Treatment Facility (Site A) consists of an activated sludge process plant using the single stage nitrification mode with a capacity of 0.675 million gallons per day (MGD). Treatment units in the Interim I phase at Site A include two parallel trains consisting of a bar screen, two equalization basins, two aeration basins, two final clarifiers, two aerobic digesters, cloth disk filters, and two chlorine contact chambers. The Bohl's Wastewater Treatment Facility (Site B) consists of an activated sludge process plant using the single stage nitrification mode with a capacity of 0.325 MGD. Treatment units in the Interim I phase at Site

B include one concentric plant with a bar screen, an aeration basin, a final clarifier, cloth disk filters, and a chlorine contact chamber. Treatment units in the Interim II phase will include two additional parallel activated sludge treatment trains using single stage nitrification mode with a combined capacity of 1.0 MGD at Site B. The treatment trains will each consist of a bar screen, an anoxic basin, an aeration basin, a final clarifier, cloth disk filters, a chlorine contact chamber, and an aerobic digester. Following the addition of the new treatment units at Site B, the treatment facility at Site A will be decommissioned, reducing the capacity by 0.675 MGD and bringing the total capacity to 1.325 MGD. In the Interim III phase, a 0.50 MGD treatment train consisting of a bar screen, an anoxic basin, an aeration basin, a final clarifier, and a chlorine contact chamber will increase the capacity at Site B to 1.825 MGD. The 0.325 MGD concentric plant at Site B will be decommissioned, bringing the total capacity to 1.5 MGD. In the Final Phase, a 0.30 MGD treatment train consisting of a bar screen, an anoxic basin, an aeration basin, a final clarifier, and a chlorine contact chamber will increase the capacity at Site B by 0.30 MGD, bringing the final capacity to 1.8 MGD. The facility is operating in the Interim I phase.

Sludge generated from the treatment facility is hauled by a registered transporter to Wilbarger Creek Wastewater Treatment Facility, Permit No. WQ0012900001 to be digested, dewatered, and then disposed of with the bulk of the sludge from the plant accepting the sludge. The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

The wastewater treatment facility and disposal site are located at 3100 Napa Drive, Austin, and 12900 1/2 Bee Cave Parkway, Austin, in Travis County, Texas 78738 (Site A and Site B). The Effluent Pond No. 1 is located approximately 8,000 feet northwest of the intersection of Farm-to-Market Road 620 and State Highway 71, in Travis County, Texas 78738. The irrigation site (Spillman Ranch) is also located approximately 8,000 feet northwest of the intersection of Farm-to-Market Road 620 and State Highway 71, in Travis County, Texas 78738. The irrigation site (CCNG) is located approximately 2,500 feet south of the intersection of Farm-to-Market Road 620 and State Highway 71, in Travis County, Texas 78738. The Effluent Pond No. 2 and a treatment facility are located approximately 3,000 feet northwest of the intersection of Farm-to-Market Road 2244 and State Highway 71, in Travis County, Texas 78738 (Site B). The proposed sub-surface area drip dispersal site will be located on the north side of State Highway 71, west of Vail Divide, in Travis County, Texas 78738. in Travis County, Texas 78738.

The wastewater treatment facilities and Effluent Pond No. 2 are located in the drainage basin of Lake Austin in Segment No. 1403 of the Colorado River Basin. The effluent disposal sites and Effluent Pond No. 1 are located in the drainage basin of Barton Creek in Segment No. 1430 of the Colorado River Basin. No discharge of pollutants into water in the state is authorized by this permit.

SUMMARY OF EFFLUENT DATA

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

Site A

<u>Parameter</u>	<u>Average of Daily Average</u>
Flow, MGD	0.50
BOD ₅ , mg/l	2.0
TSS, mg/l	1.7

Site B

<u>Parameter</u>	<u>Average of Daily Average</u>
Flow, MGD	0.20
BOD ₅ , mg/l	2.0
TSS, mg/l	1.1

DRAFT PERMIT CONDITIONS

The draft permit authorizes the disposal of treated domestic wastewater effluent at a daily average flow not to exceed 1.0 MGD via public access surface irrigation of 350 acres of land in the Interim I phase. The 350 acres irrigation site consists of the 200-acre Spillman Ranch site's golf course, medians, and parks, and the 150-acre CCNG site's golf course. The draft permit also authorizes the disposal of treated domestic wastewater effluent at a daily average flow not to exceed 1.375 MGD in the Interim II phase, 1.50 MGD in the Interim III phase, and 1.80 MGD in the Final phase via public access surface irrigation of 350 acres of land, DPR, and non-public access SADDs with a minimum area of 53 acres. The treated domestic wastewater shall not be used for DPR (human consumption) until all necessary approvals to use the DPR is provided by the TCEQ Water Supply Division. Surface irrigation application rates shall not exceed 3.0 acre-feet per year per acre irrigated (CCNG) and 3.4 acre-feet per year per acre irrigated (Spillman Ranch). SADDs application rates shall not exceed 0.1 gallons per square foot per day. The surface irrigated crops include Bermuda grass, ryegrass, bentgrass and rough bluegrass for the tees, fairways and greens, buffalo grass and native indigenous species for the rough and out-of-play areas. The permittee shall maintain Bermuda grass and rye grass on the SADDs disposal site.

The effluent limitations in the draft permit, based on a daily average, are 5 mg/l carbonaceous biochemical oxygen demand (CBOD₅), 2 mg/l ammonia nitrogen (NH₃-N), and 5 mg/l total suspended solids (TSS). The effluent limitation in the draft permit, based on a single grab, is 35 mg/l CBOD₅. The effluent shall contain a total chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes based on peak flow.

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal, and Transportation. Sludge generated from the treatment facility is hauled by a registered transporter to Wilbarger Creek Wastewater Treatment Facility, Permit No. WQ0012900001 to be digested, dewatered, and then disposed of with the bulk of the sludge from the plant accepting the sludge. The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

SUMMARY OF CHANGES FROM APPLICATION

None.

SUMMARY OF CHANGES FROM EXISTING PERMIT

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

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

The minor amendment request to change disposal phasing for the Interim II phase so that SADDs can be utilized before the implementation of the DPR disposal has been added to the revised draft.

DPR flow phasing has been added to the draft permit face based on information in the application.

The address of the wastewater treatment facility has been updated based on the information provided in the application.

The treatment process in the existing permit has been updated in the draft permit based on information provided in the application.

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

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

BASIS FOR DRAFT PERMIT

The following items were considered in developing the draft permit:

1. Application received on May 10, 2024, and additional information received on April 11, 2025 and April 14, 2025.
2. Existing TCEQ permit: Permit No. WQ0013594001 issued on November 13, 2019.
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 John Hearn at (512) 239-5239.

John Hearn

John Hearn
Municipal Permits Team
Wastewater Permitting Section (MC 148)

April 14, 2025

Date

Attachment D
Correspondence
WQ0013594001 – West Travis County Public Utility Agency

West Travis County Public Utility Agency
TCEQ Permit No. WQ0013594001



ATTACHMENT D

Murfee Engineering Company

RECEIVED
SEP 30 2003
MUNICIPAL PERMITS

September 30, 2003

Julian D. Centeno, Jr.
Water Quality Division
TCEQ
P.O. Box 13087
Austin, Texas 78711-3087

Re: LCRA: Application for Major Amendment of TCEQ Permit No. 13594-001

Dear Mr. Centeno:

Please find attached our response to your review comments dated September 5 and September 9, 2003 on the referenced project.

Should you have any questions or require additional information, please contact us.

Sincerely,

A handwritten signature in dark ink, appearing to read 'George Murfee', is written over a horizontal line.

George Murfee, P.E.
President

cc: Mike Tomme, LCRA

File: 00048.10

ATTACHMENT D

September 5, 2003 Comments

1. *The source and copy of the precipitation raw data used*

The precipitation data is National Weather Service Data for Robert Mueller Airport site. Data was obtained digitally from TNRS. A copy of the complete annual data is contained in the water balance under the column for daily precipitation.

2. *Why are the ET values constant each month?*

The ET values are only constant within a given month. The table of composite ET values at the beginning of the Water Balance and Effluent Storage Summary vary from month to month. For a daily ET, the monthly value was divided by the number of days in the month in order to obtain an estimate of the daily ET.

3. *How does the curve number revert back to AMC-II?*

The spreadsheet has an "if" statement that checks the previous five day precipitation and adjusts the curve number accordingly. For a conservative analysis, the "effluent applied" is added to any precipitation to determine the antecedent moisture condition.

4. *Which period is considered the growing season? Dormant season?*

The dormant season is assumed to be November through February. The growing season is March through October.

5. *Please identify on the buffer zone map the properties which the submitted easement agreements refer to including the West Travis County MUD 5 habitat preserve.*

The easement agreements submitted with the application evidence LCRA's authorization to dispose of treated wastewater effluent in the proposed irrigation areas. As a result, the lands that are the subject of the easement agreements are golf course, median, and park lands within the Spillman Tract and the CCNG Tract. Representatives of LCRA previously submitted to TCEQ a map identifying each of the disposal areas.

The new site for which LCRA seeks authorization to construct an additional wastewater treatment plant is owned fee simple by LCRA. LCRA previously submitted to TCEQ a copy of the deed. As a result, it is not the subject of any of the easement agreements previously submitted to TCEQ with the permit application. The areas surrounding the new wastewater treatment plant site are habitat reserve lands that are subject to a Federal Fish and Wildlife Permit issued by the United States Fish & Wildlife Department. A copy of this permit was submitted by LCRA to TCEQ with the permit application. In summary, the easement agreements do not address any of the lands depicted on the buffer zone map, including the West Travis County MUD 5 habitat reserve. These lands are subject to a federal Fish & Wildlife permit and cannot be developed.

Attachment E
Memorandum
WQ0013594001 – West Travis County Public Utility Agency

West Travis County Public Utility Agency
TCEQ Permit No. WQ0013594001

ATTACHMENT E

Murfee Engineering Company

MEMORANDUM

RECEIVED

OCT 29 2003

MUNICIPAL PERMITS

TO: Julian D. Centeno, Jr.
FROM: George Murfee, P.E. *GM*
RE: LCRA Application for Major Amendment of
TCEQ Permit #13594-001
MEC Job No. 00048,10
DATE: October 27, 2003

The following are our responses to the technical review:

1. *Referring to buffer zone requirements for treatment trains #1, #2 and #3: is there a restrictive easement agreement with the Lake Pointe Homeowners Association? Please provide further explanation if there is none.*

The two lots that were purchased in the subdivision that front on Napa Drive were purchased by and dedicated by the developer to the LCRA and the Lake Pointe Homeowner's Association (HOA) for the purposes of creating a buffer zone for the WWTP expansion. The LCRA owns Lot 2, Block A, and the HOA owns Lot 1, Block A. The attached plat for Lake Pointe Phase IV, Section A and Phase IV, Section B shows that Lot 1, Block A is designated as a MUD lot restricted as a public utility easement and drainage easement.

2. *Referring to the buffer zone map for the treatment train #3 or final phase 1.0 MGD WWTP (Alternate Location): Who owns the buffer zone? If owned by LCRA, please revise the buffer zone map to indicate LCRA property boundary encompassing the 150-foot buffer zone shown on the map.*

The buffer zone property is owned by the COA. You should be aware of the fact that this property (Alternative Location) was purchased from the City of Austin (COA) Balcones Habitat Preservation for the sole purpose of putting a WWTP and effluent pond on this site. This was a swap of properties that the Balcones Habitat Preservation Plan wanted to occur. My client, LCRA, doesn't feel that a buffer zone easement is required because the property surrounding the WWTP site is restricted habitat reserve and will never be developed as residential property, and they have an agreement between the LCRA and the COA that this site (Alternative Location) is the proposed site for the LCRA's regional WWTP to serve this area. This agreement in effect creates the needed buffer zone and the habitat reserve restriction ensures that no residences will ever exist or be impacted by noise or odor.

Attachment F
Topography Map of Irrigated Land
WQ0013594001 – West Travis County Public Utility Agency

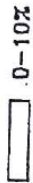
West Travis County Public Utility Agency
TCEQ Permit No. WQ0013594001

SCALE: 1"=1000'

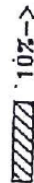


ATTACHMENT F

LEGEND



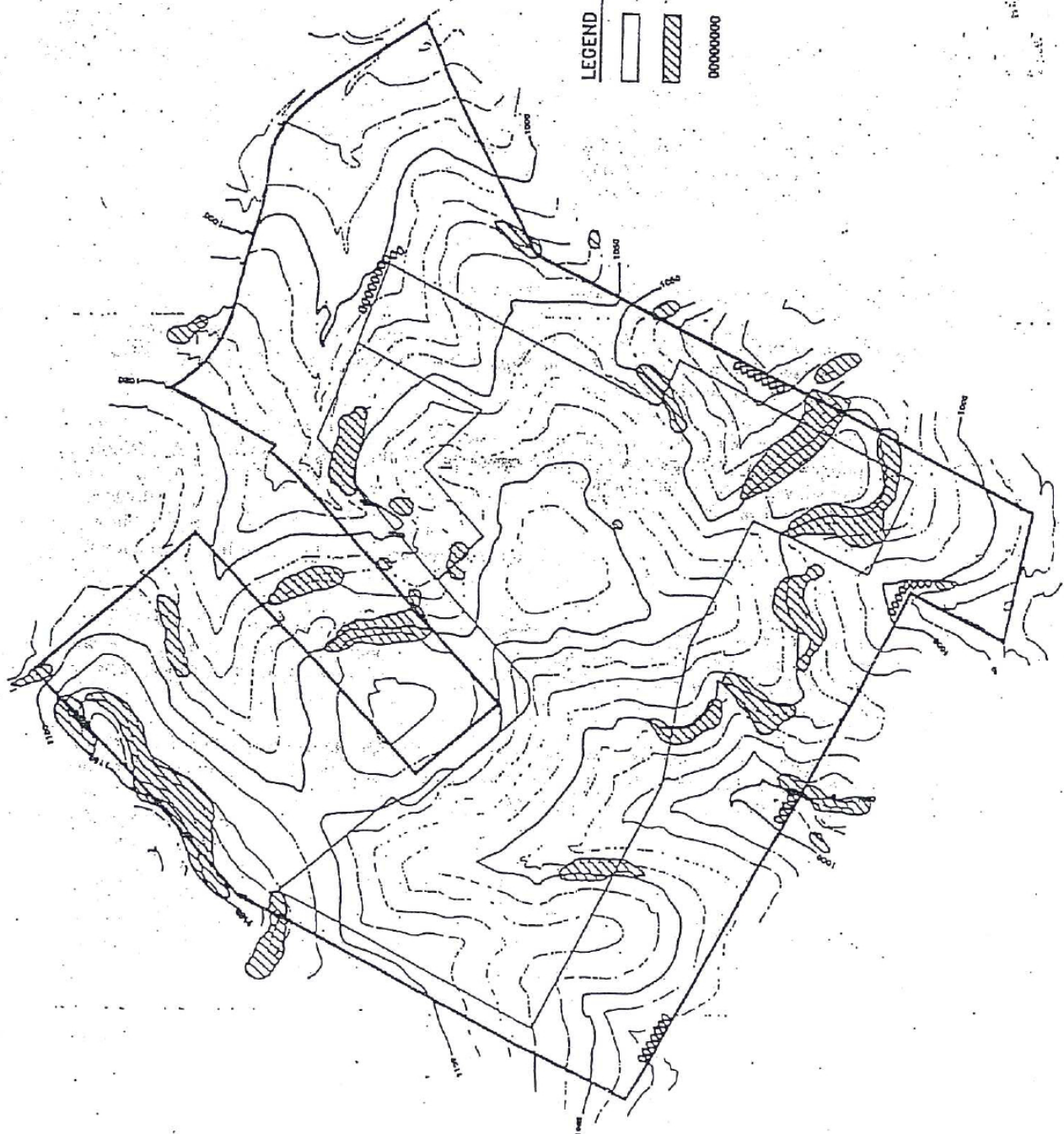
0-10%



10%+>

POTENTIAL TAIL-WATER
CONTROL STRUCTURES

000000000



Abesha Michael

From: Bryce Canady <bcanady@murfee.com>
Sent: Friday, May 17, 2024 12:19 PM
To: Abesha Michael
Cc: Jose Murga
Subject: WTCPUA TLAP Renewal WQ0013594001
Attachments: Page 2 Revision - Core Data Form.pdf; Pages 4 & 5 from TLAP Admin Report-WTCPUA-240510.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Abesha,

Thanks for the call today. I have noted the Owner will be receiving a refund for the cost of the minor amendment fee of \$150.00, since the application should have only been classified as a renewal. Reiterating what you stated, which is only major amendments with renewals require the additional fee.

Apologies for not discussing the specifics on the minor amendment in our cover letter, being that we are specifically only requesting to revise the disposal phasing such that SADDs is ahead of DPR.

Attached are the revised form sheets as we discussed:

- Core Data form page 2 has been revised to accurately reflect the two facility names and their corresponding physical addresses
- Admin report 1.0 - pages 4 and 5 have been revised to accurately reflect MEC's street number for the mailing address, which is 1101, not 101

I have also noted that technical report 1.1 is not required since we are only renewing, not applying for a new permit.

We appreciate the efforts and coordination to keep the permit application progressing.

Bryce Canady

Vice President | Development and Operations

Murfee Engineering Company, Inc.

1101 S. Capital of TX Hwy, Bldg. D

Austin, TX 78746

O 512- 327-9204

C 512-662-8039

bcanady@murfee.com



CONFIDENTIALITY NOTICE:

This message contains information from the firm Murfee Engineering Company, Inc. This communication and any accompanying attachments are intended only for use by the individual or entity to which they are addressed and may contain confidential information. Any use, dissemination, distribution, or copying of this communication is strictly prohibited. If you

are not the intended recipient and have received this communication in error, please contact the sender by reply email and destroy all copies of the original message. Thank You.



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**DOMESTIC WASTEWATER PERMIT APPLICATION
ADMINISTRATIVE REPORT 1.0**

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

Section 1. Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) \$150.00 ☐

Payment Information:

Mailed Check/Money Order Number: 7554
Check/Money Order Amount: \$2,015.00
Name Printed on Check: West Travis Country Public Utility Agency
EPAY Voucher Number: Click to enter text.
Copy of Payment Voucher enclosed? Yes ☐

Section 2. Type of Application (Instructions Page 26)

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

- ☒ Publicly-Owned Domestic Wastewater
☐ Privately-Owned Domestic Wastewater
☐ Conventional Wastewater Treatment

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

- ☒ Active ☐ Inactive

SECTION III: Regulated Entity Information

21. General Regulated Entity Information <i>(If 'New Regulated Entity' is selected, a new permit application is also required.)</i>							
<input type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information							
<i>The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).</i>							
22. Regulated Entity Name <i>(Enter name of the site where the regulated action is taking place.)</i>							
Lake Pointe WWTP Bohls WWTP							
23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>	Lake Pointe WWTP - 3100 Napa Dr, Austin, TX 78738						
	Bohls WWTP - 12900 1/2 Bee Cave Pkwy, Austin, TX 78738						
	City		State	TX	ZIP	78738	ZIP + 4
24. County							

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

25. Description to Physical Location:							
26. Nearest City					State	Nearest ZIP Code	
<i>Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).</i>							
27. Latitude (N) In Decimal:				28. Longitude (W) In Decimal:			
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds		
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)		
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>							
34. Mailing Address:							
	City		State		ZIP		ZIP + 4
35. E-Mail Address:							
36. Telephone Number	37. Extension or Code			38. Fax Number <i>(if applicable)</i>			
() -				() -			

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.

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

CN: N/A

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

Prefix: N/A

Last Name, First Name: N/A

Title: N/A

Credential: N/A

Provide a brief description of the need for a co-permittee: N/A

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. [Click to enter text.](#)

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: Canady, Bryce
Title: VP, Operations & Development Credential: PE
Organization Name: Murfee Engineering Company, Inc.
Mailing Address: 1101 S. Capital of Texas Hwy. S., Bldg. D City, State, Zip Code: Austin, TX 78746
Phone No.: (512) 662 8039 E-mail Address: bcanady@murfee.com
Check one or both: ☒ Administrative Contact ☒ Technical Contact

B. Prefix: Mr. Last Name, First Name: Murga, Jose

Organization Name: Murfee Engineering Company, Inc.
Mailing Address: 1101 S. Capital of Texas Hwy. S., Bldg. D City, State, Zip Code: Austin, TX 78746

☒ 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: Canady, Bryce
Title: VP, Operations & Development Credential: PE
Organization Name: Murfee Engineering Company, Inc.

Mailing Address: (512) 662 8039 City, State, Zip Code: bcanady@murfee.com

Phone No.: 512- 327-9204 E-mail Address: bcanady@murfee.com

B. Prefix: Mr. Last Name, First Name: Murga, Jose

Title: Graduate Engineer Credential: E.I.T

Organization Name: Murfee Engineering Company, Inc.

Mailing Address: 1101 S. Capital of Texas Hwy. S., Bldg. D City, State, Zip Code: Austin, TX 78746

Phone No.: (512) 327-9204 E-mail Address: jmurga@murfee.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: Click to enter text. Last Name, First Name: Riechers, Jennifer

Title: General Manager Credential: Click to enter text.

Organization Name: West Travis County PUA

Mailing Address: 13215 Bee Cave ParkwayBldg B City, State, Zip Code: Bee Cave, TX 78738

Phone No.: (512) 501-8086 E-mail Address: jriechers@wtcpua.org

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

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

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

Title: Water Operations Supervisor Credential: Click to enter text.

Organization Name: West Travis County PUA

Mailing Address: 12215 Bee Cave Rd City, State, Zip Code: Bee Cave, TX 78738

Phone No.: (512) 470 7702 E-mail Address: cjeffrey@wtcpua.org

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Mr. Last Name, First Name: Bryce Canady, PE

Title: VP, Operations & Development Credential: Click to enter text.

Organization Name: Murfee Engineering Company, Inc.

Mailing Address: 1101 S. Capital of Texas Hwy. S., Bldg. D City, State, Zip Code: Austin, TX 78746

Phone No.: (512) 662 8039 E-mail Address: bcanady@murfee.com

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: www.traviscad.org
- 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

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0013594001

Applicant: West Travis County Public Utility Agency

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): Jennifer Riechers

Signatory title: General Manager

Signature: _____

Jennifer Riechers
(Use blue ink)

Date: _____

5/9/24

Subscribed and Sworn to before me by the said _____

Jennifer Riechers

on this 9 day of May, 20 24.

My commission expires on the 6 day of April, 20 26.

Conchetta Impastato
Notary Public # 133691316

Travis County
County, Texas



[SEAL]

Comisión de Calidad Ambiental del Estado de Texas



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

PERMISO NO. WQ0013594001

SOLICITUD. West Travis County Public Utility Agency, 13215 Bee Cave Parkway Bldg B, Suite 110, Bee Cave, Texas 78738 ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) para renovar el Permiso No. WQ00135994001 de disposición de aguas residuales para autorizar la disposición de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 1,375,000 galones por día por medio de riego de superficie de 350 acres de tierra y un flujo promedio diario que no sobrepasa 232,590 galones al día por sistema de goteo subsuperficial (SADDS) de 53 acres de tierra. Las plantas de tratamiento de aguas domésticos residuales están ubicados en 3100 Napa Drive, Austin (Lake Pointe), y 12900 1/2 Bee Cave Pkwy (Bohl's), Austin en el Condado de Travis, Texas 78738 (Site A and Site B). El Estanque de Efluentes No. 1 está ubicado aproximadamente a 8,000 pies al noroeste de la intersección de Farm-to-Market Road 620 y State Highway 71 en Travis County, Texas 78738. El sitio de irrigación (Rancho Spillman) también está ubicado aproximadamente a 8,000 pies al noroeste de la intersección de Farm-to-Market Road 620 y State Highway 71 en el Condado de Travis, Texas 78738. La zona de riego (CCNG) se encuentra aproximadamente a 2,500 pies al sur de la intersección de Farm-to-Market Road 620 y la carretera estatal 71 en el condado de Travis, Texas 78738. El Estanque de Efluentes No. 2 y una instalación de tratamiento están ubicados aproximadamente a 3,000 pies al noroeste de la intersección de Farm-to-Market Road 2244 y State Highway 71 en el Condado de Travis, Texas 78738 (Sitio B). El área subsuperficial de dispersión por goteo se encuentra en el lado norte de la carretera estatal 71, al oeste de Vail Divide, en el Condado de Travis, Texas 78738.

La TCEQ recibió esta solicitud el día 10 de Mayo de 2024. La solicitud para el permiso estará disponible para leerla y copiarla en el Ayuntamiento de Bee Cave, Recepción Desk, 4000 Galleria Parkway, Bee Cave, en Condado de Travis, Texas, antes de la fecha de publicación de este aviso en el periódico. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-97.925833,30.310833&level=18>

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar un borrador del permiso y emitirá una Decisión Preliminar sobre la solicitud. **El aviso de la solicitud y la decisión**

preliminar serán publicados y enviado a los que están en la lista de correo de las personas a lo largo del condado que desean recibir los avisos y los que están en la lista de correo que desean recibir avisos de esta solicitud. El aviso dará la fecha límite para someter comentarios públicos.

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

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

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

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

se hayan presentado durante el período de comentarios. Si ciertos criterios se cumplen, la TCEQ puede actuar sobre una solicitud para renovar un permiso sin proveer una oportunidad de una audiencia administrativa de lo contencioso.

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

CONTACTOS E INFORMACIÓN A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía

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

También se puede obtener información adicional del West Travis County Public Utility Agency a la dirección indicada arriba o llamando a Jennifer Riechers al (512) 501 8086.

Fecha de emisión

West Travis County Public Utility Agency

Lake Pointe & Bohl's WWTP

TLAP Renewal with Minor Amendment Application

WQ0013594001



Murfee Engineering Company

May 10th, 2024

VIA HAND DELIVERY

Mrs. Kelly Keel, Executive Director
Texas Commission on Environmental Quality
Water Quality Division
ATTN: Applications Review & Processing Team (MC 148)
P.O. Box 13087
Austin, TX 78711-3087

Re: Application for Renewal with Minor Amendment of TLAP WWTP Permit No. WQ0013594001
West Travis County Public Utility Agency (CN 604021980)
Lake Pointe and Bohl's WWTP (RN 102077989)

Dear Applications Review and Processing Team:

Please find one original and two complete copies of the application for Renewal with Minor Amendment of the above-referenced TLAP help by the West Travis County PUA. As per TCEQ-10053-Instructions (Revised January 2024), a check in the amount of \$2,165.00 was submitted under separate cover on May 10th, 2024, to the TCEQ Cashier's Office (MC 214). A copy of that check is included in the permit application.

This permit application was prepared for the West Travis County PUA by Murfee Engineering Company, Inc. Should you have any questions regarding the attached application or its attachments, please feel free to contact me at your convenience at the numbers and/or address listed below or via e-mail at bcanady@murfee.com.

Sincerely,

A handwritten signature in blue ink that reads 'Bryce Canady'.

Bryce Canady, P.E.
Murfee Engineering Company

Attachments: One original and two copies of Application for Renewal with Minor Amendment of TLAP WWTP Permit No. WQ0013594001



Murfee Engineering Company

May 10th, 2024

VIA HAND DELIVERY

Mrs. Kelly Keel, Executive Director
Texas Commission on Environmental Quality
Financial Administration Division
ATTN: Cashier's Office (MC 214)
P.O. Box 13088
Austin, TX 78711-3088

Re: Application for Renewal with Minor Amendment of TLAP WWTP Permit No. WQ0013594001
West Travis County Public Utility Agency (CN 604021980)
Lake Pointe and Bohl's WWTP (RN 102077989)

Dear Cashier's Office:

Please find a check in the amount of \$2,165.00 regarding a Texas Land Application Permit Application for Renewal with Minor Amendment for the West Travis Public Utility Agency.

The permit application has also been submitted to the Application Review and Processing Team (MC 148) as of May 10th, 2024. Should you have any questions, please feel free to contact me at your convenience at number or address listed below, or via e-mail at bcanady@murfee.com.

Sincerely,

A handwritten signature in blue ink that reads 'Bryce Canady'. The signature is written in a cursive, flowing style.

Bryce Canady, P.E.
Murfee Engineering Company

Attachments: Check in the amount of \$1,650.00 regarding Application for Renewal with Minor Amendment of TLAP WWTP Permit No. WQ0013594001

TLAP RENEWAL with MINOR AMENDMENT
for the
WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY
LAKE POINTE AND BOHL'S WASTEWATER TREATMENT PLANT
WQ0013594001



Prepared for:

West Travis County Public Utility Agency
12117 Bee Cave Road
Building 3, Suite 120
Bee Cave, Texas 78738

Prepared by:

Murfee Engineering Company, Inc.
Texas Registered Firm No. F-353
1101 Capital of Texas Highway South
Building D, Suite 110
Austin, Texas 78746
(512) 327-9204

May 2024

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**DOMESTIC WASTEWATER PERMIT APPLICATION
CHECKLIST**

Complete and submit this checklist with the application.

APPLICANT NAME: West Travis County Public Utility Agency

PERMIT NUMBER (If new, leave blank): WQ00 13594001

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

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

For TCEQ Use Only

Segment Number _____ County _____
Expiration Date _____ Region _____
Permit Number _____



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**DOMESTIC WASTEWATER PERMIT APPLICATION
ADMINISTRATIVE REPORT 1.0**

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

Section 1. Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) \$150.00 ☒

Payment Information:

Mailed Check/Money Order Number: [Click to enter text.](#)
Check/Money Order Amount: \$2,165.00
Name Printed on Check: TCEQ

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

Copy of Payment Voucher enclosed? Yes ☐

Section 2. Type of Application (Instructions Page 26)

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

- ☒ Publicly-Owned Domestic Wastewater
☐ Privately-Owned Domestic Wastewater
☐ Conventional Wastewater Treatment

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

- ☒ Active ☐ Inactive

- c. Check the box next to the appropriate permit type.
- ☐ TPDES Permit
 - ☒ TLAP
 - ☐ TPDES Permit with TLAP component
 - ☐ Subsurface Area Drip Dispersal System (SADDS)
- d. Check the box next to the appropriate application type
- ☐ New
 - ☐ Major Amendment with Renewal
 - ☐ Major Amendment without Renewal
 - ☐ Renewal without changes
 - ☒ Minor Amendment with Renewal
 - ☐ Minor Amendment without Renewal
 - ☐ Minor Modification of permit
- e. For amendments or modifications, describe the proposed changes: N/A
- f. **For existing permits:**
- Permit Number: WQ00 13594001
- EPA I.D. (TPDES only): TX N/A
- Expiration Date: November 14th, 2024

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

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

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

West Travis County Public Utility Agency

(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: 604021980

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: Riechers, Jennifer

Title: General 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: N/A

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

Prefix: N/A

Last Name, First Name: N/A

Title: N/A

Credential: N/A

Provide a brief description of the need for a co-permittee: N/A

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. [Click to enter text.](#)

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: Canady, Bryce
Title: VP, Operations & Development Credential: PE
Organization Name: Murfee Engineering Company, Inc.
Mailing Address: 101 S. Capital of Texas Hwy. S., Bldg. D City, State, Zip Code: Austin, TX 78746
Phone No.: (512) 662 8039 E-mail Address: bcanady@murfee.com
Check one or both: ☒ Administrative Contact ☒ Technical Contact

B. Prefix: Mr. Last Name, First Name: Murga, Jose
Title: Graduate Engineer Credential: E.I.T
Organization Name: Murfee Engineering Company, Inc.
Mailing Address: 101 S. Capital of Texas Hwy. S., Bldg. D City, State, Zip Code: Austin, TX 78746
Phone No.: (512) 327-9204 E-mail Address: jmurga@murfee.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: Canady, Bryce
Title: VP, Operations & Development Credential: PE
Organization Name: Murfee Engineering Company, Inc.

Mailing Address: (512) 662 8039 City, State, Zip Code: bcanady@murfee.com

Phone No.: 512- 327-9204 E-mail Address: bcanady@murfee.com

B. Prefix: Mr. Last Name, First Name: Murga, Jose

Title: Graduate Engineer Credential: E.I.T

Organization Name: Murfee Engineering Company, Inc.

Mailing Address: 101 S. Capital of Texas Hwy. S., Bldg. D City, State, Zip Code: Austin, TX 78746

Phone No.: (512) 327-9204 E-mail Address: jmurga@murfee.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: Click to enter text. Last Name, First Name: Riechers, Jennifer

Title: General Manager Credential: Click to enter text.

Organization Name: West Travis County PUA

Mailing Address: 13215 Bee Cave ParkwayBldg B City, State, Zip Code: Bee Cave, TX 78738

Phone No.: (512) 501-8086 E-mail Address: jriechers@wtcpua.org

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

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

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

Title: Water Operations Supervisor Credential: Click to enter text.

Organization Name: West Travis County PUA

Mailing Address: 12215 Bee Cave Rd City, State, Zip Code: Bee Cave, TX 78738

Phone No.: (512) 470 7702 E-mail Address: cjeffrey@wtcpua.org

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Mr. Last Name, First Name: Bryce Canady, PE

Title: VP, Operations & Development Credential: Click to enter text.

Organization Name: Murfee Engineering Company, Inc.

Mailing Address: 1101 S. Capital of Texas Hwy. S., Bldg. D City, State, Zip Code: Austin, TX 78746

Phone No.: (512) 662 8039 E-mail Address: bcanady@murfee.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: Mr. Last Name, First Name: Canady, Bryce

Title: VP, Operations & Development Credential: PE

Organization Name: Murfee Engineering Company, Inc.

Mailing Address: 1101 S. Capital of Texas Hwy. S., Bldg. D City, State, Zip Code: Austin, TX 78746

Phone No.: (512) 662 8039 E-mail Address: bcanady@murfee.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: Bee Cave City Hall

Location within the building: Reception Desk

Physical Address of Building: 4000 Galleria Parkway

City: Bee Cave County: Travis

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

Phone No.: (512) 767-6600 Ext.: Click to enter text.

E. Bilingual Notice Requirements

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

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

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

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

☒ Yes

☐ No

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

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

☒ Yes

☐ No

3. Do the students at these schools attend a bilingual education program at another location?
- ☐ Yes ☒ No
4. Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC §89.1205(g)?
- ☐ Yes ☒ No
5. If the answer is **yes** to **question 1, 2, 3, or 4**, public notices in an alternative language are required. Which language is required by the bilingual program? Spanish

F. Plain Language Summary Template

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

Attachment: 2

G. Public Involvement Plan Form

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

Attachment: N/A

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

- A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. RN 102077989

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):

Lake Pointe and Bohls WWTP

- C. Owner of treatment facility: West Travis County Public Utility Agency

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: West Travis County Public Utility Agency

Mailing Address: 13215 Bee Cave Parkway Bldg B City, State, Zip Code: Bee Cave, TX 78738

Phone No.: (512) 501-8086

E-mail Address: jriechers@wtcpua.org

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: A1, A2, A3 & A4

E. Owner of effluent disposal site:

Prefix: [Click to enter text.](#) Last Name, First Name: Spillman Henry J Jr & John F & Golda L Garnett, and Drip Fields

Title: Spanish Oaks Golf Club - Falconhead West Credential: [Click to enter text.](#)

Organization Name: CCNG Golf LLC, Falconhead Golf Club

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.](#)

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

Prefix: [Click to enter text.](#) Last Name, First Name: [Click to enter text.](#)

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

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

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

Phone No.: [Click to enter text.](#) E-mail Address: [Click to enter text.](#)

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

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

Section 10. TPDES Discharge Information (Instructions Page 31)

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

☐ Yes ☐ No

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

[Click to enter text.](#)

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

☐ Yes ☐ No

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

[Click to enter text.](#)

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

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

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

☐ Yes ☐ No

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

☐ Authorization granted ☐ Authorization pending

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

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

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

Section 11. TLAP Disposal Information (Instructions Page 32)

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

☒ Yes ☐ No

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

[Click to enter text.](#)

- B. City nearest the disposal site: Bee Cave

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

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

Attachment B

- E. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: Unnamed Tributary to Little Barton Creek, and Unnamed Tributary to Barton Creek, Unnamed Tributary to Hurst Creek.

Section 12. Miscellaneous Information (Instructions Page 32)

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

☐ Yes ☒ No

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

☐ Yes ☐ No ☒ Not Applicable

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

[Click to enter text.](#)

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

☐ Yes ☒ No

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

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If yes, provide the following information:

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

Amount past due: [Click to enter text.](#)

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If yes, please provide the following information:

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

Amount past due: [Click to enter text.](#)

Section 13. Attachments (Instructions Page 33)

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

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

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

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

☐ 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: WQ0013594001

Applicant: West Travis County Public Utility Agency

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): Jennifer Riechers

Signatory title: General Manager

Signature: _____ Date: _____

(Use blue ink)

Subscribed and Sworn to before me by the said _____

on this _____ day of _____, 20____.

My commission expires on the _____ day of _____, 20____.

Notary Public

[SEAL]

County, Texas

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 36)

- A. Indicate by a check mark that the landowners map or drawing, with scale, includes the following information, as applicable:
- ☒ The applicant's property boundaries
 - ☒ The facility site boundaries within the applicant's property boundaries
 - ☐ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
 - ☒ The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
 - ☐ The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
 - ☐ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
 - ☐ The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
 - ☒ The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
 - ☐ The property boundaries of all landowners surrounding the effluent disposal site
 - ☐ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
 - ☒ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located
- B. ☒ Indicate by a check mark that a separate list with the landowners' names and mailing addresses cross-referenced to the landowner's map has been provided.
- C. Indicate by a check mark in which format the landowners list is submitted:
- ☒ USB Drive ☐ Four sets of labels
- D. Provide the source of the landowners' names and mailing addresses: www.traviscad.org
- E. As required by *Texas Water Code § 5.115*, is any permanent school fund land affected by this application?
- ☐ Yes ☒ No

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

Click to enter text.

Section 2. Original Photographs (Instructions Page 38)

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

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

Section 3. Buffer Zone Map (Instructions Page 38)

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

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

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

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

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

- ☒ Yes ☐ No

DOMESTIC WASTEWATER PERMIT APPLICATION

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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

Attachment: N/A

WATER QUALITY PERMIT

PAYMENT SUBMITTAL FORM

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

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

Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

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

BY OVERNIGHT/EXPRESS MAIL

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

Fee Code: WQP **Waste Permit No:** [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: West Travis County PUA WWTPs

Physical Address of Project or Site: 13215 Bee Cave Parkway Bldg B, Suite 110 Bee Cave, TX 78738

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

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

Design Flow (MGD): 1.0 MGD

2-Hr Peak Flow (MGD): 2.5 MGD

Estimated construction start date: 2018

Estimated waste disposal start date: 2019

B. Interim I Phase

Design Flow (MGD): 1.375 MGD

2-Hr Peak Flow (MGD): 3.45 MGD

Estimated construction start date: 2024

Estimated waste disposal start date: 2025

C. Interim II Phase

Design Flow (MGD): 1.5 MGD

2-Hr Peak Flow (MGD): 3.75 MGD

Estimated construction start date: 2026

Estimated waste disposal start date: 2027

D. Final Phase

Design Flow (MGD): 1.8 MGD

2-Hr Peak Flow (MGD): 4.5 MGD

Estimated construction start date: 2030

Estimated waste disposal start date: 2031

E. Current Operating Phase

Provide the startup date of the facility: Jan 2018

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.**

Attachment C

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)
Attachments D1, D2, D3, D4		

C. Process Flow Diagram

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

Attachment: E1, E2, E3, E4, E5

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: Spanish Oaks- 30°17'55" N, Falconhead Golf Club- 30°19'11" N, Falconhead West Drip Field- 30°19'23" N
- Longitude: Spanish Oaks- 97°56'36" W, Falconhead Golf Club- 97°57'58" W, Falconhead West Drip Field- 97°59'58" W

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: F

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

The West Travis County Public Utility Agency (PUA) provides retail and wholesale wastewater service to an area that is generally the extraterritorial jurisdiction (ETJ) of the City of Bee Cave.

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.**

Attachment I

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: Attachments G1, G2

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.**

Attachments G1, G2

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.

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*.

Attachment H: Liner Compliance. We do not have original certified letter; however, we have attached word document format which was used to submit the letter.

D. Grit and grease treatment

1. Acceptance of grit and grease waste

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

☐ Yes ☒ No

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

2. Grit and grease processing

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

N/A

3. Grit disposal

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

☐ Yes ☐ No

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

Describe the method of grit disposal.

N/A

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.

N/A

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:

N/A

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.

N/A

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.

N/A

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.

N/A

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

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

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

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

1. Acceptance of sludge from other WWTPs

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

☐ Yes ☒ No

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

In addition, provide the date the plant started or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an estimate of the BOD₅ concentration of the sludge, and the design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/A

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

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

☐ Yes ☒ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

If **yes to any of the above**, provide the date the plant started or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the BOD₅ concentration of the septic waste, and the design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

N/A

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

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

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

☐ Yes ☒ No

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

N/A

Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 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) and 1.0(3). **Water treatment facilities** discharging filter backwash water, complete Table 1.0(4). Provide copies of the laboratory results sheets. **These tables are not applicable for a minor amendment without renewal.** See the instructions for guidance.

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

Table 1.0(2) – Pollutant Analysis for Lake Pointe’s Wastewater Treatment Facility

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , mg/l	1.57	2	9	Grab	4/23, 5/23, 6/23, 7/23,

					8/23, 9/23, 10/23, 11/23, 12/23
Total Suspended Solids, mg/l	1.63	2.6	9	Grab	4/23, 5/23, 6/23, 7/23, 8/23, 9/23, 10/23, 11/23, 12/23
Ammonia Nitrogen, mg/l	0.05	0.05	2	Grab	12/2023
Nitrate Nitrogen, mg/l	34	34	1	Grab	3/28/24
Total Kjeldahl Nitrogen, mg/l	<0.20	<0.20	1	Grab	3/28/24
Sulfate, mg/l	58.1	58.1	1	Grab	3/28/24
Chloride, mg/l	171	171	1	Grab	3/28/24
Total Phosphorus, mg/l	3.77	3.77	1	Grab	3/28/24
pH, standard units	7.23	7.4	10	Grab	4/23, 5/23, 6/23, 7/23, 8/23, 9/23, 10/23, 11/23, 12/23/, 1/24
Dissolved Oxygen*, mg/l					
Chlorine Residual, mg/l	2.29	3.19	10	Grab	4/23, 5/23, 6/23, 7/23, 8/23, 9/23, 10/23, 11/23, 12/23/, 1/24
<i>E.coli</i> (CFU/100ml) freshwater	1	1	1	Grab	3/28/24
Enterococci (CFU/100ml) saltwater					
Total Dissolved Solids, mg/l	684	684		Grab	3/28/24
Electrical Conductivity, μ mohs/cm, †	1080	1080	1	Grab	3/28/24
Oil & Grease, mg/l	<16.0	<16.0	1	Grab	3/28/24
Alkalinity (CaCO ₃)*, mg/l					

*TPDES permits only

†TLAP permits only

Table1.0(3) – Pollutant Analysis for Bohl’s Wastewater Treatment Facility

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , mg/l	2.04	4.5	10	Grab	4/23, 5/23, 6/23, 7/23, 8/23, 9/23, 10/23, 11/23, 12/23/, 1/24
Total Suspended Solids, mg/l	1.17	1.63	10	Grab	4/23, 5/23, 6/23, 7/23, 8/23, 9/23, 10/23, 11/23, 12/23/, 1/24
Ammonia Nitrogen, mg/l	0.05	0.05	3	Grab	12/2023
Nitrate Nitrogen, mg/l	21	21	1	Grab	3/27/24
Total Kjeldahl Nitrogen, mg/l	<0.20	<0.20	1	Grab	3/27/24
Sulfate, mg/l	50.6	50.6	1	Grab	3/27/24
Chloride, mg/l	175	175	1	Grab	3/27/24
Total Phosphorus, mg/l	6.08	6.08	1	Grab	3/27/24
pH, standard units	7.32	7.49	10	Grab	4/23, 5/23, 6/23, 7/23, 8/23, 9/23, 10/23, 11/23, 12/23/, 1/24
Dissolved Oxygen*, mg/l					
Chlorine Residual, mg/l	3.61	4.56	10	Grab	4/23, 5/23, 6/23, 7/23, 8/23, 9/23, 10/23, 11/23, 12/23/, 1/24
<i>E.coli</i> (CFU/100ml) freshwater	2.0	2.0	1	Grab	3/27/24
Enterococci (CFU/100ml) saltwater					
Total Dissolved Solids, mg/l	622	622	1	Grab	3/27/24
Electrical Conductivity, µmohs/cm, †	1070	1070	1	Grab	3/27/24
Oil & Grease, mg/l	<5.0	<5.0	1	Grab	3/27/24
Alkalinity (CaCO ₃)*, mg/l					

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: Curtis Jeffery

Facility Operator's License Classification and Level: Class A

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

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

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

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

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

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
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): N/A

D. Disposal site

Disposal site name: City of Manor Wilbarger Creek WWTP

TCEQ permit or registration number: WQ0012900001

County where disposal site is located: Travis

E. Transportation method

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

Name of the hauler: Wastewater Transport Service, LLC

Hauler registration number: 24343

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 1×10^{-7} cm/sec?

☐ Yes ☐ No

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

[Click to enter text.](#)

D. Site development plan

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

[Click to enter text.](#)

Attach the following documents to the application.

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

E. Groundwater monitoring

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

☐ Yes ☐ No

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

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

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

A. Additional authorizations

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

☒ Yes ☐ No

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

210-Authorization No. R13594001 for beneficial use of reclaimed wastewater effluent.

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

Click to enter text.

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

A. RCRA hazardous wastes

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

☐ Yes ☒ No

B. Remediation activity wastewater

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

☐ Yes ☒ No

C. Details about wastes received

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

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

Section 14. Laboratory Accreditation (Instructions Page 56)

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

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

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

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

CERTIFICATION:

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

Printed Name: Jennifer Riechers

Title: General Manager

Signature: _____

Date: _____

DOMESTIC WASTEWATER PERMIT APPLICATION

TECHNICAL REPORT 1.1

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

Section 1. Justification for Permit (Instructions Page 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.

Attachment I

B. Regionalization of facilities

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

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

1. Municipally incorporated areas

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

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

☐ Yes ☐ No ☒ Not Applicable

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

If yes, attach correspondence from the city.

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

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

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

2. Utility CCN areas

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

☐ Yes ☒ No

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

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

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

3. *Nearby WWTPs or collection systems*

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

☐ Yes ☒ No

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

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

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

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

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

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

Section 2. Proposed Organic Loading (Instructions Page 59)

Is this facility in operation?

☒ Yes ☐ No

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

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

A. Current organic loading

Facility Design Flow (flow being requested in application): 1.0 MGD; 1.375 MGD; 1.5 MGD; 1.8 MGD

Average Influent Organic Strength or BOD₅ Concentration in mg/l: Bohls: 217; LP: 152

Average Influent Loading (lbs/day = total average flow X average BOD₅ conc. X 8.34): B: 515.78; LP: 455.1 lbs/day

Provide the source of the average organic strength or BOD₅ concentration.

Monthly operating reports and lab data

B. Proposed organic loading

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

Table 1.1(1) – Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD ₅ Concentration (mg/l)
Municipality		
Subdivision		
Trailer park – transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources		
AVERAGE BOD ₅ from all sources		

Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 59)

A. Existing Design Effluent Quality

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

Total Suspended Solids, mg/l: 5

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: N/A

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

B. Interim I Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: 5

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: N/A

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

C. Interim II Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: 5

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: N/A

Other:

D. Final Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: 5

Ammonia Nitrogen, mg/l: 2

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: N/A

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

E. Disinfection Method

Identify the proposed method of disinfection.

☒ Chlorine: 1 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: J1 & J2

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.

N/A

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

FEMA Flood Map Numbers: 48453C0415J, 48453C0385J & 48453C0405J: Effective January 22, 2020.

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 K](#)

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

A. Beneficial use authorization

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

☐ Yes ☒ No

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

B. Sludge processing authorization

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

- ☐ Sludge Composting
- ☐ Marketing and Distribution of sludge
- ☐ Sludge Surface Disposal or Sludge Monofill

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

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

Attach a solids management plan to the application.

Attachment: N/A

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:

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

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

For existing authorizations, provide Registration Number: RN102077989

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
Golf Course, Medians, Park (Bermuda grass, rye grass, bent grass, and rough bluegrass)	200	600,000	Y
Golf Course (Bermuda grass, rye grass, bent grass, and rough bluegrass)	150	400,000	Y
Ranch Land (Bermuda grass and rye grass,)	53	232,593	N

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
001	5	77	N/A	Polypropylene
002	4.5	100	N/A	Polypropylene

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

Attachment: H

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 Flood Map Numbers: 48453C0415J, 48453C0385J & 48453C0405J: Effective January 22, 2020.

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

The irrigation areas were designed with appropriate berm placement and site grading to mitigate effects of storm events and to control tailwater.

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:** M1 & M2

- 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:** N1

- 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
N2				

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

Attachment: N3

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: Reference: N2, N3, & H

Are groundwater monitoring wells available onsite? ☐ Yes ☒ No

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

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

Attachment: N/A

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: O1, O2, & O3

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: Click to enter text.

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
Brackett: BID and BoF	0-60 in.	Moderate	Low	79
San Saba Clay: SaB	0-68in	See below*	Medium	79
San Saba Clay: SaB	0-30in	Moderately Slow	Low	79
Volente: VoD	0-54in	Moderately Slow	Low	79
Purves Silty Clay: PuC	0-20in	Moderately Slow	Medium	79

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 (Lake Pointe’s WWTP)

Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	pH	Chlorine Residual mg/l	Acres irrigated
Jan-24	0.359	9.5	7.2	7.4	2.69	350
Dec-23	0.333	2	1.25	7.3	3.19	350
Nov-23	0.391	1.33	2.33	7	2.49	350
Oct-23	0.364	2	2.13	7.2	1.96	350
Sep-23	0.399	1.38	1.63	7.3	1.92	350
Aug-23	0.518	1.2	2.6	7.4	1.86	350
Jul-23	0.543	1.63	1	7.3	2.43	350
Jun-23	0.551	1.63	1.25	7.4	2.04	350
May-23	0.563	1.5	1.1	7.2	1.79	350
Apr-23	0.601	1.5	1.38	7.2	2.52	350
Mar-23	0.555	1.8	1.3	7.2	2.31	350
Feb-23	0.542	2.13	1.5	7.2	3.07	350
Jan-23	0.5	1.63	2.38	7.1	2.76	350
Dec-22	0.509	1.63	1.5	7.1	2.85	350
Nov-22	0.517	1.7	1.3	7.1	1.7	350
Oct-22	0.515	1.88	1.13	7.1	3.29	350
Sep-22	0.511	1.38	1.13	7.2	2.79	350
Aug-22	0.528	1.63	1	7.1	1.99	350
Jul-22	0.521	1.25	1	7.2	3.08	350
Jun-22	0.524	1.25	1	7.2	3.26	350
May-22	0.533	1.89	1	7.1	3.07	350
Apr-22	0.519	1.88	1.13	7	2.43	350
Mar-22	0.496	2.5	1.5	6.7	1.67	350
Feb-22	0.482	3	1.63	6.6	2.13	350
Jan-22	0.508	2	1.25	6.9	2.81	350

Table 3.1(6) – Effluent Monitoring Data (Bohl’s WWTP)

Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	pH	Chlorine Residual mg/l	Acres irrigated
Jan-24	0.285	1.3	1.4	7.32	2.52	350
Dec-23	0.222	1.4	1	7.39	3.14	350
Nov-23	0.206	1.67	1	7.49	3.07	350
Oct-23	0.204	2.38	1.13	7.38	4.46	350
Sep-23	0.2	1.38	1.13	7.24	2.94	350
Aug-23	0.197	1.6	1.4	7.28	4.49	350
Jul-23	0.174	2	1	7.13	2.94	350
Jun-23	0.177	2.63	1.63	7.12	3.92	350
May-23	0.195	1.6	1	7.46	4.56	350
Apr-23	0.2	4.5	1	7.37	4.01	350

Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	pH	Chlorine Residual mg/l	Acres irrigated
Mar-23	0.187	1.9	1.1	7.41	5.51	350
Feb-23	0.196	1.88	1	7.63	3.95	350
Jan-23	0.169	1.38	1	7.45	2.38	350
Dec-22	0.168	1.75	1	7.13	3.74	350
Nov-22	0.165	1.7	1	7.19	4.1	350
Oct-22	0.154	1.75	1	7.41	2.9	350
Sep-22	0.165	1.88	1	7.46	3.77	350
Aug-22	0.172	1.9	1	7.15	3.92	350
Jul-22	0.155	1.75	1	6.79	5.17	350
Jun-22	0.153	2.5	1	7.2	6.04	350
May-22	0.183	2	1	7.39	2.89	350
Apr-22	0.246	2.25	1	7.25	2.16	350
Mar-22	0.231	2.5	1	7.33	3.94	350
Feb-22	0.215	3	1.75	7.38	2.41	350
Jan-22	0.296	1.75	1	7.31	1.8	350

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: 350

Design application frequency:

hours/day 6-8 And days/week 7

Land grade (slope):

average percent (%): 0-15%

maximum percent (%): 15%

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

3.0 acre-feet/acre/year for CCNG and 3.4 acre-feet/acre/year for the Spillman Ranch

Design total nitrogen loading rate, in lbs N/acre/year: 91

Soil conductivity (mmhos/cm): 0-6 inches- 225mmhos/cm, 6-18 inches-253mmhos/cm, 18-30 inches- 277mmhos/cm.

Method of application: Irrigation via Sprinklers

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

Attachment: Q

B. Evaporation ponds

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

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

Attachment: Click to enter text.

C. Evapotranspiration beds

Number of beds: Click to enter text.

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

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

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

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

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

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

D. Overland flow

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

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

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

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

Design BOD₅ loading rate, in lbs BOD₅/acre/day: [Click to enter text.](#)

Design application frequency:

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

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

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

Section 2. Edwards Aquifer (Instructions Page 73)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

Attachment: [N/A](#)

DOMESTIC WASTEWATER PERMIT APPLICATION

WORKSHEET 3.3: SUBSURFACE AREA DRIP DISPERSAL (SADDS) LAND DISPOSAL OF EFFLUENT

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

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

Section 1. Administrative Information (Instructions Page 75)

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

B. Is the owner of the land where the treatment facility is located the same as the owner of the treatment facility?

☒ Yes ☐ No

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

Click to enter text.

C. Owner of the subsurface area drip dispersal system: West Travis County Public Utility Agency

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

☒ Yes ☐ No

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

Click to enter text.

E. Owner of the land where the subsurface area drip dispersal system is located: Falconhead West

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

☐ Yes ☒ No

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

Falconhead West

Section 2. Subsurface Area Drip Dispersal System (Instructions Page 75)

A. Type of system

- ☒ Subsurface Drip Irrigation
☐ Surface Drip Irrigation
☐ Other, specify: [Click to enter text.](#)

B. Irrigation operations

Application area, in acres: 53.4

Infiltration Rate, in inches/hour: 0.05

Average slope of the application area, percent (%): 1-15%

Maximum slope of the application area, percent (%): 15%

Storage volume, in gallons: 32,585,100

Major soil series: Brackett-Rock outcrop complex

Depth to groundwater, in feet: 16

C. Application rate

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

☒ Yes ☐ No

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

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

☐ Yes ☒ No

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

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

☐ Yes ☒ No

Hydraulic application rate, in gal/square foot/day: 0.1

Nitrogen application rate, in lbs/gal/day: 2.085 x 10⁻⁴

D. Dosing information

Number of doses per day: 3

Dosing duration per area, in hours: Attachment S

Rest period between doses, in hours: 8

Dosing amount per area, in inches/day: Attachment S

Number of zones: 40

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

☐ Yes ☒ No

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

Attachment: N/A

Section 3. Required Plans (Instructions Page 75)

A. Recharge feature plan

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

Attachment: I

B. Soil evaluation

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

Attachment: U

C. Site preparation plan

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

Attachment: V

D. Soil sampling/testing

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

Attachment: W

Section 4. Floodway Designation (Instructions Page 76)

A. Site location

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

☐ Yes ☒ No

B. Flood map

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

Attachment: X

Section 5. Surface Waters in the State (Instructions Page 76)

A. Buffer Map

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

Attachment: Y

B. Buffer variance request

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

☐ Yes ☒ No

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

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

Section 6. Edwards Aquifer (Instructions Page 76)

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

☐ Yes ☒ No

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

☐ Yes ☒ No

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

DOMESTIC WASTEWATER PERMIT APPLICATION

WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

The following is required for all publicly owned treatment works.

Section 1. All POTWs (Instructions Page 89)

A. Industrial users (IUs)

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

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

Categorical IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Significant IUs - non-categorical:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Other IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

B. Treatment plant interference

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

☐ Yes ☒ No

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

N/A

C. Treatment plant pass through

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

☐ Yes ☒ No

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

N/A

D. Pretreatment program

Does your POTW have an approved pretreatment program?

☐ Yes ☒ No

If **yes**, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

☐ Yes ☒ No

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

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

E. Service Area Map

Attach a map indicating the service area of the POTW. The map should include the applicant's service area boundaries and the location of any known industrial users discharging to the POTW. Please see the instructions for guidance.

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

Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 90)

A. Substantial modifications

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

☐ Yes ☐ No

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

Click to enter text.

B. Non-substantial modifications

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

☐ Yes ☐ No

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

Click to enter text.

C. Effluent parameters above the MAL

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

Table 7.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date

D. Industrial user interruptions

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

☐ Yes ☐ No

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

Click to enter text.

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

A. General information

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

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

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

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

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

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

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

B. Process information

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

Click to enter text.

C. Product and service information

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

Click to enter text.

D. Flow rate information

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

Process Wastewater:

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

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

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

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

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

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

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

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

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

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

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

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

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

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

F. Industrial user interruptions

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

☐ Yes ☐ No

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

[Click to enter text.](#)

WORKSHEET 7.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CLASS V INJECTION WELL INVENTORY/AUTHORIZATION FORM

Submit the completed form to:

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

For TCEQ Use Only
Reg. No. _____
Date Received _____
Date Authorized _____

Section 1. General Information (Instructions Page 92)

1. TCEQ Program Area

Program Area (PST, VCP, IHW, etc.): Municipal Domestic Wastewater

Program ID: N/A

Contact Name: N/A

Phone Number: N/A

2. Agent/Consultant Contact Information

Contact Name: Bryce Canady, PE

Address: 1101 S. Capital of TX Highway, Bldg. D

City, State, and Zip Code: Austin, TX 78746

Phone Number: (512) 662 8039

3. Owner/Operator Contact Information

☒ Owner ☒ Operator

Owner/Operator Name: West Travis County Public Utility Agency

Contact Name: Jennifer Reichers

Address: 13215 Bee Cave Pkwy, Bldg. B, Suite 110

City, State, and Zip Code: Austin, TX 78738

Phone Number: (512) 501-8086

4. Facility Contact Information

Facility Name: Lake Pointe WWTP Drip Fields

Address: 4912 Julian Alps

City, State, and Zip Code: Austin, TX 78738

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

Facility Contact Person: Curtis Jeffrey

Phone Number: (512) 470-7702

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

Latitude: 30°19'19" N

Longitude: 98°00'00" W

Method of determination (GPS, TOPO, etc.): Google Maps

Attach topographic quadrangle map as attachment A.

6. **Well Information**

Type of Well Construction, select one:

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

Number of Injection Wells: Click to enter text.

7. **Purpose**

Detailed Description regarding purpose of Injection System:

Disposal of Treated Effluent

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

8. **Water Well Driller/Installer**

Water Well Driller/Installer Name: N/A

City, State, and Zip Code: N/A

Phone Number: N/A

License Number: N/A

Section 2. Proposed Down Hole Design

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

Table 8.0(1) – Down Hole Design Table

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

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

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

System(s) Dimensions: N/A

System(s) Construction: N/A

Section 4. Site Hydrogeological and Injection Zone Data

1. Name of Contaminated Aquifer: N/A
2. Receiving Formation Name of Injection Zone: Fredericksburg Group (Kfr) of the Edwards Limestone
3. Well/Trench Total Depth: 8 inches
4. Surface Elevation: 1044 ft
5. Depth to Ground Water: 485'-665'
6. Injection Zone Depth: 8 inches
7. Injection Zone vertically isolated geologically? ☐ Yes ☒ No
Impervious Strata between Injection Zone and nearest Underground Source of Drinking Water:
 Name: N/A
 Thickness: N/A
8. Provide a list of contaminants and the levels (ppm) in contaminated aquifer
Attach as Attachment E.
9. Horizontal and Vertical extent of contamination and injection plume
Attach as Attachment F.
10. Formation (Injection Zone) Water Chemistry (Background levels) TDS, etc.
Attach as Attachment G.
11. Injection Fluid Chemistry in PPM at point of injection
Attach as Attachment H.

12. Lowest Known Depth of Ground Water with < 10,000 PPM TDS: N/A
13. Maximum injection Rate/Volume/Pressure: N/A
14. Water wells within 1/4 mile radius (attach map as Attachment I): Attachment Z
15. Injection wells within 1/4 mile radius (attach map as Attachment J): N/A
16. Monitor wells within 1/4 mile radius (attach drillers logs and map as Attachment K): N/A
17. Sampling frequency: N/A
18. Known hazardous components in injection fluid: None

Section 5. Site History

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

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

Class V Injection Well Designations

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

Attachment 1

Core Data Form



TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
<input type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input checked="" type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)		<input type="checkbox"/> Other
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 604021980		RN 102077989

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)			
<input type="checkbox"/> New Customer <input checked="" type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership					
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)					
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>					
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)				<i>If new Customer, enter previous Customer below:</i>	
West Travis Country Public Utility Agency					
7. TX SOS/CPA Filing Number		8. TX State Tax ID (11 digits)		9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
11. Type of Customer:		<input type="checkbox"/> Corporation		<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> Local <input type="checkbox"/> State <input checked="" type="checkbox"/> Other		<input type="checkbox"/> Sole Proprietorship		<input type="checkbox"/> Other:	
12. Number of Employees				13. Independently Owned and Operated?	
<input checked="" type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following					
<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Owner & Operator <input type="checkbox"/> Other:					
<input type="checkbox"/> Occupational Licensee <input checked="" type="checkbox"/> Responsible Party <input type="checkbox"/> VCP/BSA Applicant					
15. Mailing Address:		13215 Bee Cave Parkway Bldg B, Suite 110			
City	Bee Cave	State	TX	ZIP	78738
				ZIP + 4	
16. Country Mailing Information (if outside USA)				17. E-Mail Address (if applicable)	
				jriechers@wtcpua.org	
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)	

SECTION III: Regulated Entity Information

21. General Regulated Entity Information <i>(If 'New Regulated Entity' is selected, a new permit application is also required.)</i>								
<input type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information								
<i>The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).</i>								
22. Regulated Entity Name <i>(Enter name of the site where the regulated action is taking place.)</i>								
West Travis County Public Utility Agency; Lake Pointe & Bohls WWTP								
23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>	13215 Bee Cave Parkway Bldg B							
	City	Bee Cave	State	TX	ZIP	78738	ZIP + 4	
24. County								

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

25. Description to Physical Location:											
26. Nearest City					State		Nearest ZIP Code				
<i>Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).</i>											
27. Latitude (N) In Decimal:						28. Longitude (W) In Decimal:					
Degrees		Minutes		Seconds		Degrees		Minutes		Seconds	
29. Primary SIC Code			30. Secondary SIC Code			31. Primary NAICS Code			32. Secondary NAICS Code		
(4 digits)			(4 digits)			(5 or 6 digits)			(5 or 6 digits)		
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>											
34. Mailing Address:											
		City		State		ZIP		ZIP + 4			
35. E-Mail Address:											
36. Telephone Number				37. Extension or Code				38. Fax Number <i>(if applicable)</i>			
() -								() -			

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


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

SECTION IV: Preparer Information

40. Name:	Bryce Canady, PE	41. Title:	District Engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(512) 327-9204		(512) 327-2947	bcanady@murfee.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:	West Travis County PUA	Job Title:	General Manager
Name (In Print):	Jennifer Riechers	Phone:	(512) 501- 8086
Signature:		Date:	5/9/24

Attachment 2

Plain Language Summary

PLAIN LANGUAGE SUMMARY TLAP PERMIT

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.

WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY (CN604021980) operates Lake Pointe & Bohl's (RN102077989), a Wastewater Treatment Facility (WWTP). The facility is located at 3100 Napa Drive (LP WWTP) and 8,000ft NW of the intersection of Farm-to-Market Road and State Highway 71(Bohl's WWTP), in Austin, Travis County, Texas 78738. This application is requesting authorization for disposal of treated domestic wastewater effluent at a daily average flow not to exceed 1.0 MGD and via surface irrigation of 350 acres of public access land in the Interim I phase; a daily average flow not to exceed 1.375 MGD via surface irrigation of 350-acres of public access land and a subsurface area drip dispersal system(SADDS), where a daily average flow is not to exceed 232,590 GPD via non-public SADDS with a minimum area of 53 acres, and direct potable reuse in phase II; a daily average flow not to exceed 1.50 MGD via surface irrigation of 350-acres of public access land, where a daily average flow is not to exceed 232,590 GPD via non-public access SADDS with a minimum area of 53 acres, and direct potable reuse in phase III. In the Final phase, we request authorization to dispose of treated domestic wastewater effluent at a daily average flow not to exceed 1.8 MGD via surface irrigation of 350-acres of public access land, where a daily average flow is not to exceed 232,590 GPD via non-public access SADDS with a minimum area of 53 acres, and direct potable reuse. This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain low levels of Biochemical Oxygen Demand (5-day), Total Suspended Solids (TSS), and Ammonia Nitrogen (NH₃-N), and Escherichia coli (*E. coli*).. Domestic wastewater is treated by an activated sludge process plant using the single stage nitrification mode. Treatment units include two parallel trains consisting of a bar screen, two equalization basins, two aeration basins, two final clarifiers, two aerobic digesters, two chlorine contact chambers, and clot disk filters at the Lake Pointe Site, and another train consisting of an equalization basin, bar screen, aeration basin, final clarifier, aerobic digester, chlorine contact chamber and cloth disk filters at the Bohl's Site.

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.

WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY (CN604021980) opera Lake Pointe y Bohls. (RN102077989), un par de Plantas de Tratamiento de Aguas Residuales. La instalación está ubicada en 3100 Napa Drive (LP WWTP) y 8,000ft NW de la intersección Farm-to-Market Road y State Highway 71(Bohl's WWTP), en Austin, Condado de Travis, Texas 78738. En esta solicitud se pide autorización para verter efluentes de aguas residuales domésticas tratadas con un caudal medio diario no superior a 1.0 MGD y mediante riego superficial de 350 acres de terrenos de acceso público en la fase provisional I; un caudal medio diario no superior a 1.375 MGD mediante el riego superficial de 350 acres de terreno de acceso público y un sistema de dispersión por goteo subsuperficial (SADDs), con un caudal medio diario no superior a 232.590 GPD a través de SADDs con mínima de 53 acres, y la reutilización potable directa en la fase (DPR) II; un caudal medio diario no superior a 1.50 MGD mediante riego superficial de 350 acres de terreno de acceso público, con un caudal medio diario no superior a 232.590 GPD a través de SADDs con mínima de 53 acres, y DPR en la fase III. En la fase final, solicitamos autorización para verter efluentes de aguas residuales domésticas tratadas con un caudal medio diario no superior a 1.8 MGD mediante el riego superficial de 350 acres de terrenos de acceso público, un caudal medio diario no superará los 232.590 GPD a través de SADDs con mínima de 53 acres, y DPR. Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan niveles bajos de demanda bioquímica de oxígeno (5 días), sólidos suspendidos totales (SST), nitrógeno amoniacal (NH₃-N) y Escherichia coli.. Las aguas residuales domésticas están tratado mediante una planta de proceso de lodos activados que utiliza el modo de nitrificación de una sola etapa. Las unidades de tratamiento incluyen dos trenes paralelos formados por un tamiz de barras, dos balsas de ecualización, dos balsas de aireación, dos clarificadores finales, dos digestores aeróbicos, dos cámaras de contacto de cloro y filtros de disco de tela en el emplazamiento de Lake Pointe, y otro tren formado por una balsa de ecualización, un tamiz de barras, una balsa de aireación, un clarificador final, un digestor aeróbico, una cámara de contacto de cloro y filtros de disco de tela en el emplazamiento de Bohls.

Attachment A1

Treated Effluent Disposal Easement – CCNG

EFFLUENT DISPOSAL UTILITY EASEMENT

14

STATE OF TEXAS §
 §
COUNTY OF TRAVIS §

CCNG Properties, L.P., a Texas limited partnership ("Grantor"), for and in consideration of TEN and NO/100 DOLLARS (\$10.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, hereby GRANTS and CONVEYS to the Lower Colorado River Authority, a political subdivision of the State of Texas, and its successors and assigns (collectively, "Grantee"), the following easement:

an effluent disposal utility easement on, over, under, across and through that certain real property more particularly described in Exhibit "A" attached hereto and incorporated herein by reference, together with all and singular the rights and appurtenances thereto in anywise belonging

(the "Easement"). The real property described in Exhibit "A" is herein referred to as the "Easement Tract." The Easement is a nonexclusive right and easement on, over, under, across and through the Easement Tract to construct, install, use, maintain, repair, inspect, improve and replace such effluent transportation and disposal lines, pipes, storage tanks, reservoirs and other related facilities, systems and equipment, and all appurtenances thereto, which are reasonably required from time to time, and are to be located on, over, under, across and through the Easement Tract, in order to provide effluent disposal utility services (collectively, the "Facilities"), including, but not limited to, (a) the right of ingress and egress on, over and across the Easement Tract for the purposes herein contemplated, and (b) the right to place on or below the surface of the Easement Tract any of the Facilities as are necessary or desirable in connection with Grantee's effluent disposal utility services.

This Easement is subject in all respects to that certain "Utility Facilities Acquisition Agreement between Lower Colorado River Authority and CCNG Development Company, L.P.," dated November 19, 1999 (the "UFAA"). The conveyance of this Easement does not affect or alter the continuing rights or obligations of the parties under the UFAA. Grantee under this Easement shall not dispose of effluent by irrigation on the Effluent Tract in excess of 400,000 gallons per day on an average daily basis averaged over any period of time as authorized in any permits or approvals from state or federal agencies with appropriate jurisdiction over such activities.

Term. This Easement shall terminate upon termination of the Raw Water and Effluent Agreement between Grantor and Grantee dated of even date herewith ("Raw Water/Effluent Agreement"). Upon termination of the Easement, Grantee shall within ninety (90) days remove or cause to be removed from the Easement Tract any facilities located by, for, on behalf of or upon the authority of Grantee on, over, under, through or across the Easement Tract and restore the Easement Tract substantially to its pre-existing condition.

0044260

13771

Interference. Grantor expressly reserves the right to the use and enjoyment of the surface of the Easement Tract for any and all purposes which are consistent with Grantee's use of the Easement Tract. Such use shall not unreasonably interfere with or abridge Grantee's rights hereunder so as to prevent Grantee from using the Easement Tract as contemplated hereby. Grantee shall not unreasonably or materially interfere with the use and enjoyment of the Easement Tract by Grantor or any other person or entity granted rights on, over, under, across or through the Easement Tract.

Third Parties. Grantee may contract with third parties to perform any or all activities related to the Facilities located or to be located within the Easement Tract.

No Waiver. No waiver of any provision hereof shall be deemed to have been made unless expressed in writing and signed by the waiving party. No delay or omission in the exercise of any right or remedy accruing to a party upon any breach under this Easement shall impair such right or remedy or be construed as a waiver of any such breach theretofore or thereafter occurring. The waiver of any breach of any term, covenant or condition herein stated shall not be deemed to be a waiver of any other breach, or of a subsequent breach of the same or any other term, covenant or condition herein contained. All rights, powers, options or remedies afforded either hereunder or by law shall be cumulative and not alternative, and the exercise of one right, power, option or remedy shall not bar other rights, powers, options or remedies allowed herein or by law, unless expressly provided to the contrary herein.

Assignment. This Easement may be assigned by Grantee.

Easement Non-Exclusive. It is specifically agreed that the Easement and right to use the Easement Tract as contemplated hereby are non-exclusive, and Grantor expressly reserves the right to grant other easements in, under, over, across and/or through the Easement Tract, provided, however, that such other easements and the use thereof by the grantees or beneficiaries thereof shall not prevent Grantee from using and enjoying the Easement for the purposes contemplated hereby.

Modification to Easement Tract. Grantor, at its option, may make minor adjustments to the boundaries of the Easement Tract, provided such adjustments meet the following criteria:

- 1) Any such boundary modifications, collectively, shall not result in a net decrease of acreage of the Easement Tract exceeding five (5) acres.
- 2) Legal title to any land added to the Easement Tract shall be reviewed and approved by Grantee, which approval shall not be unreasonably withheld.
- 3) No land shall be excluded from the Easement Tract upon which improvements have been constructed by Grantee without Grantee's consent, which approval shall not be unreasonably withheld.
- 4) Any modification to the boundary of the Easement Tract must meet the requirements of the wastewater irrigation permit ("Permit") issued by the Texas Natural Resource Conservation Commission ("TNRCC") and is subject to TNRCC approval, if applicable.

- 5) Grantor shall bear the costs of any modifications to the Easement Tract and, if necessary, to Grantee's improvements on the Easement Tract and Permit.
- 6) Any modification to the Easement Tract must be in writing, signed by Grantor, or its assigns, contain a recitation that the modification meets the foregoing criteria and will be recorded in the real property records of Travis County, Texas.

TO HAVE AND TO HOLD the above-described Easement unto Grantee and Grantee's successors and assigns forever, but subject to the terms and conditions hereof; and Grantor hereby binds itself and its successors and assigns, to WARRANT AND FOREVER DEFEND all and singular the Easement unto Grantee and its successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, subject, however, to the terms and conditions hereof and to the reservations from and exceptions to this conveyance and warranty as shown on Exhibit "B".

EXECUTED AS OF THE 6th day of July, 2001.

GRANTOR:

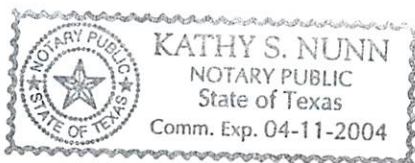
CCNG PROPERTIES, L.P.

By: CCNG, INC.
GENERAL PARTNER

By: [Signature]
Daniel B. Porter
President and CEO

STATE OF TEXAS §
 §
COUNTY OF TRAVIS §

This instrument was acknowledged before me, on the 6 day of July, 2001, by Daniel B. Porter, President and CEO of CCNG, Inc., a Texas corporation, general partner of CCNG Properties, L.P., a Texas limited partnership, on behalf of said corporation and partnership.



[Signature]
Notary Public, State of Texas

STATE OF TEXAS §
 NUECES §
COUNTY OF TRAVIS §

CONSENT AND JOINDER OF MORTGAGEE

For and in consideration of Ten dollars (\$10) and other good and valuable consideration, the receipt and sufficiency which is hereby acknowledged, Bank of America, N.A., successor in interest to NationsBank of Texas N.A., as the owner and holder of indebtedness secured by a deed of trust covering the property described above, which deed of trust is of record in Volume 13271, Page 1316, Real Property Records of Travis County, Texas, as modified and/or extended by instruments recorded under Document No. 1999089500, 2000101045 and 2000190802, Official Public Records of Travis County, Texas, does hereby join in the execution of this Effluent Disposal Utility Easement for the purpose of evidencing its consent hereto and subordinating all of its liens to this Effluent Disposal Utility Easement.

Executed this 27th day of July, 2001.

Bank of America, N.A., successor in interest to
NationsBank of Texas N.A.

By: [Signature]
Printed Name: TOM L Hunt
Title: Vice President

ACKNOWLEDGMENT

THE STATE OF TEXAS §
 NUECES §
COUNTY OF TRAVIS §

This instrument was acknowledged before me on the 27th day of July, 2001, by Tom L Hunt, Vice President Bank of America, N.A., successor in interest to NationsBank of Texas N.A., a national banking association, on behalf of said association.



DEBBIE MEDLIN
NOTARY PUBLIC
STATE OF TEXAS
My Comm. Exp. 03-29-04

[Signature]
Notary Public, State of Texas

AFTER RECORDING RETURN TO:

Lower Colorado River Authority
P.O. Box 220
Austin, Texas 78767-0220
Attn: Imelda Gallegos

COMMENCING for reference at a 1/2" steel pin in rock found in the approximate center line of Little Barton Creek at a northwest corner of that 230.92 acre tract, a portion of the I. & G. N. R.R. Co. Survey No. 57, Abstract No. 2109, and others, in Travis County, Texas, as described in a Warranty Deed from Nellie Hampe Partnership I, Ltd. to Daniel B. Porter in Volume 13212, Page 2535, Real Property Records of Travis County, Texas, and the most westerly southwest corner of that 20.975 acre tract, a portion of the Orran Wade Survey No. 540, Abstract No. 129, a portion of the D. Bohls Survey No. 905, Abstract No. 129, and others, in Travis County, Texas, as described in a Special Warranty Deed from CCNG Development Company, L.P. to Daniel B. Porter in Document Number 2001047246, Official Public Records of Travis County, Texas, said 1/2" steel pin in rock found being also in an east line of that 300.800 acre tract, a portion of the Jarrett Medlin Survey No. 520, Abstract No. 539, and others, in Travis County, Texas, designated as Tract One and described in a Warranty Deed With Vendor's Lien With Correction from Limestone Cooper Properties L.P., et al to CCNG Properties, L.P. in Document Number 2001021869, Official Public Records of Travis County, Texas;

Thence with a west, north and west line of the said Porter 230.92 acre tract and an east, south and east line of the said CCNG Properties, L.P. Tract One of 300.800 acres, being also with a west line of a 137.82 acre tract, being that 149.09 acre tract, save and except 10.500 acres of land, 0.1548 of one acre of land (Parcel "A" WTC Mud #7), 0.1548 of one acre of land (Parcel "B" WTC Mud #7), 0.1547 of one acre of land (Parcel "C" WTC Mud #7), 0.1547 of one acre of land (Parcel "D" WTC Mud #7) and 0.1549 of one acre of land (Parcel "E" WTC Mud #7), a portion of the said I. & G. N. R.R. Co. Survey No. 57, and others, in Travis County, Texas, as described in a Corrected Special Warranty Deed from Daniel B. Porter to CCNG Properties, L.P. in Document Number 2001095167, Official Public Records of Travis County, Texas (CCNG Properties, L.P. 137.82 acre tract), the following calls:

S 2°19'40" E 60.32 feet to a 1/2" iron pipe found;
 N 88°23'00" W 114.19 feet to a 1/2" iron pipe found;
 S 14°21'10" W 48.15 feet to a 1/2" steel pin found;
 S 15°52'30" W 125.35 feet to a 1/2" steel pin found;
 S 16°14'10" W at 281.17 feet passing a 1/2" steel pin with plastic cap found in concrete at the northwest corner of the said CCNG Properties, L.P. 137.82 acre tract, in all a total distance of 354.01 feet to a 1/2" steel pin found;
 S 0°57'00" E 19.54 feet to a 2" metal fence post found;
 S 2°43'10" W 301.02 feet to a calculated point for the POINT OF BEGINNING of the herein described tract;

THENCE crossing the said CCNG Properties, L.P. 137.82 acre tract and the remainder of the said Porter 230.92 acre tract not conveyed to CCNG Properties, L.P. in said Document Number 2001095167, Official Public Records of Travis County, Texas (CCNG Properties, L.P. 137.82 acre tract), courses numbered 1 through 46 inclusive as follows:

- (1) S 86°17'20" E 80.86 feet to a 1/2" steel pin with plastic cap set;
- (2) N 65°09'10" E 144.43 feet to a 1/2" steel pin with plastic cap set;
- (3) S 73°45'00" E 70.69 feet to a 1/2" steel pin with plastic cap set;
- (4) S 40°20'30" E 68.15 feet to a 1/2" steel pin with plastic cap set;

- (5) S 87°21'40" E 105.35 feet to a 1/2" steel pin with plastic cap set;
- (6) S 60°19'30" E 55.75 feet to a 1/2" steel pin with plastic cap set;
- (7) S 26°43'10" E 88.42 feet to a 1/2" steel pin with plastic cap set;
- (8) S 17°07'00" E 70.47 feet to a 1/2" steel pin with plastic cap set;
- (9) S 7°35'30" E at 171.75 feet crossing an east line of the said CCNG Properties, L.P. 137.82 acre tract into the said Porter 230.92 acre tract (remainder), in all a total distance of 253.14 feet to a 1/2" steel pin with plastic cap set;
- (10) S 25°38'20" E at 8.12 feet crossing a north line of the said CCNG Properties, L.P. 137.82 acre tract back into the said CCNG Properties, L.P. 137.82 acre tract, in all a total distance of 75.19 feet to a 1/2" steel pin with plastic cap set;
- (11) S 12°14'00" E 132.54 feet to a 1/2" steel pin with plastic cap set;
- (12) S 5°02'20" E 66.52 feet to a 1/2" steel pin with plastic cap set;
- (13) S 32°38'50" E 222.66 feet to a 1/2" steel pin with plastic cap set;
- (14) S 0°34'20" E 151.61 feet to a 1/2" steel pin with plastic cap set;
- (15) S 9°52'50" E at 121.62 feet crossing an east line of the said CCNG Properties, L.P. 137.82 acre tract into the said Porter 230.92 acre tract (remainder), in all a total distance of 188.04 feet to a 1/2" steel pin with plastic cap set;
- (16) S 6°17'10" W at 10.02 feet crossing an east line of the said CCNG Properties, L.P. 137.82 acre tract back into the said CCNG Properties, L.P. 137.82 acre tract, in all a total distance of 58.04 feet to a 1/2" steel pin with plastic cap set, for an interior corner of the herein described tract;
- (17) S 65°10'20" E at 14.60 feet crossing an east line of the said CCNG Properties, L.P. 137.82 acre tract into the said Porter 230.92 acre tract (remainder), in all a total distance of 99.27 feet to a 1/2" steel pin with plastic cap set, for an interior corner of the herein described tract;
- (18) N 23°48'10" E 47.13 feet to a 1/2" steel pin with plastic cap set;
- (19) N 40°00'50" E 104.94 feet to a 1/2" steel pin with plastic cap set;
- (20) N 65°48'40" E at 183.44 feet crossing a northwest line of the said CCNG Properties, L.P. 137.82 acre tract back into the said CCNG Properties, L.P. 137.82 acre tract, in all a total distance of 237.59 feet to a 1/2" steel pin with plastic cap set;
- (21) N 41°55'20" E 82.46 feet to a 1/2" steel pin with plastic cap set;
- (22) N 66°45'10" E 115.95 feet to a 1/2" steel pin with plastic cap set;
- (23) N 88°50'10" E 135.67 feet to a 1/2" steel pin with plastic cap set;
- (24) S 77°36'30" E 110.59 feet to a 1/2" steel pin with plastic cap set;
- (25) N 80°02'30" E 286.47 feet to a 1/2" steel pin with plastic cap set in rock;
- (26) S 89°27'50" E 192.72 feet to a 1/2" steel pin with plastic cap set;
- (27) N 82°53'40" E 237.22 feet to a 1/2" steel pin with plastic cap set, for a northeast corner of the herein described tract;
- (28) S 32°08'40" E 264.65 feet to a 1/2" steel pin with plastic cap set;
- (29) S 7°00'10" W 165.19 feet to a 1/2" steel pin with plastic cap set;
- (30) S 36°22'10" W 172.79 feet to a 1/2" steel pin with plastic cap set;
- (31) S 68°47'50" W 159.39 feet to a 1/2" steel pin with plastic cap set;
- (32) S 48°00'20" W 254.28 feet to a 1/2" steel pin with plastic cap set;
- (33) N 46°37'40" W 66.36 feet to a 1/2" steel pin with plastic cap set;

(34) S 62°18'10" W 120.41 feet to a 1/2" steel pin with plastic cap previously set;
 (35) S 31°06'10" W 55.09 feet to a 1/2" steel pin with plastic cap previously set;
 (36) S 70°03'00" W 118.31 feet to a 1/2" steel pin with plastic cap previously set;
 (37) N 86°25'40" W 262.98 feet to a 1/2" steel pin with plastic cap previously set;
 (38) N 42°39'40" W 74.79 feet to a 1/2" steel pin with plastic cap set;
 (39) S 81°02'10" W 54.76 feet to a 1/2" steel pin with plastic cap set;
 (40) S 42°18'00" W 195.80 feet to a 1/2" steel pin with plastic cap previously set;
 (41) S 64°46'10" W 132.57 feet to a 1/2" steel pin with plastic cap previously set;
 (42) S 10°37'50" W 160.62 feet to a 1/2" steel pin with plastic cap previously set;
 (43) S 31°33'40" W 347.92 feet to a 1/2" steel pin with plastic cap set;
 (44) S 24°02'00" W 71.07 feet to a 1/2" steel pin with plastic previously cap set;
 (45) S 31°51'30" E 172.71 feet to a 1/2" steel pin with plastic previously cap set;
 (46) S 31°08'30" E 201.44 feet to a 1/2" iron pipe found in the southeast line of the said CCNG Properties, L.P. 137.82 acre tract and the northwest line of that 313.298 acre tract, a portion of the said D. Bohls Survey No. 905, a portion of the said Tyler Tap R.R. Co. Survey No. 169 and a portion of the said I. & G. N. R.R. Co. Survey No. 57, in Travis County, Texas, designated as Tract Five and described in a Special Warranty Deed conveying an undivided one-third (1/3) interest from NAJD II Corp. to Limestone Rost Properties L.P. in Volume 12170, Page 131, Real Property Records of Travis County, Texas, for an east corner of the herein described tract;

(47) THENCE with the southeast line of the said CCNG Properties, L.P. 137.82 acre tract and the northwest line of the said Limestone Rost Properties L.P. Tract Five of 313.298 acres, S 58°55'30" W 146.91 feet to a calculated point at a northwest corner of that 249.30 acre tract, a portion of the said I. & G. N. R.R. Co. Survey No. 57, and others, in Travis County, Texas, designated as TRACT TWO, Parcel Five and described in said Warranty Deed With Vendor's Lien With Correction from Limestone Cooper Properties L.P., et al to CCNG Properties, L.P. in Document Number 2001021869, Official Public Records of Travis County, Texas, for an interior corner of the herein described tract;

(48) THENCE with an east line of the said CCNG Properties, L.P. TRACT TWO, Parcel Five of 249.30 acres, S 36°45'10" E 218.92 feet to a 1/2" steel pin with plastic cap set;

THENCE crossing the said CCNG Properties, L.P. TRACT TWO, Parcel Five of 249.30 acres, courses numbered 49 through 60 inclusive as follows:

- (49) S 3°00'50" E 352.18 feet to a 1/2" steel pin with plastic cap set;
- (50) S 19°29'20" W 352.50 feet to a calculated point;
- (51) S 0°03'20" E 114.09 feet to a calculated point;
- (52) S 35°44'30" W 124.97 feet to a 1/2" steel pin with plastic cap set;
- (53) S 18°44'50" W 215.85 feet to a 1/2" steel pin with plastic cap previously set;
- (54) S 41°37'00" W 169.82 feet to a 1/2" steel pin with plastic cap previously set;
- (55) S 77°58'50" W 126.54 feet to a 1/2" steel pin with plastic cap previously set;
- (56) N 73°03'50" W 148.26 feet to a 1/2" steel pin with plastic cap previously set;
- (57) N 28°44'50" W 129.18 feet to a 1/2" steel pin with plastic cap set;

- (58) N 0°37'10" E 282.38 feet to a 1/2" steel pin with plastic cap set;
- (59) N 24°20'20" E 361.58 feet to a 1/2" steel pin with plastic cap set;
- (60) N 30°00'30" W 292.07 feet to a 1/2" steel pin with plastic cap set;

(61) THENCE crossing the said CCNG Properties, L.P. TRACT TWO, Parcel Five of 249.30 acres and crossing the said CCNG Properties, L.P. 137.82 acre tract, N 8°12'30" E at 99.02 feet crossing a northwest line of the said CCNG Properties, L.P. TRACT TWO, Parcel Five of 249.30 acres and the southeast line of the said CCNG Properties, L.P. 137.82 acre tract, in all a total distance of 338.14 feet to a 1/2" steel pin with plastic cap set;

THENCE crossing the said CCNG Properties, L.P. 137.82 acre tract, courses numbered 62 through 66 inclusive as follows:

- (62) N 29°19'50" W 237.79 feet to a 1/2" steel pin with plastic cap set;
- (63) S 76°56'40" W 183.05 feet to a 1/2" steel pin with plastic cap set;
- (64) N 42°31'10" W 466.02 feet to a 1/2" steel pin with plastic cap set;
- (65) N 2°23'40" W 1093.92 feet to a 1/2" steel pin with plastic cap set;
- (66) N 39°35'10" E 115.51 feet to a 1/2" steel pin with plastic cap set;

(67) THENCE crossing the said CCNG Properties, L.P. 137.82 acre tract and crossing the said CCNG Properties, L.P. Tract One of 300.800 acres, N 0°30'10" W at 375.97 feet crossing the west line of the said CCNG Properties, L.P. 137.82 acre tract and an east line of the said CCNG Properties, L.P. Tract One of 300.800 acres, in all a total distance of 401.30 feet to a 1/2" steel pin with plastic cap previously set;

THENCE crossing the said CCNG Properties, L.P. Tract One of 300.800 acres, courses numbered 68 through 94 inclusive as follows:

- (68) N 44°11'00" W 247.50 feet to a 1/2" steel pin with plastic cap set;
- (69) S 42°37'50" W 357.60 feet to a 1/2" steel pin with plastic cap set;
- (70) N 66°32'20" W 123.18 feet to a 1/2" steel pin with plastic cap set;
- (71) S 70°38'10" W 404.80 feet to a 1/2" steel pin with plastic cap set;
- (72) S 33°44'40" W 556.33 feet to a 1/2" steel pin with plastic cap set;
- (73) N 77°10'30" W 206.48 feet to a 1/2" steel pin with plastic cap set;
- (74) N 21°52'40" E 201.49 feet to a 1/2" steel pin with plastic cap set;
- (75) N 63°20'50" W 186.16 feet to a 1/2" steel pin with plastic cap set;
- (76) N 7°35'40" W 99.15 feet to a 1/2" steel pin with plastic cap set;
- (77) N 9°52'10" E 193.09 feet to a 1/2" steel pin with plastic cap set;
- (78) S 63°38'10" W 351.70 feet to a 1/2" steel pin with plastic cap set;
- (79) N 69°56'50" W 146.30 feet to a 1/2" steel pin with plastic cap set;
- (80) N 40°43'20" W 158.24 feet to a 1/2" steel pin with plastic cap set;
- (81) N 27°42'20" W 159.65 feet to a 1/2" steel pin with plastic cap set;
- (82) N 2°38'50" W 132.77 feet to a 1/2" steel pin with plastic cap set;
- (83) N 49°42'40" E 501.76 feet to a 1/2" steel pin with plastic cap set;
- (84) S 80°09'50" E 86.83 feet to a 1/2" steel pin with plastic cap set;
- (85) N 52°01'30" E 167.51 feet to a 1/2" steel pin with plastic cap set;

- (86) N 41°13'20" W 141.64 feet to a 1/2" steel pin with plastic cap set;
- (87) N 11°37'40" E 93.06 feet to a 1/2" steel pin with plastic cap set;
- (88) N 14°34'30" W 143.69 feet to a 1/2" steel pin with plastic cap set;
- (89) N 10°42'10" E 76.33 feet to a 1/2" steel pin with plastic cap set;
- (90) N 32°33'50" W 149.10 feet to a 1/2" steel pin with plastic cap set;
- (91) N 37°57'30" E 63.70 feet to a calculated point;
- (92) N 36°53'00" E 119.63 feet to a calculated point at beginning of curve;
- (93) with a curve to the right an arc distance of 72.79 feet, said curve having a radius of 250.00 feet, a central angle of 16°40'57", and a chord of which bears N 45°13'20" E 72.53 feet to a calculated point at end of curve;
- (94) N 53°33'50" E 17.48 feet to a calculated point in a southwest line of a proposed 6.787 acre Private Street, Electric, Access, Drainage, Water and Wastewater Easement, a portion of the said Jarrett Medlin Survey No. 520, and others, in Travis County, Texas;

THENCE crossing the said CCNG Properties, L.P. Tract One of 300.800 acres with a southwest, southeast, northeast and southeast line of the said proposed 6.787 acre Private Street, Electric, Access, Drainage, Water and Wastewater Easement, courses numbered 95 through 99 inclusive as follows:

- (95) S 36°26'10" E 15.00 feet to a calculated point;
- (96) N 53°33'50" E 40.00 feet to a calculated point;
- (97) N 36°26'10" W 15.00 feet to a calculated point;
- (98) N 53°33'50" E 55.61 feet to a calculated point at beginning of curve;
- (99) with a curve to the left an arc distance of 43.11 feet, said curve having a radius of 360.00 feet, a central angle of 6°51'40", and a chord of which bears N 50°08'00" E 43.08 feet to a calculated point, for a north corner of the herein described tract;


THENCE crossing the said CCNG Properties, L.P. Tract One of 300.800 acres, courses numbered 100 through 113 inclusive as follows:

- (100) S 49°22'30" E 188.87 feet to a 1/2" steel pin with plastic cap set;
- (101) S 82°04'40" E 321.72 feet to a 1/2" steel pin with plastic cap set;
- (102) N 19°36'00" E 187.84 feet to a 1/2" steel pin with plastic cap set;
- (103) N 62°03'30" E 187.29 feet to a 1/2" steel pin with plastic cap set;
- (104) S 67°44'20" E 153.82 feet to a 1/2" steel pin with plastic cap set;
- (105) S 40°52'30" E 170.71 feet to a 1/2" steel pin with plastic cap set;
- (106) S 52°16'10" E 120.84 feet to a 1/2" steel pin with plastic cap set;
- (107) S 16°40'10" E 99.56 feet to a 1/2" steel pin with plastic cap set;
- (108) S 5°15'00" E 221.56 feet to a 1/2" steel pin with plastic cap set;
- (109) S 58°25'20" E 126.87 feet to a 1/2" steel pin with plastic cap set;
- (110) S 5°05'40" W 75.39 feet to a 1/2" steel pin with plastic cap set;
- (111) S 64°36'20" E 212.67 feet to a 1/2" steel pin with plastic cap set;
- (112) N 82°56'20" E 73.84 feet to a 1/2" steel pin with plastic cap set;
- (113) N 74°58'30" E 158.83 feet to the POINT OF BEGINNING of the herein described tract, containing 168.25 acres of land.



Metes and Bounds Description Prepared June 28, 2001.
Survey Revised June 28, 2001 From A
Survey Completed November 22, 2000.

METCALFE & SANDERS, INC.
Land Surveyors

By: 

George L. Sanders
Texas Registered Professional
Land Surveyor No. 1838

Ref: Plan 7839H
Ref: Plan 7839G
Ref: Plan 7839F
Ref: Plan 7839A

FB 862, P 1-9 & DC
FB 861, P 9-60 & DC
FB 848, P 1-45 & DC
FB 843, P 1-42 & DC
FB 822, P 1-24 & DC
FB 607, P 55-56
FB 590, P 7-19

c:\project\00015\doc\gc168ac.doc

Exhibit B

1. The restrictive covenants of record in Volume 6889, Page 1641, Volume 8300, Page 785 and Volume 8509, Page 38 of the Deed Records of Travis County, Texas. (affects that portion of the golf course out of the 249.30 acre tract.)
 - a. Electric transmission and/or distribution line easement granted to the City of Austin, by instrument dated October 15, 1940, recorded in Volume 659, Page 560 of the Deed Records of Travis County, Texas. (affects that portion of the proposed golf course out of the 149.09 acre tract)
 - b. Communications easement granted to Southwestern Bell Telephone Company, by instrument dated April 19, 1954, recorded in Volume 1465, Page 9 of the Deed Records of Travis County, Texas. (affects that portion of the proposed golf course out of the 300.800 acre tract)
 - c. Electric and telephone line(s) easement granted to the City of Austin, by instrument dated August 19, 1959, recorded in Volume 2128, Page 5 of the Deed Records of Travis County, Texas. (affects that portion of the proposed golf course out of the 300.800 acre tract)
 - d. Electric transmission and/or distribution line easement granted to Pedernales Electric Cooperative, Inc., by instrument dated May 28, 1971, recorded in Volume 4057, Page 983 of the Deed Records of Travis County, Texas, to the extent that the same may affect the subject property. (affects that portion of the proposed golf course out of the 300.800 acre tract)
 - e. Petition for Creation of West Travis County Municipal Utility District No. 8, recorded in Document No. 2000019547 of the Official Public Records of Travis County, Texas. (affects that portion of the proposed golf course out of the 300.800 acre tract)
 - f. Any portion of the property lying within the boundaries of a public road, including, but not limited to the one dedicated Travis County, Texas, and the public by Henry S. Miller Company, Trustee in that certain Road Dedication and Right-of-Way Deed dated August 28, 1973, recorded in Volume 4725, Page 1226 of the Deed Records of Travis County, Texas. (affects that portion of the proposed golf course out of the 300.800 acre tract)
 - g. Subject to the terms, conditions and stipulations contained in the Easement Estate created in that certain Effluent Disposal Utility Easement dated _____, 2001, from CCNG Development Company, L.P., a Texas limited partnership to the Lower Colorado River Authority, a political subdivision of the State of Texas, and its successors and assigns, recorded in Document No. _____ of the Official Public Records of Travis County, Texas.

- h. Subject to the terms, conditions and stipulations contained in that certain Utility Facilities Acquisition Agreement by and between CCNG Development Company, L.P., and the Lower Colorado River Authority as evidenced by the Memorandum of Agreement filed December 13, 1999, recorded in Document No. 19999153839 of the Official Public Records of Travis County, Texas.**
- i. The rights of West Travis County Municipal Utility District No. 7 to levy taxes and issue bonds. (affects that portion of the proposed golf course out of the 149.09 acre tract)**
- j. Subject to the terms, conditions and stipulations contained in that certain agreement dated May 11, 2000, by and between CCNG Development Company, L.P., as Participant or Assignee, and the Balcones Canyonlands Coordinating Committee as Permit Holder or Assignor, as evidenced in that certain Recitals filed May 15, 2000, recorded in Document No. 2000073358 of the Official Public Records of Travis County, Texas.**
- k. Rights of ingress and egress to and from that certain 10.500 acre tract of land described in deed dated March 2, 2001, recorded in Document No. 2001047245 of the Official Public Records of Travis County, Texas. (affects that portion of the proposed golf course out of the 149.09 acre tract)**
- l. Conservation easement granted to the Village of Bee Cave, Texas, by instrument dated May 3, 2001, recorded under Document No. 2001073262 of the Official Public Records of Travis County, Texas.**
- m. Petition for creation of West Travis County Municipal Utility District No. 6, filed February 10, 2000, recorded under Document No. 2000019545 of the Official Public Records of Travis County, Texas. (affects that portion of the proposed golf course out of the 249.30 acre tract)**
- n. Electric transmission and/or distribution line easement granted to the City of Austin, by instrument dated October 15, 1940, recorded in Volume 659, Page 555 of the Deed Records of Travis County, Texas. (affects that portion of the proposed golf course out of the 249.30 acre tract)**
- o. An undivided one-half non-participating royalty interest in all oil, gas and other minerals, together with all rights relating thereto, express or implied, reserved in instrument recorded in Volume 4738, Page 2077 of the Deed Records of Travis County, Texas. Said mineral estate not traced further herein. (affects that portion of the proposed golf course out of the 249.30 acre tract)**
- p. The terms, conditions and stipulations set out in that certain Wastewater Easement and Right-of-Way dated _____, 2001, from CCNG Properties, L.P., a to the Lower Colorado River Authority, its successors and/or assigns recorded under Document No. _____ of the Official Public Records of Travis County, Texas.**

- q. Any and all leases, recorded or unrecorded, with rights of tenants in possession.
- r. Easements, or claims of easements, which are not recorded in the public records.
- s. Rights of parties in possession. (Owner's Policy Only)

FILED AND RECORDED
OFFICIAL PUBLIC RECORDS

[Handwritten Signature]

08-08-2001 02:35 PM 200108002
FORDL 335 '00
DANA DEBEAUVOIR COUNTY CLERK
TRAVIS COUNTY TEXAS

Recorders Memorandum-At the time of recordation this instrument was found to be inadequate for the best reproduction, because of illegibility, carbon or photocopy, discolored paper, etc. All blockouts, additions and changes were present at the time the instrument was filed and recorded.

Attachment A2

**Treated Effluent Disposal Easement –
Falconhead West**



TREATED EFFLUENT DISPOSAL EASEMENT

STATE OF TEXAS

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF TRAVIS

THAT WHEREAS, Falconhead West, L.P., a Texas limited partnership ("Owner") is the owner of that certain real property described on **Exhibit "A"** attached hereto and incorporated herein by reference (the "Property"); and


WHEREAS, Owner has obtained, from Travis County Water Control and Improvement District No. 17 ("WCID 17") a commitment for the provision of wastewater service to the homes to be constructed within that certain residential real estate development project locally known as "Falconhead West" (herein so called) in which the Property is located; and

WHEREAS, in order to facilitate the provision of wastewater service to Falconhead West, the Lower Colorado River Authority ("LCRA") has entered into an agreement with WCID 17, pursuant to which LCRA agrees to provide wastewater service to WCID 17 on a wholesale basis (the "Wholesale Wastewater Agreement"); and

WHEREAS, in order to induce LCRA to enter into the Wholesale Wastewater Agreement, Owner has entered into an agreement with LCRA, pursuant to which Owner has agreed to fund \$450,000.00 in costs associated with the West Travis County Regional Wastewater System (the "Cost Participation Agreement") and has agreed to provide to LCRA this treated effluent disposal easement:

NOW THEREFORE, for and in consideration of the premises herein stated and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and confessed, Owner has this day GRANTED, SOLD AND CONVEYED and by these presents does hereby GRANT, SELL AND CONVEY unto the LCRA, its successors and assigns an easement (the "Easement") for the disposal of treated domestic wastewater effluent under the surface of the Property and for the construction and installation of underground irrigation lines and related equipment for the disposal of treated domestic wastewater effluent under the surface of the Property (the "Facilities"), subject to all title exceptions which are filed of record or which are visible or apparent on the ground and which affect the Property and subject, further, to the terms, conditions, reservations, restrictions, covenants, limitations and other matters set forth herein.

TO HAVE AND TO HOLD, the above described Easement, together with all and singular, the rights and appurtenances thereto in anywise belonging, unto LCRA, and LCRA's successors and assigns forever, and subject to the reservations from and exceptions to conveyance and warranties set forth herein, Owner does hereby bind itself and its successors and assigns to WARRANT AND FOREVER DEFEND all and singular, the said Easement unto LCRA, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, by, through or under Owner, but not otherwise; provided, however, that the Easement is granted by Owner and accepted by LCRA subject to the following terms, conditions, reservations, restrictions, covenants, limitations and other matters:

- 
1. The Easement is limited to the disposal of treated domestic wastewater effluent by means of subsurface irrigation only. Spray irrigation and all other methods of disposal which involve the disposition or release of effluent at or above the surface of the ground are expressly prohibited. Further, it is expressly agreed and understood that only treated domestic wastewater effluent may be disposed of under the terms of the Easement. For purposes hereof, "domestic wastewater" means wastewater from residential, retail, restaurant and office users. No effluent from any other types of users (including without limitation manufacturers and industrial users) may be disposed of within the Property.
 2. Disposition of effluent within the Property may not exceed the amount allowed under LCRA's permit for the disposition of treated effluent from the Texas Commission on Environmental Quality.
 3. No effluent may be disposed of within the Property until and unless LCRA obtains a permit for the disposition of treated effluent within the Property (the "Permit") from the Texas Commission on Environmental Quality (the "TCEQ"). Owner agrees to support LCRA's Permit application and will not protest the Permit application or any amendments to the Permit. LCRA agrees that: (a) the quality of effluent disposed of within the Property will be in compliance with the Permit and all permit conditions imposed by the TCEQ; (b) the application rate for the disposal of effluent within the Property will be in compliance with the Permit and all permit conditions imposed by the TCEQ; (c) the design, installation, operation and maintenance of the Facilities will be in compliance with the Permit and the permit conditions imposed by the TCEQ; and (d) plans and specifications for all of the Facilities will be reviewed and approved by the TCEQ.
 4. LCRA may install an above-ground pumphouse within the Property so long as LCRA obtains written approval from Owner of LCRA's plans for such pumphouse and also for landscaping to be installed by LCRA to screen the same from view. Owner's approval of the plans for the pumphouse and the proposed landscaping to be installed by LCRA will not be unreasonably withheld by Owner. The irrigation and disposal components of the Facilities must be installed completely underground. After the completion of construction, all portions of the surface of the Property which have been disturbed will be re-vegetated by the LCRA with native vegetation and will otherwise be restored, to the full extent reasonably practicable, to their original condition. Except for the pumphouse referenced above in this Paragraph 4 and any necessary roads for access to the Property, LCRA will not be allowed to place any improvements upon the surface of the Property which create any impervious cover. LCRA shall, after each entry upon the Property, leave the Property in substantially the same condition that it was in prior to such entry to the full extent reasonably practicable.
 5. LCRA understands and acknowledges that Owner intends to use the Property for open space and passive recreational purposes for the benefit of residents of Falconhead West and possibly members of the public generally. Owner intends to dedicate surrounding property to the Village of Bee Cave, Texas for park

purposes. Owner expressly reserves the right to use the surface of the Property for such purposes and the right to grant to others the right to use the surface of the Property for such purposes. LCRA agrees to conduct its activities within the Easement and to operate and maintain the Facilities so as to protect the health, safety and welfare of all persons using the surface of the Property for recreation and open space purposes. Without limitation on the generality of the foregoing, LCRA agrees, after the completion of construction of any Facilities, to operate and maintain the Facilities in good repair and adequate to provide Type I effluent as defined in Chapter 210 of the Texas Administrative Code, so that the Facilities function as intended and do not create or emit any offensive odors or other nuisance conditions such as excessive standing water.

6. The Facilities must be owned, operated and maintained in compliance with: (a) the Permit; (b) the terms and conditions of this instrument; (c) all applicable restrictions which are filed of record with respect to the Property concurrently with the execution of this instrument; and (d) all applicable local, state and federal laws and regulations.
7. LCRA is not and shall not be construed as Owner's agent in contracting for any improvements to the Property, and shall have no authority to pledge, mortgage, hypothecate or otherwise encumber any interest in the Property. To the extent provided by law, LCRA shall indemnify and hold harmless Owner from and against any and all mechanics', materialmen's or other liens or claims (and all costs and expenses associated therewith) arising out of any such work. LCRA will not create or permit to be created or remain, and will discharge, at LCRA's sole cost and expense, any and all liens, encumbrances or charges levied on account of any builder's, supplier's, mechanic's, laborer's, materialmen's or similar lien which might become a lien, encumbrance or charge upon the Property, or the income derived therefrom, with respect to any work or services performed or material furnished by or at the direction of LCRA. If any such liens, encumbrances or charges shall at any time be filed against the Property, by reason of work or services performed or material furnished by or at the direction of LCRA, LCRA within thirty (30) days after the filing thereof will cause the same to be fully discharged and released of record by payment, deposit, bond, order of a court of competent jurisdiction or otherwise.
8. To the extent provided by law, LCRA shall and hereby does agree to indemnify and hold harmless Owner, Owner's successors and assigns and any lender that holds a lien covering the Property, from and against all liability, damages, suits, actions, costs and expenses or whatsoever nature (including reasonable attorney's fees) to persons or property caused by or arising out of any of LCRA's operations hereunder or otherwise relating to the construction, operation, maintenance and/or service of the Facilities and/or caused by or arising out of LCRA's (or its employees', agents' or contractors') failure to comply at all times with the terms and provisions set out in this instrument.

9. Owner expressly reserves unto itself and Owner's successors and assigns, the right to use and enjoy the Property for any purposes whatsoever, except insofar as said use and enjoyment unreasonably interferes with the rights hereby granted to LCRA. Owner specifically reserves the right: (a) to grant additional easements or rights-of-way upon or across the Property to such other persons or entities and for such purposes as Owner may desire; (b) to construct or locate upon, within and across the Property roads, trails, fences, signs, and other non-habitable improvements which do not unreasonably interfere with the rights granted to LCRA under this instrument; and (c) to use the Property for the storage and disposal of surface water, rain or any excess water.
10. LCRA will have no right to assign its rights under this agreement to any other person or entity.
11. Notwithstanding any provision in this instrument to the contrary, it is expressly agreed and understood that: (a) Owner has provided the Easement solely for the purpose of assuring the provision of wastewater service to Falconhead West by LCRA and WCID 17; and (b) no disposal of effluent within the Property will be permitted during any period of time when wastewater service is not being provided by LCRA and/or WCID 17 to Falconhead West, then the Easement will be deemed to have been abandoned and all of the rights of the LCRA and its successors or assigns shall thereupon terminate and be void and of no further force or effect.

Executed by the undersigned effective as of December 6, 2006.

OWNER:

FALCONHEAD WEST, L.P., a Texas limited partnership

By: _____

_____, a _____
_____, its General Partner

By: _____

Printed Name: John Daurich

Title: VP - Managing General Partner

LCRA:

LOWER COLORADO RIVER AUTHORITY



By: _____

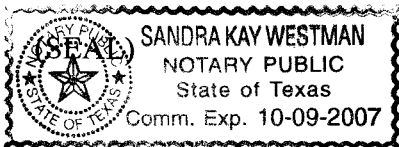
Printed Name: Scott Ahlstrom, P.E., P.M.P.

Title: Manager, Water and Wastewater Utility Services

THE STATE OF TEXAS §

COUNTY OF TRAVIS §

This instrument was acknowledged before me this 6th day of December, 2006
by John Lamuch, VP Managing of Falconhead West, L.P.
, a limited partnership, General Partner of Falconhead West, L.P., a Texas limited
partnership on behalf of said limited partnership.



Sandra Kay Westman
Notary Public Signature

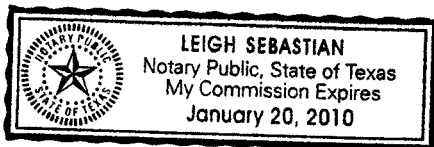
THE STATE OF TEXAS §

COUNTY OF TRAVIS §

This instrument was acknowledged before me this 11 day of December, 2006
by Scott Ahlstrom, P.E., P.M.P., Manager, Water and Wastewater Utility Services of the Lower
Colorado River Authority, a conservation and reclamation district.

(SEAL)

Scott Ahlstrom
Notary Public Signature



**AFTER RECORDING, RETURN TO;
LOWER COLORADO RIVER AUTHORITY
P.O. BOX 210
AUSTIN, TX 78767
ATTN; IMELDA GALLEGOS**

122.966 Acres
Falconhead West
LCRA Irrigation Easement
Page 1 of 11

T.C.R.R. Co. Survey No. 181, Abstract No. 2259
C. Wolfe Survey No. 182, Abstract No. 2525
J.A. Polvado No. 547, Abstract No. 645
06538.17
November 20, 2006

STATE OF TEXAS

§

COUNTY OF TRAVIS

§

§

FIELDNOTE DESCRIPTION of a 122.966 acre tract of land in the T.C.R.R. Co. Survey No. 181, Abstract No. 2259, the C. Wolfe Survey No. 182, Abstract No. 2525 and the J.A. Polvado Survey No. 547, Abstract No. 645, Travis County, Texas, and being a portion that 377.46 acre tract of land conveyed to Falconhead West, L.P. by the deeds recorded as Document Nos. 2006025401 through 2006025415 of the Official Public Records of Travis County, Texas; said 122.966 acre tract is more particularly described by metes and bounds as follows:

BEGINNING at a ½" iron rod with plastic cap marked "Capital Surveying Co., Inc." set on the curving, northerly right-of-way line of State Highway 71 (variable width R.O.W., 180.00 feet wide at this point) for the southwest corner of said 377.46 acre tract, and being the southeast corner of that 456.63 acre tract conveyed to James P. Heard, Jr. et al as recorded in Document No. 2000133661 of the Official Public Records of Travis County, from which a highway right-of-way marker found at the end of said right of way curve, bears N67°50'31"W, a chord distance of 760.93 feet and an arc distance of 771.51 feet and said beginning point having grid coordinates of X = 3,032,065.06, Y = 10,087,053.42 – Texas State Plane Coordinate System, Central Zone;

THENCE, leaving the northerly right-of-way line of State Highway 71 with the common westerly line of said 377.46 acre tract and easterly line of said 456.63 acre tract, the following two (2) courses:

- 1) N00°07'09"E, at 17.56 feet pass a found cotton spindle and continuing for a total distance of 2302.29 feet to a metal fence post found for an angle point;
- 2) N46°45'08"E, a distance of 2106.35 feet to a ½" iron rod found for the common northwest corner of said 377.46 acre tract and northeast corner of said 456.63 acre tract and being on the southerly line of Flint Valley Subdivision recorded as Document No. 199900389 of the Official Public Records of Travis County;

THENCE, with the common northerly line of said 377.46 acre tract and southerly line of Flint Valley Subdivision and generally along the southerly line of the Henning Heights Subdivision, as recorded in Volume 85, Page 790 of the Plat Records of Travis County, Texas, the following two (2) courses:

- 1) S63°48'46"E, at 32.45 feet pass a ½" iron rod found for the southwest corner of Lot 5 of said Flint Valley subdivision, at 600.17 feet pass a 60d nail in a fence post found for the common southeast corner of the Flint Valley subdivision and southwest corner of said Henning Heights subdivision, and continuing for a total distance of 1254.96 feet to a cotton spindle found for an angle point;
- 2) S65°05'52"E, a distance of 160.59 feet to a ½" iron rod with plastic cap marked "Capital Surveying Co., Inc." set for the northwest corner of the herein described tract, being on the westerly line of the Village of Bee Cave's City Limits;

November 20, 2006

THENCE, Southwesterly, leaving the northerly line of said 377.46 acre tract, across the 377.46 acre tract with the aforesaid Village of Bee Cave City Limits line, with a curve to the left having a radius of 5280.00 feet and a central angle of $00^{\circ}27'14''$ (chord bears $S32^{\circ}53'51''W$, 41.82 feet) for an arc distance of 41.82 feet to a $\frac{1}{2}$ " iron rod with plastic cap marked "Capital Surveying Co., Inc." set for corner;

THENCE, leaving the aforesaid Village of Bee Cave City Limits line, continuing across the 377.46 acre tract the following twenty (20) courses:

- 1) $N65^{\circ}48'03''W$, a distance of 3.40 feet to a calculated point;
- 2) $N78^{\circ}09'57''W$, a distance of 98.00 feet to a calculated point;
- 3) $N89^{\circ}41'18''W$, a distance of 89.61 feet to a calculated point;
- 4) $S86^{\circ}59'51''W$, a distance of 70.00 feet to a calculated point;
- 5) $S88^{\circ}27'23''W$, a distance of 62.14 feet to a calculated point;
- 6) $S12^{\circ}14'07''W$, a distance of 130.00 feet to a calculated point;
- 7) Northwestery, with a curve to the right, non-tangent to the previous course, having a radius of 175.00 feet and a central angle of $16^{\circ}49'39''$ (chord bears $N69^{\circ}21'04''W$, 51.21 feet) for an arc distance of 51.40 feet to a calculated point of curvature of a compound curve;
- 8) Northwestery, with a curve to the right having a radius of 15.00 feet and a central angle of $52^{\circ}27'21''$ (chord bears $N34^{\circ}42'34''W$, 13.26 feet) for an arc distance of 13.73 feet to a calculated point of reverse curvature;
- 9) Northwestery, with a curve to the left having a radius of 50.00 feet and a central angle of $51^{\circ}29'36''$ (chord bears $N34^{\circ}13'42''W$, 43.44 feet) for an arc distance of 44.94 feet to a calculated point;
- 10) $N30^{\circ}01'30''E$, with a line non-tangent to the previous curved course, a distance of 130.00 feet to a calculated point;
- 11) $N65^{\circ}36'05''W$, a distance of 80.98 feet to a calculated point;
- 12) $S75^{\circ}15'53''W$, a distance of 83.60 feet to a calculated point;
- 13) $S71^{\circ}17'18''W$, a distance of 54.04 feet to a calculated point;
- 14) $S30^{\circ}18'09''W$, a distance of 109.72 feet to a calculated point;
- 15) $S01^{\circ}41'33''W$, a distance of 90.37 feet to a calculated point;
- 16) $S19^{\circ}19'47''E$, a distance of 65.82 feet to a calculated point;
- 17) $S56^{\circ}26'46''E$, a distance of 117.87 feet to a calculated point;

- 18) S73°06'08"E, a distance of 92.59 feet to a calculated point;
- 19) S80°26'28"E, a distance of 99.40 feet to a calculated point;
- 20) N87°55'48"E, a distance of 148.03 feet to a ½" iron rod with plastic cap marked "Capital Surveying Co., Inc." set for corner on the aforesaid Village of Bee Cave City Limits line;

THENCE, with said Village of Bee Cave City Limits line, the following two (2) courses:

- 1) Southwesterly, with a curve to the left, non-tangent to the previous course, having a radius of 5280.00 feet and a central angle of 00°53'11" (chord bears S28°34'48"W, 81.67 feet) for an arc distance of 81.67 feet to a ½" iron rod with plastic cap marked "Capital Surveying Co., Inc." set for a point of tangency;
- 2) S28°08'13"W, a distance of 909.37 feet to a ½" iron rod with plastic cap marked "Capital Surveying Co., Inc." set for corner;

THENCE, leaving the said Village of Bee Cave City Limits line, continuing across the 377.46 acre tract the following thirty one (31) courses:

- 1) N75°45'14"W, a distance of 66.28 feet to a calculated point;
- 2) S89°31'56"W, a distance of 71.25 feet to a calculated point;
- 3) S62°50'28"W, a distance of 121.75 feet to a calculated point;
- 4) S16°42'02"W, a distance of 90.40 feet to a calculated point;
- 5) S76°25'36"E, a distance of 130.41 feet to a calculated point at the beginning of a curve;
- 6) Southeasterly, with a non-tangent curve to the left having a radius of 50.00 feet and a central angle of 43°23'41" (chord bears S16°44'58"E, 36.97 feet) for an arc distance of 37.87 feet to a calculated point of reverse curvature;
- 7) Southeasterly, with a curve to the right having a radius of 15.00 feet and a central angle of 52°01'12" (chord bears S12°26'12"E, 13.16 feet) for an arc distance of 13.62 feet to a calculated point of tangency;
- 8) S13°34'24"W, a distance of 13.60 feet to a calculated point;
- 9) N76°25'36"W, a distance of 130.00 feet to a calculated point;
- 10) S13°34'24"W, a distance of 140.02 feet to a calculated point;
- 11) S22°31'00"W, a distance of 70.04 feet to a calculated point;
- 12) S31°10'44"W, a distance of 61.41 feet to a calculated point;

- 13) N21°44'21"W, a distance of 140.00 feet to a calculated point;
- 14) S68°15'39"W, a distance of 130.00 feet to a calculated point;
- 15) N21°44'21"W, a distance of 43.07 feet to a calculated point for a point of curvature of a curve to the right;
- 16) Northeasterly, with said curve to the right having a radius of 15.00 feet and a central angle of 52°01'12" (chord bears N04°16'15"E, 13.16 feet) for an arc distance of 13.62 feet to a calculated point of reverse curvature;
- 17) Northeasterly, with a curve to the left having a radius of 50.00 feet and a central angle of 13°44'58" (chord bears N23°24'22"E, 11.97 feet) for an arc distance of 12.00 feet to a calculated point;
- 18) N68°15'39"E, with a line non-tangent to the previous course, a distance of 130.00 feet to a calculated point;
- 19) N27°25'08"W, a distance of 118.68 feet to a calculated point;
- 20) N64°03'13"W, a distance of 83.22 feet to a calculated point;
- 21) N89°29'51"W, a distance of 75.33 feet to a calculated point;
- 22) S67°10'32"W, a distance of 70.22 feet to a calculated point
- 23) S41°36'35"W, a distance of 89.02 feet to a calculated point;
- 24) S18°01'54"W, a distance of 57.94 feet to a calculated point;
- 25) S01°15'33"W, a distance of 81.27 feet to a calculated point;
- 26) S41°34'10"E, a distance of 94.60 feet to a calculated point;
- 27) S21°40'07"E, a distance of 210.43 feet to a calculated point;
- 28) S23°00'08"E, a distance of 78.82 feet to a calculated point;
- 29) S28°50'14"E, a distance of 84.56 feet to a calculated point;
- 30) S35°15'28"E, a distance of 84.56 feet to a calculated point;
- 31) S41°40'41"E, a distance of 59.45 feet to a ½" iron rod with plastic cap marked "Capital Surveying Co., Inc." set on the aforesaid Village of Bee Cave City Limits line;

THENCE, S28°08'13"W, with the said Village of Bee Cave City Limits line, a distance of 679.94 feet to a ½" iron rod with plastic cap marked "Capital Surveying Co., Inc." set for corner, from which, a ½" iron rod with plastic cap marked "Capital Surveying Co., Inc." set on the common southerly line of said 377.46 acre tract and northerly right-of-way line of State Highway 71 bears S28°08'13"W, 381.05 feet;

THENCE, leaving the said Village of Bee Cave City Limits line, continuing across the 377.46 acre tract the following eighteen (18) courses:

- 1) S79°53'36"W, a distance of 373.38 feet to a calculated point;
- 2) N17°51'42"W, a distance of 154.34 feet to a calculated point;
- 3) N42°35'55"E, a distance of 161.64 feet to a calculated point;
- 4) N25°26'06"E, a distance of 250.95 feet to a calculated point;
- 5) N82°00'26"W, a distance of 171.03 feet to a calculated point;
- 6) S53°19'35"W, a distance of 267.02 feet to a calculated point;
- 7) S37°27'17"W, a distance of 63.80 feet to a calculated point;
- 8) N64°38'03"W, a distance of 10.00 feet to a ½" iron rod with plastic cap marked "Capital Surveying Co., Inc." set;
- 9) N50°43'33"W, a distance of 150.57 feet to a ½" iron rod with plastic cap marked "Capital Surveying Co., Inc." set;
- 10) S74°24'37"W, a distance of 219.93 feet to a ½" iron rod with plastic cap marked "Capital Surveying Co., Inc." set;
- 11) S15°35'23"E, a distance of 105.00 feet to a ½" iron rod with plastic cap marked "Capital Surveying Co., Inc." set;
- 12) N74°24'37"E, a distance of 163.65 feet to a ½" iron rod with plastic cap marked "Capital Surveying Co., Inc." set;
- 13) S64°38'02"E, a distance of 107.03 feet to a calculated point;
- 14) S46°43'41"W, a distance of 155.07 feet to a calculated point;
- 15) S01°33'37"W, a distance of 200.00 feet to a calculated point;
- 16) S83°44'41"W, a distance of 235.23 feet to a calculated point;
- 17) S84°44'43"W, a distance of 44.99 feet to a calculated point;
- 18) S04°15'14"E, a distance of 302.80 feet to a ½" iron rod with plastic cap marked "Capital Surveying Co., Inc." set on the common curving southerly line of said 377.46 acre tract and northerly right-of-way line of State Highway 71 (180.00 feet wide right-of-way at this point), from which a highway right-of-way marker found at the end of curve bears N80°56'49"E, a chord distance of 55.02 feet and an arc distance of 55.02 feet;

122.966 Acres
Falconhead West
LCRA Irrigation Easement
Page 6 of 11

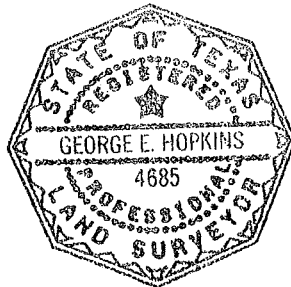
T.C.R.R. Co. Survey No. 181, Abstract No. 2259
C. Wolfe Survey No. 182, Abstract No. 2525
J.A. Polvado No. 547, Abstract No. 645
06538.17
November 20, 2006

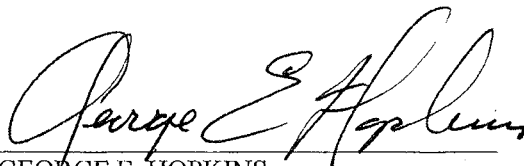
THENCE, Southwesterly with a curve to the right, having a radius of 1342.39 feet and a central angle of $13^{\circ}34'19''$ (chord bears $S88^{\circ}54'26''W$, 317.24 feet) for an arc distance of 317.98 feet to the POINT OF BEGINNING, CONTAINING within these metes and bounds 122.966 acres of land area;

Bearing Basis: Grid Bearings, Texas State Plane Coordinate System, Central Zone.

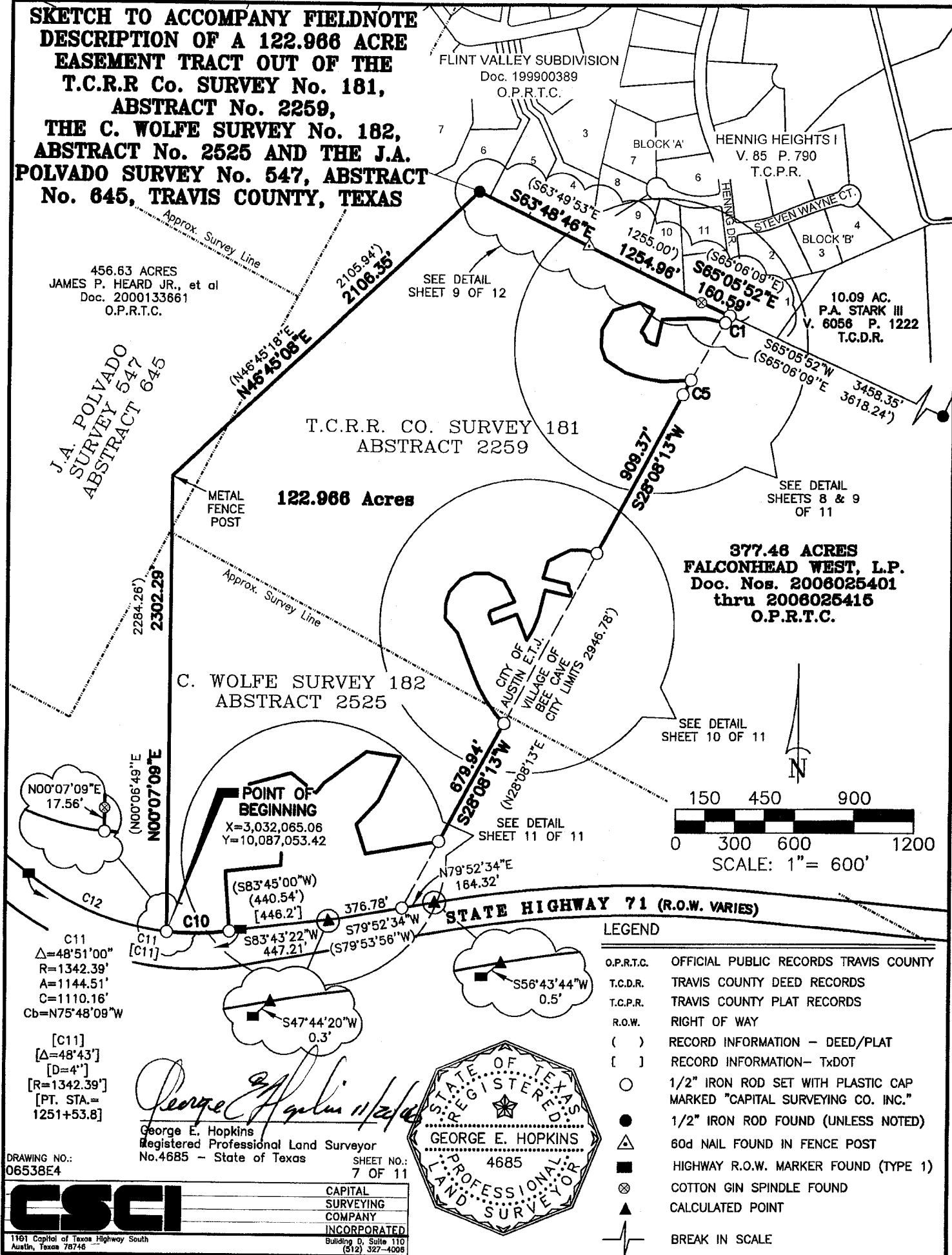
I, George E. Hopkins, a Registered Professional Land Surveyor, do hereby certify that the above easement description is true and correct to the best of my knowledge and that the easement described herein was determined by a survey made on the ground under my direction and supervision. A sketch was prepared this date to accompany this description.

WITNESS MY HAND AND SEAL at Austin, Travis County, Texas, this the 20th day of November, 2006.

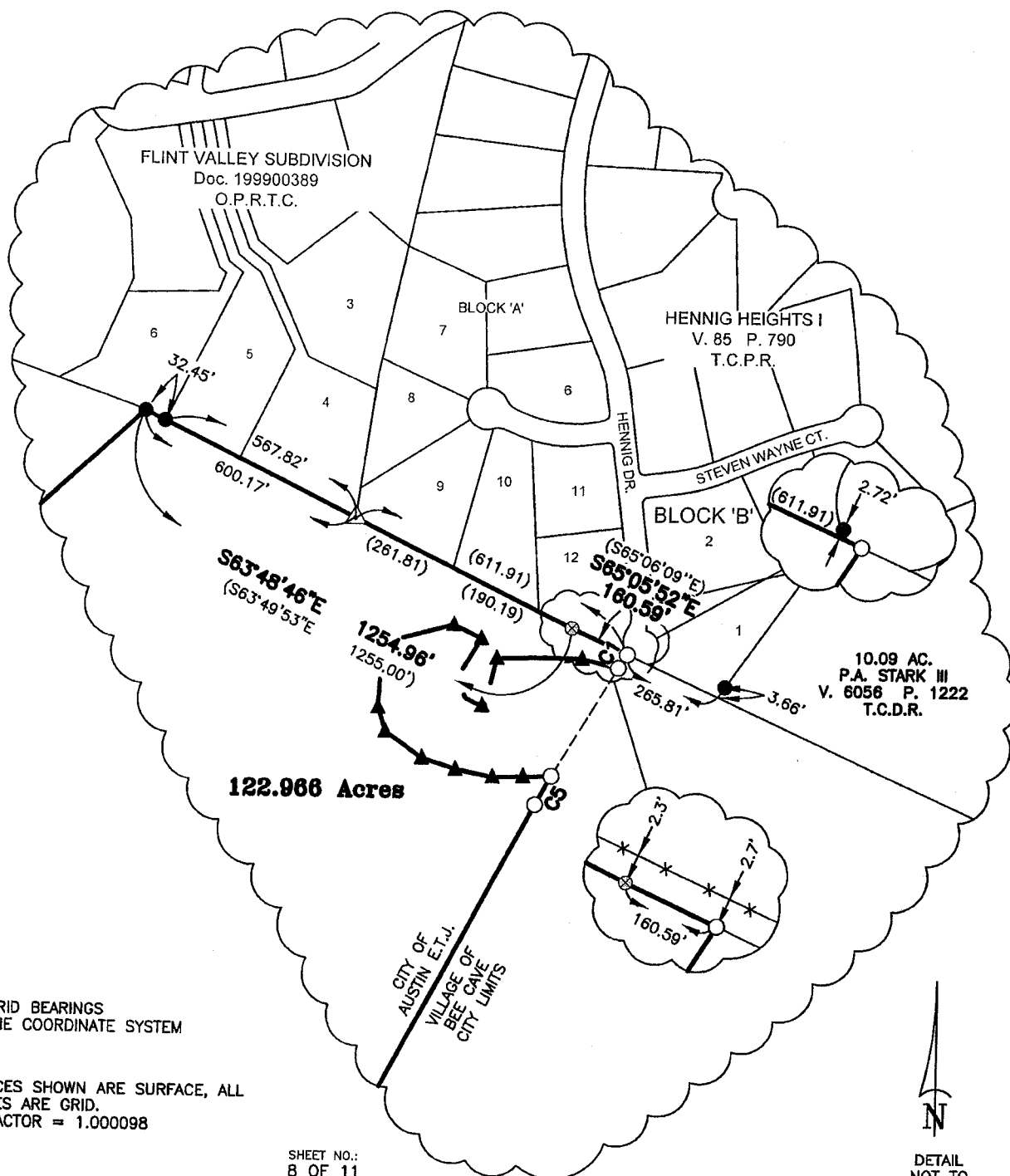



GEORGE E. HOPKINS
Registered Professional Land Surveyor
No. 4685 - State of Texas

**SKETCH TO ACCOMPANY FIELDNOTE
DESCRIPTION OF A 122.966 ACRE
EASEMENT TRACT OUT OF THE
T.C.R.R. Co. SURVEY No. 181,
ABSTRACT No. 2259,
THE C. WOLFE SURVEY No. 182,
ABSTRACT No. 2525 AND THE J.A.
POLVADO SURVEY No. 547, ABSTRACT
No. 645, TRAVIS COUNTY, TEXAS**



**SKETCH TO ACCOMPANY FIELDNOTE
DESCRIPTION OF A 122.966 ACRE
EASEMENT TRACT OUT OF THE
T.C.R.R Co. SURVEY No. 181,
ABSTRACT No. 2259,
THE C. WOLFE SURVEY No. 182,
ABSTRACT No. 2525 AND THE J.A.
POLVADO SURVEY No. 547, ABSTRACT
No. 645, TRAVIS COUNTY, TEXAS**



BEARING BASIS: GRID BEARINGS
TEXAS STATE PLANE COORDINATE SYSTEM
CENTRAL ZONE

NOTE: ALL DISTANCES SHOWN ARE SURFACE, ALL
COORDINATE VALUES ARE GRID.
PROJECT SCALE FACTOR = 1.000098

DRAWING NO.:
06538E4

SHEET NO.:
8 OF 11

ESCI

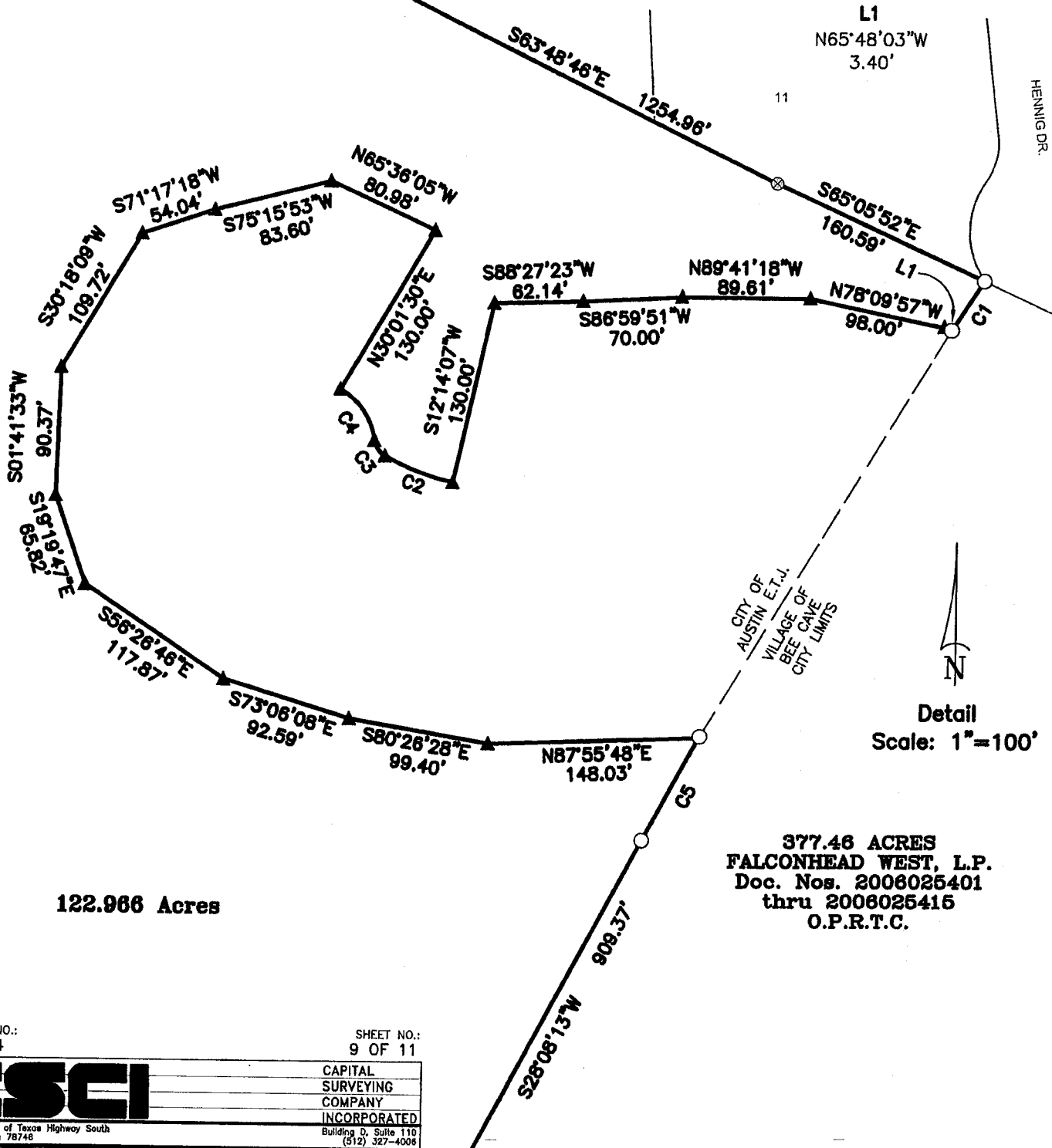
CAPITAL
SURVEYING
COMPANY
INCORPORATED
Building D, Suite 110
(512) 327-4006

1101 Capital of Texas Highway South
Austin, Texas 78746

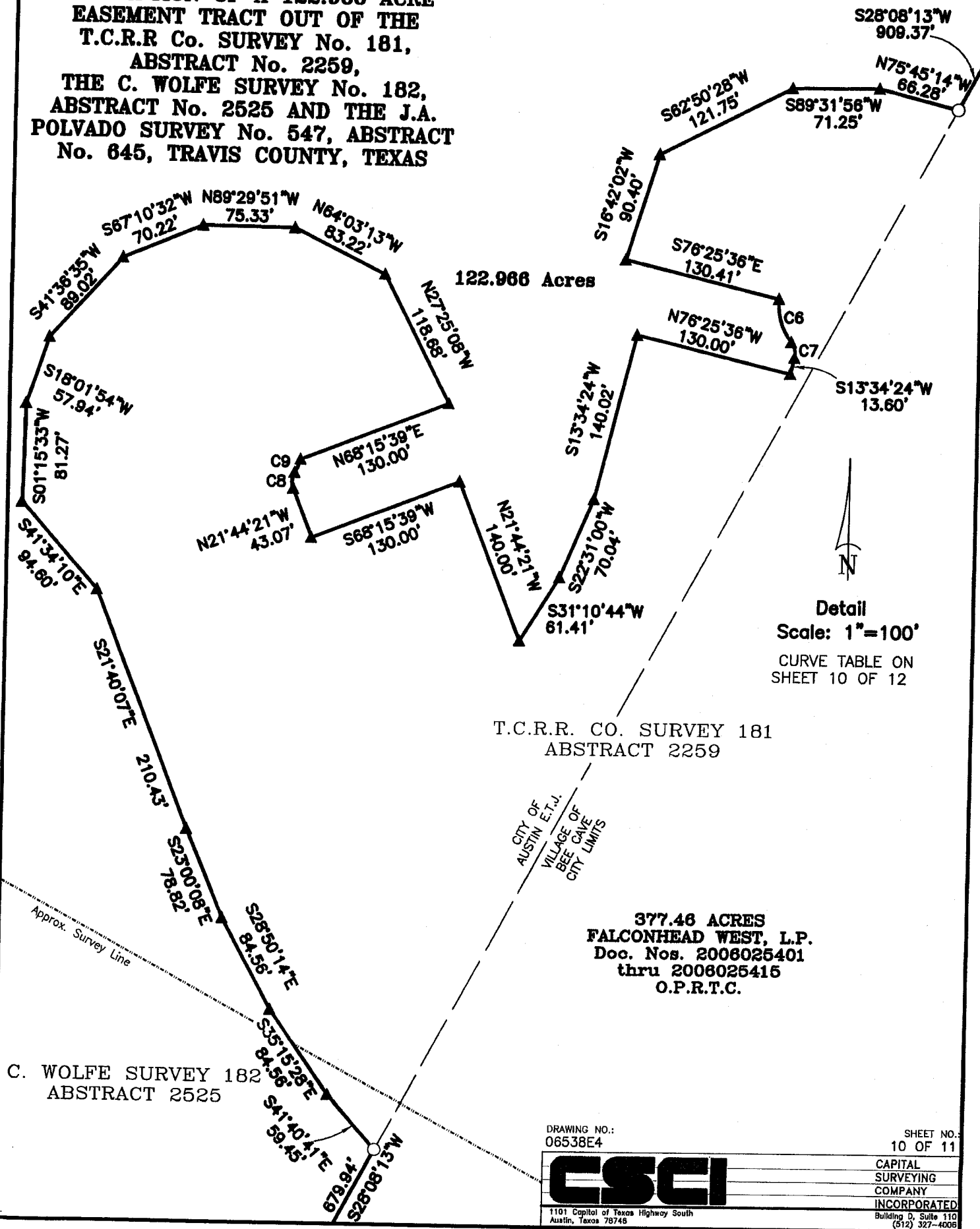
DETAIL
NOT TO
SCALE

**SKETCH TO ACCOMPANY FIELDNOTE
DESCRIPTION OF A 122.966 ACRE
EASEMENT TRACT OUT OF THE
T.C.R.R. Co. SURVEY No. 181,
ABSTRACT No. 2259,
THE C. WOLFE SURVEY No. 182,
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POLVADO SURVEY No. 547, ABSTRACT
No. 645, TRAVIS COUNTY, TEXAS**

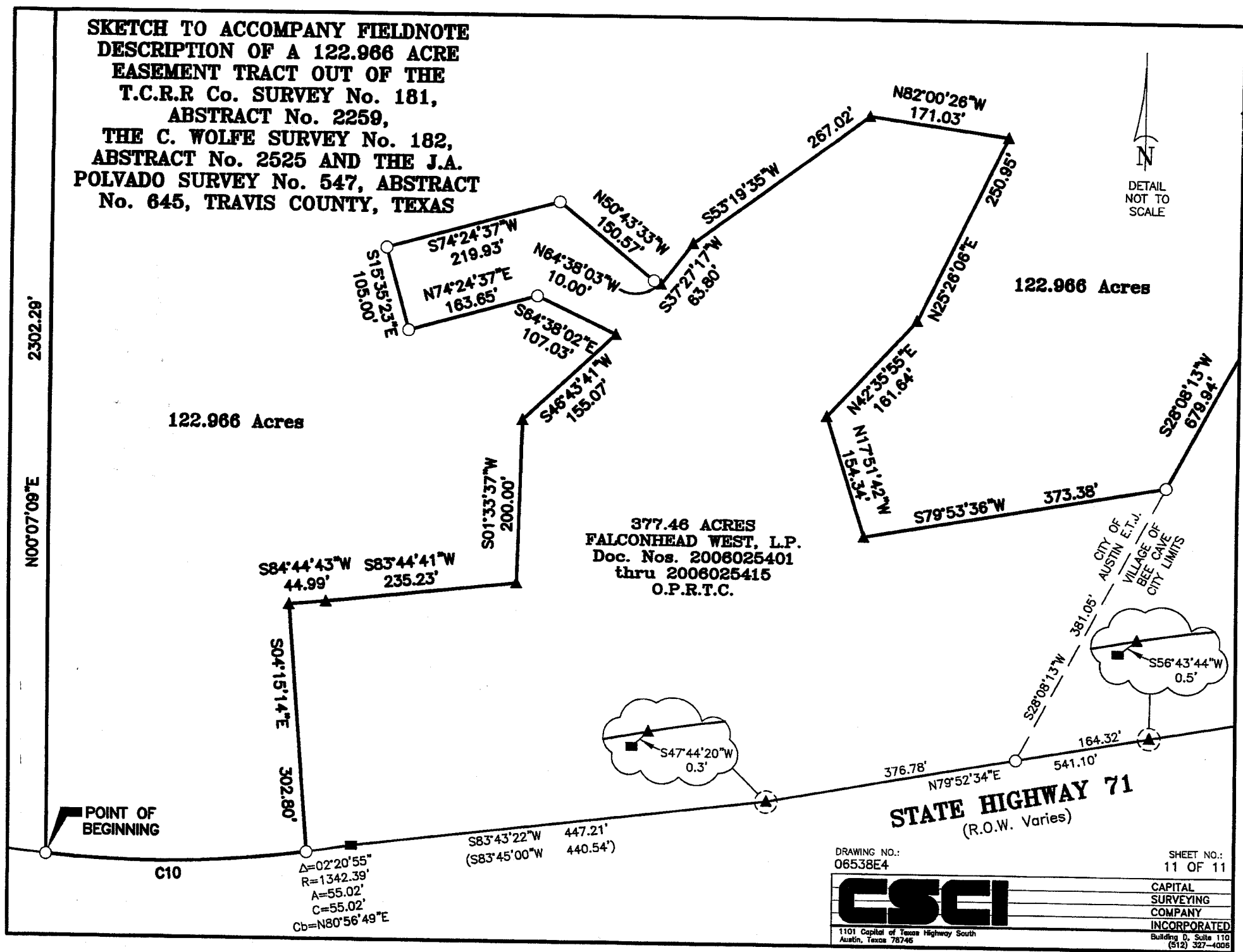
CURVE TABLE					
CURVE	DELTA	RADIUS	ARC	CHORD	CH. BEARING
C1	0°27'14"	5280.00	41.82	41.82	S32°53'51"W
C2	16°49'39"	175.00	51.40	51.21	N69°21'04"W
C3	52°27'21"	15.00	13.73	13.26	N34°42'34"W
C4	51°29'36"	50.00	44.94	43.44	N34°13'42"W
C5	0°53'11"	5280.00	81.67	81.67	S28°34'48"W
C6	43°23'41"	50.00	37.87	36.97	S16°44'58"E
C7	52°01'12"	15.00	13.62	13.16	S12°26'12"E
C8	52°01'12"	15.00	13.62	13.16	N04°16'15"E
C9	13°44'58"	50.00	12.00	11.97	N23°24'22"E
C10	13°34'20"	1342.39	317.98	317.24	S88°54'26"W
C12	32°35'46"	1342.39	771.51	760.93	N67°50'31"W



**SKETCH TO ACCOMPANY FIELDNOTE
DESCRIPTION OF A 122.966 ACRE
EASEMENT TRACT OUT OF THE
T.C.R.R. Co. SURVEY No. 181,
ABSTRACT No. 2259,
THE C. WOLFE SURVEY No. 182,
ABSTRACT No. 2525 AND THE J.A.
POLVADO SURVEY No. 547, ABSTRACT
No. 645, TRAVIS COUNTY, TEXAS**



**SKETCH TO ACCOMPANY FIELDNOTE
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ABSTRACT No. 2525 AND THE J.A.
POLVADO SURVEY No. 547, ABSTRACT
No. 645, TRAVIS COUNTY, TEXAS**



DRAWING NO.:
06538E4

SHEET NO.:
11 OF 11

CSCI

1101 Capital of Texas Highway South
Austin, Texas 78746

CAPITAL
SURVEYING
COMPANY
INCORPORATED
(512) 327-4006

FILED AND RECORDED

OFFICIAL PUBLIC RECORDS

Dana DeBeauvoir

2006 Dec 14 09:29 AM 2006238213

CORTEZY \$80.00

DANA DEBEAUVOIR COUNTY CLERK

TRAVIS COUNTY TEXAS

Surveying & Mapping

Reviewed by:

Jack Christman

Date:

12-4-06

Recorders Memorandum-At the time of recordation this instrument was found to be inadequate for the best reproduction, because of illegibility, carbon or photocopy, discolored paper, etc. All blockouts, additions and changes were present at the time the instrument was filed and recorded.

FILED AND RECORDED

OFFICIAL PUBLIC RECORDS

Dana DeBeauvoir

2006 Dec 14 09:29 AM 2006238213

CORTEZY \$80.00

DANA DEBEAUVOIR COUNTY CLERK

TRAVIS COUNTY TEXAS

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Jack Christman

Date:

12-4-06

Recorders Memorandum-At the time of recordation this instrument was found to be inadequate for the best reproduction, because of illegibility, carbon or photocopy, discolored paper, etc. All blockouts, additions and changes were present at the time the instrument was filed and recorded.

Attachment A3

**WTCPUA – FHW Effluent Disposal Easement
Consent**

**ASSIGNMENT BY LOWER COLORADO RIVER AUTHORITY TO WEST TRAVIS
COUNTY PUBLIC UTILITY AGENCY OF A CERTAIN EFFLUENT DISPOSAL
EASEMENT**

Assignment (the "Assignment") by the Lower Colorado River Authority (the "LCRA") to the West Travis County Public Utility Agency (the "PUA") of a Certain Effluent Disposal Easement is made as of March 19, 2012, by and among the LCRA, Falconhead West, L.P. ("Falconhead West, L.P.") and the PUA.

RECITALS

The LCRA is a conservation and reclamation district operating under Article XIV, Section 59 of the Texas Constitution.

The PUA is a public utility agency formed by the City of Bee Cave, Hays County, and West Travis County MUD No. 5 for the purpose of acquiring the West Travis County water and wastewater systems (the "System") from the LCRA in order to maintain public ownership.

LCRA holds a Treated Effluent Disposal Easement (Travis County Document No. 2006238213), granted by Falconhead West, L.P. on December 6, 2006 for treated effluent disposal in Falconhead West.

The LCRA and the PUA have entered into that certain Utilities Installment Purchase Agreement dated January 17, 2012, (the "Sale and Transfer Agreement") pursuant to which the parties agree that the LCRA will convey all of its rights, title and interests in the System to the PUA for ownership and operation, subject to any outstanding obligations and responsibilities applicable to the LCRA with respect to the System.

AGREEMENT

For good and valuable consideration, the parties agree as follows:

I. ASSIGNMENT. Pursuant to the Sale and Transfer Agreement, the LCRA hereby assigns to the PUA, and the PUA hereby accepts assignment of, all of the LCRA's rights, title, interests, obligations and responsibilities in the following agreement (the "Easement"), subject to Section II of this Agreement:

1. Treated Effluent Disposal Easement dated December 6, 2006.

II. ASSUMPTION. PUA, by its acceptance hereof, hereby (i) agrees to all terms and conditions of the Easement, (ii) assumes all of the duties and obligations to be performed and/or discharged by LCRA under the Easement, and (iii) covenants and agrees to obey any and all governing laws, statutes or regulations of any kind regarding the Easement.

III. CONSENT TO ASSIGNMENT; RELEASE. Subject to the terms and conditions contained herein, and in reliance upon the agreements of LCRA and PUA set out herein, Falconhead West, L.P. consents to the assignment of all of LCRA's rights, title, interest, obligations and responsibilities under the above Easement to PUA and releases LCRA from same. The foregoing release does not release or affect any of the obligations or liabilities of LCRA under this Assignment.

IV. AMENDMENT TO EASEMENT. The parties hereto acknowledge and agree that time is of the essence for the assignment of the Easement and therefore acknowledge that issues regarding operation of the System by the PUA for the benefit of Falconhead West, L.P. may still be outstanding. Therefore, the parties hereto agree and acknowledge that termination of or amendments to the Easement may be further discussed and negotiated and nothing contained herein shall waive or diminish any parties' ability to pursue such termination or amendments.

V. NOTICES. All notices, requests and demands to be made hereunder to the parties hereto shall be in writing (at the addresses set forth below) and may be given by any of the following means: personal delivery, reputable overnight courier service, or certified, first class mail, return receipt requested. Any communication sent pursuant to this Assignment shall be deemed received upon receipt or three (3) days after deposit to courier or the mail service. The addresses are as follows and may be changed by notice to the other parties in the manner provided in this Assignment:

To Falconhead West, LP

Falconhead West, L.P.
c/o Dominic Longi
1101 Arrow Point Drive, Suite 101
Cedar Park, Texas 78613

COPY TO:
Don Walden
P.O. Box 342437
Austin, Texas 78734

To PUA:

West Travis County Public Utility Agency
c/o Lauren Kalisek
Lloyd Gosselink Rochelle & Townsend, P.C.
816 Congress Avenue, Suite 1900
Austin, Texas 78701

To LCRA:

Lower Colorado River Authority
Attn: Dennis Daniel, Manager, Risk Management
and Madison Jechow, Associate General Counsel
3700 Lake Austin Blvd.

Austin, Texas 78703

VI. SUCCESSORS AND ASSIGNS. This Assignment shall be binding upon and inure to the benefit of the LCRA, Falconhead West, L.P. and the PUA and their successors and assigns.

VII. GOVERNING LAW. This Assignment will be governed by and construed in accordance with the laws of the State of Texas without giving effect to the provisions thereof relating to conflicts of laws.

VIII. MISCELLANEOUS. This Assignment may not be modified in any manner or terminated except by an instrument in writing executed by the parties hereto. If any term, covenant or condition of this Assignment is held to be invalid, illegal or unenforceable in any respect, this Assignment shall be construed without such provision. This Assignment may be executed in any number of counterpart originals and each counterpart shall be deemed to be an original. The failure of any party hereto to execute the Assignment or any counterpart hereof, shall not relieve the other signatories from their obligations hereunder. This Assignment embodies the entire agreement and understanding by and among the parties.

[Signature pages follow.]

IN WITNESS WHEREOF, the LCRA, Falconhead West, L.P. and the PUA have duly executed this Assignment as of the date above written.

LOWER COLORADO RIVER AUTHORITY

By: 
Ross Phillips
Interim General Manager



**WEST TRAVIS COUNTY PUBLIC UTILITY
AGENCY**

By: Larry Fox
Larry Fox
President

ATTEST:

By: Ray Whisenant
Ray Whisenant
Secretary/Treasurer

FALCONHEAD WEST, L.P.
a Texas limited partnership

By: Ryland Homes of Texas, Inc.
a Texas corporation
it's Managing General Partner

By: 

Name: Dominic Longi

Title: ~~Managing Partner~~

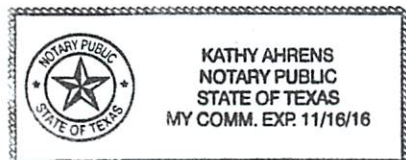
VICEPRESIDENT

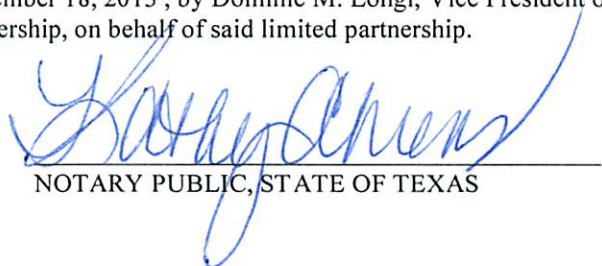

SELLER'S ACKNOWLEDGMENT

STATE OF TEXAS
COUNTY OF Williamson

} SS:

This instrument was acknowledged before me on December 18, 2013, by Dominic M. Longi, Vice President of RH of Texas Limited Partnership, a Maryland limited partnership, on behalf of said limited partnership.




NOTARY PUBLIC, STATE OF TEXAS

Name printed or typed: _____

My commission expires: _____

Attachment A4

WTCPUA – Falconhead Golf Course Agreement

RESTATED AND AMENDED LEASE AGREEMENT

This Restated and Amended Lease Agreement ("Lease") amends, supercedes and replaces in its entirety that certain "Lease Agreement" dated effective as of November 1, 1989, recorded in Volume 13424, Pages 1373, et seq., Real Property Records of Travis County, Texas, by and between the Estate of Henry J Spillman, Deceased, as "Lessor" and Cornerstone Development Corporation, as "Lessee", which said "Lease Agreement" has been previously amended and assigned pursuant to that certain "Lease Assignment" from Cornerstone Development Corporation to Cornerstone Development, Ltd dated effective as of December 31, 1990 and recorded in Volume 13242, Pages 1402, et seq, Real Property Records of Travis County, Texas, that certain "First Amendment to Lease Agreement" dated October 4, 1991, recorded in Volume 13242, Pages 1398, et seq, Real Property Records of Travis County, Texas, that certain "Lease Assignment" from Cornerstone Development, Ltd. to Southwest Travis County, Ltd, dated effective as of December 31, 1996, recorded in Volume 13242, Pages 1423, et seq, Real Property Records of Travis County, Texas; that certain "Consent to Provide Wastewater Service to Land Within the Village of Bee Caves Territory" dated April 15, 1998, by and between the Estate of Henry J Spillman, Deceased and Southwest Travis County, Ltd.; and that certain "Lease Assignment" dated July 14, 2000, from Southwest Travis County, Ltd. to Spillman Development Group, Ltd, which is filed of record as Document No 2000110519 in the Official Public Records of Travis County, Texas This Lease is subject to that certain "Treated Effluent Disposal Easement" dated July 14, 2000, by and among Spillman Development Group, Ltd, Lower Colorado River Authority, and Henry J Spillman, Jr, Individually and as Independent Executor of the Estate of Henry J Spillman which is filed of record as Document No. 2000110520 in the Official Public Records of Travis County, Texas (the "LCRA Easement").

1 PARTIES. This Lease is entered into by and between Golda Spillman Garnett, Frank Spillman (aka John Franklin Spillman) joined herein by his wife, Nancy Jo Spillman, and Henry J Spillman, Jr. joined herein by his wife, Jo Ann Spillman (collectively, the "Lessor") and Spillman Development Group, Ltd, a Texas limited partnership (the "Lessee"). This Lease is being joined in and consented to by the Lower Colorado River Authority (the "LCRA")

2 LEASE. Lessor leases to Lessee the land which is described on Exhibit "A" attached hereto and incorporated herein by reference, together with all improvements thereon and all appurtenances thereto (the "Property") The boundaries of the Property may be altered by agreement of Lessor and Lessee to accommodate permitted improvements which Lessee may choose to construct on the Property from time to time Lessor will not unreasonably withhold its approval of any requested alteration of the boundaries of the Property. Upon request by Lessee from time to time, Lessor will execute such documents as are necessary to exchange acreage within the Property for replacement land out of the separate real property which is being conveyed by Lessor to Spillman Investment Group, Ltd. by special warranty deed dated of even date herewith, but it is expressly agreed and understood that: (i) any land which is released from the Property will be replaced by land of equivalent size and value, (ii) all replacement land must be located adjacent to the Property and the boundary configuration of all replacement land must be reasonably acceptable to Lessor, (iii) if the replacement land is encumbered by the deed of trust dated of even date herewith from Spillman Investment Group, Ltd to Robert Martin Novak, Jr., Trustee for the benefit of Lessor (the "Deed of Trust") then the replacement land will be released from the Deed of Trust and the land which is

removed from the Property will be added to the land which is encumbered by the Deed of Trust, (iv) Lessor will have no obligation to agree to any requests for boundary alterations which are delivered to Lessor by Lessee after the expiration of five (5) years after the effective date of this Lease, it being agreed and understood that Lessor may deny any such request in Lessor's sole and absolute discretion, and (v) any land which is removed from the Property will be removed from the land which is subject to the LCRA Easement and any land which is added to the Property will be added to the land which is subject to the LCRA Easement.

3 **TERM** The term of this Lease shall commence on the effective date of this Lease, as stated hereinbelow, and shall terminate on December 31, 2099, unless terminated prior to that date under other provisions contained herein

4 **RENT**

(a) **BASE RENT** Lessee agrees to pay to Lessor, during the entire term of this Lease, base rent ("Base Rent") in accordance with the Base Rent Schedule which is attached hereto as Exhibit "B" and incorporated herein by reference. Base Rent is payable in advance and, based upon the payment of Base Rent made by Lessee to Lessor simultaneously with the execution of this Lease, Lessee has prepaid all Base Rent due under the terms of this Lease through December 31, 2001. Subsequent payments of Base Rent hereunder are due on January 1, 2002 and on January 1 of each succeeding calendar year during the term of this Lease, each such payment will constitute fully prepaid Base Rent for the then current calendar year. For example, the payment of Base Rent which is due on January 1, 2002 will cover Lessee's entire Base Rent obligation under this Lease for the calendar year 2002. If the Lessee has not paid the Base Rent installment which is due for any particular calendar year by the end of the business day on January 15 of such calendar year, then the amount due to Lessor shall increase five percent (5%). If the Lessee has not paid the applicable Base Rent installment by the end of the business day on February 1 of such calendar year, then the amount due to Lessor shall increase an additional five percent (5%).

(b) **PERCENTAGE RENT** Commencing with the calendar year 2011 (but not before then) and for the remainder of the term of this Lease, Lessee shall pay to Lessor percentage rent in the amount, if any, by which three percent (3%) of Lessee's "Net Operating Revenues" during each "Lease Year" exceeds the Base Rent paid by Lessee for such Lease Year. The Percentage Rent payable hereunder, if any, will be in addition to the Base Rent under this Lease. For purposes hereof: (i) the term "Lease Year" means each calendar year commencing with the calendar year 2011; and (ii) the term "Net Operating Revenues" means and refers to all sums received by Lessee from the golf course operations and any other retail or commercial operations conducted by Lessee on the Property during the applicable Lease Year (but specifically excluding all income from wastewater treatment and/or disposal operations), less all expenses incurred by Lessee in connection with such operations, all determined in accordance with generally accepted accounting principles. On or before July 1, 2012 and on or before July 1 of each subsequent year during the term of this Lease, Lessee shall furnish to Lessor a statement setting forth the Net Operating Revenues for the preceding Lease Year and the amount of Base Rent previously paid for such Lease Year. If the amount of Base Rent previously paid by Lessee for the prior Lease Year exceeds three

percent (3%) of the Net Operating Revenues for such Lease Year, then Lessee will not owe any percentage rent to Lessor for such Lease Year. If the Base Rent paid for the prior Lease Year is less than three percent (3%) of the Net Operating Revenues for such Lease Year, then, simultaneously with the delivery of the statement required hereunder, Lessee shall pay to Lessor an amount equal to the remainder of: (i) three percent (3%) of the Net Operating Revenues received by Lessee with respect to the prior Lease Year, minus (ii) the amount of Base Rent paid by Lessee to Lessor with respect to the prior Lease Year. By way of example, the first statement of Net Operating Revenues and the first payment of percentage rent will be due on July 1, 2012. If the Net Operating Revenues for 2011 are equal to or less than \$3,090,000.00 [$\$92,700.00 \div .03 = \$3,090,000.00$], then no percentage rent will be due or owing. If the Net Operating Revenues for 2011 are greater than \$3,090,000.00, then Lessee will owe to Lessor, as percentage rent, an amount equal to the remainder of (i) three percent (3%) of the 2011 Net Operating Revenues, minus (ii) \$92,700.00. For example, if the 2011 Net Operating Revenues are \$4,000,000.00, then the percentage rent amount owing by Lessee to Lessor will be \$27,300.00 [$\$4,000,000.00 \times .03 - \$92,700.00 = \$27,300.00$]. Lessee shall keep and maintain books and records of the Net Operating Revenues and the business conducted on the Property in accordance with standard accounting practices, which books and records shall be open for inspection by Lessor and Lessor's auditors or other authorized representatives. Lessee shall preserve all books and records on which any statement of Net Operating Revenues is based for a period of two (2) years after such statement is rendered.

(c) Lessor will not have a "carried interest" in the Property, and will receive no portion of the net proceeds of any financing transaction, any sale of the golf course or other business conducted within the Property or any other capital transaction

(d) Interest shall accrue on all monies due the Lessor from Lessee under the Lease at the rate of ten percent (10%) per annum from the date said amounts are due

5 UTILITIES Lessee shall obtain all necessary utility services independent of Lessor. Lessee shall timely pay all fees and charges for utilities for the Property and improvements thereon, and for all utility connections and payment of all deposits to utility companies in connection with such utilities

6 USE OF PROPERTY

(a) Lessee may develop, improve and use the Property for golf course uses, hotel/resort uses, community retail uses, commercial uses, residential uses, wastewater collection, treatment and disposal uses, and for any other lawful uses which (i) are consented to in writing by Lessor (Lessor will not unreasonably withhold or unduly delay such consent), (ii) do not require a sale of the Property; and (iii) are not inconsistent with other provisions of this Lease

(b) Lessee and LCRA may store, treat and dispose of wastewater effluent within the Property. There are no limitations under this Lease on the geographic area which may be served by wastewater facilities within the Property or the methods of disposal of wastewater

which may be utilized by Lessee within the Property, except, however, that it is expressly agreed and understood that Lessee and LCRA will be required at all times to treat, store and dispose of wastewater within the Property in accordance with applicable laws and regulations, including applicable laws and regulations relating to the maximum amount of wastewater which may be disposed of within the Property

7. **ALTERATIONS AND IMPROVEMENTS.** Lessee may construct buildings, structures and other improvements and otherwise alter and improve the Property in accordance with the Master Development Plan which is attached hereto as Exhibit "C" and incorporated herein by reference (the "Master Development Plan"). Lessor understands and hereby acknowledges that the Master Development Plan is a conceptual plan, and Lessor agrees that refinements and revisions to the Master Development Plan may be made by Lessee without necessity of obtaining any consent or approval from Lessor, so long as the scope and nature of the improvements reflected in the Master Development Plan are not significantly modified thereby. If Lessee desires, at any time and from time to time, to significantly modify the scope or nature of the improvements reflected in the Master Development Plan ("Significant Modifications"), then Lessee will develop and submit to Lessor a proposed revision or revisions to the Master Development Plan showing the proposed Significant Modifications. Lessor will have the right to review and approve such Significant Modifications, but (i) Lessor may not deny Lessee the right to make any alterations or improvements to the Property which are for the purpose of allowing Lessee to utilize the Property for the permitted uses under this Lease so long as such alterations or improvements are constructed and installed in accordance with prudent real estate development practices; and (ii) in no event will Lessor's approval of any Significant Modifications be unreasonably withheld or unduly delayed. If Lessor has objections to any proposed Significant Modifications which are submitted by Lessee, then Lessor will specifically list and describe such objections in a written response delivered to Lessee within thirty (30) days after the delivery by Lessee to Lessor of a description of the proposed Significant Modifications. If Lessor does not deliver any written notice of objections to Lessee with thirty (30) days after the date of Lessee's submission to Lessor of proposed Significant Modifications, then the proposed Significant Modifications will be deemed to have been approved by Lessor. After the approval or deemed approval of any Significant Modifications, buildings, structures and other improvements may be constructed or installed within the Property so long as the same are substantially in conformance with the approved Significant Modifications

8. **USES RESERVED.** Lessor will have no right to use the Property for any purposes during the term of this Lease. All rights previously reserved by Lessor with respect to the Property are hereby released and relinquished by Lessor.

9. **TOPSOIL.** Lessee shall have the right to rearrange existing topsoil and/or bring in additional topsoil. Any such activities shall be at the sole expense and discretion of Lessee.

10. **TAXES.** Lessee shall pay all taxes (including rollback taxes, if applicable), general and special assessments and/or governmental or regulatory charges of any kind whatsoever levied on or assessed against the Property and any improvements to the Property, during the entire term of this Lease.

11. **CONDITION OF PROPERTY.** Lessee accepts the Property in its present condition. If this

Lease is terminated or canceled, Lessee shall surrender the Property to Lessor in its present condition, or as the same may have been altered or improved by the Lessee, provided, however, that in spite of such termination or cancellation, Lessor may, at its sole discretion, require Lessee to keep all irrigation in place and in operating condition, and continue to operate the irrigation system until the effluent holding ponds are drained. In the event effluent in the ponds is toxic, noxious or in other ways unsuitable for irrigation, LCRA shall be responsible for the removal of all such effluent and any contaminated soil, to the extent such removal is required under applicable laws

12 TITLE TO IMPROVEMENTS. All buildings, structures, improvements, additions and alterations constructed, placed or maintained on any part of the Property during the term of this Lease shall be the exclusive property of Lessee during the term of this Lease and Lessee may, at Lessee's option and election, at any time and from time to time during the term of this Lease alter, demolish and/or remove any such buildings, structures, improvements, additions and alterations. Further, and notwithstanding any provision in this Lease to the contrary, Lessee shall be entitled, upon the termination of this Lease, to remove from the Property and from any improvements constructed upon or within the Property, all fixtures and all of Lessee's furniture, equipment and other personal property. Lessee shall have a period of thirty (30) days after the expiration of this Lease to remove all such fixtures, furniture, equipment and other personal property. Any fixtures, furniture, equipment or personal property not removed by Lessee prior to the expiration of such thirty (30) day period shall become the property of Lessor. Additionally, all buildings, structures, improvements, additions and alterations which remain on the Property at the expiration of such thirty (30) day period shall be considered to be a part of the real property and must remain on the Property and will become Lessor's property; except, however, that LCRA shall thereafter have the right to remove any of its facilities, so long as such removal is completed within a reasonable period of time.

13 LESSOR ACCESS. Except as necessary to exercise any of its rights or remedies under this Lease, Lessor will have no right to enter upon the Property without the prior written consent of Lessee.

14 DISCHARGE PERMIT. The Property is currently subject to Waste Discharge Permit No. 13594-001 issued by the Texas Natural Resource Conservation Commission (the "Waste Discharge Permit"). Lessor and Lessee agree that the Waste Discharge Permit may be amended to (a) change the use of the Property from pasture land and ranch land to any uses permitted under this Lease, (b) to name the LCRA as the sole permittee thereunder, and (c) to increase the treated effluent application rates. It shall be the obligation of the LCRA, at the LCRA's sole expense, to obtain and maintain all permits necessary to engage in the wastewater effluent collection, treatment and disposal program envisioned under this Lease. Lessor and Lessee agree to cooperate fully in obtaining such permits (including without limitation, by executing and delivering all applications or other documents which are necessary in connection therewith), but all expenses of the LCRA relative thereto shall be borne solely by the LCRA. The LCRA shall notify Lessor and Lessee of any public meetings to be held relative to the collection, treatment or disposal of wastewater within the Property. The LCRA shall give Lessor and Lessee timely notice of pending or existing investigations or actions by any public regulatory agencies and shall give Lessor and Lessee prior notice of regulatory agency meetings regarding Lessee's activities including, but not limited to any amendment, renewal, violations or revocation of the Waste Discharge Permit.

15 **CONDITIONS OF PERMIT** The wastewater collection, treatment and disposal program shall be operated in such a manner as to conform to the terms and conditions of the Waste Discharge Permit. No provision of this Lease is intended to, nor shall be construed as, a basis for violating any provision of the Waste Discharge Permit. No irrigation of wastewater effluent shall occur unless a permit therefor has been issued, and shall cease if such permit is later revoked.

16 **PERMIT RULES** The LCRA shall provide the Lessor and Lessee with copies of applicable rules and regulations regarding the collection, treatment or disposal of wastewater within the Property, as amended from time to time. LCRA shall also provide Lessor and Lessee with a copy of any applications and any permits issued for the collection, treatment or disposal of wastewater effluent on the Property.

17 **REPAIRS AND MAINTENANCE.** LCRA shall be responsible for the maintenance of all wastewater collection, treatment and disposal facilities within the Property. Otherwise, Lessee shall be solely responsible for the maintenance of the Property and any improvements thereto, all at Lessee's sole cost and expense. Lessor will have no obligation to maintain the Property or any improvements constructed thereon. Lessee shall have the right to clear all or portions of the Property from time to time, and to demolish or remove any improvements within the Property from time to time, all without necessity of obtaining the consent or approval of Lessor.

18 **LIABILITY OF LESSOR** Lessor shall not be liable or responsible to Lessee for any loss or damage to any property or person occasioned by theft, act of God, public enemy, injunction, riot, strike, insurrection, war, court order, requisition, or order of governmental body or authority or for any damage or inconvenience that may arise through alteration of any part of the Property, or improvements thereto, or failure to make such repairs.

19 **INDEMNITY.** Lessee will indemnify Lessor for any loss, damage or injury of any kind to any person or property arising from any use of any portion of the Property by the Lessee, or caused by any defect in any building, structure, improvement or equipment on Property or caused by or arising from any act or omission of Lessee, or any of Lessee's agents, employees, invitees, successors or assigns or by or from any accident, fire or other casualty on the Property or brought about by Lessee's failure to properly maintain the Property in a safe condition.

20 **INSURANCE.** Lessee shall at its sole expense maintain comprehensive general liability insurance covering the Property and the improvements thereon. Initially, the amount of such insurance coverage will be not less than Five Hundred Thousand and No/100 Dollars (\$500,000.00) per claim for bodily injury or death and One Million and No/100 Dollars (\$1,000,000.00) in the aggregate, and property damage liability insurance in the amount of not less than Five Hundred Thousand and No/100 Dollars (\$500,000.00). After the expiration of not less than five (5) years from and after the effective date of this Lease and no more often than once every five (5) years thereafter, Lessor may deliver to Lessee a written request for an increase in the minimum amount of insurance required hereunder, and thereafter, the minimum amount of insurance required hereunder will be increased to an amount mutually agreed upon in writing by Lessor and Lessee as necessary to provide adequate insurance coverage hereunder. Lessee will not unreasonably withhold its approval of any request for an increase in the minimum amount of insurance required hereunder.

Such insurance shall specifically insure Lessee against all liability assumed by it hereunder, as well as liability imposed by law, and shall insure both Lessee and Lessor as insureds hereunder. Lessee shall pay all of the premiums for such insurance directly to the insurance carrier on or before the due date and deliver copies of the applicable insurance policies or certificates thereof, to Lessor. If Lessee fails to effect such insurance, or to pay premiums therefore, Lessor shall be entitled, but shall not be obligated, to effect such insurance and pay the premiums therefore, which premiums shall be repayable by Lessee to Lessor upon demand by Lessor. Notwithstanding the above, Lessee's obligation to insure shall not become effective until ten (10) days prior to commencement of any construction activities, including testing, surveying or on-site activities being undertaken in preparation for commencing construction.

21 EVENTS OF DEFAULT. The following events shall constitute events of default under this Lease

- (a) Lessee fails to pay the rental payments and any penalty and interest due thereon as required to be paid under Section 4 hereunder after ten (10) days written notice from Lessor to Lessee specifically enumerating the failure by Lessee and the amount which Lessee claims is owing by Lessor
- (b) Lessee fails to pay taxes or other obligations under Section 10 hereunder after ten (10) days written notice from Lessor to Lessee given after such taxes or other obligations become delinquent
- (c) Lessor fails to fully perform under any other section of this Lease for more than thirty (30) days after Lessor has delivered to Lessee written notice of such failure to perform (provided, however, that if such failure is not reasonably susceptible of cure within such thirty (30) day period, then no event of default will be considered to have occurred under this Lease if Lessee has commenced curative action within such thirty (30) day period and thereafter continues such curative action to completion with reasonable diligence)
- (d) Lessee shall make an assignment for the benefit of creditors, bankruptcy proceedings are filed by Lessee, bankruptcy proceedings are filed against the Lessee and not contested by Lessee, or a receiver or trustee is appointed for all or substantially all of Lessee's assets, and such appointment is not contested by Lessee

22 LESSOR REMEDIES

- (a) Upon the occurrence of an event of default, as defined in subsections (a), (b) or (d) of Section 21 hereunder (default under subsection (c) of Section 21 is provided for under Section 23 hereunder), Lessor shall have the option to terminate the Lease upon twenty (20) days notice to Lessee, in which event Lessee shall immediately surrender the Property to Lessor at the end of such twenty (20) day period. If Lessee fails to surrender the Property, Lessor may enter upon and take possession of the Property and expel or remove Lessee, by force if necessary, without being liable for prosecution of any claims for damages therefor. At termination Lessee shall be liable for and shall upon demand pay to Lessor

(i) all arrearages in rent and other monetary amounts then due to Lessor under the Lease,

(ii) the damages or losses caused to Lessor by reason of Lessee's default(s), and

(iii) future rents due under the Lease, provided that because of the difficulty in ascertaining the amount of such future rents Lessee and Lessor agree that the amounts of future rents shall be fixed at twice the annual rental payment required to be made by the Lessee in the year in which the event of default occurs

(b) Upon the occurrence of an event of default, as defined in subsection (c) of Section 21 hereunder, Lessor may, as Lessor's sole and exclusive remedy. (i) sue and recover from Lessee any actual damages accruing to Lessor as a result of such default, together with Lessor's reasonable attorneys' fees and cost of court, (ii) seek injunctive relief, or (iii) cure the event of default on behalf of Lessee and deliver to Lessee written notice of any costs reasonably incurred by Lessor in connection with Lessor's curative action, in which event Lessee shall reimburse Lessor for all such reasonable costs within ten (10) days after the date of the delivery of such written notice by Lessor to Lessee. Lessor will not have the right to terminate this Lease

23 CURE OF DEFAULTS BY LESSOR OR LCRA The LCRA has assumed certain rental obligations with respect to this Lease, as set out in the LCRA Easement. In addition, the LCRA has certain obligations as stated in this Lease. Similarly, the Lessee is responsible for certain of the rent obligations under this Lease and has other obligations under this Lease, all as provided herein. Notwithstanding any provision herein to the contrary, Lessor agrees that: (a) upon the occurrence of any failure or default which could become an event of default, as provided in Section 21 hereunder, Lessor will deliver written notice of such failure or default to both the Lessee and the LCRA; (b) both the Lessee and the LCRA (or either of them) shall have the right to cure the failure or default within any applicable cure period which is provided for under the terms of Section 21 hereunder; and (c) no event of default under this Lease, as defined in Section 21 hereunder will occur if the failure or default is cured within the applicable cure period provided for under Section 21 hereunder, regardless of whether the curative action was undertaken by Lessee, LCRA or by any other person or entity.

24 NOTICES Golda Spillman Garnett, Frank Spillman (a/k/a John Franklin Spillman) joined herein by his wife, Nancy Jo Spillman, and Henry J. Spillman, Jr., joined herein by his wife, Jo Ann Spillman, all hereby collectively appoint Frank Spillman (John Franklin Spillman) as the "Lessor's Representative", as further referenced and provided for in Section 51 hereunder. All consents, approvals and other agreements given by Lessor's Representative (whether deemed or otherwise) shall be fully binding upon Lessor and Lessee shall be entitled to rely thereon. All payments, demands, notices, requests, and other communications which are required or permitted to be given under this lease, shall be deemed given and received on the day properly stamped, addressed, and deposited in the U.S. Mail or hand delivered. Any notice concerning delinquency of rental payments, delinquency of tax payments, termination, or any alleged breach of this Lease which could potentially give rise to an event of default, as defined in Section 21 hereunder, shall be sent by U S certified mail, with return receipt requested. The following addresses shall apply to any

payment, notice, demand, request or other communication

<u>Lessor</u>	Mr. Frank Spillman 3544 South F.M. 620 Austin, Texas 78734
<u>Lessee</u>	Spillman Development Group, Ltd 828 West 6 th Street Austin, Texas 78703 Attn: Mr. Stephen W Gurasich, Jr
With copy to	Spillman Development Group, Ltd 2317 Resaca Blvd Austin, Texas 78733 Attn: Mr. Don Walden
<u>LCRA:</u>	Lower Colorado River Authority P.O. Box 220 - H330 Austin, Texas 78767-0220 Attn: Mr. Randy J Goss

The parties hereto shall have the right from time to time to change their respective addresses, and each shall have the right to specify as its address any other address within the United States of America by at least five (5) days written notice to the other party. If any date or any period provided in this Lease ends on a Saturday, Sunday or legal holiday, the applicable period shall be extended to the first business day following such Saturday, Sunday or legal holiday

25 **HOLDING OVER.** Any use by Lessee after termination shall not operate or renew or extend the term but shall be constructed as a tenancy at sufferance of the Lessor. Lessee shall pay rental at the rate in effect immediately prior to termination during the period of any possession after termination

26 **ASSIGNMENT AND SUBLEASING.** Should the Property be sold in whole or in part, this Lease may be assigned by the Lessee to any subsequent owner without necessity of obtaining any consent or approval from Lessor. In addition, this Lease may be assigned by Lessee as collateral or security for a loan without necessity of obtaining any consent or approval from Lessor. Otherwise, the Lease shall be assignable by the Lessee only with the consent of the Lessor, but such consent shall not be unreasonably withheld. In evaluating any proposed assignment by Lessee, Lessor may consider the financial strength of the proposed assignee and may require that the proposed assignee carry out the development of the Property with a quality not less than that proposed by Lessee in its development plans under this Lease. Lessee may not sublease the Property, or portions thereof, without necessity of obtaining any consent or approval from Lessor, but such consent shall not be unreasonably withheld.

27 **CONDEMNATION.** If all of the Property or if any material portion of the Property is taken under the power of eminent domain or sold under the threat of that power (all of which are called

"Condemnation"), Lessee may terminate this Lease. If Lessee does not terminate this Lease, this Lease shall remain in effect as to the portion of the Property not taken, except that the Base Rent shall be reduced to a fair and equitable extent. Any Condemnation award or payment shall be distributed in the following order: (a) first, to Lessee, the amount of any loss of or damage to any improvements upon or within the Property; plus the amount of any reduction in the value of Lessee's leasehold interest under this Lease, plus all moving costs or other similar expenses incurred by Lessee; plus the amount of any loss of or damage to Lessee's trade fixtures or removable personal property, and (b) second, to Lessor, the remainder of such award

28 **MECHANICS LIENS.** The Property must at all times be kept free of mechanics' and materialmen's liens, provided, however, that Lessee will be afforded sixty (60) days opportunity to initiate court action to contest any mechanics' and materialmen's lien and Lessee will not be required to remove any mechanics' and materialmen's lien or pay any underlying indebtedness secured thereby until and unless a final decision has been made with respect to all contested matters

29. **FINANCING AND ENCUMBRANCES.** Lessee shall have the right at any time and from time to time during the term of this Lease to obtain loans and enter into bona fide financing arrangements with respect to Lessee's rights under this Lease or any improvements constructed by Lessee. Without limitation on the generality of the foregoing, Lessee shall have the right to mortgage, assign or otherwise encumber this Lease, Lessee's leasehold estate and/or any improvements placed upon the Property by Lessee, and to assign, pledge or hypothecate any of the foregoing. Notwithstanding any provision herein to the contrary, however, it is expressly agreed and understood that

- (a) Lessor shall not in any way or manner be liable for the repayment of any such financing or any costs, fees or expenses incurred or payable in connection with such financing.
- (b) The rights of the secured party, shall be subject and subordinate to each and all of the covenants, conditions, and restrictions stated in this Lease and to all rights and interests of Lessor as provided in the Lease.
- (c) Lessor shall be provided, in writing, the name and mailing address of the secured party, and copies of appropriate security documents (and any amendments thereto) to the extent applicable to Lessor or the Property.

Lessor further agrees that Lessor will, upon written request by Lessee, execute such instruments as may be required at any time and from time to time to recognize the rights and interest of any holder of an assignment of this Lease or any encumbrance placed on Lessee's leasehold estate hereunder. If requested by Lessee, Lessor agrees to execute a "Recognition and Attornment Agreement" in a form reasonably agreed to between the parties, which provides that the Lessor will recognize and attorn to Lessee's lender, provided each of the terms and conditions of this Lease continue to be faithfully performed. The form of Recognition and Attornment Agreement attached as Exhibit "D" is deemed to be reasonable by the parties. Nothing contained herein shall be construed to require Lessor to recognize, attorn or otherwise consent to any lien on the Property.

(a) The following terms shall have the meanings ascribed to them under this paragraph

(1) "Hazardous Materials" shall mean any chemical, substance, material or combination thereof which is or may be hazardous to human health or safety or to the environment due to its radioactivity, ignitability, infectiousness or other harmful or potentially harmful properties or effects, including petroleum and petroleum products, asbestos, radon, polychlorinated biphenyls ("PCBs") and all of those chemicals, substances, materials or combinations thereof that are listed, defined or regulated in any manner by any Environmental Law (defined below);

(2) "Environmental Cleanup Work" shall mean any cleanup, remediation, removal, construction, alteration, demolition, renovation or installation that is required in connection with Hazardous Materials installed, used, stored, handled or located on the Property or disposed of from the Property in order to comply with any Environmental Law,

(3) "Environmental Law" shall mean any federal, state or local environmental, health and/or safety-related law, and any related decision of the courts, ordinance, rule, regulation, code, order, directive, guideline, permit or permit condition, and

(b) Lessor hereby represents and warrants the following to Lessee to the best of Lessor's actual knowledge:

(1) The Property has not been used for the disposal of refuse or waste, or for the generation, processing, manufacture, storage, handling, treatment, release, discharge or disposal of any Hazardous Materials;

(2) The Property is in compliance with all Environmental Laws, and

(3) No (i) asbestos-containing materials, (ii) machinery, equipment or fixtures containing PCBs, (iii) storage tanks for gasoline or any other substance or (iv) urea formaldehyde foam insulation has been installed, used, stored, handled or located on the Property

(c) Lessor shall comply with, and shall pay all costs incurred in complying with, any Environmental Law then in effect and the environmental state, condition and quality of the Property, including the performance of and payment for any Environmental Cleanup Work and the preparation of any closure or other required plans, excluding, however, any costs related to Hazardous Materials within the Property established to have been caused by Lessee's use of the Property

(d) Notwithstanding any other provision of the Lease, Lessor shall and hereby does agree to indemnify, protect, defend and hold harmless Lessee and its partners, directors, officers, employees, shareholders, agents, contractors and each of their respective successors

and assigns from and against any and all claims, judgments, damages, penalties, fines, taxes, costs, liabilities, losses and expenses arising at any time during or after the term of this Lease as a result of or in connection with Lessor's breach of any representation, warranty or covenant contained in this paragraph.

(e) In the event of Lessor's breach of any representation, warranty or covenant contained in this paragraph, Lessee shall have the right, in addition to all other remedies provided herein, to (i) terminate this Lease by written notice to Lessor, such termination to be effective as of the date set forth in such notice, or (ii) complete any Environmental Cleanup Work which is necessary or appropriate and deduct from future rentals and other sums owing under this Lease the full amount of all costs and expenses incurred by Lessee in connection therewith, together with interest at the rate of ten percent (10%) per annum

(f) Lessee agrees not to store, release or discard any Hazardous Materials on the Property except in material compliance with Environmental Laws then in effect

(g) Notwithstanding any other provision of the Lease, Lessee shall and hereby does agree to indemnify, protect, defend and hold harmless Lessor and its partners, directors, officers, employees, shareholders, agents, contractors and each of their respective successors and assigns from and against any and all costs, claims, judgments, damages, penalties, fines, taxes, costs, liabilities, losses and expenses arising at any time during or after the term of this Lease as a result of or in connection with the presence of any Hazardous Materials on the Property or the Property as the result of Lessee's activities on the Property

(h) The indemnity obligations of Lessor and Lessee under this Section 30 shall survive the expiration or early termination of this Lease

31. **QUIET POSSESSION.** If Lessee pays the rent and complies with all other terms of this Lease, then Lessee may occupy and enjoy the Property for the full Lease term, and Lessor will protect and assure Lessee's quiet possession of the Property

32. **WAIVER OF LANDLORD'S LIEN.** All statutory and contractual liens for rent or other sums due or owing under this Lease are hereby waived by Lessor

33 **ESTOPPEL CERTIFICATES.**

(a) **LESSEE ESTOPPEL CERTIFICATES.** Lessee shall execute and deliver to Lessor, within ten (10) days after receipt of Lessor's request, any estoppel certificate or other statement reasonably requested by Lessor. Such estoppel certificate shall acknowledge and certify each of the following matters, to the extent each may be true that this Lease is in effect and not subject to any rental offsets, claims, or defenses to its enforcement, the commencement and termination dates of the term; that Lessee is paying rent on a current basis, that the Lease and the LCRA Easement constitute the entire agreement between Lessee and Lessor relating to the Property; that Lessee has accepted the Property and is in possession thereof, that the Lease has not been modified, altered, or amended except in

specified respects by specified instruments; and that Lessee has no notice of any prior assignment, hypothecation, or pledge of rents or the Lease

(b) **LESSOR ESTOPPEL CERTIFICATES.** Lessor shall execute and deliver to Lessee, within ten (10) days after receipt of Lessee's request, any estoppel certificate or other statement reasonably requested by Lessee. Such estoppel certificates shall acknowledge and certify each of the following matters, to the extent each may be true: that this Lease is in effect and not subject to any claims or defenses to its enforcement; the commencement and termination dates of the term; that Lessee is paying rent on a current basis and is not in default of any of its obligations under the Lease; that any improvements constructed by Lessee under the terms of the Lease have been approved and accepted by Lessor in all respects, that the Lease and the LCRA Easement constitute the entire agreement between Lessee and Lessor relating to the Property; that the Lease has not been modified, altered, or amended except in specified respects by specified instruments; and that Lessor has no notice of any prior assignment, hypothecation, or pledge of the Lease

34 **REPRESENTATIONS AND WARRANTIES.** Lessor hereby represents and warrants to Lessee as follows.

(a) the Property is free and clear of liens and encumbrances (other than liens securing the payment of ad valorem taxes for the current and subsequent years) and there are no underlying or superior leases with respect to the Property,

(b) except for the title exceptions listed on Exhibit "E" attached hereto and incorporated herein by reference, the Property is not subject to any easements, restrictive covenants or other title exceptions of any kind or nature which were created by, through or under Lessor;

(c) except as provided in this Lease, there are no outstanding leases, options to purchase, rights of first refusal, letters of intent, rental agreements, maintenance agreements or other agreements or commitments in existence with respect to any portion of the Property,

(d) there are no parties other than Lessor who own or hold title to any portion of the Property an undivided interest or otherwise; and

(e) no joinder or approval of any lender, mortgagee or any other person or entity is required with respect to Lessor's right and authority to enter into this Lease

35. **COVENANTS OF LESSOR.** Lessor covenants and agrees that, during the term of this Lease:

(a) Lessor will not enter into or grant any liens, encumbrances, easements, restrictive covenants or other agreements of any kind or nature which would affect title to the Property, without the prior written approval of Lessee (Lessee agrees, however, that Lessee will cause water and wastewater lines to be extended to the boundaries of the three (3) ten (10) acre parcels of land being retained by Lessor and Lessee agrees not to unreasonably withhold its

approval of any easements necessary to extend water and wastewater lines to such tracts),

(b) Lessor will not enter into any leases, contracts or agreements of any kind or nature which would be binding upon Lessee or which would affect Lessee's rights under this Lease without the prior written approval of Lessee (provided, however, that this restriction does not apply to conveyances of the Property or assignments of Lessor's rights under this Lease), and

(c) Lessor will cooperate with Lessee concerning easements, dedications, zoning, covenants, restrictions and all other matters relating to the development of the Property and/or the issuance of governmental approvals and utility service commitments in connection therewith (and Lessor agrees to execute and deliver any documents which may be reasonably required in connection with the foregoing, including, without limitation, zoning applications, easements, dedication instruments and other similar documents) In this regard, Lessor agrees that Lessee may obtain such zoning approvals and other governmental permits and approvals and such amendments or modifications thereto as Lessor may from time to time request in order to allow the Property to be developed and utilized for the uses and purposes allowed under this Lease.

36 LESSOR APPROVALS. It is specifically understood and agreed that as regards any approvals or matters to be performed to the satisfaction of Lessor, the Lessor shall not unreasonably withhold or delay its approval or indication of satisfaction and shall approve or indicate satisfaction as to any matter so long as any deviation from the requirements of Lessor are of a minor and insubstantial nature such that Lessor will realize substantially the benefits to which it is entitled under the Lease

37 RECORDATION. Lessee may, at Lessee's option, election and expense, record this Lease in any real property records or other public records. Alternatively, Lessor agrees, upon Lessee's request, to execute and deliver to Lessee a memorandum of this Lease which Lessee may record at its expense in any real property records or other public records. The provisions of this Lease shall control, however, in regard to any omissions from the memorandum of lease or any provisions hereof which may be in conflict with the memorandum of lease.

38. SEVERABILITY. A determination by a court of competent jurisdiction that any provision of this Lease or any part thereof is illegal or unenforceable shall not cancel or invalidate the remainder of such provision or this Lease, which shall remain in full force and effect

39. INTERPRETATION. The captions of the Sections of this Lease are to assist the parties in reading this Lease and are not a part of the terms or provisions of this Lease. Whenever required by the context of this Lease, the singular shall include the plural and the plural shall include the singular. The masculine, feminine and neuter genders shall each include the other

40 FORCE MAJEURE. Except for any requirements to pay sums of money under the terms of this Lease, if either party cannot perform any of its obligations due to events beyond such party's control, the time provided for performing such obligations shall be extended by a period of time equal to the duration of such events. Events beyond a party's control include, but are not limited

to, acts of God, war, civil commotion, labor disputes, strikes, fire, flood or other casualty, shortages of labor or material, government regulation or restriction and weather conditions. Notwithstanding any provision herein to the contrary, events beyond Lessee's control shall not excuse Lessee from the requirement to pay all rent hereunder on a timely basis.

41 **MITIGATION OF DAMAGES** Both Lessor and Lessee shall each use commercially reasonable efforts to mitigate any damages resulting from a default of the other party under this Lease.

42 **NO PARTNERSHIP OR AGENCY.** Lessor does not in any way or for any purpose become a partner of Lessee in the conduct of its business or otherwise, or a joint venturer with Lessee. Lessee shall not be deemed the agent of Lessor for any purpose.

43 **AMENDMENT** This Lease shall only be amended or modified by the written agreement of the Lessor and Lessee.

44 **ENTIRE AGREEMENT** This Lease and the LCRA Easement contain the entire agreement between the parties hereto and no modification of this Lease shall be valid or binding unless the same is in writing and signed by the Lessor and Lessee.

45. **GOVERNING LAW** The laws of the State of Texas shall govern the interpretation and validity of and other matters pertaining to this Lease, and all causes of action in connection herewith shall be maintained in proceedings filed in Travis County, Texas.

46. **SUCCESSORS AND ASSIGNS** All rights and liabilities herein given to or imposed upon the respective parties hereto shall extend to and bind the several respective heirs, executors, successors, and assigns of said parties.

47. **WAIVER.** Except as and to the extent otherwise expressly provided elsewhere in this Lease, no term, covenant or condition of this Lease shall be deemed to have been waived by either party hereto, unless such waiver be in writing by the party claimed to have waived same, and a waiver by a party hereto of any breach of any term, covenant or condition shall not be deemed to be a waiver of such term, covenant or condition on any subsequent breach of same. Subsequent acceptance of rent hereunder by Lessor shall not be deemed to be a waiver of any preceding violation by Lessee or any term, covenant or condition of this Lease, regardless of Lessor's knowledge of such preceding violation at the time of acceptance of such rent.

48 **ATTORNEY'S FEES.** If it becomes necessary for Lessor or Lessee to secure the services of an attorney in order to collect any amount due hereunder, or to enforce any of the provisions hereof, Lessee agrees to pay such reasonable attorney's fee of Lessor in the event Lessor prevails, and Lessor agrees to pay such reasonable attorney's fee of Lessee in the event Lessee prevails.


49 **COUNTERPARTS.** Each of the parties hereto has caused this Lease to be executed simultaneously in multiple counterparts, each of which shall constitute but one and the same instrument.

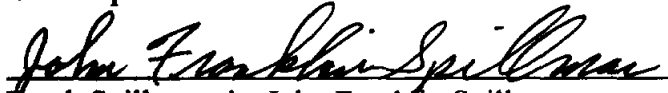
50 **LIABILITY** None of the directors, shareholders, officers, principles, owners, partners or employees of Lessee shall be personally liable in any manner or to any extent under or in connection with this Lease

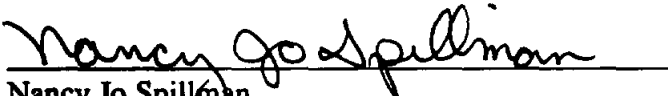
51 **LESSOR'S REPRESENTATIVE** By execution of this Lease, Golda Spillman Garnett, Frank Spillman (a/k/a John Franklin Spillman) and Henry J. Spillman, Jr (the "Individual Lessors") hereby appoint and designate Frank Spillman (a/k/a John Franklin Spillman) as their representative ("Lessor's Representative") to make all decisions required of Lessor under this Lease and to take all actions which may be taken by Lessor under the terms of this Lease, including without limitation the power to make demands upon Lessee and declare events of default hereunder For all of the foregoing purposes, the Individual Lessors hereby designate and appoint Frank Spillman (a/k/a John Franklin Spillman) as their agent and attorney in fact and the Individual Lessors agree and hereby acknowledge that such appointment and power is coupled with an interest The Individual Lessors may at any time, and from time to time, change their designation of the Lessor's Representative hereunder by delivering to Grantor written notice of such change, so long as such notice is agreed to and executed by all of the Individual Lessors. The Individual Lessors hereby agree and acknowledge that Lessee may rely upon any agreement of the Lessor's Representative as being fully binding on all of the Individual Lessors and may rely upon any decisions and actions taken by Lessor's Representative as being the decision and action of all of Individual Lessors

EXECUTED effective as of January 31, 2001.

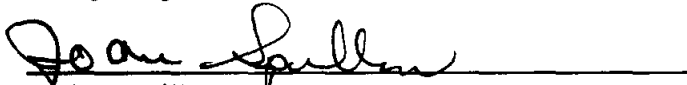
LESSOR


Golda Spillman Garnett


Frank Spillman aka John Franklin Spillman


Nancy Jo Spillman

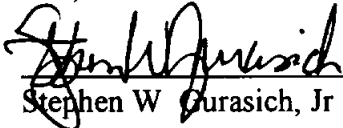

Henry J. Spillman, Jr


Jo Ann Spillman

LESSEE

SPILLMAN DEVELOPMENT GROUP, LTD , a
Texas limited partnership

By: SDG MANAGEMENT, INC , a Texas
corporation, its General Partner


By: 
Stephen W Gurasich, Jr , President

CONSENT, JOINDER AND APPROVAL OF LCRA

By execution hereof, LCRA hereby joins in, consents to and approves this Lease and agrees
to be bound by all of the terms and provisions herein which are applicable to the LCRA

Executed effective as of January 31, 2001.

LOWER COLORADO RIVER
AUTHORITY

By: 
Randy J Goss, P E , Executive
Manager, Water and Wastewater
Utilities



THE STATE OF TEXAS §
COUNTY OF TRAVIS §

This instrument was acknowledged before me on this 31st day of January, 2001 by Golda
Spillman Garnett.

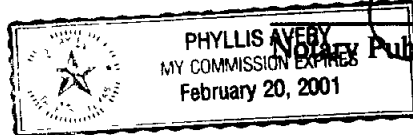
(SEAL)

 
Notary Public Signature

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

This instrument was acknowledged before me on this 31st day of January, 2001 by Frank Spillman aka John Franklin Spillman.

(SEAL)



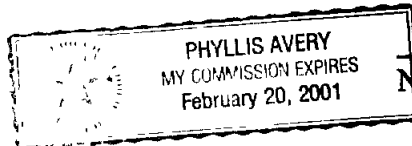
Phyllis Avery

Notary Public Signature

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

This instrument was acknowledged before me on this 31st day of January, 2001 by Nancy Jo Spillman

(SEAL)



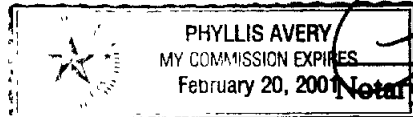
Phyllis Avery

Notary Public Signature

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

This instrument was acknowledged before me on this 31st day of January, 2001 by Henry J Spillman, Jr

(SEAL)



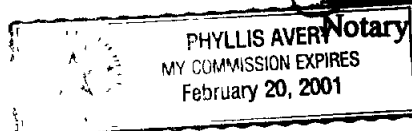
Phyllis Avery

Notary Public Signature

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

This instrument was acknowledged before me on this 31st day of January, 2001 by Jo Ann Spillman

(SEAL)

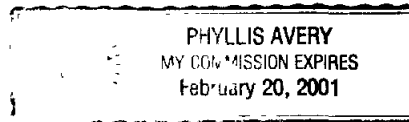


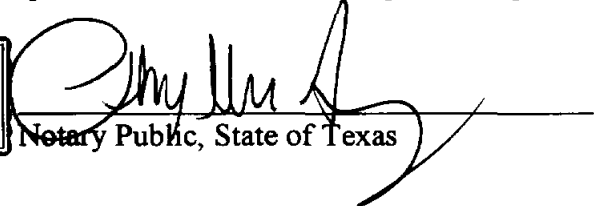
Phyllis Avery

Notary Public Signature

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

This instrument was acknowledged before me on the 31st day of January, 2001 by Stephen W Gurasich, Jr , President of SDG Management, Inc., a Texas corporation, general partner of Spillman Development Group, Ltd , a Texas limited partnership, on behalf of said limited partnership.



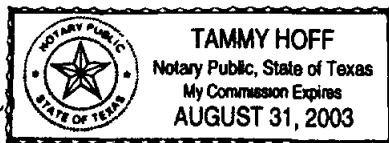


Notary Public, State of Texas

(SEAL)

THE STATE OF TEXAS §
COUNTY OF TRAVIS §

This instrument was acknowledged before me on the 31st day of January, 2001 by ^{Karen Bandy} ~~Randy I. Goss~~,
^{Chief Engineer} ~~P E , Executive Manager~~, Water and Wastewater Utilities, a division of the Lower Colorado River Authority, a conservation and reclamation district created and functioning under the laws of the State of Texas, on behalf of said conservation and reclamation district



(SEAL)



Notary Public, State of Texas

EXHIBIT "A"

DESCRIPTION OF THE PROPERTY

RECORDERS MEMORANDUM-At the time of recordation this instrument was found to be inadequate for the best photographic reproduction, because of illegibility, carbon or photocopy, discolored paper, etc. All blockouts, additions and changes were present at the time the instrument was filed and recorded.

STATE OF TEXAS §
 §
COUNTY OF TRAVIS §

FIELDNOTE DESCRIPTION of a 200 171 acre tract of land in the J Beck survey No 91, the I & G R.R Company Survey No 56, and the Ben Wightman Survey No 55, Travis County, Texas and being portions of that 177 acre tract (Second Tract), portions of the remainder of that 196.5 acre tract (First Tract), and portions of the remainder of that 160 acre tract (Third Tract) as described in Deed of Trust recorded in Volume 403, Page 341 of the Deed Records of Travis County, Texas, said 200 171 acre tract of land is more particularly described, in eight (8) parcels, by metes and bounds as follows

PARCEL "A"

COMMENCING at a ½" iron rod set for the northwest corner of the aforesaid 177 acre tract and also being the most westerly corner of that 27 338 acre tract of land conveyed to Lake Travis Independent School District by deed recorded as Document No 2000171882 of the Official Public Records of Travis County, Texas,

THENCE, S41°09'35"E, with the northwesterly line of said 177 acre tract, same being the southwesterly line of said 27.338 acre tract, a distance of 843 83 feet to a point,

THENCE, S48°50'25"W, leaving the common northwesterly line of said 177 acre tract and southwesterly line of said 27 338 acre tract, across the 17 acre tract, for a distance of 397 70 feet to a ½" iron rod set for the POINT OF BEGINNING of the herein described Parcel "A",

THENCE continuing across said 177 acre tract, the following twenty-four (24) courses

- 1) S48°11'15"E, a distance of 155 96 feet to a ½" iron rod set,
- 2) S43°16'56"E, a distance of 400 00 feet to a ½" iron rod set,
- 3) S41°08'46"W, a distance of 68 67 feet to a ½" iron rod set,
- 4) S26°13'57"W, a distance of 121 99 feet to a ½" iron rod set,
- 5) S09°59'55"W, a distance of 109 01 feet to a ½" iron rod set,
- 6) S04°40'30"E, a distance of 103 05 feet to a ½" iron rod set,
- 7) S09°46'24"E, a distance of 721 40 feet to a ½" iron rod set,
- 8) S02°57'25"E, a distance of 142 46 feet to a ½" iron rod set,
- 9) S83°11'07"E, a distance of 135 71 feet to a ½" iron rod set at the beginning of a non-tangent curve to the right,
- 10) Southwesterly along said curve to the right having a radius of 525 00 feet, a central angle of 16°00'03" (chord bears S14°48'54"W, 146 14 feet) for an arc distance of 146.62 feet to a ½" iron rod set for a point of tangency,

- 11) S22°48'56"W, a distance of 26 09 feet to a ½" iron rod set for the point of curvature of a curve to right,
- 12) Southwesterly along said curve to the right having a radius of 25 00 feet, a central angle of 86°32'47", (chord bears S66°05'19"W, 34 27 feet) for an arc distance of 37.76 feet to a ½" iron rod set for a point of reverse curvature;
- 13) Northwesterly along said curve to the left having a radius of 805 00 feet, a central angle of 34°24'04", (chord bears N87°50'19"W, 476 10 feet) for an arc distance of 483.33 feet to a ½" iron rod set,
- 14) N20°24'47"W, a distance of 729 96 feet to a ½" iron rod set,
- 15) N14°51'58"W, a distance of 145 34 feet to a ½" iron rod set,
- 16) N00°23'54"W, a distance of 320 00 feet to a ½" iron rod set,
- 17) N10°08'39"W, a distance of 117 10 feet to a ½" iron rod set,
- 18) N29°22'17"W, a distance of 116 70 feet to a ½" iron rod set,
- 19) N40°07'03"W, a distance of 99 31 feet to a ½" iron rod set,
- 20) N15°56'10"E, a distance of 160 00 feet to a ½" iron rod set,
- 21) N22°44'12"E, a distance of 137 89 feet to a ½" iron rod set,
- 22) N49°44'33"E, a distance of 128 61 feet to a ½" iron rod set,
- 23) N77°17'58"E, a distance of 128 61 feet to a ½" iron rod set,
- 24) S75°08'37"E, a distance of 128 61 feet to the POINT OF BEGINNING, CONTAINING 24.182 acres within these metes and bounds of Parcel "A"

PARCEL "B"

BEGINNING at a ½" iron rod set for the southeast corner of the aforesaid 177 acre tract and also being the northwest corner of that 23 27 acre tract of land conveyed to the City of Austin by deed recorded in Volume 9777, Page 239 of the Deed Records of Travis County, Texas;

THENCE, N62°03'56"W with the southerly line of said 177 acre tract, same being the northerly line of the remainder of that 160 acre tract described in Volume 362, Page 69 of the Deed Records of Travis County, Texas, a distance of 967 97 feet to a ½" iron rod found for the northeast corner of the Figer Subdivision according to the plat thereof recorded in Volume 80, Page 184 of the Plat Records of Travis County, Texas,

THENCE, N62°40'04"W, with the common southerly line of said 177 acre tract and northerly line of said Figer Subdivision, a distance of 200 27 feet to a ½" iron rod set for corner, from which a ½" iron rod found for the northwest corner of said Figer Subdivision bears N62°40'04"W, 8 55 feet;

THENCE, leaving the common southerly line of said 177 acre tract and northerly line of said Figer Subdivision, across the 177 acre tract and the aforesaid 196 5 acre tract, the following sixty-two (62) courses.

- 1) N27°19'56"E, a distance of 83 17 feet to a ½" iron rod set,
- 2) N02°32'32"W, a distance of 143 88 feet to a ½" iron rod set,
- 3) N29°45'14"W, a distance of 336 66 feet to a ½" iron rod set,
- 4) N71°20'57"E, a distance of 152 17 feet to a ½" iron rod set,
- 5) N75°43'40"E, a distance of 73 11 feet to a ½" iron rod set,
- 6) N12°08'53"W, a distance of 136 67 feet to a ½" iron rod set at the beginning of a non tangent curve to the right,
- 7) Northeasterly along said curve to the right having a radius of 745 00 feet, a central angle of 02°36'54", (chord bears N79°09'34"E, 34 00 feet) for an arc distance of 34.00 feet to a ½" iron rod set,
- 8) S09°31'59"E, a distance of 135 00 feet to a ½" iron rod set,
- 9) N87°19'30"E, a distance of 145 68 feet to a ½" iron rod set,
- 10) S78°57'32"E, a distance of 145 68 feet to a ½" iron rod set,
- 11) N17°53'57"E, a distance of 135 00 feet to a ½" iron rod set at the beginning of a non-tangent curve to the right,
- 12) Southeasterly along said curve to the right having a radius of 745 00 feet, a central angle of 12°31'31", (chord bears S65°50'18"E, 162 54 feet) for an arc distance of 162.86 feet to a ½" iron rod set,
- 13) S30°25'28"W, a distance of 135 00 feet to a ½" iron rod set,
- 14) S53°58'05"E, a distance of 158 34 feet to a ½" iron rod set,
- 15) S52°04'59"E, a distance of 255 27 feet to a ½" iron rod set,
- 16) S54°52'57"E, a distance of 91 21 feet to a ½" iron rod set,
- 17) N32°59'19"E, a distance of 135 00 feet to a ½" iron rod set at the beginning of a non-tangent curve to the left,
- 18) Southeasterly along said curve to the left having a radius of 1070 00 feet, a central angle of 03°50'22" (chord bears S58°55'52"E, 71 69 feet) for an arc distance of 71.70 feet to a ½" iron rod set;
- 19) S02°06'46"E, a distance of 427 50 feet to a ½" iron rod set,
- 20) N87°53'14"E, a distance of 126 07 feet to a ½" iron rod set,

- 21) N25°40'02"E, a distance of 76.43 feet to a ½" iron rod set at the beginning of a curve to the left,
- 22) Northeasterly along said curve to the left having a radius of 50.00 feet, a central angle of 75°15'14" (chord bears N78°02'25"E, 61.05 feet) for an arc distance of 65.67 feet to a ½" iron rod set,
- 23) S49°35'12"E, a distance of 41.27 feet to a ½" iron rod set,
- 24) N87°53'14"E, a distance of 115.34 feet to a ½" iron rod set,
- 25) N02°06'46"W, a distance of 90.00 feet to a ½" iron rod set,
- 26) N32°58'44"W, a distance of 93.20 feet to a ½" iron rod set,
- 27) N09°44'26"E, a distance of 76.43 feet to a ½" iron rod set at the beginning of a curve to the left;
- 28) Southeasterly along said curve to the left having a radius of 1070.00 feet, a central angle of 06°09'11" (chord bears S83°20'09"E, 114.86 feet) for an arc distance of 114.91 feet to a ½" iron rod set,
- 29) S86°24'45"E, a distance of 96.93 feet to a ½" iron rod set,
- 30) S89°16'28"E, a distance of 5.01 feet to a ½" iron rod set,
- 31) S03°35'15"W, a distance of 135.17 feet to a ½" iron rod set,
- 32) S88°04'11"E, a distance of 170.07 feet to a ½" iron rod set,
- 33) S77°32'15"E, a distance of 161.94 feet to a ½" iron rod set,
- 34) N03°35'15"E, a distance of 135.04 feet to a ½" iron rod set at the beginning of a curve to the left;
- 35) Northeasterly along said curve to the left having a radius of 50.00 feet, a central angle of 174°20'41" (chord bears N03°35'15"E, 99.88 feet) for an arc distance of 152.14 feet to a ½" iron rod set,
- 36). N03°35'15"E, a distance of 135.04 feet to a ½" iron rod set,
- 37) N07°35'31"W, a distance of 402.28 feet to a ½" iron rod set,
- 38) N51°40'02"E, a distance of 398.49 feet to a ½" iron rod set,
- 39) N79°27'58"E, a distance of 98.46 feet to a ½" iron rod set;
- 40) S18°07'09"E, a distance of 132.79 feet to a ½" iron rod set;
- 41) S33°33'34"E, a distance of 210.46 feet to a ½" iron rod set;
- 42) S12°15'09"E, a distance of 290.26 feet to a ½" iron rod set,

- 43) N75°15'32"E, a distance of 140 00 feet to a ½" iron rod set at the beginning of a curve to the left,
- 44) Southeasterly along said curve to the left having a radius of 330 00 feet, a central angle of 43°26'23" (chord bears S36°27'40"E, 244 24 feet) for an arc distance of 250 19 feet to a ½" iron rod set for a point of tangency,
- 45) S58°10'51"E, a distance of 16 21 feet to a ½" iron rod set for the point of curvature of a curve to the right,
- 46) Southeasterly along said curve to the right having a radius of 25 00 feet, a central angle of 90°00'00" (chord bears S13°10'51"E, 35 36 feet) for an arc distance of 39.27 feet to a ½" iron rod set for a point of tangency,
- 47) S30°56'48"W, a distance of 13 47 feet to a ½" iron rod set for the point of curvature of a curve to the left;
- 48) Southwesterly along said curve to the left having a radius of 420 00 feet, a central angle of 12°17'26" (chord bears S25°40'26"W, 89 92 feet) for an arc distance of 90.09 feet to a ½" iron rod set,
- 49) N70°28'17"W, a distance of 135 00 feet to a ½" iron rod set,
- 50) S13°05'27"W, a distance of 124 46 feet to a ½" iron rod set,
- 51) S03°38'37"W, a distance of 125 53 feet to a ½" iron rod set,
- 52) S15°37'22"E, a distance of 418 87 feet to a ½" iron rod set,
- 53) N74°22'38"E, a distance of 135 00 feet to a ½" iron rod set,
- 54) S15°37'22"E, a distance of 65 00 feet to a ½" iron rod set,
- 55) S74°22'38"W, a distance of 135 00 feet to a ½" iron rod set,
- 56) S15°37'22"E, a distance of 100 00 feet to a ½" iron rod set,
- 57) S07°33'18"E, a distance of 112 25 feet to a ½" iron rod set,
- 58) S26°25'58"W, a distance of 693 67 feet to a ½" iron rod set,
- 59) N43°07'00"W, a distance of 1196 91 feet to a ½" iron rod set,
- 60) N69°54'00"W, a distance of 513 96 feet to a ½" iron rod set,
- 61) S65°06'00"W, a distance of 116 34 feet to a ½" iron rod set,
- 62) S02°06'46"E, a distance of 197 54 feet to a ½" iron rod set on the southwesterly line of the aforesaid 196 5 acre tract;

THENCE, N62°03'34"W, with the southwesterly line of said 196 5 acre tract same being the northerly line of the aforesaid 23 27 acre tract, a distance of 61 24 feet to the POINT OF BEGINNING, CONTAINING 61 361 acres of land area within these metes and bounds of Parcel "B";

PARCEL "C"

BEGINNING at a ½" iron pipe found for the southeast corner of that 7 00 acre tract of land conveyed to J. Frank Spillman and Noel Spillman by deed recorded in Volume 5571, Page 2266 of the Deed Records of Travis County, Texas and being the northeasterly corner of the aforesaid 196.5 acre tract;

THENCE, with the easterly line of said 196 5 acre tract, same being the westerly line of that 52 77 acre tract (Tract 1) and that 30 00 acre tract (Tract 2) conveyed to Edward Morgan by deed recorded in volume 12361, Page 1004 of the Deed Records of Travis County, Texas the following three (3) courses.

- 1) S27°37'36"W, a distance of 177 79 feet to a ½" iron rod found for the most northerly corner of said 30 00 acre tract,
- 2) S26°57'18"W, a distance of 1117 71 feet to a ¾" iron pipe found for an angle point;
- 3) S27°13'27"W, a distance of 241 26 feet to a ½" iron rod set for the most southerly corner of the herein described tract,

THENCE, leaving the common easterly line of said 196 5 acre tract and westerly line of said 30 00 acre tract, across the 196 5 acre tract the following thirty six (36) courses

- 1) N62°38'40"W, a distance of 100 47 feet to a ½" iron rod set,
- 2) N40°08'39"W, a distance of 72 06 feet to a ½" iron rod set,
- 3) N17°35'00"W, a distance of 89.24 feet to a ½" iron rod set,
- 4) N15°37'22"W, a distance of 497 50 feet to a ½" iron rod set,
- 5) N04°13'42"E, a distance of 158 66 feet to a ½" iron rod set,
- 6) N64°56'20"W, a distance of 134 34 feet to a ½" iron rod set at the beginning of a curve to the right;
- 7) Northeasterly along said curve to the right having a radius of 360 00 feet, a central angle of 06°45'29" (chord bears N28°26'24"E, 42 44 feet) for an arc distance of 42 46 feet to a ½" iron rod set for a point of tangency,
- 8) N31°49'09"E, a distance of 98 47 feet to a ½" iron rod set,
- 9) N28°57'24"E, a distance of 37 98 feet to a ½" iron rod set,
- 10) S58°10'51"E, a distance of 185 00 feet to a ½" iron rod set;
- 11) N06°07'48"E, a distance of 110 97 feet to a ½" iron rod set,
- 12) N31°49'09"E, a distance of 500 00 feet to a ½" iron rod set,
- 13) N45°55'09"E, a distance of 178 82 feet to a ½" iron rod set,

- 14) N13°22'28"E, a distance of 72.48 feet to a ½" iron rod set,
- 15) N76°46'38"W, a distance of 115.58 feet to a ½" iron rod set,
- 16) S74°44'50"W, a distance of 25.00 feet to a ½" iron rod set at the beginning of a curve to the left;
- 17) Northwesterly along said curve to the left having a radius of 50.00 feet, a central angle of 132°53'39" (chord bears N81°42'00"W, 91.67 feet) for an arc distance of 115.97 feet to a ½" iron rod set for a point of tangency,
- 18) S31°49'10"W, a distance of 26.50 feet to a ½" iron rod set,
- 19) N58°10'51"W, a distance of 115.64 feet to a ½" iron rod set,
- 20) N69°08'20"W, a distance of 128.23 feet to a ½" iron rod set,
- 21) N77°20'40"W, a distance of 313.00 feet to a ½" iron rod set,
- 22) S78°42'58"W, a distance of 141.70 feet to a ½" iron rod set,
- 23) S60°36'49"W, a distance of 124.36 feet to a ½" iron rod set at the beginning of a curve to the right;
- 24) Northeasterly along said curve to the right having a radius of 270.00 feet, a central angle of 43°00'58" (chord bears N06°07'25"E, 197.98 feet) for an arc distance of 202.71 feet to a ½" iron rod set for a point of tangency,
- 25) N27°37'54"E, a distance of 103.51 feet to a ½" iron rod set for the point of curvature of a curve to the left,
- 26) Northeasterly along said curve to the left having a radius of 330.00 feet, a central angle of 54°45'02" (chord bears N01°15'23"E, 303.48 feet) for an arc distance of 315.34 feet to a ½" iron rod set for a point of tangency,
- 27) N27°07'07"W, a distance of 106.43 feet to a ½" iron rod set for the point of curvature of a curve to the right,
- 28) Northwesterly along said curve to the right having a radius of 270.00 feet, a central angle of 16°44'34" (chord bears N18°44'51"W, 78.62 feet) for an arc distance of 78.90 feet to a ½" iron rod set for a point of tangency,
- 29) N10°22'34"W, a distance of 29.91 feet to a ½" iron rod set for the point of curvature of a curve to the right,
- 30) Northeasterly along said curve to the right having a radius of 25.00 feet, a central angle of 95°23'41" (chord bears N37°19'16"E, 36.98 feet) for an arc distance of 41.62 feet to a ½" iron rod set for a point of compound curvature;
- 31) Northeasterly along said curve to the right having a radius of 610.00 feet, a central angle of 08°10'23" (chord bears N89°06'19"E, 86.94 feet) for an arc distance of 87.01 feet to a ½" iron rod set for a point of tangency,

- 32) S86°48'30"E, a distance of 475 18 feet to ½" iron rod set for the point of curvature of a curve to the left,
- 33) Northeasterly along said curve to the left having a radius of 2340 00 feet, a central angle of 23°50'39" (chord bears N81°16'10"E, 966 80 feet) for an arc distance of 973 82 feet to a ½" iron rod set,
- 34) S23°33'21"E, a distance of 145 62 feet to a ½" iron rod set,
- 35) S40°13'59"E, a distance of 163 25 feet to a ½" iron rod set,
- 36) S21°32'40"E, distance of 40 64 feet to a ½" iron rod set on the westerly line of the aforesaid 7.00 acre tract,

THENCE, with the westerly line of said 7 00 acre tract, the following two (2) courses

- 1) S30°58'40"W, a distance of 240 41 feet to a ½" iron pipe found for an angle point,
- 2) S27°04'48"W, a distance of 803 04 feet to a ½" iron pipe found for the southwest corner of the 7 00 acre tract,

THENCE, S62°17'27"E, with the southerly line of said 7 00 acre tract, a distance of 259 61 feet to the POINT OF BEGINNING, CONTAINING 48 790 acres of land area within these metes and bounds of Parcel "C",

PARCEL "D"

BEGINNING at a 8" diameter fence corner post found for an "ell" corner in the northerly line of the aforesaid 177 acre tract and being the most southerly corner of that 55 00 acre tract conveyed to Lake Travis Independent School District by deed recorded in Volume 7941, Page 395 of the Deed Records of Travis County, Texas,

THENCE, with the northerly line of said 177 acre tract same being the southeasterly line of said 55 00 acre tract, the following five (5) courses

- 1) N49°43'29"E, a distance of 443 51 feet to a 60d nail found for an angle point;
- 2) N47°40'08"E, a distance of 214.94 feet to a ½" iron rod found for an angle point;
- 3) N46°00'45"E, a distance of 905 22 feet to a ½" iron rod found for an angle point;
- 4) N61°22'17"E, a distance of 47 55 feet to a ½" iron rod found for an angle point;
- 5) N48°31'23"E, a distance of 575 00 feet to a ½" iron rod set for corner,

THENCE, leaving the common northerly line of said 177 acre tract and southeasterly line of said 55.00 acre tract, across the 177 acre tract and the aforesaid 196 5 acre and 160 acre tracts, the following forty-five (45) courses:

- 1) S41°28'37"E, a distance of 103.31 feet to a ½" iron rod set,
- 2) N73°54'11"E, a distance of 489.37 feet to a ½" iron rod set,
- 3) S67°55'42"E, a distance of 667.59 feet to a ½" iron rod set,
- 4) S06°50'14"E, a distance of 944.01 feet to a ½" iron rod set at the beginning of a curve to the right;
- 5) Southwesterly along said curve to the right having a radius of 2240.00 feet, a central angle of 06°06'17" (chord bears S69°16'49"W, 238.56 feet) for an arc distance of 238.67 feet to a ½" iron rod set,
- 6) N04°10'37"W, a distance of 132.46 feet to a ½" iron rod set,
- 7) N06°58'09"W, a distance of 53.87 feet to a ½" iron rod set,
- 8) N27°19'39"W, a distance of 59.23 feet to a ½" iron rod set,
- 9) N48°39'43"W, a distance of 59.23 feet to a ½" iron rod set,
- 10) N69°59'46"W, a distance of 59.23 feet to a ½" iron rod set,
- 11) S88°40'11"W, a distance of 59.23 feet to a ½" iron rod set,
- 12) S62°50'13"W, a distance of 112.14 feet to a ½" iron rod set,
- 13) S81°22'17"W, a distance of 148.90 feet to a ½" iron rod set;
- 14) S86°51'51"W, a distance of 267.42 feet to a ½" iron rod set,
- 15) N03°08'09"W, a distance of 123.49 feet to a ½" iron rod set,
- 16) N62°21'00"W, a distance of 130.54 feet to a ½" iron rod set at the beginning of a curve to the left,
- 17) Northwesterly along said curve to the left having a radius of 50.00 feet, a central angle of 99°40'27" (chord bears N22°11'15"W, 76.42 feet) for an arc distance of 86.98 feet to a ½" iron rod set,
- 18) N17°58'32"E, a distance of 110.00 feet to a ½" iron rod set,
- 19) N87°03'51"W, a distance of 87.23 feet to a ½" iron rod set,
- 20) S63°14'31"W, a distance of 203.56 feet to a ½" iron rod set,
- 21) S39°23'58"W, a distance of 68.16 feet to a ½" iron rod set,
- 22) S34°47'05"W, a distance of 67.11 feet to a ½" iron rod set,
- 23) S24°22'46"W, a distance of 257.69 feet to a ½" iron rod set;

- 24) S03°17'37"W, a distance of 212.80 feet to a ½" iron rod set at the beginning of a curve to the left;
- 25) Southwesterly along said curve to the left having a radius of 710.00 feet, a central angle of 47°15'53" (chord bears S67°36'58"W, 569.23 feet) for an arc distance of 585.70 feet to a ½" iron rod set for a point of tangency,
- 26) S43°59'01"W, a distance of 489.65 feet to a ½" iron rod set,
- 27) N46°00'59"W, a distance of 185.31 feet to a ½" iron rod set,
- 28) N31°48'25"W, a distance of 142.15 feet to a ½" iron rod set,
- 29) N16°11'39"W, a distance of 102.30 feet to a ½" iron rod set,
- 30) N39°31'07"W, a distance of 52.72 feet to a ½" iron rod set,
- 31) N56°33'47"W, a distance of 52.72 feet to a ½" iron rod set,
- 32) N76°34'04"W, a distance of 52.86 feet to a ½" iron rod set,
- 33) S84°24'52"W, a distance of 52.86 feet to a ½" iron rod set,
- 34) S59°38'06"W, a distance of 84.28 feet to a ½" iron rod set,
- 35) S46°23'31"W, a distance of 100.35 feet to a ½" iron rod set,
- 36) S51°08'57"W, a distance of 200.00 feet to a ½" iron rod set,
- 37) S38°51'03"E, a distance of 110.00 feet to a ½" iron rod set,
- 38) S51°08'57"W, a distance of 43.10 feet to a ½" iron rod set for the point of curvature of a curve to the right,
- 39) Southwesterly along said curve to the right having a radius of 375.00 feet, a central angle of 12°25'03" (chord bears S57°21'29"W, 81.11 feet) for an arc distance of 81.27 feet to a ½" iron rod set for a point of tangency,
- 40) S63°34'00"W, a distance of 26.80 feet to a ½" iron rod set for the point of curvature of a curve to the right;
- 41) Northwesterly along said curve to the right having a radius of 25.00 feet, a central angle of 93°35'00" (chord bears N69°38'30"W, 36.44 feet) for an arc distance of 40.83 feet to a ½" iron rod set for a point of compound curvature;
- 42) Northwesterly along said curve to the right having a radius of 825.00 feet, a central angle of 09°04'49" (chord bears N18°18'36"W, 130.61 feet) for an arc distance of 130.75 feet to a ½" iron rod set for a point of tangency,
- 43) N13°46'11"W, a distance of 269.33 feet to a ½" iron rod set for the point of curvature of a curve to the left,

- 44) Northwesternly along said curve to the left having a radius of 1133 00 feet, a central angle of 06°56'52" (chord bears N17°14'38"W, 137 31 feet) for an arc distance of 137.39 feet to a ½" iron rod set,
- 45) N69°16'56"E, a distance of 172 41 feet to a ½" iron rod set,
- 46) N02°06'46"W, a distance of 129 34 feet to a ½" iron rod set on the common northerly line of said 177 acre tract and southwesterly line of said 55 00 acre tract;

THENCE, S40°53'42"E, with the common northerly line of said 177 acre tract and southwesterly line of said 55.00 acre tract, a distance of 265 80 feet to a ¾" iron rod found for an angle point,

THENCE, S41°42'14"E, continuing with said common tract line, a distance of 191 87 feet to the POINT OF BEGINNING, CONTAINING 53 877 acres of land area within these metes and bounds of Parcel "D",

PARCEL "E"

COMMENCING at an 8" diameter fence corner post found for an "ell" corner in the northerly line of the aforesaid 177 acre tract and being the most southerly corner of that 55 00 acre tract of land conveyed to the Lake Travis Independent School District by deed recorded in Volume 7941, Page 395 of the Deed Records of Travis County, Texas,

THENCE, S30°11'29"W across said 177 acre tract, a distance of 596 48 feet to a ½" iron rod set for the POINT OF BEGINNING of the herein described tract,

THENCE, continuing across said 177 acre tract, the following sixteen (16) courses

- 1) Southeasterly with a curve to the left having a radius of 885 00 feet and a central angle of 13°41'54" (chord bears S39°10'02"E, 211 08 feet) for an arc distance of 211 59 feet to a ½" iron rod set for a point of tangency,
- 2) S46°00'59"E, a distance of 415 22 feet to a ½" iron rod set,
- 3) S43°59'01"W, a distance of 192 37 feet to a ½" iron rod set,
- 4) N81°39'39"W, a distance of 44 72 feet to a ½" iron rod set,
- 5) S87°53'14"W, a distance of 142 54 feet to a ½" iron rod set,
- 6) S02°06'46"E, a distance of 304 33 feet to a ½" iron rod set at the beginning of a curve to the right;
- 7) Northwesternly along said curve to the right having a radius of 1010 00 feet, a central angle of 06°40'40" (chord bears N55°25'19"W, 117 65 feet) for an arc distance of 117.71 feet to a ½" iron rod set for a point of tangency,
- 8) N52°04'59"W, a distance of 105 32 feet to a ½" iron rod set,
- 9) N37°55'01"E, a distance of 163 23 feet to a ½" iron rod set;

- 10) N02°06'46"W, a distance of 189.81 feet to a ½" iron rod set,
- 11) N34°04'01"W, a distance of 25.00 feet to a ½" iron rod set at the beginning of a curve to the left;
- 12) Northwestery along said curve to the left having a radius of 50.00 feet, a central angle of 116°05'30" (chord bears N02°06'46"W, 84.85 feet) for an arc distance of 101.31 feet to a ½" iron rod set,
- 13) N29°50'28"E, a distance of 43.90 feet to a ½" iron rod set,
- 14) N02°06'46"W, 106.55 feet to a ½" iron rod set,
- 15) N65°36'41"W, 219.22 feet to a ½" iron rod set,
- 16) N57°40'55"E, a distance of 192.29 to the POINT OF BEGINNING, CONTAINING 3.934 acres of land area within these metes and bounds of Parcel "E".

PARCEL "F"

BEGINNING at a ½" iron rod found for the southwesterly corner of the aforesaid 177 acre tract and being an "ell" corner in the easterly line of that tract described in deed to Mrs. O H Davenport recorded in Volume 1221, Page 112 of the Deed Records of Travis County, Texas;

THENCE, N27°15'34"E, with the common westerly line of said 177 acre tract and easterly line of the Davenport tract, a distance of 318.24 feet to a ½" iron rod set for corner,

THENCE, leaving the common westerly line of said 177 acre tract and easterly line of said Davenport tract, across the 177 acre tract, the following six (6) courses

- 1) N86°05'38"E, a distance of 284.05 feet to a ½" iron rod set at the beginning of a curve to the left;
- 2) Southeasterly along said curve to the left having a radius 634.00 feet, a central angle of 09°35'32" (chord bears S08°42'08"E, 106.02 feet) for an arc distance of 106.14 feet to a ½" iron rod set for a point of tangency,
- 3) S13°29'54"E, a distance of 58.01 feet to a ½" iron rod set for the point of curvature of a curve to the left,
- 4) Southeasterly along said curve to the left having a radius of 300.00 feet, a central angle of 09°51'10" (chord bears S18°25'29"E, 51.53 feet) for an arc distance of 51.59 feet to a ½" iron rod set for a point of compound curvature;
- 5) Southeasterly along said curve to the left having a radius of 639.00 feet, a central angle of 20°59'14" (chord bears S33°50'41"E, 232.76 feet) for an arc distance of 234.06 feet to a ½" iron rod set,
- 6) S45°39'42"W, a distance of 205.04 feet to a ½" iron rod set for corner on the southerly line of the 177 acre tract;

THENCE, N61°54'32"W, with the southerly line of said 177 acre tract same being the easterly line of the aforesaid Davenport tract, a distance of 519 15 feet to the POINT OF BEGINNING, CONTAINING 4 376 acres of land area within these metes and bounds of Parcel "F"

PARCEL "G"

COMMENCING at a ½" iron rod found for the southwest corner of the aforesaid 177 acre tract and being an "ell" corner in the easterly line of that tract of land described in deed to Mrs O H. Davenport recorded in Volume 1221, Page 112 of the Deed Records of Travis County, Texas;

THENCE, N73°05'33"E, across the 177 acre tract, a distance of 1022 59 feet to a ½" iron rod set for the POINT OF BEGINNING of the herein described tract,

THENCE, continuing across said 177 acre tract, the following eight (8) courses

- 1) N14°58'12"E, a distance of 46 86 feet to a ½" iron rod set,
- 2) N51°08'12"E, a distance of 48 74 feet to a ½" iron rod set,
- 3) N69°35'14"E, a distance of 171 21 feet to a ½" iron rod set,
- 4) S20°24'47"E, a distance of 151 88 feet to a ½" iron rod set,
- 5) S68°52'28"W, a distance of 174 69 feet to a ½" iron rod set,
- 6) S89°25'40"W, a distance of 45 36 feet to a ½" iron rod set,
- 7) N55°53'42"W, a distance of 46 86 feet to a ½" iron rod set,
- 8) N20°27'46"W, a distance of 46 86 feet to the POINT OF BEGINNING, CONTAINING 0.802 acres of land area within these metes and bounds of Parcel "G".

PARCEL "H"

BEGINNING at a brass right-of-way monument found for the southeast corner of that 2 618 acre tract (Part 2) described in Proceedings in Eminent Domain to the State of Texas and recorded in Volume 10378, Page 114 of the Deed Records of Travis County, Texas and being on the present southwesterly right-of-way line of RM 620, a variable width right-of-way, at the intersection with the southeasterly line of the aforesaid 160 acre tract,

THENCE, leaving the southwesterly right-of-way line of RM 620, with the southeasterly line of said 160 acre tract, same being the northwesterly line of that 36 171 acre tract described in deed to Kenneth C Margolis, Trustee as recorded in Volume 8730, Page 729 of the Deed Records of Travis County, Texas for the following two (2) courses

- 1) S64°00'06"W, a distance of 141 47 feet to a ½" iron rod found for an angle point;
- 2) S67°01'57"W, a distance of 65 00 feet to a ½" iron rod set for corner,

THENCE, leaving the common easterly line of said 160 acre tract and westerly line of said 36 181 acre tract, across the 160 acre tract, the following three (3) courses

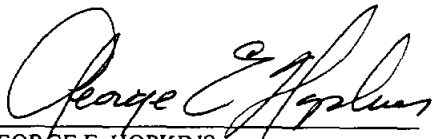
- 1) N30°54'30"W, a distance of 265 00 feet to a ½" iron rod set for an angle point;
- 2) N22°08'30"W, a distance of 520 00 feet to a ½" iron rod set for corner,
- 3) S80°10'39"E, a distance of 124 22 feet to a brass right-of-way monument found on the southwesterly right-of-way line of RM 620,

S33°27'08"E, with the southwesterly right-of-way line of RM 620, a distance of 719 67 feet to the POINT OF BEGINNING, CONTAINING 2 849 acres of land area within these metes and bounds of Parcel "H" for a total of 200 171 acres in Parcels "A-H" combined

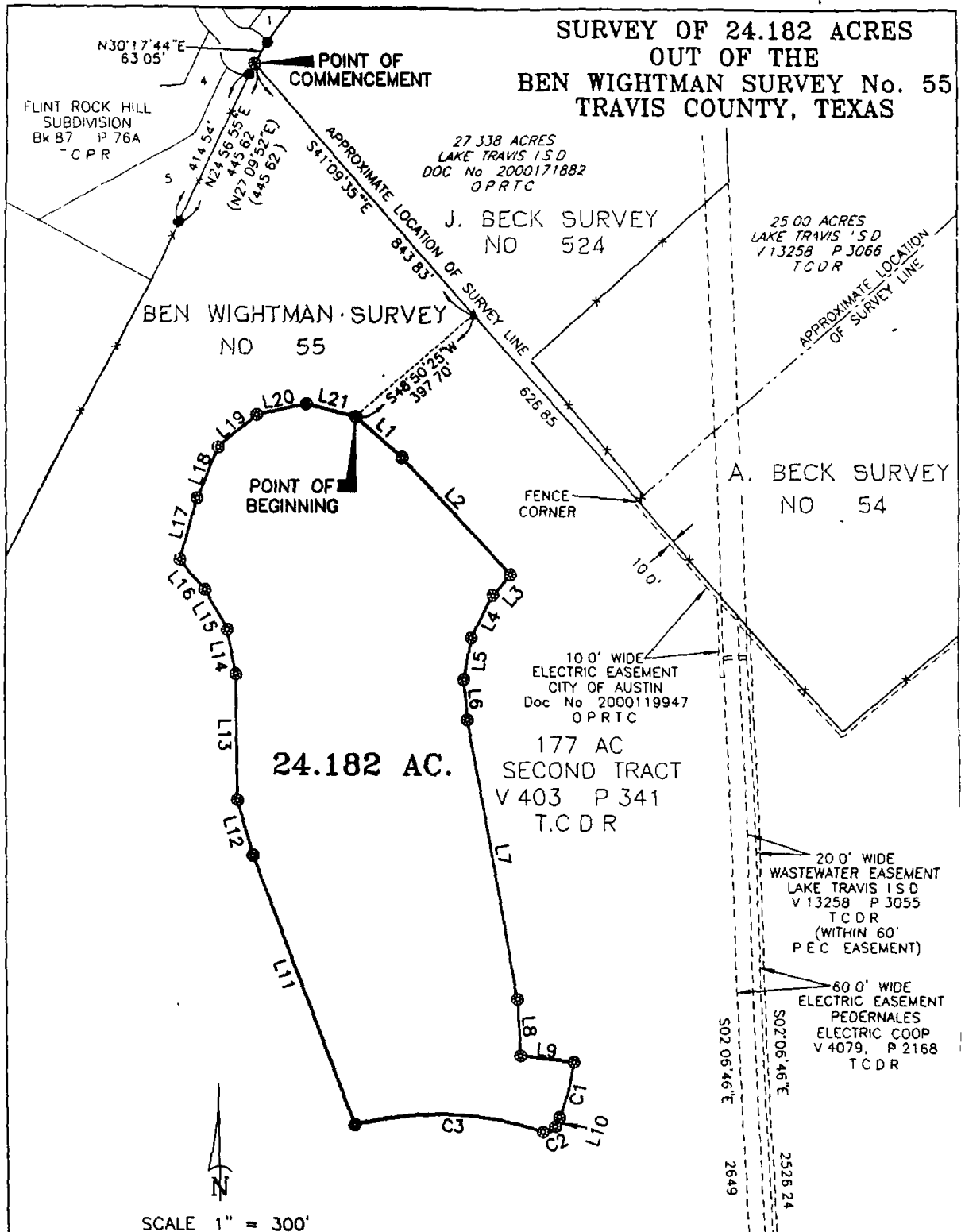
I, George E Hopkins, a Registered Professional Land Surveyor, do hereby certify that the above description is true and correct to the best of my knowledge and that the property described herein was determined by a survey made on the ground under my direction and supervision. All ½" iron rods set with "Capital Surveying Company, Inc" plastic cap.

WITNESS MY HAND AND SEAL at Austin, Travis County, Texas this the 28
day of NOVEMBER, 2000




GEORGE E HOPKINS
Registered Professional Land Surveyor
No 4685 - State of Texas

**SURVEY OF 24.182 ACRES
OUT OF THE
BEN WIGHTMAN SURVEY No. 55
TRAVIS COUNTY, TEXAS**



LEGEND

- T.C.P.R. TRAVIS COUNTY PLAT RECORD
- T.C.D.R. TRAVIS COUNTY DEED RECORD
- 1/2" IRON ROD FOUND UNLESS OTHERWISE NOTED
- ⊙ 1/2" IRON ROD FOUND WITH PLASTIC CAP MARKED "CAPITAL SURVEYING CO. INC."
- ⊙ 1/2" IRON ROD SET WITH PLASTIC CAP MARKED "CAPITAL SURVEYING CO. INC."
- ▲ CALCULATED POINT
- *— BARBED WIRE FENCE

PARCEL "A"

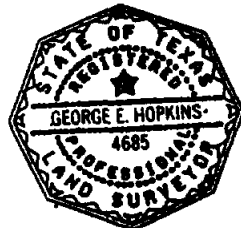
CSCI			CAPITAL SURVEYING COMPANY INCORPORATE
1101 Capital of Texas Highway South Austin, Texas 78748			Building D Suite 11 (512) 327-400
DRAWN BY	WAL	SCALE	1" = 300'
JOB NO	9951011	DATE	NOVEMBER 28 2000
DRAWING NO	99510513	CRD #	99510
			F B SHEET NO 1 OF 2

SURVEY OF 24.182 ACRES
OUT OF THE
BEN WIGHTMAN SURVEY No. 55
TRAVIS COUNTY, TEXAS

LINE No.	BEARING	DISTANCE	CURVE No
L1	S48°11'15"E	155.96'	C1
L2	S43°16'56"E	400.00'	$\Delta=16'00'03''$
L3	S41°08'46"W	68.67'	R=525.00'
L4	S26°13'57"W	121.99'	A=146.62'
L5	S09°59'55"W	109.01'	C=146.14'
L6	S04°40'30"E	103.05'	Cb=S14°48'54"W
L7	S09°46'24"E	721.40'	C2
L8	S02°57'25"E	142.46'	$\Delta=86'32'47''$
L9	S83°11'07"E	135.71'	R=25.00'
L10	S22°48'56"W	26.09'	A=37.76'
L11	N20°24'47"W	729.96'	C=34.27'
L12	N14°51'58"W	145.34'	Cb=S66°05'19"W
L13	N00°23'54"W	320.00'	C3
L14	N10°08'39"W	117.10'	$\Delta=34'24'04''$
L15	N29°22'17"W	116.70'	R=805.00'
L16	N40°07'03"W	99.31'	A=483.33'
L17	N15°56'10"E	160.00'	C=476.10'
L18	N22°44'12"E	137.89'	Cb=N87°50'19"W
L19	N49°44'33"E	128.61'	
L20	N77°17'58"E	128.61'	
L21	S75°08'37"E	128.61'	

I, George E. Hopkins, a Registered Professional Land Surveyor, do hereby certify that the attached map or plat is true and correct to the best of my knowledge and that the property shown hereon was determined by a survey made on the ground under my direction and supervision

WITNESS MY HAND AND SEAL at Austin, Travis County, Texas this the 28th day of November, 2000, A.D.



George E. Hopkins
GEORGE E. HOPKINS
Registered Professional Land Surveyor
No 4685 - State of Texas

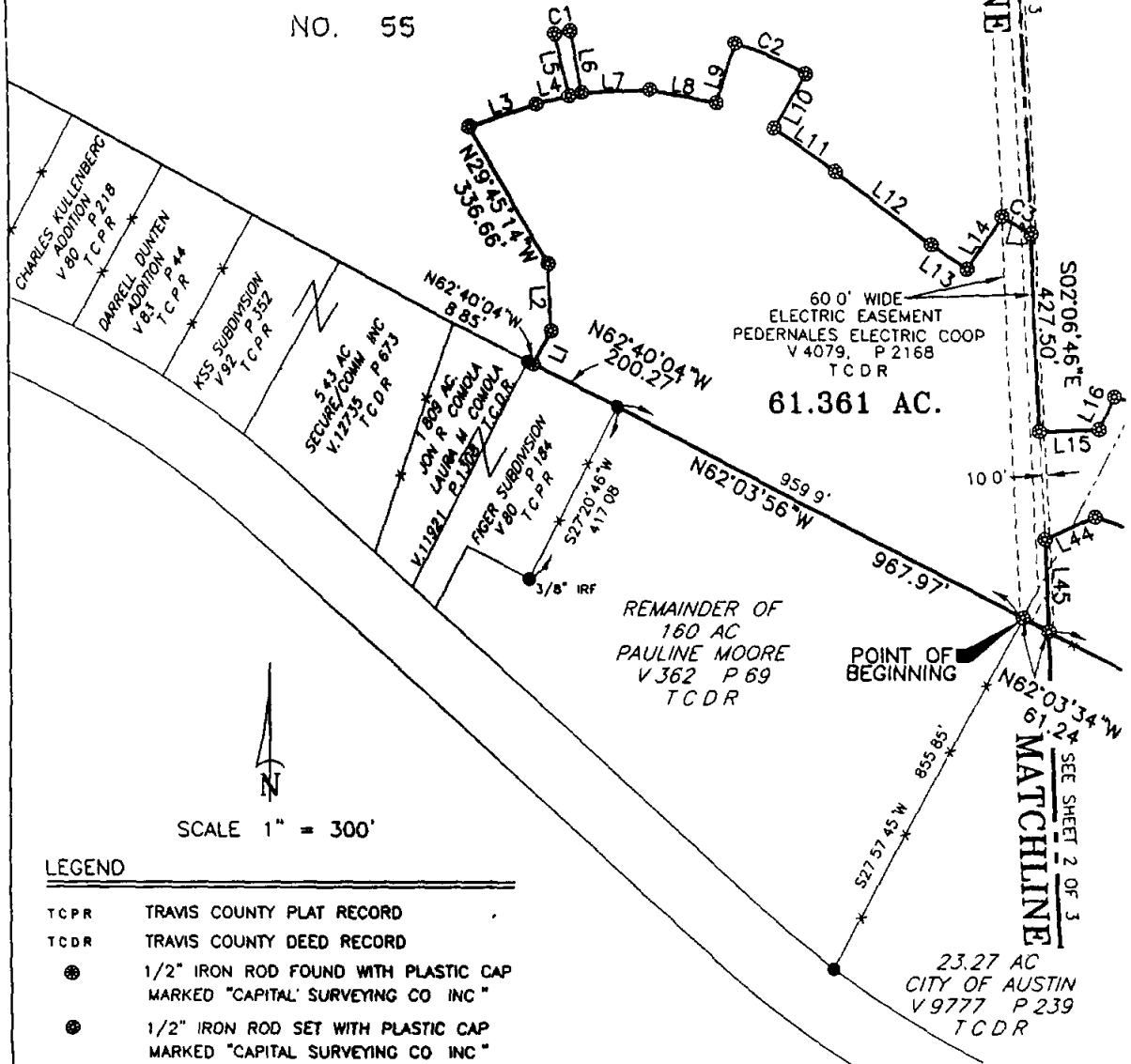
PARCEL "A"

ESCI		CAPITAL	
		SURVEYING COMPANY	
1101 Capital of Texas Highway South Austin Texas 78746		Building D Suite 110 (512) 327-4006	
DRAWN BY	WAL	SCALE	1" = 300'
JOB NO	9951011	DATE	NOVEMBER 28 2000
DRAWING NO	99510513	CRD #	99510
			SHEET NO 2 OF 2

**SURVEY OF 61.361 ACRES
OUT OF THE
BEN WIGHTMAN SURVEY No. 55 AND
THE I. & G. RR. CO. SURVEY No. 56
TRAVIS COUNTY, TEXAS**

BEN WIGHTMAN SURVEY
NO. 55

177 AC
SECOND TRACT
V 403 P 341
T C D R



LEGEND

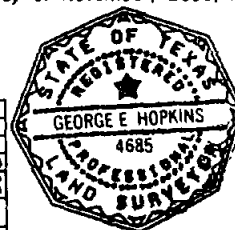
- TCPR TRAVIS COUNTY PLAT RECORD
- TCDR TRAVIS COUNTY DEED RECORD
- 1/2" IRON ROD FOUND WITH PLASTIC CAP MARKED "CAPITAL SURVEYING CO INC"
- ⊙ 1/2" IRON ROD SET WITH PLASTIC CAP MARKED "CAPITAL SURVEYING CO INC"
- 1/2" IRON ROD FOUND UNLESS OTHERWISE NOTED
- ▲ CALCULATED POINT
- x— BARBED WIRE FENCE

I, George E. Hopkins, a Registered Professional Land Surveyor, hereby certify that the attached map or plat is true and correct to the best of my knowledge and that the property shown hereon was determined by a survey made on the ground under my direction and supervision.

WITNESS MY HAND AND SEAL at Austin, Travis County, Texas this 28th day of November, 2000, A.D.

PARCEL "B"

ESCI		CAPITAL SURVEYING COMPANY INCORPORATED	
1101 Capital of Texas Highway South Austin, Texas 78748		Building 6, Suite 110 (512) 327-4608	
DRAWN BY	WAL	SCALE	1" = 300'
JOB NO	9951011	DATE	NOVEMBER 28, 2000
DRAWING NO	99510514	CRD #	99510
		F.B.	
		SHEET NO	1 OF 3



George E. Hopkins
GEORGE E. HOPKINS
Registered Professional Land Surveyor
No 4685 - State of Texas

G R R CO SURVEY
NO. 56

MATCHLINE

SEE SHEET 1 OF 3

BEN WIGHTMAN
SURVEY NO. 55
CLIMATE LOCATION

61.361 ACRES

P.O.B.

MATCHLINE
SEE SHEET 1 OF 3

23 27 AC.
CITY OF AUSTIN
V 9777 P 239
TC DR

PARCEL "B"

ESE

1101 Capital of Texas Highway South
Austin, Texas 78746

DRAWN BY WAL

JOB NO 99510 11

SCALE 1" = 300'

DATE NOVEMBER 28, 2000

**CAPITAL
SURVEYING
COMPANY
INCORPORATED**

Building D, Suite 110
(812) 327-4008

F.B

SHEET NO
0053

STATE HWY. 71

10 10 AC
*KEY ENTERPRISES, II
V 13196 P 3010
TCOR

LBAA ACRE
SUBDIVISION
V87 P141
TCPR

SURVEY OF 61.361 ACRES
OUT OF THE
BEN WIGHTMAN SURVEY No. 55 AND
THE I. & G. RR. CO. SURVEY No. 56
TRAVIS COUNTY, TEXAS

LINE No.	BEARING	DISTANCE
L1	N27°19'56"E	83.17'
L2	N02°32'32"W	143.88'
L3	N71°20'57"E	152.17'
L4	N75°43'40"E	73.11'
L5	N12°08'53"W	136.67'
L6	S09°31'59"E	135.00'
L7	N87°19'30"E	145.68'
L8	S78°57'32"E	145.88'
L9	N17°53'57"E	135.00'
L10	S30°25'28"W	135.00'
L11	S53°58'05"E	158.34'
L12	S52°04'59"E	255.27'
L13	S54°52'57"E	91.21'
L14	N32°59'19"E	135.00'
L15	N87°53'14"E	126.07'
L16	N25°40'02"E	76.43'
L17	S49°35'12"E	41.27'
L18	N87°53'14"E	115.34'
L19	N02°06'46"W	90.00'
L20	N32°58'44"W	93.20'
L21	N09°44'26"E	76.43'
L22	S86°24'45"E	96.93'
L23	S89°16'28"E	5.01'
L24	S03°35'15"W	135.17'
L25	S88°04'11"E	170.07'
L26	S77°32'15"E	161.94'
L27	N03°35'15"E	135.04'
L28	N03°35'15"E	135.04'
L29	N79°27'58"E	98.46'
L30	S18°07'09"E	132.79'
L31	S33°33'34"E	210.46'
L32	S12°15'09"E	290.26'
L33	N75°15'32"E	140.00'
L34	S58°10'51"E	16.21'
L35	S30°56'48"W	13.47'
L36	N70°28'17"W	135.00'
L37	S13°05'27"W	124.46'
L38	S03°38'37"W	125.53'
L39	N74°22'38"E	135.00'
L40	S15°37'22"E	65.00'
L41	S74°22'38"W	135.00'
L42	S15°37'22"E	100.00'
L43	S07°33'18"E	112.25'
L44	S65°08'00"W	116.34'
L45	S02°06'46"E	197.54'

CURVE No.
C1
Δ=02°36'54"
R=745.00'
A=34.00'
C=34.00'
Cb=N79°09'34"E

C2
Δ=12°31'31"
R=745.00'
A=162.86'
C=162.54'
Cb=S65°50'18"E

C3
Δ=03°50'22"
R=1070.00'
A=71.70'
C=71.69'
Cb=S58°55'52"E

C4
Δ=75°15'14"
R=50.00'
A=65.67'
C=61.05'
Cb=N78°02'25"E

C5
Δ=06°09'11"
R=1070.00'
A=114.91'
C=114.86'
Cb=S83°20'09"E

C6
Δ=174°20'41"
R=50.00'
A=152.14'
C=99.88'
Cb=N03°35'15"E

C7
Δ=43°26'23"
R=330.00'
A=250.19'
C=244.24'
Cb=S36°27'40"E

C8
Δ=90°00'00"
R=25.00'
A=39.27'
C=35.36'
Cb=S13°10'51"E

C9
Δ=12°17'26"
R=420.00'
A=90.09'
C=89.92'
Cb=S25°40'26"W

PARCEL "B"

CSCI		CAPITAL	
		SURVEYING	
		COMPANY	
		INCORPORATED	
1101 Capital of Texas Highway South Austin, Texas 78746		Building & Suite (512) 327-44	
DRAWN BY	WAL	SCALE	1" = 300'
JOB NO	9951011	DATE	NOVEMBER 28, 2000
DRAWING NO	99510514	CRD #	99510
			SHEET NO
			3 OF

LAKE TRAVIS ISD
V 7941 P 395
T.C.D.R.

**SURVEY OF 48.790 ACRES
OUT OF THE
I. & G. R.R. CO. SURVEY No. 56
TRAVIS COUNTY, TEXAS**

J BECK SURVEY
NO 91

BEN WIGHTMAN SURVEY
NO 55

196.5 AC
FIRST TRACT
V 403 P 341
T.C.D.R.

$\Delta = 23^{\circ}50'39''$
 $R = 2340.00'$
 $A = 973.82'$
 $C = 966.80'$
 $Cb = N81^{\circ}16'10''E$

(CALLED 700 ACRES)
J FRANK SPILLMAN
NOEL SPILLMAN
V 5571 P 2266
T.C.D.R.

48.790 AC.

I & G. R.R. CO. SURVEY
NO 56

POINT OF
BEGINNING

TRACT 1
52.77 AC
EDWARD A. MORGAN
V 12361 P 1004
T.C.D.R.

TRACT 2
30.00 AC

SCALE 1" = 400'

LEGEND

- T.C.P.R. TRAVIS COUNTY PLAT RECORD
- T.C.D.R. TRAVIS COUNTY DEED RECORD
- 1/2" IRON ROD FOUND
UNLESS OTHERWISE NOTED
- 1/2" IRON ROD SET WITH PLASTIC CAP
MARKED "CAPITAL SURVEYING CO. INC."
- ⊙ IRON PIPE FOUND (SIZE NOTED)
- BARBED WIRE FENCE

PARCEL "C"

ESCI		CAPITAL SURVEYING COMPANY INCORPORATED (611) 227-0888
1181 Capital of Texas Highway South Austin, Texas 78748		
DRAWN BY: NAL	SCALE: 1" = 400'	FB
JOB NO.: 99510.11	DATE: NOVEMBER 28, 2000	SHEET NO.
DRAWING NO. 99510518	CRD # 99510	1 OF 2

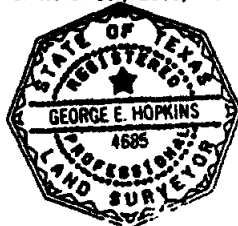
**SURVEY OF 48.790 ACRES
OUT OF THE
I. & G. R.R. CO. SURVEY No. 56
TRAVIS COUNTY, TEXAS**

LINE No.	BEARING	DISTANCE
L1	N62°38'40"W	100.47'
L2	N40°08'39"W	72.08'
L3	N17°35'00"W	89.24'
L4	N04°13'42"E	158.88'
L5	N64°56'20"W	134.34'
L6	N31°49'09"E	98.47'
L7	N28°57'24"E	37.98'
L8	S58°10'51"E	185.00'
L9	N08°07'48"E	110.87'
L10	N45°55'09"E	178.82'
L11	N13°22'28"E	72.48'
L12	N78°46'38"W	115.88'
L13	S74°44'50"W	25.00'
L14	S31°49'10"W	26.50'
L15	N58°10'51"W	115.84'
L16	N69°08'20"W	128.23'
L17	S78°42'58"W	141.70'
L18	S60°36'49"W	124.38'
L19	N27°37'54"E	103.51'
L20	N27°07'07"W	108.43'
L21	N10°22'34"W	29.81'
L22	S23°33'21"E	145.82'
L23	S40°13'59"E	183.25'
L24	S21°32'40"E	40.64'

CURVE No.	CURVE No.
C1 $\Delta=06°45'29"$ R=360.00' A=42.46' C=42.44' Cb=N28°26'24"E	C5 $\Delta=16°44'34"$ R=270.00' A=78.90' C=78.82' Cb=N18°44'51"W
C2 $\Delta=132°53'39"$ R=50.00' A=115.97' C=91.87' Cb=N81°42'00"W	C6 $\Delta=95°23'41"$ R=25.00' A=41.62' C=36.98' Cb=N37°19'16"E
C3 $\Delta=43°00'58"$ R=270.00' A=202.71' C=187.88' Cb=N08°07'25"E	C7 $\Delta=08°10'23"$ R=610.00' A=87.01' C=86.94' Cb=N89°06'19"E
C4 $\Delta=54°45'02"$ R=330.00' A=315.34' C=303.48' Cb=N00°15'23"E	

I, George E. Hopkins, a Registered Professional Land Surveyor, do hereby certify that the attached map or plat is true and correct to the best of my knowledge and that the property shown hereon was determined by a survey made on the ground under my direction and supervision.

WITNESS MY HAND AND SEAL at Austin, Travis County, Texas this 28th day of November, 2000, A.D.



George E. Hopkins
GEORGE E. HOPKINS
Registered Professional Land Surveyor
No. 4685 - State of Texas

PARCEL "C"

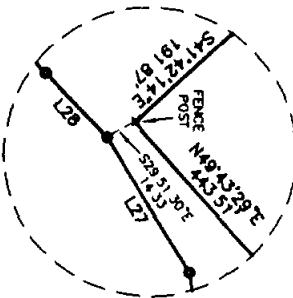
ESCI		CAPITAL	
		SURVEYING	
COMPANY		INCORPORATED	
1121 Capital of Texas Highway South Austin, Texas 78746 (512) 387-4886			
DRAWN BY: WPL	SCALE: 1" = 400'	F.S.	
JOB NO.: 99510.11	DATE: NOVEMBER 28, 2000	SHEET NO.	
DRAWING NO. 99510516	CND # 99510	2 OF 2	

A. STRUHLE SURVEY
NO 594

**SURVEY OF 53.877 ACRES
OUT OF THE J. BECK SURVEY No. 91
I. & G. R.R. CO. SURVEY No. 56
AND THE BEN WIGHTMAN SURVEY No. 55
TRAVIS COUNTY, TEXAS**

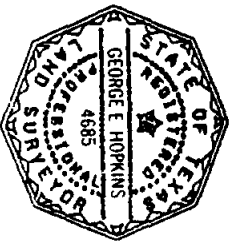
LINE No.	BEARING	DISTANCE
L1	S41°28'37"E	103.31'
L2	N06°10'37"W	132.46'
L3	N06°58'09"W	53.87'
L4	N27°19'39"W	59.23'
L5	N48°39'43"W	59.23'
L6	N69°59'46"W	59.23'
L7	S88°40'11"W	59.23'
L8	S62°50'13"W	112.14'
L9	S81°22'17"W	148.90'
L10	S86°51'51"W	267.42'
L11	N03°08'09"W	123.49'
L12	N62°21'00"W	130.34'
L13	N17°58'32"E	110.00'
L14	N87°03'51"W	67.23'
L15	S63°14'31"W	203.56'
L16	S39°23'58"W	66.16'
L17	S34°47'05"W	67.11'
L18	S24°22'46"W	237.69'
L19	S03°17'37"W	212.80'
L20	N46°00'59"W	185.31'
L21	N31°48'25"W	142.15'
L22	N18°11'39"W	102.30'
L23	N39°31'07"W	52.72'
L24	N36°33'47"W	52.72'
L25	N76°34'04"W	52.86'
L26	S59°24'52"W	52.86'
L27	S59°38'06"W	84.28'
L28	S46°23'31"W	100.35'
L29	S51°08'57"W	200.00'
L30	S39°51'03"E	110.00'
L31	S51°08'57"W	43.10'
L32	S83°34'00"W	28.80'
L33	N68°16'56"E	172.41'
L34	N02°06'46"W	129.34'
L35	S40°53'42"E	265.80'

CURVE No.	
C1	Δ=08°06'17" R=2240.00' A=238.67' C=238.56'
C2	Δ=95°40'27" R=50.00' A=86.98' C=76.42'
C3	Δ=12°25'03" R=375.00' A=81.27' C=81.11'
C4	Δ=93°36'00" R=25.00' A=40.83' C=36.44'
C5	Δ=08°04'49" R=625.00' A=130.75' C=130.81'
C6	Δ=06°56'52" R=1133.00' A=137.39' C=137.31'
C7	Δ=06°36'52" R=1133.00' A=137.39' C=137.31'
C8	Δ=06°36'52" R=1133.00' A=137.39' C=137.31'



I, George E. Hopkins, a Registered Professional Land Surveyor, do hereby certify that the attached map or plot is true and correct to the best of my knowledge and that the property shown hereon was determined by a survey made on the ground under my direction and supervision

WITNESS MY HAND AND SEAL at Austin, Travis County, Texas this 28th day of November, 2000, A.D.



George E. Hopkins
GEORGE E. HOPKINS
Registered Professional Land Surveyor
No. 4685 - State of Texas

PARCEL "D"

CS&I		DATE: 11/28/00	
JOB NO. 9951011		DATE: NOVEMBER 28, 2000	
DRAWING NO. 99510517		SHEET NO. 2 OF 2	
SCALE: 1" = 400'		SHEET NO. 2 OF 2	
DRAWING BY: [Signature]		SHEET NO. 2 OF 2	
CHECKED BY: [Signature]		SHEET NO. 2 OF 2	
APPROVED BY: [Signature]		SHEET NO. 2 OF 2	

**SURVEY OF 3.934 ACRES
OUT OF THE
BEN WIGHTMAN SURVEY No. 55
TRAVIS COUNTY, TEXAS**

**A BECK SURVEY
NO. 54**

TRACT II
55.00 ACRES
10
LAKE TRAVIS I.S.D.
V 7941 P 395
T.C.D.R.

10.0' WIDE
ELECTRIC EASEMENT
CITY OF AUSTIN
Doc No 2000119947
O.P.R.T.C.

**POINT OF
COMMENCEMENT**

10.0' WIDE
ELECTRIC EASEMENT
CITY OF AUSTIN
Doc No 2000119947
O.P.R.T.C.

177 AC
SECOND TRACT
V 403 P 341
T.C.D.R.

60.0' WIDE
ELECTRIC EASEMENT
PEDERNALES ELECTRIC COOP
V 4079 P 2168
T.C.D.R.

**BEN WIGHTMAN SURVEY
NO 55**

**POINT OF
BEGINNING**

**3.934
AC.**

SCALE: 1" = 300'

20.0' WIDE
WASTEWATER EASEMENT
LAKE TRAVIS I.S.D.
V 13258 P 3055
T.C.D.R.
(WITHIN 60'
P.E.C. EASEMENT)

10.0' WIDE
ELECTRIC EASEMENT
CITY OF AUSTIN
Doc No 2000119947
O.P.R.T.C.

196.5 AC
FIRST TRACT
V 403 P 341
T.C.D.R.

**I. & G. R.R. CO. SURVEY
NO. 56**

PARCEL "E"

ESCI

CAPITAL
SURVEYING
COMPANY
INCORPORATED

1101 Capital of Texas Highway South
Austin, Texas 78746

Building O, Suite 110
(512) 327-4006

DRAWN BY	WAL	SCALE	1" = 300'	FB
JOB NO	99510 11	DATE	NOVEMBER 28, 2000	SHEET NO
DRAWING NO	99510S18	CRD #	99510	1 OF 2

SURVEY OF 3.934 ACRES
OUT OF THE
BEN WIGHTMAN SURVEY No. 55
TRAVIS COUNTY, TEXAS

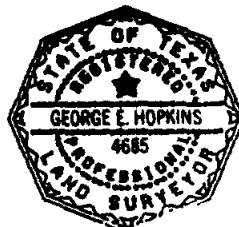
LINE No.	BEARING	DISTANCE	CURVE No.
L1	S43°59'01"W	192.37'	C1
L2	N81°39'39"W	44.72'	Δ=13°41'54"
L3	S87°53'14"W	142.54'	R=885.00'
L4	S02°06'46"E	304.33'	A=211.59"
L5	N52°04'59"W	105.32'	C=211.08'
L6	N37°55'01"E	163.23'	Cb=S39°10'02"E
L7	N02°06'46"W	189.81'	C2
L8	N34°04'01"W	25.00'	Δ=06°40'40"
L9	N29°50'28"E	43.90'	R=1010.00'
L10	N02°06'46"W	106.55'	A=117.71"
L11	N85°36'41"W	219.22'	C=117.65"
L12	N57°40'55"E	192.29'	Cb=N55°25'19"W
			C3
			Δ=116°05'30"
			R=50.00'
			A=101.31'
			C=84.85'
			Cb=N02°06'46"W

LEGEND

TCPR	TRAVIS COUNTY PLAT RECORD
TCDR	TRAVIS COUNTY DEED RECORD
●	1/2" IRON ROD FOUND UNLESS OTHERWISE NOTED
●	1/2" IRON ROD FOUND WITH PLASTIC CAP MARKED "CAPITAL SURVEYING CO INC"
●	1/2" IRON ROD SET WITH PLASTIC CAP MARKED "CAPITAL SURVEYING CO INC"
▲	CALCULATED POINT
—x—	BARBED WIRE FENCE

I, George E. Hopkins, a Registered Professional Land Surveyor, do hereby certify that the attached map or plat is true and correct to the best of my knowledge and that the property shown hereon was determined by a survey made on the ground under my direction and supervision

WITNESS MY HAND AND SEAL at Austin, Travis County, Texas this the 28th day of November, 2000, A D



George E. Hopkins
GEORGE E. HOPKINS
Registered Professional Land Surveyor
No 4685 - State of Texas

PARCEL "E"

ESCI		CAPITAL SURVEYING COMPANY, INCORPORATED	
		1101 Capital of Texas Highway South Austin, Texas 78746	
DRAWN BY	WAL	SCALE	1" = 300'
JOB NO	99510 11	DATE	NOVEMBER 28, 2000
DRAWING NO	99510518	CAD #	99510
			2 OF

**SURVEY OF 4.376 ACRES
OUT OF THE
BEN WIGHTMAN SURVEY No. 55 AND
TRAVIS COUNTY, TEXAS**

T C R R CO SURVEY
NO 181

MRS OH DAVENPORT
V1221 P112
TCDR

BEN WIGHTMAN SURVEY
NO 55

177 AC
SECOND TRACT
V 403 P 341
TCDR

APPROXIMATE LOCATION
OF SURVEY LINE

POINT OF
BEGINNING

4.376 AC.

LINE No. BEARING DISTANCE
L1 S13°29'54"E 58.01'



SCALE 1" = 200'

LEGEND

- T C P R TRAVIS COUNTY PLAT RECORD
- T C D R TRAVIS COUNTY DEED RECORD
- 1/2" IRON ROD FOUND WITH PLASTIC CAP
MARKED "CAPITAL SURVEYING CO. INC."
- ⊙ 1/2" IRON ROD SET WITH PLASTIC CAP
MARKED "CAPITAL SURVEYING CO. INC."
- 1/2" IRON ROD FOUND
UNLESS OTHERWISE NOTED
- ▲ CALCULATED POINT
- x— BARBED WIRE FENCE
- |— BREAK IN SCALE

PARCEL "F"

ESCI		CAPITAL SURVEYING COMPANY INCORPORATED	
1101 Capital of Texas Highway South Austin, Texas 78748		Building & Suite 110 (512) 327-0008	
DRAWN BY	WAL	SCALE	1" = 200'
JOB NO	9951011	DATE	NOVEMBER 28, 2000
CREATED NO	99510519	CRD #	99510
		F.B.	SHEET NO

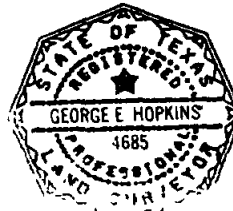
CURVE No.
C1
 $\Delta=09^{\circ}35'32''$
 $R=634.00'$
 $A=106.14'$
 $C=106.02'$
 $Cb=S08^{\circ}42'08''E$

C2
 $\Delta=09^{\circ}51'10''$
 $R=300.00'$
 $A=51.59'$
 $C=51.53'$
 $Cb=S18^{\circ}25'29''E$

C3
 $\Delta=20^{\circ}59'14''$
 $R=639.00'$
 $A=234.06'$
 $C=232.76'$
 $Cb=S33^{\circ}50'41''E$

I, George E. Hopkins, a Registered Professional Land Surveyor, do hereby certify that the attached map or plot is true and correct to the best of my knowledge and that the property shown hereon was determined by a survey made on the ground under my direction and supervision.

WITNESS MY HAND AND SEAL at Austin, Travis County, Texas this 28th day of November, 2000, A.D.



George E. Hopkins
GEORGE E. HOPKINS
Registered Professional Land Surveyor
No 4685 - State of Texas

**SURVEY OF 0.802 ACRES
OUT OF THE
BEN WIGHTMAN SURVEY No. 55 AND
TRAVIS COUNTY, TEXAS**

TCRR CO SURVEY
NO 181

MRS O.H. DAVENPORT
V 1221 P 112
T.C.D.R.

BEN WIGHTMAN SURVEY
NO 55

177 AC
SECOND TRACT
V 403 P 341
T.C.D.R.

POINT OF
BEGINNING

0.802 AC.

LINE No.	BEARING	DISTANCE
L1	N14°58'12"E	46.86'
L2	N51°08'12"E	48.74'
L3	N69°35'14"E	171.21'
L4	S20°24'47"E	151.88'
L5	S68°52'28"W	174.69'
L6	S89°25'40"W	45.36'
L7	N55°53'42"W	46.86'
L8	N20°27'46"W	46.86'

APPROXIMATE LOCATION
OF SURVEY LINE

POINT OF
COMMENCEMENT

SCALE 1" = 200'

LEGEND

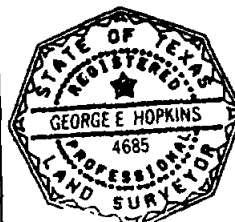
- TCPR TRAVIS COUNTY PLAT RECORD
- TCDR TRAVIS COUNTY DEED RECORD
- 1/2" IRON ROD FOUND WITH PLASTIC CAP
MARKED "CAPITAL SURVEYING CO INC"
- ⊙ 1/2" IRON ROD SET WITH PLASTIC CAP
MARKED "CAPITAL SURVEYING CO INC"
- 1/2" IRON ROD FOUND
UNLESS OTHERWISE NOTED
- ▲ CALCULATED POINT
- x— BARBED WIRE FENCE
- |— BREAK IN SCALE

PARCEL "G"

I, George E. Hopkins, a Registered Professional Land Surveyor, do hereby certify that the attached map or plat is true and correct to the best of my knowledge and that the property shown hereon was determined by a survey made on the ground under my direction and supervision.

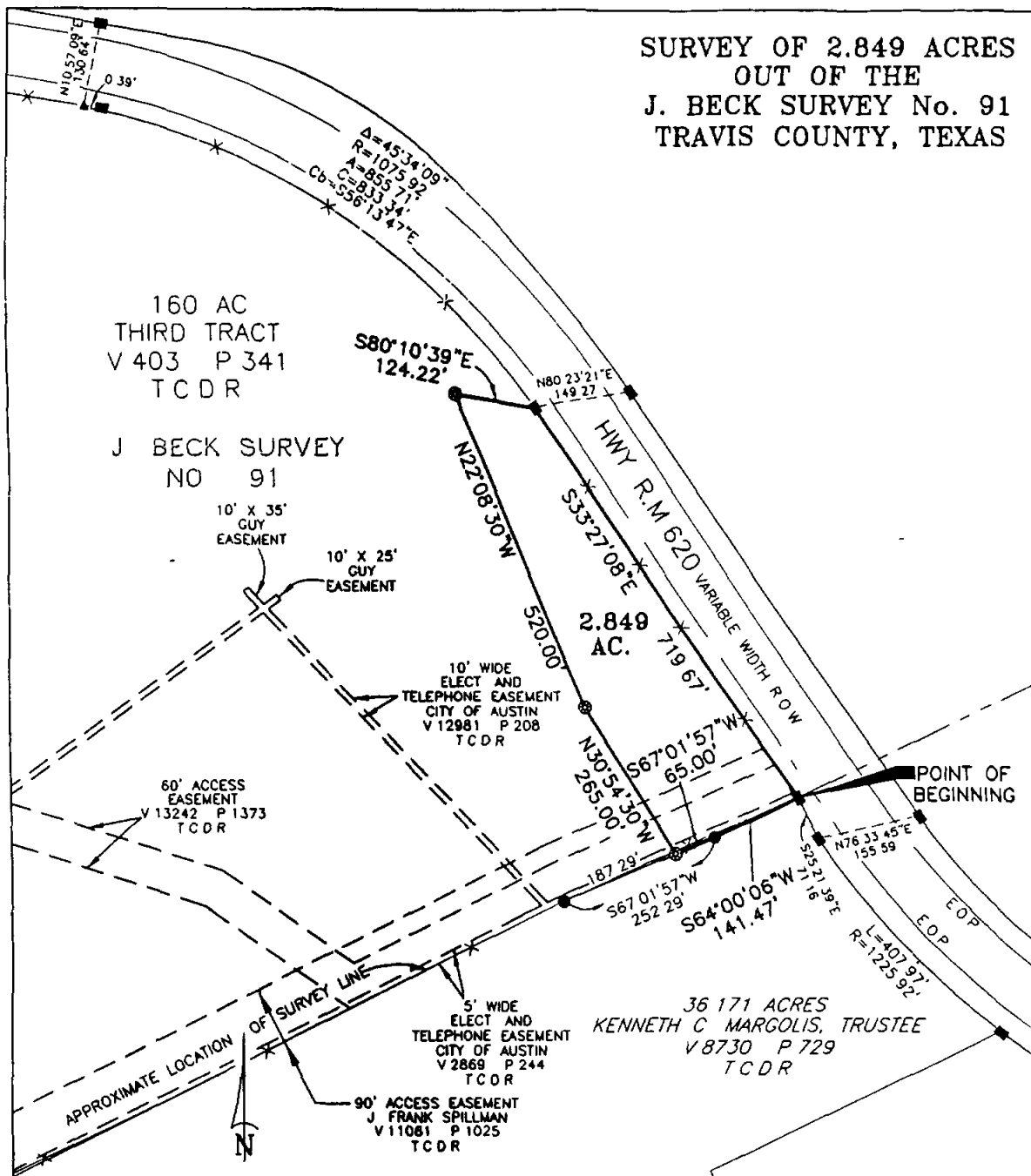
WITNESS MY HAND AND SEAL at Austin, Travis County, Texas this the 28th day of November, 2000, A.D.

CSCI		CAPITAL SURVEYING COMPANY INCORPORATED	
1101 Capital of Texas Highway South Austin, Texas 78746		Building 8, Suite 110 (512) 327-6006	
DRAWN BY	WAL	SCALE	1" = 200'
JOB NO	99510 11	DATE	NOVEMBER 28, 2000
DRAWING NO	99510520	CRD #	99510
		SHEET NO	



George E. Hopkins
GEORGE E. HOPKINS
Registered Professional Land Surveyor
No 4685 - State of Texas

**SURVEY OF 2.849 ACRES
OUT OF THE
J. BECK SURVEY No. 91
TRAVIS COUNTY, TEXAS**



SCALE 1" = 200'

**A STRUHLE SURVEY
NO 594**

LEGEND

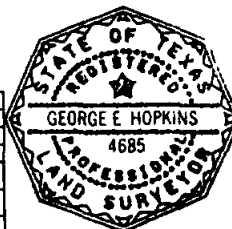
- TCPR TRAVIS COUNTY PLAT RECORD
- TCOR TRAVIS COUNTY DEED RECORD
- 1/2" IRON ROD SET WITH PLASTIC CAP MARKED "CAPITAL SURVEYING CO. INC"
- 1/2" IRON ROD FOUND UNLESS OTHERWISE NOTED
- BRASS/CONCRETE MONUMENT FOUND
- X— BARBED WIRE FENCE

I, George E Hopkins, a Registered Professional Land Surveyor, hereby certify that the attached map or plat is true and correct to the best of my knowledge and that the property shown hereon was determined by a survey made on the ground under my direction and supervision.

WITNESS MY HAND AND SEAL at Austin, Travis County, Texas this 28th day of November, 2000, A.D.

PARCEL "H"

CSCI		CAPITAL SURVEYING COMPANY INCORPORATED	
1101 Capital of Texas Highway South Austin, Texas 78748		Building 6, Suite 110 (512) 327-4804	
DRAWN BY	WAL	SCALE	1" = 200'
JOB NO	9951011	DATE	NOVEMBER 28, 2000
DRAWING NO	99510520	CRD #	99510
		F.B.	SHEET NO



George E Hopkins

GEORGE E HOPKINS
Registered Professional Land Surveyor
No 4685 - State of Texas

EXHIBIT "B"

BASE RENT SCHEDULE

<u>Payment Date</u>	<u>Payment Amount</u>
Effective Date of Lease	\$68,245 92
January 1, 2002	\$90,000.00
January 1, 2003	\$90,000 00
January 1, 2004	\$90,000 00
January 1, 2005	\$90,000 00
January 1, 2006	\$90,000 00
January 1, 2007	\$90,000 00
January 1, 2008	\$90,000 00
January 1, 2009	\$90,000 00
January 1, 2010	\$90,000 00
January 1, 2011	\$92,700.00
January 1, 2012	\$95,481 00
January 1, 2013	\$98,345 43
January 1, 2014	\$101,295 79
January 1, 2015	\$104,334.66
January 1, 2016	\$107,464 69
January 1, 2017	\$110,688 63
January 1, 2018	\$114,009 28
January 1, 2019	\$117,429 55
January 1, 2020	\$120,952 43
January 1, 2021	\$124,581 00
January 1, 2022	\$128,318 43
January 1, 2023	\$132,167 98
January 1, 2024	\$136,133 01
January 1, 2025	\$140,217 00
January 1, 2026	\$144,423 51
January 1, 2027	\$148,756 21
January 1, 2028	\$153,218.89
January 1, 2029	\$157,815 45
January 1, 2030	\$162,549 91
January 1, 2031	\$167,426 40
January 1, 2032	\$172,449 19
January 1, 2033	\$177,622 66
January 1, 2034	\$182,951 33
January 1, 2035	\$188,439 86
January 1, 2036	\$194,093.05
January 1, 2037	\$199,915.84
January 1, 2038	\$205,913 31
January 1, 2039	\$212,090 70

<u>Payment Date</u>	<u>Payment Amount</u>
January 1, 2040	\$218 453 42
January 1, 2041	\$225,007 02
January 1, 2042	\$231,757 23
January 1, 2043	\$238,709 94
January 1, 2044	\$245,871 23
January 1, 2045	\$253,247 36
January 1, 2046	\$260,844 78
January 1, 2047	\$268,670 12
January 1, 2048	\$276,730 22
January 1, 2049	\$285,032.12
January 1, 2050	\$293,583 08
January 1, 2051	\$302,390 57
January 1, 2052	\$311,462 28
January 1, 2053	\$320,806 14
January 1, 2054	\$330,430 32
January 1, 2055	\$340,343 22
January 1, 2056	\$350,553 51
January 1, 2057	\$361,070 11
January 1, 2058	\$371 902 21
January 1, 2059	\$383.059.27
January 1, 2060	\$394,551 04
January 1, 2061	\$406,387 57
January 1, 2062	\$418,579 19
January 1, 2063	\$431,136 56
January 1, 2064	\$444,070 65
January 1, 2065	\$457,392 76
January 1, 2066	\$471,114 54
January 1, 2067	\$485,247.97
January 1, 2068	\$499,805 40
January 1, 2069	\$514,799 56
January 1, 2070	\$530,243 54
January 1, 2071	\$546,150 84
January 1, 2072	\$562,535.36
January 1, 2073	\$579,411 42
January 1, 2074	\$596,793.76
January 1, 2075	\$614,697 57
January 1, 2076	\$633,138 49
January 1, 2077	\$652,132.64
January 1, 2078	\$671,696 61
January 1, 2079	\$691,847 50
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January 1, 2081	\$733,981 00
January 1, 2082	\$756,000 43
January 1, 2083	\$778,680 44

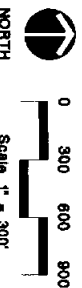
<u>Payment Date</u>	<u>Payment Amount</u>
January 1, 2084	\$802,040 85
January 1, 2085	\$826,102 07
January 1, 2086	\$850,885 13
January 1, 2087	\$876,411 68
January 1, 2088	\$902,704 03
January 1, 2089	\$929,785.15
January 1, 2090	\$957,678 70
January 1, 2091	\$986,409 06
January 1, 2092	\$1,016,001 30
January 1, 2093	\$1,046,481 30
January 1, 2094	\$1,077,875 70
January 1, 2095	\$1,110,211 90
January 1, 2096	\$1,143,518 20
January 1, 2097	\$1,177,823.70
January 1, 2098	\$1,213,158 40
January 1, 2099.	\$1,249,553 10

EXHIBIT "C"

MASTER DEVELOPMENT PLAN

RECORDERS MEMORANDUM-At the time of recordation this instrument was found to be inadequate for the best photographic reproduction, because of illegibility, carbon or photocopy, discolored paper, etc. All blockouts, additions and changes were present at the time the instrument was filed and recorded.

Computer File: I:\202386\01-01conceptplan\concept1A.dwg

[illegible]

The developer has reserved the right without notice to make changes to the map and other aspects of the development to comply with governmental requirements and to fulfill the marketing objective.

Partners
Development Consultants
Landscape Architects

**McANDREW
WIDDOWSON**

512.480.0032

Date January 22, 200

EXHIBIT "D"

RECOGNITION AND ATTORNMENT AGREEMENT

This RECOGNITION AND ATTORNMENT AGREEMENT (this "Agreement") is entered into as of _____, (the "Effective Date"), between _____, a _____, whose address is _____ ("Mortgagee"), and _____, a _____ whose address is _____ ("Lessor"), with reference to the following facts

A Lessor owns the real property described on Exhibit "A" attached hereto and incorporated herein by reference (the "Property").

B Pursuant to that certain "Restated and Amended Lease Agreement" dated as of _____, 2000 (the "Lease"), Lessor demised the Property to Spillman Development Group, Ltd, a Texas limited partnership ("Lessee"). A full and complete copy of the Lease is attached to this Agreement as Exhibit "B"

C Mortgagee has made a loan to Lessee in the original principal amount of \$ _____ (the "Loan")

D To secure the Loan, Lessee has encumbered Lessee's leasehold interest in and to the Property by entering into that certain instrument in favor of Mortgagee which is filed of record as Document No _____ in the Official Public Records of Travis County, Texas (said instrument, as amended, increased, renewed, extended, spread, consolidated, severed, restated, or otherwise changed from time to time, being referred to herein as the "Mortgage")

E Lessor and Mortgagee desire to agree upon the relative priorities of their interests in the Property and their rights and obligations if certain events occur

NOW, THEREFORE, for good and sufficient consideration, Lessor and Mortgagee agree

1. **Definitions**

The following terms shall have the following meanings for purposes of this Agreement

1 1 **Foreclosure Event.** A "Foreclosure Event" means (a) foreclosure under the Mortgage, (b) any other exercise by Mortgagee of rights and remedies (whether under the Mortgage or under applicable law, including bankruptcy law) as holder of the Loan and/or the Mortgage, as a result of which Successor Lessee becomes owner of the Leasehold Estate, or (c) delivery by Lessee to Mortgagee (or its designee or nominee) of an assignment or other conveyance of the Leasehold Estate in lieu of any of the foregoing.

1 2 **Former Lessee** A "Former Lessee" means Lessee and any other party that was a lessee under the Lease at any time before the occurrence of any attornment under this Agreement

1 3 Lessor Remedy A "Lessor Remedy" means any right or remedy which Lessor has or may have against Lessee, including without limitation any right to cancel or terminate the Lease or to claim or effectuate a partial or total eviction arising (whether under the Lease or under applicable law) from Lessee's breach or default under the Lease

1 4 Leasehold Estate The "Leasehold Estate" means all of Lessee's right, title and interest in and to the Property under the terms of the Lease

1 5 Rent. The "Rent" means any base rent, percentage rent, additional rent and/or other sums due under the Lease.

1 6 Successor Lessee A "Successor Lessee" means any party that becomes owner of the Leasehold Estate as the result of a Foreclosure Event

2 Recognition

Lessor hereby consents to the Mortgage and recognizes and agrees to all of the rights of Mortgagee under the Mortgage

3 Nondisturbance, Recognition and Attornment.

3.1 No Exercise of Lessor Remedies Against Mortgagee Lessor shall not name or join Mortgagee as a defendant in any exercise of Lessor's rights and remedies arising upon a default under the Lease unless applicable law requires Mortgagee to be made a party thereto as a condition to proceeding against Lessee or prosecuting such rights and remedies. In the latter case, Lessor may join Mortgagee as a defendant in such acts and only for such purposes

3 2 Attornment. If a Successor Lessee takes title to the Leasehold Estate Lessor shall not terminate or disturb the Successor Lessee's possession or quiet enjoyment of the Property under the Lease, except in accordance with the terms of the Lease and this Agreement, (b) Lessor shall be bound to the Successor Lessee under all the terms and conditions of the Lease (except as provided in this Agreement); (c) the Successor Lessee shall recognize and attorn to Lessor as the Successor Lessee's Lessor under the Lease as affected by this Agreement, and (d) the Lease shall continue in full force and effect as a direct lease, in accordance with its terms (except as provided in this Agreement), between Lessor and the Successor Lessee

3 3 Further Documentation. The provisions of this Article shall be effective and self-operative without any need for Lessor or the Successor Lessee to execute any further documents. Lessor and Successor Lessee shall, however, confirm the provisions of this Article in writing upon request by either of them.

4 Protection of Successor Lessee.

Notwithstanding anything to the contrary in the Lease or the Mortgage, the Successor Lessee shall not be liable for or bound by any of the following matters

4.1 Modification, Amendment, or Waiver Any modification or amendment of the Lease, or any waiver of any terms of the Lease, made without Mortgagee's written consent which materially and adversely affects Mortgagee's rights, duties or obligations under this Agreement

4.2 Surrender, Etc Any consensual or negotiated surrender, cancellation, or termination of the Lease, in whole or in part, unless the same has been previously agreed to in writing by the Mortgagee or is agreed to in writing by the Successor Lessee

5 Exculpation of Successor Lessee

Notwithstanding anything to the contrary in this Agreement or the Lease, upon any attornment pursuant to this Agreement the Lease shall be deemed to have been automatically amended to provide that the Successor Lessee's obligations and liability under the Lease shall never extend beyond Successor Lessee's (or its successors' or assigns') interest, if any, in the Property from time to time, including insurance and condemnation proceeds and the Successor Lessee's interest in the Lease, (collectively, "Successor Lessee's Interest") Lessor shall look exclusively to Successor Lessee's Interest for payment or discharge of any obligations of Successor Lessee under the Lease as affected by this Agreement. If Lessor obtains any money judgment against the Successor Lessee with respect to the Lease or the relationship between Successor Lessee and Lessor, then Lessor shall look solely to the Successor Lessee's Interest to collect such judgment. Lessor shall not collect or attempt to collect any such judgment out of any other assets of Successor Lessee

6. Mortgagee's Right to Cure

6.1 Notice to Mortgagee Notwithstanding anything to the contrary in the Lease or this Agreement, before exercising any Lessor Remedy, Lessee shall provide Mortgagee with notice of the breach or default by Lessee giving rise to same (the "Default Notice") and, thereafter, the opportunity to cure such breach or default as provided for below

6.2 Mortgagee's Cure Period After Mortgagee receives a Default Notice, Mortgagee shall have a period of thirty (30) days in which to cure the breach or default by Lessee, except, however, that if the applicable default is not reasonably susceptible of cure within thirty (30) days, then Mortgagee shall have a reasonable period of time to cure such default provided Mortgagee commences curative action within the above referenced thirty (30) day period and thereafter pursues such curative action to completion with reasonable diligence. Mortgagee shall have no obligation to cure (and shall have no liability or obligation for not curing) any breach or default by Lessee, except to the extent that Mortgagee agrees or undertakes otherwise in writing

6.3 Extended Cure Period In addition, as to any breach or default by Lessee the cure of which requires possession and control of the Property, Mortgagee's period for commencing curative action shall be extended for such additional time as Mortgagee may reasonably require to either (a) obtain possession and control of the Property; or (b) obtain the appointment of a receiver and give such receiver a reasonable period of time in which to obtain possession and control of the Property

7 Miscellaneous

7.1 Notices All notices or other communications required or permitted under this Agreement shall be in writing and given by certified mail (return receipt requested) or by nationally recognized overnight courier service that regularly maintains records of items delivered. Notices shall be effective the next business day after being sent by overnight courier service, and three business days after being sent by certified mail (return receipt requested). Unless and until notice of a change of address is given under this Agreement, notices or other communications shall be given to Mortgagee and Lessee, respectively, at the following address:

Mortgagee

with a copy to:

Lessee

with a copy to:

7.2 Successors and Assigns. This Agreement shall bind and benefit the Mortgagee and the Lessor and their respective successors and assigns. Without limitation on the generality of the foregoing, the agreements of Lessor hereunder will bind any person or entity who acquires title to the Property by foreclosure of any lien or security interest against the Property and/or by any conveyance of the Property in lieu of foreclosure.

7.3 Entire Agreement. This Agreement constitutes the entire agreement between Mortgagee and Lessor regarding the rights and obligations of Lessor and Mortgagee as to the subject matter of this Agreement.

7.4 Interaction with Lease and with Mortgage. If this Agreement conflicts with the Lease, then this Agreement shall govern as between the parties and any Successor Lessee, including upon any attornment pursuant to this Agreement.

7.5 Interpretation, Governing Law. The interpretation, validity and enforcement of this Agreement shall be governed by and construed under the internal laws of the State of Texas including its principles of conflict of laws.

7 6 Amendments This Agreement may be amended, discharged or terminated, or any of its provisions waived, only by a written instrument executed by the party to be charged

7 7 Execution. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument

7.8 Lessor's Representation. Lessor represents (a) that Lessor has full authority to enter into this Agreement; (b) that the execution hereof has been duly authorized by Lessor's Board of Directors, and (c) Lessor's entry into this Agreement has been duly authorized by all necessary actions

IN WITNESS WHEREOF, this Agreement has been duly executed by Mortgagee and Lessor as of the Effective Date

MORTGAGEE

By: _____

Printed Name: _____

Title: _____

LESSOR

By: _____

Printed Name: _____

Title: _____

ACKNOWLEDGMENTS

THE STATE OF TEXAS §

COUNTY OF _____ §

This instrument was acknowledged before me on this ____ day of _____, ____ by _____, _____ of _____, a _____, on behalf of said _____.

Notary Public Signature

(SEAL)

THE STATE OF TEXAS §

COUNTY OF _____ §

This instrument was acknowledged before me on this ____ day of _____, ____ by
_____, _____ of _____, a
_____, on behalf of said _____

Notary Public Signature

(SEAL)

EXHIBIT "E"

PERMITTED TITLE EXCEPTIONS

- 1 An easement dated October 20, 1964, granted to the City of Austin by Henry J Spillman and wife Bernice Spillman, recorded in Volume 2869, Page 244, Deed Records, Travis County, Texas
- 2 An easement dated June 3, 1971, granted to Pedernales Electric Cooperative, Inc , by Henry J Spillman and wife, Bernice Spillman, recorded in Volume 4079, Page 2168, Deed Records, Travis County, Texas.
- 3 An easement dated July 17, 1997, granted to the City of Austin by Estate of Henry J Spillman, recorded in Volume 12981, Page 208, Real Property Records, Travis County, Texas, and all rights incident thereto
- 4 An easement dated August 20, 1998, granted to Lake Travis Independent School District by Henry J. Spillman, Jr , et al, recorded in Volume 13258, Page 3055, Real Property Records of Travis County, Texas
- 5 An undivided one half interest in all the oil, gas and other minerals on, in or under the Property, held by Lydia Oliver (formerly Lydia Spillman Hart) as evidenced by Codicil No 2 in the Estate of Lydia Spillman, Deceased, Cause No 19259, Probate Court, Travis County, Texas, and in the Estate of Otto Spillman, Deceased, Cause No 21045, Probate Court, Travis County, Texas.
- 6 An easement dated July 25, 2000, granted to the City of Austin by Golda Lynn Garnett, Henry Joseph Spillman, Jr. and John Franklin Spillman, recorded as Document No 2000119947, Official Public Records, Travis County, Texas

Return:

Armbrist, Brown & Davis
100 Congress Ave
Austin, TX. 78701
Att: Janet 1300

FILED AND RECORDED
OFFICIAL PUBLIC RECORDS

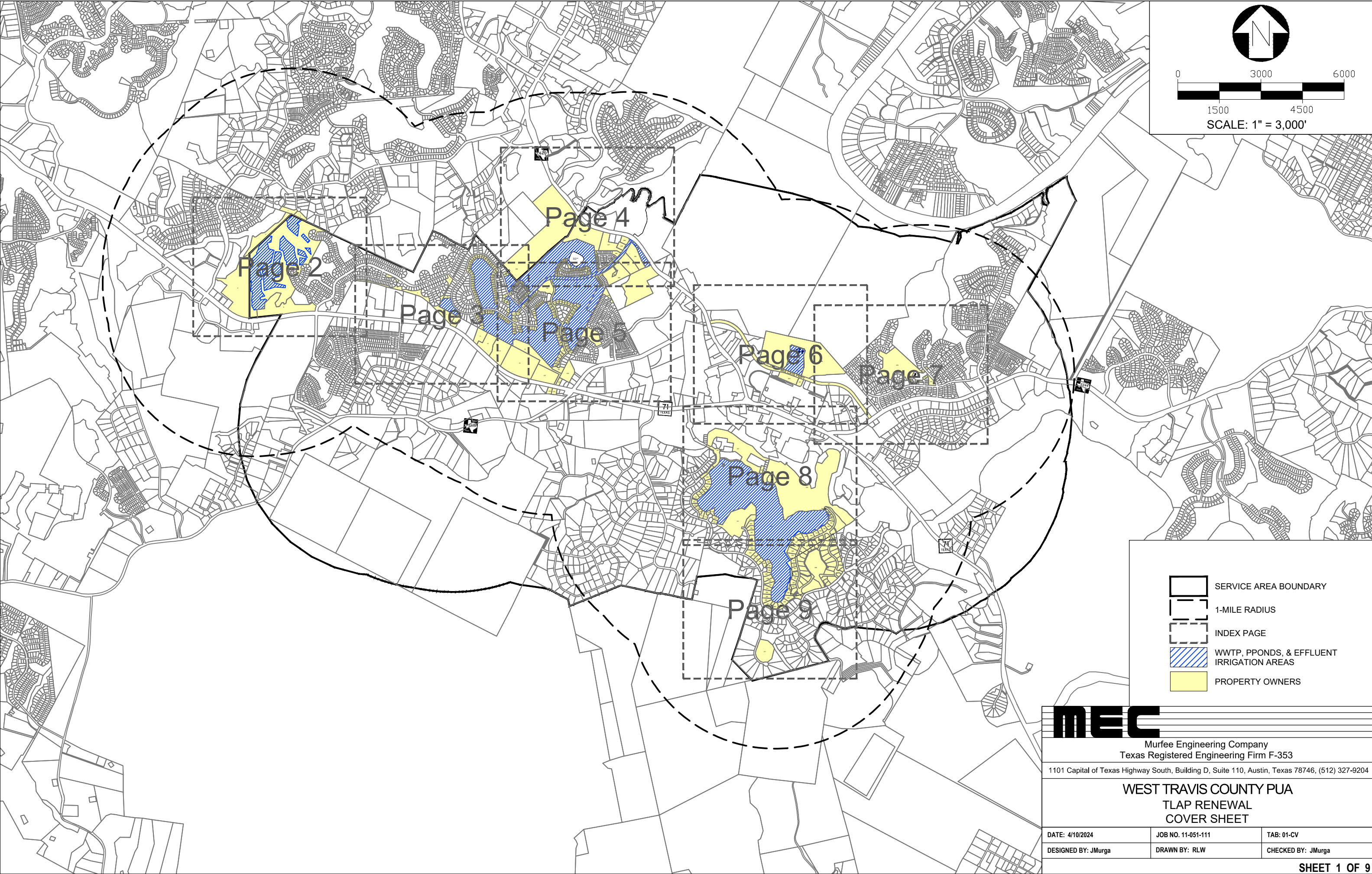
Dana Debeauvoir

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DANA DEBEAUVOIR, COUNTY CLERK
TRAVIS COUNTY, TEXAS

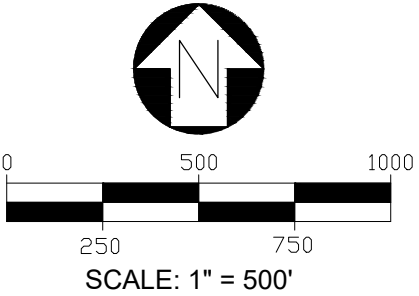
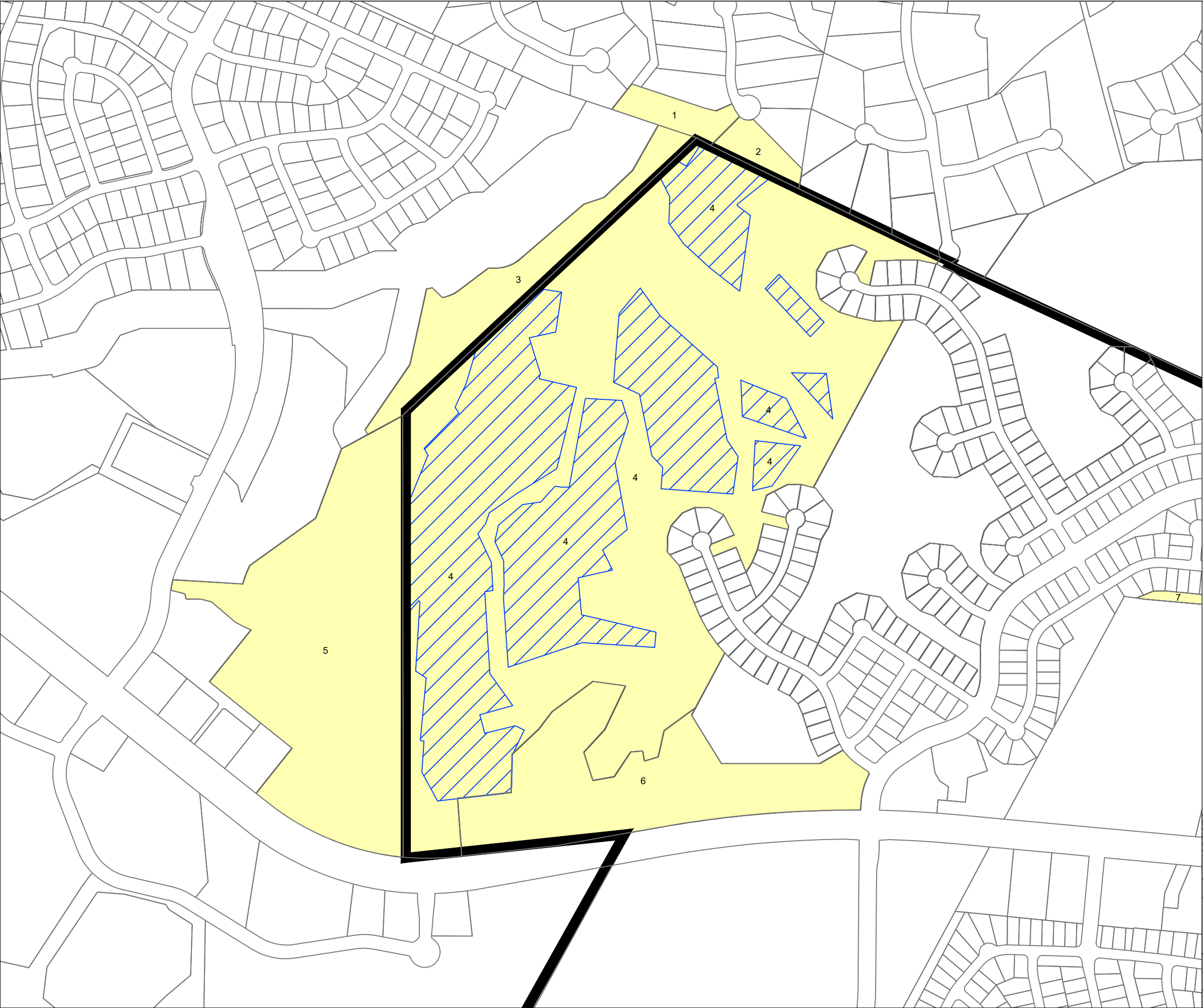
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
Landowner Information and Map

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-  SERVICE AREA BOUNDARY
-  1-MILE RADIUS
-  INDEX PAGE
-  WWTP, PPONDS, & EFFLUENT IRRIGATION AREAS
-  PROPERTY OWNERS



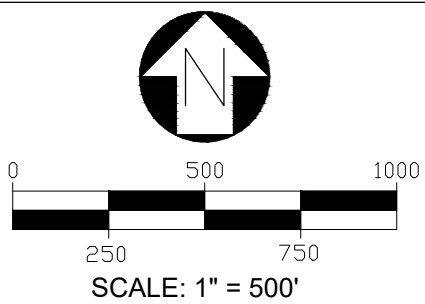
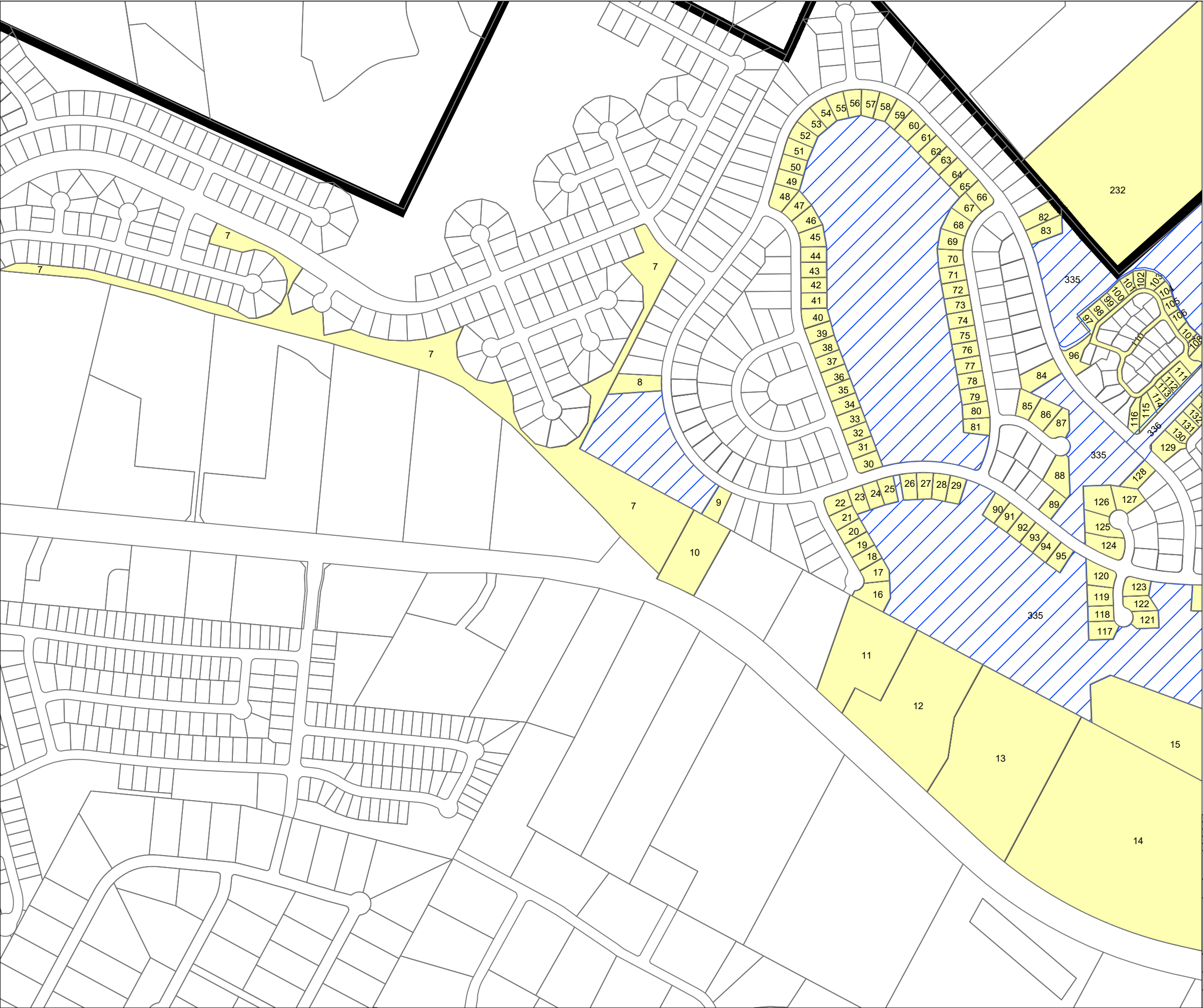
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Texas Registered Engineering Firm F-353






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WEST TRAVIS COUNTY PUA
TLAP RENEWAL
SHEET 2

DATE: 4/10/2024	JOB NO. 11-051-111	TAB: 02
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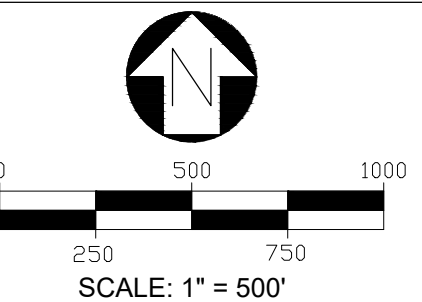
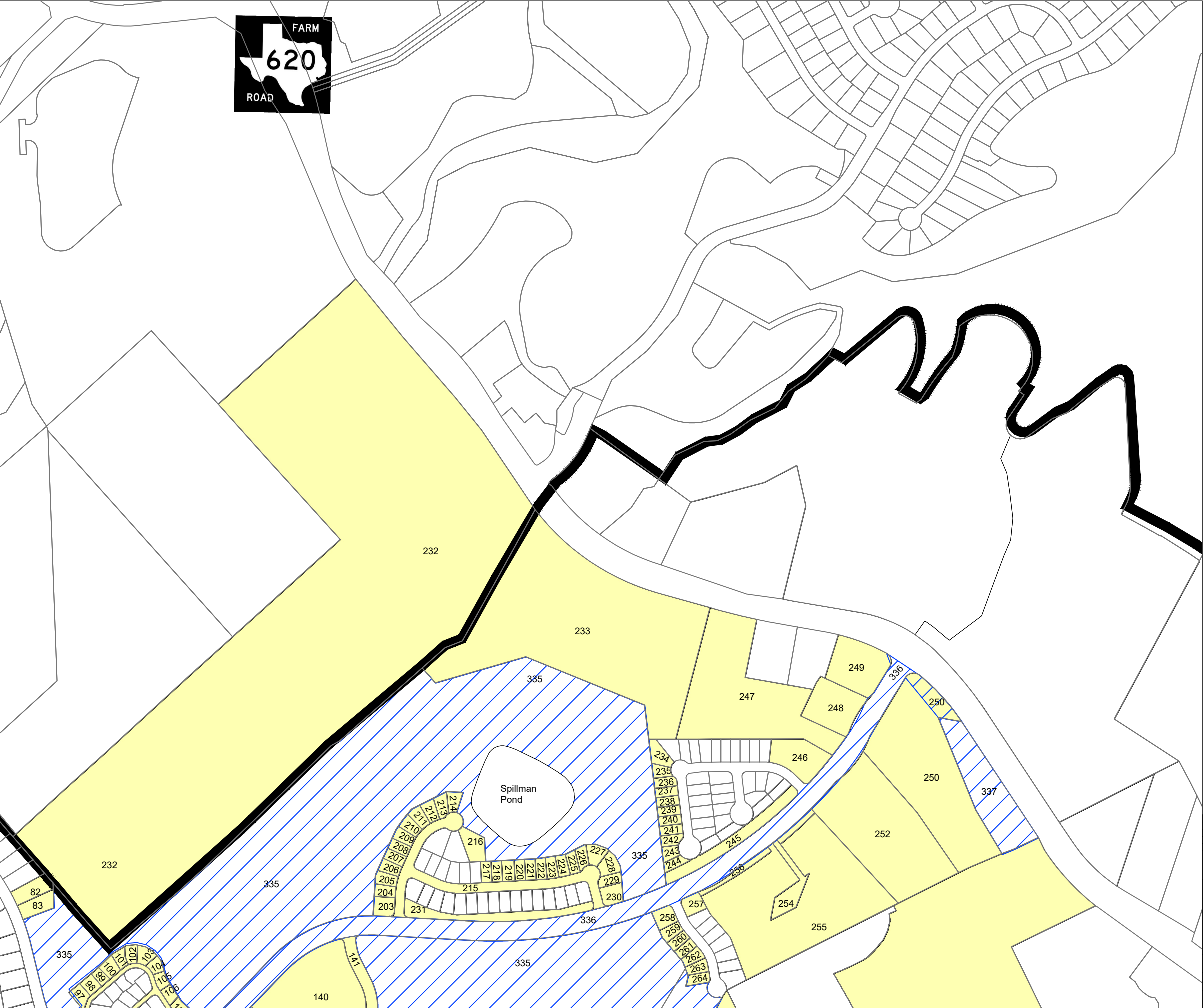


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-  INDEX PAGE
-  WWTP, POND, & EFFLUENT IRRIGATION AREAS
-  PROPERTY OWNERS



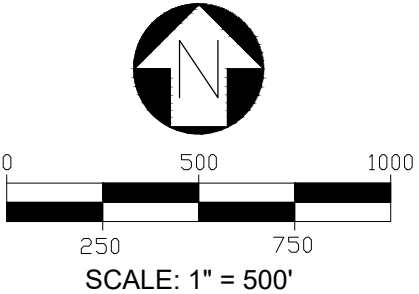
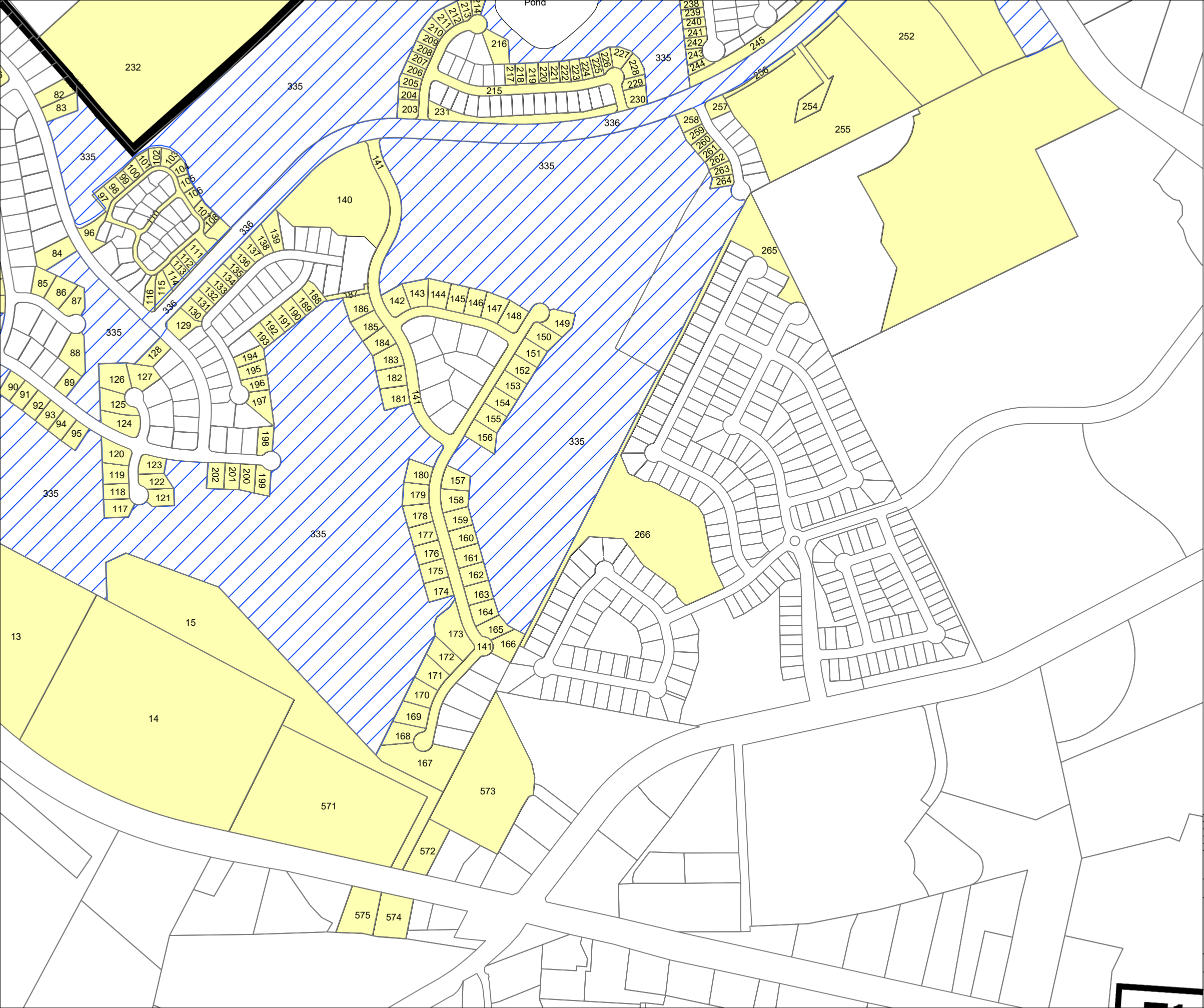
Murfee Engineering Company Texas Registered Engineering Firm F-353 1101 Capital of Texas Highway South, Building D, Suite 110, Austin, Texas 78746, (512) 327-9204		
WEST TRAVIS COUNTY PUA TLAP RENEWAL SHEET 3		
DATE: 4/10/2024	JOB NO. 11-051-111	TAB: 03
DESIGNED BY: JMurga	DRAWN BY: RLW	CHECKED BY: JMurga
SHEET 3 OF 9		

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MEC		
Murfee Engineering Company Texas Registered Engineering Firm F-353		
1101 Capital of Texas Highway South, Building D, Suite 110, Austin, Texas 78746, (512) 327-9204		
WEST TRAVIS COUNTY PUA TLAP RENEWAL SHEET 4		
DATE: 4/10/2024	JOB NO. 11-051-111	TAB: 04
DESIGNED BY: JMurga	DRAWN BY: RLW	CHECKED BY: JMurga
SHEET 4 OF 9		

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- SERVICE AREA BOUNDARY
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- PROPERTY OWNERS

Murfee Engineering Company
Texas Registered Engineering Firm F-353
1101 Capital of Texas Highway South, Building D, Suite 110, Austin, Texas 78746, (512) 327-9204

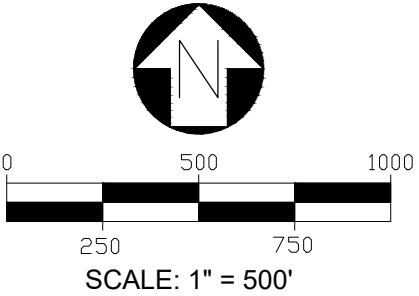
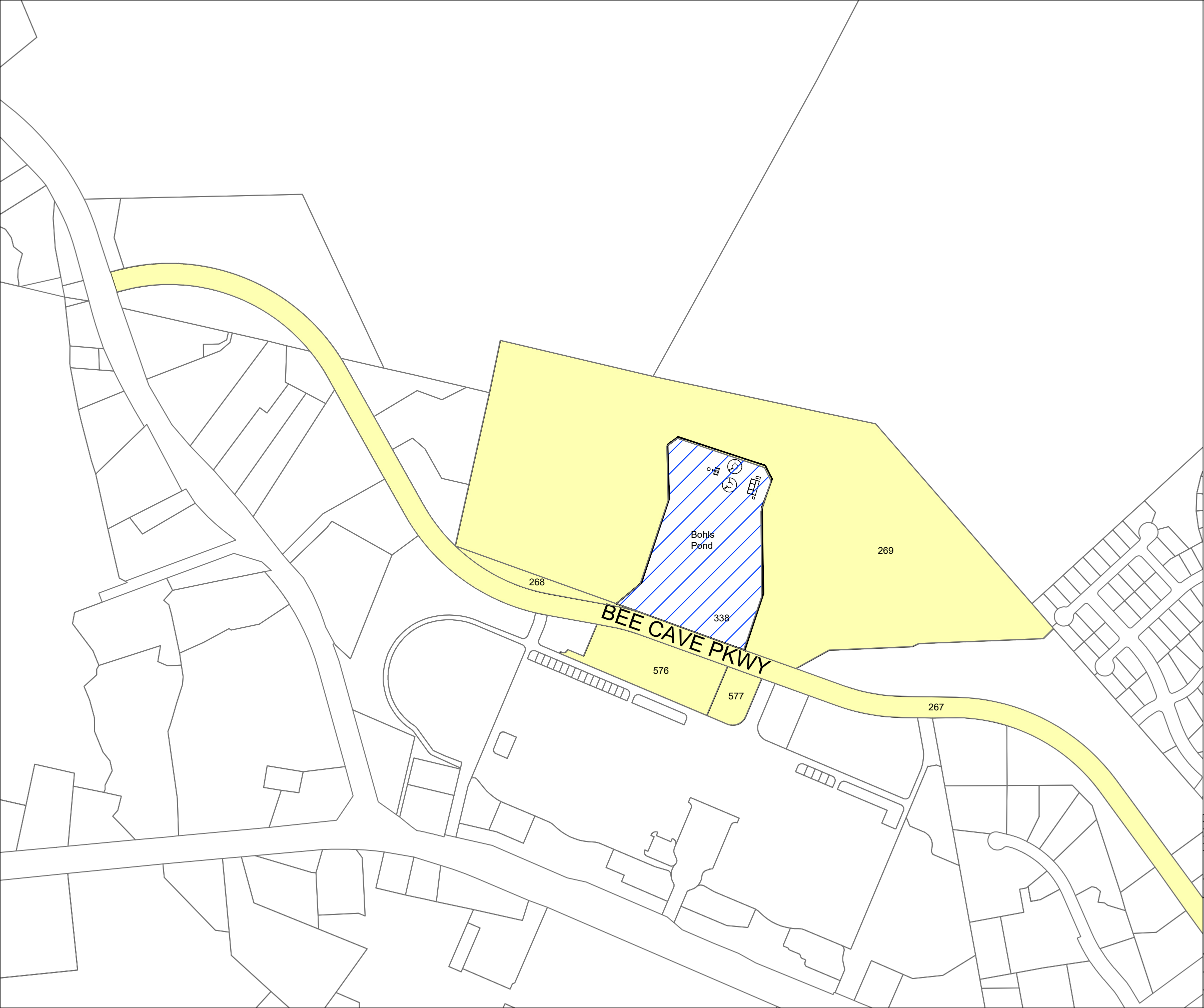
**WEST TRAVIS COUNTY PUA
TLAP RENEWAL
SHEET 5**






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SHEET 5 OF 9

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-  INDEX PAGE
-  WWTP, PPONDS, & EFFLUENT IRRIGATION AREAS
-  PROPERTY OWNERS



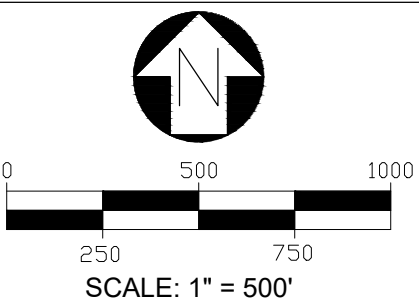
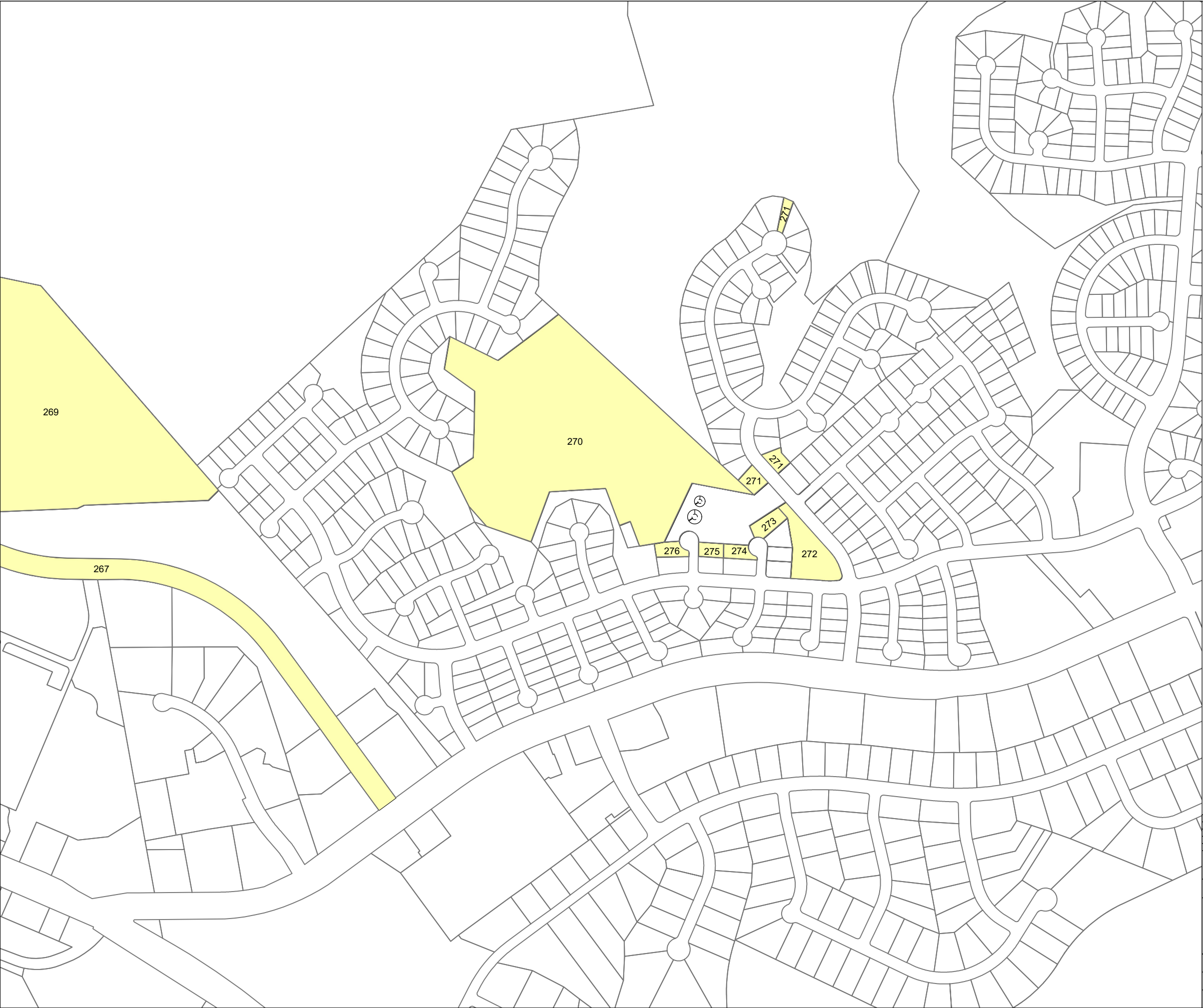
Murfee Engineering Company
Texas Registered Engineering Firm F-353






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WEST TRAVIS COUNTY PUA
TLAP RENEWAL
SHEET 6

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-  SERVICE AREA BOUNDARY
-  1-MILE RADIUS
-  INDEX PAGE
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-  PROPERTY OWNERS



Murfee Engineering Company
Texas Registered Engineering Firm F-353

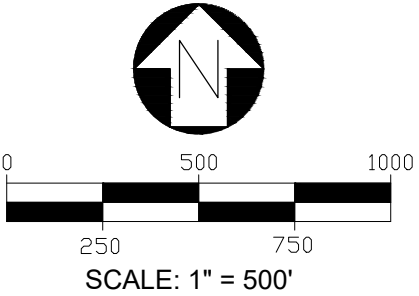
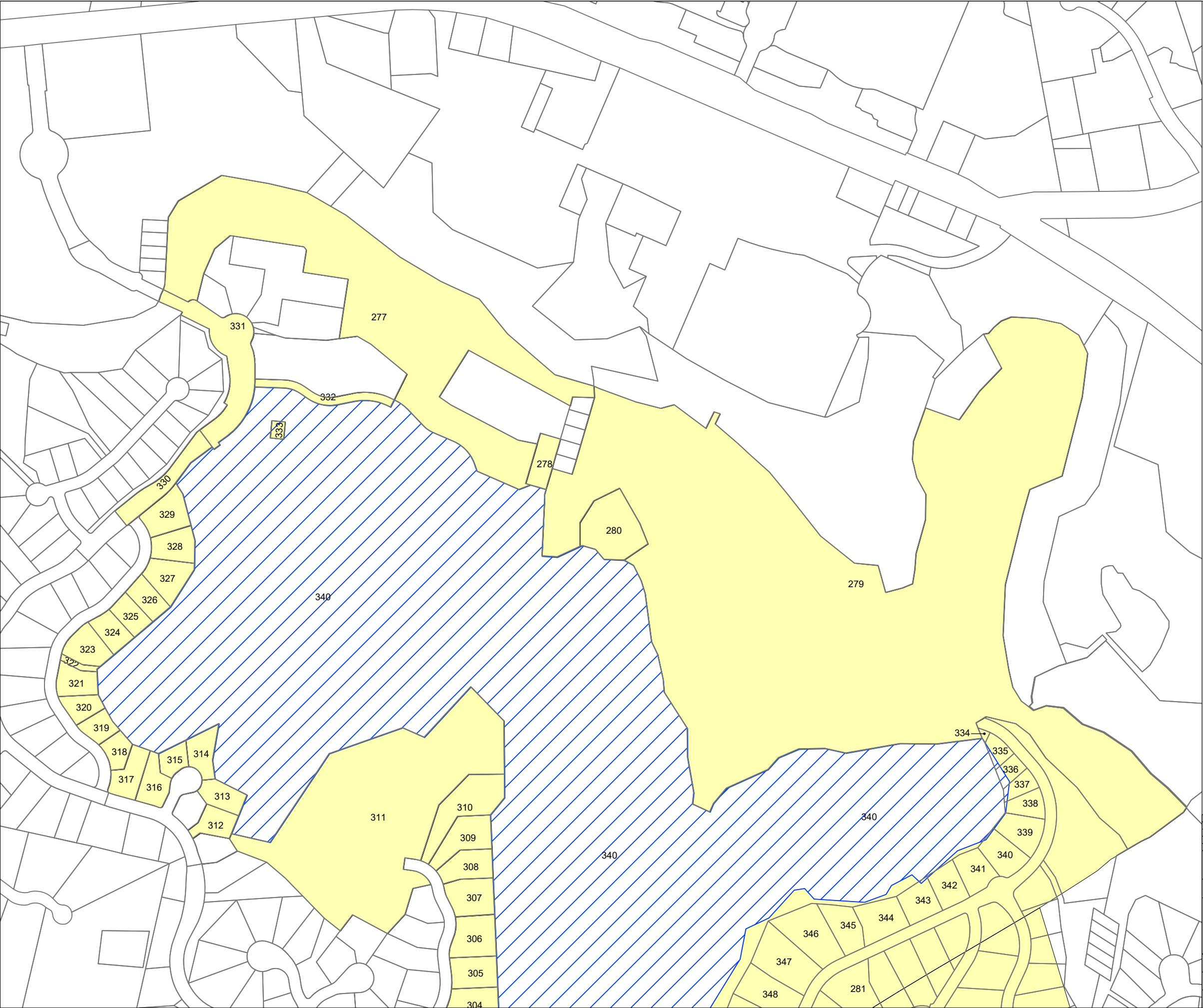
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


WEST TRAVIS COUNTY PUA
TLAP RENEWAL
SHEET 7

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SHEET 7 OF 9

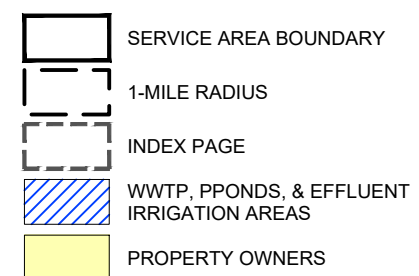
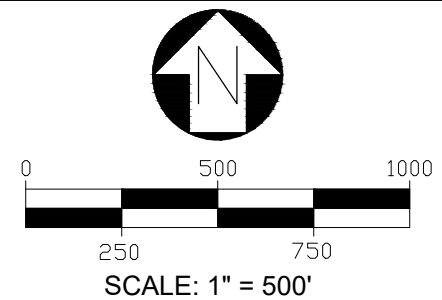
FILE PATH: O:\11051184\TLAP BOHLS ADJ OWNERS 240403.dwg



-  SERVICE AREA BOUNDARY
-  1-MILE RADIUS
-  INDEX PAGE
-  WWTP, PPONDS, & EFFLUENT IRRIGATION AREAS
-  PROPERTY OWNERS



Murfee Engineering Company Texas Registered Engineering Firm F-353		
1101 Capital of Texas Highway South, Building D, Suite 110, Austin, Texas 78746, (512) 327-9204		
WEST TRAVIS COUNTY PUA TLAP RENEWAL SHEET 8		
DATE: 4/10/2024	JOB NO. 11-051-111	TAB: 08
DESIGNED BY: JMurga	DRAWN BY: RLW	CHECKED BY: JMurga



Murfee Engineering Company
Texas Registered Engineering Firm F-353

1101 Capital of Texas Highway South, Building D, Suite 110, Austin, Texas 78746, (512) 327-9204

WEST TRAVIS COUNTY PUA
TLAP RENEWAL
SHEET 9

DATE: 4/10/2024

JOB NO. 11-051-111

TAB: 09

DESIGNED BY: JMurga

	DRAWN BY: RLW
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	CHECKED BY: JMurga
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SHEET 9 OF 9

FILE: O:\11\051\84\TLAP BOHLS ADJ OWNERS 240403.dwg

FILE PATH: O:\11\05184\TLAP BOHLS ADJ OWNERS 240403.dwg

TLAP ID	PROP. ID	OWNER NAME	MAILING ADDRESS
1	754716	WHALING SEAN & WENDY	110 STEPHANIE LN AUSTIN TX 78738-1770
2	754717	DKH DEVELOPMENT LP	2303 RR 6205 STE 160-173 LAKEWAY TX 78734
3	968746	TRAVIS COUNTY WCID #17	3811 ECK LN AUSTIN TX 78734-1613
4	770263	FALCONHEAD WEST	5316 WEST US-290 SERVICE ROAD STE 100 AUSTIN TX 78735
5	837234	BMEF LAKEWAY LLC	PO BOX 92129 SOUTHLAKE TX 76092-0102
6	877178	ASH CREEK HOMES INC	PO BOX 341749 AUSTIN TX 78734-0030
7	770373	FALCONHEAD WEST	5316 WEST US-290 SERVICE ROAD STE 100 AUSTIN TX 78735
8	696572	SORRI THOMAS N &	15313 SPILLMAN RANCH LOOP AUSTIN TX 78738-6582
9	696570	BHANOT ROHIT	15209 SPILLMAN RANCH LOOP AUSTIN , TX 78738-6581
10	119175	LENNOX EQUITIES LLC	18401 BURBANK BLVD STE 260 TARZANA CA 91356-2822
11	119174	CAMPA INVESTMENTS LLC	25222 RIVER RD SPICEWOOD TX 78669-1561
12	708856	CAMPA INVESTMENTS L L C	25222 RIVER RD SPICEWOOD TX 78669-1561
13	708855	CAMPA INVESTMENTS L L C	25223 RIVER RD SPICEWOOD TX 78669-1561
14	119177	CITY OF AUSTIN	P O BOX 1088 FSD-REAL ESTATE, 13TH FL AUSTIN TX 78767-1088
15	934836	SPILLMAN RANCH HOMES LP	1228 EUCLID AVE STE 400 CLEVELAND OH 44115-1831
16	696552	AMAYA ELMER A SR & PENELOPE	4725 SNAKE EAGLE CV AUSTIN, TX 78738-6857
17	696553	SNAKE EAGLE COVE HOLDING LLC	4716 SNAKE EAGLE CV AUSTIN TX 78738-6857
18	696554	NORWOOD STEPHEN & CYNTHIA	4717 SNAKE EAGLE CV AUSTIN, TX 78738-6857
19	696555	BENJAMIN WALTER R JR	4713 SNAKE EAGLE CV AUSTIN, TX 78738-6857
20	696556	NORWOOD STEPHEN & CYNTHIA	4717 SNAKE EAGLE CV AUSTIN TX 78738-6857
21	696557	CLAIBORNE LINDA S	4705 SNAKE EAGLE CV AUSTIN, TX 78738-6857
22	696558	SCHNEIDER JUDITH SEIDOWITZ	4701 SNAKE EAGLE CV AUSTIN, TX 78738-6857
23	696559	WOODBIDGE NANCY G & DONALD A	15025 SPILLMAN RANCH LOOP AUSTIN, TX 78738-6552
24	563884	TIMBERLAKE JOHN & KATHLEEN TRUST	15021 SPILLMAN RANCH LOOP AUSTIN TX 78738-6552

25	563885	GIBBONS PETER J & LISA M GIBBONS	15017 SPILLMAN RANCH LOOP AUSTIN, TX 78738-6552
26	563886	PARKER ANDREW RYAN & KRISTEN MICHELE	15013 SPILLMAN RANCH LOOP AUSTIN TX 78738-6552
27	563887	CONNORS MICHAEL P & ADELLE LC	15009 SPILLMAN RANCH LOOP AUSTIN, TX 78738-6552
28	563888	RYAN PATRICIA B & RICHARD E	15005 SPILLMAN RANCH LOOP AUSTIN, TX 78738-6552
29	563889	MCNEILL BRUCE & RENA L	15001 SPILLMAN RANCH LOOP AUSTIN, TX 78738-6552
30	696494	CONRAD MICHEAL G & LAUREN E	4613 BAT FALCON DR AUSTIN, TX 78738-6861
31	696495	D & D TRUST	4609 BAT FALCON DR AUSTIN TX 78738-6861
32	696496	SMITH BRIAN L	4605 BAT FALCON DR AUSTIN TX 78738-6861
33	696497	KATARIA RIDAM	4601 BAT FALCON DR AUSTIN TX 78738-6861
34	696498	SCHLOSSER DAVID R & MARY E	4521 BAT FALCON DR AUSTIN TX 78738-6860
35	696499	OLSSON LARS ERIK JOERGEN & PERNILLA CAROLINA OLSSON	4517 BAT FALCON DR AUSTIN, TX 78738-6860
36	696500	NGO HUNG VIET & TUYEN NGUYEN NGO	4513 BAT FALCON DR AUSTIN, TX 78738-6860
37	696501	SPENCER CROSBY C	4509 BAT FALCON DR BEE CAVE, TX 78738-6860
38	696502	SUN GE & JIE LIANG	4505 BAT FALCON DR AUSTIN, TX 78738-6860
39	696503	4501 BAT FALCON LLC	11801 LA BARZOLA BEND AUSTIN TX 78738-6023
40	696504	BHAKTA RAKESH & DAXABEN	13401 GALLERIA CIR APT 219 AUSTIN, TX 78738-6454
41	696533	SHAPLEY AARON D & BETH L	4409 BAT FALCON DR AUSTIN, TX 78738-6859
42	696534	ZHANG CHUNHUI & XIAOLIN BIAN (4405 BAT FALCON DR AUSTIN, TX 78738-6859
43	696535	WILLIAMS KENNETH & LINDA	4401 BAT FALCON DR AUSTIN, TX 78738-6859
44	696536	GENTRY KEITH & JOAN	4317 BAT FALCON DR AUSTIN, TX 78738-6858
45	696537	GURA DAMON & EMILIA JOINT	4313 BAT FALCON DR AUSTIN TX 78738-6858
46	696538	CHAPUT JOSHUA & KATHARINE	4309 BAT FALCON DR AUSTIN TX 78738-6858
47	696539	SMITH DOUGLAS & ELAINE	4305 BAT FALCON DR AUSTIN, TX 78738-6858
48	696615	ENGEL TODD A & VICKIE	4301 BAT FALCON DR AUSTIN, TX 78738-6858

49	696616	STEWART JEFFREY STEVEN & HOLLY ALAINE ZEMENS	15604 SPILLMAN RANCH LOOP AUSTIN, TX 78738
50	696617	LACKEY MICHAEL E & DENISE	15608 SPILLMAN RANCH LOOP AUSTIN TX 78738-6585
51	696618	KIRKUS KEVIN M &	15612 SPILLMAN RANCH LOOP AUSTIN TX 78738-6585
52	696619	ORR LIVING TRUST	15700 SPILLMAN RANCH LP AUSTIN TX 78738-6576
53	696620	HRICKO FAMILY TRUST	15704 SPILLMAN RANCH LOOP AUSTIN TX 78738-6576
54	696599	DAVISON KENNETH E JR & BARBARA	P O BOX 160910 AUSTIN, TX 78716-0910
55	563990	KOENINGS ARTHUR T JR & TAMARA A	15712 SPILLMAN RANCH LOOP AUSTIN, TX 78738-6576
56	563991	BURMEISTER FAMILY TRUST	15716 SPILLMAN RANCH LOOP AUSTIN, TX 78738-6576
57	563992	MCMASTER MARSHALL G & PAULINE A	15800 SPILLMAN RANCH LOOP AUSTIN, TX 78738-6573
58	563993	MARTIN GLENN J & SUSAN H	15806 SPILLMAN RANCH LOOP AUSTIN, TX 78738-6573
59	563994	GRUNTORAD SCOTT A &	15812 SPILLMAN RANCH LOOP AUSTIN TX 78738-6573
60	563995	CHRISTENSEN KRISTINE & NORMAN	15816 SPILLMAN RANCH LOOP AUSTIN TX 78738-6573
61	563996	HAUPTMANN SCOTT & JAYNA WATKINS	15820 SPILLMAN RANCH LOOP AUSTIN, TX 78738-6573
62	563997	PETTY COLIN J & REGINA M	15900 SPILLMAN RANCH LOOP AUSTIN TX 78738-6574
63	563998	AUSTIN QUAYS LLC	7901 BRIGHTMAN LN AUSTIN TX 78733-3435
64	563999	STEWART MORGAN	15908 SPILLMAN RANCH LP AUSTIN, TX 78738-6574
65	564000	TDF TRUST	15912 SPILLMAN RANCH AUSTIN, TX 78738-6574
66	564001	MADDOX FAMILY TRUST	4100 HOOKBILLED KITE BEE CAVE TX 78738-6571
67	564002	CERRETA SCOTT M &	4104 HOOKBILLED KITE AUSTIN TX 78738-6571
68	564003	GARDINER MURRAY	4108 HOOKBILLED KITE AUSTIN, TX 78738-6571
69	564004	NALLURI PRASAD V & ALEXANDRA DAVID	4112 HOOKBILLED KITE DR AUSTIN, TX 78738-6571
70	564005	BOCKIUS CHAD & JAMIE L	4116 HOOKBILLED KITE AUSTIN, TX 78738-6571
71	564006	WINGROVE JODY & TARA	4200 HOOKBILLED KITE AUSTIN, TX 78738-6572
72	564007	CAMPBELL JACK FREDERICK	4204 HOOKBILLED KITE AUSTIN TX 78738-6572

73	564008	SHAW MOUSUMI & SASCHA BOEHME	4208 HOOKBILLED KITE AUSTIN TX 78738-6572
74	563843	CHRISTENSEN HAL B & LINDSAY A	4212 HOOKBILLED KITE AUSTIN TX 78738-6572
75	563844	LYE TRAVIS LEE & CARA GIANNOTTI	4216 HOOKBILLED KITE AUSTIN TX 78738-6572
76	563845	BAKER JEFFREY T & BONNY E	4300 HOOKBILLED KITE AUSTIN, TX 78738-6553
77	563846	VANWINKLE BRADEN H & SUSAN M	4304 HOOKBILLED KITE AUSTIN, TX 78738-6553
78	563847	MICHAEL KIRK & KAREN MICHAEL	4308 HOOKBILLED KITE AUSTIN TX 78738-6553
79	563840	CRONK JEFFREY PAUL TRUST &	4312 HOOKBILLED KITE AUSTIN TX 78738-6553
80	563841	GRIFFIN ASHLEIGH MOUKALLED & CHRISTOPHER CLARK GREEN	4316 HOOKBILLED KITE AUSTIN, TX 78738-6553
81	563842	KETCHUM DEBRA	4400 HOOKBILLED KITE AUSTIN TX 78738-6549
82	563965	GUNAWAN ANDREAS I & MANNY	6904 PEPPERVINE CV AUSTIN , TX 78750-8158
83	563964	BRENEMAN DOUGLAS L & NANCY A	16009 SPILLMAN RANCH LOOP AUSTIN TX 78738-6577
84	563878	HARDESTY NATHAN A & ROSA	16200 SPILLMAN RANCH LOOP AUSTIN TX 78738-6579
85	563873	KELZER ANDREW & CRYSTAL	14912 SWALLOWTAILED KITE DR AUSTIN TX 78738-6545
86	563872	MCLANE FAMILY LIVING TRUST	14908 SWALLOW TAILED KITE AUSTIN TX 78738-6545
87	563871	LAFLAIR JAY W & KIMBERLY D	14904 SWALLOW TAILED KITE AUSTIN TX 78738-6545
88	563870	STANLEY BRITTANY RAE & BO	14901 SWALLOW TAILED KITE AUSTIN TX 78738-6545
89	563862	KUNCHINSKY EILEEN C REVOCABLE TRUST	14900 SPILLMAN RANCH LOOP BEE CAVE TX 78738-6551
90	865602	WALDEN DONALD & KAREN TRUST	14913 SPILLMAN RANCH LOOP BEE CAVE TX 78738-6551
91	563890	AUSTIN KEYS LLC	7901 BRIGHTMAN LN AUSTIN TX 78733-3435
92	563891	LEHTONEN CARL E & MARY B	14905 SPILLMAN RANCH LOOP AUSTIN, TX 78738-6551
93	563892	KELLEY JACOB W & STEPHANIE E	14901 SPILLMAN RANCH LOOP AUSTIN, TX 78738-6551
94	563893	SCHWAEGL BRUCE H & SARA J	14817 SPILLMAN RANCH LOOP AUSTIN, TX 78738-6550
95	563894	BAJWA GHULAM M	14813 SPILLMAN RANCH LOOP AUSTIN, TX 78738-6550
96	809042	GROVE AT FALCONHEAD COMMUNITY INC	7415 SOUTHWEST PKWY BLDG 6-500 PMB 244 AUSTIN TX 78735-7824

97	808999	BOWERS KRISTIN BETH	15013 FALCONHEAD GROVE LP AUSTIN, TX 78738-6798
98	808998	AUSTIN HOUSE SERIES	PO BOX 633 GREENWOOD TX 76246-0633
99	808997	BROCK SEAN DAVID &	15005 FALCONHEAD GROVE LOOP AUSTIN TX 78738-6798
100	808994	ROBERTS DEBORAH	7731 MENCHACA RD APT 3324 AUSTIN TX 78745-6085
101	808993	AYDAM JOAN E	14917 FALCONHEAD GROVE LOOP AUSTIN, TX 78738-6797
102	808992	HONOR GOD ALWAYS TRUST	PO BOX 162882 AUSTIN TX 78716-2882
103	808991	PERFORMANCE INGREDIENTS &	8000 IH 10 W STE 600 SAN ANTONIO TX 78230-3887
104	808990	WALDEN KENNETH A & LYND SAY B	14905 FALCONHEAD GROVE LOOP BEE CAVE, TX 78738-6797
105	809039	DEMERS DAVID E	14901 FALCONHEAD GROVE LP AUSTIN, TX 78738-6797
106	809038	GLORIOSO FAMILY INTERVIVOS	1702 COUNTY ROAD 128 BURNET TX 78611
107	809037	BROWN NEIL WILLIAM	14809 FALCONHEAD GROVE LOOP AUSTIN TX 78738-6796
108	809036	MARTIN-DE-NICOLAS ARTURO	14805 FALCONHEAD GROVE LP BEE CAVE, TX 78738-6796
109	809035	STAGHOUND HOLDINGS LLC	11300 TAYLOR DRAPER LANE AUSTIN TX 78759-3930
110	808995	??? No parcel	??? No parcel (FALCONHEAD GROVE LOOP STREET)
111	809011	CRAWFORD JEFFREY CLEON	15321 FALCONHEAD GROVE LOOP AUSTIN TX 78738-6883
112	809010	CHOW STEPHEN YUNG & JOYCE TING	4343 CORONET DRIVE ENCINO CA 91316-4324
113	809009	BURUCA JUAN P	15313 FALCONHEAD GROVE LOOP AUSTIN TX 78738-6883
114	809008	HAMBRICK LEE	15309 FALCONHEAD GROVE LP AUSTIN TX 78738-6883
115	809007	WADSACK PATRICIA L	7421 WOODWHEEL DR FORT WORTH TX 76123-2296
116	809006	PERLMAN GEOFFREY & JEANNIE	15301 FALCONHEAD GROVE LOOP BEE CAVE TX 78738-6883
117	563898	ENRIQUEZ JAVIER JR & CANDICE	4512 SHARPSHINNED HAWK CV AUSTIN, TX 78738-6544
118	563897	HORNE TRUST THE	4508 SHARPSHINNED HAWK CV AUSTIN, TX 78738-6544
119	563896	MCARTHUR RODGER & ISLA TRUST	4504 SHARPSHINNED HAWK CV BEE CAVE, TX 78738-6544
120	563895	BELLA TRUST	4500 SHARPSHINNED HAWK CV AUSTIN TX 78738-6544

121	563899	HAMROCK BRIAN & GEANEEN MARTINEZ	4509 SHARPSHINNED HAWK CV AUSTIN, TX 78738-6544
122	563900	KEY CHRISTOPHER A & SUZY BETH	4505 SHARPSHINNED HAWK CV AUSTIN TX 78738-6544
123	563901	DUNLAP GLENN & CHERYL L	4501 SHARPSHINNED HAWK CV AUSTIN TX 78738-6544
124	563861	RJ LIVING TRUST	4408 SHARPSHINNED HAWK CV AUSTIN TX 78738-6543
125	563860	PAYNE KELLY D & CINDY A	4404 SHARPSHINNED HAWK CV AUSTIN, TX 78738-6543
126	563859	MANHIRE GREGORY MICHAEL & JIRINA	4400 SHARPSHINNED HAWK CV BEE CAVE TX 78738-6543
127	563858	TYE LEE C & JULIE N	4401 SHARPSHINNED HAWK CV AUSTIN TX 78738-6543
128	563848	GOMEZ PEDRO & EMILEE REVOCABLE TRUST	3001 HEADLY DR AUSTIN, TX 78745-4711
129	880275	SPILLMAN RANCH COMMUNITY INC	7 LAKEWAY CENTRE CT STE 200 LAKEWAY TX 78734-2620
130	880274	MEYER ALFRED T & SUZANNE MEYER	4316 ISADORA DR BEE CAVE TX 78738-4405
131	880273	PICOLO RUTH	4312 ISADORA BEE CAVE TX 78738-4405
132	880272	SU PIPER LEIGH NIETERS &	4308 ISADORA DR AUSTIN TX 78738-4405
133	880271	ANTONISHEN ELIZABETH HAWLEY & COREY	4304 ISADORA DR BEE CAVES TX 78738-4405
134	880270	NEVILLE SUSAN	4300 ISADORA DR BEE CAVE TX 78738-4405
135	880316	SPILLMAN RANCH COMMUNITY INC	7 LAKEWAY CENTRE CT STE 200 LAKEWAY TX 78734-2620
136	880315	ABDALLAH J KIM &	4224 ISADORA DR BEE CAVE TX 78738-4404
137	880314	BRZEZINSKI LIVING TRUST	4220 ISADORA DR BEE CAVE TX 78738-4404
138	880313	BALANDRANO FRANCISCO &	4216 ISADORA DR BEE CAVE TX 78738-4404
139	880312	SPINN MEGAN NOEL &	4212 ISADORA DR BEE CAVE TX 78738-4404
140	563839	FH TEXAS MANAGEMENT CO LLC	10500 AVERY CLUB DR AUSTIN TX 78717-3825
141	541394	SPILLMAN RANCH COMMUNITY INC	5316 W HIGHWAY 290 STE 100 AUSTIN TX 78735-8922
142	541393	ARREDONDO CECIL RENE	PO BOX 340969 AUSTIN, TX 78734-0017
143	541392	HOBSON JUSTIN RYAN &	14420 PIPER GLEN DR AUSTIN TX 78738-6528
144	541391	JLBSMB TRUST	PO BOX 164181 AUSTIN TX 78716-4181

145	541390	PHILLIPS TRUST	14112 PIPER GLEN DR AUSTIN TX 78738
146	541389	TISDALE CASEY & KIMBERLY ANN TISDALE	14408 PIPER GLEN DR AUSTIN, TX 78738-6528
147	541388	CANCIENNE CRAIG M & ANNE MARIE	14404 PIPER GLEN DR AUSTIN TX 78738-6528
148	541387	GUERMEUR DANIEL & JOANNA M LEROND	14400 PIPER GLEN DR AUSTIN TX 78738-6528
149	541386	NASSERFAR MICHAEL HOOMAN	3805 SUGARLOAF DR AUSTIN TX 78738-6535
150	541385	ROLLINS FRANCIS WILLARD III & SONIA ARLIN	3809 SUGARLOAF DR AUSTIN TX 78738-6535
151	541384	DAVIS RICKY L & ANN	3901 SUGARLOAF DR AUSTIN TX 78738-6536
152	541383	BRICKLEY JED E & MARLA R	3905 SUGARLOAF DR AUSTIN, TX 78738-6536
153	541382	TURNBULL STEPHEN D & PHILLIPPA	3909 SUGARLOAF DR AUSTIN, TX 78738-6536
154	541381	ALDER JEFF M & MARY A	3913 SUGARLOAF DR AUSTIN, TX 78738-6536
155	541380	THOMAS MARK A & MONICA L THOMAS	3917 SUGARLOAF DR AUSTIN TX 78738-6536
156	541379	GRMOLJEZ MARY ELIZABETH	3921 SUGARLOAF DR AUSTIN, TX 78738-6536
157	541378	KEMPLER JOSEPH M JR & LESLIE A	4005 SUGARLOAF DR AUSTIN, TX 78738-6537
158	541377	CORRIVEAU KOSTA & ANNIK	4009 SUGARLOAF DR AUSTIN, TX 78738-6537
159	541376	THE MLP TRUST	4013 SUGARLOAF DR AUSTIN TX 78738-6537
160	541375	ORBEA LIVING TRUST	4101 SUGARLOAF DR AUSTIN, TX 78738-6538
161	541374	MAY VAN B & GAY S	4105 SUGARLOAF DR AUSTIN, TX 78738-6538
162	786922	BREWER DAVID J & TERRI L	4109 SUGARLOAF DR AUSTIN, TX 78738-6538
163	786920	ROMERO BRYAN & JESSICA G	4113 SUGARLOAF DR AUSTIN, TX 78738-6538
164	786919	FINCH TRAVIS SCOTT & ERIKA	4117 SUGARLOAF DR AUSTIN TX 78738-6538
165	786918	CHAUVIERE GLENN J	4121 SUGARLOAF DR AUSTIN, TX 78738-6538
166	786917	ALEXANDER AARON BLAKE & ARTHUR GOODALL	4125 SUGARLOAF DR AUSTIN TX 78738-6538
167	786901	SPILLMAN RANCH COMMUNITY INC	5316 W HIGHWAY 290 STE 100 AUSTIN TX 78735-8922
168	786898	HORWATH JESSICA DODGE &	14420 HERON BAY CV AUSTIN TX 78738-6539

169	786895	WOMACK MATTHEW J & APRIL A LIFE EST	14416 HERON BAY AUSTIN TX 78738-6539
170	786894	SNYDER DAVID B & LESLIE M	14412 HERON BAY CV AUSTIN, TX 78738-6539
171	786893	PAYNE CHRISTOPHER D & CHRISTINA	14408 HERON BAY CV AUSTIN TX 78738-6539
172	786892	WILLCOX ERIC A & THERESA M	14404 HERON BAY CV AUSTIN, TX 78738-6539
173	797936	PAPACHARALAMBOUS FAMILY TRUST	4116 SUGARLOAF DR AUSTIN, TX 78738-6538
174	786889	WISE THOMAS P JR & KERRI	4108 SUGARLOAF DR AUSTIN, TX 78738-6538
175	786888	BONGARZONE KATERINA & MICHEL FRECHETTE	4104 SUGARLOAF DR AUSTIN, TX 78738-6538
176	541373	STADELBAUER FREDERICK LEE JR &	4100 SUGARLOAF DR AUSTIN TX 78738-6538
177	541372	MARTINEZ VINCE	4016 SUGARLOAF DR AUSTIN, TX 78738-6537
178	541371	CASTRO CESAR & MARA	4012 SUGAR LOAF DR AUSTIN TX 78738-6537
179	541370	DASANAYAKE MAHENDRA	4008 SUGARLOAF DR AUSTIN, TX 78738-6537
180	541369	GOBER CHRISTOPHER & MARY	PO BOX 341016 AUSTIN TX 78734-0017
181	541368	BENDELE GERALD E & SUE BETH	4312 MYRTLE BEACH DR AUSTIN, TX 78738-6534
182	541367	KOLB MIKE & CECILIA	4308 MYRTLE BEACH DR AUSTIN, TX 78738-6534
183	541366	SCHLEGEL JOHN W & DARIEN M	4304 MYRTLE BEACH DR AUSTIN, TX 78738-6534
184	541365	CONSENTINO FABIO & ANDREA	4300 MYRTLE BEACH DR AUSTIN, TX 78738-6534
185	541364	AILAWADHI AJAY & DEEPTI	4216 MYRTLE BEACH DR AUSTIN, TX 78738-6529
186	541363	KUMAR RAJEEV & TAMARA	4212 MYRTLE BEACH DR BEE CAVES, TX 78738-6529
187	880297	SPILLMAN RANCH COMMUNITY INC	7 LAKEWAY CENTRE CT STE 200 LAKEWAY TX 78734-2620
188	880294	RINEHART EDWIN O III & CATHY A RINEHART	4205 TAMERIND DR AUSTIN TX 78738-4407
189	880293	SOOD LAL	4209 TAMERIND DR AUSTIN TX 78738-4407
190	880292	ROOTS & WINGS LIVING TRUST	4213 TAMERIND DR BEE CAVE TX 78738-4407
191	880291	DIBARTOLO MEGAN A	4217 TAMERIND DR AUSTIN TX 78738-4407
192	880290	ILENSTINE CLINTON GLENN III & DIANE E	4221 TAMERIND DR BEE CAVES TX 78738-4407

193	880289	DAFFER JUDY ELLEN	4225 TAMERIND DR AUSTIN TX 78738-4407
194	880287	RUYBAL DARYL & MARK A	14717 MARCHESA DR AUSTIN TX 78738-4406
195	880286	JOHNSON LORYN K & JONATHAN R WRIGHT	14713 MARCHESA DR BEE CAVE TX 78738-4406
196	880285	GODWIN CHRISTOPHER D & CHRISTINE M GODWIN	14709 MARCHESA DR BEE CAVE TX 78738-4406
197	880284	CHAUVERO LISA & JASHUA	14701 MARCHESA DR BEE CAVE TX 78738-4406
198	563906	MADDEN MARY JANE REVOCABLE TRUST	14608 SPILLMAN RANCH LOOP AUSTIN TX 78738-6541
199	563905	CRUSE CLARENCE M III & MARY L	14609 SPILLMAN RANCH LOOP AUSTIN TX 78738-6541
200	563904	CHHATWAL RAHUL & JASMINE THAKKAR	14613 SPILLMAN RANCH AUSTIN TX 78738-6541
201	563903	NGUYEN KELSEY K	14617 SPILLMAN RANCH LOOP AUSTIN, TX 78738-6541
202	563902	SCOTT AND LINDA TRUST	14621 SPILLMAN RANCH LOOP AUSTIN TX 78738-6541
203	541448	FIELD TAMARA THURLOW & LINVILLE M	2121 LOHMANS CROSSING RD STE 504-700 AUSTIN TX 78734-5217
204	541447	ROYAL DAVID GREGORY & ANNETTE	4008 COOPERS HAWK CV AUSTIN, TX 78738-6527
205	541446	ELSENOUSSI ADEL SAMEH ADEL	4004 COOPERS HAWK CV AUSTIN TX 78738-6527
206	541445	LANIKAI VILLA LLC	64 TIBURON DR THE HILLS TX 78738-1556
207	541444	RUSSELL CATHERINE R & VAN B III	3932 COOPERS HAWK CV AUSTIN, TX 78738-6526
208	541443	MEHTA NEIL & DIPTI PATEL	3928 COOPERS HAWK CV AUSTIN TX 78738-6526
209	541442	LUCCHETTI DAVID & HIEN T TRAN	2280 S MONACO PKWY APT 107 DENVER, CO 80222-5827
210	541441	WHATLEY RONNIE & LINDA LIFE ESTATE	3920 COOPERS HAWK CV BEE CAVE TX 78738-6526
211	541440	GLENN ERIC C & LISA SCHAEFFER	3916 COOPERS HAWK CV AUSTIN, TX 78738-6526
212	541439	BANDI NEVEEN	3912 COOPERS HAWK CV AUSTIN, TX 78738
213	541438	DE LOOZE TERRY ROBERT & JOSEPHINE J DE LOOZE	3908 COOPERS HAWK CV AUSTIN, TX 78738-6526
214	541437	TETSUKA WADE S REVOCABLE TRUST & NATALYA A TETSUKA REVOCALBE TRUST	44044 RIVERPOINT DR LEESBURG, VA 20176-8203
215	541449	SPILLMAN RANCH COMMUNITY INC	5316 W HIGHWAY 290 STE 100 AUSTIN TX 78735-8922
216	541436	ZHAO SHUWEI	3905 COOPERS HAWK CV AUSTIN TX 78738-6526

217	541427	AMERICAN KESTREL LLC	4716 MONT BLANC DR BEE CAVE TX 78738-4005
218	541426	BRILLIANT WILLIAM H & CATHY H	14500 AMERICAN KESTREL DR AUSTIN, TX 78738-6522
219	541425	RAO PUJITHA	14424 AMERICAN KESTREL DR AUSTIN TX 78738-6520
220	541424	BUCK GREGORY LEE & ANGELA C	14420 AMERICAN KESTREL DR AUSTIN, TX 78738-6520
221	541423	WANG YANG	14416 AMERICAN KESTREL DR AUSTIN TX 78738-6520
222	541422	PAO STEVE C & MEILI	14412 AMERICAN KESTREL DR AUSTIN, TX 78738-6520
223	541421	LAWLOR JOHN DIXON III & KELLY BOYSEN	14408 AMERICAN KESTREL DR AUSTIN TX 78738-6520
224	541420	WILLSON ROBERT M & MARGUERITE A	14404 AMERICAN KERSTREL DR AUSTIN TX 78738-6520
225	541419	DANIEL MICHAEL W & JAMIE L	14400 AMERICAN KESTREL DR AUSTIN, TX 78738-6520
226	541418	ALLEN NATALIE N & MICHAEL L	14316 AMERICAN KESTREL DR AUSTIN TX 78738-6519
227	541417	PERSAUD RAJENDRA N	PO BOX 1789 DRIPPING SPGS, TX 78620-1789
228	541416	BUI DAVID R & SHANNON	14308 AMERICAN KESTREL DR AUSTIN, TX 78738-6519
229	541415	GILBERT KELLY	14304 AMERICAN KESTREL DR BEE CAVE, TX 78738-6519
230	541414	ONEY JENNIFER L & JIM B	14300 AMERICAN KESTREL DR AUSTIN TX 78738-6519
231	541466	SPILLMAN RANCH COMMUNITY INC	5316 W HIGHWAY 290 STE 100 AUSTIN TX 78735-8922
232	123282	LAKE TRAVIS I S D	3322 RANCH ROAD 620 S AUSTIN, TX 78738-6804
233	541502	DOMAIN FALCONHEAD APARTMENTS LLC	3501 RICE BLVD HOUSTON TX 77005-2937
234	563946	WEST WILLIAM & GUNER	14424 BROADWINGED HAWK DR AUSTIN, TX 78738-6569
235	563947	RAJTAR MARCIN & MARTA	14428 BROADWINGED HAWK DR AUSTIN, TX 78738-6569
236	563948	LANTZ-DEMAYO FAMILY	408 BLUE CREEK DR DRIPPING SPRINGS TX 78620-3406
237	563949	SCHOENFELD VIRGINIA LIVING TRUST	14504 BROADWINGED HAWK DR AUSTIN TX 78738-6570
238	563950	CRUZ BENJAMIN 2014 FAMILY TRUST	2040 SAGE SPARROW ST BRENTWOOD, CA 94513-1777
239	563951	AYINALA MANOHAR &	14512 BROADWINGED HAWK DR AUSTIN TX 78738-6570
240	563952	BROWN CATHEE & MARK WISEMAN	14516 BROADWINGED HAWK DR AUSTIN, TX 78738-6570

241	563953	SUMRALL MARK R & KATHLEEN G	14508 AMERICAN KESTREL DR BEE CAVE TX 78738-6522
242	563954	SCHMIDT JED & TRACY	14524 BROADWINGED HAWK DR AUSTIN TX 78738-6570
243	563955	GONZALEZ BEVERLY A	3622 WINDHILL LP ROUND ROCK, TX 78664
244	563956	SMITH MICHELLE & ANDREW	14532 BROADWINGED HAWK DR AUSTIN TX 78738-6570
245	563940	SPILLMAN RANCH COMMUNITY INC	5316 W HIGHWAY 290 STE 100 AUSTIN TX 78735-8922
246	563922	SPILLMAN RANCH COMMUNITY INC	5317 W HIGHWAY 290 STE 100 AUSTIN TX 78735-8922
247	563917	FALCONHEAD PARTNERS LTD	7404 CARISSA CV AUSTIN, TX 78759-6445
248	563921	VIOLET CROWN VETERINARY REAL ESTATES LLC	14360 FALCON HEAD BLVD STE 140 BEE CAVE TX 78738-6137
249	563920	FIRST STAR BANK SSB	PO BOX 7 BREMOND, TX 76629-0007
250	892287	PFP FALCONHEAD RETAIL LLC	901 S MOPAC EXPY AUSTIN TX 78746-5776
251	824773	AMFP V BEE CAVE LLC	100 PARK AVE STE 3500 NEW YORK NY 10017-5516
252	894895	FALCONHEAD OFFICES LLC	2144 E REPUBLIC RD STE B201 SPRINGFIELD MO 65804-4643
253	541413	SPILLMAN RANCH COMMUNITY INC	5316 W HIGHWAY 290 STE 100 AUSTIN TX 78735-8922
254	772212	SPILLMAN FAMILY CEMETERY INC	1308 BORGER ST PLANVIEW TX 79072
255	798228	COTTAGES AT SPILLMAN RIDGE LTD	14501 FALCON HEAD BLVD UNIT 1 BEE CAVE TX 78738-6689
256	541412	SPILLMAN RANCH COMMUNITY INC	7 LAKEWAY CENTRE CT STE 200 LAKEWAY TX 78734-2620
257	541478	SETH KSHITIJ & ASHIMA	3901 GYRFALCON CV BEE CAVE TX 78738-6540
258	541467	GOSSEY MARGARET REVOCABLE TRUST	3900 GYRFALCON CV AUSTIN, TX 78738-6540
259	541468	WEGLIICKI PIOTR & MONIKA ANNA WEGLIICKA	3904 GYRFALCON CV AUSTIN TX 78738-6540
260	541469	GURASICH NANCY H	3908 GYRFALCON CV AUSTIN TX 78738-6540
261	541470	MORRIS JOHN BRADLEY & CYNTHIA B	3912 GYRFALCON CV AUSTIN TX 78738-6540
262	541471	NAUMANN MICHAEL & MARGARET	3916 GYRAFALCON CV AUSTIN TX 78738-6540
263	541472	BALLARD JAMES L III &	3920 GYRFALCON CV AUSTIN TX 78738-6540
264	541473	SNYDER JOANNA K	3924 GYRFALCON CV AUSTIN TX 78738-6540

265	837784	LADERA HOMEOWNERS ASSN INC	5316 W HIGHWAY 290 STE 100 AUSTIN TX 78735-8922
266	831846	LADERA HOMEOWNERS ASSN INC	5316 W HIGHWAY 290 STE 100 AUSTIN TX 78735-8922
267	740569	TRAVIS COUNTY BEE CAVE ROAD DISTRICT #1	PO BOX 1748 AUSTIN TX 78767-1748
268	740562	TRAVIS COUNTY BEE CAVE ROAD DISTRICT #1	PO BOX 1748 AUSTIN TX 78767-1748
269	119054	CITY OF AUSTIN	P O BOX 1088 FSD-REAL ESTATE, 13TH FL AUSTIN TX 78767-1088
270	375020	WEST TRAVIS COUNTY MUD NO 5	1515 S CAPITAL OF TEXAS HWY STE 415 AUSTIN TX 78746-6951
271	455583	LAKE AUSTIN LAKE POINTE HOA INC	PO BOX 700128 DALLAS TX 75370-01283
272	374994	LAKE AUSTIN LAKE POINTE HOA INC	PO BOX 700128 DALLAS TX 75370-01283
273	374998	NOVY C KEITH & LAURA M	5724 HERO DR AUSTIN TX 78735-6256
274	375000	LOWE JOSHUA L & OLGA R	1209 MAYAN WAY AUSTIN, TX 78733-2663
275	375003	SHANNON JOSEPH & MACI	3207 AVENAL DR AUSTIN TX 78738-5366
276	375004	LAKE AUSTIN LAKE POINTE HOA INC	PO BOX 700128 DALLAS TX 75370-0128
277	839243	WEST TRAVIS CO MUD NO 6	100 CONGRESS AVE STE 1300 AUSTIN TX 78701-2744
278	787808	SO MASTER BUILDERS II LP	13453 W HIGHWAY 71 BEE CAVE, TX 78738-3106
279	563801	SYNCHRO REALTY LLC	13443 W HIGHWAY 71 BEE CAVE TX 78738-3106
280	731024	PORTER DANIEL B	13443 W HIGHWAY 71 BEE CAVE TX 78738-3106
284	726619	BOON R STERLING 2007 TRUST	5416 SPANISH OAKS AUSTIN TX 78738
285	726620	BOON R STERLING 2007 TRUST	5500 SPANISH OAKS AUSTIN TX 78738
286	726621	WEST TRAVIS CO MUD NO 6	100 CONGRESS AVE STE 1300 AUSTIN, TX 78701-2744
287	726623	OTWELL JAMES L & OKSANA A	5516 SPANISH OAKS CLUB BLVD AUSTIN TX 78738-6049
288	726624	THOMPSON GREG & JENNIFER	11322 BROOKS RD BEAUMONT TX 77713-1907
289	726625	POSILIPPO JAMES & KERRY BROWN	5608 SPANISH OAKS CLUB BLVD AUSTIN TX 78738
290	726626	KUHNS CRAIG A & JULIE K	5616 SPANISH OAKS CLUB BLVD AUSTIN, TX 78738-6050
291	726627	GST-EXEMPT TRUST	5700 SPANISH OAKS CLUB AUSTIN TX 78738-6043

292	726628	WEEDEN JEFFREY B & SHARON J	5708 SPANISH OAKS CLUB BLVD AUSTIN, TX 78738-6043
293	726629	BRISCOE CRAIG A & TRACI L	5716 SPANISH OAKS CLUB BLVD AUSTIN, TX 78738-6043
294	726630	ALLEN WILLIAM C & AMY M	5724 SPANISH OAKS CLUB BLVD AUSTIN TX 78738-6043
295	726631	STRATUS USA INVESTMENTS CORP	5732 SPANISH OAKS CLUB BLVD AUSTIN TX 78738-6043
296	726632	TUJIOS CONSTANTINE & ALLISON HOPE	12304 MUHLY CV AUSTIN TX 78738-6039
297	726633	FINKE CHRISTOPHER M & MELANIE A	12308 MUHLY CV AUSTIN, TX 78738-6039
298	726634	MARTIN EDWARD E JR & BRENDA K	12309 MUHLY CV AUSTIN, TX 78738-6039
299	726635	CHORUSH RUSSELL A	12305 MUHLY CV AUSTIN, TX 78738-6039
300	743733	RANCIC WILLIAM E TRUST &	1999 BRYAN ST STE 900 DALLAS TX 75201-3140
301	743734	DANTONI MIKE & LAUREL REVOCABLE TRUST	5808 SPANISH OAKS CLUB BLVD AUSTIN TX 78738-6044
304	743738	CONLEY MANAGEMENT TRUST	12516 MAIDENHAIR LN AUSTIN, TX 78738-5601
305	743739	KELLY TIMOTHY M & LORRAINE R	12524 MAIDENHAIR LN AUSTIN TX 78738-5601
306	743740	URBAN RHODES CHARLES &	12532 MAIDENHAIR LN AUSTIN TX 78738-5601
307	743741	DZIERSK THOMAS F & SHEILA	12600 MAIDENHAIR LN AUSTIN, TX 78738-5617
308	743742	OSLER CAMERON V & KRISTIN M CLARKE-OSLER	12608 MAIDENHAIR LN AUSTIN, TX 78738-5617
309	743743	TRAMMELL KELLY BERT & LISA TANGEDAHL	12616 MAIDENHAIR LN AUSTIN, TX 78738-5617
310	743744	SYNCHRO REALTY LLC	13443 W HIGHWAY 71 BEE CAVE, TX 78738-3106
312	743786	SHEEHAN KEVIN & SUZANNA SUGARMAN	6200 SPANISH OAKS CLUB BLVD AUSTIN TX 78738-6052
313	743792	MARTIN KIMBERLY NICOLE	6005 EMPRESA DR APT 2431 6005 EMPRESA DR AUSTIN TX 78738-2114
314	743793	ESSLEMONT ALEXANDER &	12724 LITTLE BLUE STEM CV AUSTIN TX 78738-6062
315	743794	SAEED MONAF H & ENAS J	12717 LITTLE BLUE STEM CV AUSTIN TX 78738-6062
316	743795	MAYFIELD DENNIS & JULIA	5933 COUNTY RD 364 FREDONIA TX 76842
317	743796	HALL JEFFREY W & TRICIA L	12802 HACIENDA RIDGE AUSTIN, TX 78738-7652
318	583442	ESTRADA MARCO ANTONIO C	12804 HACIENDA RIDGE AUSTIN, TX 78738

319	583443	MASTERSON LEIGH H	12808 HACIENDA RIDGE AUSTIN TX 78738-7652
320	583448	CALVO RUSSELL D & DIANNE K	12812 HACIENDA RDG AUSTIN, TX 78738-7652
321	583449	TOWSLEE DANIEL J & KAREN D	12816 HACIENDA RDG AUSTIN TX 78738-7652
322	583450	WEST TRAVIS CO MUD NO 6	100 CONGRESS AVE STE 1300 AUSTIN, TX 78701-2744
323	583451	DUGGAN ASPEGREN LIVING TRUST	12900 HACIENDA RDG AUSTIN TX 78738-7662
324	583452	DYKSTRA CUTTER & JAMIE-LYNN SIGLER	12904 HACIENDA RIDGE AUSTIN TX 78738-7662
325	583453	AMC 2022 TRUST & CLC 2022 TRUST	5544 MORNINGSIDE DR SAN JOSE CA 95138-2228
326	583454	JRMD MAKARIOS TRUST	12912 HACIENDA RDG AUSTIN TX 78738-7662
327	583455	PREWITT REVOCABLE TRUST	12916 HACIENDA RDG AUSTIN TX 78738-7662
328	583456	BATT MARY G TRUST	12920 HACIENDA RDG AUSTIN TX 78738-7662
329	583457	HUFFINE DUANE & NANCY	1401 POSSUM TROT ST AUSTIN, TX 78703-3709
330	583458	SPANISH OAKS OWNERS ASSOCIATION INC	13453 W HIGHWAY 71 BEE CAVE, TX 78738-3106
331	563798	SPANISH OAKS OWNERS ASSOCIATION INC	13453 W HIGHWAY 71 BEE CAVE, TX 78738-3106
332	731109	CCNG GOLF LLC	13443 W HIGHWAY 71 BEE CAVE, TX 78738-3106
333	731103	PORTER DANIEL B	13453 W HIGHWAY 71 BEE CAVE , TX 78738-3106
334	915894	SYNCHRO REALTY LLC	13443 W HIGHWAY 71 BEE CAVE TX 78738-3106
335	915895	MICHAELS LIVING TRUST	1808 KENSPUR LN AUSTIN TX 78738
336	915896	CKA 2021 FAMILY REVOCABLE TRUST	3714 BONNIE RD AUSTIN TX 78703-2003
337	915897	MORRIS JOHN BRADLEY &	3912 GYRFALCON CV AUSTIN TX 78738-6540
338	915898	PENNINGTON MARCUS & MORGAN PENNINGTON	11533 EMERALD FALLS DR AUSTIN TX 78738-5326
339	915899	SUGARMAN SUZANNA	6200 SPANISH OAKS CLUB BLVD AUSTIN TX 78738-6052
340	915900	COLEMAN RUFUS J & DAISY D COLEMAN	2063 OAKLAND AVE PIEDMONT CA 94611-3736
341	915901	TUCK WILLIAM CODY & ASHLEY TUCK	6404 MADRONE TREE LN AUSTIN TX 78738-4483
342	915902	YULE TYRONE D & KIMBERLY F YULE	32 WINGREEN LOOP THE HILLS TX 78738-1525

343	915903	NELSON KAY LIN CONNOLLY	4713 MONTE CARMELO PL AUSTIN TX 78738-6029
344	915904	HAYLIE DUFF TRUST THE	16255 VENTURA BLVD #625 ENCINO CA 91436-2307
345	915905	BILOLIKAR SUNIL KUMAR &	5708 NAVAJO DRAW LN AUSTIN TX 78738
346	915906	KNAPP WILLIAM M & JERI CINDY	6417 SPANISH OAKS CLUB BLVD AUSTIN TX 78738
347	915907	SEPIA LANE LLC	PO BOX 749 MUSKEGO WI 53150-0749
348	915908	SULLIVAN JENNIFER LYNN & STEPHEN A SULLIVAN	12625 MAIDENHAIR LN APT 35 AUSTIN TX 78738-5620
349	915909	SULLIVAN JENNIFER LYNN & STEPHEN A SULLIVAN	12625 MAIDENHAIR LN APT 35 AUSTIN TX 78738-5620
350	915910	CHARLES FAMILY TRUST	16720 MOINEAU DRIVE AUSTIN TX 78738-4438
351	915911	HERREN EMILY ANNE & LEE ROBERT TRAVIS	1002 CHARLOTTE ST AUSTIN TX 78703-3917
352	915913	SHOBE BRETT & KA MAN LUI	1911 SEA EAGLE VIEW AUSTIN TX 78738-5380
353	915914	SYNCHRO REALTY LLC	13443 W HIGHWAY 71 BEE CAVE TX 78738-3106
354	915915	MARTINO RONALD M & ELLEN C	308 GOLDEN BEAR DR AUSTIN TX 78738-1722
355	915916	SCLOVE JARED A & SUZANNE S SCLOVE	12400 HWY 71 WEST SUITE 350-142 AUSTIN NJ 78738
356	915917	LITTLE & HOWARD INVESTMENT GROUP	2121 LOHMANS CROSSING RD STE 509-295 AUSTIN TX 78734-5217
357	915918	EUGENE D JACKSON IV REVOCABLE TRUST	403 PROSECCO PL AUSTIN TX 78738-1254
358	915920	BRUFF JESSE M & CARYN	6601 RIALTO BLVD APT 6202 AUSTIN TX 78735-0063
359	915921	GIBSON STEPHEN ANDREW & EVINS CAMERON GIBSON	12109 FLOWERING SENNA BND AUSTIN TX 78738-3011
360	915922	PATAGONIA DEVELOPMENT LLC	7407 LENAPE TRL AUSTIN TX 78736-2802

Attachment A6

Buffer Zone Map – Bohl's

PROPOSED EXPANSION AREA

EXISTING TRAIN 1

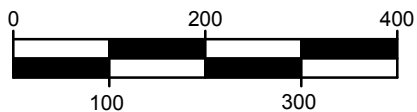
150 FT BUFFER ZONE

CITY OF AUSTIN

WTCPUA
PROPERTY BOUNDARY

EXISTING BOHL'S EFFLUENT
POND 100 AC-FT

BEE CAVE PARKWAY



SCALE: 1"=200'

MEC

Murfee Engineering Company

Texas Registered Engineering Firm F-353

**BUFFER ZONE MAP - BOHL'S WWTP
ATTACHMENT A6
FOR ADMINISTRATIVE REPORT**

1101 Capital of Texas Highway South, Building D, Suite 110, Austin, Texas 78746, (512) 327-9204

JOB NO. 11-051.84 SCALE: AS NOTED SHEET: 1 OF 1

DESIGNED BY: BC DATE: 8/17/2017

DRAWN BY: LDD DATE: 8/23/2017

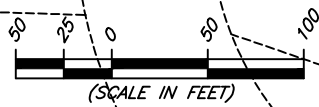
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Attachment A7

Buffer Zone Map – Lake Pointe

WEST TRAVIS COUNTY MUD 5
HABITAT PRESERVE

(RESTRICTIVE EASEMENT INCLUDED)



150 FT BUFFER ZONE

TREATMENT TRAIN #1
(0.175 MGD - EXISTING)
(0.175 MGD - FINAL)

INFLUENT
LIFT STATION

LAKE POINTE
HOMEOWNERS ASSN

NAPA DR

EFFLUENT
FILTERS

TREATMENT TRAIN #2
(0.35 MGD - EXISTING)
(0.500 MGD - FINAL)

EFFLUENT
LIFT STATION

WTCPUA PROPERTY BOUNDARY

AVENAL DR

SANTEE DR

SONOMA DR

MEC

Murfee Engineering Company

**BUFFER ZONE MAP-LAKE POINTE WWTP
ATTACHMENT A7
FOR ADMINISTRATIVE REPORT**

1101 South Capital of Texas Highway, Building D, Suite 110, Austin, Texas 78746 (512) 327-9204

JOB NO. 11051.84 SCALE: 1" = 100' SHEET: 1 OF 2

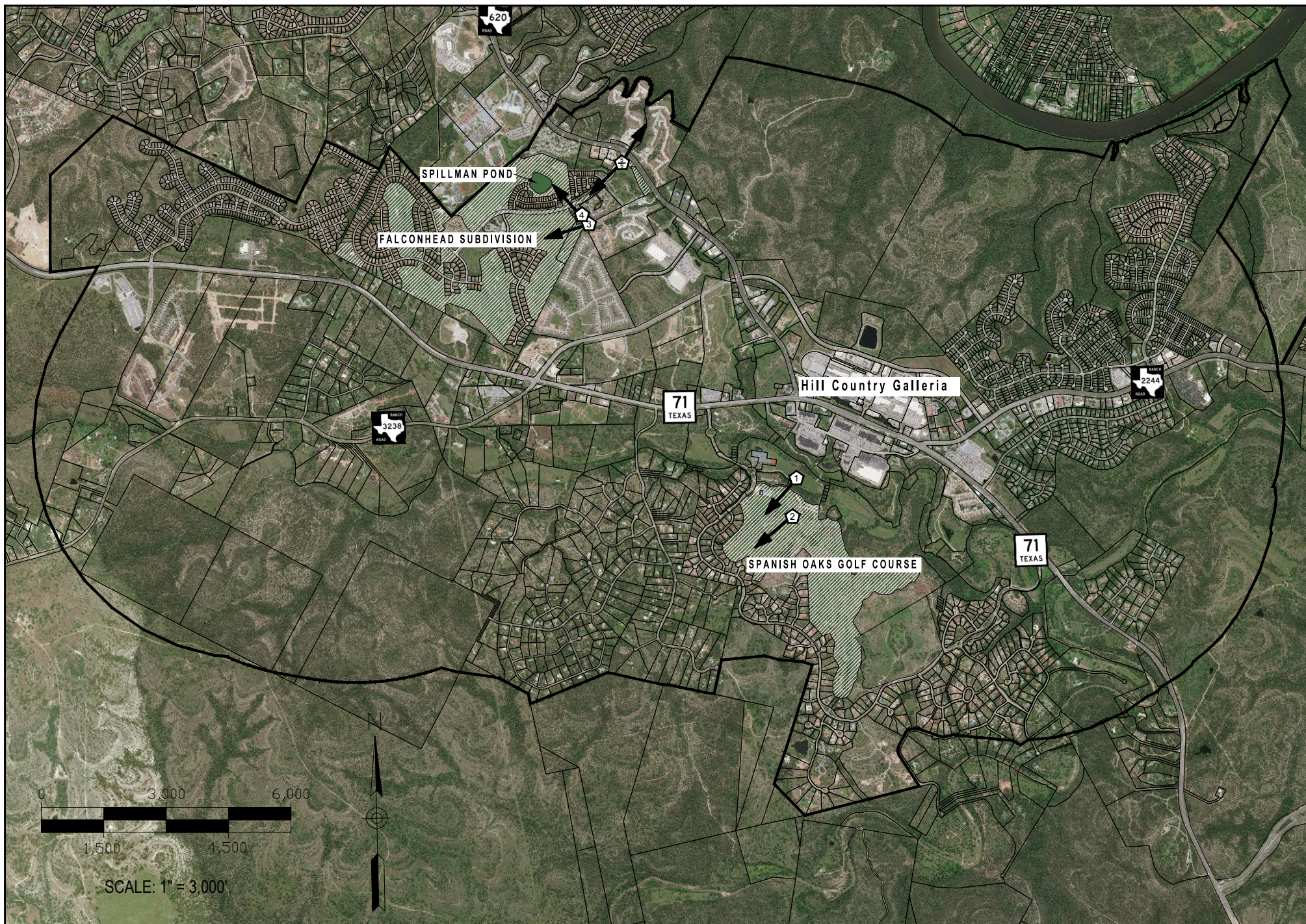
DESIGNED BY: BDC

DRAWN BY: LDD

FILE:O:\11\051\84\Buffer Zone Map DATE: 08/17/17

Attachment A8

Irrigation Area Photos and Location Map



Murfee Engineering Company Texas Registered Engineering Firm F-353
1101 Capital of Texas Highway South, Building D, Suite 110, Austin, Texas 78746, (512) 327-9204

WEST TRAVIS COUNTY PUA
TLAP MINOR AMENDMENT W/ RENEWAL
ATTACHMENT A8 - IRRIGATION AREAS

JOB NO.	11051.84	SCALE: 1"=3000'	SHEET: 1 OF 1
DESIGNED BY:	DL	DATE:	8/22/2017
DRAWN BY:	LDD	DATE:	8/22/2017
FILE(LAYOUT): O:\1105184\PHOTOS_IRRIGATION.dwg(OVL)			



PHOTO 1 - SPANISH OAKS GOLF COURSE IRRIGATION FIELDS



PHOTO 2 - SPANISH OAKS GOLF COURSE IRRIGATION FIELDS

ORIGINAL PHOTOGRAPHS



PHOTO 3 - FALCONHEAD GOLF COURSE EXISTING IRRIGATION AREAS



PHOTO 4 - SPILLMAN POND & FALCONHEAD GOLF COURSE EXISTING IRRIGATION AREAS

ORIGINAL PHOTOGRAPHS

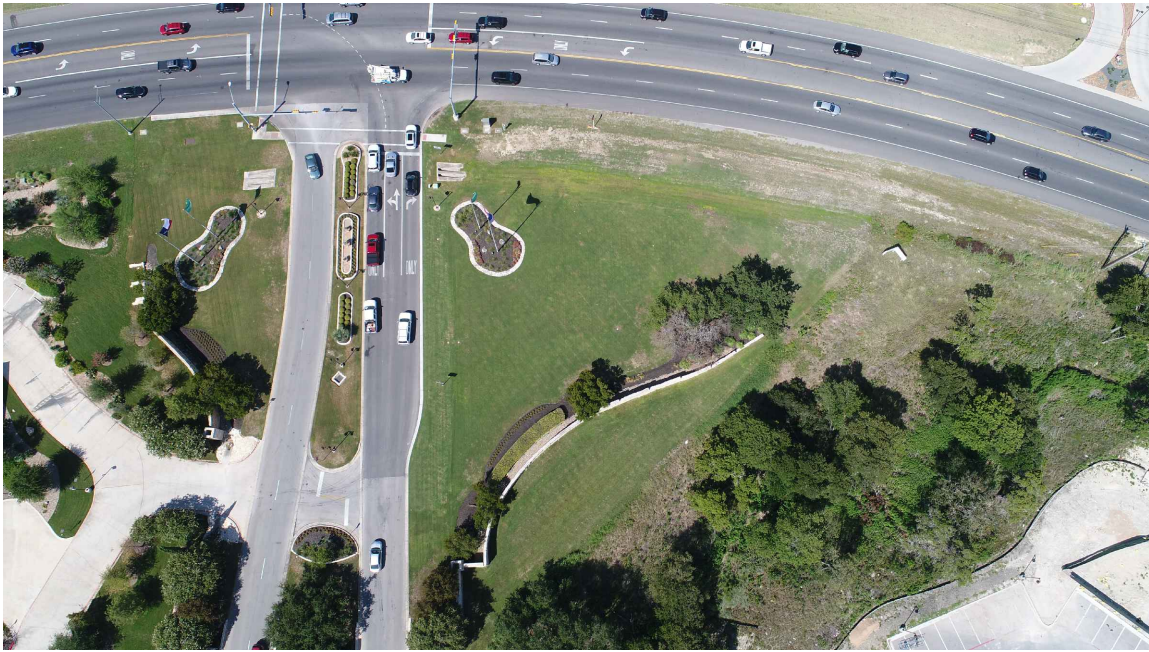


PHOTO 5 - FALCONHEAD SUBDIVISION ENTRANCE LANDSCAPE IRRIGATION AREAS

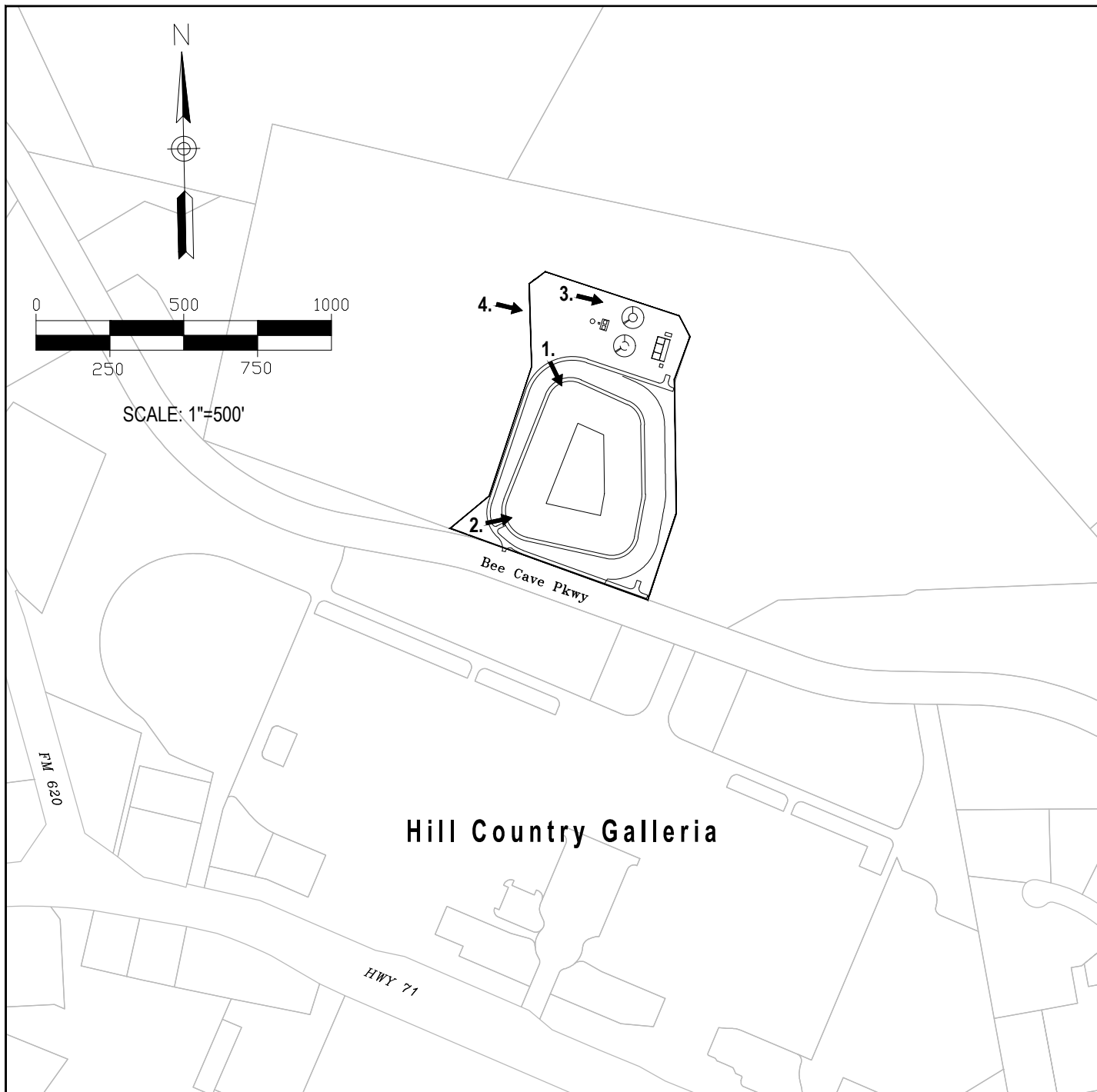


PHOTO 6 - FALCONHEAD SUBDIVISION & GOLF COURSE EXISTING IRRIGATION AREAS

ORIGINAL PHOTOGRAPHS

Attachment A9

Bohl's WWTP and Pond Photos w/ Location Map



1.



Bohl's Effluent Pond SE

2.



Bohl's Effluent Pond NE

3.



Proposed Future Treatment Site, E

4.



Proposed Future Treatment Site, Overall



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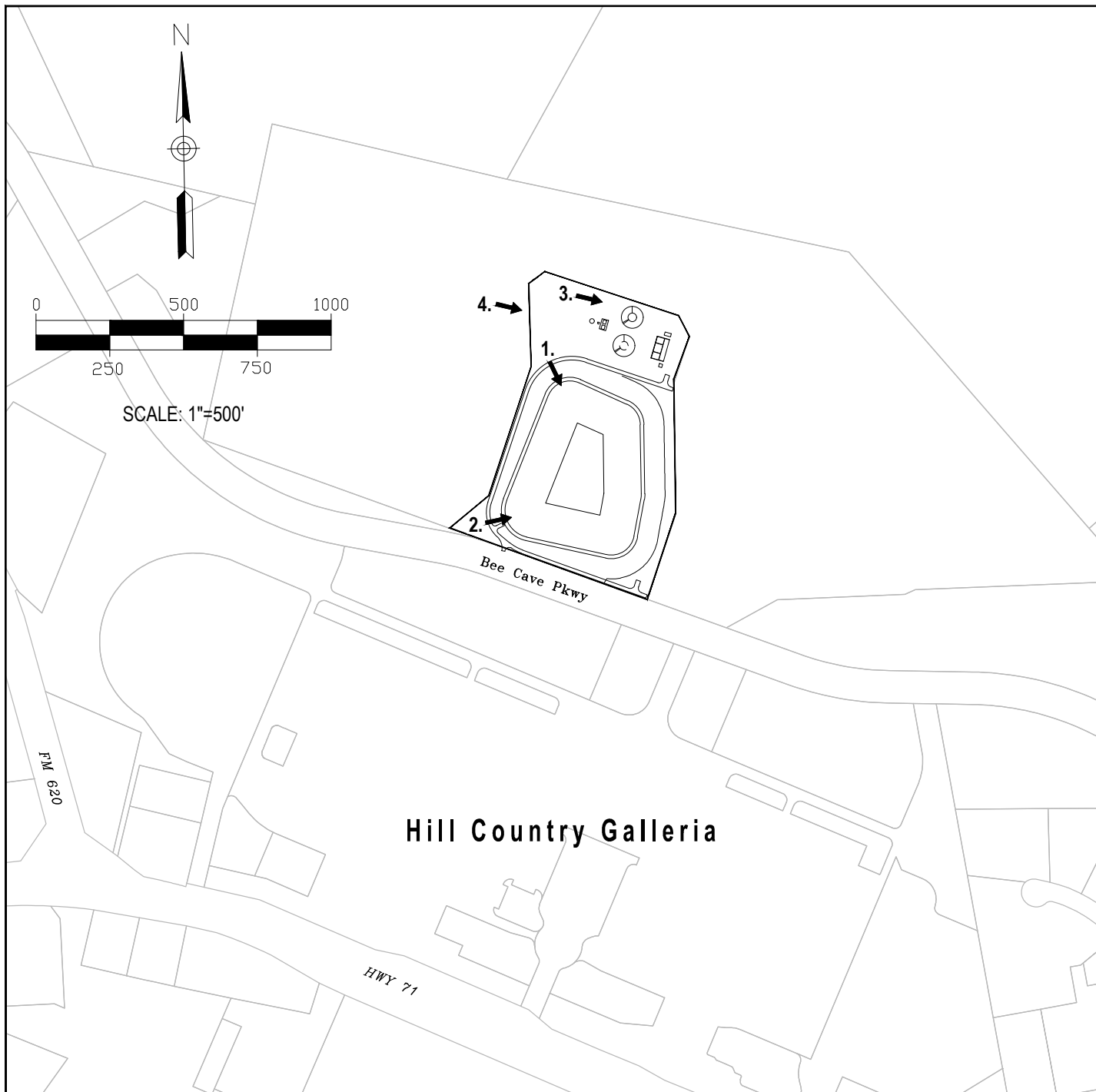
WEST TRAVIS COUNTY PUA

TLAP MINOR AMENDMENT W/ RENEWAL
ATTACHMENT A9 - BOHLS POND

JOB NO.	11051.84	SCALE: 1"=500'	SHEET: 1 OF 1
DESIGNED BY:	DL	DATE:	7/17/2017
DRAWN BY:	LDD	DATE:	7/18/2017
FILE(LAYOUT): O:\1105184\PONDS.dwg(BOHLS)			

Attachment A10

Spillman Pond Photos and Location Map



1.



Bohl's Effluent Pond SE

2.



Bohl's Effluent Pond NE

3.



Proposed Future Treatment Site, E

4.



Proposed Future Treatment Site, Overall



Murfee Engineering Company Texas Registered Engineering Firm F-353
1101 Capital of Texas Highway South, Building D, Suite 110, Austin, Texas 78746, (512) 327-9204

WEST TRAVIS COUNTY PUA

TLAP MINOR AMENDMENT W/ RENEWAL
ATTACHMENT A10 - BOHLS POND

JOB NO.	11051.84	SCALE: 1"=500'	SHEET: 1 OF 1
DESIGNED BY:	DL	DATE:	7/17/2017
DRAWN BY:	LDD	DATE:	7/18/2017
FILE(LAYOUT): O:\1105184\PONDS.dwg(BOHLS)			

Attachment A11

Drip Field Photos and Location Map



PHOTO 1



PHOTO 2



PHOTO 3



PHOTO 4

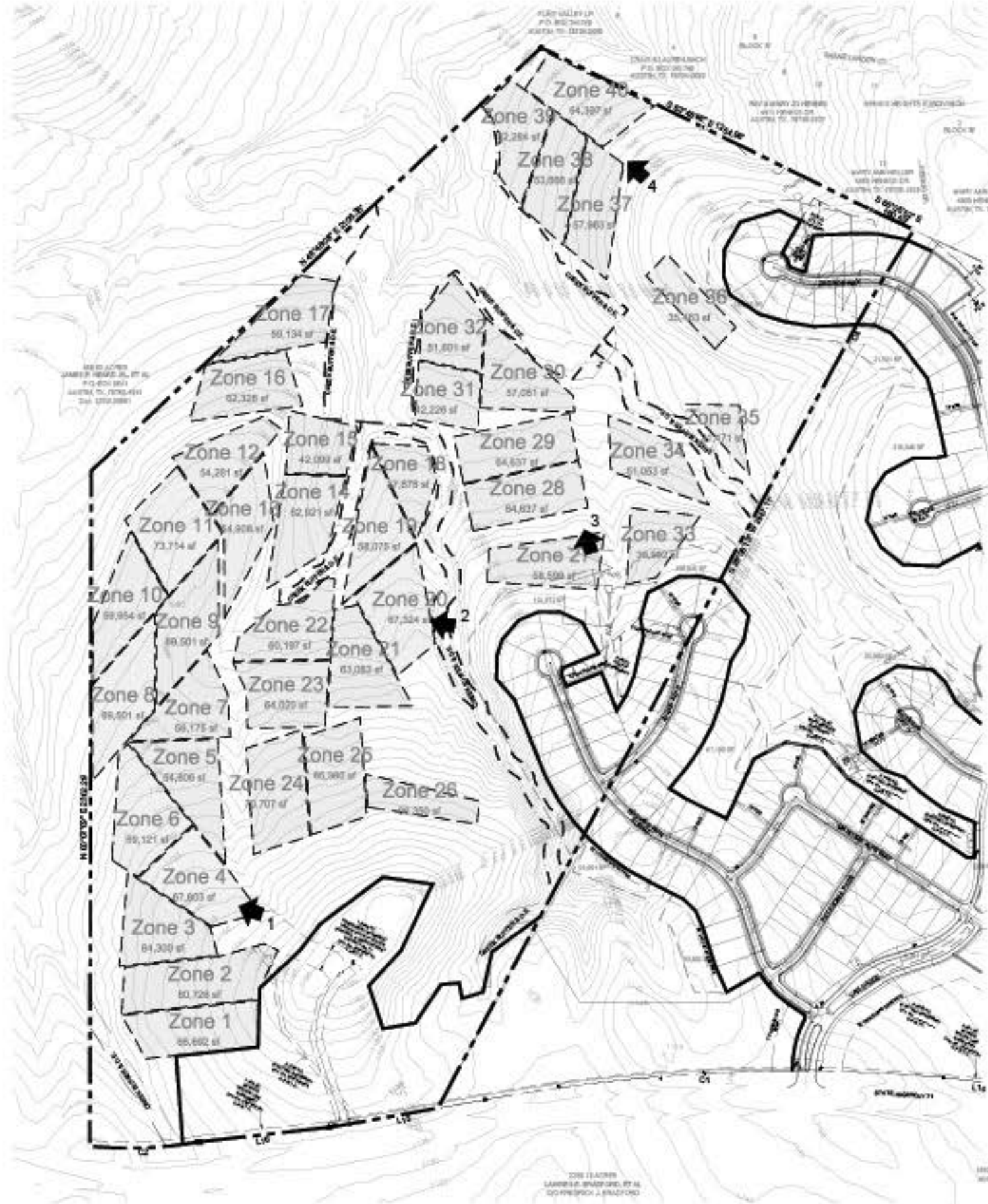


PHOTO LOCATION AND DIRECTION

SCALE-Feet
0 100 200 400

THIS EXHIBIT IS FOR ILLUSTRATIVE PURPOSES ONLY.
DOES NOT CONSTITUTE A DESIGN.

SCALE: 1"=200'



West Travis County PUA
SH 71 West Drip Disposal Area
Drip Irrigation Area Photographs
EXHIBIT

wwdengineering
an approved environmental solutions
P-1206
1111 W. 20th St., Suite 111
Austin, Texas 78741
(512) 388-2111
www.wwdeng.com

File
WTC PUA V2.dwg

Date
Jun 15, 2017

Sheet No.

Of: _









Attachment B

Effluent Routing Description

Routing of Effluent

Domestic Administrative Report 1.0 - Attachment B for Section 11

Effluent exits Outfall 001 via an effluent pump station through a 12" force main. The 12" force main exits the site to the south and follows Avenal Drive to its intersection with Sonoma Drive, thence west to San Benito Court, where it heads southwest and then west to Bee Cave Parkway. At a point approximately 500 feet west of the western boundary of the Outfall 002 site, the force main crosses Bee Cave Parkway and continues west to RM 620. The force main follows RM 620 northwest to a point approximately 500 feet south of Falcon Head Boulevard, at which point it crosses RM 620 and continues west to Falcon Head Boulevard, across the Boulevard, and ultimately discharges into the Spillman Effluent Holding Pond immediately north of the intersection of American Kestrel Drive and Falcon Head Boulevard. Effluent from Outfall 001 can also be pumped to Bohls Pond. At a point approximately 750 feet east of the eastern boundary of the Outfall 002 site a tee in the force main begins a branch of the 12" line that heads south, across Bee Cave Parkway, south to SH71, across SH71, along Shops Parkway, and thence across country to the south and west to the CCNG Golf Course Effluent Pump Station. Effluent from Outfall 002 is pumped directly to the Bohls Effluent Holding Pond, which is located on site. From the Bohls Effluent Holding Pond effluent can be delivered either to the CCNG Golf Course Effluent Pump Station or transferred to the Spillman Effluent Holding Pond.

Once the Interim I (1.375 MGD) phase commences operation, a proposed 232,590 GPD of effluent from the Bohls Pond will be routed will be routed to a subsurface drip dispersal system located approximated 4 miles west of Bohl's WWTP. An additional 142, 410 GPD of effluent will be routed to a proposed Direct Potable Reuse facility located at the Bohls WWTP site. Once the Interim II (1.5 MGD) Phase commences, an additional 125,000 GPD of effluent from Bohls Pond will be routed to the DPR facility. Upon commencement of the final phase at the Bohls WTTP, an additional 300,000 GPD will be transferred to a DPR facility that will be implemented to provide the required 1.8 MGD capacity.

Attachment C

Treatment Process Description

Treatment Process Description

Domestic Technical Report 1.0

The West Travis County PUA Wastewater Treatment Plant uses an activated sludge process with single stage nitrification. The treatment plant was designed to meet the full permit capacity through a four-phase process which will meet projected wastewater service demands.

Existing Phase: Outfall 001 accomplishes treatment using parallel activated sludge treatment trains operated in the single stage nitrification mode. One train is rated for 0.225 MGD and the other is rated at 0.45 MGD, for a combined permitted capacity of 0.675 MGD. Treatment units include a common bar screen and flow splitter followed by parallel equalization basins, aeration basins, clarifiers, aerobic digesters, and chlorine contact chambers. Following chlorination flow from both treatment trains is combined and routed to parallel cloth disk filters, such that all flow from both treatment trains can either be split between the filters or routed to one filter exclusively. Outfall 002 is a separate wastewater treatment facility located on a separate site and accomplishes treatment using activated sludge treatment operated in the single stage nitrification mode. Outfall 002 is permitted for 0.325 MGD. Treatment units for the Outfall 002 treatment facility include a bar screen, aeration basin, clarifier, aerobic digester, cloth disk filters, chlorine injection basin, and a chlorine contact chamber.

Interim Phase 1: Outfall 001 stays the same. Outfall 002 expands with the addition of two 0.5 MGD trains and the demolition of the existing 0.325 MGD train to a total of 1.0 MGD. The treatment units include a drum screen, anoxic basin, aerobic basin, clarifier, cloth disk filter, chlorination, chlorine contact basin, aerated sludge holding, and dewatering unit. The total treatment capacity of interim phase 1 is 1.675 MGD.

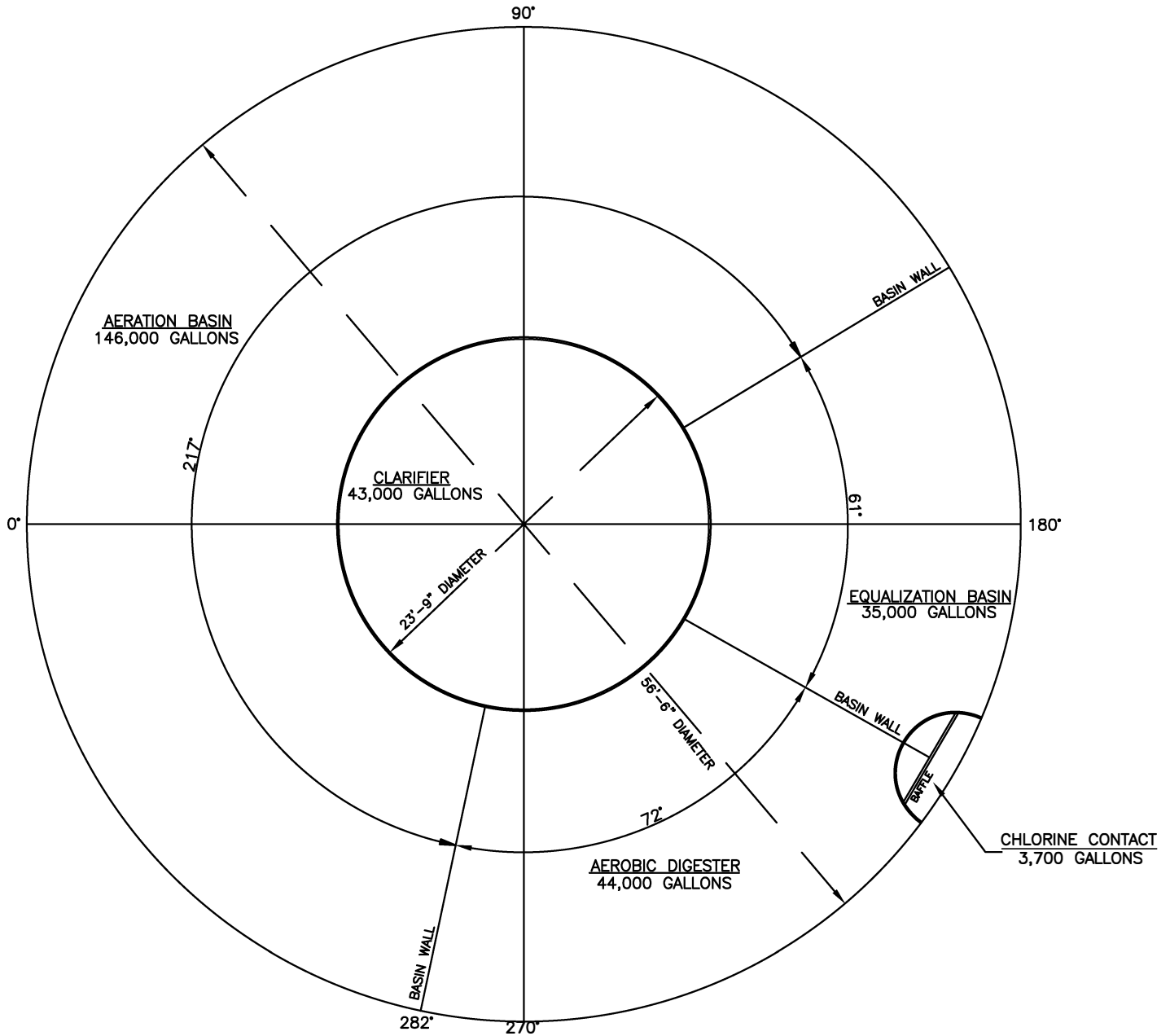
Interim Phase II installs an additional 0.5 MGD at Outfall 002 and takes Outfall 001 off line. The treatment process includes a drum screen, anoxic basin, aerobic basin, clarifier, cloth disk filter, chlorination, chlorine contact basin, aerated sludge holding, and dewatering unit. The total treatment capacity of Interim Phase II is 1.5 MGD.

Final Phase: An additional 0.5 MGD train is installed at Outfall 002. The total treatment capacity is 2.0 MGD. The treatment process includes a drum screen, anoxic basin, aerobic basin, clarifier, cloth disk filter, chlorination, chlorine contact basin, aerated sludge holding, and dewatering unit.

Attachment D1

Train No. 1 LP Dimensions

TRAIN NO. 1 UNIT PLAN
0.225 MGD (LAKE POINT WWTP)

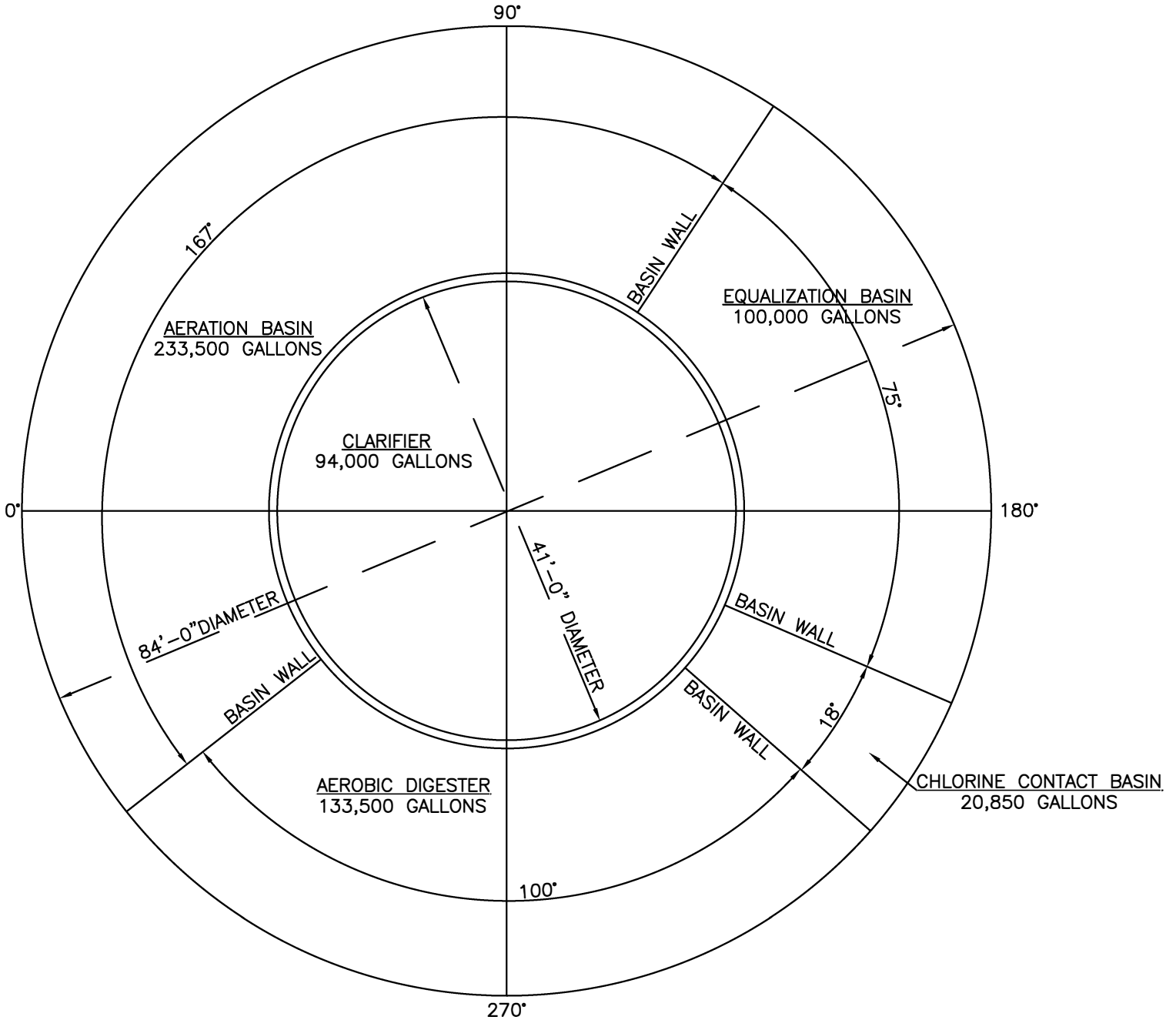


DOMESTIC TECH. REPORT 1.0
ATTACHMENT D1 FOR ITEM 3B

Attachment D2

Train No. 2 LP Dimensions

TRAIN NO. 2 UNIT PLAN 0.450 MGD (LAKE POINTE WWTP)



DOMESTIC TECH. REPORT 1.0
ATTACHMENT D2 FOR ITEM 3B



Murfee Engineering Company Texas Registered Engineering Firm F-353
1101 Capital of Texas Highway South, Building D, Suite 110, Austin, Texas 78746, (512) 327-9204

WEST TRAVIS COUNTY PUA
TRAIN NO. 2

TLAP MINOR AMENDMENT W/ RENEWAL
ATTACHMENT D2 - TREATMENT UNIT DIMENSIONS

JOB NO. 11-051.84 SCALE: NTS

DESIGNED BY: DL

DRAWN BY: KD

FILE(LAYOUT): O:\11051\79\LPWWTP 2 Trtmt Unit Dims.DWG(Layout1)

SHEET: OF

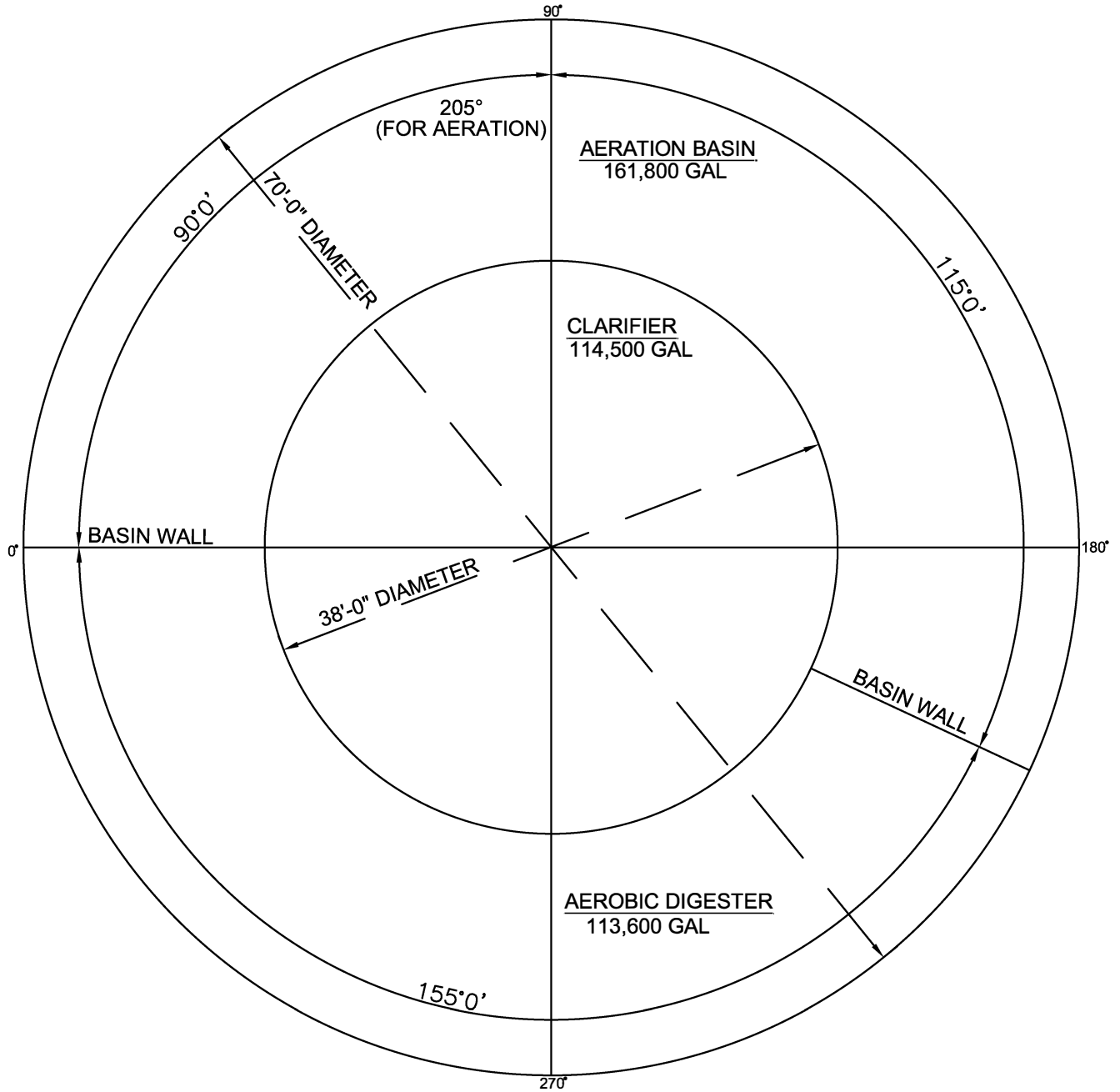
DATE: 5/13/2014

DATE: 5/15/2014

Attachment D3

Train No. 1 Bohl's Dimensions

TRAIN NO. 1 UNIT PLAN 0.325 MGD (BOHLS WWTP)



DOMESTIC TECH. REPORT 1.0
ATTACHMENT D3 FOR ITEM 3B



Murfee Engineering Company Texas Registered Engineering Firm F-353
1101 Capital of Texas Highway South, Building D, Suite 110, Austin, Texas 78746, (512) 327-9204

WEST TRAVIS COUNTY PUA
TRAIN NO. 3
TLAP MINOR AMENDMENT W/ RENEWAL
ATTACHMENT D3 - TREATMENT UNIT DIMENSIONS

JOB NO. 11-051.84	SCALE: NTS	SHEET: 1 OF 1
DESIGNED BY: DL		DATE: 5/13/2014
		DATE: 5/20/2014
FILE(LAYOUT): O:\11051\79\Bohl's Trmt Unit Dims.dwg (TRAIN NO. 3)		

Attachment D4

Treatment Unit Dimensions

Treatment Unit Dimensions – Bohls WWTP**Domestic Technical Report 1.0 - Attachment D4 for Section 2**

Interim I Phase – 1.375 MGD		
Treatment Unit Type	Number of Units	Dimensions
Aeration Basin	1	85'x30'x14'
Secondary Clarifier	2	28' Ø X 14'
Aerobic Digester	1	52' Ø X 12'
Filter	2	26'x20'
Chlorine Contact Basin	1	37'x14'x4.5'

Interim II Phase – 1.5 MGD¹		
Treatment Unit Type	Number of Units	Dimensions (L X W X D)
Aeration Basin	1	85'x30'x14'
Secondary Clarifier	2	28' Ø X 14'
Aerobic Digester	1	52' Ø X 12'
Filter	3	39'x20'
Chlorine Contact Basin	1	37'x14'x4.5'

Final Phase – 1.8 MGD		
Treatment Unit Type	Number of Units	Dimensions (L X W X D)
Aeration Basin	1	51'x30'x14'
Secondary Clarifier	2	22' Ø X 14'
Aerobic Digester	1	40' Ø X 12'
Filter	3	39'x20'
Chlorine Contact Basin	1	37'x8.5'x4.5'

Note:

- Interim Phase II will not require additional tankage except for 1 additional filter as the tankage built in Interim Phase I will be sized to handle both interim phases.

Attachment E1

Lake Pointe WWTP Flow Diagram

Existing and Final

Attachment E2

Bohl's WWTP Flow Diagram

Existing

The diagram illustrates the wastewater treatment process for a 325,000 GPD W.W.T.P. The flow begins with **WASTEWATER INFLUENT** entering a **LIFT STATION**. The effluent from the lift station passes through a **BAR SCREEN**. The screened wastewater then flows into the **AERATION BASIN**. From the aeration basin, the flow continues to the **CLARIFIER**. The clarifier has two return lines: a **SCUM RETURN** line that loops back to the aeration basin, and a **RAS** (Return Activated Sludge) line that also returns to the aeration basin. The bottom sludge from the clarifier is pumped to a **DIGESTER** via a **SUPERNATANT PUMP**. The digester produces **WASTE**, which is collected by a **CONTRACT HAULER**. The clarified effluent from the clarifier goes to a **FILTER**. The filtered effluent then passes through another **FILTER** and enters a **CHLORINE CONTACT** tank. Below the chlorine contact tank are **CHLORINE TANKS**. The flow then goes through a **FLOW MONITORING CHANNEL** and an **EFFLUENT LIFT STATION** before reaching the **TO EFFLUENT HOLDING POND (FOR IRRIGATION)**. A **FILTER BACKWASH** line is shown at the top, connecting the filter back to the lift station area.

MEC

Mr [REDACTED] [REDACTED]
[REDACTED] [REDACTED] rd [REDACTED] [REDACTED] 76033
1101 Capital of Texas Highway South, Building D, Suite 110, Austin, Texas 78746, (512) 327-9204

002
TLAP MINOR AMENDMENT W/ RENEWAL
ATTACHMENT E1 - FLOW DIAGRAM

[illegible]

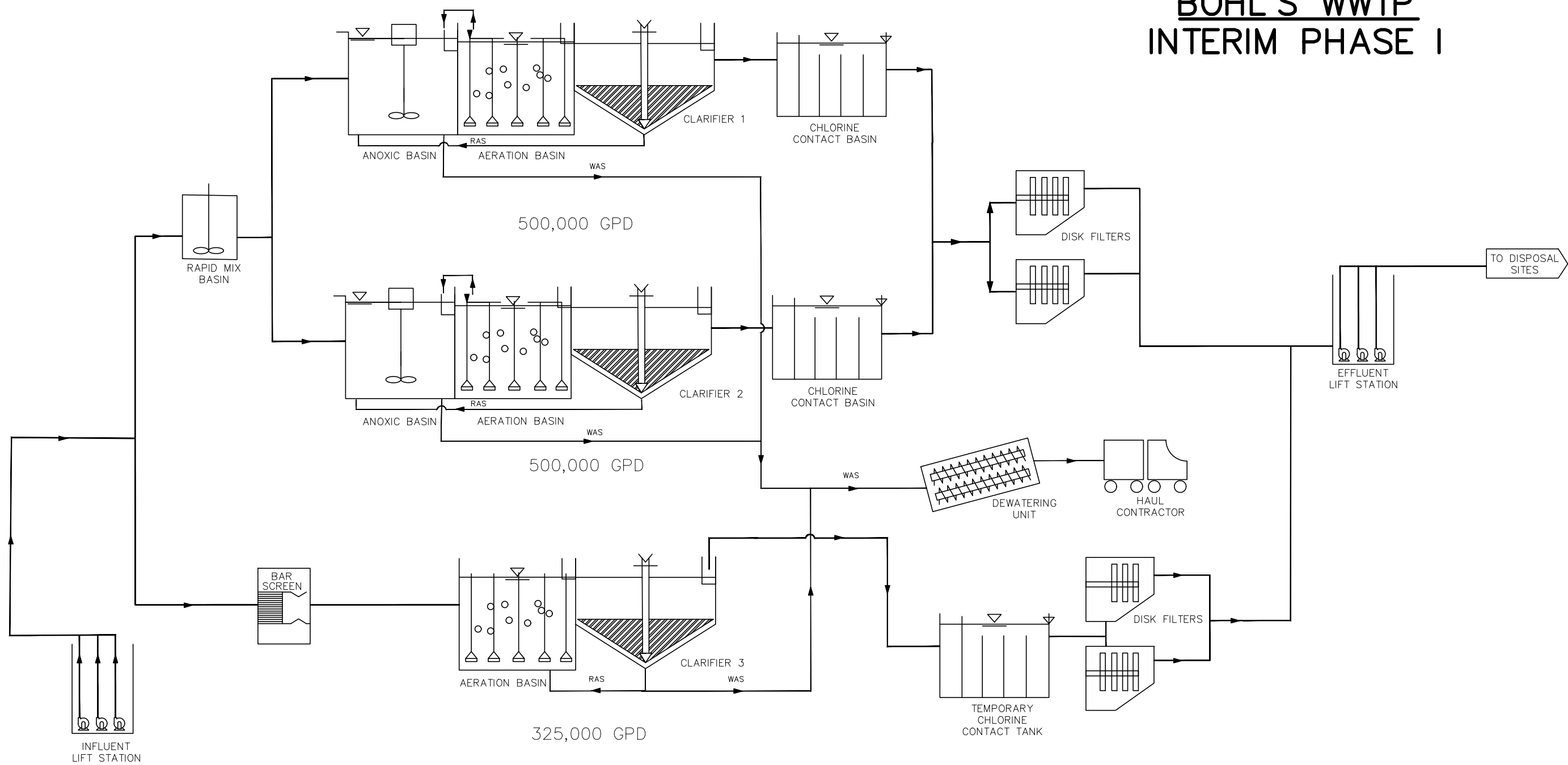
The diagram illustrates the wastewater treatment process for the Bohlman Golf Course. It begins with 'WASTEWATER EFFLUENT' entering the 'BOHLS EFFLUENT LIFT STATION', which consists of two vertical tanks. From this station, the effluent is pumped into the 'BOHLS EFFLUENT POND'. A line labeled 'OUTFALL 1' also branches off from the lift station. The 'BOHLS EFFLUENT POND' is connected to the 'BOHLS EFFLUENT TRANSFER PUMP STATION'. This pump station has two outlets: one leading to 'SPANISH OAKS GOLF COURSE' and another leading to the 'SPILLMAN EFFLUENT POND'. The 'SPILLMAN EFFLUENT POND' is then connected to the 'SPILLMAN POND EFFLUENT PUMP STATION', which finally discharges the effluent into the 'FALCONHEAD GOLF COURSE'.

Attachment E3

Bohl's WWTP Flow Diagram

Interim I

BOHL'S WWTP
INTERIM PHASE I



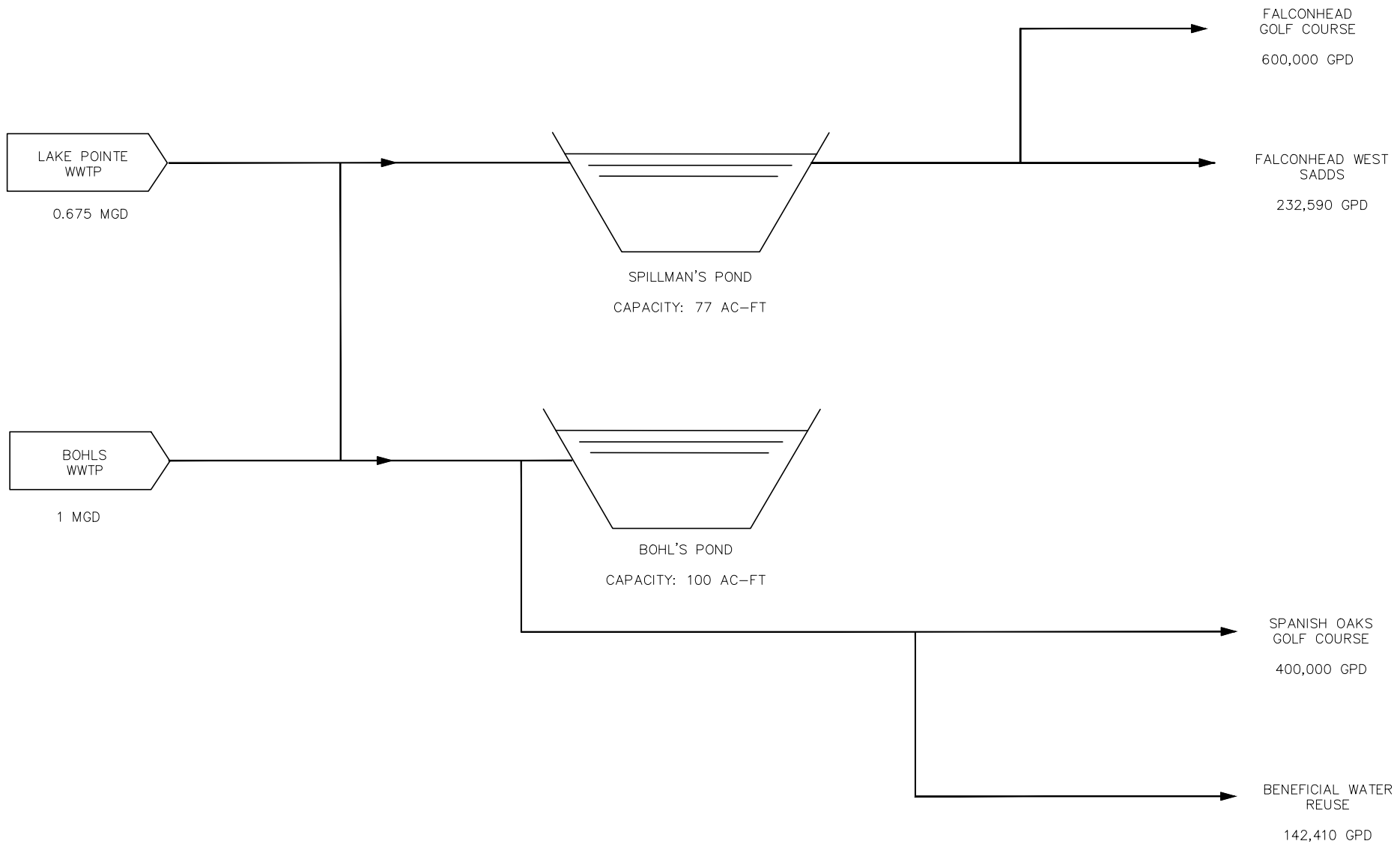
DESIGNED BY:	JGM	<div><div>MEC</div><div>MURFEE ENGINEERING COMPANY</div></div>	1101 CAPITAL OF TEXAS HIGHWAY SOUTH
DRAWN BY:	JGM		BUILDING D, SUITE 110
CHECKED BY:	BDC		AUSTIN, TEXAS 78746
APPROVED BY:	BDC		(512) 327-9204
DATE:	05/08/2024		TEXAS REGISTERED ENGINEERING FIRM F-353

West Travis County PUA

Attachment E - Flow Diagrams

NOT FOR
CONSTRUCTION

BOHL'S WWTP
INTERIM PHASE I
EFFLUENT DISPOSAL



DESIGNED BY:	JGM	<div><div></div><div>MEC</div><div>MURFEE ENGINEERING COMPANY</div></div>	1101 CAPITAL OF TEXAS HIGHWAY SOUTH
DRAWN BY:	JGM		BUILDING D, SUITE 110
CHECKED BY:	BDC		AUSTIN, TEXAS 78746
APPROVED BY:	BDC		(512) 327-9204
DATE:	05/08/2024		TEXAS REGISTERED ENGINEERING FIRM F-353

West Travis County PUA

Attachment E - Flow Diagrams

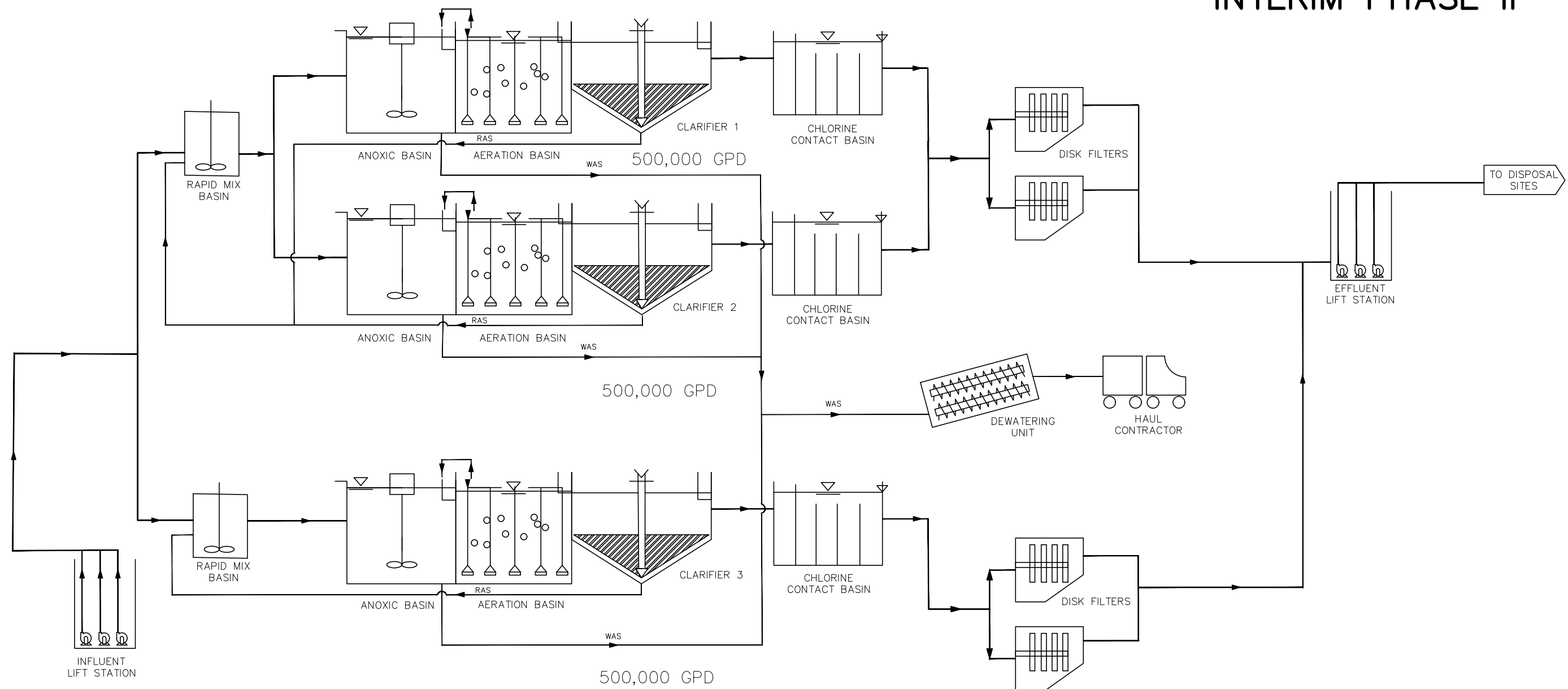
NOT FOR
CONSTRUCTION

Attachment E4

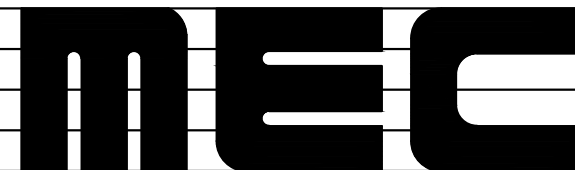
Bohl's WWTP Flow Diagram

Interim II

BOHL'S WWTP
INTERIM PHASE II



DESIGNED BY: JGM
DRAWN BY: JGM
CHECKED BY: BDC
APPROVED BY: BDC
DATE: 05/08/2024



MURFEE ENGINEERING COMPANY

1101 CAPITAL OF TEXAS HIGHWAY SOUTH

BUILDING D, SUITE 110

AUSTIN, TEXAS 78746

(512) 327-9204

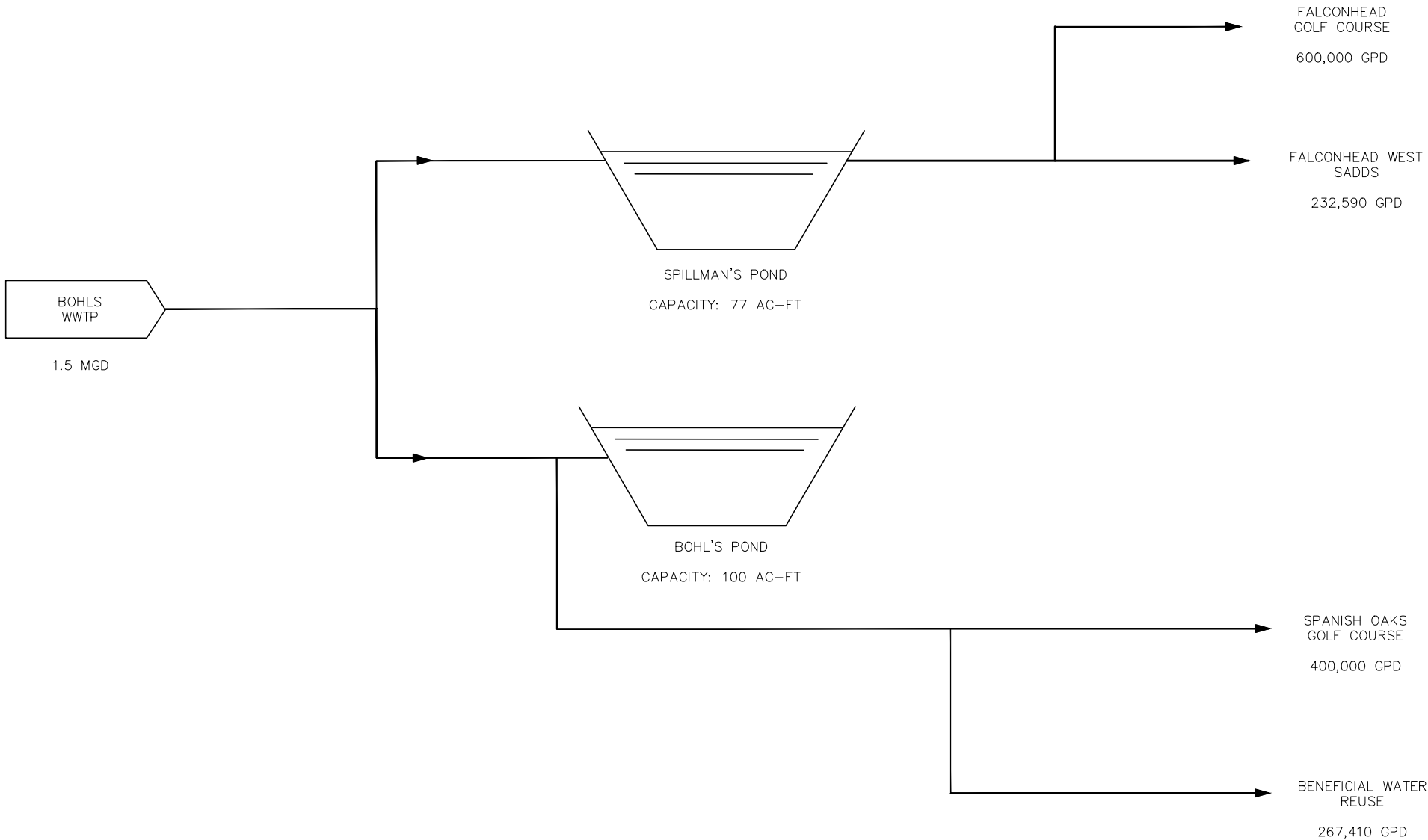
TEXAS REGISTERED ENGINEERING FIRM F-353

West Travis County PUA

Attachment E - Flow Diagrams

NOT FOR
CONSTRUCTION

BOHL'S WWTP
INTERIM PHASE II
EFFLUENT DISPOSAL



DESIGNED BY: JGM
DRAWN BY: JGM
CHECKED BY: BDC
APPROVED BY: BDC
DATE: 05/08/2024



MURFEE ENGINEERING COMPANY

1101 CAPITAL OF TEXAS HIGHWAY SOUTH

BUILDING D, SUITE 110

AUSTIN, TEXAS 78746

(512) 327-9204

TEXAS REGISTERED ENGINEERING FIRM F-353

West Travis County PUA
Attachment E - Flow Diagrams

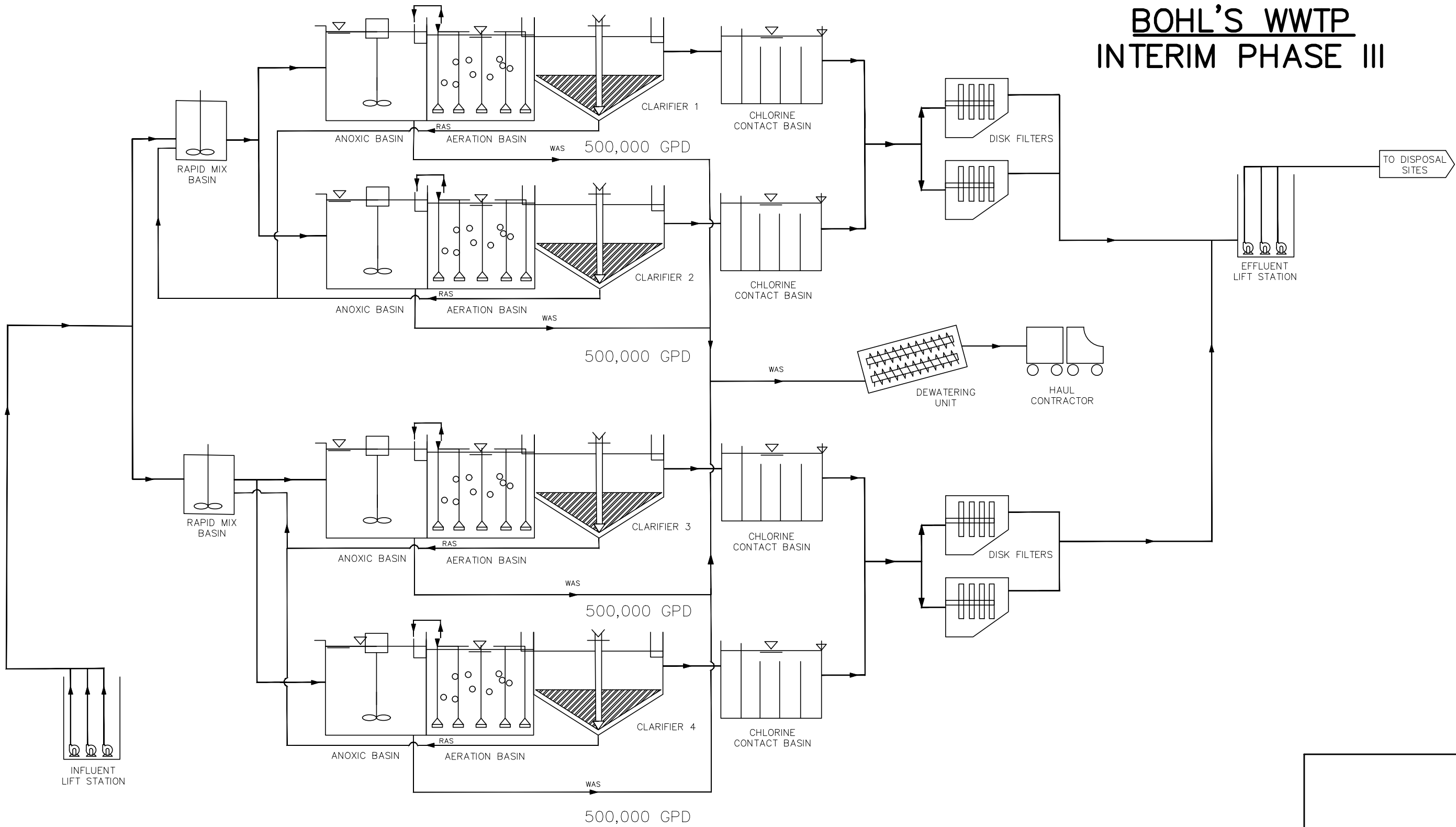
NOT FOR
CONSTRUCTION

Attachment E5

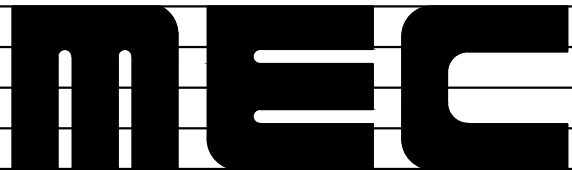
Bohl's WWTP Flow Diagram

Final

BOHL'S WWTP
INTERIM PHASE III



DESIGNED BY: JGM
DRAWN BY: JGM
CHECKED BY: BDC
APPROVED BY: BDC
DATE: 05/08/2024



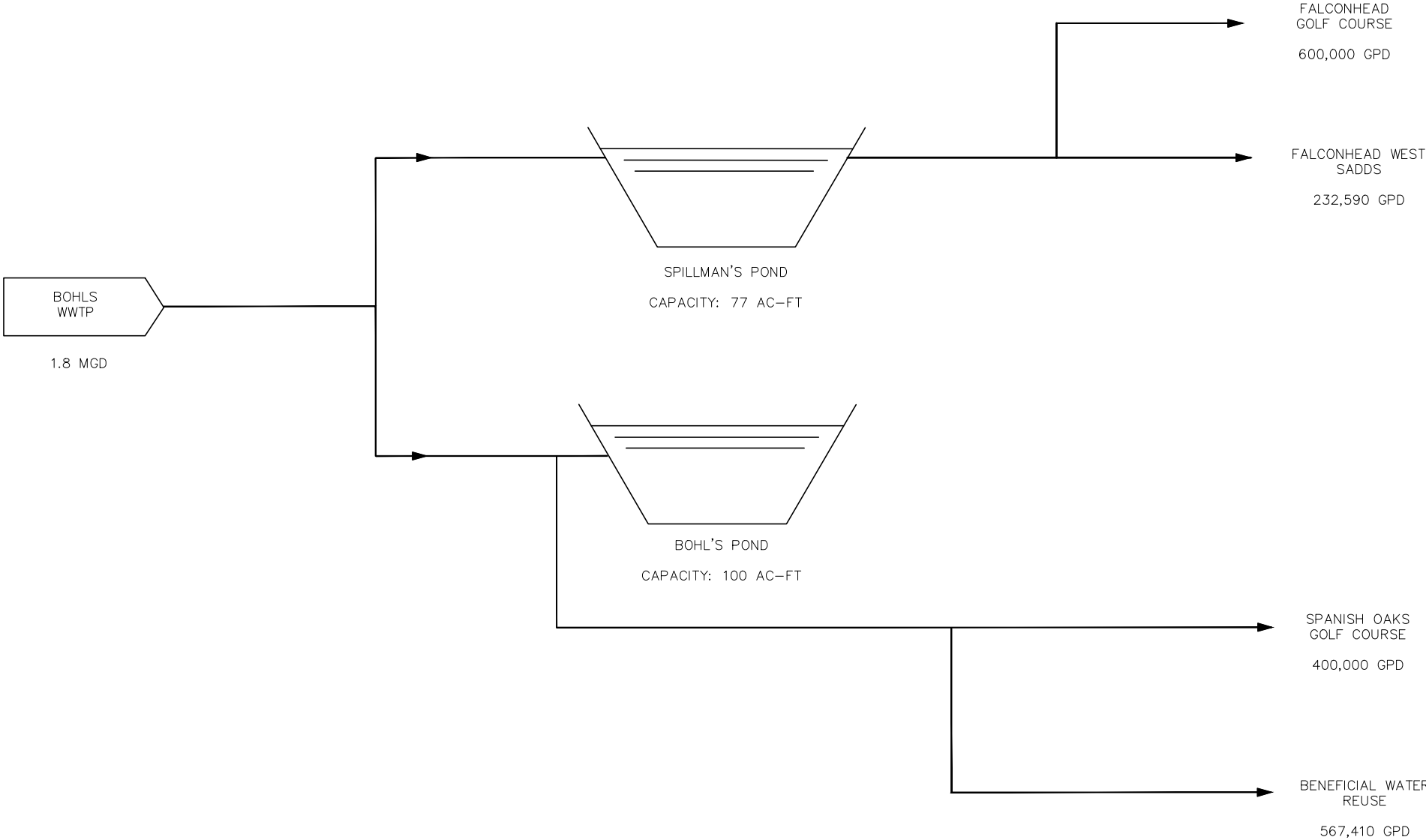
MURFEE ENGINEERING COMPANY

1101 CAPITAL OF TEXAS HIGHWAY SOUTH
BUILDING D, SUITE 110
AUSTIN, TEXAS 78746
(512) 327-9204
TEXAS REGISTERED ENGINEERING FIRM F-353

West Travis County PUA
Attachment E - Flow Diagrams

NOT FOR
CONSTRUCTION

BOHL'S WWTP
INTERIM PHASE III
EFFLUENT DISPOSAL



NOT FOR
CONSTRUCTION

DESIGNED BY: JGM
DRAWN BY: JGM
CHECKED BY: BDC
APPROVED BY: BDC
DATE: 05/08/2024



MURFEE ENGINEERING COMPANY

1101 CAPITAL OF TEXAS HIGHWAY SOUTH
BUILDING D, SUITE 110
AUSTIN, TEXAS 78746
(512) 327-9204

TEXAS REGISTERED ENGINEERING FIRM F-353

West Travis County PUA
Attachment E - Flow Diagrams

Attachment F
Site Drawing

Attachment G1

Summary Transmittal Letter

Lake Point

Murfee Engineering Company

June 3, 2000

231

0600/064
13594-001

RECEIVED

JUN 06 2000

WASTEWATER PERMITS

Mr. Louis Herrin III, P.E.
Texas Natural Resource Conservation Commission
MC 148
P.O. Box 13087
Austin, Texas 78711-3082

VIA CERTIFIED MAIL
Return Receipt Requested

Re: Chapter 317 Summary Transmittal Letter
Permittee: West Travis County MUD No. 5 and the Estate of Henry J. Spillman
Permit Number: 13594-001
Project Name: Lakepointe Phase 2 Wastewater Treatment Plant Expansion
County: Travis

Dear Mr. Herrin:

The purpose of this letter is to provide the TNRCC with the information necessary to comply with the requirements of 317.1(a)(3)(D) of the TNRCC's rules titled, Design Criteria for Sewerage Systems. The additional necessary information includes:

1. Design Firm Name and Address:
Murfee Engineering Company, Inc.
1101 Capital of Texas Highway, South, Bldg. D
Austin, Texas 78746
2. David Malish, P.E. (voice 512-327-9204, fax 512-327-2947).
3. The wastewater facilities constructed as the Lakepointe Phase 2 Wastewater Treatment Plant will be owned and operated by West Travis County MUD No. 5.
4. There are no variances requested for this project.
5. There are no innovative or non-conforming technologies proposed as part of this project.
6. The plans and specifications, which describe the project identified in this letter, are in substantial compliance with the requirements of Chapter 317.
7. The project involves construction of a 350,000 gpd single stage nitrification wastewater treatment plant, effluent filtration, and effluent pump station improvements. The improvements are necessary to provide wastewater treatment for growth in the Lakepointe

1101 Capital of Texas Highway South - Building D, Suite 110 - Austin, Texas 78746 - 512/327-9204

Page 2
Mr. Louis Herria III, P.E.
June 5, 2000

subdivision and surrounding area.

If you have any questions or require additional information please do not hesitate to call.

Sincerely,

David Malish

David Malish, P.E.

cc: Larry Smith, TNRCC Region 11
Don Walden
MEC File No. 98017-10

SEAL



Attachment G2

Summary Transmittal Letter

Bohls

Bryan W. Shaw, Ph.D., *Chairman*
Carlos Rubinstein, *Commissioner*
Toby Baker, *Commissioner*
Zak Covar, *Executive Director*



RECEIVED
APR 14 2013

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 12, 2013

J.R. Kidwell, P.E.
Murfee Engineering Company, Inc.
1101 Capitol of Texas Highway South, Bldg D Suite 110
Austin, Texas 78746

Re: West Travis County PUA
0.325 MGD Wastewater Treatment Plant
Permit No. 13594-001
WWPR Log No. 0413/029
CN604021980; RN102077989
Travis County

Dear Mr. Kidwell:

We have received the project summary transmittal letter dated April 4, 2013.

The rules which regulate the design, installation and testing of domestic wastewater projects are found in 30 TAC, Chapter 217, of the Texas Commission on Environmental Quality (TCEQ) rules titled, Design Criteria for Wastewater Systems.

Section 217.6(d), relating to case-by-case reviews, states in part that upon submittal of a summary transmittal letter, the executive director may approve of the project without reviewing a complete set of plans and specifications.

Under the authority of §217.6(e) a technical review of complete plans and specifications is not required. **However, the project proposed in the summary transmittal letter is approved for construction. Please note, that this conditional approval does not relieve the applicant of any responsibilities to obtain all other necessary permits or authorizations, such as wastewater treatment permit or other authorization as required by Chapter 26 of the Texas Water Code.** Below are provisions of the Chapter 217 regulations, which must be met as a condition of approval. These items are provided as a reminder. If you have already met these requirements, please disregard this additional notice.

1. You must keep certain materials on file for the life of the project and provide them to TCEQ upon request. These materials include an engineering report, test results, a summary transmittal letter, and the final version of the project plans and specifications. These materials shall be prepared and sealed by a Professional Engineer licensed in the State of Texas and must show substantial compliance with Chapter 217. All plans and specifications must conform to any waste discharge requirements authorized in a permit by the TCEQ. Certain specific items which shall be addressed in the engineering report are discussed in §217.6(c). Additionally, the engineering report

J.R. Kidwell, P.E.

Page 2

April 12, 2013

must include all constants, graphs, equations, and calculations needed to show substantial compliance with Chapter 217. The items which shall be included in the summary transmittal letter are addressed in §217.6(c)(1)-(10).

2. Any deviations from Chapter 217 shall be disclosed in the summary transmittal letter and the technical justifications for those deviations shall be provided in the engineering report. Any deviations from Chapter 217 shall be based on the best professional judgement of the licensed professional engineer sealing the materials and the engineer's judgement that the design would not result in a threat to public health or the environment.
3. Any variance from a Chapter 217 requirement disclosed in your summary transmittal letter is approved. If in the future, additional variances from the Chapter 217 requirements are desired for the project, each variance must be requested in writing by the design engineer. Then, the TCEQ will consider granting a written approval to the variance from the rules for the specific project and the specific circumstances.
4. Within 60 days of the completion of construction, an appointed engineer shall notify both the Wastewater Permits Section of the TCEQ and the appropriate Region Office of the date of completion. The engineer shall also provide written certification that all construction, materials, and equipment were substantially in accordance with the approved project, the rules of the TCEQ, and any change orders filed with the TCEQ. All notifications, certifications, and change orders must include the signed and dated seal of a Professional Engineer licensed in the State of Texas.

This approval does not mean that future projects will be approved without a complete plans and specifications review. The TCEQ will provide a notification of intent to review whenever a project is to undergo a complete plans and specifications review. Please be reminded of §217.5 of the rules which states, "Approval given by the executive director...shall not relieve the sewerage system owner or the design engineer of any liabilities or responsibilities with respect to the proper design, construction, or authorized operation of the project in accordance with applicable commission rules."

If you have any questions or if we can be of any further assistance, please call me at (512) 239-4552.

Sincerely,



Louis C. Herrin, III, P.E.
Wastewater Permits Section (MC 148)
Water Quality Division
Texas Commission on Environmental Quality

LCH/mac

cc: TCEQ, Region 11 Office

Attachment H
TCEQ Liner Compliance

Liner Compliance

Domestic Technical Report 1.0 - Attachment H for Section 6

October 9th, 2014

Texas Commission on Environmental Quality
Water Quality Compliance Monitoring Team (MC 224)
TCEQ MC 224
P.O. Box 13087
Austin, Texas 78711-3087

Re: Notification of Liner Compliance
Water Quality Permit No.: WQ0013594001
Permit Holder: West Travis County Public Utility Agency (CN604021980)

To Whom it May Concern:

This letter is submitted pursuant to Special Provision No. 16 of the noted Permit with reference to the Bohls Effluent Storage Pond (Holding Pond No. 2).

Based on the liner manufacturer's certifications and observations by myself and others of the underdrain and liner installation and seem testing, the West Travis County Public Utility Agency Holding Pond # 2 liner meets or exceeds the requirements of 30 TAC Section 217.203.

Should you have any questions or need any additional information, please contact me at your convenience at the number listed below.

Sincerely,

J.R. "Hank" Kidwell, P.E.

CC: TCEQ Region 11 (TCEQ MC Region 11)
Don Rauschuber, P.E. – WTCPUA
David Klein – Lloyd Gosselink

Attachment I

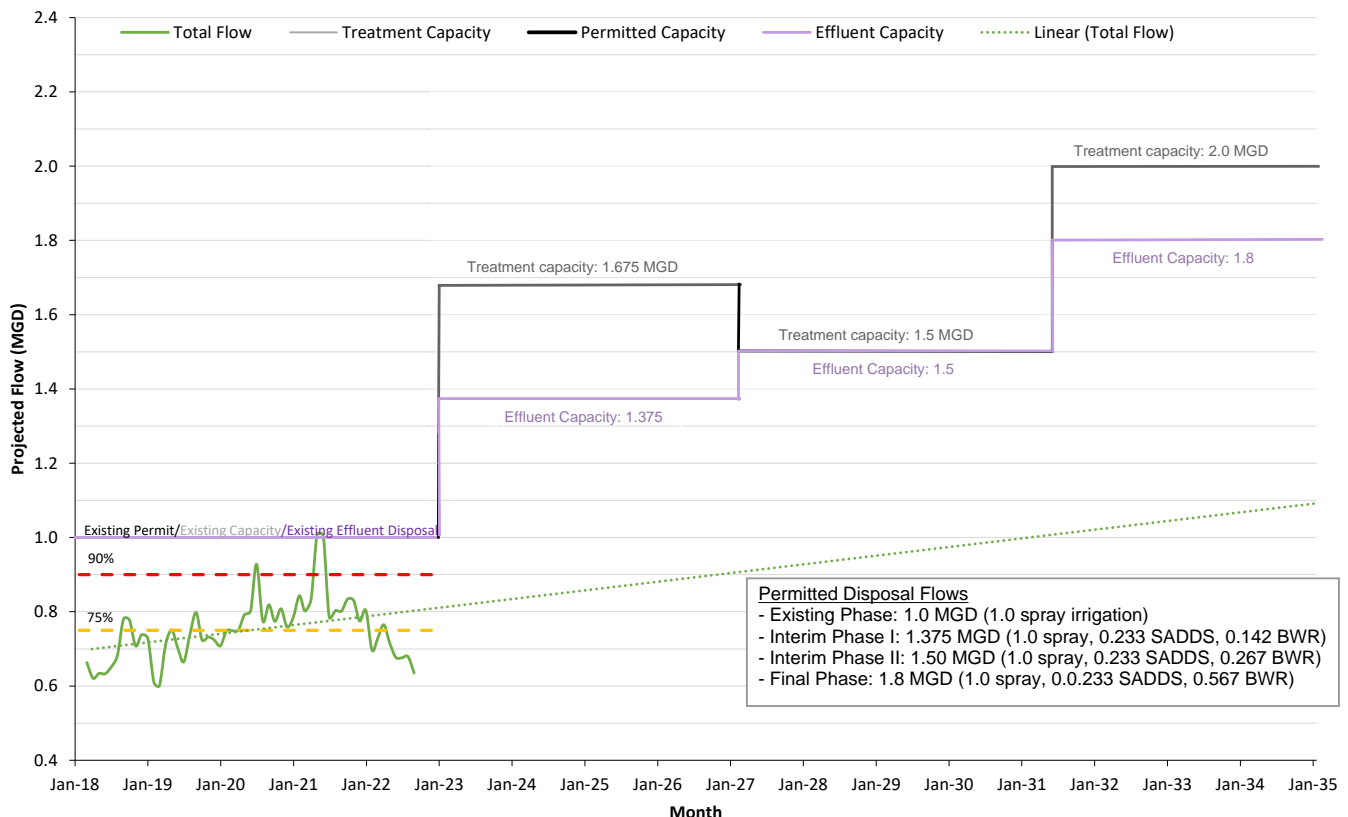
Justification of Permit

Justification of Permit

Domestic Technical Report 1.1 – Attachment I for Section 1

The Lake Pointe WWTP is currently operating at an existing phase of 1 MGD with a permitted 2-hour peak flow of 2.5 MGD. Projected demands in the service area will reach approximately 1.5-1.8 MGD ultimately based on a demographic study conducted in 2013-14 as part of the impact fee development and adoption process. The Bohl's WWTP expansion is driven by the future decommissioning of the Lake Pointe WWTP which is largely due to residential and commercial growth expected by the PUA, aging of the facility, complaints of odor from residents adjacent to the plant, and elections for an off-site facility by the board.

The proposed interim I phase of 1.375 MGD reflects both the inclusion of a subsurface area drip disposal and direct potable reuse methods as a disposal mechanism. The proposed Interim II phase of 1.5 MGD will see an increase in effluent disposal capacity for the direct potable reuse facility as the subsurface capacity system caps at 232,390 GPD. The phasing plan proposed is designed to meet the projected demands, manage capital outlays according to demographic studies, provide operational flexibility, and expand the treatment and disposal capacities in accordance with the recommendations of preliminary engineering studies regarding individual components. The WTCPUA anticipates future expansion to accommodate ultimate build out, but they are projected to occur beyond the 5-year term as shown in the graph below.



Attachment J1

Bohls WWTP Design Calculations

Interim I & II

Design Calculations (Bohls WWTP-Interim Phase I&II)

Influent Quality Characteristics - The raw sewage characteristics used for design purposes are as follows:

<u>Parameter</u>	<u>Concentration</u>
BOD ₅	300 mg/L
TSS	350 mg/L
NH ₃ -N	30 mg/L

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

Table J1(1) - Design Calculations		
Flow	Gallons Per Day	Gallons Per Minute
Average Daily Flow (Q _{ave})	500,000	347.2
Peak 2- Hour Flow (Q _{peak})	1,250,000	868

Loading	Pounds Per Day
BOD ₅	1,251
TSS	1,460

Process Design - The treatment facility will be designed to produce an effluent quality in compliance with the proposed permitted parameters of:

CBOD5 = 5 mg/L TSS = 5 mg/L NH3-N = 2 mg/L
 Cl₂ Residual > 1mg/L with a minimum detention time of 20 minutes

Treatment Units

Table J1(2) - Aeration Basin		
Aeration Basin	TCEQ Requires	Actual Provided
Organic loading rate (lbs/day/1000 ft ²)	35 (max)	35
Total aeration volume (ft ³)	35,743	35743

Table J1(3) - Clarifier		
Clarifier	TCEQ Requires	Actual Provided
Surface loading rate (Q _{peak}) (gal/day/ft ²)	1,200 (max)	1,200
Detention time (Q _{peak}) (hr)	1.8 (min)	1.8
Surface Area (ft ²)	1042	1,042
Volume (ft ³)	12,533	12,533
Side-water depth (ft)	10 (min)	10
Maximum weir loading (Q _{peak}) (gal/day/ft)	20,000 (max)	20,000
Diameter (ft)	28	28
Weir length (ft)	88	88

Table J1(4) - Aerobic Digester		
Aerobic Digester	TCEQ Requires	Actual Provided
MCRT at 15°C (days)	60	76
WAS solids production (ppd)	Not specified	1,640
Digested sludge solids production (ppd)	Not specified	328
Required solids in digester (lbs)	Not specified	
Digester Volume (ft ³)	Not specified	25,020

Table J1(5) - Chlorine Contact Chamber		
Chlorine Contact Chamber	TCEQ Requires	Actual Provided
Detention time Q_{peak} (minutes)	20	20
Volume Q_{peak} (ft ³)	2,321	2,321

Air Requirements

Table J1(6) - Aeration Basin		
Aeration Basin	TCEQ Requires	Actual Provided
Aeration Requirements (SCF/day/lb BOD ₅)	3,200	3,200
Oxygen required (lb O ₂ /lb BOD ₅)	1.2 (min)	1.63
Oxygen required (lb/day)		2039.13
Air provided (SCFM)	2,780	2,780

Table J1(7) - Sludge Digester		
Sludge Digester	TCEQ Requires	Actual Provided
Aeration Requirements (SCFM/1,000 CF)	20	20
Air Flow Rate (SCFM)	500	500

Note:

Interim II Phase will not require additional tankage except for 1 additional filter as the tankage built in Interim I Phase will be sized to handle both Interim Phases, but we will not process effluent above the permitted flow during Interim I Phase.

Attachment J2

Bohls WWTP Design Calculations

Final Phase

Design Calculations (Bohls WWTP-Final Phase)

Influent Quality Characteristics - The raw sewage characteristics used for design purposes are as follows:

Parameter	Concentration
BOD ₅	300 mg/L
TSS	350 mg/L
NH ₃ -N	30 mg/L

Influent Flow Characteristics - The hydraulic design of the facility must ensure that the facility will operate under

Table J1(1) - Design Calculations		
Flow	Gallons Per Day	Gallons Per Minute
Average Daily Flow (Q _{ave})	300,000	208
Peak 2- Hour Flow (Q _{peak})	750,000	521

Loading	Pounds Per Day
BOD ₅	751
TSS	876

Process Design - The treatment facility will be designed to produce an effluent quality in compliance with the

CBOD₅ = 5 mg/L TSS = 5 mg/L NH₃-N = 2 mg/L

Cl₂ Residual > 1mg/L with a minimum detention time of 20 minutes

Treatment Units

Table J1(2) - Aeration Basin		
Aeration Basin	TCEQ Requires	Actual Provided
Organic loading rate (lbs/day/1000 ft ²)	35 (max)	35
Total aeration volume (ft ³)	21,446	21,446

Table J1(3) - Clarifier		
Clarifier	TCEQ Requires	Actual Provided
Surface loading rate (Q _{peak}) (gal/day/ft ²)	1,200 (max)	1,200
Detention time (Q _{peak}) (hr)	1.8 (min)	1.8
Surface Area (ft ²)	625	1,042
Volume (ft ³)	7,250	12,533
Side-water depth (ft)	10 (min)	10
Maximum weir loading (Q _{peak}) (gal/day/ft)	20,000 (max)	20,000
Diameter (ft)	22	28
Weir length (ft)	69	88

Table J1(4) - Aerobic Digester		
Aerobic Digester	TCEQ Requires	Actual Provided
MCRT at 15°C (days)	60	76
WAS solids production (ppd)	Not specified	984
Digested sludge solids production (ppd)	Not specified	197
Required solids in digester (lbs)	Not specified	
Digester Volume (ft ³)	Not specified	112,290

Table J1(5) - Chlorine Contact Chamber		
Chlorine Contact Chamber	TCEQ Requires	Actual Provided
Detention time Q_{peak} (minutes)	20	20
Volume Q_{peak} (ft ³)	1,393	1,394

Air Requirements

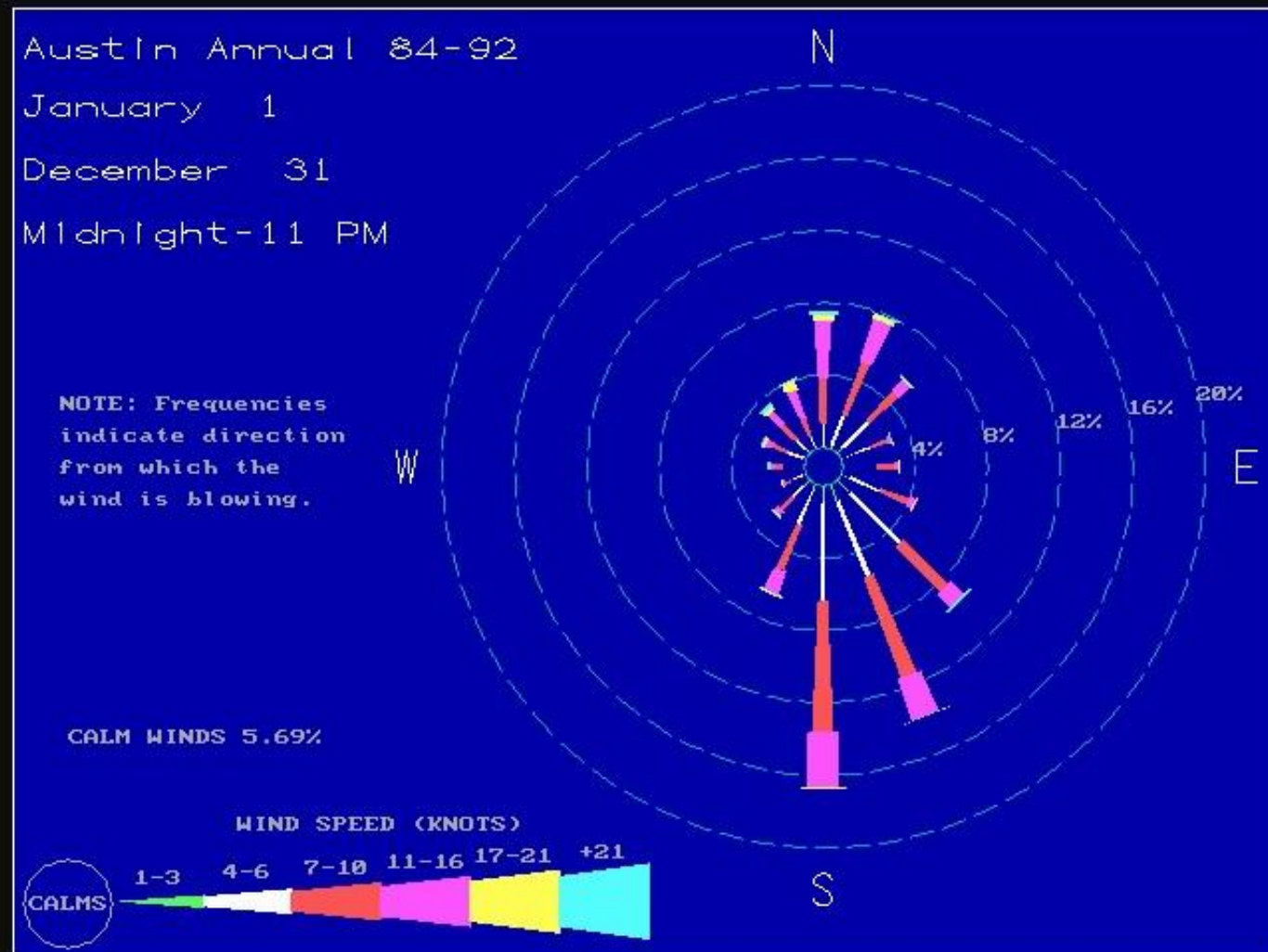
Table J1(6) - Aeration Basin		
Aeration Basin	TCEQ Requires	Actual Provided
Aeration Requirements (SCF/day/lb BOD ₅)	3,200	3,200
Oxygen required (lb O ₂ /lb BOD ₅)	1.2 (min)	1.63
Oxygen required (lb/day)		1223.478
Air provided (SCFM)	1,668	1,668

Table J1(7) - Sludge Digester		
Sludge Digester	TCEQ Requires	Actual Provided
Aeration Requirements (SCFM/1,000 CF)	20	20
Air Flow Rate (SCFM)	300	300

Attachment K

Wind Rose Diagram

Domestic Technical Report 1.1 - Attachment K



Attachment L

Approval Letter to Approve Sludge – City of Manor

City Of Manor
201 East Parsons Street
Manor, TX 78653
(512) 272-5555

Contact Info: Phillip McCammon – Sheridan Environmental
512-699-4326

Plant info: Wilbarger WWTP - TPDES Permit
No. WQ0012900001 – EPA No. TX0095184
547 Llano Street, Manor, Texas, 78653

Dear Sir,

City Of Manor Wilbarger Creek WWTP operates/owns a disposal site that will accept Wastewater Treatment Plant Sludge (class B). All sludge must meet all parameters for (class B) sludge and will need analytical testing ("TCLP"). Sludge will only be accepted when hauled by a pre-approved transportation company authorized for disposal to the listed site.

Site: – Wilbarger WWTP - WQ0012900001 – Is accepting Wastewater Sludge at this site and is expected to be open for the next five years. Acceptance for disposal of wastewater sludge for Lake Pointe WWTP WQ0013594001 is granted provided all parameters above are adhered.

The City Of Manor reserves the right to discontinue disposal from this site if at any time the sludge is found to cause problems to the treatment system, and for any other reason that the City Of Manor would deem necessary.

Generator Information:
Lake Pointe WWTP
Permit No. : WQ0013594001
3100 Napa Dr.
Austin, TX 78738

Authorizing Signature: 

Print Phillip S. McCammon Date 04/10/2014

Attachment M1

Annual Cropping Plan

Spray Irrigation Areas

Annual Cropping Plan - CCNG Golf Course and Spillman Ranch
Domestic Technical Report 3.0 - Attachment M1 for Section 5

Cover crops include Bermuda, rye grass, bent grass and rough bluegrass for the tees, fairways and greens. The rough and out of play areas consist of buffalo grass and native indigenous species. The average monthly use, expressed in inches for rye grass, was derived from Bulletin 6019, "Consumptive Use of Water by Major Crops in Texas," a publication of The Texas Board of Water Engineers, a predecessor of the Water Commission. Specifically, rye grass rates of consumptive use are derived from Table 8 – Small Grains, from the publication. Bermuda grass rates were taken from "Mean Crop Consumptive Use and Free-Water Evaporation for Texas," by John Borrelli, et. al. at Texas Tech University. The total monthly rates are calculated as follows:

Month	Bermuda (in/month)	Rye (in/month)	Total (in/month)
January	2.2	1.3	3.5
February	2.3	2.3	4.6
March	3.4	5.7	9.1
April	4.1	7.4	11.5
May	4.4	5.6	10.0
June	5.1	---	5.1
July	6.2	---	6.2
August	5.8	---	5.8
September	4.7	---	4.7
October	3.5	1.2	4.7
November	2.4	1.6	4.0
December	2.0	1.3	3.3
Total	46.1	26.4	72.5
Average	3.84	---	6.04

Additional nutrients do not appear to be a critical necessity. No additional watering or fertilizing of crops is anticipated to be necessary to maintain adequate growth of the grass crops. Grass will be mowed as necessary.

Attachment M2

Annual Cropping Plan

Drip Fields

Annual Cropping Plan - Drip Fields

Domestic Technical Report 3.0 - Attachment M2 for Section 5

The proposed cropping and maintenance plan for the wastewater application areas (subsurface area drip disposal system) is to remove the small to medium ashe juniper trees, smooth the fields, install the dripper lines, place soil if needed, and overseed with Bermuda grass. The justification for not removing all of the existing vegetation is in the attached arborist's report. The fields will be over seeded with winter rye grass during the cool season to ensure year round uptake of water and nutrients. The Bermuda grass will grow from March to October. The Rye grass will grow from November to February. The fields will be mowed regularly and maintain a vegetative height of approximately 3- 6 inches, to ensure that the grasses will be actively growing at all times. No supplemental irrigation will be needed.

There are no plans to fertilize the grasses other than natural germination. Fertility recommendations for the grasses to be used at this site are generally 100-150 lbs/acre of Nitrogen. The grasses will be fertilized for germination and it is not anticipated that future fertilization will be required.

Turf grasses are very salt tolerant and this site is not expected develop salinity problems.

The grass will only be harvested to maintain vigorous growth in the fields. This will be done when the operator determines that there is stress on the fields.

J Houser, Consulting Arborist

Ms. Erin Banks
WWD Engineering
9217 Highway 290 West, Suite 110
Austin, Texas 78736

Dear Ms. Banks,

Re: West Travis county PUA TLAP Major Amendment

Field work and analysis has been completed on the proposed drainfields for the above referenced project and yielded the following information.

Vegetation is typical Edwards Plateau. Tree assemblage is dominant and co-dominant Live Oak and Ashe Juniper with scattered Spanish Oak and hackberry. Intermediate trees in the stand are Live Oak and Ashe Juniper. Suppressed trees are Ashe Juniper. Shrub understory and edge vegetation consists of Texas Persimmon, Agarita, and Elbowbush. Openings are heavily grassed by Little Bluestem, Sideoats Grama, Blue Grama, Hairy Grama, Tall Grama, Plains Lovegrass, and Lindheimer Muhly.

The area had different canopy coverages from the north to the south and thus, I split them into 3 units separated by creek buffers.

Area 1

This is the northernmost unit west of the cul-de-sac on Zagros Way. Tree canopy coverage varies from the upper slope to the creek buffer. The upper terraces are 40-50% canopy covered. Junipers are 200-300

per acre and Live Oaks are 25-50 per acre. Grass coverage is heavy and comprises 50-60%. The lower areas leading to the creek have a higher canopy coverage of 70-90% with the remaining coverage in grass. Junipers range from 500-600 trees per acre and Live Oaks and other species are 50-100 per acre.

Area 2

This area lies north of the cul-de-sacs on Julian Alps and Rockies Run Summit. Tree canopy coverage is 50-70 % with several large, heavily grassed openings. Junipers are 400-600 trees per acre and Live Oaks are 100-200 per acre. Grasses and some open ground take the remaining coverage.

Area 3

This is the rest of the area north of the existing WCID 17 E.S.T. bisected by one thin creek buffer. It is more heavily canopy covered ranging from 60-90% and averaging 80%. Junipers are 500-1000 trees per acre depending on amount of suppressed individuals. Live oaks are 200-300 trees per acre. Grass coverage is heavy in the openings, however.

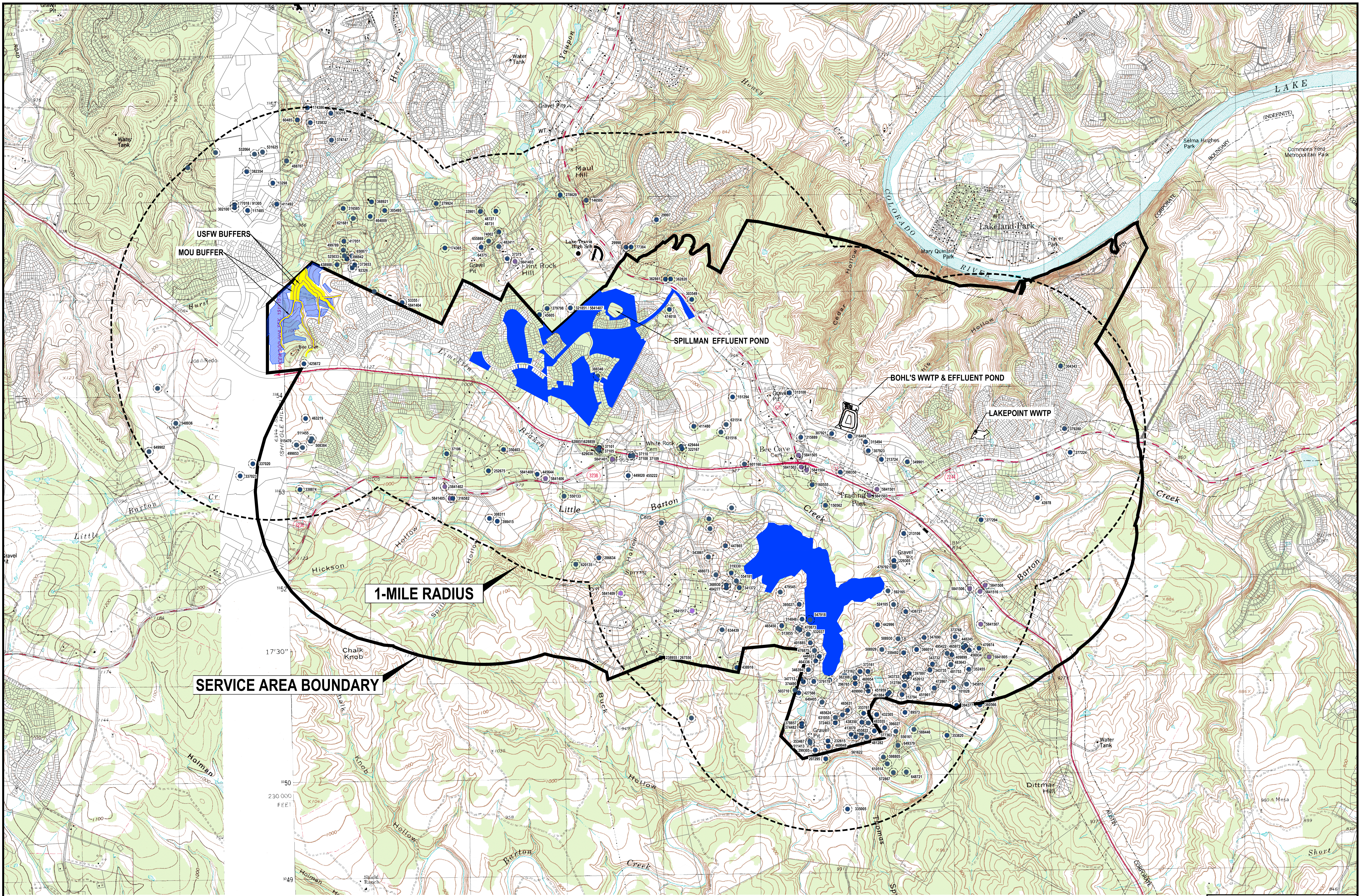
If it is desired to have more grassed areas, it would make sense to clear many areas of junipers. There is a good concentration of native grass seed from the heavily grassed areas and more could be sowed. If the juniper trees are chipped into mulch, I would concentrate the mulch into piles rather than distribute it across the area if grasses are to be encouraged.



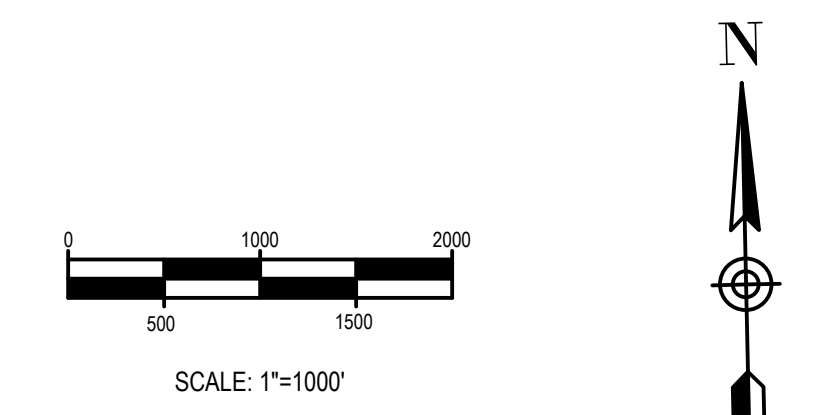
Jim Houser, MS Consulting Arborist #0106A-TX, ISA

Attachment N1


USGS Well Map



- SDRDB WELLS
- TWDB WELLS
- 150' WELL BUFFER
- EFFLUENT IRRIGATION AREA
- ▨ SUBSURFACE DRIP FIELDS
- SERVICE AREA BOUNDARY
- - - 1-MILE RADIUS



PRELIMINARY DRAWING
FOR PLANNING PURPOSES ONLY

		Texas Registered Engineering Firm F-353
Murfee Engineering Company		
<div>WEST TRAVIS COUNTY PUA</div> <div>2024 TLAP RENEWAL WITH MINOR AMENDMENT</div> <div>ATTACHMENT N1</div>		
1101 Capital of Texas Highway South, Building D, Suite 110, Austin, Texas 78746, (512) 327-9204		
JOB NO. 11-05184	SCALE: AS NOTED	SHEET: 1 OF 1
DESIGNED BY: BC		DATE: 3/25/2024
DRAWN BY: LOD		DATE: 3/26/2024
FIELDCITY: W. TRAVIS COUNTY BOHLS METROPOLITAN (LAP) PLANNING ZONATION (LAP) PROJECT: 114251-84, SHEET: 10 OF 10		

Attachment N2
Water Well Data

Well ID	Well Use	Proposed Best Management Practice
5841404	Domestic	Silt Fence
5841101	Domestic	Silt Fence
5841406	Unused	Silt Fence
5841516		Silt Fence
5841408	Monitor	Silt Fence
5841409	Domestic	Silt Fence
5841407	Irrigation	Silt Fence
5841403	Domestic	Silt Fence
5841402	Domestic	Silt Fence
5841503	Unused	Silt Fence
5841502	Unused	Silt Fence
5841805	Domestic	Silt Fence
5841517	Monitor	Silt Fence
5841405	Domestic	Silt Fence
5841506	Unused	Silt Fence
5841507	Unused	Silt Fence
5841504	Unused	Silt Fence
5841505	Unused	Silt Fence
5841401	Domestic	Silt Fence
5841501	Domestic	Silt Fence
5841508	Domestic	Silt Fence
5748608	Domestic	Silt Fence
10368	Domestic	Silt Fence
13298	Domestic	Silt Fence
18442	Injection	Silt Fence
27447	Domestic	Silt Fence
28025	Domestic	Silt Fence
28035	Domestic	Silt Fence
29997	Irrigation	Silt Fence
29998	Irrigation	Silt Fence
32163	Domestic	Silt Fence
33901	Domestic	Silt Fence
37101	Environmental Soil Boring	Silt Fence
37105	Environmental Soil Boring	Silt Fence
37106	Environmental Soil Boring	Silt Fence
37108	Environmental Soil Boring	Silt Fence
37109	Environmental Soil Boring	Silt Fence
37110	Environmental Soil Boring	Silt Fence
37375	Domestic	Silt Fence
43978	Irrigation	Silt Fence
45605	Domestic	Silt Fence

48727	Domestic	Silt Fence
48731	Domestic	Silt Fence
53355	Domestic	Silt Fence
58748	Domestic	Silt Fence
60485	Domestic	Silt Fence
64375	Domestic	Silt Fence
72745	Domestic	Silt Fence
73085	Domestic	Silt Fence
74002	Domestic	Silt Fence
77018	Domestic	Silt Fence
77232	Domestic	Silt Fence
77384	Domestic	Silt Fence
88560	Domestic	Silt Fence
88721	Domestic	Silt Fence
89573	Domestic	Silt Fence
91305	Domestic	Silt Fence
92326	Domestic	Silt Fence
94531	Domestic	Silt Fence
96653	Domestic	Silt Fence
101028	Domestic	Silt Fence
111524	Domestic	Silt Fence
117485	Domestic	Silt Fence
125832	Domestic	Silt Fence
127064	Domestic	Silt Fence
127065	Domestic	Silt Fence
134337	Domestic	Silt Fence
146505	Irrigation	Silt Fence
150562	Irrigation	Silt Fence
151294	Irrigation	Silt Fence
160555	Irrigation	Silt Fence
174365	Domestic	Silt Fence
174386	Domestic	Silt Fence
181840	Domestic	Silt Fence
188159	Domestic	Silt Fence
207295	Domestic	Silt Fence
213106	Irrigation	Silt Fence
213724	Irrigation	Silt Fence
215889	Irrigation	Silt Fence
229305	Domestic	Silt Fence
232615	Irrigation	Silt Fence
238955	Closed-Loop Geothermal	Silt Fence
252675	Domestic	Silt Fence
267550	Closed-Loop Geothermal	Silt Fence
277294	Domestic	Silt Fence

278629	Irrigation	Silt Fence
279798	Domestic	Silt Fence
279924	Closed-Loop Geothermal	Silt Fence
281229	Domestic	Silt Fence
281702	Irrigation	Silt Fence
286634	Closed-Loop Geothermal	Silt Fence
296765	Irrigation	Silt Fence
299305	Irrigation	Silt Fence
302100	Domestic	Silt Fence
303549	Irrigation	Silt Fence
305495	Domestic	Silt Fence
307921	Irrigation	Silt Fence
307923	Irrigation	Silt Fence
308311	Irrigation	Silt Fence
312786	Irrigation	Silt Fence
312794	Irrigation	Silt Fence
314848	Irrigation	Silt Fence
315108	Irrigation	Silt Fence
315494	Irrigation	Silt Fence
316408	Irrigation	Silt Fence
316582	Irrigation	Silt Fence
316585	Domestic	Silt Fence
319330	Irrigation	Silt Fence
321851	Irrigation	Silt Fence
322167	Domestic	Silt Fence
335005	Irrigation	Silt Fence
337020	Test Well	Silt Fence
337023	Test Well	Silt Fence
338874	Test Well	Silt Fence
341372	Irrigation	Silt Fence
343732	Irrigation	Silt Fence
343733	Irrigation	Silt Fence
343735	Irrigation	Silt Fence
346394	Irrigation	Silt Fence
347690	Irrigation	Silt Fence
347713	Irrigation	Silt Fence
349901	Irrigation	Silt Fence
350403	Irrigation	Silt Fence
352455	Irrigation	Silt Fence
353467	Irrigation	Silt Fence
353761	Irrigation	Silt Fence
353820	Domestic	Silt Fence
359492	Irrigation	Silt Fence
360566	Irrigation	Silt Fence

362820	Irrigation	Silt Fence
362861	Domestic	Silt Fence
363714	Domestic	Silt Fence
366014	Irrigation	Silt Fence
368921	Irrigation	Silt Fence
368930	Irrigation	Silt Fence
369578	Irrigation	Silt Fence
373161	Irrigation	Silt Fence
373162	Irrigation	Silt Fence
373653	Irrigation	Silt Fence
373768	Irrigation	Silt Fence
374482	Irrigation	Silt Fence
374490	Irrigation	Silt Fence
374747	Irrigation	Silt Fence
377363	Domestic	Silt Fence
378857	Irrigation	Silt Fence
379178	Irrigation	Silt Fence
382308	Irrigation	Silt Fence
382354	Irrigation	Silt Fence
388346	Closed-Loop Geothermal	Silt Fence
392286	Domestic	Silt Fence
394377	Domestic	Silt Fence
395027	Irrigation	Silt Fence
396027	Domestic	Silt Fence
396942	Domestic	Silt Fence
397897	Irrigation	Silt Fence
398350	Irrigation	Silt Fence
398415	Domestic	Silt Fence
401885	Irrigation	Silt Fence
404277	Irrigation	Silt Fence
409990	Irrigation	Silt Fence
413070	Irrigation	Silt Fence
409899	Irrigation	Silt Fence
411480	Irrigation	Silt Fence
411492	Domestic	Silt Fence
413978	Domestic	Silt Fence
417051	Domestic	Silt Fence
417006	Domestic	Silt Fence
420513	Domestic	Silt Fence
372463	Irrigation	Silt Fence
427566	Domestic	Silt Fence
425672	Irrigation	Silt Fence
429444	Domestic	Silt Fence
432104	Domestic	Silt Fence

432107	Domestic	Silt Fence
432305	Irrigation	Silt Fence
434434	Domestic	Silt Fence
434429	Domestic	Silt Fence
436727	Irrigation	Silt Fence
438916	Domestic	Silt Fence
438350	Domestic	Silt Fence
438988	Domestic	Silt Fence
442471	Domestic	Silt Fence
445644	Monitor	Silt Fence
443430	Domestic	Silt Fence
442996	Irrigation	Silt Fence
446623	Irrigation	Silt Fence
447865	Irrigation	Silt Fence
448245	Irrigation	Silt Fence
449020	Irrigation	Silt Fence
452612	Domestic	Silt Fence
451959	Domestic	Silt Fence
451961	Domestic	Silt Fence
427648	Domestic	Silt Fence
455222	Irrigation	Silt Fence
455822	Irrigation	Silt Fence
456934	Irrigation	Silt Fence
458760	Domestic	Silt Fence
461884	Domestic	Silt Fence
463219	Closed-Loop Geothermal	Silt Fence
455750	Domestic	Silt Fence
463997	Domestic	Silt Fence
464009	Domestic	Silt Fence
464336	Irrigation	Silt Fence
465450	Irrigation	Silt Fence
465624	Irrigation	Silt Fence
465631	Irrigation	Silt Fence
465972	Irrigation	Silt Fence
469948	Irrigation	Silt Fence
469954	Irrigation	Silt Fence
470873	Irrigation	Silt Fence
470974	Irrigation	Silt Fence
472867	Domestic	Silt Fence
474018	Irrigation	Silt Fence
476875	Irrigation	Silt Fence
479545	Domestic	Silt Fence
479792	Irrigation	Silt Fence
481282	Irrigation	Silt Fence

481753	Irrigation	Silt Fence
482405	Domestic	Silt Fence
482411	Domestic	Silt Fence
483555	Irrigation	Silt Fence
483643	Irrigation	Silt Fence
488073	Domestic	Silt Fence
488707	Irrigation	Silt Fence
488880	Domestic	Silt Fence
495422	Irrigation	Silt Fence
499365	Irrigation	Silt Fence
499789	Domestic	Silt Fence
499853	Closed-Loop Geothermal	Silt Fence
502232	Domestic	Silt Fence
502288	Irrigation	Silt Fence
500733	Domestic	Silt Fence
503710	Domestic	Silt Fence
507487	Irrigation	Silt Fence
508384	Closed-Loop Geothermal	Silt Fence
508929	Irrigation	Silt Fence
508930	Irrigation	Silt Fence
511027	Domestic	Silt Fence
511413	Domestic	Silt Fence
511455	Irrigation	Silt Fence
513855	Irrigation	Silt Fence
514336	Irrigation	Silt Fence
515144	Irrigation	Silt Fence
515470	Irrigation	Silt Fence
524105	Irrigation	Silt Fence
525033	Domestic	Silt Fence
531151	Irrigation	Silt Fence
531625	Domestic	Silt Fence
532037	Irrigation	Silt Fence
532048	Domestic	Silt Fence
532064	Domestic	Silt Fence
543861	Domestic	Silt Fence
545815	Irrigation	Silt Fence
547918	Irrigation	Silt Fence
548936	Domestic	Silt Fence
550133	Irrigation	Silt Fence
553675	Irrigation	Silt Fence
554181	Irrigation	Silt Fence
556161	Domestic	Silt Fence
559462	Irrigation	Silt Fence
560057	Domestic	Silt Fence

561622	Irrigation	Silt Fence
572867	Domestic	Silt Fence
578929	Irrigation	Silt Fence
578933	Irrigation	Silt Fence
588446	Domestic	Silt Fence
591352	Domestic	Silt Fence
592165	Domestic	Silt Fence
592201	Domestic	Silt Fence
592214	Domestic	Silt Fence
598805	Domestic	Silt Fence
600290	Domestic	Silt Fence
601160	Monitor	Silt Fence
601467	Domestic	Silt Fence
601526	Domestic	Silt Fence
610514	Domestic	Silt Fence
614344	Domestic	Silt Fence
620135	Domestic	Silt Fence
592565	Domestic	Silt Fence
621681	Domestic	Silt Fence
628851	Environmental Soil Boring	Silt Fence
628859	Environmental Soil Boring	Silt Fence
629036	Environmental Soil Boring	Silt Fence
631516	Irrigation	Silt Fence
631514	Irrigation	Silt Fence
631055	Irrigation	Silt Fence
634439	Domestic	Silt Fence
639435	Domestic	Silt Fence
645405	Domestic	Silt Fence
648721	Domestic	Silt Fence
649379	Domestic	Silt Fence
649405	Domestic	Silt Fence
650877	Domestic	Silt Fence
649902	Domestic	Silt Fence
655869	Domestic	Silt Fence

Attachment N3
Water Quality Data

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
57-48-608**

[GWDB Reports and Downloads](#)

Well Basic Details

[Scanned Documents](#)

State Well Number	5748608
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)	30.3081639
Latitude (degrees minutes seconds)	30° 18' 29.39" N
Longitude (decimal degrees)	-98.0161528
Longitude (degrees minutes seconds)	098° 00' 58.15" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	218HSCC - Hensell Sand and Cow Creek Limestone
Aquifer	Trinity
Aquifer Pick Method	Provided by Groundwater Conservation District
Land Surface Elevation (feet above sea level)	1126
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	630
Well Depth Source	Driller's Log
Drilling Start Date	12/16/2021
Drilling End Date	12/16/2021
Drilling Method	
Borehole Completion	

Well Type	Withdrawal of Water
Well Use	Domestic
Water Level Observation	GCD Current Site Visit
Water Quality Available	Yes
Pump	Submersible
Pump Depth (feet below land surface)	600
Power Type	
Annular Seal Method	
Surface Completion	
Owner	John Burer
Driller	Centex Pump & Supply, Inc.
Other Data Available	Drillers Log
Well Report Tracking Number	592565
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	8/25/2022
Last Update Date	8/25/2022

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

Casing - No Data

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements

No Data Available

Water Quality Analysis

Sample Date: 8/26/2022 **Sample Time:** 1535 **Sample Number:** 1 **Collection Entity:** Groundwater Conservation District (general)

Sampled Aquifer: Hensell Sand and Cow Creek Limestone

Analyzed Lab: LCRA - Lower Colorado River Authority

Reliability: Sampled using TWDB protocols

Collection Remarks: Sampled by Southwestern Travis Co. GCD

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00425	ALKALINITY, BICARBONATE DISSOLVED (MG/L), LAB		355	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 CaCO ₃)		355	mg/L as CaCO ₃	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	5	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		-2.15	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)		24.7	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		433.223	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		241	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.0949	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		169	mg/L	
28004	CARBON-14 DISS APPARENT AGE (YEARS BP)		15540	Y-BP	
82172	CARBON-14 FRACTION MODERN		0.1445		0.0007
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		17.3	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		1.37	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1	ug/L	
82081	DELTA CARBON 13 C13/C12 PER MIL		-0.5	0/00	
50791	DEUTERIUM, EXPRESSED AS PERMIL VSMOW		-25.95	0/00	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		2.46	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		796.97	mg/L as CaCO ₃	
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)		55.7	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		83.1	mg/L	

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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		7.48	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		0.686	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		0.155	mg/L as N	
50790	OXYGEN-18, EXPRESSED AS PERMIL VSMOW		-4.84	0/00	
00400	PH (STANDARD UNITS), FIELD		6.51	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		10.1	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)		10.7	mg/L as SIO2	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.351		
00932	SODIUM, CALCULATED, PERCENT		5.973	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		22.3	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		1600	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		28600	ug/L	
48297	STRONTIUM, ISOTOPE OF MASS 86 AND 87 RATIO		0.70751	N/A	0.0008
00946	SULFATE, DISSOLVED (MG/L AS SO4)		488	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		27.9	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		1045.262	mg/L	
07012	TRITIUM IN WATER (TRITIUM UNITS)		0.17	TU	0.09
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)		1.2	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)	<	1	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..

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**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
58-41-101**

[GWDB Reports and Downloads](#)

Well Basic Details

[Scanned Documents](#)

State Well Number	5841101
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)	30.341667
Latitude (degrees minutes seconds)	30° 20' 30" N
Longitude (decimal degrees)	-97.974444
Longitude (degrees minutes seconds)	097° 58' 28" W
Coordinate Source	+/- 1 Second
Aquifer Code	217HSTN - Hosston Formation
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	920
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	577
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	10/16/1965
Drilling Method	Cable Tool
Borehole Completion	Open Hole

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	Ivan Wall
Driller	Glass
Other Data Available	Drillers Log; 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	8/15/1991
Last Update Date	3/4/2020

Remarks Reported yield 5 GPM. Historical observation well.

Casing - No Data

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

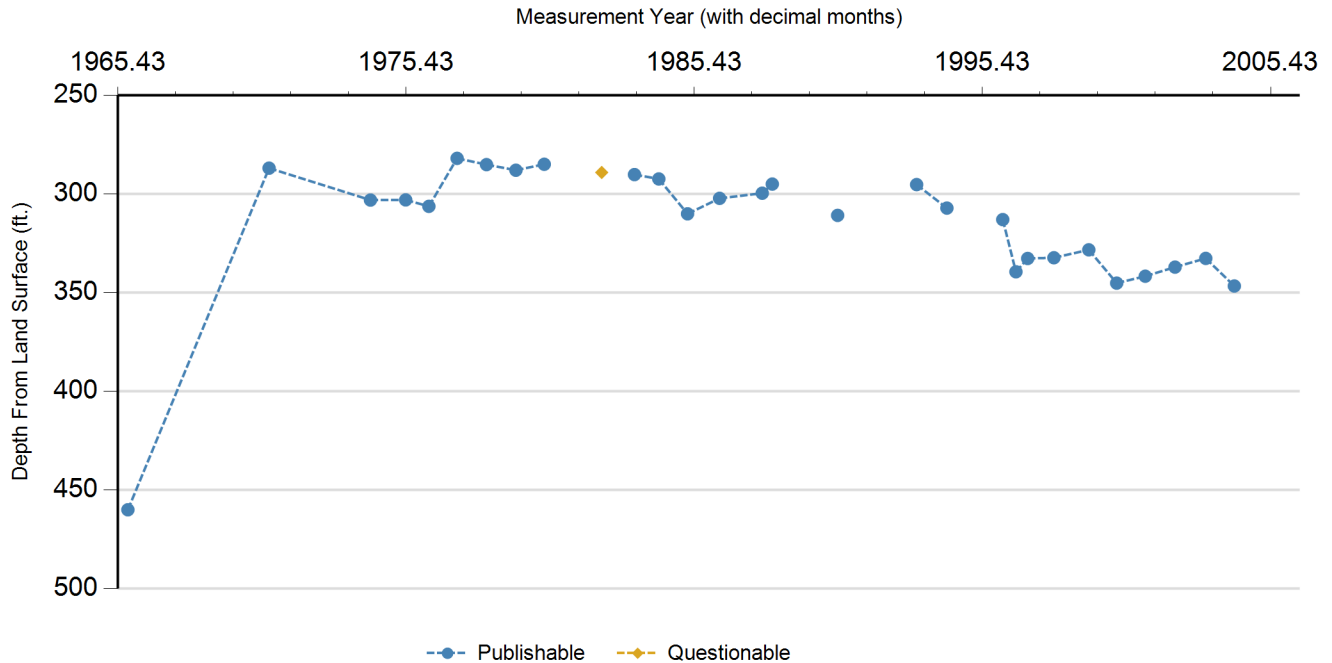
Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements



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	10/16/1965		460		460	1	Registered Water Well Driller	Unknown		
P	9/9/1970		286.95	(173.05)	633.05	1	Texas Water Development Board	Steel Tape		
P	3/13/1974		303.13	16.18	616.87	1	Texas Water Development Board	Steel Tape		
P	6/4/1975		303.05	(0.08)	616.95	1	Texas Water Development Board	Electric Line		
P	3/23/1976		306.3	3.25	613.7	1	Texas Water Development Board	Steel Tape		
P	3/15/1977		282	(24.30)	638	1	Texas Water Development Board	Steel Tape		
P	3/23/1978		285.18	3.18	634.82	1	Texas Water Development Board	Steel Tape		
P	3/30/1979		288.01	2.83	631.99	1	Texas Water Development Board	Steel Tape		
P	3/24/1980		285	(3.01)	635	1	Texas Water Development Board	Steel Tape		
Q	3/22/1982		289.14	4.14	630.86	1	Texas Water Development Board	Steel Tape	12	
P	5/12/1983		290.23	1.09	629.77	1	Texas Water Development Board	Steel Tape		
P	3/15/1984		292.43	2.20	627.57	1	Texas Water Development Board	Steel Tape		
P	3/14/1985		310.1	17.67	609.9	1	Texas Water Development Board	Steel Tape		
P	4/25/1986		302.26	(7.84)	617.74	1	Texas Water Development Board	Steel Tape		
P	10/20/1987		299.65	(2.61)	620.35	1	Texas Water Development Board	Steel Tape		
P	2/22/1988		295.04	(4.61)	624.96	1	Texas Water Development Board	Steel Tape		
X	1/12/1989					1	Texas Water Development Board		30	
P	5/30/1990		310.88		609.12	1	Texas Water Development Board	Steel Tape		
X	3/5/1991					1	Texas Water Development Board		29	
X	2/28/1992					1	Texas Water Development Board		29	
P	2/25/1993		295.3		624.7	1	Texas Water Development Board	Steel Tape		

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
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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	3/14/1994		307.2	11.90	612.8	1	Texas Water Development Board	Steel Tape		
X	1/31/1995					1	Texas Water Development Board	Steel Tape	21	
P	2/21/1996		313.02		606.98	1	Texas Water Development Board	Steel Tape		
P	8/8/1996		339.46	26.44	580.54	1	Texas Water Development Board	Steel Tape		
P	1/2/1997		332.7	(6.76)	587.3	1	Texas Water Development Board	Steel Tape		
P	12/4/1997		332.35	(0.35)	587.65	1	Texas Water Development Board	Steel Tape		
P	2/16/1999		328.33	(4.02)	591.67	1	Texas Water Development Board	Steel Tape		
P	2/4/2000		345.2	16.87	574.8	1	Texas Water Development Board	Steel Tape		
P	2/1/2001		341.7	(3.50)	578.3	1	Texas Water Development Board	Steel Tape		
P	2/13/2002		337.09	(4.61)	582.91	1	Texas Water Development Board	Steel Tape		
P	3/7/2003		332.67	(4.42)	587.33	1	Texas Water Development Board	Steel Tape		
P	3/4/2004		346.67	14.00	573.33	1	Texas Water Development Board	Steel Tape		
X	2/9/2006					1	Texas Water Development Board		18	

Code Descriptions

Status Code	Status Description
P	Publishable
Q	Questionable
X	No Measurement

Remark ID	Remark Description
12	Uncertain of reason for questionable measurement
18	Well destroyed
21	Unable to reach water level with available measuring equipment
29	Unable to locate well
30	Well temporarily inaccessible due to impassable roads, locked gate, etc.

Water Quality Analysis

Sample Date: 9/9/1970 **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)		188	mg/L as CaCO3	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		229.43	mg/L	
00910	CALCIUM (MG/L)		97	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		110	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.3	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		476	mg/L as CaCO3	
00920	MAGNESIUM (MG/L)		57	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)	<	0.4	mg/L as NO3	
00400	PH (STANDARD UNITS), FIELD		7.7	SU	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SiO2)		15	mg/L as SiO2	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		4.82		
00932	SODIUM, CALCULATED, PERCENT		52	PCT	
00929	SODIUM, TOTAL (MG/L AS Na)		242	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		2363	MICR	
00945	SULFATE, TOTAL (MG/L AS SO4)		650	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		27	C	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		1284	mg/L	

Water Quality Analysis

Sample Date: 3/13/1974 **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)		183	mg/L as CaCO3	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		223.32	mg/L	
00910	CALCIUM (MG/L)		100	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		113	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		1.5	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		467	mg/L as CaCO3	
00920	MAGNESIUM (MG/L)		53	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)	<	0.4	mg/L as NO3	
00400	PH (STANDARD UNITS), FIELD		7.4	SU	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SiO2)		15	mg/L as SiO2	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		5.13		
00932	SODIUM, CALCULATED, PERCENT		54	PCT	
00929	SODIUM, TOTAL (MG/L AS Na)		255	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		2400	MICR	
00945	SULFATE, TOTAL (MG/L AS SO4)		630	mg/L as SO4	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		1277	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 IN BACK YARD

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)		296	mg/L as CaCO3	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		361.22	mg/L	
00910	CALCIUM (MG/L)		289	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		42	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		2	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		1494	mg/L as CaCO3	
00920	MAGNESIUM (MG/L)		188	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)	<	0.1	mg/L as NO3	
00400	PH (STANDARD UNITS), FIELD		7.7	SU	
00937	POTASSIUM, TOTAL (MG/L AS K)		18	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SiO2)		11	mg/L as SiO2	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.8		
00932	SODIUM, CALCULATED, PERCENT		9	PCT	
00929	SODIUM, TOTAL (MG/L AS Na)		71	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		3852	MICR	
00945	SULFATE, TOTAL (MG/L AS SO4)		1289	mg/L as SO4	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		2087	mg/L	

Water Quality Analysis

Sample Date: 6/9/1986 **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: faucet at pump house

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)		297	mg/L as CaCO3	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		362.44	mg/L	
00910	CALCIUM (MG/L)		272	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		40	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		2.2	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		1460	mg/L as CaCO3	
00920	MAGNESIUM (MG/L)		190	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		0.09	mg/L as NO3	
00400	PH (STANDARD UNITS), FIELD		7.6	SU	
00937	POTASSIUM, TOTAL (MG/L AS K)		16	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SiO2)		11	mg/L as SiO2	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.67		
00932	SODIUM, CALCULATED, PERCENT		8	PCT	
00929	SODIUM, TOTAL (MG/L AS Na)		59	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		3772	MICR	
00945	SULFATE, TOTAL (MG/L AS SO4)		1225	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		24	C	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		1993	mg/L	

Water Quality Analysis

Sample Date: 8/15/1991 **Sample Time:** 1115 **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		260	mg/L as CaCO3	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)		260	mg/L as CaCO3	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		317.29	mg/L	
00910	CALCIUM (MG/L)		215.43	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		9.7	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		1.66	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		1465	mg/L as CaCO3	
01046	IRON, DISSOLVED (UG/L AS FE)		11657	ug/L	
00920	MAGNESIUM (MG/L)		225.45	mg/L	
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	<	0.1	mg/L as N	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)	<	0.44	mg/L as NO3	
00090	OXIDATION REDUCTION POTENTIAL (ORP), MILLIVOLTS		-231.1	MV	
00400	PH (STANDARD UNITS), FIELD		7.3	SU	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SiO2)		7.24	mg/L as SiO2	
00945	SULFATE, TOTAL (MG/L AS SO4)		1787.5	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		26	C	

Water Quality Analysis

Sample Date: 8/15/1991 **Sample Time:** 1120 **Sample Number:** 2 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Hosston Formation

Analyzed Lab: Texas Department of Health

Reliability: Sampled using TWDB protocols

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)		253	mg/L as CaCO3	
01503	ALPHA, DISSOLVED (PC/L)		4.1	PC/L	1.6
01005	BARIUM, DISSOLVED (UG/L AS BA)	<	20	ug/L	
03503	BETA, DISSOLVED (PC/L)		25	PC/L	15
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		308.75	mg/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		279	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		52	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		1.89	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		1625	mg/L as CaCO3	
01046	IRON, DISSOLVED (UG/L AS FE)		12200	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		221	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)		113	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)	<	0.04	mg/L as NO3	
00400	PH (STANDARD UNITS), FIELD		7.3	SU	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		25	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SiO2)		17	mg/L as SiO2	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		1.17		
00932	SODIUM, CALCULATED, PERCENT		12	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		108	mg/L	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		17300	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		1460	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		26	C	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		2333	mg/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		631	ug/L	

* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
58-41-101**

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State Well Number	5841401
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)	30.309167
Latitude (degrees minutes seconds)	30° 18' 33" N
Longitude (decimal degrees)	-97.965278
Longitude (degrees minutes seconds)	097° 57' 55" W
Coordinate Source	+/- 5 Seconds
Aquifer Code	218GLRSU - Glen Rose Limestone, Upper Member
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	960
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	160
Well Depth Source	Owner
Drilling Start Date	
Drilling End Date	0/0/1890
Drilling Method	
Borehole Completion	

Well Type	Withdrawal of Water
Well Use	Domestic
Water Level Observation	Miscellaneous Measurements
Water Quality Available	Yes
Pump	Piston
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	C.E. Lallier
Driller	
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Water Development Board
Created Date	10/22/1998
Last Update Date	3/4/2020

Remarks Well J-2 in 1957 Travis County report.

Casing - No Data

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

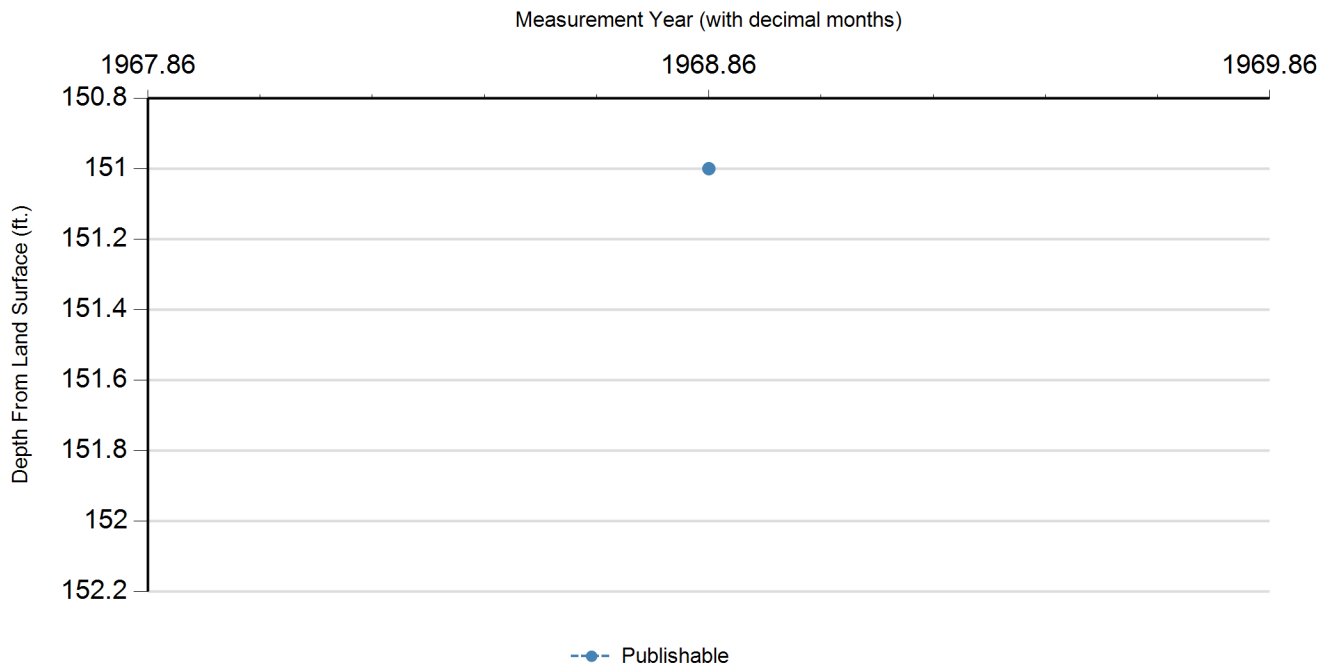
Borehole - No Data

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	11/14/1968		151		809	1	Other or Source of Measurement Unknown	Unknown		

Code Descriptions

Status Code	Status Description
P	Publishable

Water Quality Analysis

Sample Date: 8/30/1937 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** U.S. Geological Survey

Sampled Aquifer: Glen Rose Limestone, Upper Member

Analyzed Lab: WPA

Reliability: From a report; unknown sample collection & preservation

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 CaCO ₃)		370.39	mg/L as CaCO ₃	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		452	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		54	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		321	mg/L as CaCO ₃	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO ₃)		1.3	mg/L as NO ₃	

* 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
58-41-402**

[GWDB Reports and Downloads](#)

Well Basic Details

[Scanned Documents](#)

State Well Number	5841402
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)	30.306945
Latitude (degrees minutes seconds)	30° 18' 25" N
Longitude (decimal degrees)	-97.983334
Longitude (degrees minutes seconds)	097° 59' 00" W
Coordinate Source	+/- 5 Seconds
Aquifer Code	218GLRSU - Glen Rose Limestone, Upper Member
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1000
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	198
Well Depth Source	Owner
Drilling Start Date	
Drilling End Date	0/0/1908
Drilling Method	
Borehole Completion	

Well Type	Withdrawal of Water
Well Use	Domestic
Water Level Observation	Miscellaneous Measurements
Water Quality Available	Yes
Pump	Piston
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	Walter Maul
Driller	Fritz
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Water Development Board
Created Date	11/14/1968
Last Update Date	3/4/2020

Remarks Well J-1 in 1957 Travis County report.

Casing - No Data

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

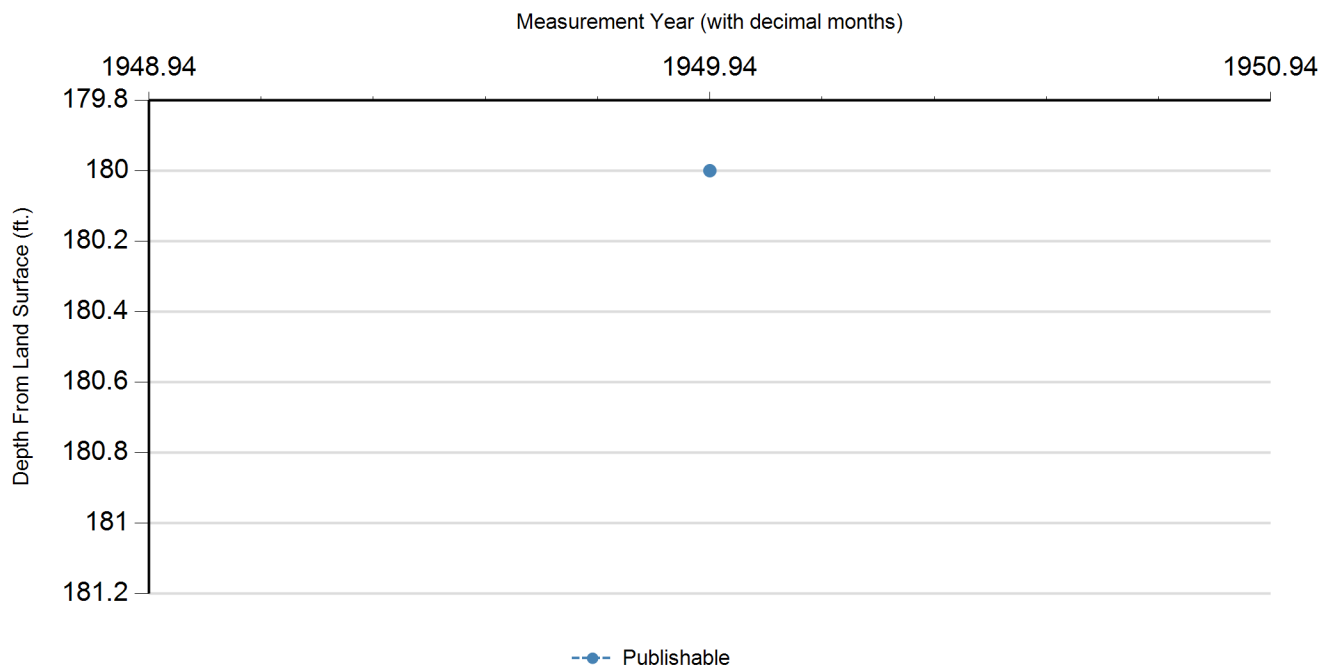
Borehole - No Data

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	12/14/1949		180		820	1	Other or Source of Measurement Unknown	Unknown		

Code Descriptions

Status Code	Status Description
P	Publishable

Water Quality Analysis

Sample Date: 12/14/1949 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** U.S. Geological Survey

Sampled Aquifer: Glen Rose Limestone, Upper Member

Analyzed Lab: U.S. Geological Survey Lab

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)		3.33	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO ₃)		363.94	mg/L as CaCO ₃	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		436	mg/L	
00910	CALCIUM (MG/L)		66	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		4	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		23	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		3.6	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		530	mg/L as CaCO ₃	
00920	MAGNESIUM (MG/L)		89	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO ₃)		2.2	mg/L as NO ₃	
00400	PH (STANDARD UNITS), FIELD		8.4	SU	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SiO ₂)		9.8	mg/L as SiO ₂	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.43		
00932	SODIUM, CALCULATED, PERCENT		8	PCT	
00929	SODIUM, TOTAL (MG/L AS Na)	calculated	23	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		977	MICR	
00945	SULFATE, TOTAL (MG/L AS SO ₄)		172	mg/L as SO ₄	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		606	mg/L	

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State Well Number	5841403
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)	30.327778
Latitude (degrees minutes seconds)	30° 19' 40" N
Longitude (decimal degrees)	-97.975278
Longitude (degrees minutes seconds)	097° 58' 31" W
Coordinate Source	+/- 1 Second
Aquifer Code	218GLRSL - Glen Rose Limestone, Lower Member
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1112
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	816
Well Depth Source	Owner
Drilling Start Date	
Drilling End Date	0/0/1970
Drilling Method	Cable Tool
Borehole Completion	Open Hole

Well Type	Withdrawal of Water
Well Use	Domestic
Water Level Observation	Miscellaneous Measurements
Water Quality Available	No
Pump	
Pump Depth (feet below land surface)	
Power Type	
Annular Seal Method	
Surface Completion	
Owner	Charles Glass
Driller	Emmett Glass
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Water Development Board
Created Date	10/22/1998
Last Update Date	3/4/2020

Remarks Reported yield 18 GPM.

Casing - No Data

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

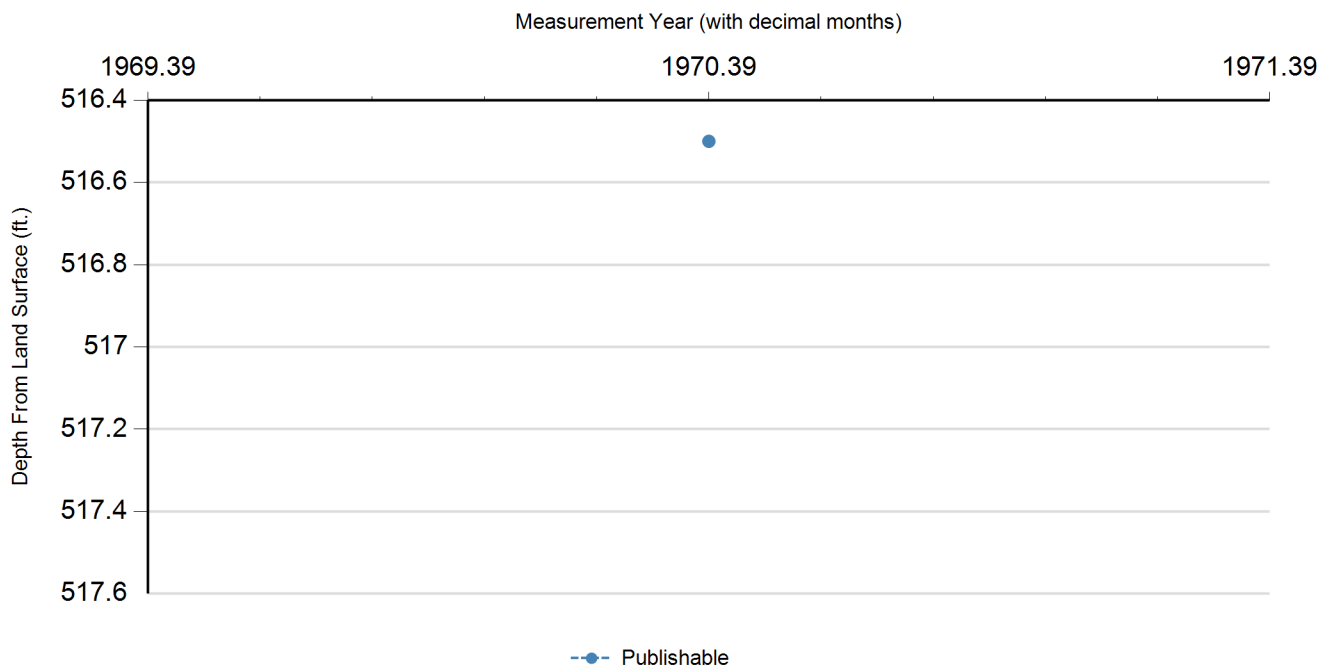
Borehole - No Data

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	5/21/1970		516.5		595.5	1	Other or Source of Measurement Unknown	Unknown		

Code Descriptions

Status Code	Status Description
P	Publishable

Water Quality Analysis - No Data Available

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State Well Number	5841404
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)	30.324167
Latitude (degrees minutes seconds)	30° 19' 27" N
Longitude (decimal degrees)	-97.9875
Longitude (degrees minutes seconds)	097° 59' 15" W
Coordinate Source	+/- 1 Second
Aquifer Code	218GLRSL - Glen Rose Limestone, Lower Member
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1080
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	547
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	2/14/1973
Drilling Method	
Borehole Completion	Open Hole

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	James Weems Jr.
Driller	Glass Drilling Co.
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 Cemented from 0 to 225 feet.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
5	Blank	Steel			0	448
	Open Hole				448	547

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

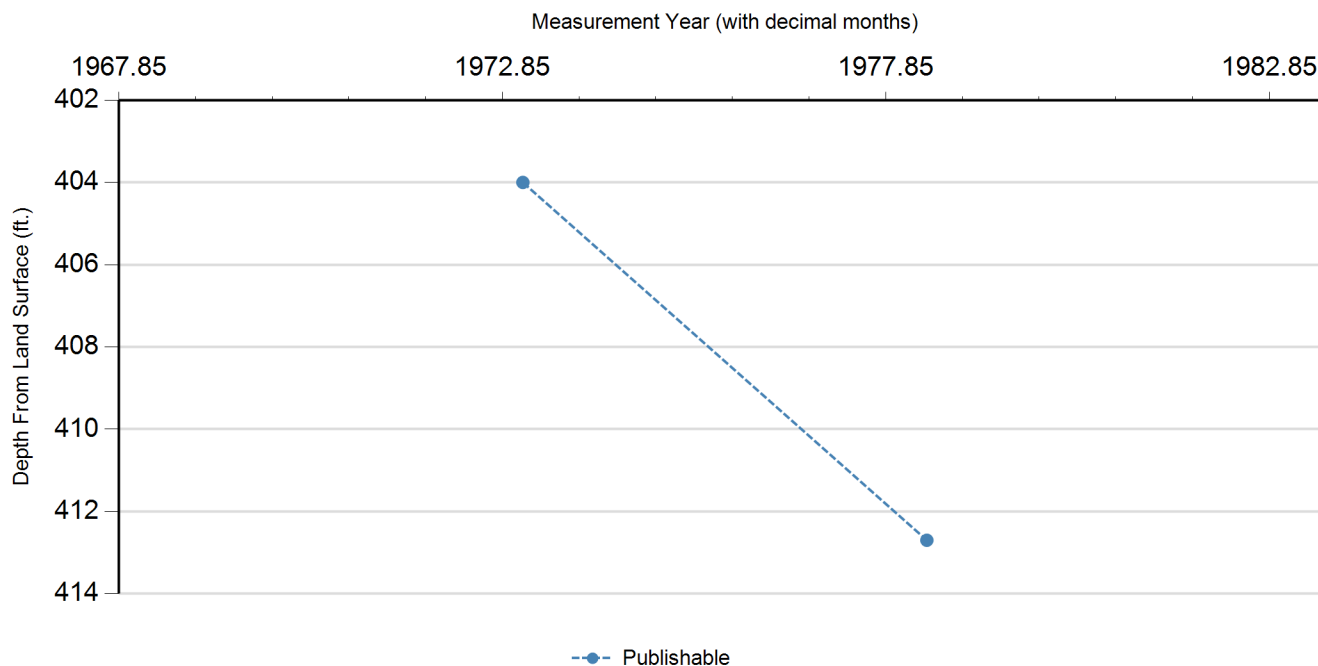
Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements



Status Code	Date	Time	Water Level (ft. below land surface)	Change value in () indicates rise in level	Water Elevation (ft. above sea level)	Meas #	Measuring Agency	Method	Remark ID	Comments
P	2/14/1973		404		676	1	Other or Source of Measurement Unknown	Unknown		
P	5/22/1978		412.7	8.70	667.3	1	Other or Source of Measurement Unknown	Unknown		

Code Descriptions

Status Code	Status Description
P	Publishable

Water Quality Analysis

Sample Date: 5/28/1978 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Glen Rose Limestone, Lower Member

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)		278	mg/L as CaCO 3	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		339.26	mg/L	
00910	CALCIUM (MG/L)		404	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		48	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		2.3	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		2258	mg/L as CaCO 3	
00920	MAGNESIUM (MG/L)		304	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)	<	0.4	mg/L as NO3	
00400	PH (STANDARD UNITS), FIELD		7.7	SU	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SiO2)		13	mg/L as SiO2	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.58		
00932	SODIUM, CALCULATED, PERCENT		5	PCT	
00929	SODIUM, TOTAL (MG/L AS Na)		63	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		5488	MICR	
00945	SULFATE, TOTAL (MG/L AS SO4)		1995	mg/L as SO4	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		2996	mg/L	

Water Quality Analysis

Sample Date: 6/9/1986 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Glen Rose Limestone, Lower Member

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)		291	mg/L as CaCO3	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		355.12	mg/L	
00910	CALCIUM (MG/L)		405	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		49	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		2.5	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		2162	mg/L as CaCO3	
00920	MAGNESIUM (MG/L)		280	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)	<	0.04	mg/L as NO3	
00400	PH (STANDARD UNITS), FIELD		7.2	SU	
00937	POTASSIUM, TOTAL (MG/L AS K)		22	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SiO2)		14	mg/L as SiO2	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.65		
00932	SODIUM, CALCULATED, PERCENT		6	PCT	
00929	SODIUM, TOTAL (MG/L AS Na)		69	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		5544	MICR	
00945	SULFATE, TOTAL (MG/L AS SO4)		1933	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		24	C	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		2949	mg/L	

Water Quality Analysis

Sample Date: 8/15/1991 **Sample Time:** 0940 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Glen Rose Limestone, Lower Member

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
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)		284	mg/L as CaCO3	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		346.58	mg/L	
00910	CALCIUM (MG/L)		350.35	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		45	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		1.94	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		2110	mg/L as CaCO3	
00920	MAGNESIUM (MG/L)		300.46	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)	<	0.44	mg/L as NO3	
00400	PH (STANDARD UNITS), FIELD		6.47	SU	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SiO2)		11.08	mg/L as SiO2	
00945	SULFATE, TOTAL (MG/L AS SO4)		2324.5	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		24	C	

Water Quality Analysis

Sample Date: 8/15/1991 **Sample Time:** 0940 **Sample Number:** 2 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Glen Rose Limestone, Lower Member

Analyzed Lab: Texas Department of Health

Reliability: Sampled using TWDB protocols

Collection Remarks: No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CaCO3		284	mg/L as CaCO3	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)		285	mg/L as CaCO3	
01503	ALPHA, DISSOLVED (PC/L)		12	PC/L	3
01005	BARIUM, DISSOLVED (UG/L AS BA)	<	20	ug/L	
03503	BETA, DISSOLVED (PC/L)	<	25	PC/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		347.8	mg/L	
00915	CALCIUM, DISSOLVED (MG/L AS Ca)		398	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		51	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		2.4	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		2169	mg/L as CaCO3	
01046	IRON, DISSOLVED (UG/L AS FE)		52	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		282	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	20	ug/L	
00618	NITRATE NITROGEN, DISSOLVED (MG/L AS N)	<	0.1	mg/L as N	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)	<	0.04	mg/L as NO3	
00090	OXIDATION REDUCTION POTENTIAL (ORP), MILLIVOLTS		70.6	MV	
00400	PH (STANDARD UNITS), FIELD		6.47	SU	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		28	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SiO2)		13	mg/L as SiO2	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.65		
00932	SODIUM, CALCULATED, PERCENT		6	PCT	
00930	SODIUM, DISSOLVED (MG/L AS Na)		69	mg/L	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		14500	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		1950	mg/L as SO4	

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
58-41-404**

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00010	TEMPERATURE, WATER (CELSIUS)		24	C	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		2979	mg/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	20	ug/L	

* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

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[Well Basic Details](#)
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State Well Number	5841405
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)	30.305834
Latitude (degrees minutes seconds)	30° 18' 21" N
Longitude (decimal degrees)	-97.982778
Longitude (degrees minutes seconds)	097° 58' 58" W
Coordinate Source	+/- 1 Second
Aquifer Code	218GLRSU - Glen Rose Limestone, Upper Member
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	990
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	310
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	6/5/1978
Drilling Method	Mud (Hydraulic) Rotary
Borehole Completion	

Well Type	Withdrawal of Water
Well Use	Domestic
Water Level Observation	None
Water Quality Available	Yes
Pump	Submersible
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	Al Figer
Driller	Glass and Tucker, Inc
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	7/31/1978
Last Update Date	3/4/2020

Remarks Reported yield 80 GPM with 100 feet drawdown after pumping 1/2 hour in 1978.

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: 7/19/1978 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** Texas Water Development Board

Sampled Aquifer: Glen Rose Limestone, Upper Member

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 CaCO ₃)		295	mg/L as CaCO ₃	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		360	mg/L	
00910	CALCIUM (MG/L)		322	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		35	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		3.7	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		1589	mg/L as CaCO ₃	
00920	MAGNESIUM (MG/L)		191	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO ₃)		4.4	mg/L as NO ₃	
00400	PH (STANDARD UNITS), FIELD		7.8	SU	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SiO ₂)		11	mg/L as SiO ₂	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.32		
00932	SODIUM, CALCULATED, PERCENT		3	PCT	
00929	SODIUM, TOTAL (MG/L AS Na)		29	mg/L	
00945	SULFATE, TOTAL (MG/L AS SO ₄)		1226	mg/L as SO ₄	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		1999	mg/L	

* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

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[GWDB Reports and Downloads](#)

Well Basic Details

[Scanned Documents](#)

State Well Number	5841406
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)	30.3075
Latitude (degrees minutes seconds)	30° 18' 27" N
Longitude (decimal degrees)	-97.9725
Longitude (degrees minutes seconds)	097° 58' 21" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	217HSTN - Hosston Formation
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	965
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	860
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	1/6/1986
Drilling Method	Air Rotary
Borehole Completion	Open Hole

Well Type	Observation
Well Use	Unused
Water Level Observation	Historical
Water Quality Available	No
Pump	None
Pump Depth (feet below land surface)	
Power Type	Other (see remarks)
Annular Seal Method	
Surface Completion	
Owner	Travis County Pct. 3
Driller	Frank Glass
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Water Development Board
Created Date	4/29/2002
Last Update Date	3/4/2020

Remarks Reported yield 23 GPM in 1986. Cemented from 0 to 590 feet. Recorder equip pulled 6/2012. 2/10/2017 They pulled the pump on the Lower Trinity well 58-41-406. Tomorrow they will jet the well to clean it out, which is the equivalent of pumping the well. We (Barton Springs GCD) and Travis county are thinking to make it a monitor well.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
7	Blank	Steel			0	590
6	Open Hole				590	860

Well Tests - No Data

Lithology - No Data

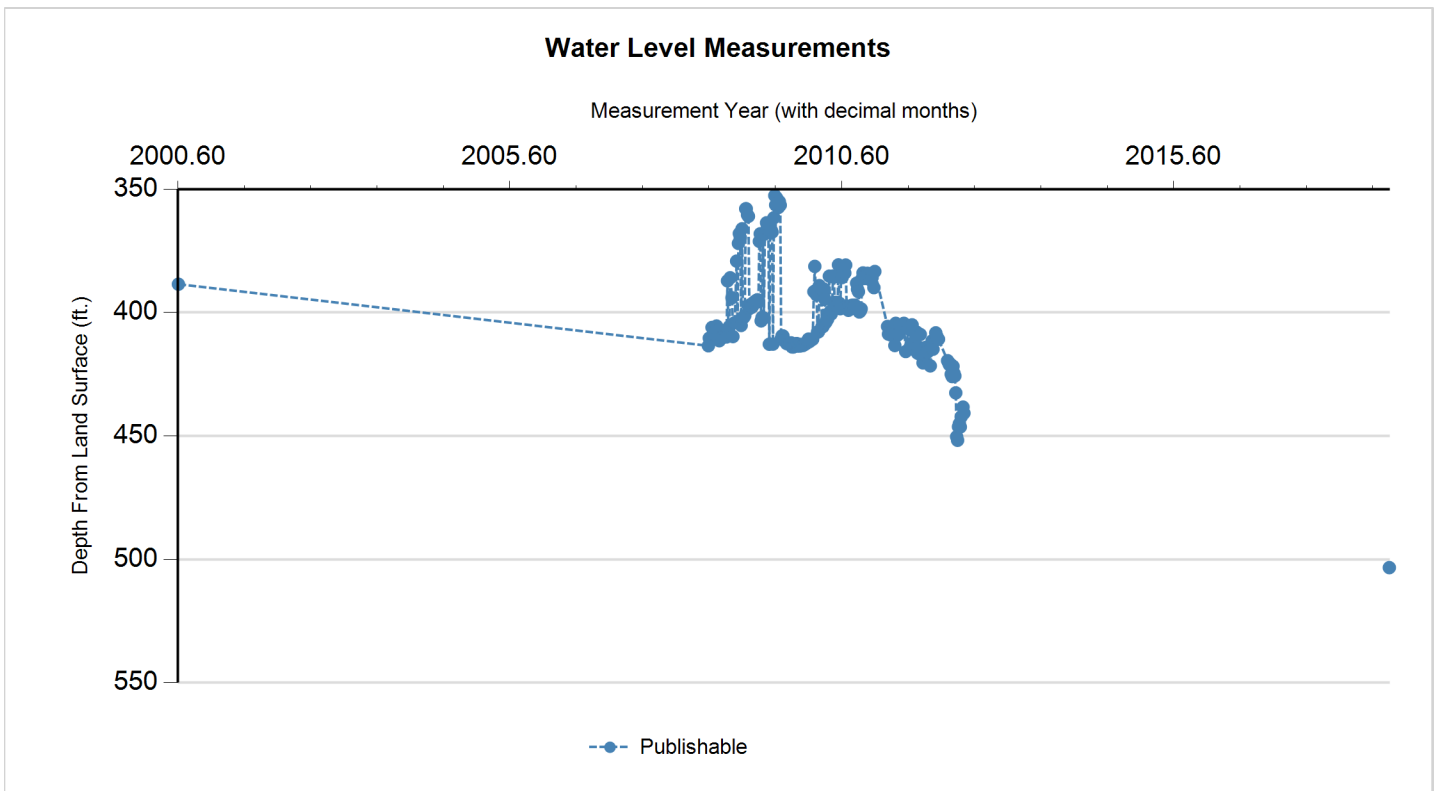
Annular Seal Range - No Data

Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data



Status Code	Date	Time	Water Level (ft. below land surface)	Change value in () indicates rise in level	Water Elevation (ft. above sea level)	Meas #	Measuring Agency	Method	Remark ID	Comments
P	8/11/2000		388.5		576.5	1	Texas Water Development Board	Steel Tape		
P	8/5/2008		413.46	24.96	551.54	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/10/2008		410.34	(3.12)	554.66	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/15/2008		410.91	0.57	554.09	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/20/2008		411.33	0.42	553.67	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/25/2008		406.03	(5.30)	558.97	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/5/2008		407.78	1.75	557.22	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/10/2008		409.42	1.64	555.58	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/15/2008		408.96	(0.46)	556.04	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/20/2008		405.46	(3.50)	559.54	1	Texas Water Development Board	Recorder (Float or Transducer)		

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
58-41-406**

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	9/25/2008		407.48	2.02	557.52	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/30/2008		409.04	1.56	555.96	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/5/2008		411.41	2.37	553.59	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/10/2008		410.76	(0.65)	554.24	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/20/2008		410.15	(0.61)	554.85	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/15/2008		409.88	(0.27)	555.12	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/20/2008		387.15	(22.73)	577.85	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/25/2008		406.45	19.30	558.55	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/30/2008		405.68	(0.77)	559.32	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/5/2008		385.89	(19.79)	579.11	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/15/2008		394.01	8.12	570.99	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/20/2008		409.73	15.72	555.27	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/30/2008		404.08	(5.65)	560.92	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/5/2009		379.14	(24.94)	585.86	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/10/2009		403.59	24.45	561.41	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/15/2009		371.97	(31.62)	593.03	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/20/2009		367.97	(4.00)	597.03	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/25/2009		369.64	1.67	595.36	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/30/2009		405.23	35.59	559.77	1	Texas Water Development Board	Recorder (Float or Transducer)		

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
58-41-406**

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	2/5/2009		366.06	(39.17)	598.94	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	2/10/2009		402.18	36.12	562.82	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	2/15/2009		401.91	(0.27)	563.09	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	2/20/2009		401.26	(0.65)	563.74	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	2/25/2009		357.94	(43.32)	607.06	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	2/28/2009		357.94	0.00	607.06	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	3/5/2009		360.41	2.47	604.59	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	3/10/2009		360.99	0.58	604.01	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	3/15/2009		398.4	37.41	566.6	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	3/20/2009		396.84	(1.56)	568.16	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	3/25/2009		396.99	0.15	568.01	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	3/30/2009		397.75	0.76	567.25	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/5/2009		397.03	(0.72)	567.97	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/10/2009		395.81	(1.22)	569.19	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/15/2009		396.26	0.45	568.74	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/20/2009		395.27	(0.99)	569.73	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/25/2009		395.04	(0.23)	569.96	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/30/2009		394.82	(0.22)	570.18	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/5/2009		395.46	0.64	569.54	1	Texas Water Development Board	Recorder (Float or Transducer)		

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
58-41-406**

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	5/10/2009		371.13	(24.33)	593.87	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/15/2009		368.08	(3.05)	596.92	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/20/2009		403.36	35.28	561.64	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/25/2009		401.95	(1.41)	563.05	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/30/2009		368.04	(33.91)	596.96	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	6/5/2009		402.21	34.17	562.79	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	6/10/2009		368.16	(34.05)	596.84	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	6/15/2009		367.51	(0.65)	597.49	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	6/20/2009		363.62	(3.89)	601.38	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	6/25/2009		365.41	1.79	599.59	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	6/30/2009		366.56	1.15	598.44	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	7/5/2009		412.82	46.26	552.18	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	7/10/2009		364.53	(48.29)	600.47	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	7/15/2009		366.48	1.95	598.52	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	7/20/2009		367.43	0.95	597.57	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	7/25/2009		412.78	45.35	552.22	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	7/30/2009		361.6	(51.18)	603.4	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/5/2009		352.6	(9.00)	612.4	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/10/2009		356.41	3.81	608.59	1	Texas Water Development Board	Recorder (Float or Transducer)		

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
58-41-406**

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	8/15/2009		353.55	(2.86)	611.45	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/20/2009		356.41	2.86	608.59	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/25/2009		357.4	0.99	607.6	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/30/2009		355.04	(2.36)	609.96	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/5/2009		356.49	1.45	608.51	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/10/2009		410.68	54.19	554.32	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/15/2009		409.42	(1.26)	555.58	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/20/2009		409.46	0.04	555.54	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/25/2009		410.95	1.49	554.05	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/30/2009		411.52	0.57	553.48	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/5/2009		411.79	0.27	553.21	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/10/2009		412.55	0.76	552.45	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/15/2009		412.51	(0.04)	552.49	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/20/2009		412.63	0.12	552.37	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/25/2009		412.85	0.22	552.15	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/30/2009		412.36	(0.49)	552.64	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/5/2009		412.28	(0.08)	552.72	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/10/2009		413.92	1.64	551.08	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/15/2009		413.96	0.04	551.04	1	Texas Water Development Board	Recorder (Float or Transducer)		

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
58-41-406**

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	11/20/2009		413.81	(0.15)	551.19	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/25/2009		413.5	(0.31)	551.5	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/30/2009		412.97	(0.53)	552.03	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/5/2009		412.55	(0.42)	552.45	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/10/2009		413.58	1.03	551.42	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/15/2009		413.08	(0.50)	551.92	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/20/2009		412.85	(0.23)	552.15	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/25/2009		413.54	0.69	551.46	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/30/2009		413.01	(0.53)	551.99	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/5/2010		413.35	0.34	551.65	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/10/2010		413.05	(0.30)	551.95	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/15/2010		412.59	(0.46)	552.41	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/20/2010		412.7	0.11	552.3	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/25/2010		412.05	(0.65)	552.95	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/30/2010		411.63	(0.42)	553.37	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	2/5/2010		410.76	(0.87)	554.24	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	2/10/2010		411.79	1.03	553.21	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	2/15/2010		411.33	(0.46)	553.67	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	2/20/2010		410.83	(0.50)	554.17	1	Texas Water Development Board	Recorder (Float or Transducer)		

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
58-41-406**

Status Code	Date	Time	Water Level (ft. below land surface)	Change value in () indicates rise in level	Water Elevation (ft. above sea level)	Meas #	Measuring Agency	Method	Remark ID	Comments
P	2/28/2010		410.83	0.00	554.17	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	3/5/2010		391.54	(19.29)	573.46	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	3/10/2010		381.28	(10.26)	583.72	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	3/15/2010		391.08	9.80	573.92	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	3/20/2010		392.87	1.79	572.13	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	3/25/2010		407.9	15.03	557.1	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	3/30/2010		407.82	(0.08)	557.18	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/5/2010		389.09	(18.73)	575.91	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/10/2010		389.93	0.84	575.07	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/15/2010		390.32	0.39	574.68	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/20/2010		405.57	15.25	559.43	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/25/2010		405.68	0.11	559.32	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/30/2010		390.47	(15.21)	574.53	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/5/2010		394.51	4.04	570.49	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/10/2010		404.04	9.53	560.96	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/15/2010		403.05	(0.99)	561.95	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/20/2010		402.75	(0.30)	562.25	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/25/2010		401.49	(1.26)	563.51	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/30/2010		385.24	(16.25)	579.76	1	Texas Water Development Board	Recorder (Float or Transducer)		

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
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58-41-406**

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	6/5/2010		399.58	14.34	565.42	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	6/10/2010		400.61	1.03	564.39	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	6/15/2010		399.39	(1.22)	565.61	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	6/20/2010		385.2	(14.19)	579.8	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	6/25/2010		385.62	0.42	579.38	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	6/30/2010		397.14	11.52	567.86	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	7/5/2010		395.88	(1.26)	569.12	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	7/10/2010		397.26	1.38	567.74	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	7/15/2010		397.14	(0.12)	567.86	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	7/20/2010		380.67	(16.47)	584.33	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	7/25/2010		396.23	15.56	568.77	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	7/30/2010		398.44	2.21	566.56	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/5/2010		385.01	(13.43)	579.99	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/10/2010		385.81	0.80	579.19	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/15/2010		381.7	(4.11)	583.3	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/20/2010		383.26	1.56	581.74	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/25/2010		383.98	0.72	581.02	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/30/2010		380.74	(3.24)	584.26	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/5/2010		397.33	16.59	567.67	1	Texas Water Development Board	Recorder (Float or Transducer)		

**Texas Water Development Board (TWDB)
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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	9/10/2010		398.29	0.96	566.71	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/15/2010		399.09	0.80	565.91	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/20/2010		398.48	(0.61)	566.52	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/25/2010		397.75	(0.73)	567.25	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/30/2010		398.4	0.65	566.6	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/5/2010		397.03	(1.37)	567.97	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/10/2010		397.98	0.95	567.02	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/15/2010		397.03	(0.95)	567.97	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/20/2010		396.99	(0.04)	568.01	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/25/2010		397.41	0.42	567.59	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/30/2010		388.1	(9.31)	576.9	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/5/2010		390.54	2.44	574.46	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/10/2010		391.54	1.00	573.46	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/15/2010		399.77	8.23	565.23	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/20/2010		399.39	(0.38)	565.61	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/25/2010		398.48	(0.91)	566.52	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/30/2010		386.23	(12.25)	578.77	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/5/2010		383.95	(2.28)	581.05	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/10/2010		384.37	0.42	580.63	1	Texas Water Development Board	Recorder (Float or Transducer)		

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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	12/15/2010		386.2	1.83	578.8	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/20/2010		385.89	(0.31)	579.11	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/25/2010		385.7	(0.19)	579.3	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/30/2010		384.1	(1.60)	580.9	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/5/2011		384.25	0.15	580.75	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/10/2011		386.12	1.87	578.88	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/15/2011		387	0.88	578	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/20/2011		385.81	(1.19)	579.19	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/30/2011		389.9	4.09	575.1	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	2/5/2011		383.34	(6.56)	581.66	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/15/2011		405.62	22.28	559.38	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/20/2011		408.74	3.12	556.26	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/25/2011		406.26	(2.48)	558.74	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/30/2011		405.77	(0.49)	559.23	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/5/2011		409.13	3.36	555.87	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/10/2011		405.88	(3.25)	559.12	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/15/2011		408.17	2.29	556.83	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/20/2011		406.72	(1.45)	558.28	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/25/2011		413.36	6.64	551.64	1	Texas Water Development Board	Recorder (Float or Transducer)		

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
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58-41-406**

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	5/30/2011		404.36	(9.00)	560.64	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	6/5/2011		409.43	5.07	555.57	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	6/10/2011		405.65	(3.78)	559.35	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	6/15/2011		408.82	3.17	556.18	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	6/25/2011		405.35	(3.47)	559.65	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	7/15/2011		404.36	(0.99)	560.64	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	7/25/2011		415.8	11.44	549.2	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/10/2011		406.46	(9.34)	558.54	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/25/2011		412.63	6.17	552.37	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	8/30/2011		404.97	(7.66)	560.03	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/20/2011		409.54	4.57	555.46	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/25/2011		407.94	(1.60)	557.06	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	9/30/2011		416.45	8.51	548.55	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/5/2011		416.33	(0.12)	548.67	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/10/2011		414.16	(2.17)	550.84	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/15/2011		408.86	(5.30)	556.14	1	Texas Water Development Board	Recorder (Float or Transducer)		
X	10/20/2011					1	Texas Water Development Board	Electric Line	22	
P	10/25/2011		417.74		547.26	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	10/30/2011		420.38	2.64	544.62	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/5/2011		416.87	(3.51)	548.13	1	Texas Water Development Board	Recorder (Float or Transducer)		

**Texas Water Development Board (TWDB)
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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	11/10/2011		415.95	(0.92)	549.05	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/15/2011		414.12	(1.83)	550.88	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/20/2011		415.84	1.72	549.16	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	11/25/2011		416.03	0.19	548.97	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/10/2011		421.6	5.57	543.4	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/20/2011		411.49	(10.11)	553.51	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	12/25/2011		414.85	3.36	550.15	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/5/2012		408.21	(6.64)	556.79	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/10/2012		409.47	1.26	555.53	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	1/20/2012		410.8	1.33	554.2	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	3/10/2012		419.5	8.70	545.5	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	3/15/2012		420.19	0.69	544.81	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	3/20/2012		421.14	0.95	543.86	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	3/25/2012		420.83	(0.31)	544.17	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	3/30/2012		424.99	4.16	540.01	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/5/2012		425.94	0.95	539.06	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/10/2012		421.75	(4.19)	543.25	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/15/2012		424.53	2.78	540.47	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/20/2012		425.68	1.15	539.32	1	Texas Water Development Board	Recorder (Float or Transducer)		

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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	4/25/2012		432.54	6.86	532.46	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	4/30/2012		450.31	17.77	514.69	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/5/2012		451.76	1.45	513.24	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/10/2012		446.27	(5.49)	518.73	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/15/2012		445.01	(1.26)	519.99	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/20/2012		446.35	1.34	518.65	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	5/25/2012		442.23	(4.12)	522.77	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	6/5/2012		438.3	(3.93)	526.7	1	Texas Water Development Board	Recorder (Float or Transducer)		
P	6/10/2012		440.74	2.44	524.26	1	Texas Water Development Board	Recorder (Float or Transducer)		
X	10/1/2012					1	Texas Water Development Board	Electric Line	22	
P	11/9/2018	0940	503.35		461.65	1	Texas Water Development Board	Electric Line		

Code Descriptions

Status Code	Status Description
P	Publishable
X	No Measurement

Remark ID	Remark Description
22	Unable to measure because tape hangs before reaching water level

Water Quality Analysis - No Data Available

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

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
58-41-407**

GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	5841407
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)	30.3233333
Latitude (degrees minutes seconds)	30° 19' 24" N
Longitude (decimal degrees)	-97.9694444
Longitude (degrees minutes seconds)	097° 58' 10" W
Coordinate Source	+/- 1 Second
Aquifer Code	217HSTN - Hosston Formation
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1095
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	1000
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	6/13/2013
Drilling Method	Air Rotary
Borehole Completion	Open End

Well Type	Withdrawal of Water
Well Use	Irrigation
Water Level Observation	Miscellaneous Measurements
Water Quality Available	Yes
Pump	Submersible
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	Pos. Displacement
Surface Completion	Surface Slab Installed
Owner	Lake Travis High School #2
Driller	Whisenant & Lyle
Other Data Available	Drillers Log; Gamma Ray; Induction; Other
Well Report Tracking Number	321851
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	7/31/2013
Last Update Date	3/4/2020

Remarks	Yield: 25 GPM. 6/13/2013.
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Casing						
Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
7	Blank	Plastic (PVC)			0	840
7	Screen				840	938
7	Blank	Plastic (PVC)			938	940
12	Open Hole				940	1000

Well Tests				
Test Date	Test Type	Yield (gallons per minute)	Drawdown (ft.)	Test Hours
2013-06-13	Pump	25		

Lithology

Top Depth (ft.)	Bottom Depth (ft.)	Description
0	3	Topsoil
3	9	Brown Limestone
9	18	Caliche
18	27	Brown Tan Limestone
27	1000	Void

Annular Seal Range - No Data

Borehole

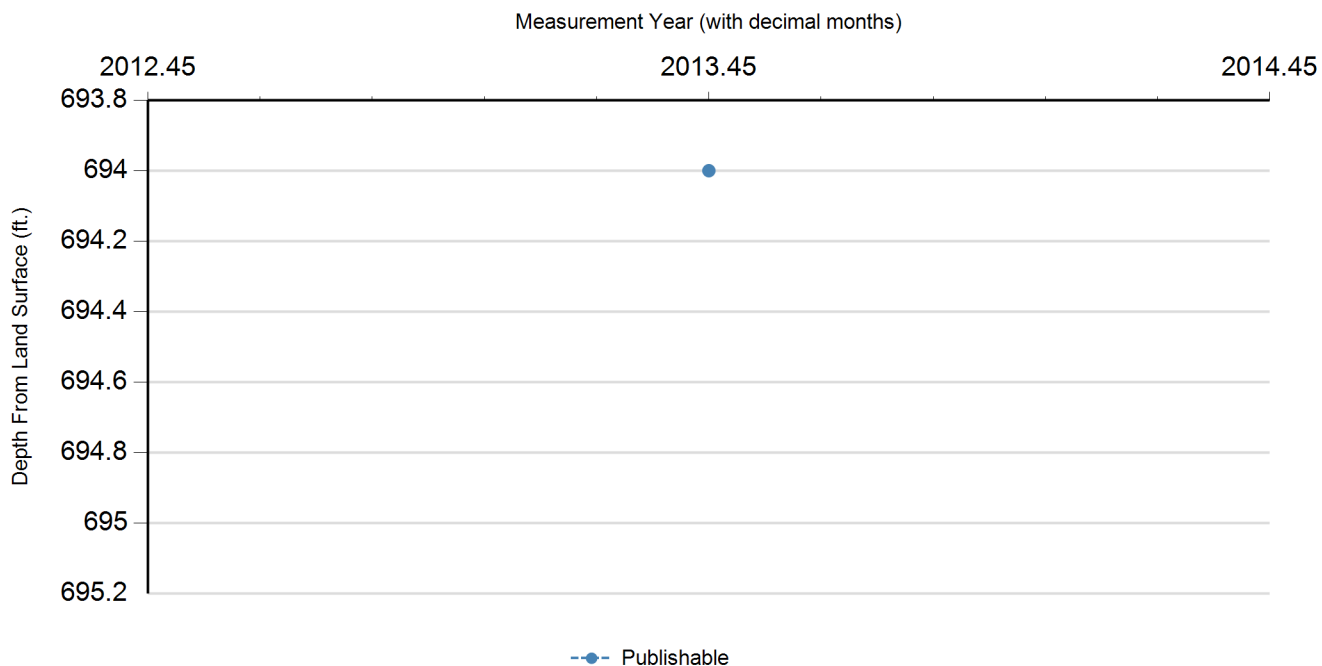
Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
12	0	1000

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	6/13/2013		694		401	1	Other Federal Agencies	Unknown		

Code Descriptions

Status Code	Status Description
P	Publishable

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
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58-41-407**

Water Quality Analysis

Sample Date: 7/16/2013 **Sample Time:** 1015 **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
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	<	10	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO ₃)		267	mg/L as CaCO ₃	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	4	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		-2.02	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		19.5	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		325.83	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		1560	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.424	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		176	mg/L	
28004	CARBON-14 DISS APPARENT AGE (YEARS BP)		11610	Y-BP	60
82172	CARBON-14 FRACTION MODERN		0.2357		0.0001
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		63.2	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	1	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)		2.32	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		3.02	ug/L	
50791	DEUTERIUM, EXPRESSED AS PERMIL VSMOW		-26.2	0/00	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		1.35	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		947	mg/L as CaCO ₃	
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)		150	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		120	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)		6.22	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		2.77	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO ₃)		2.84	mg/L as NO ₃	

**Texas Water Development Board (TWDB)
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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		0.641	mg/L as N	
50790	OXYGEN-18, EXPRESSED AS PERMIL VSMOW		-4.42	0/00	
00400	PH (STANDARD UNITS), FIELD		7.68	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		14.2	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	4	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		14.4	mg/L as SI02	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		1.89		
00932	SODIUM, CALCULATED, PERCENT		24	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		133	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		2280	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		11500	ug/L	
48297	STRONTIUM, ISOTOPE OF MASS 86 AND 87 RATIO		0.708312	N/A	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		906	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		26.64	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		1603	mg/L	
07012	TRITIUM IN WATER (TRITIUM UNITS)		0.12	TU	0.09
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		1	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		1310	ug/L	

* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

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

**Texas Water Development Board (TWDB)
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Well Information Report for State Well Number
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Well Basic Details

[Scanned Documents](#)

State Well Number	5841408
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)	30.3079139
Latitude (degrees minutes seconds)	30° 18' 28.49" N
Longitude (decimal degrees)	-97.9733833
Longitude (degrees minutes seconds)	097° 58' 24.18" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	
Aquifer	Trinity
Aquifer Pick Method	Provided by Groundwater Conservation District
Land Surface Elevation (feet above sea level)	989
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	717
Well Depth Source	Driller's Log
Drilling Start Date	2/14/2017
Drilling End Date	2/16/2017
Drilling Method	Air Rotary
Borehole Completion	West Bay Multi Port Sampling System

Well Type	Observation
Well Use	Monitor
Water Level Observation	None
Water Quality Available	Yes
Pump	
Pump Depth (feet below land surface)	
Power Type	
Annular Seal Method	Not Applicable
Surface Completion	Surface Slab Installed
Owner	Barton Springs Edwards Aquifer Conservation District
Driller	C&C Groundwater Services LLC
Other Data Available	Caliper; Drillers Log; Electric Log; Gamma Ray
Well Report Tracking Number	445644
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	Travis Co Precint #3 Westbay
Other Well Number	
Previous State Well Number	
Reporting Agency	Groundwater Conservation District
Created Date	5/26/2017
Last Update Date	9/22/2023

Remarks	Multiport well. 14 zones all completed in the Trinity but in different formations.
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Casing						
Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
6	Blank	Steel	40		0	60

Well Tests - No Data

Lithology

Top Depth (ft.)	Bottom Depth (ft.)	Description
0	19	Caliche /Light Gray L/S
19	39	Light Gray L/S / Gray Shale
39	60	Light Gray L/S
60	77	Chalky Gray L/S
77	97	Light Gray L/S
97	117	Light Gray L/S Gray Shale
117	137	Light Gray L/S
137	157	Light Gray Shale / Light Gray L/S
157	177	Gray Shale / Tan L/S
177	217	Tan L/S Gray Shale
217	277	Gray L/S
277	297	Gypsum/ Gray L/S / Tan L/S
297	377	Gray L/S / Tan L/S
377	397	Gray L/S / Tan L/S Little Gray Shale
397	417	Gray L/S Tan L/S Brown L/S
417	457	Light Brown L/S
457	497	Light Gray L/S Small Tan L/S
497	517	Light Brown L/S / Gray L/S
517	557	Gray Shale
557	597	Course Light Gray Shale w Small Tan L/S
597	617	Red L/S Gray L/S
617	657	Red L/S
657	677	Red L/S Red Tan L/S
677	697	Multi Tan L/S
697	717	Course Red and small Tan L/S

Annular Seal Range

Annular Seal Material	Amount	Unit	Top Depth (ft.)	Bottom Depth (ft.)
Cement	15	Bags/Sacks	0	60

Borehole

Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
8.75	0	60
4.75	60	717

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements

No Data Available

Water Quality Analysis

Sample Date: 6/22/2017 **Sample Time:** 1355 **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: Zone 1, 685 ft. - 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		212	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 CaCO ₃)		212	mg/L as CaCO ₃	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	5	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		-11.3807	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)		8.33	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		258.713	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		1720	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.319	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		259	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		44	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		1.07	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		2.62	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		1305.206	mg/L as CaCO ₃	
01046	IRON, DISSOLVED (UG/L AS FE)		3390	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		194	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		155	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)		143	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		28.9	ug/L	

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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)	<	0.02	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)	<	0.02	mg/L as N	
00400	PH (STANDARD UNITS), FIELD		7.56	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		18.8	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	5	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SiO2)		6.65	mg/L as SiO2	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		1.602		
00932	SODIUM, CALCULATED, PERCENT		18.274	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		132	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		3580	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		17500	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		1680	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		24.76	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		2442.779	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)	<	1	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	5	ug/L	

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Water Quality Analysis

Sample Date: 6/23/2017 **Sample Time:** 1043 **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: Zone 2, 655 ft. - 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		206	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)		206	mg/L as CaCO3	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	5	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		-2.5872	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)		5.05	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		251.391	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		2100	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.386	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		161	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		56.9	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		1.18	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		1.53	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		823.373	mg/L as CaCO3	
01046	IRON, DISSOLVED (UG/L AS FE)		285	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		228	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		96.8	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)		45.8	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		16.2	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		0.441	mg/L as NO3	

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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		0.0996	mg/L as N	
00400	PH (STANDARD UNITS), FIELD		7.28	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)		0.0353	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		14.4	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)		13.7	mg/L as SI02	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		2.722		
00932	SODIUM, CALCULATED, PERCENT		32.489	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		177	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		2990	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		19800	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		961	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		24.76	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		1626.18	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)		1.45	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)	<	1	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	5	ug/L	

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Water Quality Analysis

Sample Date: 6/23/2017 **Sample Time:** 1225 **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: Zone 3, 610 ft. - 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		244	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)		244	mg/L as CaCO3	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	5	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		0.4619	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)		10.7	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		297.764	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		1720	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.293	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		275	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		33.1	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		1.25	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		1.22	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		1.9	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		1393.096	mg/L as CaCO3	
01046	IRON, DISSOLVED (UG/L AS FE)		981	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		196	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		166	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)		54.6	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		17.8	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		0.243	mg/L as NO3	

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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		0.0549	mg/L as N	
00400	PH (STANDARD UNITS), FIELD		7.7	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)		0.0316	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		18	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)		14.3	mg/L as SI02	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		1.634		
00932	SODIUM, CALCULATED, PERCENT		18.088	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		139	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		3700	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		19800	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		1350	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		25.45	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		2163.754	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)		1.6	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)	<	1	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	5	ug/L	

Water Quality Analysis

Sample Date: 6/26/2017 **Sample Time:** 1035 **Sample Number:** 1 **Collection Entity:** Barton Springs/Edwards Aquifer CD

Sampled Aquifer: Sligo Formation

Analyzed Lab: LCRA - Lower Colorado River Authority

Reliability: Sampled using TWDB protocols

Collection Remarks: Zone 4, 570 ft. - 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		262	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)		262	mg/L as CaCO3	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	5	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		-1.5691	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)		8.62	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		11.5	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		319.731	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		1420	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.292	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		360	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		27.2	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		1.2	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		1.43	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		2.76	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		1859.357	mg/L as CaCO3	
01046	IRON, DISSOLVED (UG/L AS FE)		2940	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		153	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		227	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)		85.2	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		23.6	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		0.238	mg/L as NO3	

**Texas Water Development Board (TWDB)
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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		0.0537	mg/L as N	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		20.6	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)		8.85	mg/L as SI02	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.794		
00932	SODIUM, CALCULATED, PERCENT		8.485	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		78.1	mg/L	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		22200	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		1740	mg/L as SO4	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		2644.159	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)		1.92	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)	<	1	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	5	ug/L	

Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
58-41-408

Water Quality Analysis

Sample Date: 6/26/2017 **Sample Time:** 1145 **Sample Number:** 1 **Collection Entity:** Barton Springs/Edwards Aquifer CD

Sampled Aquifer: Cow Creek Limestone

Analyzed Lab: LCRA - Lower Colorado River Authority

Reliability: Sampled using TWDB protocols

Collection Remarks: Zone 6, 485 ft. - 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		282	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 CaCO ₃)		282	mg/L as CaCO ₃	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	5	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		-4.7264	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)		5.88	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		344.138	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		1090	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.348	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		338	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		35.5	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		1.55	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		1.53	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		2.58	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		1842.424	mg/L as CaCO ₃	
01046	IRON, DISSOLVED (UG/L AS FE)		2320	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		145	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		239	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)		47.5	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		8.28	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO ₃)		0.934	mg/L as NO ₃	

**Texas Water Development Board (TWDB)
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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		0.211	mg/L as N	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		20.9	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)		10.4	mg/L as SI02	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.862		
00932	SODIUM, CALCULATED, PERCENT		9.161	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		84.7	mg/L	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		12200	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		1840	mg/L as SO4	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		2753.426	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)	<	1	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		8.74	ug/L	

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
58-41-408**

Water Quality Analysis

Sample Date: 6/26/2017 **Sample Time:** 1250 **Sample Number:** 1 **Collection Entity:** Barton Springs/Edwards Aquifer CD

Sampled Aquifer: Hensell Sand Member of Travis Peak Formation

Analyzed Lab: LCRA - Lower Colorado River Authority

Reliability: Sampled using TWDB protocols

Collection Remarks: Zone 7, 450 ft. - 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		257	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)		257	mg/L as CaCO3	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	5	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		-1.5352	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)		2.95	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		5.8	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		313.629	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		1130	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.275	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		382	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		27.3	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	1	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		1.71	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		3.34	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		1981.03	mg/L as CaCO3	
01046	IRON, DISSOLVED (UG/L AS FE)		9970	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		115	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		246	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)		87.5	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		23.4	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		11.2	mg/L as NO3	

**Texas Water Development Board (TWDB)
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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		2.53	mg/L as N	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		20.7	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)		10.4	mg/L as SI02	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.521		
00932	SODIUM, CALCULATED, PERCENT		5.551	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		53.1	mg/L	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		12100	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		1800	mg/L as SO4	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		2720.352	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)		2.96	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)	<	1	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	5	ug/L	

Water Quality Analysis

Sample Date: 6/14/2023 **Sample Time:** 1300 **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: Zone 3

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00425	ALKALINITY, BICARBONATE DISSOLVED (MG/L), LAB		196	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)		196	mg/L as CaCO3	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	5	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		-0.76	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)		17.4	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		239.188	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		1990	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.424	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		77.6	mg/L	
28004	CARBON-14 DISS APPARENT AGE (YEARS BP)		35600	Y-BP	
82172	CARBON-14 FRACTION MODERN		0.0119		0.0005
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		67.4	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	1	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		1.55	ug/L	
82081	DELTA CARBON 13 C13/C12 PER MIL		-4.6	0/00	
50791	DEUTERIUM, EXPRESSED AS PERMIL VSMOW		-25.92	0/00	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.865	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		417.677	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)		221	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		50.2	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)		4.74	ug/L	

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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		2.43	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		0.522	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		0.118	mg/L as N	
50790	OXYGEN-18, EXPRESSED AS PERMIL VSMOW		-4.58	0/00	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		11.6	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	5	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SiO2)		16.1	mg/L as SiO2	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		4.393		
00932	SODIUM, CALCULATED, PERCENT		52.334	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		202	mg/L	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		15000	ug/L	
48297	STRONTIUM, ISOTOPE OF MASS 86 AND 87 RATIO		0.708726	N/A	0.0011
00946	SULFATE, DISSOLVED (MG/L AS SO4)		568	mg/L as SO4	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		1126.896	mg/L	
07012	TRITIUM IN WATER (TRITIUM UNITS)		0.07	TU	0.09
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)	<	1	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..

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State Well Number	5841409
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)	30.2966722
Latitude (degrees minutes seconds)	30° 17' 48.02" N
Longitude (decimal degrees)	-97.9646917
Longitude (degrees minutes seconds)	097° 57' 52.89" 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)	1065
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	880
Well Depth Source	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	Kathy Miterko
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	11/30/2018
Last Update Date	3/4/2020

Remarks	Specific capacity 1.11 GPM/ft.
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Casing - No Data

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

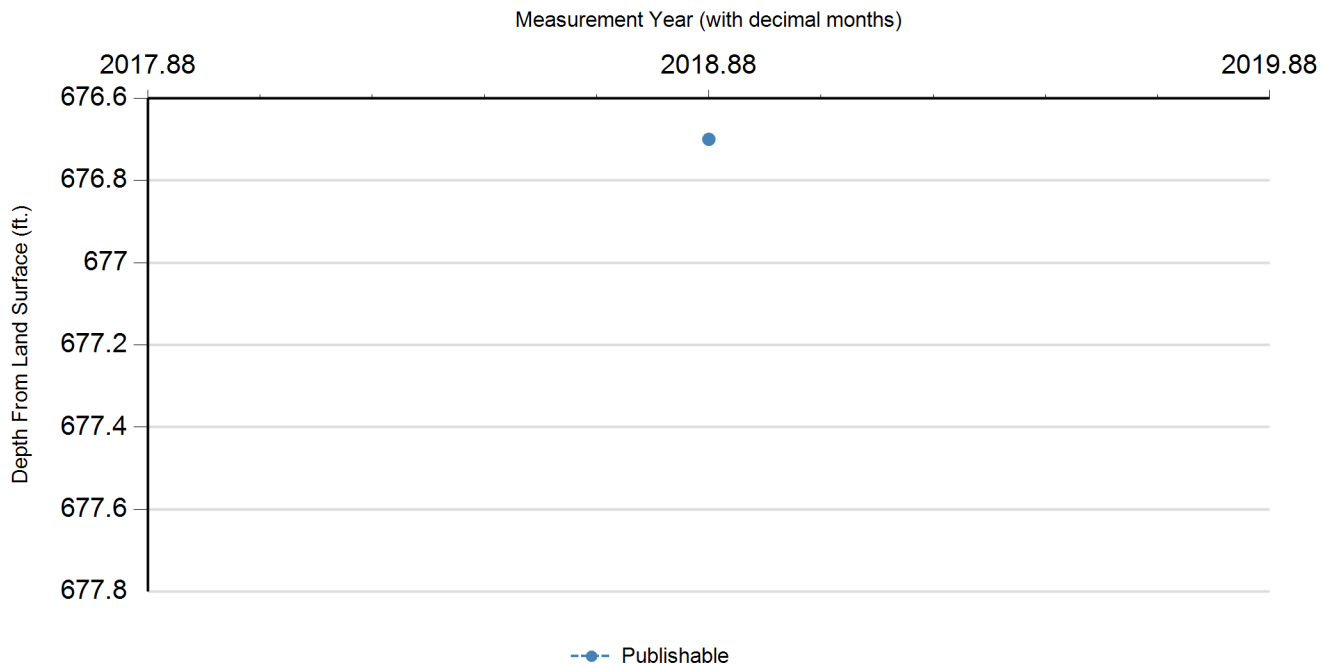
Borehole - No Data

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	11/20/2018		676.7		388.3	1	Groundwater Conservation District	Unknown		

Code Descriptions

Status Code	Status Description
P	Publishable

Water Quality Analysis

Sample Date: 11/20/2018 **Sample Time:** 1240 **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		233	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 CaCO ₃)		233	mg/L as CaCO ₃	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	5	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		-3.4007	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)		1.09	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		14.3	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		284.341	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		1370	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.362	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		118	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		50.5	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	1	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.958	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		640.2	mg/L as CaCO ₃	
01046	IRON, DISSOLVED (UG/L AS FE)		368	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		183	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		80.7	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)		4.15	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	<	1	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO ₃)	<	0.02	mg/L as NO ₃	

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
58-41-409**

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)	<	0.02	mg/L as N	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		12.4	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	5	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SiO2)		16.9	mg/L as SiO2	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		2.555		
00932	SODIUM, CALCULATED, PERCENT		33.791	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		147	mg/L	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		11500	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		708	mg/L as SO4	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		1285.768	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)	<	1	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..

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State Well Number	5841501
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)	30.305834
Latitude (degrees minutes seconds)	30° 18' 21" N
Longitude (decimal degrees)	-97.936945
Longitude (degrees minutes seconds)	097° 56' 13" W
Coordinate Source	+/- 1 Second
Aquifer Code	218GLRS - Glen Rose Limestone
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	930
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	440
Well Depth Source	Owner
Drilling Start Date	
Drilling End Date	0/0/1914
Drilling Method	
Borehole Completion	Open Hole

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	H.C. Bohls
Driller	Sanders, Hayden and Glass
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Water Development Board
Created Date	10/22/1998
Last Update Date	3/4/2020

Remarks Drilled to 241 ft in 1914, 282 ft in 1925, and 440 ft in 1939. Well J-9 in 1957 Travis County report.

Casing - No Data

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

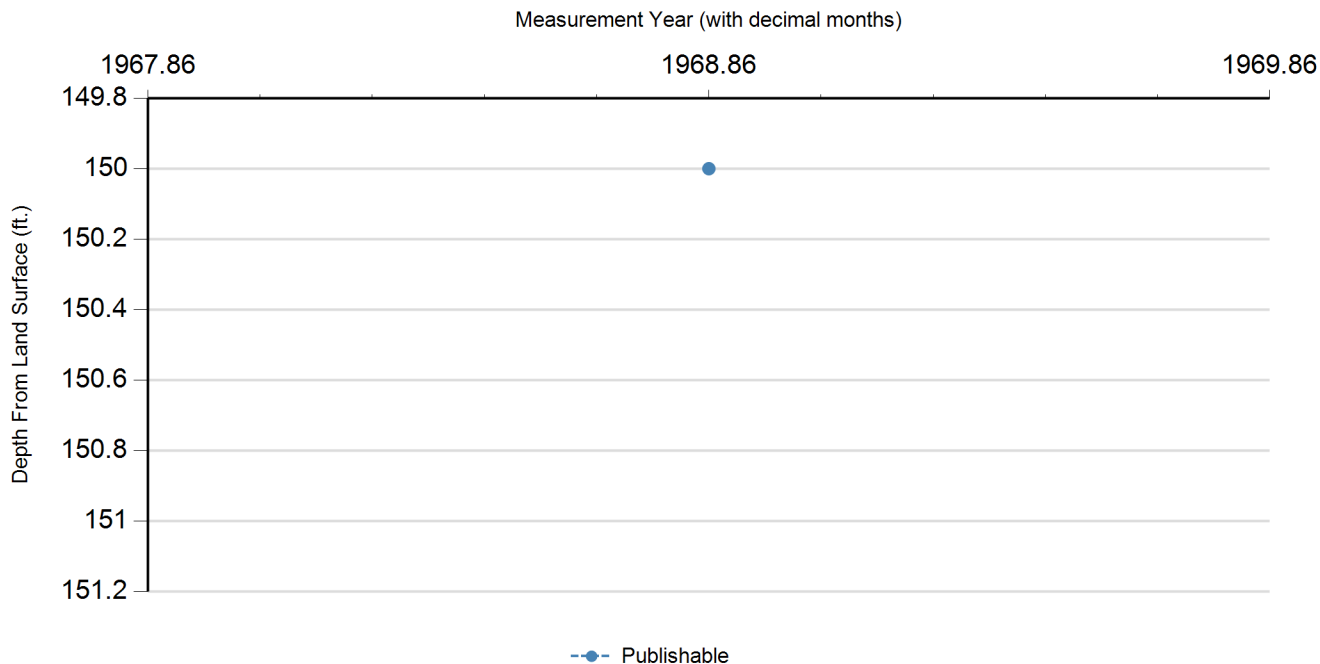
Borehole - No Data

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	11/14/1968		150		780	1	Other or Source of Measurement Unknown	Unknown		

Code Descriptions

Status Code	Status Description
P	Publishable

Water Quality Analysis

Sample Date: 2/14/1941 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** U.S. Geological Survey

Sampled Aquifer: Glen Rose Limestone

Analyzed Lab: University of Texas

Reliability: From a report; unknown sample collection & preservation

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 CaCO ₃)		340.16	mg/L as CaCO ₃	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		415.11	mg/L	
00910	CALCIUM (MG/L)		282	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		32	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		2.8	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		1464	mg/L as CaCO ₃	
00920	MAGNESIUM (MG/L)		185	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.56		
00932	SODIUM, CALCULATED, PERCENT		6	PCT	
00929	SODIUM, TOTAL (MG/L AS Na)	calculated	49	mg/L	
00945	SULFATE, TOTAL (MG/L AS SO ₄)		1130	mg/L as SO ₄	
00010	TEMPERATURE, WATER (CELSIUS)		22	C	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		1884	mg/L	

* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

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State Well Number	5841502
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)	30.308056
Latitude (degrees minutes seconds)	30° 18' 29" N
Longitude (decimal degrees)	-97.945
Longitude (degrees minutes seconds)	097° 56' 42" W
Coordinate Source	+/- 5 Seconds
Aquifer Code	218GLRSL - Glen Rose Limestone, Lower Member
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	910
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	245
Well Depth Source	Person Other than Owner
Drilling Start Date	
Drilling End Date	0/0/1890
Drilling Method	
Borehole Completion	Open Hole

Well Type	Withdrawal of Water
Well Use	Unused
Water Level Observation	Miscellaneous Measurements
Water Quality Available	Yes
Pump	Piston
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	Travis County
Driller	
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Water Development Board
Created Date	11/14/1968
Last Update Date	3/4/2020

Remarks Unused public supply well. Well J-6 in 1957 Travis County report.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
8	Blank	Galvanized Iron			0	15
	Open Hole				15	245

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

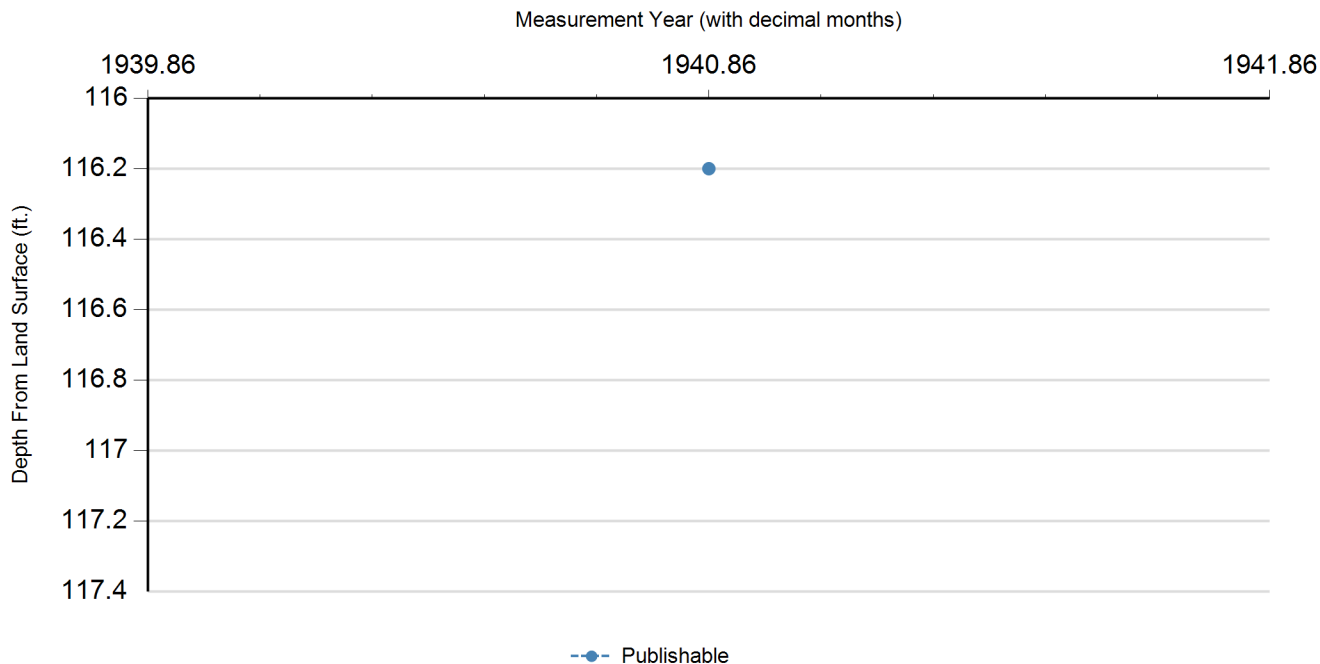
Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements



Status Code	Date	Time	Water Level (ft. below land surface)	Change value in () indicates rise in level	Water Elevation (ft. above sea level)	Meas #	Measuring Agency	Method	Remark ID	Comments
P	11/15/1940		116.2		793.8	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
58-41-502**

Water Quality Analysis

Sample Date: 11/15/1940 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** U.S. Geological Survey

Sampled Aquifer: Glen Rose Limestone, Lower Member

Analyzed Lab: University of Texas

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 CaCO ₃)		350	mg/L as CaCO ₃	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		427.12	mg/L	
00910	CALCIUM (MG/L)		75	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		16	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.5	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		425	mg/L as CaCO ₃	
00920	MAGNESIUM (MG/L)		58	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.13		
00932	SODIUM, CALCULATED, PERCENT		2	PCT	
00929	SODIUM, TOTAL (MG/L AS Na)	calculated	6	mg/L	
00945	SULFATE, TOTAL (MG/L AS SO ₄)		61	mg/L as SO ₄	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		426	mg/L	

* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

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State Well Number	5841503
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)	30.305278
Latitude (degrees minutes seconds)	30° 18' 19" N
Longitude (decimal degrees)	-97.937778
Longitude (degrees minutes seconds)	097° 56' 16" W
Coordinate Source	+/- 5 Seconds
Aquifer Code	218GLRS - Glen Rose Limestone
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	910
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	608
Well Depth Source	Owner
Drilling Start Date	
Drilling End Date	
Drilling Method	
Borehole Completion	Open Hole

Well Type	Withdrawal of Water
Well Use	Unused
Water Level Observation	Miscellaneous Measurements
Water Quality Available	Yes
Pump	None
Pump Depth (feet below land surface)	
Power Type	
Annular Seal Method	
Surface Completion	
Owner	Tom Johnson
Driller	S.W. Glass
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Water Development Board
Created Date	10/22/1998
Last Update Date	3/4/2020

Remarks This is an old well,original drill date unknown. 1st deepened in 1939. Abandoned. Deepened from 483 feet in 1956. Well J-8 in 1957 Travis county report.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
6	Blank	Galvanized Iron			0	40
	Open Hole				40	608

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

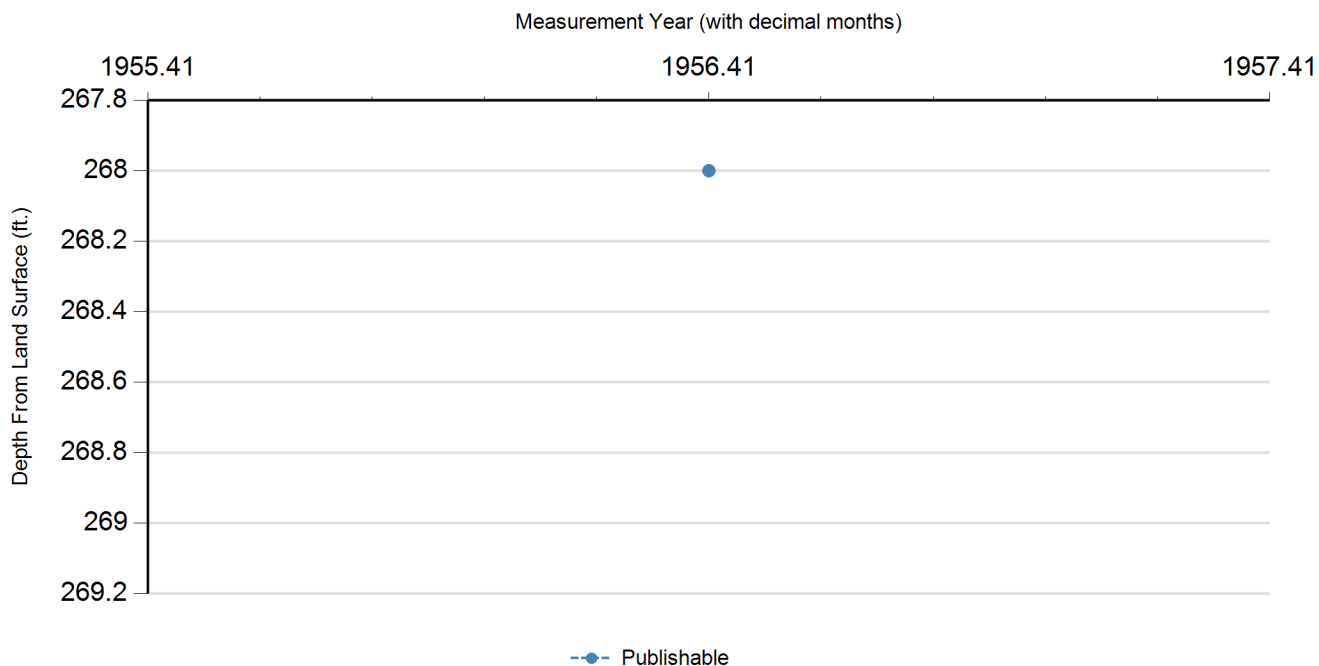
Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements



Status Code	Date	Time	Water Level (ft. below land surface)	Change value in () indicates rise in level	Water Elevation (ft. above sea level)	Meas #	Measuring Agency	Method	Remark ID	Comments
P	4/0/1956		268		642	1	Other or Source of Measurement Unknown	Unknown		

Code Descriptions

Status Code	Status Description
P	Publishable

Water Quality Analysis

Sample Date: 8/27/1937 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** U.S. Geological Survey

Sampled Aquifer: Glen Rose Limestone

Analyzed Lab: WPA

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 CaCO ₃)		375.3	mg/L as CaCO ₃	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		458	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		24	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		405	mg/L as CaCO ₃	
00945	SULFATE, TOTAL (MG/L AS SO ₄)		350	mg/L as SO ₄	

Water Quality Analysis

Sample Date: 8/14/1939 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** U.S. Geological Survey

Sampled Aquifer: Glen Rose Limestone

Analyzed Lab: University of Texas

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)		286.89	mg/L as CaCO3	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		350.11	mg/L	
00910	CALCIUM (MG/L)		284	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		33	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		3	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		1568	mg/L as CaCO3	
00920	MAGNESIUM (MG/L)		209	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.58		
00932	SODIUM, CALCULATED, PERCENT		6	PCT	
00929	SODIUM, TOTAL (MG/L AS Na)	calculated	53	mg/L	
00945	SULFATE, TOTAL (MG/L AS SO4)		1270	mg/L as SO4	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		2024	mg/L	

Water Quality Analysis

Sample Date: 12/14/1949 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** U.S. Geological Survey

Sampled Aquifer: Glen Rose Limestone

Analyzed Lab: U.S. Geological Survey Lab

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)		293.44	mg/L as CaCO3	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		358.1	mg/L	
00910	CALCIUM (MG/L)		256	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		43	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		1543	mg/L as CaCO3	
00920	MAGNESIUM (MG/L)		220	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		4.2	mg/L as NO3	
00400	PH (STANDARD UNITS), FIELD		7.7	SU	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SiO2)		11	mg/L as SiO2	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		1.02		
00932	SODIUM, CALCULATED, PERCENT		11	PCT	
00929	SODIUM, TOTAL (MG/L AS NA)	calculated	92	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		2510	MICR	
00945	SULFATE, TOTAL (MG/L AS SO4)		1330	mg/L as SO4	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		2132	mg/L	

* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

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State Well Number	5841504
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)	30.307778
Latitude (degrees minutes seconds)	30° 18' 28" N
Longitude (decimal degrees)	-97.944445
Longitude (degrees minutes seconds)	097° 56' 40" W
Coordinate Source	+/- 5 Seconds
Aquifer Code	218GLRSU - Glen Rose Limestone, Upper Member
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	910
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	160
Well Depth Source	Owner
Drilling Start Date	
Drilling End Date	0/0/1946
Drilling Method	
Borehole Completion	Open Hole

Well Type	Withdrawal of Water
Well Use	Unused
Water Level Observation	Miscellaneous Measurements
Water Quality Available	Yes
Pump	None
Pump Depth (feet below land surface)	
Power Type	
Annular Seal Method	
Surface Completion	
Owner	E.E. Puryear
Driller	Gus Sanders
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Water Development Board
Created Date	10/22/1998
Last Update Date	3/4/2020

Remarks Well J-7 in 1957 Travis County report.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
10	Blank	Galvanized Iron			0	5
	Open Hole				5	160

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

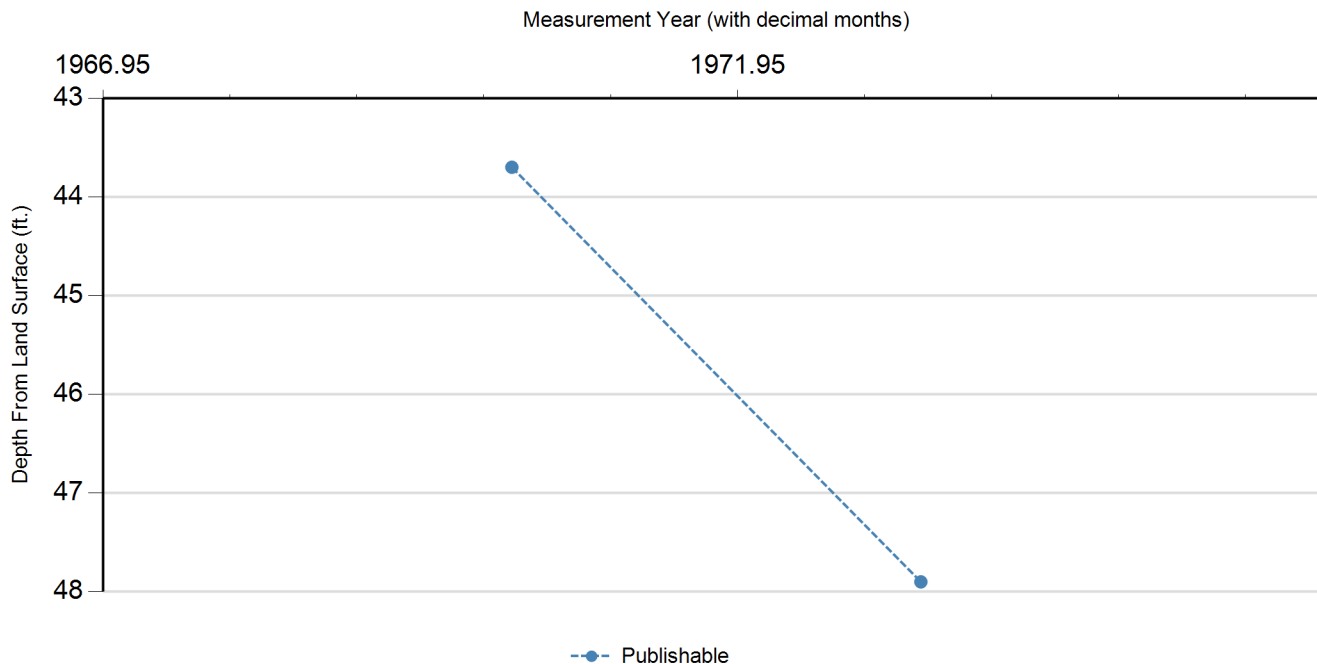
Borehole - No Data

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	3/4/1970		43.7		866.3	1	Other or Source of Measurement Unknown	Unknown		
P	5/25/1973		47.9	4.20	862.1	1	Other or Source of Measurement Unknown	Unknown		

Code Descriptions

Status Code	Status Description
P	Publishable

Water Quality Analysis

Sample Date: 12/14/1949 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** U.S. Geological Survey

Sampled Aquifer: Glen Rose Limestone, Upper Member

Analyzed Lab: U.S. Geological Survey Lab

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 CaCO ₃)		278.69	mg/L as CaCO ₃	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		340.1	mg/L	
00910	CALCIUM (MG/L)		58	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		15	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		358	mg/L as CaCO ₃	
00920	MAGNESIUM (MG/L)		52	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO ₃)		12	mg/L as NO ₃	
00400	PH (STANDARD UNITS), FIELD		7.9	SU	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SiO ₂)		11	mg/L as SiO ₂	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.18		
00932	SODIUM, CALCULATED, PERCENT		4	PCT	
00929	SODIUM, TOTAL (MG/L AS Na)	calculated	8	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		776	MICR	
00945	SULFATE, TOTAL (MG/L AS SO ₄)		58	mg/L as SO ₄	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		381	mg/L	

* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

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State Well Number	5841505
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)	30.309167
Latitude (degrees minutes seconds)	30° 18' 33" N
Longitude (decimal degrees)	-97.945278
Longitude (degrees minutes seconds)	097° 56' 43" W
Coordinate Source	+/- 5 Seconds
Aquifer Code	218GLRSU - Glen Rose Limestone, Upper Member
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	920
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	210
Well Depth Source	Unknown
Drilling Start Date	
Drilling End Date	0/0/1946
Drilling Method	
Borehole Completion	

Well Type	Withdrawal of Water
Well Use	Unused
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	Marvin Hudson
Driller	S.A. Glass
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	
Created Date	
Last Update Date	3/4/2020

Remarks	Well J-5 in 1957 Travis County report.
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Casing						
Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
6	Blank					

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

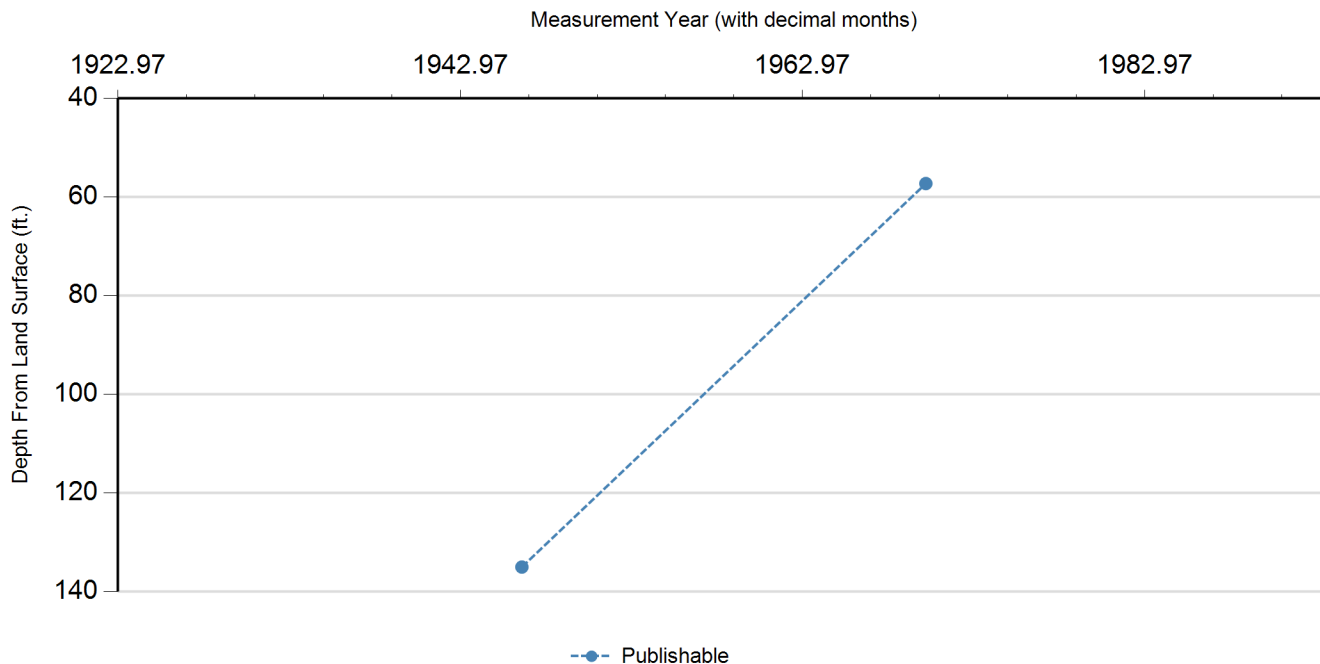
Borehole - No Data

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	6/0/1946		135		785	1	Other or Source of Measurement Unknown	Unknown		
P	3/4/1970		57.3	(77.70)	862.7	1	Other or Source of Measurement Unknown	Unknown		

Code Descriptions

Status Code	Status Description
P	Publishable

Water Quality Analysis - No Data Available

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State Well Number	5841506
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)	30.296389
Latitude (degrees minutes seconds)	30° 17' 47" N
Longitude (decimal degrees)	-97.927222
Longitude (degrees minutes seconds)	097° 55' 38" W
Coordinate Source	+/- 10 Seconds
Aquifer Code	218GLRSU - Glen Rose Limestone, Upper Member
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	813
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	65
Well Depth Source	Unknown
Drilling Start Date	
Drilling End Date	
Drilling Method	
Borehole Completion	

Well Type	Withdrawal of Water
Well Use	Unused
Water Level Observation	None
Water Quality Available	Yes
Pump	Piston
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	Kish
Driller	
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	
Created Date	
Last Update Date	3/4/2020

Remarks Well J-26 in 1957 Travis County report.

Casing						
Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
6	Blank				0	65

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements

No Data Available

Water Quality Analysis

Sample Date: 7/5/1949 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** U.S. Geological Survey

Sampled Aquifer: Glen Rose Limestone, Upper Member

Analyzed Lab: U.S. Geological Survey Lab

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 CaCO ₃)		373.77	mg/L as CaCO ₃	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		456.13	mg/L	
00910	CALCIUM (MG/L)		98	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		22	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		709	mg/L as CaCO ₃	
00920	MAGNESIUM (MG/L)		113	mg/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO ₃)		1.2	mg/L as NO ₃	
00400	PH (STANDARD UNITS), FIELD		7.3	SU	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00955	SILICA, DISSOLVED (MG/L AS SiO ₂)		9	mg/L as SiO ₂	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.23		
00932	SODIUM, CALCULATED, PERCENT		4	PCT	
00929	SODIUM, TOTAL (MG/L AS Na)	calculated	14	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		1260	MICR	
00945	SULFATE, TOTAL (MG/L AS SO ₄)		322	mg/L as SO ₄	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		803	mg/L	

* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

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State Well Number	5841507
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)	30.293056
Latitude (degrees minutes seconds)	30° 17' 35" N
Longitude (decimal degrees)	-97.926111
Longitude (degrees minutes seconds)	097° 55' 34" W
Coordinate Source	+/- 1 Second
Aquifer Code	218GLRS - Glen Rose Limestone
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	760
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	210
Well Depth Source	Unknown
Drilling Start Date	
Drilling End Date	0/0/1927
Drilling Method	
Borehole Completion	Open End

Well Type	Withdrawal of Water
Well Use	Unused
Water Level Observation	Miscellaneous Measurements
Water Quality Available	Yes
Pump	None
Pump Depth (feet below land surface)	
Power Type	
Annular Seal Method	
Surface Completion	
Owner	B.E. Giesecke
Driller	
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	
Created Date	1/12/2010
Last Update Date	3/4/2020

Remarks Abandoned. Well J-27 in 1957 Travis County report.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
6	Blank	Galvanized Iron			0	20
	Open Hole				20	210

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

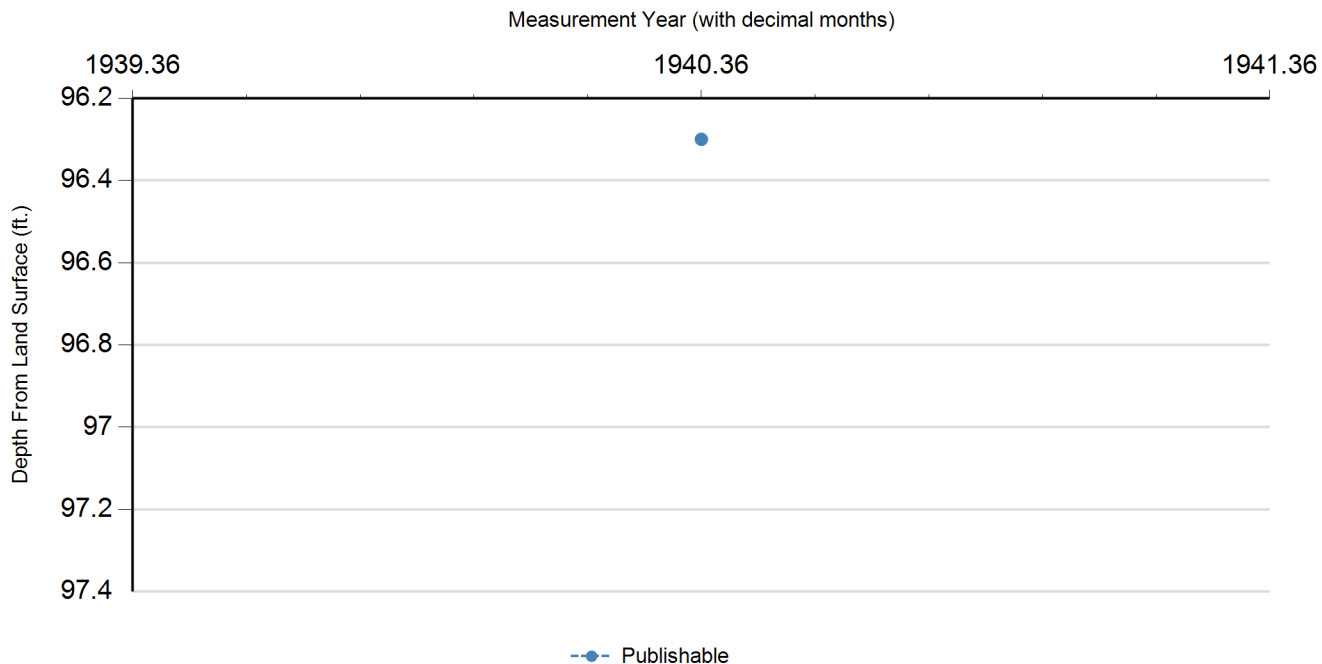
Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements



Status Code	Date	Time	Water Level (ft. below land surface)	Change value in () indicates rise in level	Water Elevation (ft. above sea level)	Meas #	Measuring Agency	Method	Remark ID	Comments
P	5/12/1940		96.3		663.7	1	Other or Source of Measurement Unknown	Unknown		

Code Descriptions

Status Code	Status Description
P	Publishable

Water Quality Analysis

Sample Date: 5/12/1940 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** U.S. Geological Survey

Sampled Aquifer: Glen Rose Limestone

Analyzed Lab: University of Texas

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)		330.33	mg/L as CaCO 3	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		403.12	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)		23	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		5.7	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		569	mg/L as CaCO 3	
00920	MAGNESIUM (MG/L)		88	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		1.04		
00932	SODIUM, CALCULATED, PERCENT		17	PCT	
00929	SODIUM, TOTAL (MG/L AS Na)	calculate d	57	mg/L	
00945	SULFATE, TOTAL (MG/L AS SO4)		302	mg/L as SO4	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		756	mg/L	

* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

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State Well Number	5841508
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)	30.296667
Latitude (degrees minutes seconds)	30° 17' 48" N
Longitude (decimal degrees)	-97.925555
Longitude (degrees minutes seconds)	097° 55' 32" W
Coordinate Source	+/- 5 Seconds
Aquifer Code	218GLRSU - Glen Rose Limestone, Upper Member
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	828
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	120
Well Depth Source	Unknown
Drilling Start Date	
Drilling End Date	
Drilling Method	
Borehole Completion	

Well Type	Withdrawal of Water
Well Use	Domestic
Water Level Observation	None
Water Quality Available	Yes
Pump	Bucket
Pump Depth (feet below land surface)	
Power Type	Hand
Annular Seal Method	
Surface Completion	
Owner	J.M. Smith
Driller	S.W. Glass
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	
Created Date	1/12/2010
Last Update Date	3/4/2020

Remarks	Well J-25 in 1957 Travis County report.
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Casing						
Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
6	Blank				0	10

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: 2/13/1941 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** U.S. Geological Survey

Sampled Aquifer: Glen Rose Limestone, Upper Member

Analyzed Lab: University of Texas

Reliability: From a report; unknown sample collection & preservation

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 CaCO ₃)		369.67	mg/L as CaCO ₃	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		451.13	mg/L	
00910	CALCIUM (MG/L)		110	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		21	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		5.3	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		755	mg/L as CaCO ₃	
00920	MAGNESIUM (MG/L)		117	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.19		
00932	SODIUM, CALCULATED, PERCENT		3	PCT	
00929	SODIUM, TOTAL (MG/L AS Na)	calculated	12	mg/L	
00945	SULFATE, TOTAL (MG/L AS SO ₄)		355	mg/L as SO ₄	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		842	mg/L	

* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

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State Well Number	5841516
County	Travis
River Basin	San Jacinto
Groundwater Management Area	9
Regional Water Planning Area	K - Lower Colorado
Groundwater Conservation District	Southwestern Travis County GCD
Latitude (decimal degrees)	30.2961111
Latitude (degrees minutes seconds)	30° 17' 46" N
Longitude (decimal degrees)	-97.9261111
Longitude (degrees minutes seconds)	097° 55' 34" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	NOT-APPL - Aquifer Code Is Not Applicable to this Well
Aquifer	Unassigned
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	750
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	Surface Water (not a spring)
Well Use	
Water Level Observation	None
Water Quality Available	Yes
Pump	
Pump Depth (feet below land surface)	
Power Type	
Annular Seal Method	
Surface Completion	
Owner	Barton Creek @ Hwy 71
Driller	
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	Groundwater Conservation District
Created Date	10/30/2015
Last Update Date	3/13/2020

Remarks Water quality sample collected 50 ft. upstream of Hwy 71 above USGS gage 08155200. Flow about 1.7 cfs. 8/2015.

Casing - No Data

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements

No Data Available

Water Quality Analysis

Sample Date: 8/28/2015 **Sample Time:** 0910 **Sample Number:** 1 **Collection Entity:** Barton Springs/Edwards Aquifer CD

Sampled Aquifer: Aquifer Code Is Not Applicable to this Well

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
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	<	20	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO ₃)		192	mg/L as CaCO ₃	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)		5.84	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		-1.02	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		36.7	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		234.3	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		124	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.214	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		70.2	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		54.4	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	1	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.19	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		260	mg/L as CaCO ₃	
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)		7.15	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		20.6	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)		2.92	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		1.04	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO ₃)		0.41	mg/L as NO ₃	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		0.0919	mg/L as N	
00400	PH (STANDARD UNITS), FIELD		8.15	SU	

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
58-41-516**

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		2.26	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	4	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		11.1	mg/L as SI02	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.82		
00932	SODIUM, CALCULATED, PERCENT		20	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		30.5	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		673	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		280	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		64.1	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		26.37	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		369	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		1.14	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	4	ug/L	

Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
58-41-516

Water Quality Analysis

Sample Date: 6/16/2016 **Sample Time:** 1105 **Sample Number:** 1 **Collection Entity:** Barton Springs/Edwards Aquifer CD

Sampled Aquifer: Aquifer Code Is Not Applicable to this Well

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		230	mg/L	
00430	ALKALINITY, CARBONATE DISSOLVED (MG/L), LAB	<	20	mg/L	
00420	ALKALINITY, HYDROXIDE DISSOLVED (MG/L), LAB	<	20	mg/L	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	<	20	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO ₃)		240	mg/L as CaCO ₃	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	4	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		7.8341	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		35.3	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		292.883	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		59.6	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.042	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		74.9	mg/L	
28004	CARBON-14 DISS APPARENT AGE (YEARS BP)	>	1950	Y-BP	
82172	CARBON-14 FRACTION MODERN		1.0432		0.0025
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		8.47	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		2.4	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1	ug/L	
82081	DELTA CARBON 13 C13/C12 PER MIL		-10.3	0/00	
50791	DEUTERIUM, EXPRESSED AS PERMIL VSMOW		-24.5	0/00	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.0485	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		273.447	mg/L as CaCO ₃	
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)		5.15	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		20.9	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)		2.38	ug/L	

**Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number
58-41-516**

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	<	1	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		0.987	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		0.223	mg/L as N	
50790	OXYGEN-18, EXPRESSED AS PERMIL VSMOW		-4.7	0/00	
00400	PH (STANDARD UNITS), FIELD		8.48	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)		0.1	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		1.4	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	4	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SiO2)		10.9	mg/L as SiO2	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.495		
00932	SODIUM, CALCULATED, PERCENT		13.032	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		18.8	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		565	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		268	ug/L	
48297	STRONTIUM, ISOTOPE OF MASS 86 AND 87 RATIO		0.7079	N/A	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		16.4	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		27.48	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		297.084	mg/L	
07012	TRITIUM IN WATER (TRITIUM UNITS)		2.31	TU	0.09
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		2	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	4	ug/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
58-41-517**

[GWDB Reports and Downloads](#)

Well Basic Details

[Scanned Documents](#)

State Well Number	5841517
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)	30.2949
Latitude (degrees minutes seconds)	30° 17' 41.64" N
Longitude (decimal degrees)	-97.9570583
Longitude (degrees minutes seconds)	097° 57' 25.41" 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)	1029
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	880
Well Depth Source	Driller's Log
Drilling Start Date	3/26/1995
Drilling End Date	3/27/1995
Drilling Method	Air Rotary
Borehole Completion	Straight Wall

Well Type	Observation
Well Use	Monitor
Water Level Observation	GCD Current Site Visit
Water Quality Available	No
Pump	
Pump Depth (feet below land surface)	
Power Type	
Annular Seal Method	tremie tube-pressure
Surface Completion	Surface Slab Installed
Owner	Jared Beckelman
Driller	
Other Data Available	Drillers Log
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	Groundwater Conservation District
Created Date	8/15/2022
Last Update Date	8/15/2022

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

Casing						
Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
5	Blank	Plastic (PVC)		40	-2	760
5	Open Hole	Other			760	880

Well Tests				
Test Date	Test Type	Yield (gallons per minute)	Drawdown (ft.)	Test Hours
4/1/1995	150			

Lithology

Top Depth (ft.)	Bottom Depth (ft.)	Description
0	1	top soil
1	18	caliche
18	330	grey lime
330	345	broken lime
345	370	grey lime
370	440	broken lime
440	510	grey sandstone
510	590	broken sandstone
590	630	grey shale
630	690	grey sandstone
690	700	red clay
700	750	broken sandstone
750	780	sandstone
780	790	red clay
790	880	broken sandstone

Annular Seal Range

Annular Seal Material	Amount	Unit	Top Depth (ft.)	Bottom Depth (ft.)
Cement	11	Bags/Sacks	0	40

Borehole

Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
7.875	0	20
6.75	20	740
5.625	740	880

Plugged Back - No Data

Filter Pack - No Data

Packers

Packer Type	Depth (ft.)
neoprene	40
neoprene	720

Water Level Measurements

No Data Available

Water Quality Analysis - No Data Available

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State Well Number	5841805
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)	30.29
Latitude (degrees minutes seconds)	30° 17' 24" N
Longitude (decimal degrees)	-97.925278
Longitude (degrees minutes seconds)	097° 55' 31" W
Coordinate Source	+/- 1 Second
Aquifer Code	218GLRSL - Glen Rose Limestone, Lower Member
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	754
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	228
Well Depth Source	Unknown
Drilling Start Date	
Drilling End Date	0/0/1940
Drilling Method	
Borehole Completion	

Well Type	Withdrawal of Water
Well Use	Domestic
Water Level Observation	None
Water Quality Available	Yes
Pump	Submersible
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	Arnold Rombers
Driller	S.W. Glass
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	
Created Date	
Last Update Date	3/4/2020

Remarks Well J-28 in 1957 Travis County report.

Casing - No Data

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements

No Data Available

Water Quality Analysis

Sample Date: 8/15/1940 **Sample Time:** 0000 **Sample Number:** 1 **Collection Entity:** U.S. Geological Survey

Sampled Aquifer: Glen Rose Limestone, Lower Member

Analyzed Lab: University of Texas

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 CaCO ₃)		390.16	mg/L as CaCO ₃	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO ₃)		476.13	mg/L	
00910	CALCIUM (MG/L)		129	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO ₃)		0	mg/L	
00940	CHLORIDE, TOTAL (MG/L AS CL)		29	mg/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		4.4	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO ₃)		906	mg/L as CaCO ₃	
00920	MAGNESIUM (MG/L)		142	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.33		
00932	SODIUM, CALCULATED, PERCENT		5	PCT	
00929	SODIUM, TOTAL (MG/L AS Na)	calculated	23	mg/L	
00945	SULFATE, TOTAL (MG/L AS SO ₄)		493	mg/L as SO ₄	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		1054	mg/L	

* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

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STATE OF TEXAS WELL REPORT for Tracking #13298

Owner:	Harvey Atwell	Owner Well #:	No Data
Address:	P.O. Box 160996 Austin, TX 78716	Grid #:	57-48-3
Well Location:	17135 Majestic Ridge Lakeway, TX 78738	Latitude:	30° 20' 08" N
		Longitude:	098° 00' 04" W
Well County:	Travis	Elevation:	1099 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **8/30/2002** Drilling End Date: **8/31/2002**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	7.875	0	120
	6.75	120	820

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	120	38

Seal Method: **pressure cementing**

Sealed By: **ADC**

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: **520 ft. below land surface on 2002-09-05** Measurement Method: **Unknown**

Packers: **Neoprene/burlap 120 & 680**

Type of Pump: **Submersible** Pump Depth (ft.): **740**

Well Tests: **Estimated** Yield: **55 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
680-820	trinity

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: **Associated Drilling Co.**

**P.O. Box 1060
Manchaca, TX 78652**

Driller Name: **Byron Benoit**

License Number: **1955**

Apprentice Name: **Byron Benoit**

Apprentice Number: **1955**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	3	Topsoil
3	45	caliche
45	130	gray lime
130	160	broken tan lime
160	480	gray lime
480	560	broken tan lime
560	640	gray lime
640	680	shale
680	720	broken red sandstone
720	740	red clay sandstone
740	820	broken red sandstone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5 N Plastic -2 to 820 SDR 17			
Perf. From 680-820			

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 #27447

Owner:	Richard Bright	Owner Well #:	No Data
Address:	3201 Hayden Bend Austin, TX 78738	Grid #:	58-41-7
Well Location:	13449 Saddle Back Pass Austin, TX 78736	Latitude:	30° 17' 23" N
Well County:	Travis	Longitude:	097° 57' 57" W
		Elevation:	1324 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **4/4/2003**

Drilling End Date: **4/7/2003**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	8	0	50
	7	50	350
	6.75	350	800

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	30	

Seal Method: **Gravity**

Sealed By: **ADC**

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: **535 ft. below land surface on 2003-04-11** Measurement Method: **Unknown**

Packers: **Neoprene/burlap 30 & 700**

Type of Pump: **Submersible** Pump Depth (ft.): **640**

Well Tests: **Estimated** Yield: **30 GPM**

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
700-800	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: **James Benoit**

License Number: **4064**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	18	white limestone
18	400	blue lime
400	515	tan limestone
515	590	tan sandstone
590	610	gray limestone
610	625	gray shale
625	690	gray sandstone
690	800	red trinity sandstone

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
4.5	New	PLastic	-2 to 800 SDR 17
perf. from 700-800			

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

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

STATE OF TEXAS WELL REPORT for Tracking #28025

Owner:	JUAQUIN KETCHBAW	Owner Well #:	001
Address:	PO BOX 28207 AUSTIN, TX 78755	Grid #:	58-41-4
Well Location:	15601 HAMILTON POOL RD. AUSTIN, TX 78738	Latitude:	30° 18' 21" N
		Longitude:	097° 59' 28" W
Well County:	Travis	Elevation:	995 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **9/16/2003** Drilling End Date: **9/17/2003**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	10	0	13
	7	13	670

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	570	670	Gravel	

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	10	12 CEMENT
	555	570	2 HOLE PLUG

Seal Method: **SLURRIED & POURED**

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

Sealed By: **GREG SVETLIK**

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: **385 ft. below land surface on 2003-09-19** Measurement Method: **Unknown**

Packers: **PLASTIC 10**

Type of Pump: **Submersible** Pump Depth (ft.): **620**

Well Tests: **Jetted** **Yield: 50 GPM**

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **BEE CAVE DRILLING, INC.**
185 ANGELFIRE DR.
DRIPPING SPRINGS, TX 78620

Driller Name: **JIM BLAIR** License Number: **54416**

Apprentice Name: **GREG SVETLIK** Apprentice Number: **WWDAPP00001**
734

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	4	TOPSOIL
4	22	CALICHE
22	77	GREY LIMESTONE
77	85	GREY SHALE
85	140	GREY LIMESTONE
140	145	GREY SHALE
145	158	GREY LIMESTONE
158	165	GREY SHALE
165	235	LIGHT GREY LIMESTONE
235	255	GREY CLAY
255	315	GREY LIMESTONE
315	390	LIGHT GREY LIMESTONE
390	425	GREY LIMESTONE
425	463	LIGHT GREY LIMESTONE
463	486	WHITE ROCK W/B 10 GPM
486	525	GREY LIMESTONE
525	533	GREY SHALE

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
4.5	NEW	PLASTIC	0 - 590
4.5	NEW	SCREEN MFG.	590 - 650 .10
4.5	NEW	PLASTIC	650 - 670

533	540	GREY LIMESTONE
540	545	GREY SHALE
545	560	GREY LIMESTONE
560	568	DARK GREY SHALE
568	585	GREY LIMESTONE
585	600	BLUE SHALE
600	670	COURSE SAND & PINK ROCK W/B 50 GPM

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 #28035

Owner:	SHADOWLAKE BUILDERS	Owner Well #:	020
Address:	5004 BEE CREEK RD. SPICEWOOD, TX 78669	Grid #:	57-48-3
Well Location:	BEE CREEK RD. @ 71 W. SPICEWOOD, TX 78669	Latitude:	30° 20' 06" N
Well County:	Travis	Longitude:	098° 01' 28" W
		Elevation:	940 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **9/23/2003** Drilling End Date: **9/23/2003**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	10	0	13
	7	13	430

Drilling Method: **Air Hammer**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	330	430	Gravel	

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	10	12 CEMENT
	315	330	2 HOLE PLUG

Seal Method: **SLURRIED & POURED**

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

Sealed By: **GREG SVETLIK**

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: **273 ft. below land surface on 2003-09-24** Measurement Method: **Unknown**

Packers: **PLASTIC 10**

Type of Pump: **Submersible** Pump Depth (ft.): **400**

Well Tests: **Jetted** Yield: **60 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: **JIM BLAIR**

License Number: **54416**

Apprentice Name: **GREG SVETLIK**

Apprentice Number: **WWDAPP00001**
734

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOPSOIL
1	22	CALICHE W/ SHELF ROCK
22	42	GREY LIMESTONE
42	46	TAN CLAY
46	185	GREY LIMESTONE
185	198	LIGHT GREY ROCK
198	200	GREY SHALE
200	208	GREY LIMESTONE
208	228	LIGHT GREY & TAN LIMESTONE W/B 7 GPM
228	275	GREY LIMESTONE
275	320	LIGHT GREY LIMESTONE
320	360	GREY LIMESTONE
360	405	LIGHT GREY LIMESTONE
405	425	WHITE ROCK W/B 60 GPM
425	430	GREY LIMESTONE

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 - 430

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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 #29997

Owner: **TOLL BROTHERS**
Address: **907 S. RR 620 STE. 200
AUSTIN, TX 78734**
Well Location: **111 ARIA DR.
LAKEWAY, TX 78734**
Well County: **Travis**

Owner Well #: **No Data**
Grid #: **58-41-4**
Latitude: **30° 19' 53" N**
Longitude: **097° 57' 36" W**
Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **10/14/2003** Drilling End Date: **10/14/2003**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	20
	6	20	900

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	5 CEM

Seal Method: **Slurry**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **135**

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

Method of Verification: **OWNER**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **4 PVC & BURLAP 20-570-580-600**

Type of Pump: **Submersible**

Well Tests: **Jetted** Yield: **15 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**
2520 HWY 290 WEST
DRIPPING SPRINGS, TX 78620

Driller Name: **FRANK GLASS**

License Number: **1313**

Comments: **REVISED**
DG

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	15	CALICHE
15	70	BLUE LIME
70	255	GRAY LIME
255	260	SOAP STONE WHITE
260	345	GRAY LIME
345	400	BROWN LIME
400	460	GRAY LIME
460	500	TAN LIME
500	515	GRAY LIME
515	560	HAMMID
560	585	BROWN
585	815	TRINITY
815	900	BLACK SHOLE

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5	N	PLASTIC	+2-900

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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 #29998

Owner: **TOLL BROTHERS**
Address: **907 S. RR 620 STE. 200
AUSTIN, TX 78734**
Well Location: **111 ARIA DR.
LAKEWAY, TX 78734**
Well County: **Travis**

Owner Well #: **No Data**
Grid #: **58-41-4**
Latitude: **30° 19' 44" N**
Longitude: **097° 57' 48" W**
Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **10/14/2003** Drilling End Date: **10/14/2003**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	20
	6	20	900

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	5 CEM

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: **3 PVC & BURLAP 20-700-710**

Type of Pump: **Submersible**

Well Tests: **Jetted** Yield: **15 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
35	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**
2520 HWY 290 WEST
DRIPPING SPRINGS, TX 78620

Driller Name: **FRANK GLASS** License Number: **1313**

Comments: **REVISED**
DG

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	4	FILL
4	16	CALICHE
16	70	BLUE LIME
70	180	GRAY LIME
180	215	BROWN LIME
215	410	GRAY LIME
410	430	BROWN LIME
430	500	GRAY & BROWN LIME
500	560	TAN LIME
560	570	GRAY LIME
570	620	HAMMID
620	710	BROWN SANDSTONE
710	810	TRINITY

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5 N	PLASTIC	+2-810	SDR-17

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

STATE OF TEXAS WELL REPORT for Tracking #33901

Owner:	GREG CUSACK	Owner Well #:	No Data
Address:	322 EXPLORER AUSTIN, TX 78734	Grid #:	58-41-4
Well Location:	3406 PAWNEE PASS AUSTIN, TX	Latitude:	30° 19' 57" N
Well County:	Travis	Longitude:	097° 58' 44" W
		Elevation:	1045 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **1/28/2004** Drilling End Date: **1/30/2004**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	10	0	13
	7	13	750

Drilling Method: **Air Hammer**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	650	750	Gravel	

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	10	6 CEMENT
	635	650	2 HOLE PLUG

Seal Method: **SLURRIED & POURED**

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

Sealed By: **GREG SVETLIK**

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:	492 ft. below land surface on 2004-02-02	Measurement Method:	Unknown
Packers:	1 PLASTIC 10		
Type of Pump:	Submersible	Pump Depth (ft.):	700
Well Tests:	Jetted	Yield:	25 GPM

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **BEE CAVE DRILLING, INC.**
185 ANGELFIRE DR.
DRIPPING SPRINGS, TX 78620

Driller Name: **JIM BLAIR** License Number: **54416**

Apprentice Name: **GREG SVETLIK** Apprentice Number: **WWDAPP00001**
734

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	1	TOPSOIL
1	10	CALICHE
10	530	GREY LIMESTONE
530	560	WHITE ROCK W/B 10 GPM
560	570	LT GREY LIMESTONE
570	582	GREY LIMESTONE
582	640	GREY SHALE / LIMESTONE MIX
640	668	GREY LIMESTONE
668	675	RED CLAY
675	683	TAN & WHITE ROCK
683	750	PINK ROCK W/B 25 GPM

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
4.5	NEW	PLASTIC	0 - 683
4.5	NEW	SCREEN MFG	683 - 743 .10
4.5	NEW	PLASTIC	743 - 750

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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 #37101

Owner: **TXDOT**

Owner Well #: **EN-1**

Address: **125 E. 11TH
AUSTIN, TX 78701**

Grid #: **58-41-4**

Well Location: **14417-A W. HWY 71
BEE CAVE, TX 78733**

Latitude: **30° 18' 37" N**

Longitude: **097° 58' 00" W**

Well County: **Travis**

Elevation: **No Data**

****Plugged Within 48 Hours****

****This well has been plugged****

Plugging Report Tracking #109232

Type of Work: **New Well**

Proposed Use: **Environmental Soil Boring**

Drilling Start Date: **1/26/2004**

Drilling End Date: **1/26/2004**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	4.75	0	7

Drilling Method: **Air Rotary**

Borehole Completion: **ABANDONED**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

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

Sealed By: **Unknown**

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**

	<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Plug Information:	NO CASING 0-6 CEMENT-2		
	6-7 BENTONITE-1		

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **GEOPROJECTS INTERNATIONAL,INC**
8834 CIRCLE DRIVE
AUSTIN, TX 78736

Driller Name: **AMADOR HINOJOSA**

License Number: **2897**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	0.3	TOP SOIL,DK BROWN
0.3	2.8	DK BROWN FILL
2.8	7	SANDY CLAY, PALE YELLOW

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

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

STATE OF TEXAS WELL REPORT for Tracking #37105

Owner: **TXDOT**

Owner Well #: **EN-2**

Address: **125 E. 11TH
AUSTIN, TX 78701**

Grid #: **58-41-4**

Well Location: **14417-A W. HWY 71
BEE CAVE, TX 78733**

Latitude: **30° 18' 36" N**

Longitude: **097° 58' 00" W**

Well County: **Travis**

Elevation: **No Data**

****Plugged Within 48 Hours****

****This well has been plugged****

Plugging Report Tracking #109233

Type of Work: **New Well**

Proposed Use: **Environmental Soil Boring**

Drilling Start Date: **1/26/2004**

Drilling End Date: **1/26/2004**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	4.75	0	8

Drilling Method: **Air Rotary**

Borehole Completion: **ABANDONED**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

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

Sealed By: **Unknown**

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**

	<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Plug Information:	NO CASING 0-7 CEMENT-2		
	7-8 BENTONITE-1		

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: **GEOPROJECTS INTERNATIONAL,INC**
8834 CIRCLE DRIVE
AUSTIN, TX 78736

Driller Name: **AMADOR HINOJOSA**

License Number: **2897**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	ASPHALT
1	2.5	SANDY CLAY,PALE YELLOW
2.5	3	DK BROWN FILL (CLAY)
3	8	SANDY CLAY,REDDISH YELLOW

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

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 #37106

Owner: **TXDOT**

Owner Well #: **EN-3**

Address: **125 E. 11TH
AUSTIN, TX 78701**

Grid #: **58-41-4**

Well Location: **14417-A W. HWY 71
BEE CAVE, TX 78733**

Latitude: **30° 18' 36" N**

Longitude: **097° 58' 59" W**

Well County: **Travis**

Elevation: **No Data**

****Plugged Within 48 Hours****

****This well has been plugged****

Plugging Report Tracking #109234

Type of Work: **New Well**

Proposed Use: **Environmental Soil Boring**

Drilling Start Date: **1/26/2004**

Drilling End Date: **1/26/2004**

Borehole:

<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
4.75	0	8

Drilling Method: **Air Rotary**

Borehole Completion: **ABANDONED**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

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

Sealed By: **Unknown**

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:

<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
NO CASING 0-6.5 CEMENT-2		
6.5-7.5BENTONITE-1		

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **GEOPROJECTS INTERNATIONAL, INC**
8834 CIRCLE DRIVE
AUSTIN, TX 78736

Driller Name: **AMADOR HINOJOSA**

License Number: **2897**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	0.5	ASPHALT
0.5	7.5	SANDY CLAY, PALE YELLOW

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

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

STATE OF TEXAS WELL REPORT for Tracking #37108

Owner: TXDOT

Owner Well #: FA-1

Address: 125 E. 11TH
AUSTIN, TX 78701

Grid #: 58-41-4

Well Location: 14211 W. HWY 71
BEE CAVE, TX 78733

Latitude: 30° 18' 34" N

Longitude: 097° 57' 48" W

Well County: Travis

Elevation: No Data

****Plugged Within 48 Hours****

****This well has been plugged****

Plugging Report Tracking #109235

Type of Work: New Well

Proposed Use: Environmental Soil Boring

Drilling Start Date: 1/26/2004

Drilling End Date: 1/26/2004

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	4.75	0	9

Drilling Method: Air Rotary

Borehole Completion: ABANDONED

Annular Seal Data: No Data

Seal Method: Not Applicable

Distance to Property Line (ft.): No Data

Sealed By: Unknown

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

	<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Plug Information:	NO CASING 0-8 CEMENT-2		
	8-9 BENTONITE-1		

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **GEOPROJECTS INTERNATIONAL,INC**
8834 CIRCLE DRIVE
AUSTIN, TX 78736

Driller Name: **AMADOR HINOJOSA**

License Number: **2897**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	2	ASPHALT
2	8	SANDY CLAY,BROWN
8	9	CLAYEY SAND,PALE YELLOW

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

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

STATE OF TEXAS WELL REPORT for Tracking #37109

Owner: **TXDOT**

Owner Well #: **FA-2**

Address: **125 E. 11TH
AUSTIN, TX 78701**

Grid #: **58-41-4**

Well Location: **14211 W. HWY 71
BEE CAVE, TX 78733**

Latitude: **30° 18' 34" N**

Longitude: **097° 57' 48" W**

Well County: **Travis**

Elevation: **No Data**

****Plugged Within 48 Hours****

****This well has been plugged****

Plugging Report Tracking #109236

Type of Work: **New Well**

Proposed Use: **Environmental Soil Boring**

Drilling Start Date: **1/26/2004**

Drilling End Date: **1/26/2004**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	4.75	0	6

Drilling Method: **Air Rotary**

Borehole Completion: **ABANDONED**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

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

Sealed By: **Unknown**

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**

	<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Plug Information:	NO CASING 0-5 CEMENT-2		
	5-6 BENTONITE-1		

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **GEOPROJECTS INTERNATIONAL,INC**
8834 CIRCLE DRIVE
AUSTIN, TX 78736

Driller Name: **AMADOR HINOJOSA**

License Number: **2897**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	1.5	ASPHALT
1.5	4	SANDY CLAY,BROWN
4	6	SANDY CLAY,PALE YELLOW

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

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

STATE OF TEXAS WELL REPORT for Tracking #37110

Owner: **TXDOT**

Owner Well #: **FA-3**

Address: **125 E. 11TH
AUSTIN, TX 78701**

Grid #: **58-41-4**

Well Location: **14211 W. HWY 71
BEE CAVE, TX 78733**

Latitude: **30° 18' 34" N**

Longitude: **097° 57' 47" W**

Well County: **Travis**

Elevation: **No Data**

****Plugged Within 48 Hours****

****This well has been plugged****

Plugging Report Tracking #109237

Type of Work: **New Well**

Proposed Use: **Environmental Soil Boring**

Drilling Start Date: **1/26/2004**

Drilling End Date: **1/26/2004**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	4.75	0	6

Drilling Method: **Air Rotary**

Borehole Completion: **ABANDONED**

Annular Seal Data: **No Data**

Seal Method: **Not Applicable**

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

Sealed By: **Unknown**

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**

	<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Plug Information:	NO CASING 0-5 CEMENT-2		
	5-6 BENTONITE-1		

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **GEOPROJECTS INTERNATIONAL,INC**
8834 CIRCLE DRIVE
AUSTIN, TX 78736

Driller Name: **AMADOR HINOJOSA**

License Number: **2897**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	0.5	ASPHALT
0.5	2.5	SAND CLAY,LT REDDISH BROWN
2.5	6	SANDY CLAY,BROWN

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

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

STATE OF TEXAS WELL REPORT for Tracking #37375

Owner:	Doug Osborne	Owner Well #:	No Data
Address:	13151 Humphrey Drive Austin, TX 78729	Grid #:	58-41-4
Well Location:	4000 Peak Lookout Drive Austin, TX 78735	Latitude:	30° 19' 41" N
Well County:	Travis	Longitude:	097° 58' 34" W
		Elevation:	1195 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **11/18/2002** Drilling End Date: **11/19/2002**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	7.875	0	100
	7	100	640
	6.75	640	960

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	120	38

Seal Method: **pressure cementing**

Sealed By: **ADC**

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:	614 ft. below land surface on 2002-11-22	Measurement Method:	Unknown
Packers:	Neoprene/Burlap 120 & 780		
Type of Pump:	Submersible	Pump Depth (ft.):	760
Well Tests:	Estimated	Yield:	35 GPM

Water Quality:

Strata Depth (ft.)	Water Type
780-960	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: **Byron Benoit**

License Number: **1955**

Comments: **Talked to David about this report being so late.
JONI**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	topsoil
2	50	tan-white sandstone
50	200	gray lime
200	280	broken gray lime
280	400	gray lime-shale
400	560	broken tan-gray lime
560	640	gray lime-shale
640	720	broken tan sandstone
720	780	Shale
780	820	broken red sandstone
820	840	red clay-sandstone
840	920	broken red sandstone
920	960	yellow clay-purple sandstone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	New	PLastic	-2 to 960 sch 40
			perf. from 780-960

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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 #43978

Owner: **Jim Ross**

Owner Well #: **No Data**

Address: **11601 Juniper Ridge Road
Austin, TX 78759**

Grid #: **58-41-5**

Well Location: **Astoria
Austin, TX 78733**

Latitude: **30° 18' 17" N**

Longitude: **097° 55' 11" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **9/24/2003**

Drilling End Date: **10/24/2003**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	12	0	20
	6.5	20	345

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	8 cement

Seal Method: **Hand Poured**

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

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **109**

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

Method of Verification: **Tape Measure**

Surface Completion: **Surface Sleeve Installed**

Water Level: **190 ft. below land surface on 2003-10-24** Measurement Method: **Unknown**

Packers: **Shale Catcher 230'**

Type of Pump: **Submersible**

Pump Depth (ft.): **260**

Well Tests: **Estimated** Yield: **40 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: **\$dfs**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	19	Brown Limestone
19	39	Blue Limestone
39	114	Gray Limestone
114	120	Blue Limestone
120	135	Brown Limestone
135	230	Gray Limestone
230	275	Brown and White Limestone
275	345	Gray Limestone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
8	New	Plastic	0 20
4 1/2	New	Plastic	5 345
Perf.	265	285	

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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 #45605

Owner: **PETE STROBEL & ASSOC.**
Address: **P. O. BOX 1118
DRIPPING SPRINGS,, TX 78620**
Well Location: **4008 PEAK LOOKOUT
AUSTIN, TX**
Well County: **Travis**

Owner Well #: **No Data**
Grid #: **58-41-4**
Latitude: **30° 19' 22" N**
Longitude: **097° 58' 22" W**
Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **9/6/2004**

Drilling End Date: **9/7/2004**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9.5	0	100
	6.75	100	970

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	7 CEMENT
	0	100	20 CLAY

Seal Method: **PRESSURE TRIMMY
CEMENTING**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

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 100', 110', 770', 790', 830'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 30 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: **CENTRAL TEXAS DRILLING**
2520 HWY. 290 WEST
DRIPPING SPRINGS, TX 78620

Driller Name: **AARON GLASS** License Number: **4227**

Comments: **Amended 9-28-04 Ref#402**

Report Amended on by Request #402

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	50	CALICHE
50	55	BLUE LIME
55	350	GRAY LIME
350	410	GRAY/TAN LIME
410	450	TAN LIME
450	690	GRAY LIME
690	710	GRAY W/TAN LIME
710	740	GRAY LIME
740	765	HAMMID LIME
765	780	HAMMID CLAY/RED CLAY
780	820	GRAY/TAN LIME
820	830	RED W/BUE SHELL
830	870	RED LIME
870	940	RED SAND
940	970	RED W/TAN LIME

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5	OD	N PVC	+2 TO 970 .020

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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 #48727

Owner:	Don Mitchem	Owner Well #:	No Data
Address:	3519 south Pawnee Pass Lakeway, TX 78738	Grid #:	58-41-4
Well Location:	3519 south Pawnee Pass Lakeway, TX 78738	Latitude:	30° 19' 57" N
Well County:	Travis	Longitude:	097° 58' 38" W
		Elevation:	1107 ft. above sea level
Type of Work:	Replacement	Proposed Use:	Domestic

Drilling Start Date: **9/17/2004** Drilling End Date: **9/19/2004**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	40
	7	40	420
	6.75	420	860

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	40	15

Seal Method: **gravity flow**

Distance to Property Line (ft.): **200+**

Sealed By: **adc**

Distance to Septic Field or other
concentrated contamination (ft.): **200+**

Variance Number: **n/a**

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

Method of Verification: **est.**

Surface Completion: **Surface Sleeve Installed**

Water Level: **560 ft. below land surface on 2004-09-23** Measurement Method: **Unknown**

Packers: **neoprene/burlap 40
shale trap 740**

Type of Pump: **Submersible** Pump Depth (ft.): **700**

Well Tests: **Jetted** Yield: **40 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
780-860	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: **4064 wi james benoit**

License Number: **4064**

Comments: **5s20-39ds b08110039-p10241us6**
0422 / 794545506

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	18	white limestone
18	410	bluish lime and clay mix
410	530	tan limestone
530	580	grey limestone
580	600	grey sandstone
600	630	grey clay/shale
630	680	grey white sandstone/limestone
680	820	red sandstone
820	860	multi-color limestones

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5"	new	sdr17	-3 to 860
slotted 780-840			

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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 #48731

Owner:	Don Mitchem	Owner Well #:	No Data
Address:	3519 south Pawnee Pass Lakeway, TX 78738	Grid #:	58-41-4
Well Location:	3519 south Pawnee Pass Lakeway, TX 78738	Latitude:	30° 19' 57" N
Well County:	Travis	Longitude:	097° 58' 38" W
		Elevation:	1107 ft. above sea level
Type of Work:	Replacement	Proposed Use:	Domestic

Drilling Start Date: **9/17/2004** Drilling End Date: **9/19/2004**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	8	0	40
	7	40	420
	6.75	420	860

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	40	15

Seal Method: **gravity flow**

Distance to Property Line (ft.): **200+**

Sealed By: **adc**

Distance to Septic Field or other
concentrated contamination (ft.): **200+**

Variance Number: **n/a**

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

Method of Verification: **est.**

Surface Completion: **Surface Sleeve Installed**

Water Level: **560 ft. below land surface on 2004-09-23** Measurement Method: **Unknown**

Packers: **neoprene/burlap 40**
shale trap 740

Type of Pump: **Submersible** Pump Depth (ft.): **700**

Well Tests: **Jetted** Yield: **40 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
780-860	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: **4064 wi james benoit**

License Number: **4064**

Comments: **5s20-39ds b08110039-p10241us6**
0422 / 794545506

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	18	white limestone
18	410	bluish lime and clay mix
410	530	tan limestone
530	580	grey limestone
580	600	grey sandstone
600	630	grey clay/shale
630	680	grey white sandstone/limestone
680	820	red sandstone
820	860	multi-color limestones

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5"	new	sdr17	-3 to 860
slotted 780-840			

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 #53355

Owner:	JIM WEEMS	Owner Well #:	No Data
Address:	16327 FLINTROCK RD. AUSTIN, TX 78734	Grid #:	58-41-4
Well Location:	16327 FLINTROCK RD. AUSTIN, TX 78734	Latitude:	30° 19' 27" N
Well County:	Travis	Longitude:	097° 59' 15" W
		Elevation:	846 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **1/4/2005**

Drilling End Date: **1/5/2005**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	13	13	790
	10	0	13

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	690	790	Gravel	

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	12 CEMENT
	685	690	2 HOLE PLUG

Seal Method: **PRESSURE CEMENTED**

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

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **200**

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

Method of Verification: **STEEL TAPE**

Surface Completion: **Surface Sleeve Installed**

Water Level: **515 ft. below land surface on 2005-01-06** Measurement Method: **Unknown**

Packers: **PLASTIC 100**

Type of Pump: **Submersible** Pump Depth (ft.): **640**

Well Tests: **Jetted** Yield: **12 GPM**

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **BEE CAVE DRILLING, INC.**
185 ANGELFIRE DR.
DRIPPING SPRINGS, TX 78620

Driller Name: **MARTIN LINGLE** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	20	BROWN CLAY
20	540	BLUE LIMESTONE
540	580	GREY SANDSTONE
580	650	GREY LIMESTONE
650	720	RED SANDSTONE, BLACK ROCK W/ YELLOW CLAY
720	790	LIMESTONE W/ LAYERS OF SAND

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
4.5	NEW	PLASTIC	0 - 725
4.5	NEW	SCREEN MFG.	725 - 785 .50
4.5	NEW	PLASTIC	785 - 790

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Texas Department of Licensing and Regulation
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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #60485

Owner:	Dennis Cook	Owner Well #:	1
Address:	5604 Southwest Parkway Austin, TX 78735	Grid #:	58-41-1
Well Location:	3413 Serene Hill Ct. Austin, TX 78738	Latitude:	30° 20' 29" N
Well County:	Travis	Longitude:	097° 59' 54" W
		Elevation:	1022 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **1/14/2005** Drilling End Date: **1/16/2005**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	20
	7	20	860

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	5

Seal Method: **Gravity**

Sealed By: **ADC**

Distance to Property Line (ft.): **150**

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

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

Method of Verification: **measured**

Surface Completion: **Surface Sleeve Installed**

Water Level: **377 ft. below land surface on 2005-01-18** Measurement Method: **Unknown**

Packers: **neophrene 20'**
neophrene 780'

Type of Pump: **Submersible** Pump Depth (ft.): **740**

Well Tests: **Estimated** Yield: **40 GPM**

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
780-860	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: **A**
Po Box 1060
Manchaca, TX 78652

Driller Name: **James Benoit** License Number: **4064**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	1	black topsoil
1	20	tan caliche
20	320	gray limestone
320	420	sandstone
420	520	tan limestone
520	560	red sandstone/ clay
560	640	sandstone
640	780	gray limestone
780	860	broken red sandstone

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
4.5	new	plastic -2	860 SDR 17
perf. from 780' to 860'			

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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 #64375

Owner:	Rick Skinner c/o Action Water Wells	Owner Well #:	1
Address:	100 Spanish Oak Trail Spicewood, TX 78669	Grid #:	58-41-4
Well Location:	Pawnee Pass TX	Latitude:	30° 19' 45" N
Well County:	Travis	Longitude:	097° 58' 44" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **3/25/2005** Drilling End Date: **3/25/2005**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	20
	6	20	880

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	4 Portland

Seal Method: **Slurry**

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

Sealed By: **Driller**

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

Variance Number: **n/a**

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

Method of Verification: **landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Burlap 685', 680', 20'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 40 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
685-875	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: **APEX Drilling Inc.**
PO Box 867
Marble Falls, TX 78654

Driller Name: **Michael G Becker, P.G.** License Number: **54516**

Comments: **Amended 8/10/05 ref#1899**

Report Amended on by Request #1899

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	12	Caliche
12	120	Blue Limestone
120	180	Tan Limestone
180	220	Gray Limestone with Clay
220	390	Gray & Tan Limestone
390	480	Tan Limestone
480	530	Gray Limestone
530	610	Tan Limestone
610	630	Gray Limestone with Clay
630	665	Clay-Hammid
665	685	Gray Sandstone w/ White Limestone
685	800	Red Sandstone
800	855	Gravel
855	865	White Limestone
865	875	Gravel
875	880	White Limestone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5"	New	PVC +2 to 800	SDR17
4.5"	New	Screen	800 to 880

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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 #74002

Owner:	Summit Builders	Owner Well #:	1
Address:	Po Box 340277 Austin, TX 78734	Grid #:	58-41-4
Well Location:	3700 Wild Cherry Austin, TX 78738	Latitude:	30° 19' 50" N
Well County:	Travis	Longitude:	097° 58' 37" W
		Elevation:	1113 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **1/3/2006**

Drilling End Date: **1/5/2006**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8.5	0	120
	7	120	950

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	120	28

Seal Method: **Tremie**

Distance to Property Line (ft.): **40**

Sealed By: **ADC**

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: **587 ft. below land surface on 2006-01-09** Measurement Method: **Unknown**

Packers: **neophrene 120
neophrene 800**

Type of Pump: **Submersible** Pump Depth (ft.): **760**

Well Tests: **Estimated** Yield: **20 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
800'-930'	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: **James Benoit / 4064wi**

License Number: **4064**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	black topsoil
1	20	tan caliche
20	460	gray limestone
460	500	tan limestone (broken)
500	740	gray limestone
740	800	shale
800	930	broken red sandstone
930	950	hard tan limestone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	plastic	-2 950 SDR 17
		mill slotted	800'- 900'

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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 #77018

Owner: **Gary Simon**

Owner Well #: **1**

Address: **17003 Flint Rock Rd
Austin, TX 78738**

Grid #: **57-48-3**

Well Location: **17204 Flint Rock Rd
Austin, TX 78738**

Latitude: **30° 20' 01" N**

Longitude: **098° 00' 19" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **9/9/2005**

Drilling End Date: **9/10/2005**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	20
	6	20	875

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	4 Portland

Seal Method: **Slurry**

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

Sealed By: **APEX Drilling**

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 690', 680', 20'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 35 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
675 to 875	Trintiy

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: **Amended 2/23/06 Ref.#3007**

Report Amended on by Request #3007

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	32	Tan LS
32	320	Tan & Gry LS
320	440	Tan LS
440	620	Tan & Gry LS
620	675	Gry LS w/ Clay
675	700	Red Clay w/ Sand (H2O)
700	710	Gravel
710	755	Red Sand
755	785	Tan LS
785	840	Red SS
840	860	Wht LS
860	875	Gravel

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5"	New	PVC +2 to 875	SDR17

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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 #77384

Owner: **TOLL BROTHERS**

Owner Well #: **No Data**

Address: **8716 N. Mopac, Suite 100
Austin, TX 78759**

Grid #: **58-41-4**

Well Location: **101 1/2 Aria Drive
Austin, TX 78738**

Latitude: **30° 19' 44" N**

Longitude: **097° 57' 46" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **12/30/2005**

Drilling End Date: **12/30/2005**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6	100	810

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	27

Seal Method: **Pressure trimmy**

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

Sealed By: **Central Texas Drilling**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

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

Method of Verification: **Owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **4 PVC & Burlap at 100', 660', 700', 710'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 20-30 GPM**

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
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 Co.**
500 Southland Drive
Burnet, TX 78611

Driller Name: **Frank Glass**

License Number: **1313**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	1	Top soil
1	17	Caliche
17	90	Blue lime
90	340	Gray lime
340	400	Brown lime
400	610	Gray & brown lime strips sandstone
610	660	Hammond
660	700	Brown sandstone
700	810	Trinity 20-30 gpm

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
5" OD New Plastic +2-810 (SDR 17 - 750' & 60' Screen)			

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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 #89573

Owner:	Joe Himelick	Owner Well #:	2
Address:	11701 Overlook Pass Austin, TX 78738	Grid #:	58-41-8
Well Location:	11701 Overlook Pass Austin, TX 78738	Latitude:	30° 17' 06" N
Well County:	Travis	Longitude:	097° 56' 04" W
		Elevation:	876 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **7/20/2006** Drilling End Date: **7/29/2006**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	160
	7	160	725

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	160	32

Seal Method: **Tremie**

Sealed By: **ADC**

Distance to Property Line (ft.): **100**

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: **320 ft. below land surface on 2006-07-30** Measurement Method: **Unknown**

Packers: **neophrene 670'**
neophrene 160'

Type of Pump: **Submersible** Pump Depth (ft.): **600**

Well Tests: **Estimated** Yield: **50 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
670-725	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: **Byron Benoit**

License Number: **1955**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	4	white chalk
4	22	tan lime
22	230	gray lime
230	310	gray lime
310	415	gray sandstone
415	500	broken gray lime
500	660	gray lime
660	670	gray lime
670	725	trinity sandstone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	plastic	-2 725 SDR17
		mill slotted	670-675

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #91305

Owner: **Fred Edlin**

Owner Well #: **No Data**

Address: **129 Royal Oaks Lane
Lakeway, TX 78734**

Grid #: **57-48-3**

Well Location: **4313 Travis Vista
Lakeway, TX 78734**

Latitude: **30° 20' 01" N**

Longitude: **098° 00' 19" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **9/10/2005**

Drilling End Date: **9/11/2005**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	20
	6	20	875

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	4 of Portland

Seal Method: **Slurry**

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

Sealed By: **Driller**

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 700', 695', 20'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 35 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
700-875	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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	32	Tan Limestone
32	320	Tan-Grey Limestone
320	440	Tan Limestone
440	620	Grey & Tan Limestone
620	675	Grey Limestone w/ Clay
675	700	Red Clay w/ Sand H2O
700	710	Gravel
710	755	Red Sand
755	785	Tan Limestone
785	840	Red Sandstone
840	860	White Limestone
860	875	Gravel

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5" (5" OD)	New	PVC	+2' to 775' SDR17
4.5" (5" OD)	New	PVC Slotted	775' to 795' .035
4.5" (5" OD)	New	PVC	795' to 855' SDR17
4.5" (5" OD)	New	PVC Slotted	855' to 875' .035

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 #92326

Owner: **Andrew Heller**
Address: **4501 Henning Dr
Austin, TX 78738**
Well Location: **4501 Henning Dr
Austin, TX 78738**
Well County: **Travis**

Owner Well #: **No Data**
Grid #: **58-41-4**
Latitude: **30° 19' 39" N**
Longitude: **097° 59' 34" W**
Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **8/23/2005**

Drilling End Date: **8/23/2005**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	20
	6	20	880

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	4 of Portland

Seal Method: **Slurry**

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

Sealed By: **Driller**

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 700', 695', 20'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 30 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
705-860	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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	28	Caliche
28	80	Blue Limestone
80	180	Grey-Tan Limestone
180	350	Grey-Limestone w/ Clay
350	530	Tan-Grey Limestone
530	590	Tan Limestone
590	640	White Limestone
640	655	Grey Limestone
655	690	Clay
690	705	Grey Sandstone
705	770	Red Sand H2O
770	810	Tan Limestone
810	845	Red Sand H2O
845	860	Gravel
860	880	Tan-Blue Clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5" (5" OD)	New	PVC	+2' to 780' SDR17
4.5" (5" OD)	New	Slotted PVC	780' to 860' .035
4.5" (5" OD)	New	PVC	860' to 880' SDR17

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Texas Department of Licensing and Regulation
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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #93219

Owner:	J R BOEHL	Owner Well #:	No Data
Address:	239 BORA BORA DR GALVESTON, TX 77554	Grid #:	58-41-1
Well Location:	17106 MAJESTIC RIDGE AUSTIN, TX 78738	Latitude:	30° 20' 31" N
		Longitude:	097° 59' 41" W
Well County:	Travis	Elevation:	1010 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **8/17/2006** Drilling End Date: **8/18/2006**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	8	0	13
	6.75	13	795

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	2	2
	2	13	8

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: **540 ft. below land surface on 2006-08-21** Measurement Method: **Unknown**

Packers: **NEOPRENE 13**
NEOPRENE 725
NEOPRENE 730

Type of Pump: **Submersible** Pump Depth (ft.): **700**

Well Tests: **Jetted** Yield: **25 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: **BOBBY ROBERTS** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	TOPSOIL
2	51	TAN LIMESTONE
51	520	GREY LIMESTONE
520	646	GREY ROCK
646	680	GREY SHALE
680	690	GREY ROCK
690	715	TAN ROCK
715	725	BROWN CLAY
725	790	BROWN ROCK W/B 25 GPM TDS 1440
790	795	BLUE CLAY

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	NEW	PLASTIC	0-730
4.5	NEW	SCREEN MFG.	730-790 .050
4.5	NEW	PLASTIC	790-795

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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 #94531

Owner:	Pete Strobel	Owner Well #:	No Data
Address:	P. O. Box 1118 Dripping Springs, TX 78620	Grid #:	58-41-4
Well Location:	13708 Overland Pass Austin, TX 78734	Latitude:	30° 17' 45" N
Well County:	Travis	Longitude:	097° 58' 08" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **6/23/2003** Drilling End Date: **6/23/2003**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	8.75	0	50
	6	50	790

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	50	8.5

Seal Method: **Slurry**

Sealed By: **C.T.D.**

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: **Well Drilled First**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **3 Burlap, Plastic 50',660',680'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 35-40 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 Highway 290 West
Dripping Springs, TX 78620

Driller Name: **Aaron Glass**

License Number: **4227**

Comments: **\$dfs**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	Top Soil
2	18	Caliche
18	20	Fractures
20	24	Caliche
24	26	Blue Lime
26	550	Gray Limestone
550	605	Gray/Tan Limestone
605	615	Gray Limestone
615	660	Hammid Clay
660	670	Gray/Red Clay
670	700	Gray Sandstone
700	785	Trinity Sandstone
785	790	Red and Blue Limestone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5 OD	New	PVC Plastic	+2 790 SDR17

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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #96653

Owner:	RICHARD SKINNER	Owner Well #:	No Data
Address:	1310 RR 620 S., STE C-15 AUSTIN, TX 78734	Grid #:	57-48-3
Well Location:	4400 BEE CREEK RD. SPICEWOOD, TX 78669	Latitude:	30° 20' 22" N
		Longitude:	098° 01' 12" W
Well County:	Travis	Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **9/26/2006** Drilling End Date: **9/26/2006**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	10	0	13
	6.75	13	670

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	2	2
	2	13	8

Seal Method: **SLURRIED & POURED**

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

Sealed By: **BOBBY ROBERTS**

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: **377 ft. below land surface on 2006-10-18** Measurement Method: **Unknown**

Packers: **NEOPRENE 13
NEOPRENE 555
NEOPRENE 560**

Type of Pump: **Submersible** Pump Depth (ft.): **640**

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**
185 ANGELFIRE DR
DRIPPING SPRINGS, TX 78620

Driller Name: **BOBBY ROBERTS 54870** License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOPSOIL
1	13	CALICHE
13	30	YELLOW CLAY
30	205	GRAY LIMESTONE
205	215	BLUE SHALE
215	345	GRAY LIMESTONE
345	450	WHITE ROCK W/B 10 GPM TDS 640
450	455	GRAY CLAY
455	460	GRAY ROCK
460	465	BLUE CLAY
465	475	GRAY ROCK
475	485	BLUE CLAY
485	495	GREY ROCK
495	550	RED SANDSTONE
550	670	RED ROCK W/B 100 GPM TDS 1670

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	NEW	PLASTIC	0-600
4.5	NEW	SCREEN MFG.	600-660 .050
4.5	NEW	PLASTIC	660-670

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Texas Department of Licensing and Regulation
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Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #101028

Owner: **CAMELOT CUSTOM BUILDERS**

Owner Well #: **No Data**

Address: **11705 EMERALD FALLS DRIVE
AUSTIN, TX 78738**

Grid #: **58-41-8**

Well Location: **SPANISH OAKS
AUSTIN, TX**

Latitude: **30° 17' 14" N**

Longitude: **097° 55' 45" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **10/23/2006**

Drilling End Date: **10/23/2006**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8.625	0	50
	6.5	50	690

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	50	4 CEMENT
	0	50	5 VOLCLAY

Seal Method: **Slurry**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

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: **296 ft. below land surface on 2006-10-23** Measurement Method: **Unknown**

Packers: **5 BURLAP,PVC,RUBBER 50',500',520',540',580'**

Type of Pump: **Submersible**

Well Tests: **Jetted** Yield: **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: **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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	TOP SOIL
2	10	CALICHE
10	12	BLUE LIMESTONE
12	300	GRAY LIMESTONE
300	390	GRAY/TAN LIMESTONE
390	440	TAN LIMESTONE
440	470	GRAY/TAN LIMESTONE
470	520	HAMMID CLAY
520	555	GRAY/TAN SANDSTONE
555	575	GRAY/RED CLAY
575	595	GRAY/TAN/RED/SANDSTONE
595	610	TAN/RED SAND
610	680	RED SAND
680	690	RED/TAN LIMESTONE

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N PVC SDR17	+4 TO 690
5"	OD	N PVC SDR17	SLOT 620 TO 680 .032

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #111524

Owner:	CHUPIC PROPERTIES	Owner Well #:	No Data
Address:	P O BOX 50562 AUSTIN, TX 78763	Grid #:	58-41-4
Well Location:	15155 HAMILTON POOL RD AUSTIN, TX 78738	Latitude:	30° 18' 19" N
		Longitude:	097° 59' 21" W
Well County:	Travis	Elevation:	1137 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 4/10/2007 Drilling End Date: 4/11/2007

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	10	0	12
	8	12	100
	6.75	100	810

Drilling Method: Air Rotary

Borehole Completion: Open Hole

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	2	2
	2	105	13

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: 465 ft. below land surface on 2007-04-25 Measurement Method: Unknown

Packers: NEOPRENE 105
NEOPRENE 560
NEOPRENE 755
NEOPRENE 757

Type of Pump: Submersible Pump Depth (ft.): 760

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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	TOPSOIL
2	12	TAN ROCK
12	375	GRAY LIMESTONE
375	600	GRAY & WHITE ROCK
600	650	BLUE SHALE
650	720	GRAY ROCK
720	725	RED CLAY
725	745	BROWN ROCK
745	755	RED CLAY
755	785	WHITE ROCK
785	810	BROWN ROCK W/B 30 GPM

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	NEW	PLASTIC	0-765
4.5	NEW	SCREEN	MFG. 765-805 .050
4.5	NEW	PLASTIC	805-810

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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 #117485

Owner: **Mollison Homes c/o Mike Mollison**

Owner Well #: **No Data**

Address: **17115 Majestic Ridge
Lakeway, TX 78738**

Grid #: **57-48-6**

Well Location: **17012 Flint Rock RD
Lakeway, TX 78738**

Latitude: **30° 19' 59" N**

Longitude: **098° 00' 14" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **4/25/2007**

Drilling End Date: **4/25/2007**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	20
	6.5	20	845

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	4 of Portland

Seal Method: **Slurry**

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

Sealed By: **Driller**

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: **Neoprene 635', 630', 625', 20**

Type of Pump: **No Data**

Well Tests: **Estimated** **Yield: 50 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
637-835	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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	30	Caliche
30	90	Blue Limestone
90	210	Grey Limestone
210	410	Grey-Tan Limestone
410	450	Tan Limestone
450	525	Grey Limestone
525	560	Tan Limestone
560	580	Grey Limestone / Clay
580	605	Clay
605	637	Grey Sandy Limestone
637	645	Red Sandstone
645	660	Sand
660	704	Red Sandstone
704	715	White Limestone
715	740	Sand
740	782	Tan Limestone
782	835	Sand / Gravel
835	845	Tan Clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5" (5" OD)	New	PVC	+2' to 715' SDR17
4.5" (5" OD)	New	Slotted PVC	715' to 735' .035
4.5" (5" OD)	New	PVC	735' to 755' SDR17
4.5" (5" OD)	New	Slotted PVC	755' to 775' .035
4.5" (5" OD)	New	PVC	775' to 795' SDR17
4.5" (5" OD)	New	Slotted PVC	795' to 835' .035
4.5" (5" OD)	New	PVC	835' to 845' SDR17

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 #125832

Owner: **Mark Shimek**

Owner Well #: **No Data**

Address: **2 Tourney Ln.
Austin, TX 78738**

Grid #: **58-41-1**

Well Location: **3701 Serene Hills Dr
Austin, TX 78738**

Latitude: **30° 20' 28" N**

Longitude: **097° 59' 49" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **6/3/2004**

Drilling End Date: **6/3/2004**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	50
	6.25	50	850

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	40	6

Seal Method: **Slurry**

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

Sealed By: **CTD**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

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

Method of Verification: **None - Well Drilled
First**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Rubber,PVC,Burlap 40,620,640**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 3 Cave GPM**

Water Quality:

Strata Depth (ft.)	Water Type
?Cave	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: **Logged by DT\$**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-1	Top Soil	
1-30	Caliche	
30-34	Blue	
34-335	Gray	
335-337	Fracture?	
NO RETURNS		
?590	Hammid Clay	
630	No More Clay?	
650	Sandstone?	
850	Total Depth	

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5	OD	N PVC SDR 17	-2/850 .25

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Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #134337

Owner:	BOB HUTHNANCE	Owner Well #:	No Data
Address:	4001 HARBORLIGHT COVE AUSTIN, TX 78731	Grid #:	57-48-6
Well Location:	21300 HAMILTON POOL RD DRIPPING SPRINGS, TX 78620	Latitude:	30° 18' 31" N
		Longitude:	098° 01' 06" W
Well County:	Travis	Elevation:	1153 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **1/16/2008** Drilling End Date: **1/17/2008**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	10	0	12
	6.75	12	430

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	6	6
	6	12	5

Seal Method: **SLURRIED & POURED**

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

Sealed By: **CESAR RAMOS**

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: **307 ft. below land surface on 2008-01-28** Measurement Method: **Unknown**

Packers: **NEOPRENE 12
NEOPRENE 363
NEOPRENE 366**

Type of Pump: **Submersible** Pump Depth (ft.): **400**

Well Tests: **Jetted** Yield: **25 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** Apprentice Number: **57534**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOPSOIL
1	5	TAN LIMESTONE
5	15	TAN CLAY
15	55	TAN LIMESTONE
55	160	GRAY LIMESTONE
160	250	GRAY ROCK
250	350	BROWN ROCK
350	366	WHITE ROCK
366	368	GREEN CLAY
368	400	WHITE ROCK W/B 25 GPM TDS 800
400	430	BLUE SHALE

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	NEW	PLASTIC	0-363
4.5	NEW	SCREEN MFG	363-403 .050
4.5	NEW	PLASTIC	403-430

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**Texas Department of Licensing and Regulation
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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #146505

Owner: **McAden Cumby Builders**
Address: **500 Cap.of Tx. Bldg.8, Ste.100
AUSTIN, TX 78746**
Well Location: **3001 F.M. 620 SOUTH
AUSTIN, TX 78734**
Well County: **Travis**

Owner Well #: **No Data**
Grid #: **58-41-1**
Latitude: **30° 20' 00" N**
Longitude: **097° 58' 03" W**
Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **6/19/2008**

Drilling End Date: **6/19/2008**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8.625	0	100
	6.5	100	760

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	16 CEMENT
	0	100	15 VOLCLAY

Seal Method: **PRESSURE TRIMMY
CEMENTING**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

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: **Pitless Adapter Used**

Water Level: **No Data**

Packers: **5 BURLAP,PVC,RUBBER 100,580,600,620,
640**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 30-35 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
85	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 Ref# 6153 7/30/08**

Report Amended on by Request #6153

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-2		FILL
2-18		CALICHE
18-20		BLUE LIMESTONE
20-210		GRAY LIMESTONE
210-460		GRAY W/TAN LIMESTONE
460-510		TAN LIMESTONE
510-540		TAN/GRAY/BROWN LIMESTONE
540-560		TAN/BROWN SANDSTONE
560-580		BROWN/GRAY LIMESTONE
580-595		GRAY LIMESTONE
595-610		GRAY LIMESTONE W/HAMMIT
		CLAY
610-630		GRAY LIMESTONE W/RED CLAY
630-650		GRAY/TAN LIMESTONE W/
		LITTLE CLAY
650-660		RED/GRAY LIMESTONE
660-720		RED/TAN SAND

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 760
5"	OD	N SDR17 PVC SLOT	660 TO 760 .032

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Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #150562

Owner:	WEST TRAVIS COUNTY MUN. UTILITY DIST.	Owner Well #:	No Data
Address:	1701 DIRECTORS BLVD., STE. 400 AUSTIN, TX 78744	Grid #:	58-41-5
Well Location:	HWY. 71 WEST AT THE GALLERIA AUSTIN, TX	Latitude:	30° 18' 16" N
Well County:	Travis	Longitude:	097° 56' 33" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **4/21/2008** Drilling End Date: **4/21/2008**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	8.625	0	100
	6.5	100	690

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	100	14 CEMENT
	0	100	12 CLAY

Seal Method: **PRESSURE TRIMMY
CEMENTING**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

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,RUBBER 100',490',510',530'
570'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 80 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
100	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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-1		TOP SOIL
1-10		CALICHE
10-12		BLUE LIMESTONE
12-210		GRAY LIMESTONE
210-230		GRAY/TAN LIMESTONE
230-260		TAN LIMESTONE
260-450		GRAY W/TAN LIMESTONE
450-470		BROWN LIMESTONE
470-480		GRAY/TAN/BROWN
		LIMESTONE
480-510		GRAY CLAY HAMMIT
510-530		HAMMIT & RED CLAY
530-550		GRAY/TAN LIMESTONE
550-620		RED LIMESTONE W/SAND
620-635		BLUE SANDSTONE
635-680		RED SAND
680-690		RED W/GRAY LIMESTONE

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 690
5"	OD	N SDR17 PVC SLOT	550 TO 570 .032
5"	OD	N SDR17 PVC SLOT	590 TO 610 .032
5"	OD	N SDR17 PVC SLOT	630 TO 650 .032
5"	OD	N SDR17 PVC SLOT	670 TO 690 .032

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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #151294

Owner:	TBG PARTNERS	Owner Well #:	No Data
Address:	901 S. MOPAC BLDG. 2, STE. 350 AUSTIN, TX 78746	Grid #:	58-41-5
Well Location:	BEE CAVES OFF HW. 620 AUSTIN, TX	Latitude:	30° 18' 53" N
Well County:	Travis	Longitude:	097° 57' 08" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **7/17/2008** Drilling End Date: **7/17/2008**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9.5	0	100
	6.5	100	810

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	16 CEMENT
	0	100	15 VOLCLAY

Seal Method: **PRESSURE TRIMMY
CEMENTING**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

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:	460.6 ft. below land surface on 2008-07-17	Measurement Method:	Unknown
Packers:	6 BURLAP,PVC,RUBBER 100',510',530',550', 570',730'		
Type of Pump:	Submersible		
Well Tests:	Jetted	Yield:	25 GPM

Water Quality:

Strata Depth (ft.)	Water Type
80	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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	8	FILL-ROCKS & CALICHE
8	15	CALICHE
15	18	BLUE LIMESTONE
18	130	GRAY LIMESTONE
130	240	GRAY/TAN LIMESTONE
240	241	WHITE LIMESTONE
241	400	GRAY/TAN LIMESTONE
400	440	TAN W/GRAY LIMESTONE
440	500	TAN LIMESTONE
500	510	GRAY LIMESTONE
510	540	HAMMIT CLAY
540	565	HAMMIT CLAY W/RED CLAY
565	590	GRAY/TAN LIMESTONE
590	680	RED SANDSTONE
680	700	RED W/GRAY LIMESTONE
700	800	RED/TAN SAND
800	805	TRINITY GRAVEL
805	810	BLUE/YELLOW CLAY

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 810
5"	OD	N SDR17 PVC SLOT	630 TO 650 .032
5"	OD	N SDR17 PVC SLOT	690 TO 710 .032
5"	OD	N SDR17 PVC SLOT	750 TO 810 .032

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Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #151294

Owner: **TBG PARTNERS**

Owner Well #: **No Data**

Address: **901 S. MOPAC BLDG. 2, STE. 350
AUSTIN, TX 78746**

Grid #: **58-41-5**

Well Location: **BEE CAVES OFF HW. 620
AUSTIN, TX**

Latitude: **30° 18' 53" N**

Longitude: **097° 57' 08" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **7/17/2008**

Drilling End Date: **7/17/2008**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9.5	0	100
	6.5	100	810

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	16 CEMENT
	0	100	15 VOLCLAY

Seal Method: **PRESSURE TRIMMY
CEMENTING**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

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: **460.6 ft. below land surface on 2008-07-17** Measurement Method: **Unknown**

Packers: **6 BURLAP,PVC,RUBBER 100',510',530',550',
570',730'**

Type of Pump: **Submersible**

Well Tests: **Jetted** Yield: **25 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
80	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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	8	FILL-ROCKS & CALICHE
8	15	CALICHE
15	18	BLUE LIMESTONE
18	130	GRAY LIMESTONE
130	240	GRAY/TAN LIMESTONE
240	241	WHITE LIMESTONE
241	400	GRAY/TAN LIMESTONE
400	440	TAN W/GRAY LIMESTONE
440	500	TAN LIMESTONE
500	510	GRAY LIMESTONE
510	540	HAMMIT CLAY
540	565	HAMMIT CLAY W/RED CLAY
565	590	GRAY/TAN LIMESTONE
590	680	RED SANDSTONE
680	700	RED W/GRAY LIMESTONE
700	800	RED/TAN SAND
800	805	TRINITY GRAVEL
805	810	BLUE/YELLOW CLAY

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 810
5"	OD	N SDR17 PVC SLOT	630 TO 650 .032
5"	OD	N SDR17 PVC SLOT	690 TO 710 .032
5"	OD	N SDR17 PVC SLOT	750 TO 810 .032

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P.O. Box 12157
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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #152651

Owner:	Gene Villanueva	Owner Well #:	1
Address:	318 Nautilus Ave Lakeway, TX 78738	Grid #:	58-41-1
Well Location:	3408 Serene Hills Court Lakeway, TX 78738	Latitude:	30° 20' 40" N
Well County:	Travis	Longitude:	097° 59' 56" W
		Elevation:	937 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **8/29/2008** Drilling End Date: **9/3/2008**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	120
	7	120	850

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	120	36
	640	700	18

Seal Method: **Tremie**

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

Sealed By: **ADC**

Distance to Septic Field or other
concentrated contamination (ft.): **91**

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

Method of Verification: **measured**

Surface Completion: **Surface Sleeve Installed**

Water Level: **409 ft. below land surface on 2008-09-06** Measurement Method: **Unknown**

Packers: **neophrene 120'**

Type of Pump: **Submersible** Pump Depth (ft.): **700**

Well Tests: **Estimated** Yield: **30 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
740'-850'	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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	13	caliche
13	247	gray limestone
247	249	void
249	600	gray limestone
600	640	shale
640	700	hard tan limestone
700	740	red sandstone
740	850	broken red sandstone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5"	new	plastic	-2' to 850' sdr17
		slotted	740'-850'

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 #160555

Owner:	BEE CAVE GALLERIA	Owner Well #:	No Data
Address:	P O BOX 34048 AUSTIN, TX 78734	Grid #:	58-41-5
Well Location:	12918 SHOPS PARKWAY, STE600 AUSTIN, TX 78738	Latitude:	30° 18' 23" N
Well County:	Travis	Longitude:	097° 56' 38" W
		Elevation:	904 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **9/5/2008**

Drilling End Date: **10/16/2008**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	10	0	12
	10	12	800

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	12	13

Seal Method: **SLURRIED & POURED**

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

Sealed By: **CESAR RAMOS**

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

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

Method of Verification: **STEEL TAPE**

Surface Completion: **Surface Sleeve Installed**

Water Level: **378 ft. below land surface on 2008-10-17** Measurement Method: **Unknown**

Packers: **NEOPRENE 12
NEOPRENE 190
NEOPRENE 195
NEOPRENE 620
NEOPRENE 625**

Type of Pump: **Submersible** Pump Depth (ft.): **756**

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 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	TOPSOIL
2	108	GRAY SHALE
108	200	GRAY LIMESTONE
200	210	GRAY CLAY
210	340	GRAY ROCK W/B 25 GPM TDS 400
340	460	GRAY LIMESTONE
460	545	BLUE CLAY
545	580	BROWN CLAY
580	595	BROWN ROCK
595	610	BROWN CLAY
610	785	BROWN ROCK W/B 100+ GPM TDS 1500
785	800	BROWN CLAY

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
6.5	NEW	FIBERGLASS	0-710
6.5	NEW	SCREEN MFG	710-770 .050
6.5	NEW	FIBERGLASS	770-785

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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 #174365

Owner: **David Faust--Diamond F Ranch**

Owner Well #: **No Data**

Address: **P.O. Box 340080
Austin, TX 78734**

Grid #: **58-41-4**

Well Location: **16177 Flint Rock Rd
Austin, TX 78738**

Latitude: **30° 19' 45" N**

Longitude: **097° 58' 58" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **7/29/2004**

Drilling End Date: **7/29/2004**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	30
	6	30	810

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	30	5

Seal Method: **Slurry**

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

Sealed By: **Driller**

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: **PVC and burlap, 30'
PVC and burlap, 620'
PVC and burlap, 630'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 15-20 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: **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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	15	caliche
15	75	blue lime
75	315	gray lime
315	360	brown lime
360	490	gray and brown lime sandstone
490	525	white lime 5-8 gpm
525	560	gray lime
560	610	Hammond
610	630	gray lime
630	700	sandstone and sand
700	760	tan lime
760	800	sand strips
800	810	chert lime

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5	OD	N plastic	+2-810 17 & 40

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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 #174386

Owner: **David Piland**

Owner Well #: **No Data**

Address: **26 Autumn Oak
Austin, TX 78738**

Grid #: **58-41-1**

Well Location: **3605 Serene Hills Lot 27
Majestic Hills, TX**

Latitude: **30° 20' 33" N**

Longitude: **097° 59' 50" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **7/2/2004**

Drilling End Date: **7/2/2004**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	25
	6	25	800

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	25	5

Seal Method: **Slurry**

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

Sealed By: **Driller**

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: **PVC and burlap, 25'
PVC and burlap, 660'
PVC and burlap, 670'**

Type of Pump: **No Data**

Well Tests: **Jetted** **No Test Data Specified**

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: **Western Water Wells, LLC**
500 Southland Drive
Burnet, TX 78611

Driller Name: **Frank A. Glass**

License Number: **1313**

Comments: **Well Test: no returns. \$scd**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	17	caliche
17	65	blue lime
65	275	gray lime
275	276	fracture--lost returns
276	580	lime
580	635	Hammond
635	670	lime
670	800	Trinity

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5	OD	N plastic	+2-800 SDR17&40

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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 #181840

Owner: **Duncan Johnson Comm-Word
(Owner)**

Owner Well #: **No Data**

Address: **6601-A Bee Cave Road
Austin, TX 78746**

Grid #: **57-48-3**

Well Location: **17824 Serene Hills Pass
Austin, TX 78738**

Latitude: **30° 20' 36" N**

Longitude: **098° 00' 22" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **5/22/2009**

Drilling End Date: **5/22/2009**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	50
	6	50	890

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	50	10

Seal Method: **Slurry**

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

Sealed By: **Driller**

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: **6 PVC & Burlap @ 50', 640', 680', 695', 700', 740'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 30 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: **Western Water Wells**
500 Southland Dr.
Burnet, TX 78611

Driller Name: **Frank Glass**

License Number: **1313**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	40	Caliche
40	70	Blue Lime
70	315	Gray Lime
315	375	Brown Lime
375	395	White Soap Stone
395	590	Gray & Brown Lime
590	640	White & Brown
640	690	Hammond
690	748	Sand
740	890	Trinity 30 GPM

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5 OD	New	Plastic	+2 to 890 SDR 17
80'	Screen		

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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 #207295

Owner:	BRIAN BAILEY HOMES	Owner Well #:	001
Address:	11610 BEE CAVES RD. # 230 AUSTIN, TX 78738	Grid #:	58-41-8
Well Location:	5916 KRAUSE LANE AUSTIN, TX 78738	Latitude:	30° 16' 51" N
		Longitude:	097° 56' 35" W
Well County:	Travis	Elevation:	863 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **12/10/2009** Drilling End Date: **12/11/2009**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	10	0	12
	3.75	12	750

Drilling Method: **Air Hammer**

Borehole Completion: **Open Hole**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	10	9 CEMENT
	10	12	3 BENTONITE

Seal Method: **SLURRIED & POURED**

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

Sealed By: **CESAR RAMOS**

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: **370 ft. below land surface on 2009-12-15** Measurement Method: **Unknown**

Packers:
1 NEOPRENE 12
1 NEOPRENE 450
1 NEOPRENE 615
1 NEOPRENE 670

Type of Pump: **Submersible** Pump Depth (ft.): **700**

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 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOPSOIL
1	17	CALICHE
17	270	GREY LIMESTONE
270	400	BROWN & TAN ROCK
400	450	BROWN & GRAY ROCK
450	510	TAN ROCK W/B 25 GPM TDS 1300
510	570	BLUE SHALE
570	615	TAN ROCK
615	630	SANDSTONE
630	650	TAN CLAY
650	750	RED SANDSTONE W/B 50 GPM TDS 800

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	NEW	PLASTIC	0 690
4.5	NEW	SCREEN MFG.	690 730 .050
4.5	NEW	PLASTIC	730 750

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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 #213106

Owner: **WINDSOR AT BEE CAVE**

Owner Well #: **No Data**

Address: **1231 WEST HWY. 71
AUSTIN, TX 78738**

Grid #: **58-41-5**

Well Location: **1231 WEST HWY. 71
AUSTIN, TX 78738**

Latitude: **30° 18' 06" N**

Longitude: **097° 56' 03" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **4/6/2010**

Drilling End Date: **4/6/2010**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	7	100	750

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	14 CEMENT
	0	100	5 VOLCLAY

Seal Method: **PRESSURE TRIMMY
CEMENTING**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **N/A**

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

Method of Verification: **OWNER & TEXAS
ONE CALL**

Surface Completion: **Surface Sleeve Installed**

Water Level: **376 ft. below land surface on 2010-04-06** Measurement Method: **Unknown**

Packers: **4 BURLAP,PVC,RUBBER 100',530',550',630'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 60+ GPM**

Water Quality:

Strata Depth (ft.)	Water Type
80	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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-1		TOP SOIL
1-22		CALICHE
22-25		BLUE LIMESTONE
25-50		GRAY LIMESTONE
50-60		TAN LIMESTONE
60-190		GRAY LIMESTONE
190-330		GRAY/TAN LIMESTONE
330-400		TAN W/GRAY LIMESTONE
400-455		GRAY/TAN LIMESTONE
455-480		TAN LIMESTONE
480-485		GRAY/TAN LIMESTONE
485-500		BROWN/GRAY LIMESTONE
		W/STRIPS OF HAMMETT CLAY
500-530		HAMMETT CLAY
530-540		HAMMETT CLAY W/RED CLAY
540-560		GRAY/TAN SANDSTONE
560-590		TAN/GRAY SANDSTONE
590-750		RED/TAN SAND

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 750
5"	OD	N SDR17 PVC SLOT	590 TO 610 .032
5"	OD	N SDR17 PVC SLOT	670 TO 750 .032

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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 #213724

Owner:	HILL COUNTRY GALLERIA/WELL #1	Owner Well #:	No Data
Address:	12912 HILL COUNTRY BLVD.,STE.F BEE CAVES, TX 78738	Grid #:	58-41-5
Well Location:	12912 HILL COUNTRY BLVD. BEE CAVES, TX 78738	Latitude:	30° 18' 31" N
Well County:	Travis	Longitude:	097° 56' 11" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **3/22/2010** Drilling End Date: **3/25/2010**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	14	0	100
	9	100	850

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	15 CEMENT
	0	100	4 VOLCLAY

Seal Method: **PRESSURE TRIMMY
CEMENTING**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

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: **421 ft. below land surface on 2010-03-25** Measurement Method: **Unknown**

Packers: **4 BURLPA,PVC,RUBBER 100',590',610',630'**

Type of Pump: **Submersible**

Well Tests: **Jetted** Yield: **50+ GPM**

Water Quality:

Strata Depth (ft.)	Water Type
140	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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-15		TOP SOIL & FILL
15-22		CALICHE
22-25		BLUE LIMESTONE
25-60		GRAY LIMESTONE
60-120		GRAY/TAN LIMESTONE
120-130		TAN/GRAY LIMESTONE
130-170		GRAY/TAN LIMESTONE
		W/GRAY CLAY STRIPS
170-210		TAN W/GRAY LIMESTONE
		CLAY STRIPS
210-330		TAN W/GRAY LIMESTONE
330-350		GRAY W/TAN LIMESTONE
350-445		TAN/BROWN LIMESTONE
		W/LITTLE GRAY
445-470		GRAY W/TAN LIMESTONE
470-480		TAN SANDSTONE W/GRAY
		STRIPS
480-520		TAN LIMESTONE

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
6.9 OD	N	SDR17 CASING	+3 TO 850
6.9 OD	N	SDR17 CASING SLOT	670 TO 770 .050
6.9 OD	N	SDR17 CASING SLOT	810 TO 850 .050
10"	N	STEEL CASING	

520-530 TAN/GRAY LIMESTONE
530-540 GRAY/TAN LIMESTONE
W/HAMMETT STRIPS
540-575 HAMMETT CLAY
575-600 HAMMETT CLAY W/RED CLAY
*580 HEAVY OIL LIKE CUTTINGS
600-615 GRY/TAN SANDSTONE
615-620 GRAY/TAN SANDSTONE
W/CLAY STRIPS
620-630 GRAY/TAN LIMESTONE
630-650 GRAY/TAN/RED SANDSTONE
650-700 RED/TAN SAND
700-760 RED SAND
760-800 SAND & GRAVEL
800-850 RED LIMESTONE

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 #215889

Owner:	HILL COUNTRY GALLERIA/WELL #2	Owner Well #:	No Data
Address:	12912 HILL COUNTRY BLVD.STE.,F BEE CAVES, TX 78738	Grid #:	58-41-5
Well Location:	12912 HILL COUNTRY BLVD. BEE CAVES, TX 78738	Latitude:	30° 18' 39" N
Well County:	Travis	Longitude:	097° 56' 42" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **3/26/2010** Drilling End Date: **3/29/2010**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	14	0	100
	9	100	890

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	16 CEMENT
	0	100	5 VOLCLAY

Seal Method: **PRESSURE TRIMMY
CEMENTING**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

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: **474 ft. below land surface on 2010-03-29** Measurement Method: **Unknown**

Packers: **3 BURLAP,PVC,RUBBER 100',660',680'**

Type of Pump: **Submersible**

Well Tests: **Jetted** Yield: **70 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
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: **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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	12	FILL
12	35	CALICHE
25	30	BLUE LIMESTONE
30	80	GRAY LIMESTONE
80	330	GRAY/TAN LIMESTONE
330	350	GRAY/TAN LIMESTONE W/CLAY
350	460	GRAY/TAN LIMESTONE
460	490	BROWN W/TAN LIMESTONE
490	530	TAN/GRAY LIMESTONE
530	560	GRAY W/BROWN LIMESTONE
560	600	HAMMETT CLAY
600	630	GRAY/TAN LIMESTONE
630	785	TAN LIMESTONE W/RED SAND
785	810	GRAVEL & SAND
810	860	SANDSTONE
860	890	RED LIMESTONE W/CLAY

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
6.9"	N	SDR17 PVC	+3 TO 890
6.9"	N	SDR17 PVC SLOT	680 TO 780 .032
6.9"	N	SDR17 PVC SLOT	800 TO 880 .032
10"	N	STEEL CASING	

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Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #229305

Owner: **WEST TRAVIS COUNTY MUN.
UTILITY DIST.**

Address: **1701 DIRECTORS BLVD., STE. 400
AUSTIN, TX 78744**

Well Location: **LOS ROBLES IRRIGATION WELL
AUSTIN, TX 78738**

Well County: **Travis**

Owner Well #: **No Data**

Grid #: **58-41-5**

Latitude: **30° 17' 57" N**

Longitude: **097° 56' 07" W**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **8/18/2010**

Drilling End Date: **8/18/2010**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	160
	6.5	160	470

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	160	22 CEMENT
	0	160	12 VOLCLAY

Seal Method: **PRESSURE TRIMMY
CEMENTING**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **55**

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

Method of Verification: **OWNER**

Surface Completion: **Surface Sleeve Installed**

Water Level: **485 ft. below land surface on 2010-08-18** Measurement Method: **Unknown**

Packers: **6 BURLAP,PVC,RUBBER 160',470',490',530',
550', 710'**

Type of Pump: **Submersible**

Well Tests: **Jetted** Yield: **40-45 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
100	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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-2		ROCK W/TOP SOIL
2-20		CALICHE
20-25		BLUE LIMESTONE
25-310		GRAY LIMESTONE
310-400		GRAY/TAN LIMESTONE
400-420		TAN/GRAY W/CLAY STRIPS
420-450		GRAY HAMMETT CLAY
450-470		HAMMETT W/RED CLAY
470-530		GRAY/TAN SANDSTONE
530-535		RED/TAN SANDSTONE
535-550		RED TAN W/GRAY CLAY
		STRIPS
550-560		GRAY SANDSTONE
560-590		GRAY/RED SANDSTONE
590-630		SAND & GRAVEL H2O
630-740		RED SAND H2O

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 740
5"	OD	N SDR17 PVC SLOT	550 TO 570 .032
5"	OD	N SDR17 PVC SLOT	610 TO 690 .032
5"	OD	N SDR17 PVC SLOT	710 TO 730 .032

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P.O. Box 12157
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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #232615

Owner:	Emerald Crest Development	Owner Well #:	1
Address:	2727 Exposition Blvd. Austin, TX 78703	Grid #:	58-41-8
Well Location:	6005 Krause Ln. Austin, TX 78738	Latitude:	30° 16' 57" N
Well County:	Travis	Longitude:	097° 56' 34" W
		Elevation:	910 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **8/23/2010** Drilling End Date: **8/24/2010**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	10	0	100
	6.75	100	760

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:			9
	0	16	7 cement
	16	18	2 bentonite

Seal Method: **slurry and pour**

Sealed By: **Alonzo Duke**

Distance to Property Line (ft.): **30**

Distance to Septic Field or other
concentrated contamination (ft.): **90' sewer**

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

Method of Verification: **customer**

Surface Completion: **Surface Sleeve Installed**

Water Level: **394 ft. below land surface on 2010-09-13** Measurement Method: **Unknown**

Packers: **neoprene 18
neoprene 180
neoprene 655
neoprene 660**

Type of Pump: **Submersible** Pump Depth (ft.): **700**

Well Tests: **Jetted** Yield: **45 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 Angelfire Dr.
Dripping Springs, TX 78620

Driller Name: **Jim Blair**

License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	3	Topsoil
3	5	white rock
5	13	caliche
13	17	blue clay
17	21	tan clay
21	33	blue clay
33	285	grey limestone
285	365	tan limestone wb 5 gpm 1000 tds
365	545	grey limestone
545	600	blue shale
600	665	grey sandstone
665	745	red sandstone wb 45 gpm 1100 tds
745	760	grey sandstone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	plastic	0 720
4.5	new	plastic perf	720 760

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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 #238955

Owner:	Stan's Heating and Air Conditioning	Owner Well #:	No Data
Address:	9200 Waterford Centre Blvd Austin, TX 78758	Grid #:	58-41-7
Well Location:	13425 Saddleback Pass Austin, TX 78738	Latitude:	30° 17' 26" N
Well County:	Travis	Longitude:	097° 57' 38" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Closed-Loop Geothermal

Drilling Start Date: **12/22/2010** Drilling End Date: **12/22/2010**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	4.75	0	250

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	30	250	Gravel	3/8ths

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	5	30	3 PER bentonite

Seal Method: **Poured**

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

Sealed By: **Steve Thomas**

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

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

Method of Verification: **Measured**

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: **Ball Drilling Company**
Box 3011
Marble Falls, TX 78654

Driller Name: **Lonnie C. Ball**

License Number: **2298**

Apprentice Name: **Steve Thomas**

Apprentice Number: **57350**

Comments: **5 Closed Loop Geothermal Wells**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0	23	Caliche
23	62	Tan Limestone
62	250	Grey Limestone w/fissures
5		Closed Loop Geothermal Wells

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
1	New	Polyethylene Loop	0 to 250

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 #252675

Owner:	Adam Woolley	Owner Well #:	#1
Address:	15000 Hamilton Pool Road Bee Cave, TX 78738	Grid #:	58-41-4
Well Location:	15000 Hamilton Pool Road Bee Cave, TX 78738	Latitude:	30° 18' 30" N
Well County:	Travis	Longitude:	097° 58' 43" W
		Elevation:	1056 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **3/1/2011**

Drilling End Date: **3/2/2011**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	12
	6.75	12	720

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

Seal Method: **Slurry and poured**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

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 15'
Neoprene 275' and 280'
Neoprene 620' and 625'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 25 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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0	1	Topsoil
1	20	Caliche
20	250	Grey limestone
250	280	Grey clay
280	500	Grey limestone
500	530	Grey shale
530	565	Grey limestone
565	610	Grey shale
610	625	Grey limestone
625	720	Coarse sand and rock-1st H2O
25	30	gpm

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	New	Plastic	0 to 680'
4.5	New	Screen	Mfg. 680' to 720' .050

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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 #267550

Owner:	Stan's Heating and AC	Owner Well #:	No Data
Address:	9200 Waterford Centre Blvd Austin, TX 78758	Grid #:	58-41-7
Well Location:	13425 Saddleback Pass Austin, TX 78738	Latitude:	30° 17' 26" N
Well County:	Travis	Longitude:	097° 57' 38" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Closed-Loop Geothermal

Drilling Start Date: 9/1/2011

Drilling End Date: 9/1/2011

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	4.75	0	300

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

	Top Depth (ft.)	Bottom Depth (ft.)	Filter Material	Size
Filter Pack Intervals:	30	250	Gravel	3/8thsF

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	30	3 per bentonite

Seal Method: Poured

Distance to Property Line (ft.): 50+

Sealed By: Steve Thomas

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

Distance to Septic Tank (ft.): No Data

Method of Verification: Measured

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: **Ball Drilling Company**
Box 3011
Marble Falls, TX 78654

Driller Name: **Lonnie C. Ball**

License Number: **2298**

Apprentice Name: **Steve Thomas**

Apprentice Number: **57350**

Comments: **2 Closed Loop Geothermal Wells**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0	23	Caliche
23	62	Tan Limestone
62	250	Grey limestone with fissures
2		Closed loop geothermal wells

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
1	new	polyethylene loop	0 to 250

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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P.O. Box 12157
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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #277294

Owner: **LARRY HENSLEY**

Owner Well #: **No Data**

Address: **11800 COLLEYVILLE DRIVE
BEE CAVES, TX 78738**

Grid #: **58-41-5**

Well Location: **11800 COLLEYVILLE DRIVE
BEE CAVES, TX 78738**

Latitude: **30° 18' 10" N**

Longitude: **097° 55' 33" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **11/10/2011**

Drilling End Date: **11/10/2011**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	50
	6.5	50	770

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	50	5 VOLCLAY
	0	50	4 CEMENT

Seal Method: **Slurry**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

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: **237.6 ft. below land surface on 2011-11-10**

Measurement Method: **Unknown**

Packers: **4 BURLAP, PVC 50',500',520',640'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 30+ 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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-1		TOP SOIL
1-10		CALICHE
10-15		YELLOW CLAY
15-18		CALICHE
18-20		BLUE LIMESTONE
20-190		GRAY LIMESTONE
190-290		GRAY/TAN LIMESTONE
290-420		TAN W/GRAY LIMESTONE
420-450		BROWN LIMESTONE
450-470		GRAY W/BROWN LIMESTONE
470-510		HAMMETT CLAY
510-520		GRAY/TAN LIMESTONE
520-560		GRAY/TAN SANDSTONE
560-570		TAN SANDSTONE
570-630		RED SAND
630-640		RED SAND W/CLAY
640-650		RED SAND W/CLAY
650-670		RED SAND & GRAVEL

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 770
5"	OD	N SDR17 PVC	680 TO 760 .032

670-745 RED SAND
745-765 SAND & GRAVEL
765-770 BLUE LIMESTONE W/YELLOW
SHELL

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 #278629

Owner: **Aqua Land Lakeway Medical Dvlp, LLC**

Owner Well #: **No Data**

Address: **3700 Buffalo Speedway Ste.1100
Houston, TX 77098**

Grid #: **58-41-1**

Well Location: **3002 1/2 Ranch Rd. 620 South
Lakeway, TX 78738**

Latitude: **30° 20' 02" N**

Longitude: **097° 58' 13" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **11/21/2011**

Drilling End Date: **11/22/2011**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	10	0	40
	8	40	860

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	50	21 of Portland

Seal Method: **Slurry**

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

Sealed By: **Driller**

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 710, 705, 700, 300, 60, 50**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 50-60 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
710-853	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: **Reference to Variance #068-12 (Distance to Sewer Line)**
Amended 4/26/12 Ref.# 10346

Report Amended on by Request #10346

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	36	Fill
36	161	Grey Limestone
161	178	Tan Limestone
178	490	Grey/Tan Limestone
490	510	Tan Limestone
510	580	Grey/Tan Limestone
580	665	Grey Limestone w/Clay
665	710	Red Sandstone
710	715	Gravel H2O
715	742	Red Sandstone
742	754	Gravel H2O
754	790	Red Sandstone
790	800	Gravel H2O
800	830	Sandstone
830	853	Gravel H2O
853	860	Tan Clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	(5" OD) New	PVC + 2'	to 780' SDR17
5"	(5" OD) New	Slotted PVC	780' to 860' .035
8"	New	PVC	0' to 40' Sch40

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Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #279798

Owner:	Lake Travis High School	Owner Well #:	No Data
Address:	3324 Ranch Rd. 620 S. Austin, TX 78738	Grid #:	58-41-4
Well Location:	3324 Ranch Rd. 620 S. Austin, TX 78738	Latitude:	30° 19' 24" N
Well County:	Travis	Longitude:	097° 58' 19" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **8/22/2011** Drilling End Date: **8/22/2011**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	8	0	952

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	60	12 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 755, 760, 765, 60**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 27 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
755-945	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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	24	Tan Limestone
24	118	Grey/Tan Limestone
118	128	Tan Limestone
128	492	Grey/Tan Limestone
492	520	Tan/White Limestone
520	680	Grey/Tan Limestone
680	755	Grey Limestone w/Clay
755	920	Red Sandstone
920	945	Gravel
945	952	Tan Clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5" (5" OD)	New	PVC	+ 2' to 872' SDR17
4.5" (5" OD)	New	Slotted PVC	872' to 952' .035

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #279924

Owner: **Hutter** Owner Well #: **No Data**
Address: **102 cog hill
austin, TX 78738** Grid #: **58-41-1**
Well Location: **102 cog hill
austin, TX 78738** Latitude: **30° 20' 00" N**
Longitude: **097° 59' 01" W**
Well County: **Travis** Elevation: **924 ft. above sea level**
****Plugged Within 48 Hours****

****This well has been plugged****

Plugging Report Tracking #134785

Type of Work: **New Well** Proposed Use: **Closed-Loop Geothermal**

Drilling Start Date: **1/4/2012** Drilling End Date: **1/6/2012**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	4.5	0	300

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	30	300	Gravel	3/8

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	30	3 bentonite

Seal Method: **Poured**

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

Sealed By: **Driller**

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 on 2012-01-04**

Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **Other - Not Specified**

Well Tests: **No Test Data Specified**

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
No Data	none

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: **Sarris Gerthmal Drilling**
p. o. box 19452
Austin, TX 78760

Driller Name: **Anthony Sarris** License Number: **58870**

Comments: **4 closed loop geothermal wells drilled**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	10	clay
10	300	grey shale

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
1 inch new polyethylene pipe 0- 300			

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Texas Department of Licensing and Regulation
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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #281702

Owner:	Wheelock Street Capital	Owner Well #:	1
Address:	5025 McDade Dr Austin, TX 78735	Grid #:	57-48-6
Well Location:	5928 Pedernales Summit Parkway Austin, TX 78738	Latitude:	30° 19' 36" N
Well County:	Travis	Longitude:	098° 01' 45" W
		Elevation:	955 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **12/21/2011** Drilling End Date: **1/29/2012**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	12.25	0	100
	9.875	100	740

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	45	24 PtInd
	45	100	2 Hlplg8BnsI

Seal Method: **Unknown**

Distance to Property Line (ft.): **1000+**

Sealed By: **Unknown**

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

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

Method of Verification: **Measured**

Surface Completion: **Surface Sleeve Installed**

Water Level: **360 ft. below land surface on 2012-01-09** Measurement Method: **Unknown**

Packers:

- 6Mil Poly 100'**
- 6Mil Poly 200'**
- 6Mil Poly 300'**
- 6Mil Poly 400'**
- 6Mil Poly 500'**
- 6Mil Poly 540'**
- Shale Packer 600'**
- 6Mil Poly 620'**

Type of Pump: **Submersible**

Pump Depth (ft.): **640**

Well Tests: **Jetted** **Yield: 20+ GPM**

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
640'/720'	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

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>From (ft)</i>	<i>To (ft)</i>	<i>Description</i>
0-1/2	Topsoil	
1/2-2	Caliche	
2-16	Black Clay Brown Limestone	
16-17	Gray Limestone	
17-38	Brown Limestone	
38-80	Gray Limestone	
80-101	Dark Gray Limestone	
101-220	Light Gray Limestone	
220-240	Dark Gray Limestone	
240-270	Tan Limestone	
270-340	Gray Limestone	
340-360	Tan Limestone	
360-400	Brown Limestone	
400-440	Gray Limestone	
440-480	Gray Clay	

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
6.9	New	SDR 17 Blank	+2'/640'
6.9	New	SDR 17 Slotted	640'/720'
6.9	New	SDR 17 Blank	720'/740'

480-540 Gray Brown Limestone
540-560 Red Sandstone
560-690 Brown Limestone
690-710 Red Sandstone
710-738 Calcite
738-740 Black Rock

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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 #286634

Owner: **searle** Owner Well #: **No Data**
Address: **14941** Grid #: **58-41-4**
bee cave, TX 78738
Well Location: **149941** Latitude: **30° 18' 00" N**
bee cave, TX 78738 Longitude: **097° 58' 01" W**
Well County: **Travis** Elevation: **924 ft. above sea level**
****Plugged Within 48 Hours****

****This well has been plugged****

Plugging Report Tracking #135984

Type of Work: **New Well** Proposed Use: **Closed-Loop Geothermal**

Drilling Start Date: **3/5/2012** Drilling End Date: **3/20/2012**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	4.5	0	300

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	0	30	Gravel	3/8

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	303	3 bentonite

Seal Method: **Poured**

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

Sealed By: **Anthony Sarris**

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

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

Method of Verification: **owner**

Surface Completion: **Alternative Procedure Used**

Water Level: **No Data on 2012-03-18** Measurement Method: **Unknown**
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 Geothermal Drilling**
p o box 19452
austin, TX 78760

Driller Name: **Anthony Sarris** License Number: **58870**

Comments: **21 closed loop geothermal wells drilled**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-20		clay and limestone
20- 300		grey shale

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
1 inch	new	polyethylene loop	0-300

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STATE OF TEXAS WELL REPORT for Tracking #296765

Owner: **Robert Blankenship**

Owner Well #: **No Data**

Address: **Iron Bluff Pl.
Austin, TX 78738**

Grid #: **58-41-8**

Well Location: **Iron Bluff Pl.
Austin, TX 78738**

Latitude: **30° 17' 16" N**

Longitude: **097° 56' 23" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **6/5/2012**

Drilling End Date: **6/5/2012**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.125	100	922

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	1	100	14cmt 6gel

Seal Method: **pressure / tremmie**

Distance to Property Line (ft.): **25**

Sealed By: **ADC**

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

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

Method of Verification: **tape**

Surface Completion: **Surface Sleeve Installed**

Water Level: **642 ft. below land surface on 2012-06-05** Measurement Method: **Unknown**

Packers: **burlap and plastic @ 722,702,682**
burlap and plastic with rubber @ 100

Type of Pump: **Submersible** Pump Depth (ft.): **740**

Well Tests: **Jetted** Yield: **25-30 GPM**

	<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Plug Information:	n/a		

Water Quality:

Strata Depth (ft.)	Water Type
725-910	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: **Associated Drilling Inc.**
12928 Lowden Ln.
Manchaca, TX 78652

Driller Name: **James Benoit**

License Number: **4064**

Comments: **Art Duncan**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	15	white limestone
15	465	gray lime
465	510	tan limestone
510	585	gray limestone
585	635	gray shale
635	695	gray and white limestone
695	725	red sandstone
725	740	red and white sandstone
740	870	red sandstone
870	910	multi-colored limestones
910	922	yellow limestone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5 od.	new	sdr17 pvc	-3 to 742
5 od.	new	sdr17 pvc (.032) screen	742 to 922 stag.

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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #299305

Owner: **Lorenz residents**

Owner Well #: **No Data**

Address: **6000 Krause
Austin, TX 78738**

Grid #: **58-41-8**

Well Location: **6000 Krause
Austin, TX 78738**

Latitude: **30° 16' 54" N**

Longitude: **097° 56' 39" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **8/6/2012**

Drilling End Date: **8/6/2012**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	50
	6.25	50	810

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	1	50	7cmt 3gel

Seal Method: **gravity poured**

Distance to Property Line (ft.): **100+**

Sealed By: **ADC**

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

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

Method of Verification: **tape**

Surface Completion: **Surface Sleeve Installed**

Water Level: **432 ft. below land surface on 2012-08-06** Measurement Method: **Unknown**

Packers: **burlap,plastic, and rubber @ 710,690,510 and 50**

Type of Pump: **Submersible** Pump Depth (ft.): **700**

Well Tests: **Jetted** Yield: **50-60 GPM**

	<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Plug Information:	n/a		

Water Quality:

Strata Depth (ft.)	Water Type
730-810	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: **Glass Well Service**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	25	white limestone
25	410	gray lime
410	440	tan limestone
440	480	tan and white limestone
480	510	gray limestone
510	550	gray shale
550	610	gray and white limestone
610	740	red sandstone
740	790	red and white sandstone
790	805	multi-colored limestone (gravel)
805	810	yellow limestone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5 od.	new	sdr17 pvc	-3 to 730
5 od.	new	sdr17 pvc (.032) screen	730 to 810

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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #302100

Owner:	Mike Meyer	Owner Well #:	No Data
Address:	402 Aria Dr Austin, TX 78738	Grid #:	57-48-3
Well Location:	17204 Flint Rock Rd Austin, TX 78738	Latitude:	30° 20' 00" N
Well County:	Travis	Longitude:	098° 00' 19" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **9/24/2012** Drilling End Date: **9/25/2012**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	100
	6.5	100	875

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	9-Bens 1-Port

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.): **No Data**

Method of Verification: **Landowner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **No Data**

Packers: **Brulap/Neoprene 690', 680', 660', 400', 105', 100'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 15 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
700-875	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** License Number: **54516**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	33	Tan Limestone
33	421	Gray/Tan Limestone
421	435	Tan Limestone
432	557	Gray/Tan Limestone
557	575	Tan/White Limestone
575	615	Gray/Tan Limestone
615	660	Gray Clay
660	700	Red Sandstone
700	705	Gravel
705	747	Red Sandstone
747	756	Gravel
756	860	Red Sandstone **H2O
860	875	Gravel **H2O

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5" (5" OD)	New	PVC	+2' to 795' SDR17
4.5" (5" OD)	New	Slotted PVC	795' to 815' .035
4.5" (5" OD)	New	PVC	815' to 835' SDR17
4.5" (5" OD)	New	Slotted PVC	835' to 855' .035
4.5" (5" OD)	New	PVC	855' to 875' SDR17

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

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

STATE OF TEXAS WELL REPORT for Tracking #303549

Owner:	TDI CONSTRUCTION	Owner Well #:	No Data
Address:	600 E.LAS COL. BLVD.STE.1800 IRVING, TX 75039	Grid #:	58-41-5
Well Location:	3501 SOUTH F.M. 620 AUSTIN, TX 78738	Latitude:	30° 19' 26" N
Well County:	Travis	Longitude:	097° 57' 23" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **8/17/2012** Drilling End Date: **8/17/2012**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.5	100	840

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	12 CEMENT
	0	100	4 VOLCLAY

Seal Method: **PRESSURE TRIMMIE
CEMENT**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

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: **503 ft. below land surface on 2012-08-17** Measurement Method: **Unknown**

Packers: **4 BURLAP,PVC,NEOPRENE 100',590',610',750'**

Type of Pump: **Submersible**

Well Tests: **Jetted** Yield: **25-30 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
80	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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-1		TOP SOIL
1-10		CALICHE
10-15		BLUE LIMESTONE
15-300		GRAY LIMESTONE
300-310		WHITE LIMESTONE
310-380		GRAY LIMESTONE
380-440		GRAY/TAN LIMESTONE
440-510		TAN/GRAY LIMESTONE
510-530		TAN/BROWN LIMESTONE H2O
530-540		TAN/BROWN LIMESTONE
		W/GRAY
540-590		GRAY LIMESTONE W/HAMMIT
		CLAY
590-600		GRAY LIMESTONE W/RED CLAY
600-635		GRAY/TAN LIMESTONE
635-660		RED/TAN LIMESTONE
660-730		RED SANDSTONE
730-790		RED SAND

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 840
5"	OD	N SDR17 PVC SLOT	670 TO 730 .032
5"	OD	N SDR17 PVC SLOT	770 TO 840 .032

790-835 GRAVEL SAND
835-840 GRAY LIMESTONE W/CLAY

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 #305495

Owner:	BURK EDWARDS	Owner Well #:	No Data
Address:	3001 RANCH RD. 620 N., STE.321 AUSTIN, TX 78738	Grid #:	58-41-4
Well Location:	4023 PAWNEE PASS AUSTIN, TX 78738	Latitude:	30° 19' 58" N
Well County:	Travis	Longitude:	097° 59' 21" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **10/10/2012** Drilling End Date: **10/10/2012**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	50
	6.5	50	760

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	50	8 CEMENT
	0	50	4 VOLCLAY

Seal Method: **Slurry**

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

Sealed By: **Driller**

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:	522.6 ft. below land surface on 2012-10-10	Measurement Method:	Unknown
Packers:	6 BURLAP,PVC 50',500',520',540',620',700		
Type of Pump:	Submersible		
Well Tests:	Jetted	Yield:	40 GPM

Water Quality:

Strata Depth (ft.)	Water Type
80	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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-1		TOP SOIL
1-14		CALICHE
14-18		BLUE/GRAY LIMESTONE
18-260		GRAY LIMESTONE
260-370		GRAY/TAN LIMESTONE
370-460		TAN/GRAY LIMESTONE
460-490		TAN LIMESTONE
490-530		GRAY LIMESTONE W/HAMMETT
		CLAY
530-540		HAMMETT & RED CLAY
540-560		GRAY LIMESTONE
560-570		SANDSTONE H20
570-630		RED/TAN SANDSTONE
630-730		RED/TAN LIMESTONE STRIPS
730-760		RED SAND AND GRAVEL

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N PVC SDR17	+3 TO 760
5"	OD	N PVC SDR17	SLOT 600 TO 760 .032

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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 #307921

Owner:	Shops at the Galleria	Owner Well #:	1
Address:	P.O. Box 340489 Austin, TX 78734	Grid #:	58-41-5
Well Location:	13401 Galleria Parkway Austin, TX 78738	Latitude:	30° 18' 40" N
Well County:	Travis	Longitude:	097° 56' 30" W
		Elevation:	963 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **12/14/2012** Drilling End Date: **12/15/2012**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	10	0	10
	8	10	20
	6.75	20	860

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	50	14 cement

Seal Method: **slurry and pour**

Sealed By: **Steve Stewart**

Distance to Property Line (ft.): **15**

Distance to Septic Field or other
concentrated contamination (ft.): **62 sewer**

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

Method of Verification: **tape**

Surface Completion: **Pitless Adapter Used**

Water Level: **485 ft. below land surface on 2012-12-19** Measurement Method: **Unknown**

Packers: **neoprene shale trap 50, 300, 735, 740, 755, 760**

Type of Pump: **Submersible** Pump Depth (ft.): **740**

Well Tests: **Jetted** Yield: **45 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	4	topsoil
4	7	white caliche
7	13	gray limestone
13	20	gray shale
20	45	white limestone
45	350	gray limestone wb 2 gpm 1400 tds
350	390	gray clay
390	475	gray limestone wb 5 gpm 1000 tds
475	515	tan & white limestone
515	690	gray & white limestone
690	710	brown & red limestone
710	720	red & gray clay
720	730	trinity sandstone & gravel wb 20 gpm
730	860	white & pink sandstone wb 25 gpm 1000 tds

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17 pvc	0 820
4.5	new	sdr-17 pvc slotted	820 860

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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 #307923

Owner:	Shops at the Galleria	Owner Well #:	1
Address:	P.O. Box 340489 Austin, TX 78734	Grid #:	58-41-5
Well Location:	13401 Galleria Parkway Austin, TX 78738	Latitude:	30° 18' 34" N
Well County:	Travis	Longitude:	097° 56' 16" W
		Elevation:	936 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **12/14/2012** Drilling End Date: **12/15/2012**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	10	0	10
	8	10	20
	6.75	20	860

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	50	14 cement

Seal Method: **slurry and pour**

Sealed By: **Steve Stewart**

Distance to Property Line (ft.): **18**

Distance to Septic Field or other
concentrated contamination (ft.): **52 sewer**

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

Method of Verification: **tape**

Surface Completion: **Pitless Adapter Used**

Water Level: **475 ft. below land surface on 2012-12-20** Measurement Method: **Unknown**

Packers: **neoprene shale trap 50, 420, 425, 740, 745**

Type of Pump: **Submersible** Pump Depth (ft.): **740**

Well Tests: **Jetted** Yield: **20 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	3	topsoil
3	5	white caliche
5	9	red caliche
9	20	gray limestone
20	25	gray shale
25	50	white limestone
50	400	gray limestone
400	420	gray clay
420	500	gray limestone wb 4 gpm 1300 tds
500	510	tan limestone
510	530	gray clay
530	710	gray limestone
710	730	red & gray clay
730	740	red sandstone w/ shale
740	860	red & pink trinity mix 20 gpm 1000 tds

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17 pvc	0 820
4.5	new	sdr-17 pvc slotted	820 860

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 #308311

Owner: **Ryan Searle**

Owner Well #: **No Data**

Address: **14941 Hamilton Pool Rd
Austin, TX 78738**

Grid #: **58-41-4**

Well Location: **14941 Hamilton Pool Rd
Austin, TX 78738**

Latitude: **30° 18' 14" N**

Longitude: **097° 58' 43" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **10/24/2012**

Drilling End Date: **10/25/2012**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	30
	6.5	30	765

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	4 of Portland

Seal Method: **Slurry**

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

Sealed By: **Driller**

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 610', 600', 580', 30', 20'**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 18-20 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
610-748	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**License Number: **54516**Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	6	Black Dirt
6	18	Red Clay and Gravel
18	27	Tan Limestone
27	380	Gray/Tan Limestone
380	390	Tan/White Limestone
390	440	Gray/Tan Limestone
440	470	Tan/White Limestone
470	520	Gray/Tan Limestone
520	568	Gay Limestone w/ Clay
568	610	Red Sandstone
610	618	Gravel **H2O
618	630	Red Sandstone
630	655	Gravel **H2O
655	702	Red Sandstone
702	718	Tan Limestone w/ Sand **H2O
718	748	Red Sandstone **H2O
748	765	Tan Clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5"	(5" OD)	New PVC	+2' to 665' SDR17
4.5"	(5" OD)	New Slotted PVC	665' to 685' .035
4.5"	(5" OD)	New PVC	685' to 705' SDR17
4.5"	(5" OD)	New Slotted PVC	705' to 745' .035
4.5"	(5" OD)	New PVC	745' to 765' SDR17

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 #312786

Owner:	David Bickley	Owner Well #:	1
Address:	12017 Musket Rim Austin, TX 78738	Grid #:	58-41-8
Well Location:	12017 Musket Rim Austin, TX 78738	Latitude:	30° 17' 15" N
Well County:	Travis	Longitude:	097° 56' 04" W
		Elevation:	954 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **1/23/2013** Drilling End Date: **1/24/2013**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	10	0	10
	8	10	20
	6.75	20	820

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	50	9 cement

Seal Method: **slurry and pour**

Sealed By: **Steve Stewart**

Distance to Property Line (ft.): **65**

Distance to Septic Field or other
concentrated contamination (ft.): **75' sewer**

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

Method of Verification: **Google Earth**

Surface Completion: **Pitless Adapter Used**

Water Level: **390 ft. below land surface on 2013-01-25** Measurement Method: **Unknown**

Packers: **neoprene shale trap 50, 330, 335, 600, 605, 700, 705**

Type of Pump: **Submersible** Pump Depth (ft.): **760**

Well Tests: **Jetted** Yield: **50 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	topsoil
2	7	tan caliche
7	15	tan limestone
15	25	white limestone
25	170	gray limestone
170	195	gray shale
195	305	gray limestone
305	330	gray limestone w/ shale
330	350	gray limestone
350	370	white sandstone wb 10 gpm 1700 tds
370	450	gray & white limestone
450	510	gray limestone
510	600	gray clay
600	620	gray limestone
620	630	brown & gray sandstone
630	670	red & gray sandstone wb 20 gpm 1000 tds

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17 pvc	0 780
4.5	new	sdr-17 pvc perf	780 820

670	700	tan & gray sandstone
700	820	tan & red rock wb 30 gpm 900 tds

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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 #312794

Owner:	Ray Bearden	Owner Well #:	1
Address:	5221 Musket Cove Austin, TX 78738	Grid #:	58-41-8
Well Location:	5221 Musket Cove Austin, TX 78738	Latitude:	30° 17' 12" N
Well County:	Travis	Longitude:	097° 56' 05" W
		Elevation:	938 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **1/28/2013** Drilling End Date: **1/29/2013**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	10	0	10
	8	10	20
	6.75	20	800

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	50	9

Seal Method: **slurry and pour**

Sealed By: **Steve Stewart**

Distance to Property Line (ft.): **71**

Distance to Septic Field or other
concentrated contamination (ft.): **62 sewer**

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

Method of Verification: **Google Earth**

Surface Completion: **Pitless Adapter Used**

Water Level: **443 ft. below land surface on 2013-01-31** Measurement Method: **Unknown**

Packers: **neoprene shale trap 50, 350, 355, 595, 600, 740, 745**

Type of Pump: **Submersible** Pump Depth (ft.): **760**

Well Tests: **Jetted** Yield: **50 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	10	fill dirt
10	28	limestone
28	130	gray limestone
130	150	gray shale
150	300	gray limestone
300	370	gray shale
370	410	white sandstone wb 10 gpm 1500 tds
410	470	gray & white limestone
470	520	gray limestone
520	620	gray clay
620	640	brown & gray sandstone
640	800	red & brown sandstone wb 50 gpm 900 tds

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17 pvc	0 760
4.5	new	sdr-17 pvc perf	760 800

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 #314848

Owner:	Emerald Crest Development	Owner Well #:	1
Address:	2727 Exposition Blvd. Ste. 101 Austin, TX 78703	Grid #:	58-41-5
Well Location:	12516 Maidenhair Ln. Austin, TX 78738	Latitude:	30° 17' 38" N
		Longitude:	097° 56' 43" W
Well County:	Travis	Elevation:	940 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **2/20/2013** Drilling End Date: **2/21/2013**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	10	0	10
	8	10	20
	6.75	20	810

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	50	9 cement

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: **524 ft. below land surface on 2013-02-22** Measurement Method: **Unknown**

Packers: **neoprene 50, 300, 305, 700, 705**

Type of Pump: **Submersible** Pump Depth (ft.): **780**

Well Tests: **Jetted** Yield: **80 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	2	rock
2	7	tan caliche
7	12	tan clay
12	55	tan limestone
55	215	gray limestone
215	305	white & gray limestone
305	325	white limestone
325	360	white sandstone wb 10 gpm 1000 tds
360	470	gray & white limestone
470	530	gray limestone
530	560	gray clay
560	620	gray limestone
620	690	brown & red sandstone
690	770	tan & red sandstone wb 20 gpm
770	795	tan & red gravel wb 80 gpm 700tds

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17 pvc	0 750
4.5	new	sdr-17 pvc perf	750 790
4.5	new	sdr-17 pvc	790 810

795	810	yellow clay
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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 #315108

Owner: **L T YOUTH ASSOC./ JOHN NELMS**

Owner Well #: **No Data**

Address: **2101 LAKEWAY BLVD.,STE.115
LAKEWAY, TX 78734**

Grid #: **58-41-5**

Well Location: **3927 RANCH RD. SOUTH
AUSTIN, TX 78738**

Latitude: **30° 18' 54" N**

Longitude: **097° 56' 46" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **3/7/2013**

Drilling End Date: **3/7/2013**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.5	100	870

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	17 CEMENT
	0	100	14 VOLCLAY
	0	100	

Seal Method: **PRESSURE TRIMMIE
CEMENT**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

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: **575 ft. below land surface on 2013-03-07** Measurement Method: **Unknown**

Packers: **6 BURLAP,PVC 100',590',610',630',670'
730'**

Type of Pump: **Jet**

Well Tests: **Jetted** **Yield: 35 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
80	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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-2		TOP SOIL
2-14		CALICHE
14-18		BLUE LIMESTONE
18-210		GRAY LIMESTONE
210-410		GRAY/TAN LIMESTONE
410-500		TAN LIMESTONE
500-540		GRAY LIMESTONE
540-560		GRAY LIMESTONE W/HAMMETT
		STRIPS
560-595		HAMMETT CLAY
595-620		HAMMETT CLAY W/RED CLAY
620-630		GRAY LIMESTONE W/CLAY
630-660		GRAY/TAN SANDSTONE
660-670		SANDSTONE W/CLAY STRIPS
670-710		RED SANDSTONE
710-730		RED/TAN LIMESTONE W/BUE
		BLUE CLAY
730-740		MULTICOLOR LIMESTONE

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 870
5"	OD	N SDR17 PVC SLOT	690 TO 710 .032
5"	OD	N SDR17 PVC SLOT	730 TO 870 .032

740-750 TAN/RED LIMESTONE
750-870 RED SAND & GRAVEL

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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 #315494

Owner:	AVANTI HILLS/GALLERIA WELL #2	Owner Well #:	No Data
Address:	P. O. BOX 340489 AUSTIN, TX 78734	Grid #:	58-41-5
Well Location:	13401 GALLERIA CIRCLE AUSTIN, TX 78734	Latitude:	30° 18' 37" N
Well County:	Travis	Longitude:	097° 56' 17" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **2/27/2013** Drilling End Date: **2/27/2013**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	6.5	100	880

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	14 CEMENT
	0	100	10 VOLCLAY

Seal Method: **PRESSURE TRIMMIE
CEMENT**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

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: **589 ft. below land surface on 2013-02-27** Measurement Method: **Unknown**

Packers: **9 BURLAP, PVC 100',120',560',580',600',680',700',740',820**

Type of Pump: **Submersible**

Well Tests: **Jetted** Yield: **30 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
80	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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-22		CALICHE
22-370		GRAY LIMESTONE
370-510		GRAY W/TAN LIMESTONE
510-520		TAN LIMESTONE
520-555		GRAY LIMESTONE W/HAMMETT
		CLAY
555-580		HAMMETT CLAY
580-585		GRAY LIMESTONE W/CLAY
		STRIPS
585-590		GRAY LIMESTONE W/RED CLAY
590-630		GRAY/TAN LIMESTONE
630-645		GRAY/TAN LIMESTONE W/RED
		SANDSTONE
645-685		GRAY LIMESTONE W/RED CLAY
685-690		GRAY/TAN/RED LIMESTONE
690-720		TAN/GRAY LIMESTONE
720-730		MULTICOLOR W/RED SHALE
730-775		RED SANDSTONE

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD N	SDR17 PVC	+3 TO 880
5"	OD N	SDR17 PVC SLOT	760 TO 800 .032
5"	OD N	SDR17 PVC SLOT	820 TO 860 .032

775-780 MULTICOLOR W/RED
LIMESTONE
780-800 GRAVEL H2O
800-810 RED MULTICOLOR W/SHALE
STRIP
810-870 RED MULTICOLOR
870-880 BLUE/YELLOW CLAY

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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 #316408

Owner:	AVANTI HILLS/WELL #1	Owner Well #:	No Data
Address:	P.O. BOX 340489 AUSTIN, TX 78734	Grid #:	58-41-5
Well Location:	12601 BEE CAVES PKWY. AUSTIN, TX 78734	Latitude:	30° 18' 39" N
Well County:	Travis	Longitude:	097° 56' 23" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **2/25/2013** Drilling End Date: **2/25/2013**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	6.5	100	890

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	16 CEMENT
	0	100	8 VOLCLAY

Seal Method: **PRESSURE TRIMMIE
CEMENT**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

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: **605 ft. below land surface on 2013-02-25** Measurement Method: **Unknown**

Packers: **5 BURLAP, PVC 100',650',670',730',750'**

Type of Pump: **Submersible**

Well Tests: **Jetted** Yield: **30 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
80	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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-2		CALICHE
2-310		GRAY LIMESTONE
310-350		GRAY/TAN LIMESTONE
350-370		GRAY/TAN LIMESTONE
370-525		TAN W/GRAY LIMESTONE
525-540		TAN LIMESTONE
540-550		BROWN LIMESTONE
550-560		GRAY LIMESTONE W/BLUE CLAY
560-565		TAN/BROWN/GRAY HAMMETT
565-610		HAMMETT
610-650		GRAY W/TAN LIMESTONE
650-660		GRAY W/TAN LIMESTONE
		W/BLUE SHALE
660-665		MULTICOLOR W/RED LIMESTONE
665-670		RED CLAY
670-690		RED SAND W/CLAY
690-715		MULTICOLOR W/RED LIMESTONE
715-740		MULTICOLOR W/BLUE SHALE

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 890
5"	OD	N SDR17 PVC SLOT	770 TO 830 .032
5"	OD	N SDR17 PVC SLOT	850 TO 890 .032

740-750 RED W/SHALE
750-810 RED LIMESTONE
810-890 RED/GRAVEL

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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 #316582

Owner:	Russell Enis	Owner Well #:	No Data
Address:	15025 Hamilton Pool Rd. Austin, TX 78738	Grid #:	58-41-4
Well Location:	15025 Hamilton Pool Rd. Austin, TX 78738	Latitude:	30° 18' 21" N
Well County:	Travis	Longitude:	097° 58' 57" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **12/14/2012** Drilling End Date: **12/19/2012**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	9	0	20
	8	20	103
	6.5	103	705

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	103	21

Seal Method: **Tremie Tube**

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: **445 ft. below land surface on 2012-12-18** Measurement Method: **Unknown**

Packers: **Shale Trap 622', 605', 103'**

Type of Pump: **Submersible** Pump Depth (ft.): **600**

Well Tests: **Estimated** 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: **Tom Arnold Drilling**
2750 S Q. W. Grimes Blvd.
Roundrock, TX 78664

Driller Name: **Tommy D. Arnold**

License Number: **2096**

Comments: **See note in late report file.**
^EAD

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	9	yellow limestone
9	26	blue limestone & shale
26	41	gray limestone
41	50	brown limestone
50	388	gray limestone
388	414	blue liemstone & shale
414	580	gray limestone
580	600	gray sandstone
600	622	gray sandstone & shale
622	655	gray sand
655	666	blue shale
666	680	gray sandstone & sand strip
680	690	red shale
690	705	red sandstone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4 1/2"	N	Plastic	0'-103'
Perf. 622'-655'			

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #316585

Owner: **Cassie & Creed Ford**

Owner Well #: **No Data**

Address: **325 Ranch Rd. 620 S #104
Lakeway, TX 78734**

Grid #: **58-41-4**

Well Location: **16490 Flint Rock Rd.
Lakeway, TX 78734**

Latitude: **30° 19' 59" N**

Longitude: **097° 59' 37" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **12/20/2012** Drilling End Date: **12/29/2012**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	20
	8	20	815

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	6

Seal Method: **Hand Poured**

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

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **180**

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

Method of Verification: **Tape Measure**

Surface Completion: **Pitless Adapter Used**

Water Level: **487 ft. below land surface on 2012-12-21** Measurement Method: **Unknown**

Packers: **Shale Trap 750', 709', 705', 685', 20'**

Type of Pump: **Submersible**

Pump Depth (ft.): **600**

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: **Tom Arnold Drilling**
2750 S Q. W. Grimes Blvd.
Roundrock, TX 78664

Driller Name: **Tommy D. Arnold**

License Number: **2096**

Comments: **See note in late report file.**
^EAD

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	fill
1	11	yellow limestone
11	34	blue limestone
34	41	brown limestone
41	230	gray limestone
230	245	brown limestone
245	412	gray limestone
412	430	gray limestone & shale
430	511	gray limestone
511	560	red & blue shale
560	580	red sandstone
580	640	red shale
640	709	red sandstone
709	730	red cemented gravel & sand
730	750	red sandstone & shale
750	770	cemented gravel & sand
770	790	gray liemstone & shale

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4 1/2"	N	Plastic	0'-810'
Perf. 709'-730'			
Perf. 750'-770'			

790	815	blue 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 #319330

Owner: **Dr. John Maxwell**

Owner Well #: **No Data**

Address: **12817 Hacienda Ridge
Austin, TX 78738**

Grid #: **58-41-5**

Well Location: **12817 Hacienda Ridge
Austin, TX 78738**

Latitude: **30° 17' 54" N**

Longitude: **097° 57' 10" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **3/27/2013**

Drilling End Date: **3/28/2013**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.75	100	930

Drilling Method: **Air Rotary**

Borehole Completion: **cased; Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	1	100	14cmt 5gel

Seal Method: **pressure pumped / tremie
method**

Distance to Property Line (ft.): **7**

Sealed By: **ADC**

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

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

Method of Verification: **tape**

Surface Completion: **Surface Sleeve Installed**

Water Level: **508 ft. below land surface on 2013-03-28** Measurement Method: **Unknown**

Packers: **burlap,plastic,rubber @ 670,650,630,100**

Type of Pump: **Submersible** Pump Depth (ft.): **800**

Well Tests: **Jetted** Yield: **15-20 GPM**

	<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Plug Information:	n/a		

Water Quality:

Strata Depth (ft.)	Water Type
720-930	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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-	15	tan and white limestone
15-	340	gray lime
340-	390	tan limestone
390-	570	gray lime
570-	605	gray shale/clay
605-	690	gray and white limestone
690-	720	tan and white limestone
720-	840	red sandstone
840-	875	red and white sandstone
875-	930	red and white limestone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5	od	new sdr17 pvc	-3 to 730
5	od	new sdr17 pvc (.032)	screen 730 to 930 stag.

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STATE OF TEXAS WELL REPORT for Tracking #321851

Owner:	Lake Travis ISD	Owner Well #:	1
Address:	3322 RR 620 Austin, TX 78738	Grid #:	58-41-4
Well Location:	3322 RR 620 Austin, TX 78738	Latitude:	30° 19' 24" N
Well County:	Travis	Longitude:	097° 58' 10" W
		Elevation:	1102 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 12/27/2012 Drilling End Date: 6/13/2013

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	12	0	1000

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	60	80ptIn66hlpg

Seal Method: Pos. Displacement

Sealed By: Driller

Distance to Property Line (ft.): 200+

Distance to Septic Field or other
concentrated contamination (ft.): 1,000

Distance to Septic Tank (ft.): No Data

Method of Verification: Measured

Surface Completion: Surface Slab Installed

Water Level: 694 ft. below land surface on 2013-05-16 Measurement Method: Unknown

Packers: Shale Packer 680'
Shale Packer 675'
Shale Packer 670'
6MIL Poly 60'

Type of Pump: Submersible Pump Depth (ft.): 840

Well Tests: Pump Yield: 25 GPM

Water Quality:

Strata Depth (ft.)	Water Type
840'/940'	Unknown

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: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	3	Topsoil
3	9	Brown Limestone
9	18	Caliche
18	27	Brown Tan Limestone
27	1000	Void

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
6.9	New	PVC-SDR 17IB	+2'/840'
6.9	New	PVC-17 Slotted	.035 840'/938'
6.9	New	Cap	938'/940'
940'/1000'		Open Hole	

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Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #322167

Owner: **Tim Skaggs**

Owner Well #: **No Data**

Address: **13618 West HWY 71
Bee Cave, TX 78738**

Grid #: **58-41-5**

Well Location: **13618 West HWY 71
Bee Cave, TX 78738**

Latitude: **30° 18' 36" N**

Longitude: **097° 57' 28" W**

Well County: **Travis**

Elevation: **No Data**

****This well has been plugged****

Plugging Report Tracking #161309

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **4/16/2013**

Drilling End Date: **4/16/2013**

Borehole:

<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
9	0	50
6.125	50	410

Drilling Method: **Air Rotary**

Borehole Completion: **cased; Straight Wall**

Annular Seal Data:

<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
1	50	7cmt 3gel

Seal Method: **hand poured**

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

Sealed By: **ADC**

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

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

Method of Verification: **tape**

Surface Completion: **Surface Sleeve Installed**

Water Level: **188 ft. below land surface on 2013-04-16** Measurement Method: **Unknown**

Packers: **burlap,plastic,rubber @ 230,50**

Type of Pump: **Submersible** Pump Depth (ft.): **360**

Well Tests: **Jetted** **Yield: 70-80 GPM**

Plug Information:

<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
n/a		

Water Quality:

Strata Depth (ft.)	Water Type
240-390	glen rose

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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	15	tan lime
15	210	gray lime
210	240	tan limestone
240	245	Fracture
245	330	tan limestone
330	410	gray lime

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5	od new	sdr17 pvc	-3 to 330
5	od new	sdr17 pvc (.032)	screen 330 to 390
5	od new	sdr17 pvc	390 to 410

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STATE OF TEXAS WELL REPORT for Tracking #335005

Owner:	Larry Amberg	Owner Well #:	No Data
Address:	5908 Krause Ln. Austin, TX 78738	Grid #:	58-41-8
Well Location:	5908 Krause Ln Austin, TX 78738	Latitude:	30° 16' 34" N
Well County:	Travis	Longitude:	097° 56' 27" W
		Elevation:	906 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **7/22/2013** Drilling End Date: **7/26/2013**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	8	0	760

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	1h1pg4bns16tpH

Seal Method: **Positive displacement**

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: **Measured**

Surface Completion: **Surface Sleeve Installed**

Water Level: **448 ft. below land surface on 2013-07-26** Measurement Method: **Unknown**

Packers:

- 6MilPoly 100**
- 6MilPoly 160**
- 6MilPoly 280**
- 6MilPoly 400**
- 6MilPoly 480**
- 6MilPoly 580**

Type of Pump: **Submersible** Pump Depth (ft.): **700**

Well Tests: **Jetted** Yield: **20+ GPM**

Water Quality:

Strata Depth (ft.)	Water Type
600 / 760	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**

Apprentice Name: **Travis Haffelder**

Apprentice Number: **58603**

Comments: **TDS 700**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	2	Brown Limestone
2	5	Tan Brown Limestone
5	90	Gray Limestone
90	110	Tan Limestone
110	180	Gray Limestone
180	210	Tan Gray Limestone
210	300	Light Brown Gray Limestone
300	350	Light Tan Limestone
350	400	Gray Tan Limestone
400	473	Light Gray Limestone
473	500	Tan Limestone
500	540	Gray Tan Limestone
540	620	Tan Limestone (damp)
620	760	Calcite

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	New	PVC-SDR 17IB	0' to 700'
4.5	New	PVC-17 Slotted .035	700' to 760'

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STATE OF TEXAS WELL REPORT for Tracking #337020

Owner:	SCOTT HANSON #2	Owner Well #:	2
Address:	4600 SPANISH OAKS CLUB BLVD. AUSTIN, TX 78738	Grid #:	57-48-6
Well Location:	15730 HAMILTON POOL ROAD AUSTIN, TX 78738	Latitude:	30° 18' 34" N
Well County:	Travis	Longitude:	098° 00' 14" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Test Well

Drilling Start Date: 5/1/2013

Drilling End Date: 5/1/2013

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	20
	6.5	20	330

Drilling Method: Air Hammer

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: No Test Data Specified

	Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
Plug Information:	0 0 2 1		

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:

Driller Name: **TOMMY ARNOLD**

License Number: **2096**

Comments: **^MP**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-1		LOOSE ROCK
1-6		YELL L.STONE
6-31		BLU L.STONE
31-108		GRAY L.STONE
108-128		BRWN L.STONE
128-292		GRAY L.STONE
292-293		FRACTURE
293-330		NO RETURNS
(WELL BACK FILLED W/DRILL CUTTING & ABONDANDED)		

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
NONE			

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 #337023

Owner:	SCOTT HANSON	Owner Well #:	2
Address:	4600 SPANISH OAKS CLUB BLVD. AUSTIN, TX 78738	Grid #:	57-48-6
Well Location:	15730 HAMILTON POOL ROAD AUSTIN, TX 78738	Latitude:	30° 18' 30" N
Well County:	Travis	Longitude:	098° 00' 19" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Test Well

Drilling Start Date: **4/30/2013** Drilling End Date: **4/30/2013**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	20
	6.5	20	310

Drilling Method: **Air Hammer**

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: **No Test Data Specified**

	Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
Plug Information:	0 0 2 1		

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:

Driller Name: **TOMMY ARNOLD**

License Number: **2096**

Comments: **^MP**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-1		LOOSE ROCK
1-6		YELL L.STONE
6-31		BLU L.STONE
31-126		GRAY L.STONE
126-140		BRWN L.STONE
140-290		GRAY L.STONE
290-291		FRACTURE
291-310		NO RETURNS
(WELL BACK FILLED W/DRILL CUTTING & ABONDANDED)		

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
NONE			

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STATE OF TEXAS WELL REPORT for Tracking #341372

Owner: **Shelton Boyce**

Owner Well #: **No Data**

Address: **6221 Spanish Oaks Club Blvd.
Austin, TX 78738**

Grid #: **58-41-5**

Well Location: **6221 Spanish Oaks Club Blvd.
Austin, TX 78738**

Latitude: **30° 17' 49" N**

Longitude: **097° 57' 07" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **7/24/2013**

Drilling End Date: **7/25/2013**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.25	100	870

Drilling Method: **Air Rotary**

Borehole Completion: **cased; Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	1	100	6cmt 7gel

Seal Method: **pressure pumped /
tremmie method**

Distance to Property Line (ft.): **40**

Sealed By: **ADC**

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

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

Method of Verification: **owner / tape**

Surface Completion: **Surface Sleeve Installed**

Water Level: **487 ft. below land surface on 2013-07-25** Measurement Method: **Unknown**

Packers: **burlap,plastic,rubber @ 690,670,650,110,100**

Type of Pump: **Submersible** Pump Depth (ft.): **780**

Well Tests: **Jetted** Yield: **20-25 GPM**

	<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Plug Information:	n/a		

Water Quality:

Strata Depth (ft.)	Water Type
700-850	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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	20	white limestone
20	410	gray lime
410	460	tan lime
460	540	gray lime
540	575	gray shale/clay
575	635	grayand white limestone
635	700	reddish brown sandstone
700	750	multi-colored limestones
750	810	red sandstone
810	830	multi-colored limestones (gravel)
830	850	yellow limestone
850	870	yellow / gray clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5 od	new	sdr17 pvc	-3 to 770
5 od	new	sdr17 pvc (.032)	screen 770 to 850
5 od	new	sdr17 pvc	850 to 870

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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STATE OF TEXAS WELL REPORT for Tracking #343732

Owner:	Dan Carrasco	Owner Well #:	No Data
Address:	4816 Paraiso Pkwy. Austin, TX 78738	Grid #:	58-41-8
Well Location:	4816 Paraiso Pkwy. Au, TX 78738	Latitude:	30° 17' 22" N
Well County:	Travis	Longitude:	097° 55' 53" W
		Elevation:	881 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **8/19/2013** Drilling End Date: **8/20/2013**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	10
	8	10	20
	6.75	20	810

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	50	5 cement

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: **393 ft. below land surface on 2013-08-21** Measurement Method: **Unknown**

Packers: **neoprene 50, 330, 740, 755, 760**

Type of Pump: **Submersible** Pump Depth (ft.): **760**

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: **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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	3	topsoil
3	4	tan caliche
4	12	tan limestone
12	30	white limestone
30	240	gray limestone
240	260	gray shale
260	410	white limestone wb 15 gpm
410	540	gray limestone
540	610	gray clay
610	620	gray limestone
620	700	tan & brown clay
700	750	red & brown sandstone w/ clay
750	810	red & tan sandstone wb

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17 0	770
4.5	new	perf	770 810

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 #343733

Owner:	Jerry Lehmann	Owner Well #:	No Data
Address:	12020 Musket Rim St. Austin, TX 78738	Grid #:	58-41-8
Well Location:	12020 Musket Rim St. Austin, TX 78738	Latitude:	30° 17' 18" N
		Longitude:	097° 56' 04" W
Well County:	Travis	Elevation:	942 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **8/20/2013** Drilling End Date: **8/21/2013**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	10
	8	10	20
	6.75	20	790

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	50	9 cement

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:	345 ft. below land surface on 2013-08-23	Measurement Method:	Unknown
Packers:	neoprene 50, 350, 670, 695, 700		
Type of Pump:	Submersible	Pump Depth (ft.):	760
Well Tests:	Jetted	Yield:	50 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	4	topsoil
4	140	gray limestone
140	170	tan limestone
170	210	gray shale
210	310	gray limestone
310	450	white limestone wb 10 gpm
450	550	gray limestone
550	670	gray clay
670	790	brown sandstone wb 50 gpm

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 750
4.5	new	perf	750 790

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #343735

Owner:	Joe Stinus	Owner Well #:	No Data
Address:	11801 Musket Rim St. Austin, TX 78738	Grid #:	58-41-8
Well Location:	14801 Musket Rim St. TX 78738	Latitude:	30° 17' 20" N
Well County:	Travis	Longitude:	097° 55' 54" W
		Elevation:	934 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **8/21/2013** Drilling End Date: **8/21/2013**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	10	0	10
	8	10	20
	6.75	20	790

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	50	10 cement

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:	344 ft. below land surface on 2013-09-02	Measurement Method:	Unknown
Packers:	neoprene 50, 320, 650, 700, 705		
Type of Pump:	Submersible	Pump Depth (ft.):	760
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: **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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	3	topsoil
3	7	tan caliche
7	280	gray limestone
280	300	gray clay
300	440	white limestone wb 7 gpm @ 350
440	540	gray limestone
540	610	gray clay
610	690	gray sandstone
690	700	brown sandstone w/ clay
700	790	brown & red sandstone wb 1000 tds 35 gpm

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 750
4.5	new	perf	750 790

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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #346394

Owner: **CULLEN & JORDIN LOEFFLER**

Owner Well #: **No Data**

Address: **12300 EMORY OAK LANE
AUSTIN, TX 78738**

Grid #: **58-41-8**

Well Location: **12300 EMORY OAK LANE
AUSTIN, TX 78738**

Latitude: **30° 17' 21" N**

Longitude: **097° 56' 41" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **8/12/2013**

Drilling End Date: **8/12/2013**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.5	100	950

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	14 CEMENT
	0	100	5 VOLCLAY

Seal Method: **PRESSURE TRIMMIE
CEMENT**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

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: **490 ft. below land surface on 2013-08-12** Measurement Method: **Unknown**

Packers: **7 BURLAP,PVC,RUBBER 100',640',660',720',
740',820',900'**

Type of Pump: **Submersible**

Well Tests: **Jetted** Yield: **25-30 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
120	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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-1		CALICHE ROCK
1-18		CALICHE
18-20		BLUE LIMESTONE
20-350		GRAY LIMESTONE
350-430		GRAY/TAN LIMESTONE
430-570		TAN LIMESTONE
570-585		TAN W/BROWN LIMESTONE
585-600		GRAY LIMESTONE
600-650		GRAY LIMESTONE
		W/HAMMETT CLAY
650-660		GRAY LIMESTONE
		W/RED CLAY
660-670		GRAY/TAN LIMESTONE
670-680		GRAY LIMESTONE W/CLAY
		STRIPS
680-700		GRAY/TAN SANDSTONE
700-710		RED LIMESTONE W/RED
		CLAY STRIPS

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 950
5"	OD	N SDR17 PVC SLOT	780 TO 800 .032
5"	OD	N SDR17 PVC SLOT	860 TO 880 .032
5"	OD	N SDR17 PVC SLOT	900 TO 940 .032

710-740 RED SANDSTONE W/CLAY
740-790 RED SAND
790-940 MULTI COLOR SANDSTONE
940-950 BLUE/YELLOW LIMESTONE

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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 #347690

Owner:	Alan Engelbrecht	Owner Well #:	No Data
Address:	4825 Malaquita Branch Austin, TX 78738	Grid #:	58-41-5
Well Location:	4825 Malaquita Branch Austin, TX 78738	Latitude:	30° 17' 31" N
		Longitude:	097° 55' 56" W
Well County:	Travis	Elevation:	888 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 10/7/2013 Drilling End Date: 10/8/2013

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	10
	8	10	20
	6.75	20	750

Drilling Method: Air Rotary

Borehole Completion: Open Hole

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	50	12 cement

Seal Method: Slurry & 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: 360 ft. below land surface on 2013-10-11 Measurement Method: Unknown

Packers: neoprene 50, 400, 405, 675, 680

Type of Pump: Submersible Pump Depth (ft.): 660

Well Tests: Jetted Yield: 30 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	3	topsoil
3	7	tan limestone
7	15	white limestone
15	75	gray limestone
75	110	gray clay
110	290	white limestone
290	370	gray limestone wb @ 350 5 gpm
370	470	white & tan sandstone wb @ 440 30 gpm
470	520	dark gray limestone
520	600	gray clay
600	650	brown sandstone
650	750	red, pink,&tan sandstone wb30gpm900tds

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 690
4.5	new	perf	690 750

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Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #347713

Owner:	Charles Manning	Owner Well #:	No Data
Address:	12317 Emory Oak Ln. Austin, TX 78738	Grid #:	58-41-8
Well Location:	12317 Emory Oak Ln. Austin, TX 78738	Latitude:	30° 17' 18" N
Well County:	Travis	Longitude:	097° 56' 44" W
		Elevation:	985 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **10/10/2013** Drilling End Date: **10/11/2013**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	10	0	10
	8	10	20
	6.75	20	850

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	50	14 cement

Seal Method: **Slurry & 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: **498 ft. below land surface on 2013-10-18** Measurement Method: **Unknown**

Packers: **neoprene 50, 320, 325, 700, 705**

Type of Pump: **Submersible** Pump Depth (ft.): **660**

Well Tests: **Jetted** Yield: **70 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	7	topsoil & fill
7	15	tan limestone
15	270	gray limestone
270	280	gray shale
280	350	gray limestone
350	510	gray & tan limestone
510	550	hard white limestone wb 20 gpm
550	570	gray limestone
570	700	gray clay
700	760	brown & gray sandstone wb 35 gpm
760	850	red & tan sandstone wb 35 gpm 1100 tds

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 750
4.5	new	perf	750 850

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P.O. Box 12157
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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #349901

Owner:	HILL COUNTRY GALLERIA/WELL #3	Owner Well #:	No Data
Address:	12912 HILL COUNTRY BLVD.,STE.F BEE CAVES, TX 78738	Grid #:	58-41-5
Well Location:	12912 HILL COUNTRY BLVD.STE.F-250 BEE CAVES, TX 78738	Latitude:	30° 18' 30" N
		Longitude:	097° 56' 01" W
Well County:	Travis	Elevation:	No Data

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **9/16/2013**

Drilling End Date: **9/16/2013**

Borehole:

<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
12.75	0	120
9.75	120	900

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

Annular Seal Data:

<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
0	120	35 CEMENT
0	120	4 VOLCLAY

Seal Method: **PRESSURE TRIMMIE
CEMENT**

Distance to Property Line (ft.): **NA/**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **N/A**

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

Method of Verification: **MANAGEMENT**

Surface Completion: **Surface Sleeve Installed**

Water Level: **471 ft. below land surface on 2013-09-16** Measurement Method: **Unknown**

Packers: **6 NUEROPREEM PACKERS, 120',540',560',580'
BURLAP, PVC 600',700'**

Type of Pump: **Submersible**

Well Tests: **Jetted** Yield: **55-60 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
80	TRINITY

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: **CENTEX PUMP & SUPPLY, INC.**
2520 HWY. 290 WEST
DRIPPING SPRINGS, TX 78620

Driller Name: **FRANK GLASS**

License Number: **1313**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-2		TOP SOIL
2-25		CALICHE
25-30		BLUE/GRAY LIMESTONE
30-310		GRAY LIMESTONE
310-430		GRAY/TAN LIMESTONE
430-490		TAN LIMESTONE
490-500		BROWN LIMESTONE
500-520		GRAY LIMESTONE
520-550		GRAY LIMESTONE W/HAMMETT
		CLAY
550-570		GRAY/TAN LIMESTONE
570-580		TAN W/GRAY LIMESTONE
580-600		GRAY/BROWN LIMESTONE
600-610		TAN/GRAY LIMESTONE
610-630		TAN/RED SANDSTONE
630-750		RED/TAN SANDSTONE
750-850		RED SAND & GRAVEL
850-870		TAN/RED LIMESTONE

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
6.9	N	SDR17 PVC	+2 TO 900
6.9	N	SDR17 PVC	700 TO 720 .032
6.9	N	SDR17 PVC	780 TO 880 .032

870-890 GRAY/TAN LIMESTONE
890-900 GRAY LIMESTONE

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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #350403

Owner:	Sage Johnston	Owner Well #:	No Data
Address:	5191 Avispa Way Austin, TX 78738	Grid #:	58-41-4
Well Location:	5191 Avispa Way Austin, TX 78738	Latitude:	30° 18' 37" N
Well County:	Travis	Longitude:	097° 58' 37" W
		Elevation:	1030 ft. above sea level
Type of Work:	Deepening	Proposed Use:	Irrigation

Drilling Start Date: **11/1/2013** Drilling End Date: **11/1/2013**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	5.75	530	750

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	50	12 cement

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: **Surface Sleeve Installed**

Water Level: **586 ft. below land surface on 2013-11-04** Measurement Method: **Unknown**

Packers: **plastic shirrtail 50, 610, 615, 617, 620**

Type of Pump: **Submersible** Pump Depth (ft.): **700**

Well Tests: **Jetted** Yield: **30 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	530	existing borehole
530	560	broken tan limestone
560	610	gray & red clay
610	750	red & tan sandstone & gravel wb30gpm

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 700
4.5	new	perf	700 750

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 #352455

Owner:	Jeff & Jackie Barber	Owner Well #:	1
Address:	11415 Musket Rim St. Austin, TX 78738	Grid #:	58-41-8
Well Location:	11415 Musket Rim St. Austin, TX 78738	Latitude:	30° 17' 20" N
Well County:	Travis	Longitude:	097° 55' 39" W
		Elevation:	877 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 12/26/2013 Drilling End Date: 12/27/2013

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	10
	8	10	20
	6.75	20	730

Drilling Method: Air Rotary

Borehole Completion: Open Hole

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	50	16 cement

Seal Method: slurry & 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:	289 ft. below land surface on 2013-12-30	Measurement Method:	Unknown
Packers:	neoprene 50, 300, 610, 670, 675		
Type of Pump:	Submersible	Pump Depth (ft.):	660
Well Tests:	Jetted	Yield:	40 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	4	topsoil
4	12	tan caliche
12	290	gray limestone
290	490	tan & gray limestone wb 20 gpm
490	510	gray limestone
510	590	gray clay
590	605	gray sandstone
605	660	gray & red sandstone w/ clay
660	680	red sandstone
680	730	gray, red, tan, & pink sandstone wb 40

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 690
4.5	new	perf	690 730

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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #353467

Owner:	Tom Kindle	Owner Well #:	No Data
Address:	5924 Krause Ln. Austin, TX 78738	Grid #:	58-41-8
Well Location:	5924 Krause Ln. Austin, TX 78738	Latitude:	30° 16' 57" N
Well County:	Travis	Longitude:	097° 56' 41" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 12/13/2013 Drilling End Date: 12/14/2013

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	9	0	50
	6.25	50	850

Drilling Method: Air Rotary

Borehole Completion: cased; Straight Wall

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	1	50	5cmt 3gel

Seal Method: hand poured

Sealed By: ADC

Distance to Property Line (ft.): 52

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: 542 ft. below land surface on 2013-12-14 Measurement Method: Unknown

Packers: burlap,plastic,rubber @ 690,650,550,50

Type of Pump: Submersible Pump Depth (ft.): 0

Well Tests: Jetted Yield: 40-45 GPM

Plug Information:	Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
	n/a		

Water Quality:

Strata Depth (ft.)	Water Type
690-830	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: **Glass Well Service**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	25	white limrstone
25	480	gray lime
480	530	tan limestone
530	590	gray limestone
590	620	gray shale
620	690	gray and white limestone
690	740	red sandstone
740	810	red and white sandstone
810	830	multi-colored limestones (gravel)
830	850	yellow limestone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5 od	new	sdr17 pvc	-3 to 770
5 od	new	sdr17 pvc (.032)	screen 770 to 850

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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #353761

Owner:	Rome McMahon	Owner Well #:	1
Address:	12009 Kirkland Court Austin, TX 78738	Grid #:	58-41-8
Well Location:	12009 Kirkland Court Austin, TX 78738	Latitude:	30° 17' 06" N
Well County:	Travis	Longitude:	097° 56' 20" W
		Elevation:	971 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **1/22/2014** Drilling End Date: **1/29/2014**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8.5	0	900

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	1hlg/4bns/9typH

Seal Method: **Pos. Displacement**

Sealed By: **Driller**

Distance to Property Line (ft.): **5**

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: **485 ft. below land surface on 2014-01-28** Measurement Method: **Unknown**

Packers: **6MIL Poly/Shale Packer 100'**
6MIL Poly 160'
6MIL Poly 320'
6MIL Poly 500'
6MIL Poly 640'
6MIL Poly 720'

Type of Pump: **Submersible** Pump Depth (ft.): **700**

Well Tests: **Jetted** Yield: **40+ GPM**

Water Quality:

Strata Depth (ft.)	Water Type
800/900	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 1000**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	0.5	Topsoil
0.5	4	Brown Limestone
4	15	Gray Limestone
15	17	Brown Limestone
17	18	Gray Limestone
18	300	Gray Tan Limestone
300	460	Brown Limestone
460	510	Light Gray Limestone
510	540	Gray Clay
540	700	Gray Tan Limestone Water Bearing 1gpm
700	760	Red Sandstone Brown Limestone
760	840	Clay
840	860	Brown Limestone Red Sandstone
860	890	Calcite
890	900	Black Rock

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	New	PVC-SDR 171B	+2'/800
4.5	New	PVC-17 Slotted	.035 800'/900'

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STATE OF TEXAS WELL REPORT for Tracking #353820

Owner: **Scott Duncan**

Owner Well #: **No Data**

Address: **11945 Overlook Pass
Austin, TX 78738**

Grid #: **58-41-8**

Well Location: **11945 Overlook Pass
Austin, TX 78738**

Latitude: **30° 16' 58" N**

Longitude: **097° 55' 48" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **12/27/2013**

Drilling End Date: **12/27/2013**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	50
	6.25	50	790

Drilling Method: **Air Rotary**

Borehole Completion: **cased; Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	1	50	5cmt 3gel

Seal Method: **hand poured**

Distance to Property Line (ft.): **60**

Sealed By: **ADC**

Distance to Septic Field or other
concentrated contamination (ft.): **n/a**

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

Method of Verification: **well drilled first /
owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **396 ft. below land surface on 2013-12-27**

Measurement Method: **Unknown**

Packers: **burlap,plastic,rubber @ 530,510,50**

Type of Pump: **Submersible**

Pump Depth (ft.): **0**

Well Tests: **Jetted** **Yield: 20-25 GPM**

	<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Plug Information:	n/a		

Water Quality:

Strata Depth (ft.)	Water Type
525-780	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: **Glass Well Service**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	5	topsoil
5	20	tan lime
20	415	gray lime
415	455	gray shale
455	525	gray and white limestone
525	630	red sandstone
630	710	red and white limestone
710	720	multi-colored limestones (gravel)
720	780	yellow limestone
780	790	gray shale

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5 od	new	sdr17 pvc	-3 to 690
5 od	new	sdr17 pvc (.032)	screen 690 to 770
5 od	new	sdr17 pvc	770 to 790

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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #359492

Owner:	Clay Fuselier	Owner Well #:	No Data
Address:	5001 Spanish Oaks Tr. Austin, TX 78738	Grid #:	58-41-8
Well Location:	5001 Spanish Oaks Tr Austin, TX 78738	Latitude:	30° 17' 26" N
Well County:	Travis	Longitude:	097° 56' 04" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 3/14/2014 Drilling End Date: 3/14/2014

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	9	0	50
	6.25	50	830

Drilling Method: Air Rotary

Borehole Completion: cased; Straight Wall

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	1	50	5cmt 3gel

Seal Method: hand poured

Distance to Property Line (ft.): 30

Sealed By: ADC

Distance to Septic Field or other
concentrated contamination (ft.): n/a

Distance to Septic Tank (ft.): No Data

Method of Verification: owner / city sewer

Surface Completion: Surface Sleeve Installed

Water Level: 487 ft. below land surface on 2014-03-14 Measurement Method: Unknown

Packers: burlap,plastic,rubber @ 690,685,610,50

Type of Pump: Submersible Pump Depth (ft.): 0

Well Tests: Jetted Yield: 25-30 GPM

Plug Information:	Description (number of sacks & material)	Top Depth (ft.)	Bottom Depth (ft.)
	n/a		

Water Quality:

Strata Depth (ft.)	Water Type
610-830	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: **Glass Well Service**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	15	white chalky lime
15	495	gray lime
495	520	gray limestone
520	550	gray shale
550	610	gray and white limestone
610	710	red sandstone
710	790	red and white limestone
790	800	multi-colored limestones (gravel)
800	830	yellow limestone w/clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5 od	new	sdr17 pvc	-3 to 730
5 od	new	sdr17 pvc (.032)	screen 730 to 810
5 od	new	sdr17 pvc	810 to 830

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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #360566

Owner: **Jim Evans** Owner Well #: **No Data**
Address: **11917 Musket Rim St
Austin, TX 78738** Grid #: **58-41-8**
Well Location: **11917 Musket Rim St
Austin, TX 78738** Latitude: **30° 17' 08" N**
Longitude: **097° 55' 35" W**
Well County: **Travis** Elevation: **938 ft. above sea level**

****This well has been plugged****

Plugging Report Tracking #169055

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **4/3/2014**

Drilling End Date: **4/8/2014**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	7.875	0	900

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	380	3-3/8hp24bs9ptH

Seal Method: **Pos. Displacement**

Distance to Property Line (ft.): **8'**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **N/A**

Variance Number: **042-14**

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

Method of Verification: **Measured**

Surface Completion: **Pitless Adapter Used**

Water Level: **394 ft. below land surface on 2014-04-04** Measurement Method: **Unknown**

Packers: **6Mil-Poly -Shale Packer 380
6Mil-Poly 400
6Mil-Poly- Shale Packer 600**

Type of Pump: **Submersible** Pump Depth (ft.): **760**

Well Tests: **Jetted** Yield: **25+ GPM**

Water Quality:

Strata Depth (ft.)	Water Type
800-900	Good TDS 900

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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Top soil
1	3	Tan brown limestone
3	55	Light gray limestone
55	60	Gray shale
60	180	Light gray tan limestone
180	210	Tan Limestone
210	520	Tan brown limestone 380 - 18GPM
520	570	Gray Limestone
570	600	Gray Clay
600	620	Tan white -brown limestone
620	640	Gray limestone
640	660	Gray brown sandstone
660	680	Tan brown-black rock
680	700	Conglomerate
700	720	Red clay Red sandstone blue limestone
720	900	Conglomerate

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	New	PVC-SDR 171B	+2 to 800
4.5	New	PVC-17 Slotted .035	800 to 900

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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 #362820

Owner: **TDI Construction Serv., LLC-Well 1**

Owner Well #: **No Data**

Address: **600 E.Las Colinas, Ste. 1800
IRVING, TX 75039**

Grid #: **58-41-4**

Well Location: **3453 S. RANCH RD. 620
AUSTIN, TX 78738**

Latitude: **30° 19' 33" N**

Longitude: **097° 57' 31" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **3/31/2014**

Drilling End Date: **3/31/2014**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.5	100	850

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	16 CEMENT
	0	100	6 VOLCLAY

Seal Method: **PRESSURE TRIMMIE
CEMENT**

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

Sealed By: **Driller**

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

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

Method of Verification: **OWNER**

Surface Completion: **Surface Sleeve Installed**

Water Level: **566 ft. below land surface on 2014-03-31** Measurement Method: **Unknown**

Packers: **6 BURLAP,PVC 100',540',560',580',600',700'**

Type of Pump: **Submersible**

Well Tests: **Jetted** Yield: **50-60 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
80	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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-1		TOP SOIL & ROCK
1-15		CALICHE
15-20		BLUE/GRAY LIMESTONE
20-310		GRAY LIMESTONE
310-430		GRAY/TAN LIMESTONE
430-490		TAN/GRAY LIMESTONE
490-500		TAN LIMESTONE
500-501		FRACTURE
501-530		TAN LIMESTONE
530-540		GRAY LIMESTONE
540-580		GRAY LIMESTONE W/CLAY
		(HAMMETT CLAY)
580-590		GRAY LIMESTONE W/RED CLAY
590-600		GRAY W/TAN LIMESTONE
600-640		GRAY W/TAN SANDSTONE
640-690		RED SANDSTONE W/RED CLAY
690-700		RED/GRAY LIMESTONE
700-775		SANDSTONE

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 850
5"	OD	N SDR17 PVC SLOT	760 TO 780 .032
5"	OD	N SDR17 PVC SLOT	800 TO 840 .032

775-845 SAND & GRAVEL
845-850 TAN LIMESTONE

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #362861

Owner: **TDI Construction serv.,LLC-Well 2**

Owner Well #: **No Data**

Address: **600 E.Las Colinas,Ste. 1800
IRVING, TX 75039**

Grid #: **58-41-4**

Well Location: **3453 S. Ranch Rd. 620
AUSTIN, TX 78738**

Latitude: **30° 19' 33" N**

Longitude: **097° 57' 33" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **4/1/2014**

Drilling End Date: **4/1/2014**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.5	100	850

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	13 CEMENT
	0	100	5 VOLCLAY

Seal Method: **PRESSURE TRIMMIE
CEMENT**

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

Sealed By: **Driller**

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

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

Method of Verification: **OWNER**

Surface Completion: **Surface Sleeve Installed**

Water Level: **571.6 ft. below land surface on 2014-04-01**

Measurement Method: **Unknown**

Packers: **7 BURLAP,PVC 100',540',560',580',600'
600', 680'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 50-60 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
80	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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-1		TOP SOIL & ROCK
1-15		CALICHE
15-18		BLUE/GRAY LIMESTONE
18-320		GRAY LIMESTONE
320-440		GRAY/TAN LIMESTONE
440-500		TAN/GRAY LIMESTONE
500-550		GRAY LIMESTONE
550-580		HAMMETT CLAY
580-600		HAMMETT W/RED CLAY
600-635		GRAY/TAN LIMESTONE
635-680		GRAY/RED SANDSTONE
		W/CLAY
680-700		GRAY/RED SANDSTONE
		NO CLAY
700-780		RED SANDSTONE
780-850		RED SANDSTONE W/GRAVEL

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 850
5"	OD	N SDR17 PVC SLOT	720 TO 780 .032
5"	OD	N SDR17 PVC SLOT	800 TO 840 .032

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 #363714

Owner:	CHRISTOPHER LEVY	Owner Well #:	No Data
Address:	2002A GUADALUPE ST. #118 AUSTIN, TX 78705	Grid #:	58-41-1
Well Location:	3505 SERENE HILLS DRIVE AUSTIN, TX 78738	Latitude:	30° 20' 36" N
Well County:	Travis	Longitude:	097° 59' 49" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 2/13/2014 Drilling End Date: 2/13/2014

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	6.5	100	770

Drilling Method: Air Rotary

Borehole Completion: CASED

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	5 VOLCLAY

Seal Method: PRESSURE TRIMMIE
CEMENT

Distance to Property Line (ft.): N/A

Sealed By: Driller

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: 431 ft. below land surface on 2014-02-13 Measurement Method: Unknown

Packers: 6 BURLPA, PVC 100',560',580',600',
620', 660'

Type of Pump: Submersible

Well Tests: Jetted Yield: 30-35 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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-1		TOP SOIL
1-13		CALICHE
13-18		BLUE/GRAY LIMESTONE
18-210		GRAY LIMESTONE
210-310		GRAY W/TAN LIMESTONE
310-410		TAN W/GRAY LIMESTONE
410-450		TAN/GRAY SANDSTONE
450-500		WHITE/TAN LIMESTONE
500-520		BROWN LIMESTONE
520-540		GRAY LIMESTONE
540-575		GRAY LIMESTONE W/HAMMETT CLAY
575-580		GRAY LIMESTONE W/RED CLAY
580-600		GRAY/TAN LIMESTONE
600-610		RED SANDSTONE & CLAY
610-630		SAND & GRAVEL
630-660		RED SAND W/RED CLAY
660-760		SAND & GRAVEL

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 770
5"	OD	N SDR17 PVC SLOT	680 TO 760 .032

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #363765

Owner: **Hurst Creek MUD**

Owner Well #: **No Data**

Address: **102 Trophy Dr.
The Hills, TX 78738**

Grid #: **58-41-1**

Well Location: **102 Trophy Dr. (Rec.Park)
The Hills, TX 78738**

Latitude: **30° 20' 50" N**

Longitude: **097° 59' 45" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Test Well**

Drilling Start Date: **4/30/2014**

Drilling End Date: **4/30/2014**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	20
	6.25	20	770

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	3cmt

Seal Method: **hand poured**

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

Sealed By: **ADC**

Distance to Septic Field or other
concentrated contamination (ft.): **n/a**

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

Method of Verification: **owner**

Surface Completion: **Unknown**

Water Level: **393 ft. below land surface on 2014-04-30** Measurement Method: **Unknown**

Packers: **n/a**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 5-7 GPM**

	<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Plug Information:	n/a		

Water Quality:

Strata Depth (ft.)	Water Type
590-730	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: **Well to be plugged at later date as per owner**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	10	topfill
10	35	white caliche
35	390	gray lime
390	410	tan lime
410	480	tan and white limestone
480	495	gray and white limestone
495	525	gray shale
525	590	tan and white limestone
590	670	red sandstone
670	690	multi-colored limestones
690	730	red sandstone
730	750	yellow limestone and clay
750	770	gray shale

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
6-1/4	id new	sch 40 pvc	0 to 20

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #366014

Owner:	Roger Niles	Owner Well #:	1
Address:	4712 Paraiso Pkwy. Austin, TX 78738	Grid #:	58-41-8
Well Location:	4712 Paraiso Pkwy. Austin, TX 78738	Latitude:	30° 17' 27" N
Well County:	Travis	Longitude:	097° 55' 59" W
		Elevation:	860 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **4/21/2014** Drilling End Date: **4/22/2014**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	10	0	10
	8	10	20
	6.75	20	750

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	50	17 cement

Seal Method: **Derek Scott**

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

Sealed By: **Slurry & pour**

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: **300 ft. below land surface on 2014-04-25** Measurement Method: **Unknown**

Packers: **neoprene 50, 300, 305, 670, 673, 675**

Type of Pump: **Submersible** Pump Depth (ft.): **660**

Well Tests: **Jetted** Yield: **60 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	6	tan caliche
6	18	white limestone
18	155	gray limestone
155	165	gray clay
165	245	gray limestone
245	260	white & gray limestone
260	470	white & tan limestone wb 15 gpm
470	490	gray limestone
490	590	gray clay
590	615	red clay
615	750	red & brown sandstone wb 60+ gpm

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 690
4.5	new	perf	690 750

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #368921

Owner:	Kim Calbert	Owner Well #:	2
Address:	3920 Pawnee Pass Lakeway, TX 78738	Grid #:	58-41-1
Well Location:	3920 Pawnee Pass Lakeway, TX 78738	Latitude:	30° 20' 01" N
Well County:	Travis	Longitude:	097° 59' 26" W
		Elevation:	983 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **6/6/2014**

Drilling End Date: **6/7/2014**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	10
	8	10	100
	6.75	100	810

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	25	8 cement
	25	100	15 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: **524 ft. below land surface on 2014-06-09** Measurement Method: **Unknown**

Packers: **neoprene 100, 240, 245, 655, 660**

Type of Pump: **Submersible** Pump Depth (ft.): **760**

Well Tests: **Jetted** Yield: **30 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	5	white limestone
5	10	white limestone & shale mix
10	40	white limestone
40	190	gray limestone
190	210	tan limestone
210	450	gray limestone
450	500	tan & gray limestone
500	530	gray limestone & shale mix
530	570	red & gray clay
570	590	gray sandstone
590	630	red & gray clay
630	780	red & gray sandstone
780	810	red sand & gravel

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 750
4.5	new	perf	750 790
4.5	new	sdr-17	790 810

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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 #368930

Owner:	Adam Waxman	Owner Well #:	1
Address:	12704 Pistachio Ct. Austin, TX 78738	Grid #:	58-41-5
Well Location:	12704 Pistachio Ct. Austin, TX 78738	Latitude:	30° 17' 50" N
Well County:	Travis	Longitude:	097° 57' 12" W
		Elevation:	1025 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **6/6/2014**

Drilling End Date: **6/7/2014**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	10
	8	10	20
	6.75	20	890

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	50	15 cement

Seal Method: **slurry & 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: **579 ft. below land surface on 2014-06-10** Measurement Method: **Unknown**

Packers: **neoprene 50, 320, 770, 772, 775**

Type of Pump: **Submersible** Pump Depth (ft.): **700**

Well Tests: **Jetted** Yield: **60 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	4	tan caliche
4	12	tan limestone
12	20	white limestone
20	250	gray limestone
250	290	gray clay
290	310	gray limestone
310	330	gray clay
330	510	gray & tan limestone wb 30 gpm
510	530	gray clay
530	610	gray limestone
610	700	gray clay
700	710	red clay
710	890	red sandstone wb 60 gpm

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 810
4.5	new	perf	810 890

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #369578

Owner: **Ben Hudson**

Owner Well #: **No Data**

Address: **4101 Texas Wildlife Tr.
Austin, TX 78735**

Grid #: **58-41-5**

Well Location: **4101 Texas Wildlife Tr
Austin, TX 78735**

Latitude: **30° 17' 42" N**

Longitude: **097° 55' 05" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **7/9/2014**

Drilling End Date: **7/9/2014**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.25	100	760

Drilling Method: **Air Rotary**

Borehole Completion: **cased; Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	1	100	8cmt 6gel

Seal Method: **pressure pumped /
tremmie**

Distance to Property Line (ft.): **25**

Sealed By: **ADC**

Distance to Septic Field or other
concentrated contamination (ft.): **55**

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

Method of Verification: **tape**

Surface Completion: **Surface Sleeve Installed**

Water Level: **362 ft. below land surface on 2014-07-09** Measurement Method: **Unknown**

Packers: **burlap,plastic,rubber @ 660,640,105,100**

Type of Pump: **Submersible** Pump Depth (ft.): **700**

Well Tests: **Jetted** Yield: **20-25 GPM**

	<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Plug Information:	n/a		

Water Quality:

Strata Depth (ft.)	Water Type
660-760	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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	top bedrock
2	15	white limestone
15	35	tan lime
35	390	gray lime
390	415	tan and white limestone
415	525	gray lime
525	560	gray shale
560	590	gray and white limestone
590	620	red sandstone some clay
620	685	tan and gray sandstone
685	750	red and white sandstone some gravel
750	760	yellow and white limestone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5	od	new sdr17 pvc	-3 to 660
5	od	new sdr17 pvc (.032)	screen 660 to 740
5	od	new sdr17 pvc	740 to 760

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #373161

Owner:	Susan Stone	Owner Well #:	No Data
Address:	5125 Spanish Oaks Club Blvd. Austin, TX 78738	Grid #:	58-41-8
Well Location:	5125 Spanish Oaks Club Blvd. Austin, TX 78738	Latitude:	30° 17' 20" N
		Longitude:	097° 56' 18" W
Well County:	Travis	Elevation:	949 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **7/15/2014** Drilling End Date: **7/16/2014**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	10
	8	10	20
	6.75	20	850

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	50	14 cement

Seal Method: **slurry & pour**

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: **468 ft. below land surface on 2014-07-20** Measurement Method: **Unknown**

Packers: **neoprene 50, 460, 465, 710, 715**

Type of Pump: **Submersible** Pump Depth (ft.): **660**

Well Tests: **Jetted** **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: **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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	10	caliche & tan limestone
10	20	tan & gray limestone
20	50	gray limestone
50	70	gray shale
70	310	gray limestone
310	330	gray & tan limestone
330	470	tan limestone wb 15 gpm 1400 tds
470	530	gray limestone
530	620	clay
620	640	gray sandstone
640	670	gray/white/brown sandstone
670	700	gray shale
700	730	white rock
730	850	trinity mix wb 800 tds

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 770
4.5	new	perf	770 830
4.5	new	sdr-17	830 850

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 #373162

Owner:	Scott Cole	Owner Well #:	No Data
Address:	5209 Spanish Oaks Club Blvd. Austin, TX 78738	Grid #:	58-41-8
Well Location:	5209 Spanish Oaks Club Blvd. Austin, TX 78738	Latitude:	30° 17' 20" N
		Longitude:	097° 56' 21" W
Well County:	Travis	Elevation:	978 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **7/17/2014** Drilling End Date: **7/18/2014**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	10	0	10
	8	10	20
	6.75	20	890

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	50	16 cement

Seal Method: **slurry & pour**

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: **497 ft. below land surface on 2014-07-20** Measurement Method: **Unknown**

Packers: **neoprene 50, 400, 405, 740, 745**

Type of Pump: **Submersible** Pump Depth (ft.): **660**

Well Tests: **Jetted** Yield: **30 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	8	caliche
8	80	white limestone
80	300	gray limestone
300	330	clay
330	380	gray sandstone
380	400	gray limestone
400	465	white sandstone wb 10 gpm
465	530	tan & gray limestone
530	580	gray limestone
580	650	clay
650	680	gray limestone
680	690	gray sandstone
690	740	red shale
740	760	red sandstone wb
760	890	trinity mix wb

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 830
4.5	new	perf	830 870
4.5	new	sdr-17	870 890

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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 #372463

Owner:	Michael Archuleta	Owner Well #:	1
Address:	P.O. Box 90549 Austin, TX 78709	Grid #:	58-41-8
Well Location:	5609 Laceback Terrace Austin, TX 78738	Latitude:	30° 17' 03" N
		Longitude:	097° 56' 31" W
Well County:	Travis	Elevation:	953 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **6/27/2014** Drilling End Date: **6/27/2014**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	10	0	10
	8	10	20
	6.75	20	810

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	50	14 cement

Seal Method: **slurry & 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: **No Data**

Packers: **neoprene 50, 350, 355, 670 675, 677**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 50+ 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**

Report Amended on 4/21/2016 by Request #17656

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	8	tan caliche
8	60	tan limestone
60	280	gray limestone
280	400	tan & white limestone wb @ 340
400	570	white & gray limestone wb 25 gpm
570	610	gray clay
610	670	gray sandstone
670	800	tan & red sandstone wb 50+ gpm
800	810	gray limestone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 750
4.5	new	perf	750 790
4.5	new	sdr-17	790 810

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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 #373653

Owner: **Ray and Mary Hennig**

Owner Well #: **No Data**

Address: **4411 Hennig Rd.
Austin, TX 78738**

Grid #: **58-41-4**

Well Location: **4411 Hennig Rd.
Austin, TX 78738**

Latitude: **30° 19' 40" N**

Longitude: **097° 59' 33" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **7/22/2014**

Drilling End Date: **7/22/2014**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	50
	6.25	50	930

Drilling Method: **Air Rotary**

Borehole Completion: **cased; Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	1	50	5cmt 3gel

Seal Method: **hand poured**

Distance to Property Line (ft.): **55**

Sealed By: **ADC**

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: **662 ft. below land surface on 2014-07-22** Measurement Method: **Unknown**

Packers: **burlap,plastic,rubber @ 710,690,670,50**

Type of Pump: **Submersible**

Pump Depth (ft.): **810**

Well Tests: **Jetted** **Yield: 10-15 GPM**

	<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Plug Information:	n/a		

Water Quality:

Strata Depth (ft.)	Water Type
705-930	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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	15	white chalk
15	545	gray lime
545	590	tan lime
590	615	gray lime
615	645	gray shale
645	705	gray and white limestone
705	770	red sandstone
770	790	tan and white limestone
790	850	red sandstone
850	860	multi-colored limestones
860	900	red sandstone
900	930	yellow limestone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5 od	new	sdr17 pvc	-3 to 790
5 od	new	sdr17 pvc (.032)	screen 790 to 890
5 od	new	sdr17 pvc	890 to 930

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #373768

Owner:	Matt & Sarah Meigs	Owner Well #:	No Data
Address:	11600 Musket Rim St. Austin, TX 78738	Grid #:	58-41-5
Well Location:	11600 Musket Rim St. Austin, TX 78738	Latitude:	30° 17' 31" N
Well County:	Travis	Longitude:	097° 55' 44" W
		Elevation:	848 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **8/12/2014** Drilling End Date: **8/13/2014**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	10	0	10
	8	10	20
	6.75	20	750

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	50	14 cement

Seal Method: **Slurry & pour**

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: **286 ft. below land surface on 2014-08-22** Measurement Method: **Unknown**

Packers: **neoprene 50, 400, 660, 665**

Type of Pump: **Submersible** Pump Depth (ft.): **660**

Well Tests: **Jetted** Yield: **30 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	10	tan limestone
10	210	gray limestone wb @180 0.5 gpm
210	250	gray limestone
250	290	tan sandstone wb 10 gpm
290	350	tan limestone
350	390	gray limestone
390	430	gray & tan limestone
430	490	gray sandstone wb 20 gpm 500 tds
490	500	gray limestone
500	520	gray clay
520	570	gray sandstone
570	750	trinity mix wb 30 gpm 800 tds

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 670
4.5	new	perf	670 750

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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 #374482

Owner:	Brian Bares	Owner Well #:	No Data
Address:	5816 Krause Ln. Austin, TX 78738	Grid #:	58-41-8
Well Location:	5816 Krause Ln. Austin, TX 78738	Latitude:	30° 17' 02" N
Well County:	Travis	Longitude:	097° 56' 44" W
		Elevation:	903 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **8/20/2014** Drilling End Date: **8/21/2014**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	10
	8	10	20
	6.75	20	830

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	50	11 cement

Seal Method: **slurry & pour**

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: **No Data**

Packers: **neoprene 50, 400, 700, 705**

Type of Pump: **Submersible**

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: **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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	10	caliche & tan limestone
10	60	white limestone
60	360	gray limestone
360	410	tan limestone
410	530	gray limestone wb 15 gpm 900 tds
530	610	gray shale
610	630	gray sand
630	830	trinity mix wb 35 gpm 700 tds

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 750
4.5	new	perf	750 830

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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 #374490

Owner:	Lynne Sargent	Owner Well #:	No Data
Address:	12309 Emory Oak Austin, TX 78738	Grid #:	58-41-8
Well Location:	12309 Emory Oak Ln. Austin, TX 78738	Latitude:	30° 17' 17" N
Well County:	Travis	Longitude:	097° 56' 43" W
		Elevation:	971 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **8/22/2014** Drilling End Date: **8/25/2014**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	10	0	10
	8	10	20
	6.75	20	850

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	50	11 cement

Seal Method: **slurry & pour**

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:	541 ft. below land surface on No Data	Measurement Method:	Unknown
Packers:	neoprene 50, 320, 700, 720, 725		
Type of Pump:	Submersible	Pump Depth (ft.):	660
Well Tests:	Jetted	Yield:	30 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	10	caliche
10	390	gray limestone
390	430	tan limestone
430	570	gray limestone wb 15 gpm
570	700	gray clay
700	780	red sandstone wb 15 gpm
780	850	red & tan sandstone wb 15 gpm

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 770
4.5	new	perf	770 850

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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 #374747

Owner:	HURST CREEK MUD	Owner Well #:	No Data
Address:	102 TROPHY DRIVE THE HILLS, TX 78738	Grid #:	58-41-1
Well Location:	102 TROPHY DRIVE 102 TROPHY DRIVE, TX 78738	Latitude:	30° 20' 22" N
Well County:	Travis	Longitude:	097° 59' 41" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 7/16/2014 Drilling End Date: 7/16/2014

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	6.5	100	750

Drilling Method: Air Rotary

Borehole Completion: CASED

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	3 VOLCLAY
	0	100	13 CLASS H

Seal Method: PRESSURE TRIMMIE
CEMENTING

Distance to Property Line (ft.): N/A

Sealed By: Driller

Distance to Septic Field or other
concentrated contamination (ft.): N/A

Distance to Septic Tank (ft.): No Data

Method of Verification: HURST CREEK MUD

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: 5 BURLAP,PVC,RUBBER 100',470',490',510',
530'

Type of Pump: Submersible

Well Tests: Jetted Yield: 35-40 GPM

Water Quality:

Strata Depth (ft.)	Water Type
75	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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	TOP SOIL & FILL
2	15	CALICHE
15	18	BLUE/GRAY LIMESTONE
18	20	GRAY LIMESTONE
20	70	TAN LIMESTONE
70	290	GRAY LIMESTONE
290	295	WHITE LIMESTONE
295	400	GRAY/TAN LIMESTONE
400	445	TAN/GRAY LIMESTONE
445	450	TAN W/WHITE LIMESTONE
450	460	BROWN LIMESTONE
460	465	GRAY/TAN/BROWN LIMESTONE
465	470	GRAY LIMESTONE
470	505	HAMMETT CLAY
505	520	HAMMETT CLAY W/RED CLAY
520	540	GRAY/TAN LIMESTONE
540	585	RED SANDSTONE

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 750
5"	OD	N SDR17 PVC SLOT	590 TO 750 .032

585	610	RED SANDSTONE W/GRAVEL
610	690	RED SANDSTONE
690	710	GRAVEL
710	740	RED SAND
740	750	TAN LIMESTONE

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 #377363

Owner:	JAUREGUI ARCHITECT	Owner Well #:	No Data
Address:	3660 STONERIDGE RD., STE. A-10 AUSTIN, TX 78746	Grid #:	58-41-8
Well Location:	11801 YAUPON HOLLY LANE AUSTIN, TX 78738	Latitude:	30° 17' 00" N
Well County:	Travis	Longitude:	097° 56' 16" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 7/14/2014 Drilling End Date: 7/14/2014

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	6.5	100	710

Drilling Method: Air Rotary

Borehole Completion: CASED

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	12 CEMENT
	0	100	4 VOLCLAY

Seal Method: PRESSURE TRIMMIE
CEMENT

Distance to Property Line (ft.): N/A

Sealed By: Driller

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:	475.6 ft. below land surface on 2014-07-14	Measurement Method:	Unknown
Packers:	6 BURLAP, PVC 100',510',530',550',570', 690'		
Type of Pump:	Submersible		
Well Tests:	Jetted	Yield:	25-30 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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-1		TOP SOIL
1-30		CALICHE
30-35		BLUE/GRAY LIMESTONE
35-270		GRAY LIMESTONE
270-370		GRAY/TAN LIMESTONE
370-460		TAN W/GRAY LIMESTONE
460-490		TAN/GRAY LIMESTONE
		W/CLAY
490-510		TAN LIMESTONE (H2O)
510-520		GRAY LIMESTONE W/GRAY
		CLAY STRIPS
520-550		HAMMETT CLAY
550-560		HAMMETT CLAY W/RED
		CLAY
560-605		GRAY W/TAN LIMESTONE
605-615		GRAY SANDSTONE
615-670		RED/TAN SANDSTONE
670-680		GRAY/RED LIMESTONE

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 710
5"	OD	N SDR17 PVC SLOT	590 TO 670 .032
5"	OD	N SDR17 PVC SLOT	690 TO 710 .032

W/SRIPS OF SHALE
680-705 RED SAND
705-710 RED LIMESTONE
W/YELLOW CLAY

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Texas Department of Licensing and Regulation

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Austin, TX 78711

(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #378857

Owner:	Brad Beckworth	Owner Well #:	1
Address:	205 Linda Dr. Daingerfield, TX 75638	Grid #:	58-41-8
Well Location:	Lot 131 Krause Ln Austin, TX 78738	Latitude:	30° 17' 03" N
Well County:	Travis	Longitude:	097° 56' 44" W
		Elevation:	899 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **9/25/2014** Drilling End Date: **9/26/2014**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	10	0	10
	8	10	20
	6.75	20	840

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	50	11 cement

Seal Method: **slurry & pour**

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:	481 ft. below land surface on No Data	Measurement Method:	Unknown
Packers:	neoprene 50, 310, 615, 685, 690		
Type of Pump:	Submersible	Pump Depth (ft.):	760
Well Tests:	Jetted	Yield:	50 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	10	tan caliche/clay
10	30	tan limestone
30	310	gray limestone
310	430	tan limestone wb 25 gpm 1500 tds
430	510	gray limestone
510	610	gray shale
610	630	gray & tan sandstone
630	840	trinity mix wb 50 gpm

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 720
4.5	new	perf	720 840

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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #379178

Owner:	RICHARD PINGER	Owner Well #:	No Data
Address:	12301 EMORY OAK LANE AUSTIN, TX 78738	Grid #:	58-41-8
Well Location:	12301 EMORY OAK LANE AUSTIN, TX 78738	Latitude:	30° 17' 17" N
Well County:	Travis	Longitude:	097° 56' 39" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **6/10/2014** Drilling End Date: **6/10/2014**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	200
	6.5	200	870

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	200	20 CEMENT
	0	200	8 VOLCLAY

Seal Method: **PRESSURE TRIMMIE
CEMENT**

Distance to Property Line (ft.): **N/A**

Sealed By: **CENTEX PUMP & SUPPLY,
INC.**

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: **545 ft. below land surface on 2014-06-10** Measurement Method: **Unknown**

Packers: **5 BURLAP,PVC 200',650',670',690',730'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 30-35 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
80	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 PUP & 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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-1		TOP SOIL
1-12		CALICHE
12-15		BLUE/GRAY LIMESTONE
15-210		GRAY LIMESTONE
210-310		GRAY W/TAN LIMESTONE
310-370		GRAY LIMESTONE
370-460		GRAY/TAN LIMESTONE
460-500		TAN/GRAY LIMESTONE
500-530		GRAY LIMESTON W/CLAY
		STRIPS
530-560		TAN LIMESTONE H20
560-570		TAN/BROWN LIMESTONE H20
570-580		GRAY LIMESTONE
580-640		HAMMETT CLAY
640-680		GRAY/TAN SANDSTONE
680-690		GRAY/RED LIMESTONE
		W/RED CLAY STRIPS
690-700		RED SAND H20

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 870
5"	OD	N SDR17 PVC SLOT	730 TO 850 .032

700-710 MULTICOLOR SANDSTONE
H2O
710-720 RED SAND H2O
720-730 RED CLAY STRIPS W/SAND
730-860 SANDSTONE H2O
860-870 CLAY

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P.O. Box 12157
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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #382308

Owner: **Gary Magee**

Owner Well #: **No Data**

Address: **12224 Iron Bluff
Austin, TX 78738**

Grid #: **58-41-8**

Well Location: **12224 Iron Bluff
Austin, TX 78738**

Latitude: **30° 17' 18" N**

Longitude: **097° 56' 23" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **10/7/2014**

Drilling End Date: **10/7/2014**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.25	100	870

Drilling Method: **Air Rotary**

Borehole Completion: **cased; Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	1	100	9cmt 5gel

Seal Method: **pressure pumped / trimmie**

Distance to Property Line (ft.): **25**

Sealed By: **ADC**

Distance to Septic Field or other
concentrated contamination (ft.): **n/a**

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

Method of Verification: **tape**

Surface Completion: **Surface Sleeve Installed**

Water Level: **563 ft. below land surface on 2014-10-07** Measurement Method: **Unknown**

Packers: **burlap,plastic,rubber @ 710,690,670,105,100**

Type of Pump: **Submersible**

Pump Depth (ft.): **740**

Well Tests: **Jetted** **Yield: 20-25 GPM**

	<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Plug Information:	n/a		

Water Quality:

Strata Depth (ft.)	Water Type
705-870	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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	15	tan and white chalk
15	495	gray lime
495	515	tan limestone
515	615	gray limestone
615	645	gray shale
645	705	gray and white limestone
705	720	red sandstone
720	790	tan and white limestone
790	850	red sandstone
850	870	multi-colored limestones (gravel)

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5	od	new sdr17 pvc	-3 to 770
5	od	new sdr17 pvc (.032)	screen 770 to 850
5	od	new sdr17 pvc	850 to 870

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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 #382354

Owner:	Matthew Scrivener	Owner Well #:	1
Address:	8920 Business Park Dr. St. 350 Austin, TX 78759	Grid #:	57-48-3
Well Location:	17027 Raynam Hill Dr. Austin, TX 78738	Latitude:	30° 20' 12" N
		Longitude:	098° 00' 14" W
Well County:	Travis	Elevation:	1102 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **11/25/2014** Drilling End Date: **11/26/2014**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	10
	8	10	20
	6.75	20	870

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	50	8 cement

Seal Method: **slurry & 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:	605 ft. below land surface on 2014-12-01	Measurement Method:	Unknown
Packers:	neoprene 50, 400, 700, 705, 745, 750		
Type of Pump:	Submersible	Pump Depth (ft.):	740
Well Tests:	Jetted	Yield:	40 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	topsoil
2	15	tan caliche
15	29	tan limestone
29	45	gray limestone
45	60	tan limestone
60	295	gray limestone
295	340	tan & gray limestone
340	380	gray limestone
380	390	white gypsum
390	490	gray limestone
490	580	tan & gray limestone wb 2.5 gpm
580	630	gray clay
630	660	gray sandstone
660	710	gray clay
710	730	gray limestone
730	770	red sandstone wb
770	870	red/tan sandston wb 40 gpm 1800 tds

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 790
4.5	new	perf	790 870

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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #388346

Owner: **Sellers**

Owner Well #: **No Data**

Address: **4000 peak lookout dr
Austin, TX 78738**

Grid #: **58-41-4**

Well Location: **4000 peaklook dr
austin, TX 78738**

Latitude: **30° 19' 01" N**

Longitude: **097° 58' 00" W**

Well County: **Travis**

Elevation: **No Data**

****Plugged Within 48 Hours****

****This well has been plugged****

Plugging Report Tracking #149257

Type of Work: **New Well**

Proposed Use: **Closed-Loop Geothermal**

Drilling Start Date: **12/22/2014** Drilling End Date: **12/30/2014**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	4.5	0	300

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	20	300	Gravel	3/8

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	3 bentonite

Seal Method: **Poured**

Distance to Property Line (ft.): **20**

Sealed By: **Anthony Sarris**

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

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:

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

Chemical Analysis Made: **Unknown**

Did the driller knowingly penetrate any strata which
contained injurious constituents?: **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 Drilling**
p o box 18716
Austin, TX 78760

Driller Name: **Anyhony Sarris** License Number: **58870**

Comments: **drillrd 10 new closed loop geothermal wells 0-300**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	10	clay
10	300	grey shale

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
1 inch new polyethylene pipe 0- 300			

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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #392286

Owner: **Destiny Hills Development**

Owner Well #: **No Data**

Address: **6801 Destiny Hills Dr.
Austin, TX 78738**

Grid #: **57-48-6**

Well Location: **6801 Destiny Hills Dr.
Austin, TX 78738**

Latitude: **30° 18' 36" N**

Longitude: **098° 00' 55" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **2/9/2015**

Drilling End Date: **2/10/2015**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.25	100	930

Drilling Method: **Air Rotary**

Borehole Completion: **cased; Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	-1	100	13cmt 3gel

Seal Method: **pressure cemented /
trimmie**

Distance to Property Line (ft.): **20**

Sealed By: **ADC**

Distance to Septic Field or other
concentrated contamination (ft.): **n/a**

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

Method of Verification: **tape**

Surface Completion: **Surface Sleeve Installed**

Water Level: **432 ft. below land surface on 2015-02-10** Measurement Method: **Unknown**

Packers: **burlap,plastic,rubber @ 810,805,790,100**

Type of Pump: **Submersible** Pump Depth (ft.): **740**

Well Tests: **Jetted** **Yield: 25-30 GPM**

	<i>Description (number of sacks & material)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Plug Information:	n/a		

Water Quality:

Strata Depth (ft.)	Water Type
750-930	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: **Fire Protection Water Source**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	5	white caliche
5	25	tan lime and clay
25	490	gray lime
490	515	tan lime
515	630	tan and white limestone
630	690	gray and white limestone
690	710	gray lime and shale
710	750	tan limestone
750	890	red sandstone
890	910	multi colored limestones (gravel)
910	930	yellow limestone and clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5 od	new	sdr17 pvc	-3 to 810
5 od	new	sdr17 pvc (.032)	screen 810 to 910
5 od	new	sdr17 pvc	910 to 930

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #394377

Owner: **Don Thomas**
Address: **5020 Calabria Ct.
Austin, TX 78738**
Well Location: **5020 Calabria Ct.
Austin, TX 78738**
Well County: **Travis**

Owner Well #: **No Data**
Grid #: **58-41-8**
Latitude: **30° 17' 08" N**
Longitude: **097° 55' 44" W**
Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **4/1/2015**

Drilling End Date: **4/1/2015**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	50
	6.25	50	790

Drilling Method: **Air Rotary**

Borehole Completion: **cased; Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	-1	50	7cmt 2gel

Seal Method: **hand poured**

Sealed By: **ADC**

Distance to Property Line (ft.): **>100**

Distance to Septic Field or other
concentrated contamination (ft.): **>100 city**

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

Method of Verification: **owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **521 ft. below land surface on 2015-04-01** Measurement Method: **Unknown**

Packers: **burlap,plastic,rubber @ 590,585,510,50**

Type of Pump: **Submersible** Pump Depth (ft.): **720**

Well Tests: **Jetted** Yield: **20-25 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
521-790	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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	25	white chalk
25	395	gray lime
395	410	tan white limestone
410	490	gray lime
490	510	gray shale
510	585	tan white limestone
585	610	red sandstone
610	635	red white sandstone (h2o)
635	775	red sandstone
775	790	multi-colored limestones (h2o)

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5 od	new	sdr17 pvc	-3 to 630
5 od	new	sdr17 pvc (.032)	screen 630 to 790 stag.

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STATE OF TEXAS WELL REPORT for Tracking #395027

Owner:	Emerald Crest Development	Owner Well #:	1
Address:	2727 Exposition Blvd. # 101 Austin, TX 78703	Grid #:	58-41-5
Well Location:	12600 Maidenhair Ln. Austin, TX 78738	Latitude:	30° 17' 43" N
Well County:	Travis	Longitude:	097° 56' 44" W
		Elevation:	975 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **4/7/2015**

Drilling End Date: **4/8/2015**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	9
	8.5	9	20
	6.75	20	850

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	20	3 cement
	20	50	3 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:	493 ft. below land surface on No Data	Measurement Method:	Unknown
Packers:	neoprene 50, 300, 630, 635		
Type of Pump:	Submersible	Pump Depth (ft.):	760
Well Tests:	Jetted	Yield:	52 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	4	tan limestone
4	7	tan clay
7	20	white limestone
20	130	gray limestone
130	150	gray clay
150	170	gray limestone & clay
170	290	gray limestone & sandstone
290	390	gray & tan sandstone
390	530	tan sandstone
530	570	gray sandstone
570	600	gray clay
600	670	gray sandstone
670	690	brown sandstone
690	850	red sandstone & Trinity mix wb 700 tds

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	new	sdr-17	0 850
		perf	750 850

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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #396027

Owner: **DAVID & HELEN KULTGEN**

Owner Well #: **No Data**

Address: **202 BLUE RIDGE TRAIL
AUSTIN, TX 78746**

Grid #: **58-41-8**

Well Location: **11841 OVERLOOK PASS
AUSTIN, TX 78738**

Latitude: **30° 17' 01" N**

Longitude: **097° 56' 12" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **1/26/2015**

Drilling End Date: **1/26/2015**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.5	100	730

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	6 VOLCLAY
	0	100	14 CEMENT

Seal Method: **PRESSURE TREMIE
CEMENT**

Distance to Property Line (ft.): **N/A**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **N/A**

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

Method of Verification: **OWNER/WELL
DRILLED FIRST**

Surface Completion: **Surface Sleeve Installed**

Water Level: **443.6 ft. below land surface on 2015-01-26**

Measurement Method: **Unknown**

Packers: **4 BURLAP, PVC 100', 540', 560', 580'**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 40 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
80	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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-1		ROCK
1-18		CALICHE
18-20		BLUE LIMESTONE
20-190		GRAY LIMESTONE
190-450		GRAY W/TAN LIMESTONE
450-460		GRAY LIMESTONE W/BLUE CLAY
460-480		TAN LIMESTONE
480-500		GRAY/TAN/BROWN LIMESTONE
500-550		GRAY LIMESTONE W/HAMMETT
550-565		GRAY LIMESTONE W/RED CLAY
565-610		GRAY/TAN LIMESTONE
610-650		RED/TAN SANDSTONE
650-720		RED SANDSTONE
720-730		RED LIMESTONE W/BLUE CLAY

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5"	OD	N SDR17 PVC	+3 TO 730
5"	OD	N SDR17 PVC SLOT	620 TO 720 .032

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STATE OF TEXAS WELL REPORT for Tracking #396942

Owner:	Steve Cokins	Owner Well #:	No Data
Address:	805 Brooks Hollow Rd Austin, TX 78734	Grid #:	58-41-4
Well Location:	16200 Shane Landon Ct. Austin, TX 78734	Latitude:	30° 19' 42" N
Well County:	Travis	Longitude:	097° 59' 36" W
		Elevation:	1090 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **4/29/2015** Drilling End Date: **5/12/2015**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	7.875	0	860

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	91	19 cement
	91	100	4 Bentonite

Seal Method: **Pos. Displacement**

Distance to Property Line (ft.): **30**

Sealed By: **Driller**

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: **543 ft. below land surface on 2015-05-11** Measurement Method: **Unknown**

Packers:

- Shale Packer 103
- 6Mil Poly 105
- Shale Packer 117
- 6Mil Poly 120
- 6Mil Poly 600
- Shale Packer 680
- 6Mil Poly 685
- Shale Packer 695
- 6Mil Poly 700

Type of Pump: **Submersible** Pump Depth (ft.): **740**

Well Tests: **Jetted** **Yield: 10 GPM**

Water Quality:	Strata Depth (ft.)	Water Type
	740/840	Good

Chemical Analysis Made: **No**

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

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

Company Information: **Whisenant & Lyle Water Services**
 PO Box 525
 Dripping Springs, TX 78620

Driller Name: **Martin Lingle** License Number: **54813**

Comments: **No Data**

Lithology:	Casing:
DESCRIPTION & COLOR OF FORMATION MATERIAL	BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	20	Clay
20	21	Gray limestone
21	59	Brown limestone
59	357	Gray limestone
357	360	Dark gray limestone
360	401	Gray limestone
401	416	Tan limestone
416	420	Gray limestone
420	438	Tan gray limestone
438	510	Tan limestone
510	520	Gray limestone
520	577	Brown limestone
577	615	Gray white limestone
615	635	Gray limestone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	New	SDR 17	+2/740
4.5	New	SDR 17 Slotted	740/840 .035
		Open Hole	840/860

635	680	Gray clay
680	720	Tan brown limestone
720	740	Red sandstone
740	855	Conglomerate
855	860	Blue shale

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STATE OF TEXAS WELL REPORT for Tracking #397897

Owner:	Jack Johnson	Owner Well #:	No Data
Address:	127 Betula Drive Lakeway, TX 78734	Grid #:	58-41-8
Well Location:	11928 Musket Rim Austin, TX 78738	Latitude:	30° 17' 19" N
Well County:	Travis	Longitude:	097° 56' 02" W
		Elevation:	930 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 6/2/2015

Drilling End Date: 6/11/2015

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	7.875	0	900

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	86	20 Cement
	86	100	4 Bentonite

Seal Method: Pos. Displacement

Distance to Property Line (ft.): 20

Sealed By: Driller

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: 520 ft. below land surface on 2015-06-11 Measurement Method: Unknown

Packers: Shale Packer & 6MIL Poly 620
Shale Packer & 6MIL Poly 610
Shale Packer & 6MIL Poly 120
Shale Packer & 6MIL Poly 100

Type of Pump: Submersible Pump Depth (ft.): 840

Well Tests: Jetted Yield: 10 GPM

Water Quality:

Strata Depth (ft.)	Water Type
840/900	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: **Brice Bormann**

License Number: **54855**

Apprentice Name: **Tyler Loman**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	5	Topsoil
5	7	Tan limestone
7	230	Gray limestone
230	272	Brown limestone
272	455	Tan limestone
455	485	Brown limestone
485	510	Tan limestone
510	560	Dark brown limestone
560	605	Clay/ Hamet
605	658	Tan limestone
658	742	Sand rock
742	850	Conglomerate
850	900	Brown clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	New	PVC-SDR 171B	0/840
4.5	New	PVC-17 Slotted	840/900 0.35

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**Texas Department of Licensing and Regulation
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STATE OF TEXAS WELL REPORT for Tracking #398350

Owner:	Hill Country Galleria	Owner Well #:	3
Address:	12700 Hill Country Blvd. #T100 Bee Cave, TX 78738	Grid #:	58-41-5
Well Location:	12700 Hill Country Blvd. Bee Cave, TX 78738	Latitude:	30° 18' 27" N
Well County:	Travis	Longitude:	097° 56' 27" W
		Elevation:	923 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **5/4/2015**

Drilling End Date: **5/9/2015**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	12	0	10
	10	10	860

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	20	6 cement
	20	50	4 bentonite

Seal Method: **slurried & poured**

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

Sealed By: **Steve Stewart**

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:	440 ft. below land surface on No Data	Measurement Method:	Unknown
Packers:	neoprene 50, 55, 400, 405, 745, 748, 750		
Type of Pump:	Submersible	Pump Depth (ft.):	777
Well Tests:	Jetted	Yield: 80+ 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	5	topsoil
5	7	tan caliche
7	25	tan limestone
25	295	gray limestone
295	310	gray shale
310	450	gray limestone
450	465	white limestone
465	525	white & gray limestone
525	600	tan & gray limestone
600	615	yellow limestone
615	670	gray limestone
670	730	gray clay
730	750	red & tan limestone
750	860	red & tan sandstone wb 80+ gpm 1100 tds

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
6.25	new	sdr-17 0 860	
		perf 760 860	

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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #398415

Owner: **Lake Travis Builders (Lynn)**

Owner Well #: **No Data**

Address: **P O Box 342105
Austin, TX 78734**

Grid #: **58-41-4**

Well Location: **14805 Foxfield Cove
Austin, TX 78738**

Latitude: **30° 18' 13" N**

Longitude: **097° 58' 40" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **6/10/2015**

Drilling End Date: **6/11/2015**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	18
	6.25	18	765

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	4 Portland

Seal Method: **Slurry**

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

Sealed By: **Apex Drilling INC.**

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 630,620,30,20**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 40 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
630-765	Trinity TDS-1000

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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	3	Blk Dirt
3	27	Tan LS
27	377	Gray Tan LS
377	385	Tan White LS
385	435	Gray tan LS
435	465	Tan White LS
465	510	Gray Tan LS
510	560	Gray LS w/ Clay
560	630	Red SS
630	635	Gravel
635	682	Red SS
682	765	Gravel

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5" (5 OD)	New	PVC	+2' to 685' SDR17
4.5" (5 OD)	New	Screen	685' to 705' .035
4.5" (5 OD)	New	PVC	705' to 725' SDR17
4.5" (5 OD)	New	Screen	725' to 765' .035

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STATE OF TEXAS WELL REPORT for Tracking #401885

Owner:	Beau Burkett	Owner Well #:	No Data
Address:	PO Box 163266 Austin, TX 78716	Grid #:	58-41-5
Well Location:	12424 Cherry Laurel Terrace Austin, TX 78738	Latitude:	30° 17' 30" N
Well County:	Travis	Longitude:	097° 56' 40" W
		Elevation:	920 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **7/28/2015** Drilling End Date: **8/6/2015**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	7.875	0	860

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	81	15 Cement
	81	100	4 Bentonite

Seal Method: **Pos. Displacement**

Distance to Property Line (ft.): **30**

Sealed By: **Driller**

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

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

Method of Verification: **Measured**

Surface Completion: **Pitless Adapter Used**

Water Level: **510 ft. below land surface on 2015-08-06** Measurement Method: **Unknown**

Packers: **Shale Packer & 6Mil Poly 635
Shale Packer & 6Mil Poly 630
Shale Packer & 6Mil Poly 620
6Mil Poly 400
Shale Packer & 6Mil Poly 120
Shale Packer & 6Mil Poly 100**

Type of Pump: **Submersible** Pump Depth (ft.): **760**

Well Tests: **Jetted** Yield: **15 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
800/860	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: **Brice Bormann**

License Number: **54855**

Apprentice Name: **Tyler Loman**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	3	Tan limestone
3	12	Caliche
12	25	Tan limestone
25	300	Gray limestone
300	390	Tan limestone
390	575	Brown limestone
575	605	Shale
605	845	Sand rock
845	860	Clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5	New	PVC-SDR 171B	0/800
4.5	New	PVC-17 Slotted	800/860 0.32

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 #404277

Owner: **Don Thomas**

Owner Well #: **No Data**

Address: **12701 Pistachio Ct.
Austin, TX 78738**

Grid #: **58-41-5**

Well Location: **12701 Pistachio Ct.
Austin, TX 78738**

Latitude: **30° 17' 49" N**

Longitude: **097° 57' 12" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **7/27/2015**

Drilling End Date: **7/28/2015**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	50
	6.25	50	890

Drilling Method: **Air Rotary**

Borehole Completion: **cased; Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	-1	50	7cmt 2gel

Seal Method: **hand poured**

Distance to Property Line (ft.): **40**

Sealed By: **ADC**

Distance to Septic Field or other
concentrated contamination (ft.): **n/a**

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

Method of Verification: **city sewer / no septic**

Surface Completion: **Surface Sleeve Installed**

Water Level: **347 ft. below land surface on 2015-07-28** Measurement Method: **Unknown**

Packers: **burlap,plastic @ 710,705,690,50**

Type of Pump: **Submersible**

Well Tests: **Jetted** Yield: **20-25 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
347-890	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: **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

Casing:
BLANK PIPE & WELL SCREEN DATA

From (ft)	To (ft)	Description
0-15		white chalk
15-25		tan lime
25-465		blue lime
465-535		tan white limestone
535-585		gray lime
585-615		gray shale
615-690		gray white limestone
690-720		red sandstone
720-725		tan white limestone (h2o)
725-850		red sandstone
850-860		gravel bed (h2o)
860-870		yellow limestone
870-890		black limestone

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5 od	new	sdr17 pvc	-3 to 730
5 od	new	sdr17 pvc (.032) screen	730 to 890 stag.

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**Texas Department of Licensing and Regulation
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Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #409899

Owner:	Dr. William Franklin	Owner Well #:	No Data
Address:	4303 Victory Dr. c/o Sheri Albertson Austin, TX 78704	Grid #:	58-41-8
Well Location:	16012 Pontevedera Place Austin, TX 78738	Latitude:	30° 17' 24.99" N
Well County:	Travis	Longitude:	097° 55' 45.4" W
		Elevation:	892 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 9/14/2015 Drilling End Date: 9/25/2015

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	7.875	0	880

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	92	Cement 27 Bags/Sacks
	92	103	Bentonite 4 Bags/Sacks

Seal Method: Positive Displacement

Distance to Property Line (ft.): 20

Sealed By: Driller

Distance to Septic Field or other
concentrated contamination (ft.): N/A

Distance to Septic Tank (ft.): N/A

Method of Verification: measured-tape

Surface Completion: Surface Sleeve Installed

Surface Completion NOT by Driller

Water Level: 540 ft. below land surface on 2015-09-18

Packers:

- Rubber at 103 ft.
- Plastic at 110 ft.
- Rubber at 117 ft.
- Plastic at 120 ft.
- Plastic at 300 ft.
- Rubber at 530 ft.
- Plastic at 535 ft.
- Rubber at 560 ft.
- Plastic at 565 ft.

Type of Pump: **Submersible**

Pump Depth (ft.): **700**

Well Tests: **Jetted**

Yield: 15-20 GPM

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
760 - 860	Good TDS 950

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 12/21/2015 by Request #15427

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	1	Topsoil
1	8	Brown limestone Rock
8	30	Light gray limestone
30	45	Tan limestone
45	55	Light gray limestone
55	67	Dark gray limestone
67	200	Light gray tan limestone
200	245	Drak gray limestone
245	275	Light gray tan limestone
275	295	Dark gray limestone
295	300	Light gray limestone
300	460	Tan limestone
460	515	Gray limestone

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	17	2	760
4.5	Screen	New Plastic (PVC)	17 0.035	760	860
			Open Hole	860	880

515	540	Gray clay
540	600	Gary tan limestone
600	620	Tan brown limestone
620	690	Red sandstone
690	740	Tan red brown sandstone
740	800	Red sandstone
800	855	Conglomerate
855	880	Red shale clay

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P.O. Box 12157
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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #409990

Owner:	Robert Hendricks	Owner Well #:	No Data
Address:	12201 Iron Bluff Pl. Austin, TX 78738	Grid #:	58-41-8
Well Location:	12201 Iron Bluff Pl. Austin, TX 78738	Latitude:	30° 17' 13.4" N
Well County:	Travis	Longitude:	097° 56' 18" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **11/24/2015** Drilling End Date: **11/24/2015**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	50
	6.25	50	850

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall and Cased**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	-1	50	6 cement 2 gelclay

Seal Method: **Hand Mixed**

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: **City Sewer-No OSSF**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **331 ft. below land surface on 2015-11-24** Measurement Method: **Electric Line**

Packers: **Burlap and Plastic @ 650,645,630
Burlap at 50 ft.**

Type of Pump: **Submersible**

Well Tests: **Jetted / Estimated Yield: 25-30 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
331 - 850	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: **Associated Drilling Inc**
PO Box 673
Dripping Springs, TX 78620

Driller Name: **mes Benoit**

License Number: **4064**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	2	topsoil
2	30	white caliche
30	490	blue lime
490	530	tan white limestone
530	540	gray limestone
540	585	gray shale
585	640	gray white limestone
640	660	red sandstone
660	720	red white sandstone (h2o)
720	840	red sandstone
840	850	gravel bed (h2o)

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New SDR17 PVC		-3	710
5	(Stag.) Blank and Screen	New SDR17 PVC	0.032	710	850

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STATE OF TEXAS WELL REPORT for Tracking #411480

Owner:	Langle Design and Construction	Owner Well #:	1
Address:	P.O. Box 286 Spicewood, TX 78669	Grid #:	58-41-5
Well Location:	Skaggs Dr. Austin, TX 78738	Latitude:	30° 18' 43.45" N
Well County:	Travis	Longitude:	097° 57' 23.25" W
		Elevation:	999 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **10/27/2015** Drilling End Date: **11/3/2015**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	10.5	0	10
	8.5	10	920

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	50	Cement 9 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: **580 ft. below land surface on 2015-11-05** Measurement Method: **Electric Line**

Packers: **Rubber at 50 ft.
Rubber at 310 ft.
Rubber at 650 ft.
Rubber at 710 ft.
Rubber at 715 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **760**

Well Tests: **Jetted** **Yield: 200 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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	4	Topsoil and Fill dirt
4	30	Tan Lime
30	320	Grey Lime
320	590	Grey Sandstone
590	640	Grey Shale
640	920	Trinity Mix W/B 710-730, 200gpm 750TDS

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR-17	0	720
4.5	Perforated or Slotted	New Plastic (PVC)	SDR-17	720	920

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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 #411492

Owner:	Paul Beavers	Owner Well #:	No Data
Address:	17003 Flintrock Rd. Austin, TX 78738	Grid #:	57-48-3
Well Location:	17003 Flintrock Rd. Austin, TX 78738	Latitude:	30° 20' 00.91" N
		Longitude:	098° 00' 02.68" W
Well County:	Travis	Elevation:	1000 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **11/5/2015** Drilling End Date: **11/6/2015**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	10	0	9
	8.5	9	20
	6.75	20	780

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	50	Cement 7 Bags/Sacks

Seal Method: **Poured**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Surface Completion by Driller

Water Level: **525 ft. below land surface on 2015-11-09** Measurement Method: **Electric Line**

Packers: **Rubber at 50 ft.
Rubber at 650 ft.
Rubber at 655 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **610**

Well Tests: **Jetted** **Yield: 27 GPM**

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **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

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	9	Tan Lime/Caliche
9	110	Grey Lime
110	130	Grey & Tan Sand
130	330	Grey Sand
330	410	Grey And Tan Sand
410	450	Brown Lime
450	490	Grey Lime
490	510	Tan Lime
510	530	Dark Gray Lime
530	570	Gray and Tan Sand
570	640	Hammett
640	690	Red Sand W/B 650-670
690	750	Trinity Mix W/B 690-710
750	760	Trinity Mix w/ Gravel W/B 27gpm 2000TDS
760	780	Trinity Mix

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	SDR-17	-2	700
4.5	Perforated or Slotted	New Plastic (PVC)	SDR-17	700	780

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P.O. Box 12157
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STATE OF TEXAS WELL REPORT for Tracking #413070

Owner:	Dirk Koester	Owner Well #:	No Data
Address:	11841 Sterling Panaravna Terrace Austin, TX 78738	Grid #:	58-41-8
Well Location:	11700 Yaupon Holly Austin, TX 78759	Latitude:	30° 16' 59" N
Well County:	Travis	Longitude:	097° 56' 25" W
		Elevation:	923 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **10/28/2015** Drilling End Date: **11/20/2015**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	7.875	0	880

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	9	Cement 23 Bags/Sacks
	90	105	Bentonite 4 Bags/Sacks

Seal Method: **Positive Displacement**

Distance to Property Line (ft.): **20**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **N/A**

Distance to Septic Tank (ft.): **N/A**

Method of Verification: **Measured-tape**

Surface Completion: **Surface Sleeve Installed**

Surface Completion NOT by Driller

Water Level: **464 ft. below land surface on 2015-11-02**

Packers:

- Plastic at 105 ft.**
- Rubber at 105 ft.**
- Plastic at 110 ft.**
- Rubber at 110 ft.**
- Plastic at 115 ft.**
- Rubber at 115 ft.**
- Plastic at 118 ft.**
- Rubber at 118 ft.**
- Plastic at 300 ft.**
- Plastic at 500 ft.**
- Plastic at 600 ft.**

Rubber at 600 ft.
Plastic at 610 ft.
Rubber at 610 ft.
Plastic at 618 ft.
Rubber at 618 ft.
Plastic at 620 ft.
Rubber at 620 ft.

Type of Pump: **Submersible**

Pump Depth (ft.): **760**

Well Tests: **Jetted** **Yield: 20 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
720 - 860	Good TDS 900

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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	20	Brown limestone
20	230	Light gray limestone
230	300	Tan gray limestone
300	530	Tan brown limestone
530	580	Gray clay
580	620	Gray brown limestone
620	680	Tan red brown gray limestone

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	17	2	760
4.5	Screen	New Plastic (PVC)	17 0.035	760	860

680	720	Red gray limestone
720	860	Conglomerate
860	880	Black Rock

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

STATE OF TEXAS WELL REPORT for Tracking #413978

Owner:	MARSHALL WILLIS	Owner Well #:	No Data
Address:	710 LAKEWAY DRIVE AUSTIN, TX 78734	Grid #:	57-48-6
Well Location:	17017 Whispering Breeze Austin, TX 78738	Latitude:	30° 18' 31.8" N
Well County:	Travis	Longitude:	098° 01' 06.84" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **1/8/2016**

Drilling End Date: **1/8/2016**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.5	100	650

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	Cement 11 Bags/Sacks
	0	100	Bentonite 3 Bags/Sacks

Seal Method: **Tremie**

Distance to Property Line (ft.): **52**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **N/A**

Distance to Septic Tank (ft.): **N/A**

Method of Verification: **TAPE
MEASURE/OWNER**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **484 ft. below land surface on 2016-01-08**

Packers: **BURLAP & PVC at 100 ft.
BURLAP & PVC at 470 ft.
BURLAP & PVC at 490 ft.
BURLAP & PVC at 590 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **600**

Well Tests: **Jetted** **Yield: 30-35 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
530 - 650	MIDDLE TRINITY

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: **GLASS**License Number: **4227**Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	40	CALICHE
40	50	BLUE/GRAY LIMESTONE
50	70	GRAY LIMESTONE
70	90	TAN LIMESTONE
90	210	GRAY LIMESTONE
210	380	GRAY/TAN LIMESTONE
380	390	GRAY LIMESTONE
390	430	GRAY/TAN/WHITE LIMESTONE
430	500	TAN/GRAY LIMESTONE
500	530	TAN LIMESTONE
530	560	TAN/GRAY LIMESTONE
560	590	TAN LIMESTONE
590	600	TAN/GRAY LIMESTONE
600	645	BROWN LIMESTONE
645	650	HAMMETT CLAY

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New SDR17 PVC	SDR17	3	650
5	Perforated or Slotted	New SDR17 PVC	SDR17 0.032	530	650

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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 #417051

Owner: **Weldon Graham**

Owner Well #: **No Data**

Address: **1905 Univerisity Club Dr.
Austin , TX 78732**

Grid #: **58-41-4**

Well Location: **4305 Hennig Dr
Austin, TX 78738**

Latitude: **30° 19' 48" N**

Longitude: **097° 59' 37" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **2/25/2016**

Drilling End Date: **2/25/2016**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	20
	6.25	20	885

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	30	Portland 6 Bags/Sacks

Seal Method: **Slurry**

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

Sealed By: **Driller**

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 30 ft.
Burlap/Neoprene at 40 ft.
Burlap/Neoprene at 700 ft.
Burlap/Neoprene at 710 ft.
Burlap/Neoprene at 720 ft.
Burlap/Neoprene at 725 ft.
Burlap/Neoprene at 740 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: NA GPM**

Water Quality:

Strata Depth (ft.)	Water Type
700 - 879	L. Trinity TDS- NA

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**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	35	Tan LS
35	350	Tan Gray LS
350	400	Lost Returns
400	515	Smooth Soft
515	525	Smooth Hard
638	662	Soft Clay
662	665	Hard Clay
665	673	Soft Clay
673	879	Hard Choppy
879	885	Soft

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	805
4.5	Screen	New Plastic (PVC)	.035	805	825
4.5	Blank	New Plastic (PVC)	SDR17	825	845
4.5	Screen	New Plastic (PVC)	.035	845	885

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Texas Department of Licensing and Regulation
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Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #420513

Owner:	Jeff Kickert	Owner Well #:	No Data
Address:	17029 Whispering Breeze Austin, TX 78737	Grid #:	57-48-6
Well Location:	Destiny Hills Sec. 2 Austin, TX 78738	Latitude:	30° 18' 34" N
Well County:	Travis	Longitude:	098° 01' 05" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **3/23/2016** Drilling End Date: **3/23/2016**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	50
	6.25	50	690

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall and Cased**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	-1	50	6 cement 3 gelclay

Seal Method: **hand mixed / gravity
poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **+60**

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

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

Method of Verification: **well drilled first by
owner / builder**

Surface Completion: **Pitless Adapter Used**

Surface Completion by Driller

Water Level: **No Data**

Packers: **Burlap and Plastic @ 590,570,50**

Type of Pump: **Submersible**

Well Tests: **jettied / estimated Yield: 25-30 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
No Data	Mid 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	2	top bedrock
2	95	tan lime
95	585	blue lime some strips of clay
585	620	tan white limestone
620	660	tan white limestone (h2o)
660	680	gray white limestone
680	690	gray shale

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New sdr17 pvc		-3	590
5	Screen	New sdr17 pvc	0.032	590	670
5	Blank	New sdr17 pvc		670	690

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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #425672

Owner:	Ash Creek Homes	Owner Well #:	No Data
Address:	PO Box 341749 Austin, TX 78734	Grid #:	58-41-4
Well Location:	16105 Rockies Run Summit Austin, TX 78738	Latitude:	30° 19' 07.17" N
		Longitude:	097° 59' 53.44" W
Well County:	Travis	Elevation:	1137 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 5/24/2016 Drilling End Date: 5/25/2016

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	10	0	10
	6.75	10	925

Drilling Method: Air Rotary

Borehole Completion: Perforated or Slotted

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	30	Cement 10 Bags/Sacks
	30	50	Bentonite 3 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: No Data

Packers: Rubber at 50 ft.
Rubber at 800 ft.
Rubber at 805 ft.

Type of Pump: No Data

Well Tests: Jetted Yield: 25 GPM

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
800 - 925	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: **we have not set the pump yet.**

Report Amended on 7/8/2016 by Request #18197

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	5	topsoil & loose rock
5	40	tan limestone
40	470	gray limestone
470	540	tan limestone
540	690	gray limestone
690	800	shale & clay
800	925	trinity sandstone & gravel

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	sdr-17	0	825
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	825	925

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Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #427566

Owner:	Jim Dunham	Owner Well #:	1
Address:	10434 SE 22nd Bellvue, WA 98004	Grid #:	58-41-8
Well Location:	12117 Rayner Place Austin, TX 78738	Latitude:	30° 17' 13.29" N
Well County:	Travis	Longitude:	097° 56' 44.88" W
		Elevation:	950 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **4/14/2016** Drilling End Date: **4/28/2016**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	7.875	0	900

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	10	Cement 10 Bags/Sacks
	10	105	Bentonite 30 Bags/Sacks

Seal Method: **Positive Displacement**

Distance to Property Line (ft.): **10 +**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **n/a**

Distance to Septic Tank (ft.): **n/a**

Method of Verification: **tag line**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **500 ft. below land surface on 2016-04-18** Measurement Method: **Electric Line**

Packers:

- Rubber at 105 ft.**
- Rubber at 120 ft.**
- Rubber at 340 ft.**
- Rubber at 440 ft.**
- Rubber at 540 ft.**
- Rubber at 580 ft.**
- Rubber at 590 ft.**
- Rubber at 600 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **740**

Well Tests: **Jetted** **Yield: 25 + GPM**

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
680 - 880	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: **Hydro Resources Mid-Continent, Inc.**

PO Box 525
Dripping Springs, TX 78620

Driller Name: **Tyler R Loman**

License Number: **59607**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	10	caliche
10	540	grey limestone
540	580	hamet clay
580	760	grey tan sandstone
760	800	multi color sandstone
800	880	red sandstone
880	900	red grey shale

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	sdr 17	0	640
4.5	Screen	New Plastic (PVC)	sdr 17 0.032	640	660
4.5	Blank	New Plastic (PVC)	sdr 17	660	780
4.5	Screen	New Plastic (PVC)	sdr 17 0.032	780	860
4.5	Blank	New Plastic (PVC)	sdr 17	860	880

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #429444

Owner:	Tim Skaggs	Owner Well #:	No Data
Address:	13618 West HWY 71 Bee Caves, TX 78738	Grid #:	58-41-5
Well Location:	13618 West HWY 71 Bee Caves, TX 78738	Latitude:	30° 18' 36.8" N
Well County:	Travis	Longitude:	097° 57' 28.3" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **7/26/2016** Drilling End Date: **7/26/2016**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	625	100	810
	9	0	100

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	-1	100	6 cement 5 bentonite gel Bags/Sacks

Seal Method: **Pressure Pumped /
Tremmie**

Distance to Property Line (ft.): **+100**

Sealed By: **Driller**

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

Distance to Septic Tank (ft.): **+50**

Method of Verification: **owner**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **497 ft. below land surface on 2016-07-26** Measurement Method: **Electric Line**

Packers: **Burlap at 100 ft.
Rubber at 105 ft.
Burlap and Plastic at 650 ft.
Burlap and Plastic at 670 ft.
Burlap and Plastic at 690 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **700**

Well Tests: **Jetted / Estimated Yield: 25-30 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
497 - 810	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: **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	white caliche
5	210	blue lime
210	330	tan lime
330	440	gray lime some clay
440	525	gray white lime
525	540	gray shale
540	590	gray white limestone
590	655	red sandstone
655	710	red white sandstone (h2o)
710	750	tan white limestone
750	765	multi-colored limestones / gravel (h2o)
765	780	red white limestone
780	810	yellow and black limestone

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr17	-3	710
4.5	Screen	New Plastic (PVC)	sdr17 0.032	710	790
4.5	Blank	New Plastic (PVC)	sdr17	790	810

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #432305

Owner:	Seven Custom Homes	Owner Well #:	No Data
Address:	11805 Overlook Pass Austin, TX 78738	Grid #:	58-41-8
Well Location:	11805 Overlook Pass Austin, TX 78738	Latitude:	30° 17' 05.47" N
Well County:	Travis	Longitude:	097° 56' 14.99" W
		Elevation:	912 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **9/8/2016**

Drilling End Date: **9/8/2016**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	10
	8.5	10	100
	6.75	100	820

Drilling Method: **Air Rotary**

Borehole Completion: **Perforated or Slotted**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	20	Cement 2 Bags/Sacks
	20	100	Bentonite 10 Bags/Sacks

Seal Method: **Slurry**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Surface Completion by Driller

Water Level: **430 ft. below land surface on No Data**

Packers: **Rubber at 100 ft.
Rubber at 102 ft.
Rubber at 310 ft.
Rubber at 650 ft.
Rubber at 655 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **740**

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**

Apprentice Name: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	10	tan lime
10	310	grey lime
310	560	grey tan sandstone wb 310'-370' 5 gpm @ 750 tds
560	630	grey clay
630	810	red/grey sandstone wb 630'-700' 5 gpm @ 900 tds
810	820	grey/tan sandstone wb 730'-820' 25 gpm @ 800 tds

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr17	-2	720
4.5	Perforated or Slotted	New Plastic (PVC)	sdr17	720	820

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #436727

Owner:	Emerald Crest Development	Owner Well #:	No Data
Address:	8131 Hwy 71 W Austin, TX 78735	Grid #:	58-41-5
Well Location:	4700 Almirante Cove Austin, TX 78738	Latitude:	30° 17' 39.78" N
Well County:	Travis	Longitude:	097° 56' 02.86" W
		Elevation:	887 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **10/18/2016** Drilling End Date: **10/20/2016**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	10.625	0	20
	6.75	20	815

Drilling Method: **Air Rotary**

Borehole Completion: **Perforated or Slotted**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	20	Cement 6 Bags/Sacks
	20	50	Bentonite 3 Bags/Sacks

Seal Method: **Slurry**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Surface Completion by Driller

Water Level: **No Data**

Packers: **Rubber at 50 ft.
Rubber at 440 ft.
Rubber at 650 ft.
Rubber at 670 ft.**

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 Dr.
Dripping Springs, TX 78620

Driller Name: **Jim Blair**

License Number: **54416**

Apprentice Name: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	top soil
1	20	tan lime
20	270	grey lime
270	530	lost returns WB 270'-310'
530	815	sandstone/gravel

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr17	-2	715
4.5	Perforated or Slotted	New Plastic (PVC)	sdr17	715	815

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 #438350

Owner:	JIM DIMEO	Owner Well #:	No Data
Address:	11816 YAUPON HOLLY LANE AUSTIN, TX 78738	Grid #:	58-41-8
Well Location:	11816 YAUPON HOLLY LANE AUSTIN, TX 78738	Latitude:	30° 17' 03" N
Well County:	Travis	Longitude:	097° 56' 20.76" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **10/18/2016** Drilling End Date: **10/18/2016**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.5	100	870

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	CEMENT TYPE H 14 Bags/Sacks
	0	100	BENSEAL 5 Bags/Sacks
	530	570	CEMENT TYPE H 5 Bags/Sacks

Seal Method: **Tremie**

Sealed By: **Driller**

Distance to Property Line (ft.): **55**

Distance to Septic Field or other
concentrated contamination (ft.): **53**

Distance to Septic Tank (ft.): **80**

Method of Verification: **TAPE MEASURE**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **515 ft. below land surface on 2016-10-21** Measurement Method: **Electric Line**

Packers: **BURLAP & PVC at 100 ft.
BURLAP & PVC at 570 ft.
BURLAP & PVC at 590 ft.
BURLAP & PVC at 610 ft.
BURLAP & PVC at 770 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **700**

Well Tests: **Jetted** **Yield: 18 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
645 - 870	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: **AARON GLASS**

License Number: **4227**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	14	CALICHE
14	25	BLUE/GRAY LIMESTONE
25	310	GRAY LIMESTONE
310	490	TAN W/GRAY LIMESTONE
490	540	GRAY W/BROWN LIMESTONE
540	580	HAMMETT CLAY
580	600	HAMMETT CLAY W/RED CLAY
600	620	GRAY LIMESTONE
620	645	GRAY W/TAN LIMESTONE
645	790	RED/TAN SANDSTONE
790	830	RED SAND
830	870	SAND WITH RED

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New SDR17 PVC	SDR17	3	870
5	Perforated or Slotted	New SDR17 SLOT	SDR17 0.032	750	790
5	Perforated or Slotted	New SDR17 SLOT	SDR17 0.032	850	870

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #438916

Owner:	JOE INGE	Owner Well #:	No Data
Address:	5608 GREAT DIVIDE DRIVE AUSTIN, TX 78738	Grid #:	58-41-8
Well Location:	5608 GREAT DIVIDE DRIVE AUSTIN, TX 78738	Latitude:	30° 17' 22.26" N
Well County:	Travis	Longitude:	097° 57' 08.64" W
		Elevation:	No Data
Type of Work:	Deepening	Proposed Use:	Domestic

Drilling Start Date: **8/26/2016** Drilling End Date: **8/26/2016**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	6	570	870

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	CEMENT TYPE H 9 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.): **100**

Method of Verification: **OWNER**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **611 ft. below land surface on 2016-08-30** Measurement Method: **Electric Line**

Packers: **BURLAP & PVC at 100 ft.
BURLAP & PVC at 630 ft.
BURLAP & PVC at 650 ft.
BURLAP & PVC at 670 ft.
BURLAP & PVC at 690 ft.
BURLAP & PVC at 810 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **700**

Well Tests: **Jetted** **Yield: 15-20 GPM**

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
680 - 870	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: **AARON GLASS**

License Number: **4227**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
570	580	WHITE/TAN LIMESTONE
580	610	GRAY LIMESTONE
610	620	GRAY LIMESTONE W/HAMMETT STRIPS
620	660	HAMMETT CLAY
660	680	HAMMETT CLAY W/RED CLAY
680	720	GRAY SANDSTONE
720	870	RED SANDSTONE

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
5	SDR17	New Plastic (PVC)	120	2	870
5	Perforated or Slotted	New Plastic (PVC)	120 0.032	730	790
5	Perforated or Slotted	New Plastic (PVC)	120 0.032	830	870

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #438988

Owner:	JENKINS CUSTOM HOMES	Owner Well #:	No Data
Address:	3813 JUNIPER TRACE, STE. 100 BEE CAVES, TX 78738	Grid #:	58-41-4
Well Location:	16409 SHANE LANDON CT. AUSTIN, TX 78738	Latitude:	30° 19' 40.2" N
Well County:	Travis	Longitude:	097° 59' 39.84" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 10/11/2016 Drilling End Date: 10/11/2016

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	6.5	100	860

Drilling Method: Air Rotary

Borehole Completion: CASED

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	CEMENT TYPE H 14 Bags/Sacks
	0	100	Bentonite 4 Bags/Sacks

Seal Method: Pressure

Sealed By: Driller

Distance to Property Line (ft.): 20

Distance to Septic Field or other
concentrated contamination (ft.): N/A

Distance to Septic Tank (ft.): N/A

Method of Verification: TAPE MEASURE

Surface Completion: Surface Sleeve Installed

Surface Completion by Driller

Water Level: 606 ft. below land surface on 2016-10-20 Measurement Method: Electric Line

Packers: BURLAP & PVC at 101 ft.
BURLAP & PVC at 620 ft.
BURLAP & PVC at 640 ft.
BURLAP & PVC at 660 ft.
BURLAP & PVC at 680 ft.

Type of Pump: Submersible Pump Depth (ft.): 700

Well Tests: Jetted Yield: N/A GPM

Water Quality:

Strata Depth (ft.)	Water Type
600 - 780	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 DALE LINGLE, JR.**

License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	15	BROWN LIMESTONE
15	340	GRAY LIMESTONE
340	350	DARK GRAY LIMESTONE
350	385	GRAY LIMESTONE
385	410	BROWN LIMESTONE
410	590	GRAY/TAN LIMESTONE
590	630	TAN LIMESTONE
630	635	TAN/GRAY LIMESTONE
635	660	CLAY HAMMETT
660	675	CLAY HAMMETT W/RED CLAY
675	695	GRAY LIMESTONE
695	800	SANDSTONE

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	3	800
5	Perforated or Slotted	New Plastic (PVC)	SDR17 0.032	600	780

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Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #442471

Owner:	Travis Creek Homes	Owner Well #:	No Data
Address:	PO Box 342076 Austin, TX 78734	Grid #:	57-48-6
Well Location:	1700 Whispering Breeze Austin, TX 78738	Latitude:	30° 18' 30.39" N
		Longitude:	098° 01' 04.35" W
Well County:	Travis	Elevation:	1153 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 12/14/2016 Drilling End Date: 12/15/2016

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	10.5	0	20
	6.75	20	900

Drilling Method: Air Rotary

Borehole Completion: Perforated or Slotted

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	20	Cement 5 Bags/Sacks
	20	50	Bentonite 3 Bags/Sacks

Seal Method: Poured

Sealed By: Driller

Distance to Property Line (ft.): No Data

Distance to Septic Field or other
concentrated contamination (ft.): No Data

Distance to Septic Tank (ft.): No Data

Method of Verification: No Data

Surface Completion: Pitless Adapter Used

Surface Completion by Driller

Water Level: 526 ft. below land surface on 2016-12-16

Packers: Rubber at 50 ft.
Rubber at 580 ft.
Rubber at 750 ft.
Rubber at 770 ft.

Type of Pump: Submersible

Pump Depth (ft.): 740

Well Tests: No Test Data Specified

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **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

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	3	topsoil
3	20	tan limestone
20	670	limestone (lost returns)
670	770	clay
770	900	sandstone

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	sdr-17	0	800
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	800	900

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #442996

Owner:	JEFF NALLEY	Owner Well #:	No Data
Address:	1608 ACACIA BUD DRIVE AUSTIN, TX 78733	Grid #:	58-41-5
Well Location:	12500 MAIDENHAIR LANE BEE CAVE, TX 78738	Latitude:	30° 17' 35.58" N
		Longitude:	097° 56' 13.86" W
Well County:	Travis	Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 12/29/2016 Drilling End Date: 12/29/2016

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	6.125	100	790

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	Bentonite 3 Bags/Sacks
	1	100	TYPE H CEMENT 15 Bags/Sacks

Seal Method: Slurry

Sealed By: Driller

Distance to Property Line (ft.): 52

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

Distance to Septic Tank (ft.): CITY

Method of Verification: TAPE MEASURE

Surface Completion: Surface Sleeve Installed

Surface Completion by Driller

Water Level: No Data

Packers: Burlap at 100 ft.
BURLAP & PVC at 300 ft.
BURLAP & PVC at 500 ft.
BURLAP & PVC at 680 ft.

Type of Pump: Submersible

Pump Depth (ft.): 700

Well Tests: Jetted Yield: 50+ GPM

Water Quality:

Strata Depth (ft.)	Water Type
690 - 789	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 DALE LINGLE, JR.**License Number: **54813**Comments: **No Data****Report Amended on 3/28/2017 by Request #21048**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	TOP SOIL
2	30	CALICHE
30	35	GRAY LIMESTONE
35	90	TAN LIMESTONE
90	120	GRAY LIMESTONE
120	170	TAN/BROWN LIMESTONE
170	400	GRAY/TAN LIMESTONE
400	510	TAN/BROWN LIMESTONE
510	520	GRAY LIMESTONE
520	560	GRAY CLAY
560	620	GRAY/BROWN LIMESTONE
620	640	BROWN/RED LIMESTONE
640	660	RED SANDSTONE
660	690	TAN/RED LIMESTONE
690	740	GRAVEL
740	750	RED SANDSTONE
750	790	CONGLOMERATE

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	3	690
5	Perforated or Slotted	New Plastic (PVC)	SDR17 0.032	690	790

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #445644

Owner:	Travis County	Owner Well #:	No Data
Address:	700 Lavaca St Austin, TX 78767	Grid #:	58-41-4
Well Location:	14624 Hamilton Pool Road Austin, TX 78738	Latitude:	30° 18' 28.49" N
Well County:	Travis	Longitude:	097° 58' 24.19" W
		Elevation:	987 ft. above sea level
Type of Work:	New Well	Proposed Use:	Monitor

Drilling Start Date: 2/14/2017 Drilling End Date: 2/16/2017

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	8.75	0	60
	4.75	60	717

Drilling Method: Air Rotary

Borehole Completion: West bay Multi Port Sampling System

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	60	Cement 15 Bags/Sacks

Seal Method: Not Applicable

Distance to Property Line (ft.): 50 ft

Sealed By: Unknown

Distance to Septic Field or other
concentrated contamination (ft.): +500 ft

Distance to Septic Tank (ft.): +500 ft

Method of Verification: Visual

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**

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: **C&C Groundwater Services LLC**
29143 Old Fredericksburg Rd
Boerne, TX 78015

Driller Name: **Richard Kyle Courtney** License Number: **2546**

Comments: **Barton Springs Edwards Aquifer Conservation District multiport monitor well**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	19	Caliche /Light Gray L/S
19	39	Light Gray L/S / Gray Shale
39	60	Light Gray L/S
60	77	Chalky Gray L/S
77	97	Light Gray L/S
97	117	Light Gray L/S Gray Shale
117	137	Light Gray L/S
137	157	Light Gray Shale / Light Gray L/S
157	177	Gray Shale / Tan L/S
177	217	Tan L/S Gray Shale
217	277	Gray L/S
277	297	Gypsum/ Gray L/S / Tan L/S
297	377	Gray L/S / Tan L/S
377	397	Gray L/S / Tan L/S Little Gray Shale

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
6	Blank	New Steel	40	0	60

397	417	Gray L/S Tan L/S Brown L/S
417	457	Light Brown L/S
457	497	Light Gray L/S Small Tan L/S
497	517	Light Brown L/S / Gray L/S
517	557	Gray Shale
557	597	Course Light Gray Shale w Small Tan L/S
597	617	Red L/S Gray L/S
617	657	Red L/S
657	677	Red L/S Red Tan L/S
677	697	Multi Tan L/S
697	717	Course Red and small Tan L/S

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #446623

Owner:	Jeff Weeden	Owner Well #:	No Data
Address:	5708 Spanish Oaks Tr. Austin, TX 78738	Grid #:	58-41-8
Well Location:	5708 Spanish Oaks Tr. Austin, TX 78738	Latitude:	30° 17' 25.4" N
Well County:	Travis	Longitude:	097° 56' 36.6" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 4/4/2017

Drilling End Date: 4/4/2017

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	9	0	100
	6.25	100	890

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	-1	100	10 cement 4 bentonite gelclay Bags/Sacks

Seal Method: Pressure Pumped / Tremie

Distance to Property Line (ft.): 60

Sealed By: Driller

Distance to Septic Field or other
concentrated contamination (ft.): N/A

Distance to Septic Tank (ft.): N/A

Method of Verification: No OSSF

Surface Completion: Surface Sleeve Installed

Surface Completion by Driller

Water Level: No Data

Packers: Burlap at 100 ft.
Rubber at 100 ft.
Burlap and Plastic at 650 ft.
Burlap and Plastic at 670 ft.

Type of Pump: Submersible

Pump Depth (ft.): 800

Well Tests: Jetted / Estimated Yield: 25-30 GPM

Water Quality:

Strata Depth (ft.)	Water Type
660 - 890	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: **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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	15	white chalk
15	495	blue lime
495	515	tan white limestone
515	560	gray white limestone
560	590	gray lime and shale
590	660	gray white lime
660	690	red sandstone
690	710	red white sandstone (h2o)
710	845	red sandstone
845	865	multi colored limestones gravel (h2o)
865	890	yellow limestone and clay

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr17	-3	790
4.5	Screen	New Plastic (PVC)	sdr17 0.032	790	870
4.5	Blank	New Plastic (PVC)	sdr17	870	890

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 #447865

Owner:	Patricia Nettleship	Owner Well #:	1
Address:	6449 Spanish Oaks Club Dr. Austin, TX 78738	Grid #:	58-41-5
Well Location:	6449 Spanish Oaks Club Dr. Austin, TX 78738	Latitude:	30° 18' 03.16" N
		Longitude:	097° 57' 12.02" W
Well County:	Travis	Elevation:	1002 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **3/15/2017** Drilling End Date: **3/16/2017**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	10	0	20
	6.75	20	865

Drilling Method: **Air Rotary**

Borehole Completion: **Perforated or Slotted**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	Cement 8 Bags/Sacks
	20	50	Bentonite 5 Bags/Sacks

Seal Method: **Poured**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Surface Completion by Driller

Water Level: **578 ft. below land surface on 2017-03-16**

Packers: **Rubber at 50 ft.
Rubber at 745 ft.
Rubber at 750 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **700**

Well Tests: **Jetted Yield: 50+ GPM**

Water Quality:

Strata Depth (ft.)	Water Type
750 - 845	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	8	caliche
8	330	gray limestone
330	660	gray limestone & white rock
660	675	red clay
675	705	red & gray limestone
705	720	gray clay
720	865	red sandstone & white rock with gravel

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	805
8	Blank	New Plastic (PVC)	sch. 40	0	20
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	805	865

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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 #448245

Owner:	RON MULSO	Owner Well #:	No Data
Address:	11512 MUSKET RIM AUSTIN, TX 78738	Grid #:	58-41-8
Well Location:	11512 MUSKET RIM AUSTIN, TX 78738	Latitude:	30° 17' 27.9" N
Well County:	Travis	Longitude:	097° 55' 40.08" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **3/28/2017** Drilling End Date: **3/28/2017**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.125	100	770

Drilling Method: **Air Rotary**

Borehole Completion: **CASED**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	Cement 17 Bags/Sacks
	0	100	Bentonite 2 Bags/Sacks

Seal Method: **PRESSURE TREMIE**

Distance to Property Line (ft.): **42**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **N/A**

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

Method of Verification: **OWNER/TAPE
MEASURE**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **363 ft. below land surface on 2017-03-30** Measurement Method: **Electric Line**

Packers: **Burlap at 100 ft.
BURLAP & PLASTIC at 300 ft.
BURLAP & PLASTIC at 480 ft.
BURLAP & PLASTIC at 540 ft.
BURLAP & PLASTIC at 560 ft.
BURLAP & PLASTIC at 580 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **700**

Well Tests: **Jetted** **Yield: 40+ GPM**

Water Quality:

Strata Depth (ft.)	Water Type
570 - 770	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 DALE LINGLE**

License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	3	TOP SOIL
3	10	CALICHE/TAN LIMESTONE
10	270	GRAY LIMESTONE
270	490	GRAY/TAN LIMESTONE
490	500	TAN LIMESTONE
500	515	GRAY CLAY
515	525	GRAY LIMESTONE
525	570	GRAY/TAN LIMESTONE
570	575	RED SANDSTONE
575	590	GRAVEL
590	630	RED SANDSTONE
630	770	CONGLOMERATE

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	2	600
5	Perforated or Slotted	New Plastic (PVC)	SDR17 0.032	600	760
5	Blank	New Plastic (PVC)	SDR17	760	770

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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 #449020

Owner: **Lake Travis Youth Association** Owner Well #: **2**
Address: **2101 Lakeway Blvd.
Ste. 115
Lakeway, TX 78734** Grid #: **58-41-4**
Well Location: **13909 Hwy. 71 W.
Bee Cave, TX 78738** Latitude: **30° 18' 27.37" N**
Longitude: **097° 57' 49" W**
Well County: **Travis** Elevation: **928 ft. above sea level**
****Plugged Within 48 Hours****

****This well has been plugged****

Plugging Report Tracking #168252

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **5/8/2017**

Drilling End Date: **5/11/2017**

Borehole:

<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
10.5	0	18
6.75	18	590

Drilling Method: **Air Rotary**

Borehole Completion: **Plugged**

Annular Seal Data:

<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
0	18	Cement 3 Bags/Sacks

Seal Method: **Poured**

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

Sealed By: **Driller**

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: **plugged**

Surface Completion by Driller

Water Level: **No Data**

Packers: **Rubber at 18 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 0 GPM**

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **Bee Cave Drilling, Inc.**
185 Angel Fire Dr.
Dripping Springs, TX 78620

Driller Name: **Jim Blair**

License Number: **54416**

Comments: **dry hole. Plugged.**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	20	topsoil & caliche
20	480	gray limestone
480	490	gray limestone & shale
490	590	blue clay

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
8	Blank	New Plastic (PVC)	sch. 40	0	18

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P.O. Box 12157
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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #451959

Owner: **GREG JANECEK** Owner Well #: **1**
Address: **3501 RR 620S, APT 8101** Grid #: **58-41-8**
AUSTIN, TX 78738
Well Location: **12109 MUSKET RIM STREET** Latitude: **30° 17' 12.72" N**
AUSTIN, TX 78738 Longitude: **097° 56' 09.97" W**
Well County: **Travis** Elevation: **939 ft. above sea level**

****This well has been plugged****

Plugging Report Tracking #171549

Type of Work: **New Well**

Proposed Use: **Domestic**

Drilling Start Date: **4/17/2017**

Drilling End Date: **5/10/2017**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	820

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	1	120	Cement 27 Bags/Sacks

Seal Method: **Positive Displacement**

Distance to Property Line (ft.): **200**

Sealed By: **HYDRO**

Distance to Septic Field or other
concentrated contamination (ft.): **N/A**

Distance to Septic Tank (ft.): **75**

Method of Verification: **TAPE**

Surface Completion: **Pitless Adapter Used**

Surface Completion NOT by Driller

Water Level: **460 ft. below land surface on 2017-04-25** Measurement Method: **Electric Line**

Packers: **Rubber at 120 ft.**
Plastic at 121 ft.
Rubber at 300 ft.
Rubber at 480 ft.
Plastic at 481 ft.
Rubber at 660 ft.
Rubber at 680 ft.
Plastic at 681 ft.
Rubber at 700 ft.

Type of Pump: **Submersible**

Pump Depth (ft.): **740**

Well Tests:

Jetted

Yield: 18-20 GPM

Water Quality:

Strata Depth (ft.)	Water Type
700 - 820	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: Hydro Resources Mid-Continent, Inc.

31866 RR 12
DRIPPING SPRINGS, TX 78620

Driller Name: CANON KUTSCHER

License Number: 58773

Apprentice Name: RAY WITTMESSE

Apprentice Number: 59935

Comments: No Data

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIALCasing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	10	FILL DIRT & ROCK
10	50	YELLOW LIMESTONE
50	300	LIGHT BLUE LIMESTONE
300	325	GRAY LIMESTONE
325	470	LIGHT YELLOW LIMESTONE
470	540	GRAY LIMESTONE
540	630	GRAY SHALE
630	660	GRAY LIMESTONE
660	820	REDDISH BROWN SANDSTONE

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR 17	0	760
4.5	Screen	New Plastic (PVC)	0.032	760	820

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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 #451961

Owner:	JIM EVANS	Owner Well #:	2
Address:	11917 MUSKET RIM STREET AUSTIN, TX 78738	Grid #:	58-41-8
Well Location:	11917 MUSKET RIM STREET AUSTIN, TX 78738	Latitude:	30° 17' 13.8" N
Well County:	Travis	Longitude:	097° 55' 58.7" W
		Elevation:	938 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **5/15/2017** Drilling End Date: **5/24/2017**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	880

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	Cement 22 Bags/Sacks
	100	515	Benseal 25 Bags/Sacks

Seal Method: **Positive Displacement**

Distance to Property Line (ft.): **15**

Sealed By: **HYDRO**

Distance to Septic Field or other
concentrated contamination (ft.): **35**

Distance to Septic Tank (ft.): **N/A**

Method of Verification: **TAPE**

Surface Completion: **Pitless Adapter Used**

Surface Completion NOT by Driller

Water Level: **440 ft. below land surface on 2017-05-18** Measurement Method: **Electric Line**

Packers:

- Rubber at 340 ft.**
- Plastic at 341 ft.**
- Rubber at 360 ft.**
- Plastic at 361 ft.**
- Rubber at 515 ft.**
- Plastic at 516 ft.**
- Rubber at 520 ft.**
- Plastic at 521 ft.**
- Rubber at 660 ft.**
- Plastic at 661 ft.**
- Rubber at 680 ft.**

Plastic at 681 ft.
Rubber at 700 ft.
Plastic at 701 ft.
Plastic at 719 ft.
Rubber at 720 ft.

Type of Pump: **Submersible**

Pump Depth (ft.): **760**

Well Tests: **Jetted** **Yield: 20 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
720 - 880	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: **Hydro Resources Mid-Continent, Inc.**
31866 RR 12
DRIPPING SPRINGS, TX 78620

Driller Name: **CANON KUTSCHER**

License Number: **58773**

Apprentice Name: **JOSEPH DOTTAIO**

Apprentice Number: **59883**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	5	TOPSOIL & LOOSE ROCK
5	10	YELLOW LIMESTONE
10	380	BLUE LIMESTONE
380	520	LIGHT YELLOW LIMESTONE (H2O 15GPM)
520	570	GRAY LIMESTONE
570	620	GRAY SHALE
620	680	GRAY LIMESTONE
680	880	REDDISH BROWN LIMESTONE & CONGLOMERATE

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 #452612

Owner:	PATTI MATTISON	Owner Well #:	1
Address:	11932 MUSKET RIM STREET AUSTIN, TX 78738	Grid #:	58-41-8
Well Location:	11932 MUSKET RIM STREET AUSTIN, TX 78738	Latitude:	30° 17' 17.92" N
		Longitude:	097° 56' 02.85" W
Well County:	Travis	Elevation:	965 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **4/24/2017** Drilling End Date: **5/16/2017**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	840

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	2	90	Cement 23 Bags/Sacks
	90	104	Bentonite 4 Bags/Sacks

Seal Method: **Positive Displacement**

Distance to Property Line (ft.): **38**

Sealed By: **HYDRO**

Distance to Septic Field or other
concentrated contamination (ft.): **200+**

Distance to Septic Tank (ft.): **200+**

Method of Verification: **TAPE**

Surface Completion: **Surface Sleeve Installed**

Surface Completion NOT by Driller

Water Level: **470 ft. below land surface on 2017-04-26** Measurement Method: **Electric Line**

Packers:

- Rubber at 120 ft.**
- Rubber at 280 ft.**
- Plastic at 281 ft.**
- Rubber at 480 ft.**
- Rubber at 680 ft.**
- Plastic at 681 ft.**
- Rubber at 700 ft.**
- Plastic at 719 ft.**
- Rubber at 720 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **700**

Well Tests: **Jetted** **Yield: 25+ GPM**

Water Quality:	<i>Strata Depth (ft.)</i>	<i>Water Type</i>
	700 - 840	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: **Hydro Resources Mid-Continent, Inc.**
31866 RR 12
DRIPPING SPRINGS, TX 78620

Driller Name: **CANON KUTSCHER** License Number: **58773**

Apprentice Name: **JOE DOOTTAVIO** Apprentice Number: **59883**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	2	TOPSOIL & LOOSE ROCK
2	10	YELLOW LIMESTONE
10	390	BLUE LIMESTONE
390	520	BROWN LIMESTONE (5-7 GPM)
520	560	GRAY LIMESTONE
560	650	GRAY SHALE
650	700	GRAY LIMESTONE
700	840	REDDISH BROWN (H2O 25+GPM)

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	SDR 17	0	780
4.5	Screen	New Plastic (PVC)	0.035	780	840

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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 #455222

Owner:	Lake Travis Youth Association	Owner Well #:	2
Address:	2101 Lakeway Blvd. Ste. 115 Lakeway, TX 78734	Grid #:	58-41-4
Well Location:	13909 Hwy. 71 W. Bee Cave, TX 78737	Latitude:	30° 18' 27.35" N
Well County:	Travis	Longitude:	097° 57' 49.01" W
		Elevation:	928 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 5/15/2017 Drilling End Date: 5/16/2017

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	10	0	9
	8.5	9	20
	6.75	20	865

Drilling Method: Air Rotary

Borehole Completion: Perforated or Slotted

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	30	Cement 8 Bags/Sacks
	30	60	Bentonite 4 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: No Data

Packers: Rubber at 60 ft.
Rubber at 65 ft.
Rubber at 540 ft.
Rubber at 545 ft.

Type of Pump: No Data

Well Tests: Jetted Yield: 40 GPM

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **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

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	4	caliche
4	5	gravel
5	20	caliche
20	220	gray limestone
220	340	gray limestone & shale
340	380	gray & brown limestone
380	460	gray limestone
460	505	gray & brown rock
505	530	clay
530	570	gray rock
570	780	gray & red sandstone
780	850	greenish brown rock wb
850	865	clay

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	sdr-17	0	805
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	805	865

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 #455750

Owner:	Mike Mc Donald	Owner Well #:	No Data
Address:	17001 Whispering Breeze Austin, TX 78738	Grid #:	57-48-6
Well Location:	17001 Whispering Breeze Austin, TX 78738	Latitude:	30° 18' 29.1" N
Well County:	Travis	Longitude:	098° 01' 05.7" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **6/27/2017** Drilling End Date: **6/27/2017**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	60
	6.25	60	650

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	-1	50	Cement 6 Bags/Sacks
	0	30	Bentonite 15 Bags/Sacks

Seal Method: **Hand Mixed**

Distance to Property Line (ft.): **>60**

Sealed By: **Driller**

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

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

Method of Verification: **well drilled first /
owner**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **No Data**

Packers: **Burlap at 30 ft.
Burlap at 50 ft.
Burlap and Plastic at 550 ft.
Burlap and Plastic at 570 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **600**

Well Tests: **Estimated Yield: 15-20 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
580 - 625	Mid 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****Report Amended on 10/6/2017 by Request #23312****Report Amended on 11/2/2017 by Request #23556**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	15	white chalk
15	35	tan lime
35	50	blue lime
50	51	lost returns (cave)
51	395	blue lime
395	415	tan lime
415	580	blue lime
580	625	tan white limestone (h2o)
625	650	gray lime

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr17	-3	570
6.9	Blank	New Plastic (PVC)	40	0	60
4.5	Screen	New Plastic (PVC)	sdr17 0.032	570	630
4.5	Blank	New Plastic (PVC)	sdr17	630	650

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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #455822

Owner:	Steve & Sarah Cady	Owner Well #:	No Data
Address:	11705 Yaupon Holly Ln. Austin, TX 78738	Grid #:	58-41-8
Well Location:	11705 Yaupon Holly Ln. Austin, TX 78738	Latitude:	30° 16' 58.14" N
		Longitude:	097° 56' 23.3" W
Well County:	Travis	Elevation:	909 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **5/23/2017** Drilling End Date: **5/24/2017**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	8
	8	8	22
	6.75	22	825

Drilling Method: **Air Rotary**

Borehole Completion: **Perforated or Slotted**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	20	Cement 5 Bags/Sacks
	20	50	Bentonite 3 Bags/Sacks

Seal Method: **Poured**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Surface Completion by Driller

Water Level: **425 ft. below land surface on 2017-05-25**

Packers: **Rubber at 50 ft.
Rubber at 620 ft.
Rubber at 625 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **700**

Well Tests: **Jetted Yield: 25 GPM**

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
640 - 795	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: **combined tds 750**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	1	topsoil
1	4	tan limestone
4	15	gray limestone
15	25	tan limestone
25	280	gray limestone
280	380	gray rock & tan limestone
380	475	gray limestone
475	520	fractured gray & tan rock wb 10 gpm 1100 tds
520	575	gray clay
575	640	gray sandstone
640	670	tan sandstone tds 450
670	690	conglomerate
690	695	white sandstone
695	730	red sandstone & white rock mix
730	735	white sandstone
735	745	conglomerate
745	795	red sandstone

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	sdr-17	0	745
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	745	805

795	825	clay
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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #456934

Owner:	JULIO QUINTANA	Owner Well #:	No Data
Address:	5603 COTTONMIST CT. SUGARLAND, TX 77479	Grid #:	58-41-8
Well Location:	11508 MUSKET RIM AUSTIN, TX 78738	Latitude:	30° 17' 26.4" N
Well County:	Travis	Longitude:	097° 55' 38.64" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **5/1/2017**

Drilling End Date: **5/1/2017**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.125	100	870

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	Cement 17 Bags/Sacks
	0	100	Bentonite 2 Bags/Sacks

Seal Method: **PRESSURE TREMIE
CEMENTING**

Distance to Property Line (ft.): **55**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **N/A**

Distance to Septic Tank (ft.): **N/A**

Method of Verification: **TAPE MEASURE**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **428 ft. below land surface on 2017-05-05** Measurement Method: **Electric Line**

Packers: **Burlap at 100 ft.
BURLAP & PVC at 300 ft.
BURLAP & PVC at 500 ft.
BURLAP & PVC at 540 ft.
BURLAP & PVC at 580 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **700**

Well Tests: **Jetted** Yield: **20+ GPM**

Water Quality:

Strata Depth (ft.)	Water Type
750 - 850	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 DALE LINGLE**

License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	15	CALICHE
15	240	GRAY LIMESTONE
240	340	TAN/GRAY LIMESTONE
340	495	TAN LIMESTONE
495	560	GRAY CLAY
560	580	GRAY LIMESTONE
580	600	RED SANDSTONE
600	620	RED/BROWN LIMESTONE
620	640	RED/GRAY LIMESTONE
640	660	RED/GRAY LIMESTONE
660	680	RED/TAN LIMESTONE
680	700	RED LIMESTONE
700	720	RED LIMESTONE
720	740	RED/PURPLE LIMESTONE
740	760	RED/TAN LIMESTONE
760	780	RED/TAN LIMESTONE
780	800	RED SANDSTONE

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	2	750
5	Perforated or Slotted	New Plastic (PVC)	SDR17 0.032	750	850
5	Blank	New Plastic (PVC)	SDR17	850	870

800	820	GRAVEL
820	850	GRAVEL
850	870	RED SANDSTONE

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #460445

Owner:	Steven Cox	Owner Well #:	No Data
Address:	2281 270th Ct SE Sammamish, WA 98075	Grid #:	57-48-3
Well Location:	17000 Majestic Ridge Lakeway, TX 78738	Latitude:	30° 20' 46.1" N
Well County:	Travis	Longitude:	098° 00' 24.4" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **10/4/2016** Drilling End Date: **10/11/2016**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	9	0	20
	8	20	101
	6.5	101	890

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	101	Cement 22 Bags/Sacks

Seal Method: **Tremie**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **109**

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

Method of Verification: **tape measure**

Surface Completion: **Surface Sleeve Installed**

Water Level: **490 ft. below land surface on 2016-10-11**

Packers: **shale trap at 810 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **600**

Well Tests: **Estimated** Yield: **10 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**

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: **TOM ARNOLD DRILLING**
2750 SOUTH A. W. GRIMES BLVD
ROUND ROCK, TX 78664

Driller Name: **Tommy D Arnold**License Number: **2096**Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	top soil & loose rock
1	13	yellow limestone
13	44	gray limestone
44	51	blue limestone
51	160	gray limestone
160	177	brown limestone
177	201	gray limestone
201	209	gray limestone
209	350	gray limestone
350	352	fractures
352	510	gray limestone (partial drill returns)
510	890	no drill returns

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5		New Plastic (PVC)		0	890
4.5	Screen	New Plastic (PVC)	0.032	810	870

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Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #461884

Owner:	GREG JANECEK	Owner Well #:	2
Address:	3501 RR 620 S, APT 8101 AUSTIN, TX 78738	Grid #:	58-41-8
Well Location:	12109 MUSKET RIM STREET AUSTIN, TX 78738	Latitude:	30° 17' 12.18" N
Well County:	Travis	Longitude:	097° 56' 10.53" W
		Elevation:	939 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **6/15/2017** Drilling End Date: **9/18/2017**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	880

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	95	Cement 22 Bags/Sacks
	95	100	Bentonite 3 Bags/Sacks

Seal Method: **Positive Displacement**

Distance to Property Line (ft.): **15**

Sealed By: **HYDRO**

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

Distance to Septic Tank (ft.): **50+**

Method of Verification: **TAPE**

Surface Completion: **Pitless Adapter Used**

Surface Completion NOT by Driller

Water Level: **460 ft. below land surface on 2017-06-19**

Packers:

- Rubber at 100 ft.**
- Plastic at 101 ft.**
- Rubber at 110 ft.**
- Rubber at 240 ft.**
- Plastic at 241 ft.**
- Rubber at 440 ft.**
- Plastic at 441 ft.**
- Rubber at 630 ft.**
- Plastic at 631 ft.**
- Rubber at 650 ft.**
- Plastic at 651 ft.**

Rubber at 670 ft.

Type of Pump: **Submersible**

Pump Depth (ft.): **780**

Well Tests: **Jetted** **Yield: 18-20 GPM**

Water Quality:	<i>Strata Depth (ft.)</i>	<i>Water Type</i>
	740 - 870	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: **Hydro Resources Mid-Continent, Inc.**
31866 RR 12
DRIPPING SPRINGS, TX 78620

Driller Name: **CANON KUTSCHER** License Number: **58773**

Apprentice Name: **EDUARDO COVARRUBIAS** Apprentice Number: **60037**

Comments: **DRILLED FIRST WELL ON 5/8/17. PLUGGED THAT WELL AND DRILLED NEW WELL ON 6/15/17**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	10	FILL
10	30	YELLOW LIMESTONE
30	300	LIGHT BLUE LIMESTONE
300	325	GRAY LIMESTONE
325	470	LIGHT YELLOW LIMESTONE
470	540	GRAY LIMESTONE
540	630	GRAY SHALE
630	660	GRAY SHALE
660	880	REDDISH BROWN SANDSTONE

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	SDR 17	0	820
4.5	Screen	New Plastic (PVC)	0.032	820	880

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #463219

Owner:	Lake Travis ISD	Owner Well #:	No Data
Address:	Vail Divide Bee Cave , TX 78738	Grid #:	58-41-4
Well Location:	Vail Divide Bee Cave, TX 78738	Latitude:	30° 18' 48.81" N
Well County:	Travis	Longitude:	097° 59' 53.24" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Closed-Loop Geothermal

Drilling Start Date: 9/18/2017 Drilling End Date: 9/18/2017

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	4.75	0	300

Drilling Method: Air Rotary

Borehole Completion: Plugged

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	30	Bentonite 10 Bags/Sacks
	30	300	Dry Cuttings

Seal Method: Dry cuttings and Hole Plug

Distance to Property Line (ft.): 500

Sealed By: Driller

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

Distance to Septic Tank (ft.): 1000+

Method of Verification: Laser

Surface Completion: Alternative Procedure Used Surface Completion by Driller

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: No Test Data Specified

Water Quality:

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

Chemical Analysis Made: **No**

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

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: **Ball Drilling Company**
PO Box 3011
Marble Falls, TX 78654

Driller Name: **Joseph C. Hart** License Number: **59548**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	2	Clay
2	10	White Limestone
10	21	Tan Limestone
21	92	Grey Limestone
93	300	Grey Limestone with Hard Layers

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

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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #463997

Owner:	Michael Macs	Owner Well #:	No Data
Address:	17730 Serene Hills Pass Austin, TX 78738	Grid #:	57-48-3
Well Location:	17730 Serene Hills Pass Austin, TX 78738	Latitude:	30° 20' 27.9" N
Well County:	Travis	Longitude:	098° 00' 16.6" W
		Elevation:	1098 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **9/5/2017**

Drilling End Date: **9/13/2017**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	10	0	10
	6.75	10	888

Drilling Method: **Air Rotary**

Borehole Completion: **Perforated or Slotted**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	Cement 4 Bags/Sacks
	20	25	Bentonite 2 Bags/Sacks

Seal Method: **Poured**

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

Sealed By: **Driller**

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: **587 ft. below land surface on 2017-09-16**

Packers: **Rubber at 25 ft.
Rubber at 510 ft.
Rubber at 730 ft.
Rubber at 735 ft.
Rubber at 740 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **800**

Well Tests: **Jetted** **Yield: 18 GPM**

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **Bee Cave Drilling, Inc.**
185 Angel Fire Dr.
Dripping Springs, TX 78620

Driller Name: **Jim Blair**

License Number: **54416**

Comments: **tds 875**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	1	topsoil
1	13	caliche
13	287	gray limestone
287	315	gray limestone w/ shale stringers
315	385	gray limestone
385	575	grey & tan rock
575	650	white & tan rock
650	740	grey limestone
740	820	red sandstone
820	880	red sandstone & conglomerate
880	888	grey shale & clay

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	sdr-17	0	828
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	828	888

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

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

STATE OF TEXAS WELL REPORT for Tracking #464009

Owner:	Doug & Dianne Webb	Owner Well #:	2
Address:	4008 Pawnee Pass Austin, TX 78738	Grid #:	58-41-4
Well Location:	4008 Pawnee Pass Austin, TX 78738	Latitude:	30° 19' 56.13" N
Well County:	Travis	Longitude:	097° 59' 26.64" W
		Elevation:	986 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **9/20/2017** Drilling End Date: **9/21/2017**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	10	0	10
	6.75	10	828

Drilling Method: **Air Rotary**

Borehole Completion: **Perforated or Slotted**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	30	Cement 6 Bags/Sacks
	30	55	Bentonite 2 Bags/Sacks

Seal Method: **Poured**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Surface Completion by Driller

Water Level: **571 ft. below land surface on 2017-09-25**

Packers: **Rubber at 50 ft.
Rubber at 55 ft.
Rubber at 623 ft.
Rubber at 628 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **740**

Well Tests: **Jetted Yield: 40+ 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	caliche
8	495	gray limestone
495	560	tan limestone
560	610	clay
610	640	tan limestone
640	660	tan sandstone wb 15 gpm
660	828	red sandstone wb

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	748
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	748	808

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Texas Department of Licensing and Regulation
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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #464336

Owner:	Bill Casey	Owner Well #:	No Data
Address:	5700 Spanish Oaks Club Austin, TX 78738	Grid #:	58-41-8
Well Location:	5700 Spanish Oaks Club Austin, TX 78738	Latitude:	30° 17' 23.9" N
Well County:	Travis	Longitude:	097° 56' 38.1" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **9/18/2017** Drilling End Date: **9/19/2017**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.25	100	910

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	-1	100	10 cement 4 bentonite gelclay Bags/Sacks

Seal Method: **Pressure Pumped / Tremie**

Distance to Property Line (ft.): **10**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **No OSSF**

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

Method of Verification: **Tape**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **No Data**

Packers: **Burlap at 100 ft.
Rubber at 100 ft.
Burlap and Plastic at 710 ft.
Burlap and Plastic at 730 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **740**

Well Tests: **Estimated Yield: 20 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
715 - 910	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: **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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	topsoil
2	20	tan white lime
20	510	blue lime
510	540	tan white limestone
540	590	gray white limestone
590	620	gray lime and shale
620	715	gray and white limestone
715	740	red sandstone
740	770	tan limestone (h2o)
770	820	red sandstone
820	860	multi-colored limestones (h2o)
860	890	tan white limestone
890	910	yellow lime and clay

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr17	-3	810
4.5	Screen	New Plastic (PVC)	sdr17 0.032	810	890
4.5	Blank	New Plastic (PVC)	sdr17	890	910

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Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #465450

Owner:	KIRK PRICE	Owner Well #:	No Data
Address:	5917 SPANISH OAKS CLUB BLVD. AUSTIN, TX 78738	Grid #:	58-41-5
Well Location:	5917 SPANISH OAKS CLUB AUSTIN, TX 78738	Latitude:	30° 17' 35.93" N
Well County:	Travis	Longitude:	097° 56' 50.92" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 9/11/2017 Drilling End Date: 9/11/2017

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	6.125	100	850

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	TYPE H CEMENT 8 Bags/Sacks
	0	100	Bentonite 2 Bags/Sacks

Seal Method: PRESSURE TREMIE
CEMENTING

Distance to Property Line (ft.): 15

Sealed By: Driller

Distance to Septic Field or other
concentrated contamination (ft.): N/A

Distance to Septic Tank (ft.): N/A

Method of Verification: TAPE MEASURE

Surface Completion: Surface Sleeve Installed

Surface Completion by Driller

Water Level: 602 ft. below land surface on 2017-09-18 Measurement Method: Electric Line

Packers: Burlap at 100 ft.
BURLAP & PLASTIC at 300 ft.
BURLAP & PLASTIC at 500 ft.
BURLAP & PLASTIC at 560 ft.
BURLAP & PLASTIC at 620 ft.
BURLAP & PLASTIC at 700 ft.

Type of Pump: Submersible Pump Depth (ft.): 700

Well Tests: Jetted Yield: 25 GPM

Water Quality:

Strata Depth (ft.)	Water Type
730 - 830	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 DALE LINGLE**

License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	0.5	TOP SOIL
0.5	18	CALICHE
18	21	BLUE LIMESTONE
21	333	GRAY LIMESTONE
333	360	GRAY/TAN LIMESTONE
360	380	TAN/BROWN LIMESTONE
380	400	GRAY LIMESTONE
400	550	TAN LIMESTONE
550	610	CLAY LIMESTONE
610	620	BROWN/TAN LIMESTONE
620	630	BROWN SANDSTONE
630	660	BROWN/TAN LIMESTONE
660	675	GRAY LIMESTONE
675	690	SAND/BROWN LIMESTONE
690	710	BROWN SANDSTONE
710	730	BROWN SANDSTONE

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	2	730
5	Perforated or Slotted	New Plastic (PVC)	SDR17 0.032	730	830
5	Blank	New Plastic (PVC)	SDR17	830	850

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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 #465624

Owner:	Chuck Enze	Owner Well #:	No Data
Address:	5600 Laceback Terrace Austin, TX 78735	Grid #:	58-41-8
Well Location:	5600 Laceback Terrace Austin, TX 78735	Latitude:	30° 17' 05.6" N
Well County:	Travis	Longitude:	097° 56' 28.2" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **10/23/2017** Drilling End Date: **10/24/2017**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	50
	6.25	50	890

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	-1	50	7 cement 2 bentonite gelclay Bags/Sacks

Seal Method: **Hand Mixed**

Sealed By: **Driller**

Distance to Property Line (ft.): **10**

Distance to Septic Field or other
concentrated contamination (ft.): **No OSSF**

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

Method of Verification: **owner**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **573 ft. below land surface on 2017-10-24** Measurement Method: **Electric Line**

Packers: **Burlap at 50 ft.
Burlap and Plastic at 770 ft.
Burlap and Plastic at 790 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **740**

Well Tests: **Estimated Yield: 20-25 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
710 - 890	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: **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	10	white caliche
10	30	tan lime
30	495	blue lime
495	540	tan white limestone
540	580	gray tan lime
580	615	gray shale
615	710	gray white limestone
710	810	red sandstone
810	840	tan white limestone
840	860	multi-colored limestone (h2o)
860	890	yellow limestone and 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	790
4.5	Screen	New Plastic (PVC)	sdr17 0.020	790	870
4.5	Blank	New Plastic (PVC)	sdr17	870	890

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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 #465631

Owner:	Ben Hudson	Owner Well #:	No Data
Address:	4101 Texas Wildlife Tr. Austin, TX 78735	Grid #:	58-41-8
Well Location:	5500 Laceback Terrace Austin, TX 78735	Latitude:	30° 17' 07.1" N
Well County:	Travis	Longitude:	097° 56' 26.2" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **10/26/2017** Drilling End Date: **10/27/2017**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	50
	6.25	50	890

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	-1	50	7 cement 2 bentonite gelclay Bags/Sacks

Seal Method: **Hand Mixed**

Sealed By: **Driller**

Distance to Property Line (ft.): **20**

Distance to Septic Field or other
concentrated contamination (ft.): **No OSSF**

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

Method of Verification: **owner / builder**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **565 ft. below land surface on 2017-10-27** Measurement Method: **Electric Line**

Packers: **Burlap at 50 ft.
Burlap and Plastic at 770 ft.
Burlap and Plastic at 790 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **740**

Well Tests: **Estimated Yield: 20-25 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
700 - 890	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: **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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	15	white caliche
15	470	blue lime
470	490	tan lime
490	545	tan white limestone
545	600	gray tan lime
600	635	gray shale
635	680	gray white limestone
680	715	red sandstone
715	730	red white limestone
730	830	red sandstone
830	850	multi-colored limestones (h2o)
850	890	yellow limestone and clay

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr17	-3	790
4.5	Screen	New Plastic (PVC)	sdr17 0.020	790	870
4.5	Blank	New Plastic (PVC)	sdr17	870	890

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #465972

Owner:	JIM STORER	Owner Well #:	No Data
Address:	11509 MUSKET RIM ST. AUSTIN, TX 78738	Grid #:	58-41-8
Well Location:	11509 MUSKET RIM ST. AUSTIN, TX 78738	Latitude:	30° 17' 27.36" N
Well County:	Travis	Longitude:	097° 55' 40.8" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **9/21/2017** Drilling End Date: **9/21/2017**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	9	0	100
	6.125	100	790

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	100	TYPE H CEMENT 7 Bags/Sacks
	0	100	Bentonite 2 Bags/Sacks

Seal Method: **PRESSURE TREMIE
CEMENTING**

Distance to Property Line (ft.): **15**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **N/A**

Distance to Septic Tank (ft.): **N/A**

Method of Verification: **OWNER/TAPE
MEASURE**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **368.6 ft. below land surface on 2017-10-05** Measurement Method: **Electric Line**

Packers: **Burlap at 100 ft.
BURLAP & PLASTIC at 500 ft.
BURLAP & PLASTIC at 520 ft.
BURLAP & PLASTIC at 540 ft.
BURLAP & PLASTIC at 590 ft.
BURLAP & PLASTIC at 710 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **720**

Well Tests: **Jetted** **Yield: 25 GPM**

Water Quality:	<i>Strata Depth (ft.)</i>	<i>Water Type</i>
	670 - 770	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 DALE LINGLE** License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	0.05	TOP SOIL
0.05	15	BROWN LIMESTONE
15	170	GRAY LIMESTONE
170	260	GRAY/TAN LIMESTONE
260	335	TAN LIMESTONE
335	400	BROWN/TAN LIMESTONE
400	500	TAN LIMESTONE
500	510	GRAY LIMESTONE W/SANDSTONE CLAY
510	540	GRAY CLAY
540	550	GRAY RED CLAY
550	590	GRAY/BROWN LIMESTONE
590	610	GRAY LIMESTONE W/RED SANDSTONE
610	630	BROWN/RED SANDSTONE
630	640	RED SANDSTONE & GRAVEL
640	670	CONGLOMERATE

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
5	Blank	New Plastic (PVC)	SDR17	2	670
5	Perforated or Slotted	New Plastic (PVC)	SDR17 0.032	670	770
5	Blank	New Plastic (PVC)	SDR17	770	790

670	690	RED SANDSTONE W/RED CLAY
690	710	RED SANDSTONE & GRAVEL
710	730	RED SANDSTONE
730	750	PINK & BLACK GRAVEL
750	770	RED SANDSTONE W/CLAY
770	790	RED CLAY

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 #467734

Owner:	Weigelt Enterprises	Owner Well #:	1
Address:	1728 S. FM 1626 Buda, TX 78610	Grid #:	57-48-3
Well Location:	Highland Village Dr. Lakeway, TX 78734	Latitude:	30° 20' 53.76" N
		Longitude:	098° 00' 34.83" W
Well County:	Travis	Elevation:	864 ft. above sea level

Type of Work:	New Well	Proposed Use:	Test Well
Replaced by Tracking # <u>474700</u>			

Drilling Start Date: **11/1/2017** Drilling End Date: **11/3/2017**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	10	0	8
	8.5	8	900

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	20	Cement 5 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
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Water Level: **No Data**

Packers: **Rubber at 20 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 45 GPM**

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **Bee Cave Drilling, Inc.**
185 Angel Fire Dr.
Dripping Springs, TX 78620

Driller Name: **Jim Blair**

License Number: **54416**

Comments: **1300 tds.**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	2	topsoil
2	6	brown limestone
6	8	white rock
8	19	tan limestone
19	378	gray limestone
378	388	tan limestone
388	460	gray & tan limestone
460	467	gray clay
467	580	red sandstone & clay
580	788	white rock
788	825	gray limestone
825	900	gray limestone & gravel

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	sdr-17	0	20

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STATE OF TEXAS WELL REPORT for Tracking #467735

Owner:	Weigelt Enterprises	Owner Well #:	2
Address:	1728 S. FM 1626 Buda, TX 78610	Grid #:	57-48-3
Well Location:	Highland Village Dr. Lakeway, TX 78734	Latitude:	30° 20' 51.41" N
Well County:	Travis	Longitude:	098° 00' 33.24" W
Number of Wells Drilled:	2	Elevation:	863 ft. above sea level

Type of Work:	New Well	Proposed Use:	Test Well
Replaced by Tracking # 474701			

Drilling Start Date: **11/24/2017** Drilling End Date: **11/26/2017**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	8
	8.5	8	830

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	20	Cement 5 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
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Water Level: **No Data**

Packers: **Rubber at 20 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 80 GPM**

Water Quality:

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

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

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

Company Information: **Bee Cave Drilling, Inc.**
185 Angel Fire Dr.
Dripping Springs, TX 78620

Driller Name: **Jim Blair**License Number: **54416**Comments: **600 tds**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	2	white rock
2	5	brown clay
5	8	caliche
8	16	brown clay
16	79	gray limestone
79	89	white limestone
89	148	light gray limestone
148	157	white limestone
157	353	gray limestone & shale
353	366	gray clay
366	405	white & gray limestone
405	460	gray & brown clay
460	587	red sandstone
587	660	sandstone
660	686	blue clay
686	748	sandstone & gravel mix
748	810	gray limestone
810	830	black rock

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	sdr-17	0	20

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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #469948

Owner:	Emerald Crest Development	Owner Well #:	1
Address:	8131 W. Hwy. 71 Austin, TX 78735	Grid #:	58-41-8
Well Location:	6004 Krause Ln. Austin, TX 78738	Latitude:	30° 16' 55.16" N
Well County:	Travis	Longitude:	097° 56' 33.89" W
		Elevation:	912 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **12/4/2017** Drilling End Date: **12/5/2017**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	8
	8.5	8	20
	6.75	20	810

Drilling Method: **Air Rotary**

Borehole Completion: **Perforated or Slotted**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	20	Cement 17 Bags/Sacks
	20	25	Bentonite 2 Bags/Sacks

Seal Method: **Poured**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Surface Completion by Driller

Water Level: **479 ft. below land surface on 2017-12-11**

Packers: **Rubber at 25 ft.
Rubber at 30 ft.
Rubber at 630 ft.
Rubber at 635 ft.
Rubber at 638 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **740**

Well Tests: **Jetted Yield: 50 GPM**

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
0	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: **650 tds**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	1	topsoil
1	4	caliche
4	6	tan limestone
6	8	white rock
8	331	gray limestone
331	385	tan limestone
385	478	gray limestone
478	512	dark gray limestone
512	563	gray & white limestone
563	587	gray shale
587	626	light gray limestone wb 6 gpm 900 tds
626	686	red sandstone
686	781	white sandstone and conglomerate
781	810	conglomerate gravel wb 50 gpm 650 tds

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	sdr-17	0	750
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	750	810

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STATE OF TEXAS WELL REPORT for Tracking #469954

Owner:	Emerald Crest Development	Owner Well #:	No Data
Address:	8131 W. Hwy. 71 Austin, TX 78735	Grid #:	58-41-8
Well Location:	12208 Iron Bluff Austin, TX 78738	Latitude:	30° 17' 15.03" N
Well County:	Travis	Longitude:	097° 56' 18.37" W
		Elevation:	945 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **12/11/2017** Drilling End Date: **12/12/2017**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	10	0	8
	8.5	8	50
	6.75	50	880

Drilling Method: **Air Rotary**

Borehole Completion: **Perforated or Slotted**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	35	Cement 15 Bags/Sacks
	35	55	Bentonite 3 Bags/Sacks

Seal Method: **Poured**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Surface Completion by Driller

Water Level: **543 ft. below land surface on 2017-12-18**

Packers: **Rubber at 55 ft.
Rubber at 60 ft.
Rubber at 625 ft.
Rubber at 628 ft.
Rubber at 630 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **760**

Well Tests: **Jetted Yield: 50+ GPM**

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **Bee Cave Drilling, Inc.**
185 Angel Fire Dr.
Dripping Springs, TX 78620

Driller Name: **Jim Blair**

License Number: **54416**

Comments: **500 tds**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	1	topsoil
1	7	caliche
7	16	tan limestone
16	38	gray limestone
38	64	white limestone
64	271	gray limestone
271	296	gray shale
296	331	gray & tan limestone
331	453	tan limestone
453	554	gray limestone
554	630	gray shale & limestone
630	744	tan limestone wb 13 gpm 700 tds
744	812	red sandstone & white rock wb 40 gpm 750 tds
812	847	red, white, and gray sandstone
847	880	conglomerate gravel wb 50+ gpm 500 tds

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	sdr-17	0	820
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	820	880

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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #470873

Owner:	KARINA DAVIS	Owner Well #:	No Data
Address:	5817 SPANISH OAKS CLUB BLVD. AUSTIN, TX 78738	Grid #:	58-41-5
Well Location:	5817 SPANISH OAKS CLUB BLVD. AUSTIN, TX 78738	Latitude:	30° 17' 34.45" N
Well County:	Travis	Longitude:	097° 56' 43.97" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **12/14/2017** Drilling End Date: **12/14/2017**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.125	100	770

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	TYPE H CEMENT 12 Bags/Sacks
	0	100	QUICK GEL 2 Bags/Sacks

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **45**

Distance to Septic Field or other
concentrated contamination (ft.): **N/A**

Distance to Septic Tank (ft.): **N/A**

Method of Verification: **OWNER/TAPE
MEASURE**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **537 ft. below land surface on 2017-12-14** Measurement Method: **Electric Line**

Packers: **Burlap at 100 ft.
BURLAP & PLASTIC at 120 ft.
BURLAP & PLASTIC at 530 ft.
BURLAP & PLASTIC at 560 ft.
BURLAP & PLASTIC at 580 ft.
BURLAP & PLASTIC at 660 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **700**

Well Tests: **Jetted** **Yield: 30 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
660 - 760	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 DALE LINGLE**

License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	5	BROWN LIMESTONE
5	10	RED SANDSTONE & GRAVEL
10	20	TAN LIMESTONE
20	30	GRAY LIMESTONE
30	33	TAN LIMESTONE
33	140	GRAY LIMESTONE
140	185	TAN LIMESTONE
185	187	GRAY CLAY
187	240	TAN/GRAY LIMESTONE
240	370	TAN LIMESTONE
370	400	GRAY LIMESTONE
400	520	TAN LIMESTONE
520	530	GRAY LIMESTONE
530	570	GRAY CLAY
570	590	GRAY SAND

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	2	660
5	Perforated or Slotted	New Plastic (PVC)	SDR17 0.032	660	760
5	Blank	New Plastic (PVC)	SDR17	760	770

590	610	GRAY/TAN/SAND
610	630	TAN/BROWN LIMESTONE
630	650	BROWN/RED SANDSTONE
650	670	RED SANDSTONE GRAVEL
670	690	RED SANDSTONE/TAN LIMESTONE
690	710	RED/TAN SANDSTONE
710	730	RED/TAN/BROWN SANDSTONE
730	740	TAN/BROWN LIMESTONE
740	760	RED/TAN/BROWN LIMESTONE
760	770	RED CLAY

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STATE OF TEXAS WELL REPORT for Tracking #470974

Owner:	Bill Schneider	Owner Well #:	No Data
Address:	11500 Musket Rim Austin, TX 78738	Grid #:	58-41-8
Well Location:	11500 Musket Rim Austin, TX 78738	Latitude:	30° 17' 26.98" N
Well County:	Travis	Longitude:	097° 55' 34.86" W
		Elevation:	865 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **1/24/2018** Drilling End Date: **1/25/2018**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	10	0	8.5
	8.5	8.5	22
	6.75	22	810

Drilling Method: **Air Rotary**

Borehole Completion: **Perforated or Slotted**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	20	Cement 5 Bags/Sacks
	20	30	Bentonite 2 Bags/Sacks

Seal Method: **Poured**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Surface Completion by Driller

Water Level: **306 ft. below land surface on 2018-02-06**

Packers: **Rubber at 30 ft.
Rubber at 400 ft.
Rubber at 600 ft.
Rubber at 610 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **760**

Well Tests: **Pump Yield: 15 GPM**

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **Bee Cave Drilling, Inc.**
185 Angel Fire Dr.
Dripping Springs, TX 78620

Driller Name: **Jim Blair**

License Number: **54416**

Comments: **900 tds**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	23	topsoil & caliche
23	440	gray limestone
440	560	tan limestone
560	590	blue clay
590	660	gray sandstone
660	785	red sandstone
785	810	conglomerate

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	sdr-17	0	670
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	670	810

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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #472867

Owner:	JAIME DELA GARZA	Owner Well #:	No Data
Address:	11520 OVERLOOK PASS AUSTIN, TX 78738	Grid #:	58-41-8
Well Location:	11520 OVERLOOK PASS AUSTIN, TX 78738	Latitude:	30° 17' 13.98" N
Well County:	Travis	Longitude:	097° 55' 52.5" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **1/8/2018**

Drilling End Date: **1/8/2018**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.125	100	810

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	TYPE H CEMENT 13 Bags/Sacks
	0	100	QUICK GEL 2 Bags/Sacks

Seal Method: **Pressure**

Distance to Property Line (ft.): **15**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **N/A**

Distance to Septic Tank (ft.): **N/A**

Method of Verification: **TAPE
MEASURE/OWNER**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **455 ft. below land surface on 2018-01-12** Measurement Method: **Electric Line**

Packers: **Burlap at 100 ft.
BURLAP & PLASTIC at 120 ft.
BURLAP & PLASTIC at 540 ft.
BURLAP & PLASTIC at 560 ft.
BURLAP & PLASTIC at 630 ft.
BURLAP & PLASTIC at 710 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **720**

Well Tests: **Jetted** Yield: **30 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
700 - 800	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 DALE LINGLE**License Number: **54813**Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	TOP SOIL
2	18	BROWN LIMESTONE
18	22	BLUE LIMESTONE
22	260	GRAY LIMESTONE
260	340	GRAY/TAN LIMESTONE
340	370	TAN LIMESTONE
370	400	TAN/GRAY LIMESTONE
400	530	TAN LIMESTONE
530	560	GRAY CLAY
560	570	GRAY/TAN LIMESTONE
570	610	BROWN/GRAY LIMESTONE
610	630	GRAY CLAY
630	650	GRAY/RED SANDSTONE
650	670	RED SAND
670	690	RED SANDSTONE
690	710	RED CLAY SANDSTONE

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	2	700
5	Perforated or Slotted	New Plastic (PVC)	SDR17 0.032	700	800
5	Blank	New Plastic (PVC)	SDR17	800	810

710	730	RED/BLUE SANDSTONE
730	750	RED/TAN/BROWN SANDSTONE
750	770	GRAVEL & RED SAND
770	790	GRAVEL & RED SAND
790	810	GRAVEL & RED SHALE

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

STATE OF TEXAS WELL REPORT for Tracking #474018

Owner:	STEVE HARREN	Owner Well #:	No Data
Address:	6836 BEE CAVES BLDG. 3, STE. 302 AUSTIN, TX 78746	Grid #:	58-41-4
Well Location:	14425 FALCON HEAD BLVD. AUSTIN, TX 78738	Latitude:	30° 19' 22.8" N
Well County:	Travis	Longitude:	097° 57' 31.74" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **1/5/2018**

Drilling End Date: **1/5/2018**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	9	0	100
	6.125	100	870

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	100	TYPE H CEMENT 12 Bags/Sacks
	0	100	QUICK GEL 2 Bags/Sacks

Seal Method: **Pressure**

Distance to Property Line (ft.): **40**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **N/A**

Distance to Septic Tank (ft.): **N/A**

Method of Verification: **TAPE
MEASURE/OWNER**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **600 ft. below land surface on 2018-01-05** Measurement Method: **Electric Line**

Packers: **Burlap at 100 ft.
BURLAP & PLASTIC at 120 ft.
BURLAP & PLASTIC at 600 ft.
BURLAP & PLASTIC at 700 ft.
BURLAP & PLASTIC at 750 ft.
BURLAP & PLASTIC at 770 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **740**

Well Tests: **Jetted** Yield: **30 GPM**

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
770 - 870	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 DALE LINGLE**

License Number: **54813**

Comments: **No Data**

Report Amended on 4/2/2018 by Request #24752

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	3	TOP SOIL
3	8	BROWN LIMESTONE
8	10	BLUE LIMESTONE
10	18	BROWN LIMESTONE
18	160	GRAY LIMESTONE
160	210	GRAY/TAN LIMESTONE
210	270	TAN LIMESTONE
270	280	GRAY LIMESTONE
280	290	DARK GRAY LIMESTONE
290	300	WHITE LIMESTONE
300	420	TAN/GRAY LIMESTONE
420	510	TAN LIMESTONE
510	530	TAN/BLACK LIMESTONE (COW CREEK)
530	550	TAN/BLACK LIMESTONE (COW CREEK)
550	570	GRAY CLAY

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
5	Blank	New Plastic (PVC)	SDR17	2	770
5	Perforated or Slotted	New Plastic (PVC)	SDR17 0.032	770	870

570	590	GRAY CLAY W/LIMESTONE
590	610	GRAY CLAY W/LIMESTONE
610	630	GRAY LIMESTONE
630	650	BROWN SANDSTONE
650	670	BROWN SANDSTONE
670	690	RED SANDSTONE W/GRAVEL
690	710	BROWN/TAN LIMESTONE
710	730	RED/WHITE/TAN/BROWN LIMESTONE
730	750	RED SANDSTONE
750	770	RED SANDSTONE W/GRAVEL
770	790	GRAVEL
790	810	GRAVEL
810	830	GRAVEL W/SAND
830	850	GRAVEL W/BROWN SANDSTONE
850	870	BROWN/WHITE CLAY

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 #474700

Owner:	Weigelt Enterprises	Owner Well #:	1
Address:	1728 S. FM 1626 Buda, TX 78610	Grid #:	57-48-3
Well Location:	Highland Village Dr. Lakeway, TX 78734	Latitude:	30° 20' 53.76" N
Well County:	Travis	Longitude:	098° 00' 34.83" W
		Elevation:	864 ft. above sea level

Type of Work: **Reconditioning** for Tracking #**467734** Proposed Use: **Irrigation**

Drilling Start Date: **2/6/2018** Drilling End Date: **2/12/2018**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	12.25	0	830

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	560	830	Gravel	3/8"

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	40	Cement 25 Bags/Sacks
	40	80	Bentonite 15 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: **330 ft. below land surface on 2018-02-27**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 25 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

No Data

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
6.25	Blank	New Plastic (PVC)	sdr-17	0	600
6.25	Perforated or Slotted	New Plastic (PVC)	sdr-17	600	830

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 #474701

Owner:	Weigelt Enterprises	Owner Well #:	2
Address:	1728 S. FM 1626 Buda, TX 78610	Grid #:	57-48-3
Well Location:	Highland Village Dr. Lakeway, TX 78734	Latitude:	30° 20' 51.41" N
Well County:	Travis	Longitude:	098° 00' 33.24" W
		Elevation:	863 ft. above sea level

Type of Work: **Reconditioning** for Tracking #**467735** Proposed Use: **Irrigation**

Drilling Start Date: **2/19/2018** Drilling End Date: **3/1/2018**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	10	0	830

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	600	830	Gravel	3/8"

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	50	Cement 28 Bags/Sacks
	50	70	Bentonite 12 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: **330 ft. below land surface on 2018-03-06**

Packers: **No Data**

Type of Pump: **Submersible** Pump Depth (ft.): **756**

Well Tests: **Pump** **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: **Jim Blair**

License Number: **54416**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

No Data

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
6.25	Blank	New Plastic (PVC)	sdr-17	0	660
6.25	Perforated or Slotted	New Plastic (PVC)	sdr-17	660	830

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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 #474702

Owner:	Weigelt Enterprises	Owner Well #:	3
Address:	1728 S. FM 1626 Buda, TX 78610	Grid #:	57-48-3
Well Location:	Highland Village Dr. Lakeway, TX 78734	Latitude:	30° 20' 54.97" N
Well County:	Travis	Longitude:	098° 00' 35.43" W
Number of Wells Drilled:	3	Elevation:	863 ft. above sea level

Type of Work:	New Well	Proposed Use:	Irrigation
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Drilling Start Date: **3/14/2018** Drilling End Date: **3/19/2018**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	12	0	10
	10	10	830

Drilling Method: **Air Rotary**

Borehole Completion: **Perforated or Slotted**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	40	Cement 18 Bags/Sacks
	40	50	Bentonite 5 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
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Water Level: **330 ft. below land surface on 2018-04-04**

Packers: **Rubber at 50 ft.
Rubber at 70 ft.
Rubber at 500 ft.
Rubber at 515 ft.
Rubber at 520 ft.**

Type of Pump:	Submersible	Pump Depth (ft.): 756
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Well Tests:	Jetted	Yield: 80 GPM
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Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **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

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	2	topsoil
2	15	caliche
15	150	gray limestone
150	180	gray shale
180	475	gray limestone
475	485	gray & brown clay
485	500	gray clay
500	550	gray limestone
550	640	red sandstone
640	735	conglomerate
735	750	broken tan rock
750	772	yellow clay
772	830	black rock

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
6.25	Blank	New Plastic (PVC)	sdr-17	0	600
6.25	Perforated or Slotted	New Plastic (PVC)	sdr-17	600	830

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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 #476875

Owner:	Arbogast Homes	Owner Well #:	No Data
Address:	5724 Spanish Oaks Blvd. Austin, TX 78738	Grid #:	58-41-8
Well Location:	5724 Spanish Oaks Blvd. Austin, TX 78738	Latitude:	30° 17' 27.36" N
Well County:	Travis	Longitude:	097° 56' 38.46" W
		Elevation:	1002 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **3/21/2018** Drilling End Date: **3/21/2018**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	50
	6.25	50	890

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	-1	50	7 cement 2 bentonite gelclay Bags/Sacks

Seal Method: **Hand Mixed**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **NO OSSF**

Distance to Septic Tank (ft.): **NO OSSF**

Method of Verification: **Owner**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **No Data**

Packers: **Burlap at 50 ft.
Burlap and Plastic at 550 ft.
Burlap and Plastic at 650 ft.
Burlap and Plastic at 670 ft.**

Type of Pump: **Submersible**

Well Tests: **Estimated Yield: 20-25 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
665 - 890	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: **Associated Drilling Company**

**PO Box 673
Dripping Springs, TX 78620**

Driller Name: **James Benoit**

License Number: **4064**

Comments: **Glass Well Service**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	25	tan lime
25	495	blue lime
495	550	tan white limestone
550	570	gray lime
570	605	gray lime and shale
605	665	tan white lime
665	685	red sandstone
685	700	tan white limestone (h2o)
700	870	red white sandstone
870	890	multi-colored limestones (h2o)

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr17	-3	810
4.5	Screen	New Plastic (PVC)	sdr17 0.020	810	890

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #479545

Owner:	Ames Design Build	Owner Well #:	No Data
Address:	702 N. Commons Ford Austin, TX 78733	Grid #:	58-41-5
Well Location:	Unit 31, Maidenhair Ln. Austin, TX 78738	Latitude:	30° 17' 47.23" N
		Longitude:	097° 56' 51.21" W
Well County:	Travis	Elevation:	940 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **3/21/2018** Drilling End Date: **3/23/2018**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	9
	8.5	9	25
	6.75	25	810

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 14 Bags/Sacks
	40	50	Bentonite 4 Bags/Sacks

Seal Method: **Poured**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Surface Completion by Driller

Water Level: **548 ft. below land surface on 2018-03-26**

Packers: **Rubber at 50 ft.
Rubber at 600 ft.
Rubber at 605 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **720**

Well Tests: **Jetted Yield: 30+ GPM**

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
760 - 810	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

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	1	topsoil
1	6	tan limestone
6	10	caliche & white rock
10	236	gray limestone
236	239	gray clay
239	395	gray limestone
395	415	tan limestone
415	480	gray limestone
480	550	gray limestone & shale
550	565	gray clay
565	620	gray sandstone
620	630	gray limestone
630	760	red sandstone
760	810	red sandstone & conglomerate mix wb

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	sdr-17	0	750
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	750	810

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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 #479792

Owner:	Terry Booth	Owner Well #:	No Data
Address:	12535 Hwy 71 W Bee Caves , TX 78728	Grid #:	58-41-5
Well Location:	East Village Lot 72 Bee Caves, TX 78728	Latitude:	30° 17' 55" N
Well County:	Travis	Longitude:	097° 56' 07" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **3/20/2018** Drilling End Date: **3/20/2018**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	8	0	100
	6.25	100	745

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	7 Benseal 1 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 100 ft.
Burlap/Neoprene at 105 ft.
Burlap/Neoprene at 535 ft.
Burlap/Neoprene at 540 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 40 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
540 - 725	Trinity - TDS 880

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	320	Gray Tan LS
320	386	Tan LT Gray LS
386	460	Gray LS w/ Clay
460	501	Gray Tan LS
501	538	Tan Red LS
538	660	Red Tan SS
660	664	Gravel
664	717	Red SS
717	725	Granite Churt
725	745	Tan SS

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.25	Blank	New Plastic (PVC)	SDR17	2	665
4.25	Screen	New Plastic (PVC)	.035	665	725
4.25	Blank	New Plastic (PVC)	SDR17	725	745

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

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

STATE OF TEXAS WELL REPORT for Tracking #481282

Owner: **Austin Enve LLC.**

Owner Well #: **No Data**

Address: **4202 Spicewood Spring Rd
Suite 203
Austin , TX 78759**

Grid #: **58-41-8**

Latitude: **30° 16' 58" N**

Well Location: **11713 Yaupon Holly Ln
Austin, TX 78738**

Longitude: **097° 56' 19" W**

Well County: **Travis**

Elevation: **No Data**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **4/24/2018**

Drilling End Date: **4/24/2018**

Borehole:

<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
8	0	100
6.25	100	800

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
0	100	7 Benseal 1 Portland 8 Bags/Sacks

Seal Method: **Pressure**

Distance to Property Line (ft.): **5**

Sealed By: **Driller**

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 655 ft.
Burlap/Neoprene at 660 ft.
Burlap/Neoprene at 665 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 45 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
595 - 800	Trinity - TDS 510

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 6/6/2018 by Request #25231

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	12	Tan LS
12	287	Gray Tan LS
287	350	Tan LS
350	385	Gray Tan LS
385	398	Tan LS
398	502	Gray Tan LS
502	548	Gray LS w/ Clay
548	595	Gray Tan LS
595	718	Red SS
718	780	Sand Gravel
780	785	Chert
785	800	Tan Red SS

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	740
4.5	Screen	New Plastic (PVC)	.035	740	800

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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 #481753

Owner:	Hal Conklin	Owner Well #:	No Data
Address:	4921 Celanova Ct. Austin, TX 78738	Grid #:	58-41-8
Well Location:	4921 Celanova Ct. Austin, TX 78738	Latitude:	30° 17' 21.65" N
Well County:	Travis	Longitude:	097° 55' 45.9" W
		Elevation:	907 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **4/17/2018** Drilling End Date: **4/18/2018**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10.5	0	10
	8.5	10	20
	6.75	20	855

Drilling Method: **Air Rotary**

Borehole Completion: **Perforated or Slotted**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	20	Cement 5 Bags/Sacks
	20	50	Bentonite 5 Bags/Sacks

Seal Method: **Poured**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Surface Completion by Driller

Water Level: **335 ft. below land surface on 2018-04-19**

Packers: **Rubber at 50 ft.
Rubber at 300 ft.
Rubber at 580 ft.
Rubber at 700 ft.
Rubber at 705 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **740**

Well Tests: **No Test Data Specified**

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **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

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	2	topsoil & loose rock
2	30	tan limestone
30	335	gray limestone
335	420	tan limestone
420	520	gray limestone
520	580	hammit shale
580	690	gray sandstone
690	730	gray & brown sandstone
730	750	red, brown, tan, & gray sandstone
750	855	red & tan sandstone

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	sdr-17	0	755
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	755	855

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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 #482405

Owner:	Robert Childress	Owner Well #:	No Data
Address:	4907 Great Divide Austin, TX 78738	Grid #:	58-41-5
Well Location:	4907 Great Divide Austin, TX 78738	Latitude:	30° 18' 12.29" N
Well County:	Travis	Longitude:	097° 57' 18.15" W
		Elevation:	880 ft. above sea level
Type of Work:	Deepening	Proposed Use:	Domestic

Drilling Start Date: **4/21/2018** Drilling End Date: **4/21/2018**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	5	450	545

Drilling Method: **Air Rotary**

Borehole Completion: **Open Hole**

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: **Submersible**

Pump Depth (ft.): **440**

Well Tests: **Pump Yield: 1.7 GPM**

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **Bee Cave Drilling, Inc.**
185 Angel Fire Dr.
Dripping Springs, TX 78620

Driller Name: **Jim Blair** License Number: **54416**

Comments: **We did not alter or add casing or cementing. We simply cleaned out the well and deepened it a bit.**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
450	462	gray sandstone
462	470	gray limestone
470	545	tan limestone

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

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

STATE OF TEXAS WELL REPORT for Tracking #482411

Owner:	C&A Builders	Owner Well #:	1
Address:	1100 Lakeway Dr. Suite 200 Lakeway, TX 78734	Grid #:	58-41-4
Well Location:	3711 Pawnee Pass South Austin, TX 78738	Latitude:	30° 19' 45.13" N
Well County:	Travis	Longitude:	097° 58' 37.16" W
		Elevation:	1124 ft. above sea level

Type of Work:	New Well	Proposed Use:	Domestic
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Drilling Start Date: **5/23/2018** Drilling End Date: **5/28/2018**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	8
	8.5	8	960

Drilling Method: **Air Rotary**

Borehole Completion: **Perforated or Slotted**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	20	Cement 6 Bags/Sacks
	20	50	Bentonite 5 Bags/Sacks

Seal Method: **Poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **52**

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion:	Pitless Adapter Used	Surface Completion by Driller
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Water Level: **762 ft. below land surface on 2018-05-30**

Packers:

- Rubber at 50 ft.**
- Rubber at 55 ft.**
- Rubber at 520 ft.**
- Rubber at 525 ft.**
- Rubber at 760 ft.**
- Rubber at 765 ft.**
- Rubber at 775 ft.**
- Rubber at 780 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **860**

Well Tests: **Pump**

Yield: 8+ GPM

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **Bee Cave Drilling, Inc.**
185 Angel Fire Dr.
Dripping Springs, TX 78620

Driller Name: **Jim Blair**

License Number: **54416**

Comments: **well does not pump off at 8 gpm pump test.**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	1	topsoil & loose rock
1	20	tan limestone
20	580	gray limestone
580	590	gray sandstone (lost returns)
590	660	clay?
660	960	no returns

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
5	Blank	New Plastic (PVC)	sch. 80	0	860
5	Perforated or Slotted	New Plastic (PVC)	sch. 80	860	960

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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 #483555

Owner:	PHILLIP ENDSLEY	Owner Well #:	No Data
Address:	308 ARIA DRIVE AUSTIN, TX 78738	Grid #:	58-41-8
Well Location:	11809 YAUPON HOLLY LANE AUSTIN, TX 78738	Latitude:	30° 17' 02.7" N
Well County:	Travis	Longitude:	097° 56' 18.24" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 5/30/2018 Drilling End Date: 5/30/2018

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	6.125	100	870

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	TYPE H CEMENT 13 Bags/Sacks
	0	100	QUICK GEL 2 Bags/Sacks

Seal Method: Pressure

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.): 200

Method of Verification: TAPE
MEASURE/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 540 ft.
BURLAP & PLASTIC at 570 ft.
BURLAP & PLASTIC at 680 ft.
BURLAP & PLASTIC at 740 ft.

Type of Pump: No Data

Well Tests: No Test Data Specified

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **Centex Pump & Supply, Inc.**
2520 Hwy. 290 West
Dripping Springs, TX 78620

Driller Name: **MARTIN DALE LINGLE**

License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	3	TOP SOIL
3	8	BROWN LIMESTONE
8	10	BLUE LIMESTONE
10	15	BROWN LIMESTONE
15	25	GRAY LIMESTONE
25	70	TAN LIMESTONE
70	300	GRAY/TAN LIMESTONE
300	320	TAN LIMESTONE
320	490	GRAY/TAN LIMESTONE
490	520	BROWN/GRAY LIMESTONE
520	570	CLAY
570	600	GRAY/TAN LIMESTONE W/CLAY
600	620	GRAY/TAN SANDSTONE
620	660	RED SANDSTONE
660	680	RED SANDSTONE W/BROWN
680	700	RED SANDSTONE SAND

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
5	Blank	New Plastic (PVC)	SDR17	2	740
5	Perforated or Slotted	New Plastic (PVC)	SDR17 0.032	740	860
5	Blank	New Plastic (PVC)	SDR17	860	870

700	720	BROWN SANDSTONE
720	740	RED,WHITE, & PURPLE LIMESTONE
740	760	RED SANDSTONE
760	800	GRAVEL
800	820	BROWN LIMESTONE
820	860	GRAVEL
860	870	BROWN CLAY

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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 #483643

Owner:	Hal Conklin	Owner Well #:	2
Address:	4921 Celanova Ct. Austin, TX 78738	Grid #:	58-41-8
Well Location:	4921 Celanova Ct. Austin, TX 78738	Latitude:	30° 17' 21.71" N
Well County:	Travis	Longitude:	097° 55' 45.85" W
Number of Wells Drilled:	2	Elevation:	907 ft. above sea level

Type of Work:	New Well	Proposed Use:	Irrigation
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Drilling Start Date: **5/31/2018** Drilling End Date: **6/1/2018**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10	0	10
	8.5	10	860

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:	Top Depth (ft.)	Bottom Depth (ft.)	Filter Material	Size
	600	860	Gravel	3/8"

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	15	Cement 4 Bags/Sacks
	15	25	Bentonite 3 Bags/Sacks

Seal Method: **Poured**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion:	Pitless Adapter Used	Surface Completion by Driller
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Water Level: **535 ft. below land surface on 2018-06-13**

Packers: **No Data**

Type of Pump:	Submersible	Pump Depth (ft.): 700
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Well Tests: **Jetted** **Yield: 15-20 GPM**

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
600 - 860	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

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	2	topsoil
2	35	tan limestone
35	520	gray limestone
520	600	hammett shale
600	710	gray sandstone
710	730	gray & brown sandstone
730	750	gray, brown, & red sandstone
750	860	red & tan sandstone

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	sdr-17	0	740
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	740	840

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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 #488073

Owner:	John Colman	Owner Well #:	No Data
Address:	5201 Great Divide Dr. Bee Cave, TX 78738	Grid #:	58-41-5
Well Location:	5201 Great Divide Dr. Bee Cave, TX 78738	Latitude:	30° 17' 53.46" N
		Longitude:	097° 57' 15.92" W
Well County:	Travis	Elevation:	1015 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **8/14/2018** Drilling End Date: **8/15/2018**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	10.5	0	8.5
	8.5	8.5	880

Drilling Method: **Air Rotary**

Borehole Completion: **Perforated or Slotted**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	30	Cement 7 Bags/Sacks
	30	50	Bentonite 4 Bags/Sacks

Seal Method: **Poured**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Surface Completion by Driller

Water Level: **665 ft. below land surface on 2018-08-17**

Packers: **Rubber at 50 ft.
Rubber at 740 ft.
Rubber at 745 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **840**

Well Tests: **Pump Yield: 5 GPM**

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
750 - 850	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: **1100 tds**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	1	topsoil
1	13	broken tan limestone
13	340	gray limestone
340	370	broken white rock
370	680	gray limestone
680	735	red clay
735	750	red sandstone
750	830	Trinity mix sandstone & gravel
830	850	tan limestone
850	880	yellow & brown clay

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
5	Blank	New Plastic (PVC)	sch. 80	0	760
5	Perforated or Slotted	New Plastic (PVC)	sch. 80	760	850
5	Blank	New Plastic (PVC)	sch. 80	850	880

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 #488707

Owner:	Marc Dodge	Owner Well #:	No Data
Address:	17119 Majestic Ridge Road Austin, TX 78738	Grid #:	58-41-1
Well Location:	17119 Majestic Ridge Road Austin, TX 78738	Latitude:	30° 20' 15.3" N
Well County:	Travis	Longitude:	097° 59' 58.5" W
		Elevation:	1070 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **8/21/2018** Drilling End Date: **8/21/2018**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	50
	6.25	50	910

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	-1	50	6 cement 2 benseal Bags/Sacks

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **52**

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

Distance to Septic Tank (ft.): **none**

Method of Verification: **owner**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **522 ft. below land surface on 2018-08-21** Measurement Method: **Sonic/Radar**

Packers: **Burlap at 50 ft.
burlap and plastic at 410 ft.
burlap and plastic at 730 ft.
burlap and plastic at 750 ft.**

Type of Pump: **Submersible**

Well Tests: **Estimated Yield: 5 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
750 - 910	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: **Associated Drilling Inc**
PO Box 673
Dripping Springs, TX 78620

Driller Name: **James Benoit**

License Number: **4064**

Comments: **Drilled for Glass Well Service**
SB

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	15	white calachie
15	475	blue lime
475	540	tan lime
540	630	grey lime
630	670	grey shale
670	725	tan grey limestone
725	760	red grey sandstone
760	770	red white sandstone, H2O
770	850	red sandstone
850	870	yellow tan limestone, H2O
870	895	grey limestone
895	910	blue shale

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	-3	750
4.5	blank/screen/stag	New Plastic (PVC)	SDR17 0.020	750	910

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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #488880

Owner:	ALLAN STARK	Owner Well #:	No Data
Address:	16327 FLINT ROCK RD. AUSTIN, TX 78738	Grid #:	58-41-4
Well Location:	16327 FLINT ROCK RD. AUSTIN, TX 78738	Latitude:	30° 19' 30.91" N
Well County:	Travis	Longitude:	097° 59' 25.69" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **7/2/2018**

Drilling End Date: **7/2/2018**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	9	0	100
	6.125	100	895

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	100	TYPE H CEMENT 14 Bags/Sacks
	0	100	Bentonite 2 Bags/Sacks

Seal Method: **Pressure**

Distance to Property Line (ft.): **15**

Sealed By: **Driller**

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

Distance to Septic Tank (ft.): **150**

Method of Verification: **OWNER**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **699 ft. below land surface on 2018-07-12** Measurement Method: **Electric Line**

Packers: **Burlap at 100 ft.
BURLAP & PLASTIC at 120 ft.
BURLAP & PLASTIC at 650 ft.
BURLAP & PLASTIC at 670 ft.
BURLAP & PLASTIC at 690 ft.
BURLAP & PLASTIC at 785 ft.**

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 10 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
785 - 885	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 DALE LINGLE**

License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	15	CALICHE
15	17	BLUE LIMESTONE
17	40	BROWN LIMESTONE
40	160	GRAY LIMESTONE
160	180	TAN LIMESTONE
180	340	GRAY/TAN LIMESTONE
340	475	TAN LIMESTONE
475	650	TAN/GRAY LIMESTONE
650	690	GRAY CLAY
690	775	BROWN & RED LIMESTONE
775	815	RED SAND
815	835	SAND
835	855	SAND & GRAVEL
855	885	SAND
885	895	BROWN CLAY

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	2	785
5	Perforated or Slotted	New Plastic (PVC)	SDR17 0.032	785	885
5	Blank	New Plastic (PVC)	SDR17	885	895

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P.O. Box 12157
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STATE OF TEXAS WELL REPORT for Tracking #495422

Owner:	DR. WILLIAM FRANKLIN	Owner Well #:	No Data
Address:	16012 PONTEVEDRA PLACE AUSTIN, TX 78738	Grid #:	58-41-8
Well Location:	16012 PONTEVEDRA PLACE AUSTIN, TX 78738	Latitude:	30° 17' 25.5" N
Well County:	Travis	Longitude:	097° 55' 47.22" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **8/2/2018**

Drilling End Date: **8/2/2018**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	9	0	100
	6.125	100	530

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	100	TYPE H CEMENT 12 Bags/Sacks
	0	100	QUICK GEL 2 Bags/Sacks

Seal Method: **Pressure**

Distance to Property Line (ft.): **40**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **N/A**

Distance to Septic Tank (ft.): **50+**

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 400 ft.
BURLAP & PLASTIC at 430 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **500**

Well Tests: **Jetted** Yield: **20+ GPM**

Water Quality:

Strata Depth (ft.)	Water Type
430 - 530	COW CREEK

Chemical Analysis Made: **No**

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

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

Company Information: **Centex Pump & Supply, Inc.**
2520 Hwy. 290 West
Dripping Springs, TX 78620

Driller Name: **MARTIN DALE LINGLE**

License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	10	BROWN LIMESTONE
10	15	BLUE LIMESTONE
15	50	GRAY/BROWN LIMESTONE
50	83	GRAY LIMESTONE
83	300	GRAY/TAN LIMESTONE
300	350	BROWN LIMESTONE
350	400	TAN LIMESTONE
400	525	TAN/BROWN LIMESTONE
525	530	GRAY CLAY

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	2	430
5	Perforated or Slotted	New Plastic (PVC)	SDR17 0.032	430	530

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STATE OF TEXAS WELL REPORT for Tracking #499365

Owner:	Jeff Angelovich	Owner Well #:	2
Address:	5500 Spanish Oaks Club Blvd. Austin, TX 78738	Grid #:	58-41-8
Well Location:	5500 Spanish Oaks Club Blvd. Austin, TX 78738	Latitude:	30° 17' 17.37" N
Well County:	Travis	Longitude:	097° 56' 32.78" W
		Elevation:	951 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **11/15/2018** Drilling End Date: **11/20/2018**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	10.5	0	10
	8.5	10	840

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Filter Material</i>	<i>Size</i>
Filter Pack Intervals:	500	840	Gravel	3/8"

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	15	Cement 4 Bags/Sacks
	15	20	Bentonite 1 Bags/Sacks

Seal Method: **Poured**

Sealed By: **Driller**

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

Distance to Septic Field or other
concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used**

Surface Completion by Driller

Water Level: **591 ft. below land surface on 2018-11-26**

Packers: **Rubber at 20 ft.**

Type of Pump: **Submersible**

Pump Depth (ft.): **710**

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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	15	tan limestone
15	390	gray limestone
390	400	tan limestone
400	510	gray limestone
510	515	gray sandy limestone
515	605	gray limestone
605	615	gray sand
615	645	gray sandstone
645	655	gray sand wb 10 gpm 800 tds
655	670	gray sandstone
670	700	gray sand wb 5 gpm 600 tds
700	720	red sandstone
720	745	sand
745	780	red, gray, & tan sandstone & sand wb
780	840	red sandstone & sand

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr-17	0	740
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	740	840

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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #499789

Owner:	MARK NORRIS	Owner Well #:	No Data
Address:	327 HURST CREEK RD. LAKEWAY , TX 78734	Grid #:	58-41-4
Well Location:	4404 HENNIG DRIVE AUSTIN, TX 78738	Latitude:	30° 19' 45" N
Well County:	Travis	Longitude:	097° 59' 37.32" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **10/29/2018** Drilling End Date: **10/29/2018**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.125	100	910

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	Cement 14 Bags/Sacks
	0	100	Bentonite 2 Bags/Sacks

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **20**

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: **641 ft. below land surface on 2018-10-31** Measurement Method: **Electric Line**

Packers: **Burlap at 100 ft.
BURLAP & PLASTIC at 120 ft.
BURLAP & PLASTIC at 590 ft.
BURLAP & PLASTIC at 630 ft.
BURLAP & PLASTIC at 650 ft.
BURLAP & PLASTIC at 700 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **725**

Well Tests: **Jetted** Yield: **20+ GPM**

Water Quality:

Strata Depth (ft.)	Water Type
810 - 890	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 DALE LINGLE**

License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	18	TAN/BROWN LIMESTONE
18	50	BLUE LIMESTONE
50	320	GRAY LIMESTONE
320	400	GRAY/TAN LIMESTONE
400	590	BROWN/TAN LIMESTONE
590	650	GRAY CLAY
650	670	GRAY LIMESTONE
670	690	GRAY LIMESTONE
690	710	RED SANDSTONE & GRAY SANDSTONE
710	730	RED SANDSTONE
730	750	RED/BROWN SAND
750	770	GRAY/RED SANDSTONE
770	790	TAN/BROWN LIMESTONE
790	810	RED/BROWN SANDSTONE
810	830	RED SANDSTONE W/MULTICOLORED
830	850	RED SANDSTONE W/MULTICOLORED

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

850	870	GRAVEL
870	890	GRAVEL
890	910	BLUE CLAY

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #499853

Owner:	Lake Travis Independent School District	Owner Well #:	No Data
Address:	16101 West SH 71 Austin, TX 78738	Grid #:	58-41-4
Well Location:	16101 West SH 71 Austin, TX 78738	Latitude:	30° 18' 39.07" N
Well County:	Travis	Longitude:	097° 59' 54.65" W
Number of Wells Drilled:	410	Elevation:	1065 ft. above sea level
Type of Work:	New Well	Proposed Use:	Closed-Loop Geothermal

Drilling Start Date: **2/14/2018** Drilling End Date: **12/21/2018**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	4.75	0	300

Drilling Method: **Air Rotary**

Borehole Completion: **Crushed Limestone 30 to 300**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	30	Bentonite 3 Bags/Sacks

Seal Method: **Poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **400**

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

Distance to Septic Tank (ft.): **None**

Method of Verification: **Laser**

Surface Completion: **Alternative Procedure Used** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

Water Quality:

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

Chemical Analysis Made: **No**

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

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

Company Information: **Ball Drilling Company**
PO Box 3011
Marble Falls, TX 78654

Driller Name: **Joseph C. Hart** License Number: **59548**

Comments: **These are closed loop geothermal wells. No water was encountered, no pumps were installed**

410 Closed loop wells

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	15	Brown Clay
15	25	Tan Limestone
25	52	Blue Limestone
52	300	Grey Limestone

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
1	Geothermal Loop	New Polyethylene Loop	SDR 11	4	300

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Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #500733

Owner:	HAGY CUSTOM HOMES	Owner Well #:	No Data
Address:	31872 Ranch Rd. 12 Dripping Springs, TX 78620	Grid #:	57-48-6
Well Location:	17136 WHISPERING BREEZE DRIVE AUSTIN, TX 78738	Latitude:	30° 18' 32.58" N
Well County:	Travis	Longitude:	098° 00' 57.9" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 11/5/2018 Drilling End Date: 11/5/2018

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	6.125	100	650

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	Cement 14 Bags/Sacks
	0	100	Bentonite 2 Bags/Sacks

Seal Method: Pressure

Sealed By: Driller

Distance to Property Line (ft.): 40

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: 442 ft. below land surface on 2018-11-05 Measurement Method: Electric Line

Packers: Burlap at 100 ft.
BURLAP & PLASTIC at 120 ft.
BURLAP & PLASTIC at 300 ft.
BURLAP & PLASTIC at 400 ft.
BURLAP & PLASTIC at 500 ft.
BURLAP & PLASTIC at 590 ft.

Type of Pump: Submersible Pump Depth (ft.): 600

Well Tests: Jetted Yield: 40 GPM

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
580 - 640	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: **Centex Pump & Supply, Inc.**
2520 Hwy. 290 West
Dripping Springs, TX 78620

Driller Name: **Martin Dale Lingle**

License Number: **54813**

Comments: **No Data**

Report Amended on 2/1/2019 by Request #27034

Report Amended on 2/11/2019 by Request #27141

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	1	TOP SOIL
1	37	CALICHE
37	40	BLUE LIMESTONE
40	60	BROWN LIMESTONE
60	215	GRAY LIMESTONE
215	375	TAN/GRAY LIMESTONE
375	400	BROWN/GRAY LIMESTONE
400	430	GRAY LIMESTONE W/CLAY
430	450	TAN LIMESTONE
450	510	GRAY LIMESTONE
510	590	TAN/BROWN LIMESTONE
590	610	WHITE LIMESTONE
610	630	WHITE LIMESTONE
630	640	WHITE/BROWN/GRAY LIMESTONE

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
5	Blank	New Plastic (PVC)	SDR17	2	580
5	Perforated or Slotted	New Plastic (PVC)	SDR17 0.32	580	640
5	Blank	New Plastic (PVC)	SDR17	640	650

640	650	CLAY
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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 #502232

Owner:	JORGE HERRERO	Owner Well #:	No Data
Address:	7100 DESTINY HILLS AUSTIN, TX 78738	Grid #:	57-48-6
Well Location:	7100 DESTINY HILLS DRIVE AUSTIN, TX 78738	Latitude:	30° 18' 59.94" N
		Longitude:	098° 00' 50.22" W
Well County:	Travis	Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **12/13/2018** Drilling End Date: **12/13/2018**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.125	100	630

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	Cement 13 Bags/Sacks
	0	100	QUICK GEL 2 Bags/Sacks

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **25**

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

Distance to Septic Tank (ft.): **50+**

Method of Verification: **OWNER**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **207 ft. below land surface on 2018-12-13** Measurement Method: **Electric Line**

Packers: **Burlap at 100 ft.
BURLAP & PLASTIC at 120 ft.
BURLAP & PLASTIC at 500 ft.
BURLAP & PLASTIC at 520 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **600**

Well Tests: **Jetted** **Yield: 25+ GPM**

Water Quality:

Strata Depth (ft.)	Water Type
530 - 630	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: **Centex Pump & Supply, Inc.**
2520 Hwy. 290 West
Dripping Springs, TX 78620

Driller Name: **MARTIN DALE LINGLE**

License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	23	CALICHE
23	25	BLUE LIMESTONE
25	250	GRAY/TAN LIMESTONE
250	300	GRAY LIMESTONE W/FRACTURE
300	390	GRAY LIMESTONE W/CLAY
390	410	TAN & GRAY LIMESTONE
410	430	GRAY LIMESTONE W/CLAY
430	490	TAN/BROWN LIMESTONE
490	610	TAN/BROWN LIMESTONE
610	615	GRAY/TAN LIMESTONE
615	630	GRAY CLAY

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	2	530
5	Perforated or Slotted	New Plastic (PVC)	SDR17 0.032	530	630

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 #503710

Owner:	David Santucci	Owner Well #:	No Data
Address:	12116 Rayner Place Austin, TX 78738	Grid #:	58-41-8
Well Location:	12116 Rayner Place Austin, TX 78738	Latitude:	30° 17' 14.22" N
Well County:	Travis	Longitude:	097° 56' 46.32" W
		Elevation:	934 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 1/23/2019 Drilling End Date: 1/24/2019

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	9	0	100
	6.25	100	850

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	-1	100	10 cement 4 benseal Bags/Sacks

Seal Method: Positive Displacement

Distance to Property Line (ft.): 25

Sealed By: Driller

Distance to Septic Field or other
concentrated contamination (ft.): NO OSSF

Distance to Septic Tank (ft.): NO OSSF

Method of Verification: unsure of adjacent
septic systems

Surface Completion: Surface Sleeve Installed

Surface Completion by Driller

Water Level:	525 ft. below land surface on 2019-01-24	Measurement Method:	Sonic/Radar
Packers:	burlap and plastic 650', 630' burlap and rubber at 100 ft.		
Type of Pump:	Submersible		
Well Tests:	Estimated	Yield:	25-30 GPM

Water Quality:

Strata Depth (ft.)	Water Type
650 - 850	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: **Associated Drilling Inc**
PO Box 673
Dripping Springs, TX 78620

Driller Name: **James Benoit**

License Number: **4064**

Comments: **Drilled for Glass Well Services**
SB

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	topsoil
2	15	white calachie
15	445	blue lime
445	480	tan lime
480	545	blue lime
545	580	blue lime and shale
580	615	tan white limestone
615	660	grey and red sandstone
660	675	red white sandstone, H2O
675	830	red sandstone
830	840	multi color limestone, H2O
840	850	yellow limestone

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	-3	675
4.5	stag	New Plastic (PVC)	SDR17 0.020	690	850

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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P.O. Box 12157
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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #507487

Owner:	Dave and Pam Witte	Owner Well #:	No Data
Address:	11813 Musket Rim Street Austin, TX 78738	Grid #:	58-41-8
Well Location:	11813 Musket Rim Street Austin, TX 78738	Latitude:	30° 17' 19.5" N
Well County:	Travis	Longitude:	097° 55' 55.92" W
		Elevation:	956 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **2/28/2019** Drilling End Date: **3/1/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	6.25	100	830

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	-1	100	10 cement 4 benseal Bags/Sacks

Seal Method: **Positive Displacement**

Distance to Property Line (ft.): **45**

Sealed By: **Driller**

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:	450 ft. below land surface on 2019-03-01	Measurement Method:	Sonic/Radar
Packers:	burlap and plastic 710', 690' burlap and rubber at 100 ft.		
Type of Pump:	Submersible		
Well Tests:	Estimated	Yield: 20 GPM	

Water Quality:

Strata Depth (ft.)	Water Type
690 - 830	lower trinity (hosston)

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: **Drilled for Glass Well Service**
SB

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	15	white calachie
15	495	blue lime
495	550	tan grey limestone
550	580	grey limestone
580	610	grey lime and shale
610	695	grey white limestone
695	730	brown sandstone
730	750	tan white limestone, H2O
750	775	grey sandstone
775	790	red sandstone
790	810	tan limestone, H2O, gravel
810	830	yellow white limestone

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	-3	730
4.5	Screen	New Plastic (PVC)	SDR17 0.020	730	810
4.5	Blank	New Plastic (PVC)	SDR17	810	830

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 #508384

Owner:	Lake Travis ISD	Owner Well #:	No Data
Address:	16101 TX Hwy 71 West Austin, TX 78738	Grid #:	58-41-4
Well Location:	16101 TX Hwy 71 West Austin, TX 78738	Latitude:	30° 18' 41.18" N
Well County:	Travis	Longitude:	097° 59' 51.51" W
Number of Wells Drilled:	410	Elevation:	1087 ft. above sea level

Type of Work:	New Well	Proposed Use:	Closed-Loop Geothermal
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Drilling Start Date: **2/14/2018** Drilling End Date: **3/1/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	4.75	0	300

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

	Top Depth (ft.)	Bottom Depth (ft.)	Filter Material	Size
Filter Pack Intervals:	30	300	Gravel	3/8ths with fines

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	30	Bentonite 3 Bags/Sacks

Seal Method: **Poured**

Sealed By: **Driller**

Distance to Property Line (ft.): **500+**

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

Distance to Septic Tank (ft.): **None**

Method of Verification: **Laser**

Surface Completion:	Alternative Procedure Used	Surface Completion by Driller
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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: **Ball Drilling Company**
P. O. Box 3011
Marble Falls, TX 78654

Driller Name: **Lonnie Ball** License Number: **2298**

Comments: **410 Closed Loop Geothermal Wells**
Some of the wells were drilled by Joseph C. Hart 59548C

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	3	Caliche
3	24	White Limestone
24	300	Grey Limestone

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
1	Blank	New Polyethylene Loop	SDR 11	5	300

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P.O. Box 12157
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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #508929

Owner:	SPANISH OAKS/ WELL #1	Owner Well #:	1
Address:	13453 HIGHWAY 71 WEST BEE CAVE, TX 78738	Grid #:	58-41-8
Well Location:	13453 HWY. 71 WEST BEE CAVE, TX 78738	Latitude:	30° 17' 27.24" N
Well County:	Travis	Longitude:	097° 56' 12.42" W
Number of Wells Drilled:	2	Elevation:	No Data

Type of Work:	New Well	Proposed Use:	Irrigation
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Drilling Start Date: **3/4/2019** Drilling End Date: **3/4/2019**

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	14	0	18
	9	18	100
	7.87	100	870

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	770	TYPE H CEMENT 120 Bags/Sacks
	0	770	BENSEAL 18 Bags/Sacks

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **1000+**

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
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Water Level:	540.3 ft. below land surface on 2019-03-18	Measurement Method:	Electric Line
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Packers: **8" PVC & BURLAP at 680 ft.**
8" PVC & BURLAP at 685 ft.
8" PVC & BURLAP at 700 ft.

Type of Pump:	Submersible	Pump Depth (ft.):	735
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Well Tests:	Jetted	Yield: 40 GPM
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Water Quality:

Strata Depth (ft.)	Water Type
770 - 870	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 DALE LINGLE**

License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	50	GRAY LIMESTONE
50	60	DARK GRAY LIMESTONE
60	290	GRAY LIMESTONE
290	300	GRAY/TAN LIMESTONE
300	330	GRAY LIMESTONE
330	530	GRAY/TAN LIMESTONE
530	540	GRAY LIMESTONE
540	550	GRAY LIMESTONE & CLAY
550	610	CLAY
600	630	GRAY CLAY W/TAN LIMESTONE
630	650	GRAY/TAN LIMESTONE
650	670	GRAY/BROWN LIMESTONE
670	720	BROWN LIMESTONE W/SAND
720	740	FINE BROWN SAND
740	810	CONGLOMERATE

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
10		New			

810	860	BROWN SAND
860	870	GRAY SHALE

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #508930

Owner:	SPANISH OAKS/ WELL #2	Owner Well #:	2
Address:	13453 HIGHWAY 71 WEST BEE CAVE, TX 78738	Grid #:	58-41-5
Well Location:	13453 HIGHWAY 71 WEST BEE CAVE, TX 78738	Latitude:	30° 17' 30.72" N
Well County:	Travis	Longitude:	097° 56' 06.06" W
Number of Wells Drilled:	2	Elevation:	No Data

Type of Work:	New Well	Proposed Use:	Irrigation
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Drilling Start Date: **3/11/2019** Drilling End Date: **3/11/2019**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	14	0	18
	9	18	100
	7.87	100	810

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	710	TYPE H CEMENT 115 Bags/Sacks
	0	710	BENSEAL 15 Bags/Sacks

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **1000+**

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
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Water Level:	514.6 ft. below land surface on 2019-03-21	Measurement Method:	Electric Line
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Packers: **8 PVC & BURLAP at 700 ft.**
8 PVC & BURLAP at 705 ft.
8 PVC & BURLAP at 710 ft.

Type of Pump:	Submersible	Pump Depth (ft.):	735
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Well Tests:	Jetted	Yield:	20 GPM
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Water Quality:

Strata Depth (ft.)	Water Type
710 - 810	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 DALE LINGLE**

License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	18	BROWN LIMESTONE
18	290	GRAY LIMESTONE W/CLAY
290	310	GRAY/TAN LIMESTONE
310	510	TAN LIMESTONE
510	520	GRAY LIMESTONE
520	530	CLAY
530	560	CLAY
560	570	GRAY LIMESTONE
570	580	GRAY/TAN LIMESTONE
580	590	GRAY/BROWN SAND
590	610	BROWN SAND
610	620	RED SAND
620	630	RED SAND
630	650	CONGLOMERATE
650	670	RED SANDSTONE
670	690	RED SANDSTONE

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
10	Blank	New Plastic (PVC)	SCH. 40	0	20
5	Blank	New Plastic (PVC)	SCH. 80	2	710
5	Perforated or Slotted	New Plastic (PVC)	SCH. 80 0.032	710	810

690	710	CONGLOMERATE
710	810	CONGLOMERATE

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P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #511027

Owner:	Richard McIntyre	Owner Well #:	No Data
Address:	4909 Great Divide Bee Caves, TX 78738	Grid #:	58-41-5
Well Location:	4909 Great Divide Bee Caves, TX 78738	Latitude:	30° 18' 09" N
Well County:	Travis	Longitude:	097° 57' 17.82" W
		Elevation:	924 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **1/22/2019** Drilling End Date: **1/22/2019**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	9	0	50
	6.25	50	770

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	-1	50	6 cement 2 benseal Bags/Sacks

Seal Method: **Slurry**

Sealed By: **Driller**

Distance to Property Line (ft.): **70**

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

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

Method of Verification: **owner**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **472 ft. below land surface on 2019-01-22** Measurement Method: **Sonic/Radar**

Packers: **burlap and plastic 610', 590'**
Burlap at 50 ft.

Type of Pump: **Submersible**

Well Tests: **Estimated** **Yield: 25 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
620 - 750	lower trinity, hosston

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: **Drilled for A&W Water Wells**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	10	white calachie
10	245	blue lime
245	250	white lime
250	280	grey lime
280	410	blue lime
410	490	tan lime
490	515	blue lime
515	550	blue lime and shale
550	590	tan grey limestone
590	620	red sandstone
620	635	red white sandstone, h2o
635	675	tan white limestone
675	730	red sandstone
730	750	multi color limestone, H2O
750	770	tan yellow limestone

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr17	-3	670
4.5	Screen	New Plastic (PVC)	sdr17 0.020	670	750
4.5	Blank	New Plastic (PVC)	sdr17	750	770

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 #511413

Owner:	TOM KENDALL	Owner Well #:	No Data
Address:	5924 KRAUSE LANE AUSTIN, TX 78738	Grid #:	58-41-8
Well Location:	5924 KRAUSE LANE AUSTIN, TX 78735	Latitude:	30° 16' 56.46" N
Well County:	Travis	Longitude:	097° 56' 40.92" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **4/22/2019** Drilling End Date: **4/22/2019**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	9	0	100
	6.25	100	850

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	100	Cement 14 Bags/Sacks

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **20**

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

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

Method of Verification: **OWNER**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **517 ft. below land surface on 2019-04-24** Measurement Method: **Electric Line**

Packers: **Burlap at 100 ft.
BURLAP & PLASTIC at 120 ft.
BURLAP & PLASTIC at 550 ft.
BURLAP & PLASTIC at 580 ft.
BURLAP & PLASTIC at 630 ft.
BURLAP & PLASTIC at 650 ft.**

Type of Pump: **Submersible** Pump Depth (ft.): **720**

Well Tests: **Jetted** Yield: **45 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
750 - 850	LOW 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 DALE LINGLE**

License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	3	TOP SOIL
3	6	BROWN LIMESTONE
6	47	GRAY W/WHITE LIMESTONE
47	310	GRAY LIMESTONE
310	380	TAN LIMESTONE
380	500	GRAY/TAN LIMESTONE
500	550	TAN LIMESTONE
550	580	GRAY LIMESTONE W/CLAY
580	610	GRAY/BROWN LIMESTONE
610	630	TAN/BROWN LIMESTONE
630	650	TAN & RED SANDSTONE
650	670	BROWN & RED SANDSTONE
670	690	SAND & GRAVEL
690	710	RED SANDSTONE W/SAND
710	750	GRAY & RED SANDSTONE W/SAND
750	770	GRAVEL SAND
770	790	RED SANDSTONE W/SAND

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	2	750
5	Perforated or Slotted	New Plastic (PVC)	SDR17 0.032	750	850

790	810	GRAVEL
810	850	GRAVEL

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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 #511455

Owner:	American Constructors (Lake Travis Middle School)	Owner Well #:	2
Address:	11900 W. Palmer Lane # 200 Cedar Park , TX 78613	Grid #:	58-41-4
Well Location:	5400 Vail Divide Austin, TX 78738	Latitude:	30° 18' 42" N
Well County:	Travis	Longitude:	097° 59' 51" W
Number of Wells Drilled:	2	Elevation:	No Data

Type of Work:	New Well	Proposed Use:	Irrigation
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Drilling Start Date: **5/14/2019** Drilling End Date: **5/15/2019**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	9.87	0	15
	8	15	600

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	100	7 Benseal 8 Portland 15 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.): **50**

Method of Verification: **Land Owner**

Surface Completion:	Surface Sleeve Installed	Surface Completion by Driller
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Water Level: **No Data**

Packers: **Burlap/Neoprene at 100 ft.
Burlap/Neoprene at 105 ft.
Burlap/Neoprene at 270 ft.
Burlap/Neoprene at 280 ft.
Burlap/Neoprene at 290 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted Yield: 60-70+ GPM**

Water Quality:

Strata Depth (ft.)	Water Type
320 - 580	M. Trinity - TDS 1000

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 5/24/2019 by Request #27932

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	2	Fill
2	9	Tan LS
9	140	Gray Tan LS
140	490	Lt Gray LS
490	520	Tan LS
520	589	Tan Gray LS
589	600	Gray LS w/ Clay

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	2	320
5	Screen	New Plastic (PVC)	.035	320	340
5	Blank	New Plastic (PVC)	SDR17	340	500
5	Screen	New Plastic (PVC)	.035	500	580
5	Blank	New Plastic (PVC)	SDR17	580	600

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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 #513855

Owner:	KAKI JOHN	Owner Well #:	No Data
Address:	12411 CHERRY LAUREL TERRACE AUSTIN, TX 78738	Grid #:	58-41-5
Well Location:	12411 CHERRY LAUREL TERRACE AUSTIN, TX 78738	Latitude:	30° 17' 34.9" N
Well County:	Travis	Longitude:	097° 56' 44.72" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 5/6/2019

Drilling End Date: 5/6/2019

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	6.125	100	810

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	TYPE H PORTLAND CEMENT 14 Bags/Sacks

Seal Method: Pressure

Distance to Property Line (ft.): 20

Sealed By: Driller

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: 555 ft. below land surface on 2019-05-06 Measurement Method: Electric Line

Packers: Burlap at 100 ft.
BURLAP & PLASTIC at 120 ft.
BURLAP & PLASTIC at 240 ft.
BURLAP & PLASTIC at 660 ft.
BURLAP & PLASTIC at 680 ft.
BURLAP & PLASTIC at 700 ft.

Type of Pump: Submersible

Pump Depth (ft.): 740

Well Tests: Jetted Yield: 20 GPM

Water Quality:

Strata Depth (ft.)	Water Type
700 - 810	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 DALE LINGLE**

License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	17	CALICHE
17	25	BLUE LIMESTONE
25	65	TAN LIMESTONE
65	110	GRAY LIMESTONE
110	300	TAN/GRAY LIMESTONE
300	400	TAN LIMESTONE
400	530	TAN/GRAY LIMESTONE
530	570	GRAY CLAY
570	630	GRAY/BROWN LIMESTONE
630	650	RED/BROWN LIMESTONE
650	670	BROWN SAND
670	690	TAN/RED SANDSTONE
690	710	BROWN/TAN SANDSTONE W/SAND
710	730	RED SANDSTONE
730	750	RED SANDSTONE W/GRAVEL
750	770	GRAVEL

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	2	700
5	Perforated or Slotted	New Plastic (PVC)	SDR17	700	800
5	Blank	New Plastic (PVC)	SDR17	800	810

770	800	GRAVEL
800	810	RED CLAY

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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 #514336

Owner:	SPANISH OAKS/WELL #3	Owner Well #:	No Data
Address:	13453 HIGHWAY 71 WEST BEE CAVE, TX 78738	Grid #:	58-41-5
Well Location:	13453 HIGHWAY 71 WEST BEE CAVE, TX 78738	Latitude:	30° 18' 05.58" N
Well County:	Travis	Longitude:	097° 56' 59.88" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 5/20/2019 Drilling End Date: 5/20/2019

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	7.875	100	830

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	610	TYPE H PORTLAND CEMENT 94 Bags/Sacks
	0	610	Bentonite 8 Bags/Sacks

Seal Method: Pressure

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.): N/A

Method of Verification: OWNER

Surface Completion: Surface Sleeve Installed Surface Completion by Driller

Water Level: No Data

Packers: BURLAP & RUBBER at 600 ft.
BURLAP & RUBBER at 605 ft.
BURLAP & RUBBER at 610 ft.

Type of Pump: No Data

Well Tests: Jetted Yield: 20+ GPM

Water Quality:

Strata Depth (ft.)	Water Type
730 - 830	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 DALE LINGLE**License Number: **54813**Comments: **No Data****Report Amended on 6/25/2019 by Request #28157**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	15	CALICHE
15	21	BLUE LIMESTONE
21	60	GRAY LIMESTONE
60	90	GRAY/TAN LIMESTONE
90	230	GRAY LIMESTONE
230	350	GRAY/TAN LIMESTONE
350	400	GRAY LIMESTONE
400	570	TAN/GRAY LIMESTONE
570	590	GRAY LIMESTONE W/CLAY
590	610	GRAY LIMESTONE
610	650	RED SANDSTONE
650	800	BROWN W/GRAY/RED LIMESTONE W/SOME GRAVEL
800	810	GRAVEL
810	830	BROWN SHALE

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	2	730
5	Perforated or Slotted	New Plastic (PVC)	SDR17	730	830

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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 #515144

Owner:	SPANISH OAKS/ WELL #4	Owner Well #:	No Data
Address:	13453 HIGHWAY 71 WEST BEE CAVE, TX 78738	Grid #:	58-41-5
Well Location:	13453 HIGHWAY 71 WEST BEE CAVE, TX 78738	Latitude:	30° 18' 08.82" N
Well County:	Travis	Longitude:	097° 56' 52.26" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 5/23/2019 Drilling End Date: 5/23/2019

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	7.875	100	810

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	580	TYPE H PORTLAND CEMENT 81 Bags/Sacks
	0	580	Bentonite 8 Bags/Sacks

Seal Method: Pressure

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.): N/A

Method of Verification: OWNER

Surface Completion: Surface Sleeve Installed Surface Completion by Driller

Water Level: 551 ft. below land surface on 2019-05-23 Measurement Method: Electric Line

Packers: BURLAP & RUBBER at 570 ft.
BURLAP & RUBBER at 575 ft.
BURLAP & RUBBER at 580 ft.

Type of Pump: Submersible

Well Tests: Jetted Yield: 33 GPM

Water Quality:

Strata Depth (ft.)	Water Type
710 - 810	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 DALE LINGLE**

License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	10	FILL
10	15	BROWN LIMESTONE
15	19	CALICHE
19	21	BLUE LIMESTONE
21	24	BROWN LIMESTONE
24	120	GRAY LIMESTONE
120	250	GRAY/TAN LIMESTONE
250	310	BROWN/TAN LIMESTONE
310	330	GRAY LIMESTONE
330	500	BROWN/TAN LIMESTONE
500	510	GRAY LIMESTONE
510	540	GRAY CLAY
540	560	GRAY/BROWN LIMESTONE
560	580	GRAY LIMESTONE
580	590	GRAY/TAN/RED LIMESTONE
590	610	RED/GRAY/BROWN LIMESTONE
610	660	RED/BROWN LIMESTONE

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	2	710
5	Perforated or Slotted	New Plastic (PVC)	SDR17	710	810

660	670	TAN/BROWN LIMESTONE W/GRAVEL
670	700	RED SANDSTONE
700	790	TAN/BROWN/RED LIMESTONE
790	810	BROWN SAND

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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 #515470

Owner: **American Contractors (Lake Travis Middle School)**

Owner Well #: **1**

Address: **11900 W. Palmer Lane # 200
Cedar Park , TX 78613**

Grid #: **58-41-4**

Well Location: **5400 Vail Divide
Austin, TX 78738**

Latitude: **30° 18' 40" N**

Longitude: **097° 59' 57" W**

Well County: **Travis**

Elevation: **No Data**

Number of Wells Drilled: **2**

Type of Work: **New Well**

Proposed Use: **Irrigation**

Drilling Start Date: **5/20/2019**

Drilling End Date: **5/21/2019**

Borehole:

<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
9.87	0	15
8.75	15	892

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:

<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
0	100	12 Benseal 5 Portland 17 Bags/Sacks

Seal Method: **Pressure**

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

Sealed By: **Driller**

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 700 ft.
Burlap/Neoprene at 720 ft.
Burlap/Neoprene at 740 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 20-25 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
740 - 880	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: **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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	14	Tan LS
14	120	Gray Tan LS
120	490	Tan Lt Gray LS
490	502	Tan LS
502	538	Tan Gray LS
538	553	Tan LS
553	585	Tan Gray LS
585	610	Gray Tan LS w/ Clay
610	642	Gray Clay
642	655	Gray Tan LS w/ Sand
655	780	Red SS
780	810	Gravel
810	846	Chert
846	850	Pink Tan White LS
850	880	Tan Red White LS
880	892	Tan Blue Clay

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	2	792
5	Screen	New Plastic (PVC)	.035	792	892

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 #524105

Owner:	SPANISH OAKS/WELL #6	Owner Well #:	WELL #6
Address:	13453 HIGHWAY 71 WEST BEE CAVE, TX 78738	Grid #:	58-41-5
Well Location:	13453 HIGHWAY 71 WEST BEE CAVE, TX 78738	Latitude:	30° 17' 42.24" N
Well County:	Travis	Longitude:	097° 56' 07.5" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **8/29/2019** Drilling End Date: **8/29/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	14.75	0	18
	7.875	18	830

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	540	TYPE H CEMENT 72 Bags/Sacks
	0	540	Bentonite 7 Bags/Sacks

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **100+**

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 & RUBBER at 540 ft.**
BURLAP & RUBBER at 550 ft.
BURLAP & RUBBER at 560 ft.

Type of Pump: **Submersible**

Well Tests: **Jetted** **Yield: 20+ GPM**

Water Quality:

Strata Depth (ft.)	Water Type
730 - 830	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 DALE LINGLE**

License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL/ROCK
1	25	CALICHE
25	30	GRAY LIMESTONE W/CLAY
30	60	TAN LIMESTONE
60	90	GRAY LIMESTONE
90	280	GRAY/TAN LIMESTONE
280	480	TAN LIMESTONE
480	540	GRAY CLAY
540	590	TAN/BROWN LIMESTONE W/SAND
590	610	GRAY/RED/TAN/WHITE LIMESTONE
610	630	RED/TAN LIMESTONE
630	650	GRAY/TAN/BROWN LIMESTONE
650	730	BROWN & GRAY SAND
730	830	CONGLOMERATE

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
8	PLASTIC	New Plastic (PVC)	JET STREAM	1	18
5	Blank	New Plastic (PVC)	SDR17	2	730
5	Perforated or Slotted	New Plastic (PVC)	SDR17	730	830

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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #525033

Owner:	Andrew Brunone	Owner Well #:	No Data
Address:	4408 Hennig Drive Austin , TX 78738	Grid #:	58-41-4
Well Location:	4408 Hennig Drive Austin, TX 78738	Latitude:	30° 19' 43.1" N
Well County:	Travis	Longitude:	097° 59' 36.9" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: **9/4/2019**

Drilling End Date: **9/6/2019**

Borehole:	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
	7.875	0	100
	6.75	100	900

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data:	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
	0	100	Cement 23 Bags/Sacks

Seal Method: **Pressure**

Sealed By: **Driller**

Distance to Property Line (ft.): **20**

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

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

Method of Verification: **tape**

Surface Completion: **Pitless Adapter Used**

Surface Completion by Driller

Water Level: **No Data**

Packers:

- Rubber at 100 ft.**
- Plastic at 101 ft.**
- Rubber at 120 ft.**
- Rubber at 340 ft.**
- Plastic at 341 ft.**
- Rubber at 500 ft.**
- Plastic at 501 ft.**
- Rubber at 680 ft.**
- Plastic at 681 ft.**
- Rubber at 700 ft.**
- Plastic at 701 ft.**

Type of Pump: **No Data**

Well Tests: **Jetted** **Yield: 10 GPM**

Water Quality:	<i>Strata Depth (ft.)</i>	<i>Water Type</i>
	700 - 900	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: **Texan Water**
1107 FM 1431 suit 286
Marble Falls, TX 78654

Driller Name: **Brice Bormann** License Number: **54855**

Apprentice Name: **Justin Bounds**

Comments: **No Data**

Report Amended on 10/25/2019 by Request #29114

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	25	white limestone
25	330	grey limestone
330	510	tan limestone with some grey limestone streaks
510	620	brwon limestone
620	660	clay
660	700	grey lime stone
700	900	red sand stone

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Dia (in.)</i>	<i>Type</i>	<i>Material</i>	<i>Sch./Gage</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
4.5	Blank	New Plastic (PVC)	sdr 17	0	840
4.5	Screen	New Plastic (PVC)	sdr 17 0.032	840	900

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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #531151

Owner:	SPANISH OAKS/ WELL #5	Owner Well #:	5
Address:	13453 HIGHWAY 71 WEST BEE CAVE, TX 78738	Grid #:	58-41-5
Well Location:	13453 HIGHWAY 71 WEST BEE CAVE, TX 78738	Latitude:	30° 18' 15.8" N
Well County:	Travis	Longitude:	097° 57' 09.3" W
		Elevation:	814 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **11/15/2019** Drilling End Date: **11/15/2019**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	12.75	0	18
	7.5	18	710

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>	<i>Description (number of sacks & material)</i>
Annular Seal Data:	0	18	Cement 12 Bags/Sacks
	0	570	Cement 90 Bags/Sacks
	0	570	BENSEAL 8 Bags/Sacks

Seal Method: **Pressure**

Sealed By: **CTD**

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: **No Data**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level:	492 ft. below land surface on No Data	Measurement Method:	Electric Line
Packers:	Burlap at 570 ft.		
Type of Pump:	Submersible		
Well Tests:	Jetted	Yield: 10 GPM	

Water Quality:

Strata Depth (ft.)	Water Type
610 - 710	LOWER TRINITY

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

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	15	CALICHE
15	80	BROWN
80	100	GRAY
100	170	GRAY/TAN
170	180	GRAY W/ CLAY
180	200	GRAY W/ CLAY
200	210	GRAY
210	220	GRAY/TAN W/ CLAY
220	230	TAN W/ CLAY
230	250	TAN
250	300	TAN/BROWN/GRAY
300	440	GRAY
440	480	GRAY CLAY
480	490	GRAY CLAY

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
8	Blank	New Plastic (PVC)	SCH. 40	0	18
5	Blank	New Plastic (PVC)	SDR17	2	610
5	Perforated or Slotted	New Plastic (PVC)	SD17	610	710

490	510	GRAY/TAN
510	530	GRAY/BROWN/WHITE
530	610	GRAY/BROWN SAND
610	710	BROWN SAND

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P.O. Box 12157
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(512) 334-5540**

STATE OF TEXAS WELL REPORT for Tracking #531625

Owner:	DAVID BABIN	Owner Well #:	No Data
Address:	17212 MAJESTIC RIDGE RD. AUSTIN, TX 78738	Grid #:	57-48-3
Well Location:	17212 MAJESTIC RIDGE RD. AUSTIN, TX 78738	Latitude:	30° 20' 18.48" N
Well County:	Travis	Longitude:	098° 00' 07.74" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 11/26/2019 Drilling End Date: 11/26/2019

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	6.125	100	890

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	PORTLAND CEMENT 50 Bags/Sacks

Seal Method: Pressure

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.): N/A

Method of Verification: OWNER

Surface Completion: Surface Sleeve Installed

Surface Completion by Driller

Water Level: No Data

Measurement Method: Electric Line

Packers: Burlap at 100 ft.
BURLAP & PLASTIC at 120 ft.
BURLAP & PLASTIC at 400 ft.
BURLAP & PLASTIC at 600 ft.
BURLAP & PLASTIC at 750 ft.
BURLAP & PLASTIC at 770 ft.

Type of Pump: Submersible

Pump Depth (ft.): 700

Well Tests: Jetted Yield: 15 GPM

Water Quality:

Strata Depth (ft.)	Water Type
770 - 870	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 DALE LINGLE**License Number: **54813**Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	ROCK
2	18	CALICHE
18	20	BLUE LIMESTONE
20	85	GRAY LIMESTONE
85	210	GRAY/TAN LIMESTONE
210	270	GRAY LIMESTONE
270	300	TAN LIMESTONE
300	340	GRAY LIMESTONE
340	350	WHITE LIMESTONE
350	390	GRAY LIMESTONE
390	420	BROWN LIMESTONE
420	440	GRAY & TAN LIMESTONE
440	600	BROWN LIMESTONE
600	630	GRAY CLAY
630	645	GRAY SAND
645	660	GRAY/RED CLAY
660	670	GRAY SAND
670	690	GRAY/RED SAND

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	770
4.5	Perforated or Slotted	New Plastic (PVC)	SDR17 0.032	770	870
4.5	Blank	New Plastic (PVC)	SDR17	870	890

690	710	RED SANDSTONE
710	730	RED SANDSTONE W/GRAVEL
730	750	CONGLOMERATE
750	770	RED SANDSTONE
770	790	RED SANDSTONE
790	810	GRAVEL/CONGLOMERATE
810	830	GRAVEL/CONGLOMERATE
830	850	GRAVEL/CONGLOMERATE
850	870	GRAVEL/CONGLOMERATE
870	890	BROWN CLAY

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Texas Department of Licensing and Regulation
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Austin, TX 78711
(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #532037

Owner:	Tony Rhine	Owner Well #:	No Data
Address:	5800 Spanish Oaks Club Drive Austin, TX 78738	Grid #:	58-41-5
Well Location:	5800 Spanish Oaks Club Drive Austin, TX 78738	Latitude:	30° 17' 32.88" N
Well County:	Travis	Longitude:	097° 56' 40.74" W
		Elevation:	899 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: **11/19/2019** Drilling End Date: **11/20/2019**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	11	0	20
	6.25	20	850

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	-1	50	5 cement
	0	20	2 cement 4 holeplug Bags/Sacks

Seal Method: **Slurry**

Distance to Property Line (ft.): **42**

Sealed By: **Driller**

Distance to Septic Field or other
concentrated contamination (ft.): **NO OSSF**

Distance to Septic Tank (ft.): **NO OSSF**

Method of Verification: **owner**

Surface Completion: **Surface Sleeve Installed**

Surface Completion by Driller

Water Level: **583 ft. below land surface on 2019-11-20** Measurement Method: **Sonic/Radar**

Packers: **burlap 50', 20'**
burlap and plastic 630', 610'

Type of Pump: **Submersible**

Well Tests: **Estimated** **Yield: 20-25 GPM**

Water Quality:

Strata Depth (ft.)	Water Type
630 - 850	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: **Drilled for Glass Well Service**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	3	top loose rock
3	15	tan lime
15	430	blue lime
430	470	tan limestone
470	530	tan grey limestone
530	560	grey lime and shale
560	605	tan white limestone
605	645	red sandstone
645	685	tan limestone, H2O
685	805	red sandstone
805	830	multi color limestone, H2O
830	850	blue clay

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr17	-3	750
6.25	Blank	New Plastic (PVC)	sch 40	0	20
4.5	Screen	New Plastic (PVC)	sdr17 0.020	750	830
4.5	Blank	New Plastic (PVC)	sdr17	830	850

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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 #532048

Owner:	Thad Price	Owner Well #:	No Data
Address:	16724 Whispering Breeze- Lot2 Austin, TX 78738, TX 78738	Grid #:	57-48-6
Well Location:	16724 Whispering Breeze- Lot2 Austin, TX 78738, TX 78738	Latitude:	30° 18' 26.7" N
Well County:	Travis	Longitude:	098° 00' 58.74" W
		Elevation:	1056 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 11/21/2019 Drilling End Date: 11/21/2019

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	6.25	100	630

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	-1	100	13 cement 4 benseal Bags/Sacks

Seal Method: Positive Displacement

Distance to Property Line (ft.): 35

Sealed By: Driller

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:	491 ft. below land surface on 2019-11-21	Measurement Method:	Sonic/Radar
Packers:	burlap and plastic 510', 490' burlap and rubber 100'		
Type of Pump:	Submersible		
Well Tests:	Estimated	Yield:	20-25 GPM

Water Quality:

Strata Depth (ft.)	Water Type
510 - 610	cow creek

Chemical Analysis Made: **No**

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

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

Company Information: **Associated Drilling Inc**
PO Box 673
Dripping Springs, TX 78620

Driller Name: **James Benoit** License Number: **4064**

Comments: **Drilled for Glass Well Service**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	2	topsoil
2	10	tan lime and clay
10	450	blue lime
450	500	grey lime and clay
500	510	tan limestone
510	560	tan white limestone, H2O
560	590	tan brown limestone
590	610	grey limestone
610	630	blue lime and shale

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr17	-3	550
4.5	Screen	New Plastic (PVC)	sdr17 0.020	530	610
4.5	Blank	New Plastic (PVC)	sdr17	610	630

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(512) 334-5540

STATE OF TEXAS WELL REPORT for Tracking #532064

Owner:	JOHNNY MORROW	Owner Well #:	No Data
Address:	17211 MAJESTIC RIDGE RD. AUSTIN, TX 78738	Grid #:	57-48-3
Well Location:	17211 MAJESTIC RIDGE DRIVE AUSTIN, TX 78738	Latitude:	30° 20' 17.82" N
Well County:	Travis	Longitude:	098° 00' 10.86" W
		Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 11/27/2019 Drilling End Date: 11/27/2019

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	100
	6.125	100	870

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	PORTLAND CEMENT 14 Bags/Sacks

Seal Method: Pressure

Sealed By: Driller

Distance to Property Line (ft.): 10

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: 560 ft. below land surface on 2019-12-04 Measurement Method: Electric Line

Packers: Burlap at 100 ft.
BURLAP & PLASTIC at 120 ft.
BURLAP & PLASTIC at 400 ft.
BURLAP & PLASTIC at 600 ft.
BURLAP & PLASTIC at 750 ft.
BURLAP & PLASTIC at 770 ft.

Type of Pump: Submersible Pump Depth (ft.): 700

Well Tests: Jetted Yield: 20 GPM

Water Quality:

Strata Depth (ft.)	Water Type
770 - 870	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 DALE LINGLE**

License Number: **54813**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	ROCK
2	18	CALICHE
18	20	BLUE LIMESTONE
20	85	GRAY LIMESTONE
85	210	GRAY/TAN LIMESTONE
210	270	GRAY LIMESTONE
270	300	TAN LIMESTONE
300	340	GRAY LIMESTONE
340	350	WHITE LIMESTONE
350	390	GRAY LIMESTONE
390	420	BROWN LIMESTONE
420	440	GRAY/TAN LIMESTONE
440	600	BROWN LIMESTONE
600	630	GRAY CLAY
630	645	GRAY SAND
645	660	GRAY/RED CLAY
660	670	GRAY SAND
670	690	GRAY/RED SAND

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	770
4.5	Perforated or Slotted	New Plastic (PVC)	SDR17 0.032	770	870

690	710	RED SANDSTONE
710	730	RED SANDSTONE W/GRAVEL
730	750	COLOR
750	770	RED SANDSTONE
770	790	RED SANDSTONE SAND
790	810	GRAVEL COLOR LIMESTONE
810	830	GRAVEL COLOR LIMESTONE
830	850	GRAVEL COLOR LIMESTONE
850	870	GRAVEL COLOR LIMESTONE

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 #543861

Owner:	Tiffany Todd	Owner Well #:	No Data
Address:	5103 Great Divide Austin, TX 78738	Grid #:	58-41-5
Well Location:	5103 Great Divide Austin, TX 78738	Latitude:	30° 17' 59.52" N
Well County:	Travis	Longitude:	097° 57' 18.66" W
		Elevation:	976 ft. above sea level
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 4/6/2020

Drilling End Date: 4/6/2020

Borehole:	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
	8.75	0	100
	6.25	100	870

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	-1	100	10 cement 4 benseal Bags/Sacks

Seal Method: Positive Displacement

Distance to Property Line (ft.): 25

Sealed By: Driller

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:	617 ft. below land surface on 2020-04-06	Measurement Method:	Sonic/Radar
Packers:	burlap 100' burlap and plastic 670', 650'		
Type of Pump:	Submersible		
Well Tests:	Estimated	Yield:	25 GPM

Water Quality:

Strata Depth (ft.)	Water Type
253	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: **Drilled for Glass Well Services**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	10	white calachie
10	470	blue lime
470	530	tan white limestone
530	570	tan grey limestone
570	600	grey shale
600	660	grey white limestone
660	680	red sandstone
680	700	red white limestone, H2O
700	775	red sandstone
775	800	white calachie
800	820	multi color limestone, H2O
820	850	yellow white limestone
850	870	red and grey shale

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr17	-3	770
4.5	Screen	New Plastic (PVC)	sdr17 0.020	770	850
4.5	Blank	New Plastic (PVC)	sdr17	850	870

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

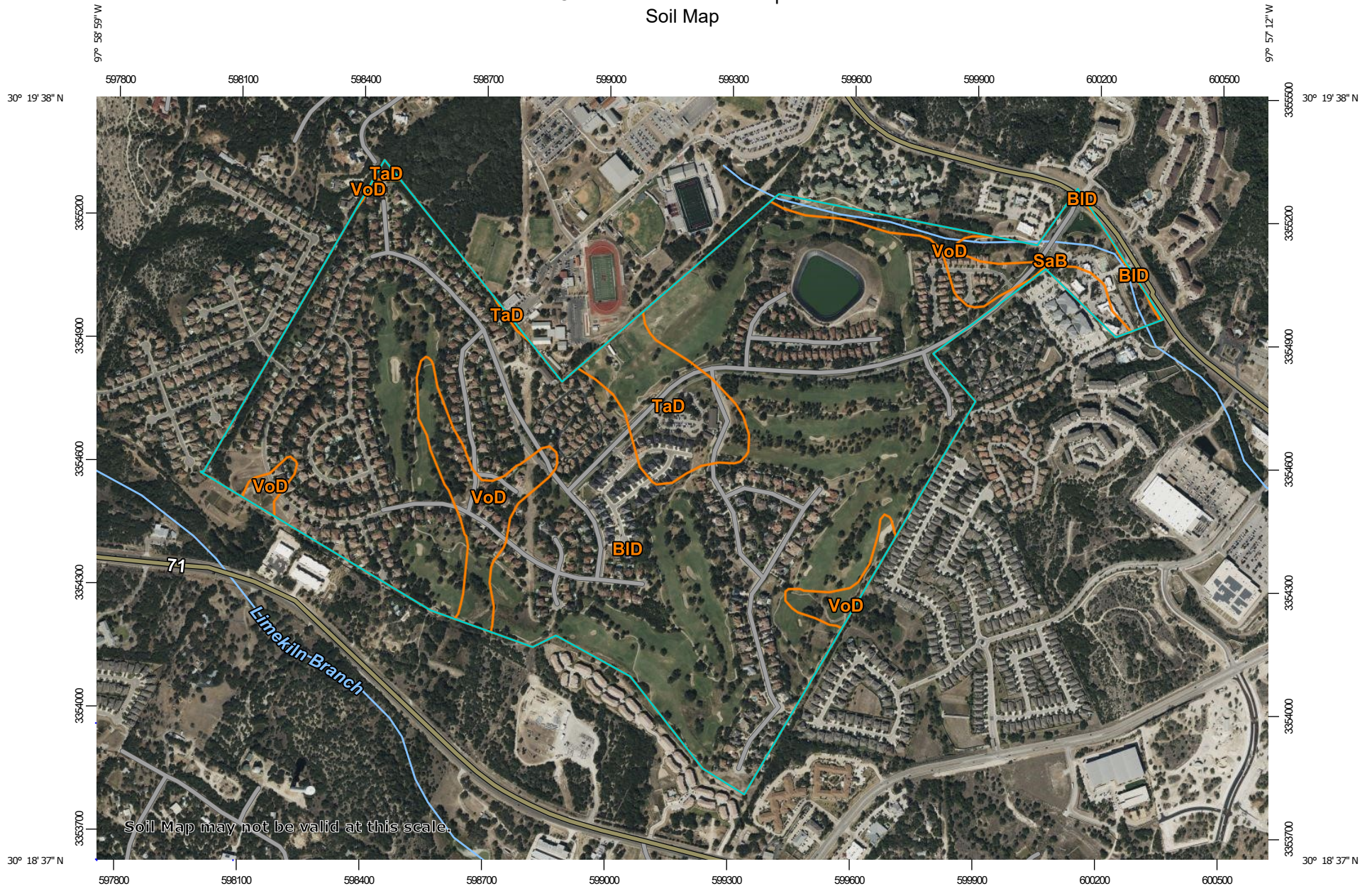
TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail,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

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

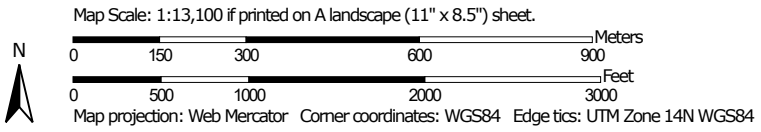
**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

Attachment O1
Soil Map for Falconhead

Custom Soil Resource Report Soil Map



Soil Map may not be valid at this scale.



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Travis County, Texas
Survey Area Data: Version 25, Sep 5, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BID	Brackett-Rock outcrop complex, 1 to 12 percent slopes	340.7	83.8%
SaB	San Saba clay, 1 to 2 percent slopes	11.7	2.9%
TaD	Eckrant very stony clay, 5 to 18 percent slopes	22.4	5.5%
VoD	Volente silty clay loam, 1 to 8 percent slopes	31.6	7.8%
Totals for Area of Interest		406.4	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.

Attachment O2

**Soil Map for CCNG Golf course and Spanish Oaks
Irrigation Areas**

Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Travis County, Texas

Survey Area Data: Version 25, Sep 5, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BID	Brackett-Rock outcrop complex, 1 to 12 percent slopes	362.5	46.0%
BoF	Brackett-Rock outcrop-Real complex, 8 to 30 percent slopes	263.6	33.5%
Md	Mixed alluvial land, 0 to 1 percent slopes, frequently flooded	4.7	0.6%
PuC	Purves clay, 1 to 5 percent slopes	3.4	0.4%
TaD	Eckrant very stony clay, 5 to 18 percent slopes	33.8	4.3%
TdF	Eckrant-Rock outcrop complex, 18 to 50 percent slopes	20.6	2.6%
VoD	Volente silty clay loam, 1 to 8 percent slopes	98.8	12.6%
Totals for Area of Interest		787.4	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

Attachment O3

Soil Map for Drip Field

Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Travis County, Texas
Survey Area Data: Version 25, Sep 5, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BID	Brackett-Rock outcrop complex, 1 to 12 percent slopes	133.1	96.1%
VoD	Volente silty clay loam, 1 to 8 percent slopes	5.3	3.9%
Totals for Area of Interest		138.4	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,

Attachment P

Soil Analysis Result 2024



Texas Commission on Environmental Quality

P.O. Box 13087 • Austin, TX 78711-3087

WQ0013594-001
PERMIT NUMBER

1
SET

22/23	2
YEAR	MO

15136
EID

This report to be used for

OTFL 001-2329-CCNG Golf Course

Please retain a photocopy for your records. **SOIL MON o-6"**

Parameter Code/ Parameter	Effluent Condition			No. Ex	Frequency of Analysis	Sample Type		
		Value	Units					
8258360030-PH Soil Water	Permitted		Standard Units		1/Year	Grab		
	Reported	8.5						
9501030-Conductivity Specific	Permitted		MMHOS/CM		1/Year	Grab		
	Reported	301						
6641430-Plant Availbe Phosphorus	Permitted		MG/KG		1/Year	Grab		
	Reported	7						
6001430-Total Nitrogen As N	Permitted		MG/KG		1/Year	Grab		
	Reported	2380						
6201430 Nitrate Nitrogen	Permitted		MG/KG		1/Year	Grab		
	Reported	25						
6251430-Total Kjeldahl Nitrogen	Permitted		MG/KG		1/Year	Grab		
	Reported	2360						
Potassium	Permitted		MG/L		1/Year	Grab		
	Reported	231						
Sulfur	Permitted		MG/L		1/Year	Grab		
	Reported	226						
Sodium	Permitted		MG/L		1/Year	Grab		
	Reported	91						
% Solids	Permitted		MG/L		1/Year	Grab		
	Reported	77.2						
Herbert Harkrider						March	28	
EXECUTIVE OFFICER NAME		EXECUTIVE OFFICER SIGNATURE						
Jennifer Riechers						March	28	
Telephone Number						512	263-0100	
						Area code		Number



Texas Commission on Environmental Quality

P.O. Box 13087 • Austin, TX 78711-3087

0013594-001
PERMIT NUMBER

1
SET

22/23	2
YEAR	MO

15136
EID

This report to be used for

OTFL 001-2329-CCNG Golf Course

Please retain a photocopy for your records. **SOIL MON 6-18"**

Parameter Code/ Parameter	Effluent Condition			No. Ex	Frequency of Analysis	Sample Type		
		Value	Units					
8258360030-PH Soil Water	Permitted		Standard Units		1/Year	Grab		
	Reported	8.6						
9501030-Conductivity Specific	Permitted		MMHOS/CM		1/Year	Grab		
	Reported	167						
6641430-Plant Availble Phosphorus	Permitted		MG/KG		1/Year	Grab		
	Reported	3						
6001430-Total Nitrogen As N	Permitted		MG/KG		1/Year	Grab		
	Reported	996						
6201430 Nitrate Nitrogen	Permitted		MG/KG		1/Year	Grab		
	Reported	20						
6251430-Total Kjeldahl Nitrogen	Permitted		MG/KG		1/Year	Grab		
	Reported	976						
Potassium	Permitted		MG/L		1/Year	Grab		
	Reported	140						
Sulfur	Permitted		MG/L		1/Year	Grab		
	Reported	197						
Sodium	Permitted		MG/L		1/Year	Grab		
	Reported	52						
% Solids	Permitted		MG/L		1/Year	Grab		
	Reported	83.2						
Herbert Harkrider						March	28	
EXECUTIVE OFFICER NAME		EXECUTIVE OFFICER SIGNATURE						
Jennifer Riechers						March	28	
Telephone Number						512	263-0100	
						Area code	Number	



Texas Commission on Environmental Quality

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22/23	2
YEAR	MO

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This report to be used for

OTFL 001-2329-CCNG Golf Course

Please retain a photocopy for your records. **SOIL MON 18-30"**

Parameter Code/ Parameter	Effluent Condition			No. Ex	Frequency of Analysis	Sample Type		
		Value	Units					
8258360030-PH Soil Water	Permitted		Standard Units		1/Year	Grab		
	Reported	8.6						
9501030- Conductivity Specific	Permitted		MMHOS/CM		1/Year	Grab		
	Reported	306						
6641430-Plant Avaible Phosphorus	Permitted		MG/KG		1/Year	Grab		
	Reported	4						
6001430-Total Nitrogen As N	Permitted		MG/KG		1/Year	Grab		
	Reported	1490						
6201430 Nitrate Nitrogen	Permitted		MG/KG		1/Year	Grab		
	Reported	19						
6251430-Total Kjeldahl Nitrogen	Permitted		MG/KG		1/Year	Grab		
	Reported	1470						
Potassium	Permitted		MG/L		1/Year	Grab		
	Reported	188						
Sulfur	Permitted		MG/L		1/Year	Grab		
	Reported	213						
Sodium	Permitted		MG/L		1/Year	Grab		
	Reported	112						
% Solids	Permitted		MG/L		1/Year	Grab		
	Reported	80.9						
Herbert Harkrider						March	28	
EXECUTIVE OFFICER NAME		EXECUTIVE OFFICER SIGNATURE						
Jennifer Riechers						March	28	
Telephone Number						512	263-0100	
Area code						Number		



Texas Commission on Environmental Quality

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0013594-001
PERMIT NUMBER

1
SET

22/23	2
YEAR	MO

15136
EID

This report to be used for

OTFL 001-2329-Falconhead Golf Course

Please retain a photocopy for your records. **SOIL MON o-6"**

Parameter Code/ Parameter	Effluent Condition			No. Ex	Frequency of Analysis	Sample Type	
		Value	Units				
8258360030-PH Soil Water	Permitted		Standard Units		1/Year	Grab	
	Reported	8.5					
9501030-Conductivity Specific	Permitted		MMHOS/CM		1/Year	Grab	
	Reported	275					
6641430-Plant Availbe Phosphorus	Permitted		MG/KG		1/Year	Grab	
	Reported	13					
6001430-Total Nitrogen As N	Permitted		MG/KG		1/Year	Grab	
	Reported	1720					
6201430 Nitrate Nitrogen	Permitted		MG/KG		1/Year	Grab	
	Reported	27					
6251430-Total Kjeldahl Nitrogen	Permitted		MG/KG		1/Year	Grab	
	Reported	1720					
Potassium	Permitted		MG/L		1/Year	Grab	
	Reported	273					
Sulfur	Permitted		MG/L		1/Year	Grab	
	Reported	140					
Sodium	Permitted		MG/L		1/Year	Grab	
	Reported	109					
% Solids	Permitted		MG/L		1/Year	Grab	
	Reported	88.4					
Herbert Harkrider					March	28	
EXECUTIVE OFFICER NAME		EXECUTIVE OFFICER SIGNATURE					
Jennifer Riechers					March	28	
Telephone Number					512	263-0100	
					Area code	Number	



Texas Commission on Environmental Quality

P.O. Box 13087 • Austin, TX 78711-3087

0013594-001
PERMIT NUMBER

1
SET

22/23	2
YEAR	MO

15136
EID

This report to be used for

OTFL 001-2329-Falconhead Golf Course

Please retain a photocopy for your records. **SOIL MON 6-18"**

Parameter Code/ Parameter	Effluent Condition			No. Ex	Frequency of Analysis	Sample Type	
		Value	Units				
8258360030-PH Soil Water	Permitted		Standard Units		1/Year	Grab	
	Reported	8.4					
9501030-Conductivity Specific	Permitted		MMHOS/CM		1/Year	Grab	
	Reported	207					
6641430-Plant Availbe Phosphorus	Permitted		MG/KG		1/Year	Grab	
	Reported	6					
6001430-Total Nitrogen As N	Permitted		MG/KG		1/Year	Grab	
	Reported	1750					
6201430 Nitrate Nitrogen	Permitted		MG/KG		1/Year	Grab	
	Reported	21					
6251430-Total Kjeldahl Nitrogen	Permitted		MG/KG		1/Year	Grab	
	Reported	1530					
Potassium	Permitted		MG/L		1/Year	Grab	
	Reported	237					
Sulfur	Permitted		MG/L		1/Year	Grab	
	Reported	186					
Sodium	Permitted		MG/L		1/Year	Grab	
	Reported	123					
% Solids	Permitted		MG/L		1/Year	Grab	
	Reported	88.6					
Herbert Harkrider					March	28	
EXECUTIVE OFFICER NAME		EXECUTIVE OFFICER SIGNATURE					
Jennifer Riechers					March	28	
Telephone Number					512	263-0100	
					Area code	Number	



Texas Commission on Environmental Quality

P.O. Box 13087 • Austin, TX 78711-3087

0013594-001
PERMIT NUMBER

1
SET

22/23	2
YEAR	MO

15136
EID

This report to be used for

OTFL 001-2329-Falconhead Golf Course

Please retain a photocopy for your records. **SOIL MON 18-30"**

Parameter Code/ Parameter	Effluent Condition			No. Ex	Frequency of Analysis	Sample Type	
		Value	Units				
8258360030-PH Soil Water	Permitted		Standard Units		1/Year	Grab	
	Reported	8.4					
9501030-Conductivity Specific	Permitted		MMHOS/CM		1/Year	Grab	
	Reported	296					
6641430-Plant Availbe Phosphorus	Permitted		MG/KG		1/Year	Grab	
	Reported	3					
6001430-Total Nitrogen As N	Permitted		MG/KG		1/Year	Grab	
	Reported	711					
6201430 Nitrate Nitrogen	Permitted		MG/KG		1/Year	Grab	
	Reported	14					
6251430-Total Kjeldahl Nitrogen	Permitted		MG/KG		1/Year	Grab	
	Reported	697					
Potassium	Permitted		MG/L		1/Year	Grab	
	Reported	155					
Sulfur	Permitted		MG/L		1/Year	Grab	
	Reported	216					
Sodium	Permitted		MG/L		1/Year	Grab	
	Reported	170					
% Solids	Permitted		MG/L		1/Year	Grab	
	Reported	90.9					
Herbert Harkrider					March	28	
EXECUTIVE OFFICER NAME		EXECUTIVE OFFICER SIGNATURE					
Jennifer Riechers					March	28	
Telephone Number					512	263-0100	
					Area code	Number	

Attachment Q

Water Balance and Nitrogen Balance

Water Balance- CCNG (150 acres)										
(All units are Inches of Water per Acre of Irrigated Area)										
	a	b	Ri	c	d		e	f	g	
Month	Avg Precip.	Avg Runoff	Avg Infiltrated Rainfall	Evapotrans-piration	Required Leaching	Total Water Needs	Effluent Needed in Root Zone	Evaporation from Reservoir Surface	Effluent to be Applied to Land	Consumption from Reservoir
1	2	3	4	5	6	7	8	9	10	11
						5+6	7-4		8/K	9+10
Jan	5.02	0.61	4.41	2.40	0.24	2.64	1.92	0.04	2.19	2.22
Feb	0.50	0.00	0.50	3.00	0.38	3.38	3.03	0.03	2.74	2.77
Mar	4.83	0.75	4.08	4.90	0.52	5.42	4.18	0.13	3.83	3.95
Apr	2.31	0.00	2.31	5.90	0.68	6.58	5.46	0.13	5.02	5.15
May	17.59	7.31	10.28	7.10	0.57	7.67	4.54	0.11	3.70	3.81
Jun	8.89	3.15	5.74	8.30	0.87	9.17	6.94	0.26	7.07	7.33
Jul	0.00	0.00	0.00	9.00	1.29	10.29	10.29	0.44	12.10	12.54
Aug	0.35	0.00	0.35	8.60	1.19	9.79	9.51	0.43	11.19	11.62
Sep	1.89	0.11	1.78	6.50	0.86	7.36	6.88	0.21	7.57	7.78
Oct	11.85	5.73	6.12	4.90	0.56	5.46	4.52	0.17	5.31	5.49
Nov	3.73	0.32	3.41	3.10	0.34	3.44	2.72	0.09	2.64	2.73
Dec	3.00	0.46	2.54	2.40	0.30	2.70	2.43	0.05	2.71	2.76
	59.96	18.43	41.53	66.10	7.80	73.90	62.42	2.09	66.06	68.15

- a. Up-to-date rainfall and evaporation data sets are available from the Texas Natural Resource Information System.
- b. Runoff should be determined by an acceptable method such as the Soil Conservation Service method found in SCS Technical Release No. 55. For calculation purposes only, a CN value of 79 was assumed.
- c. Suggested source of values is the "Bulletin 6019, Consumptive Use of Water by Major Crops in Texas", Texas Board of Water Engineers.
- d. In low rainfall areas, this is the required leaching to avoid salinity build-up in the soil where:

$$L = Ce (E - Ri) / (Cl - Ce)$$

 Ce = Electrical Conductivity of Effluent E = Evapotranspiration
 Ri = Rainfall
 Cl = Maximum Allowable Conductivity of Soil Solution (Table 3)
- e. Net Average Evaporation from Reservoir Surface. For the purpose of this calculation, irrigation area = 100 acres and reservoir surface area = 5 acres. Therefore, values are 5% of Evaporation figures of Austin, Texas.
- f. K is the irrigation efficiency. K value is 0.85 unless specific information is provided to support a different value.
- g. The total of this column is the maximum allowable application rate in Acre-in./Ac./yr.

Calculation of Storage Volume Requirements (Spillman)								
(All units are Inches of Water per Acre of Irrigated Area)								
	a	b	c	d				
Month	Effluent received for Application or Storage	Rainfall Worst Year in Past 25 years	Runoff Worst Year in Past 25 years	Infiltrated Rainfall	Available Water	Net 25 Year Low Evaporation	Net Storage Accumulation	Accumulated Storage
12	13	14	15	16	17	18	19	20
				14-15	13+16			
Jan	3.43	5.02	0.61	4.41	7.84	0.02	5.49	1.69
Feb	3.09	0.50	0.00	0.50	3.59	0.02	-0.31	1.80
Mar	3.43	4.83	0.75	4.08	7.51	0.05	1.79	1.23
Apr	3.31	2.31	0.00	2.31	5.62	0.05	-1.77	0.00
May	3.43	17.59	7.31	10.28	13.71	0.05	6.45	0.00
Jun	3.31	8.89	3.15	5.74	9.06	0.11	-0.82	0.00
Jul	3.43	0.00	0.00	0.00	3.43	0.18	-8.86	0.00
Aug	3.43	0.35	0.00	0.35	3.78	0.18	-7.86	0.00
Sep	3.31	1.89	0.11	1.78	5.10	0.08	-3.33	0.00
Oct	3.43	11.85	5.73	6.12	9.54	0.07	4.12	0.00
Nov	3.31	3.73	0.32	3.41	6.72	0.04	3.24	0.00
Dec	3.43	3.00	0.46	2.54	5.97	0.02	3.21	0.54
	40.33	59.96	18.43	41.53	81.85	0.87		1.80
					Required Storage (ac-ft)		30.1	
					Storage (Gal)		9,795,547	
					Pond Surface area at 25' depth		1.20	
					Storage Amount (days)		16.33	

a.	Annual rainfall amount from the worst year in past 25 years of data. Total rainfall is then distributed proportional to monthly averages.
b.	Using rainfall figures Using rainfall figures in Column 14, calculate runoff with the same method used in Column 3.
c.	Lowest annual evaporation in past 25 years from reservoir surface. Storage = [(13)-(18)]-[(7)-(16)]/k. If the term [(7)-(16)]/k is negative, then the value for storage = [(13)-(18)]. Irrigation efficiency is 0.85 unless specific information is provided to support a different value.
d.	

Water Balance- Spillman (200 acres)										
(All units are Inches of Water per Acre of Irrigated Area)										
	a	b	Ri	c	d		e	f	g	
Month	Avg Precip.	Avg Runoff	Avg Infiltrated Rainfall	Evapotrans-piration	Required Leaching	Total Water Needs	Effluent Needed in Root Zone	Evaporation from Reservoir Surface	Effluent to be Applied to Land	Consumption from Reservoir
1	2	3	4	5	6	7	8	9	10	11
						5+6	7-4		8/K	9+10
Jan	5.02	0.61	4.41	2.4	0.24	2.64	1.92	0.03	2.19	2.21
Feb	0.50	0.00	0.50	3	0.38	3.38	3.03	0.03	2.74	2.76
Mar	4.83	0.75	4.08	4.9	0.52	5.42	4.18	0.10	3.83	3.92
Apr	2.31	0.00	2.31	5.9	0.68	6.58	5.46	0.10	5.02	5.12
May	17.59	7.31	10.28	7.1	0.57	7.67	4.54	0.09	3.70	3.78
Jun	8.89	3.15	5.74	8.3	0.87	9.17	6.94	0.19	7.07	7.26
Jul	0.00	0.00	0.00	9	1.29	10.29	10.29	0.33	12.10	12.43
Aug	0.35	0.00	0.35	8.6	1.19	9.79	9.51	0.32	11.19	11.51
Sep	1.89	0.11	1.78	6.5	0.86	7.36	6.88	0.15	7.57	7.73
Oct	11.85	5.73	6.12	4.9	0.56	5.46	4.52	0.13	5.31	5.44
Nov	3.73	0.32	3.41	3.1	0.34	3.44	2.72	0.07	2.64	2.71
Dec	3.00	0.46	2.54	2.4	0.30	2.70	2.43	0.04	2.71	2.75
	59.96	18.43	41.53	66.1	7.80	73.90	62.42	1.57	66.06	67.63

- a. Up-to-date rainfall and evaporation data sets are available from the Texas Natural Resource Information System.
- b. Runoff should be determined by an acceptable method such as the Soil Conservation Service method found in SCS Technical Release No. 55. For calculation purposes only, a CN value of 79 was assumed.
- c. Suggested source of values is the "Bulletin 6019, Consumptive Use of Water by Major Crops in Texas", Texas Board of Water Engineers.
- d. In low rainfall areas, this is the required leaching to avoid salinity build-up in the soil where:

$$L = Ce (E - Ri) / (CI - Ce)$$

Ce = Electrical Conductivity of Effluent E = Evapotranspiration
Ri = Rainfall
CI = Maximum Allowable Conductivity of Soil Solution (Table 3)
- e. Net Average Evaporation from Reservoir Surface. For the purpose of this calculation, irrigation area = 100 acres and reservoir surface area = 5 acres. Therefore, values are 5% of Evaporation figures of Austin, Texas.
- f. K is the irrigation efficiency. K value is 0.85 unless specific information is provided to support a different value.
- g. The total of this column is the maximum allowable application rate in Acre-in./Ac./yr.

Total Storage Required After Water Balances for CCNG and Spillman:

CCNG	32.51 ac-ft
<u>Spillman</u>	<u>30.10 ac-ft</u>
Total	62.61 ac-ft

NITROGEN BALANCE (CCNG)

(Based on actual effluent applied, 37 mg/l TN, 331 lb/ac/yr TN loading)

Month	Effluent Needed in Root Zone for Crop Consumption (1)	Monthly Distribution of Annual Effluent Needed = Monthly Distribution of Annual Nitrogen (2)	Actual Effluent Applied (inches) (3a)	Actual Effluent Applied (ac-ft) (3b)	Nitrogen Applied (lb/ac) (4)	Crop re'qmt. of nitrogen + 10% volatilization (lb/ac) (5)	Effluent Capacity in root zone based on crop re'qmt. of nitrogen + 10% volatilization (inches) (6)
JAN	1.92	3.1%	1.24	10.3	10	12.2	1.5
FEB	3.03	4.9%	1.96	16.3	16	19.3	2.3
MAR	4.18	6.7%	2.70	22.5	23	26.6	3.2
APR	5.46	8.7%	3.53	29.4	30	34.7	4.2
MAY	4.54	7.3%	2.93	24.5	25	28.9	3.5
JUN	6.94	11.1%	4.49	37.4	38	44.2	5.3
JUL	10.29	16.5%	6.65	55.4	56	65.5	7.9
AUG	9.51	15.2%	6.15	51.2	52	60.5	7.3
SEP	6.88	11.0%	4.45	37.1	37	43.8	5.3
OCT	4.52	7.2%	2.92	24.3	24	28.8	3.5
NOV	2.72	4.4%	1.76	14.6	15	17.3	2.1
DEC	2.43	3.9%	1.57	13.1	13	15.5	1.9
	62.42	100%	40.3	336	338	397	47.7

Actual effluent applied (ac-ft) = (Effluent irrigated)(Irrig. Area)(1 ft/12 in)

336 ac-ft

Irrigation area =

100 acres

Wastewater total nitrogen concentration =

37 mg/l

Annual crop requirement of nitrogen + volatilization = 125 + 10% volatilization

331 lb/ac/yr

(1) = Water Balance Summary, Line 8

(2) = (1) / Annual total of effluent needed in root zone

(3a) = (Monthly Max. irrigation needs)(Annual Effluent Received/Annual Max. Irrigation needs)

(3b) = (3a)(Irrigation Area)/12

(4) = (Actual effluent applied)(0.3259 MG/ac-ft)(nitrogen conc.)(8.34) / (irrigation area)

(5) = (2) * crop requirement of nitrogen + 10% volatilization

(6) = (Annual crop requirement of nitrogen + 10% volatilization)(12 in/ft)(1/2.7) / (nitrogen conc.)

NITROGEN BALANCE (Spillman Ranch)

(Based on actual effluent applied, 37 mg/l TN, 331 lb/ac/yr TN loading)

Month	Effluent Needed in Root Zone for Crop Consumption (1)	Monthly Distribution of Annual Effluent Needed = Monthly Distribution of Annual Nitrogen (2)	Actual Effluent Applied (inches) (3a)	Actual Effluent Applied (ac-ft) (3b)	Nitrogen Applied (lb/ac) (4)	Crop re'qmt. of nitrogen + 10% volatilization (lb/ac) (5)	Effluent Capacity in root zone based on crop re'qmt. of nitrogen + 10% volatilization (inches) (6)
JAN	1.92	3.1%	1.24	20.7	10	12.2	1.5
FEB	3.03	4.9%	1.96	32.6	16	19.3	2.3
MAR	4.18	6.7%	2.70	45.0	23	26.6	3.2
APR	5.46	8.7%	3.53	58.8	30	34.7	4.2
MAY	4.54	7.3%	2.93	48.9	25	28.9	3.5
JUN	6.94	11.1%	4.49	74.8	38	44.2	5.3
JUL	10.29	16.5%	6.65	110.8	56	65.5	7.9
AUG	9.51	15.2%	6.15	102.4	52	60.5	7.3
SEP	6.88	11.0%	4.45	74.1	37	43.8	5.3
OCT	4.52	7.2%	2.92	48.7	24	28.8	3.5
NOV	2.72	4.4%	1.76	29.3	15	17.3	2.1
DEC	2.43	3.9%	1.57	26.2	13	15.5	1.9
	62.42	100%	40.3	672	338	397	47.7

Actual effluent applied (ac-ft) = (Effluent irrigated)(Irrig. Area)(1 ft/12 in)

Irrigation area =

Wastewater total nitrogen concentration =

Annual crop requirement of nitrogen + volatilization = 331 + 20% volatilization

(1) = Water Balance Summary, Line 8

(2) = (1) / Annual total of effluent needed in root zone

(3a) = (Monthly Max. irrigation needs)(Annual Effluent Received/Annual Max. Irrigation needs)

(3b) = (3a)(Irrigation Area)/12

(4) = (Actual effluent applied)(0.3259 MG/ac-ft)(nitrogen conc.)(8.34) / (irrigation area)

(5) = (2) * crop requirement of nitrogen + 20% volatilization

(6) = (Annual crop requirement of nitrogen + 20% volatilization)(12 in/ft)(1/2.7) / (nitrogen conc.)

672 ac-ft

200 acres

37 mg/l

331 lb/ac/yr

Attachment S

Dosing Information

Dosing Information for drip fields

Domestic Worksheet 3.3 - Attachment S for Section 2

Field #	Total Daily Dose Gallons	Total Field Flow Rate (GPM)	Each Dose(8 hour)	Area (SQFT)	Area (Acre)	Dosing Duration(Hours)	Dosing Amount (inch/day)
1	6,689	302	2,230	66,892	1.5356	0.123	0.16042301
2	8,873	388	2,958	88,728	2.0369	0.127	0.16043142
3	6,430	288	2,143	64,300	1.4761	0.124	0.16042781
4	6,780	329	2,260	67,803	1.5565	0.114	0.16042071
5	6,481	237	2,160	64,806	1.4877	0.152	0.16043771
6	6,912	289	2,304	69,121	1.5868	0.133	0.16042549
7	5,617	318	1,872	56,175	1.2896	0.098	0.16041353
8	6,950	342	2,317	69,501	1.5955	0.113	0.1604255
9	6,950	338	2,317	69,501	1.5955	0.114	0.1604255
10	5,995	346	1,998	59,954	1.3764	0.096	0.1604171
11	7,371	200	2,457	73,714	1.6922	0.205	0.1604191
12	5,428	147	1,809	54,281	1.2461	0.205	0.16042485
13	5,491	149	1,830	54,908	1.2605	0.205	0.16043365
14	6,292	170	2,097	62,921	1.4445	0.206	0.16042526
15	4,210	114	1,403	42,099	0.9665	0.205	0.16043162
16	6,233	169	2,078	62,328	1.4309	0.205	0.16043296
17	5,913	160	1,971	59,134	1.3575	0.205	0.16041696
18	3,768	102	1,256	37,678	0.8650	0.205	0.16043632
19	5,807	157	1,936	58,075	1.3332	0.205	0.160414
20	6,732	182	2,244	67,324	1.5455	0.205	0.16041828
21	6,308	171	2,103	63,083	1.4482	0.205	0.16042018
22	6,110	165	2,037	61,097	1.4026	0.206	0.16043568
23	6,402	173	2,134	64,020	1.4697	0.206	0.16042781
24	7,071	191	2,357	70,707	1.6232	0.206	0.16043461
25	6,336	172	2,112	63,360	1.4545	0.205	0.16042781
26	3,635	98	1,212	36,350	0.8345	0.206	0.16042781
27	5,860	159	1,953	58,599	1.3452	0.205	0.16043055
28	6,464	175	2,155	64,637	1.4839	0.205	0.16043525
29	6,764	183	2,255	67,637	1.5527	0.205	0.16043492
30	5,708	155	1,903	57,081	1.3104	0.205	0.160425
31	4,223	114	1,408	42,226	0.9694	0.206	0.160443
32	5,160	140	1,720	51,601	1.1846	0.205	0.1604247
33	3,999	108	1,333	39,992	0.9181	0.206	0.16041978
34	5,105	138	1,702	51,053	1.1720	0.206	0.16041838
35	2,147	58	716	21,471	0.4929	0.206	0.16042034
36	3,546	96	1,182	35,463	0.8141	0.205	0.16041424

37	5,796	157	1,932	57,963	1.3306	0.205	0.1604195
38	5,367	145	1,789	53,667	1.2320	0.206	0.16043678
39	5,228	142	1,743	52,284	1.2003	0.205	0.16041553
40	6,440	174	2,147	64,397	1.4784	0.206	0.16043528
	232,591		77,533		53		

Attachment T

Recharge Feature Plan

**RECHARGE FEATURE PLAN
West Travis County Public Utility Agency
Major Amendment
Travis County, Texas
WQ0013594001**

INTRODUCTION

This Recharge Feature Plan and attachments have been prepared to incorporate information required by the Texas Commission on Environmental Quality (TCEQ) in support of permitting additional Subsurface Area Drip Dispersal System (SADDs). The assessment included review of published geologic data in the vicinity of the site, analysis of high resolution aerial photographs of the site, and walking and driving across the property in order to identify and observe recharge features as well as other potentially critical environmental features (CEFs). Subsequently, in support of the SADDs permitting additional data sources were reviewed. Databases reviewed include:

- Submitted Drillers Report Database
- TCEQ Water Well Database
- Texas Water Development Board Groundwater Database
- Water Utility Database
- Railroad Commission of Texas
- Natural Resources Conservation Service

The site is not located within the jurisdiction of any groundwater conservation district.

SITE DESCRIPTION AND GEOLOGY

The site is located in Travis County on the north side of Highway 71, east of Vail Divide. The site is currently undeveloped and is dedicated as a Nature Preserve. The site is not located within the Edwards Aquifer Recharge or Contributing Zone. The site overlies the Trinity Aquifer. The wells located in the site vicinity are likely completed in the Trinity Aquifer.

According to the Geologic Atlas of Texas, Austin Sheet, this site is located on the Fredericksburg Group (Kfr) of the Edwards Limestone, undivided between the Edwards Limestone, the Comanche Peak Limestone, the Keys Valley Marl, the Cedar Park Limestone, the Bee Cave Marl and the Walnut Formation. This formation is described

as consisting of limestone, dolomite, chert, and marl. The limestone is nodular, aphanitic, marly, gray, yellow, white, and pink. The dolomite is described as fine grained and gray. The chert is present in thin layers and nodules. The marl is locally gypsiferous and gray. The Edwards Limestone, Group consisting of limestone, dolomite and chert can range from 60-350 feet thick. The Comanche Peak Limestone is approximately 80 feet thick. The Keys Valley Marl, is soft and white and can be as much as 50 feet thick. The Cedar Park Limestone is similar to Comanche Peak Limestone (fine to very fine grained, fairly hard, nodular, light gray, and burrowed). The Bee Cave Marl is soft, white *Exogyra texana* about 25-40 feet thick¹.

We researched the site and surrounding area to identify recharge features such as caves, sinkholes, faults, fractures, or other permeable features that could potentially serve as recharge features. Our findings indicated that no such features were present. If such features are encountered during future field investigations or during construction we will ensure that the appropriate setbacks are maintained.

The drainage from the site and surrounding areas flow into an unnamed tributary thence into Hurst Creek.

There are no wells located on the subject tract. During our well search several wells were located within the site vicinity (within ½ mile of the site). All of the area wells are greater than 150' from the SADDs site if they are not public water supply wells and greater than 500' from the SADDs site if they are public water supply wells.

GROUNDWATER

The water bearing formations beneath the site are within the Trinity Aquifer. Driller's logs in the area indicate that that water levels in the area range from 485' below ground surface (bgs) to 665' bgs. Access to measure current water levels in the existing private wells was not possible. The driller's reports for the on-site and one mile radius off-site water wells are provided at the end of this report.

PREVENTATIVE MEASURES


Buffer zones from the SADDs will be maintained in order to prevent impacts to potential recharge features, existing and future water wells, CEFs, creekbeds, and drainage ditches along the highway. CEFs were considered to be karst features, bluffs, canyon rim rocks, caves, sinkholes, springs, and wetlands. Appropriate buffer zones (i.e. setbacks) as defined in §222.81(a) are met under the existing site conditions, including the proposed SADDs. These setbacks include a minimum 150 feet to existing on-site and off-site private water wells. The setback will be a minimum of 500 feet to existing on-site and off-site public water supply wells. There are also set backs from dry creeks as prescribed in Chapter 222.

¹ Bureau of Economic Geology, 1974, rev'd 1995, Austin Sheet, Geologic Atlas of Texas, University of Texas



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
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: Travis County, Texas
Survey Area Data: Version 15, Sep 29, 2014

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 18, 2010—Apr 18, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Travis County, Texas (TX453)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BID	Brackett-Rock outcrop complex, 1 to 12 percent slopes	127.7	100.0%
Totals for Area of Interest		127.7	100.0%

Travis County, Texas

BID—Brackett-Rock outcrop complex, 1 to 12 percent slopes

Map Unit Setting

National map unit symbol: f52k

Elevation: 300 to 8,700 feet

Mean annual precipitation: 10 to 35 inches

Mean annual air temperature: 52 to 73 degrees F

Frost-free period: 120 to 320 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

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Residuum weathered from limestone

Typical profile

H1 - 0 to 6 inches: gravelly clay loam

H2 - 6 to 18 inches: clay loam

H3 - 18 to 48 inches: bedrock

Properties and qualities

Slope: 1 to 12 percent

Depth to restrictive feature: 6 to 20 inches to paralithic bedrock

Natural drainage class: Well drained

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 in profile: 90 percent

Gypsum, maximum in profile: 5 percent

Available water storage in profile: 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: Adobe 29-35" pz (R081CY355TX)

Description of Rock Outcrop

Setting

Landform: Ridges

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Limestone

Typical profile

H1 - 0 to 80 inches: bedrock

Properties and qualities

Slope: 3 to 12 percent

Depth to restrictive feature: 0 to 2 inches to lithic bedrock

Capacity of the most limiting layer to transmit water (Ksat):

Moderately low to very high (0.06 to 19.98 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8s

Hydrologic Soil Group: D

Minor Components

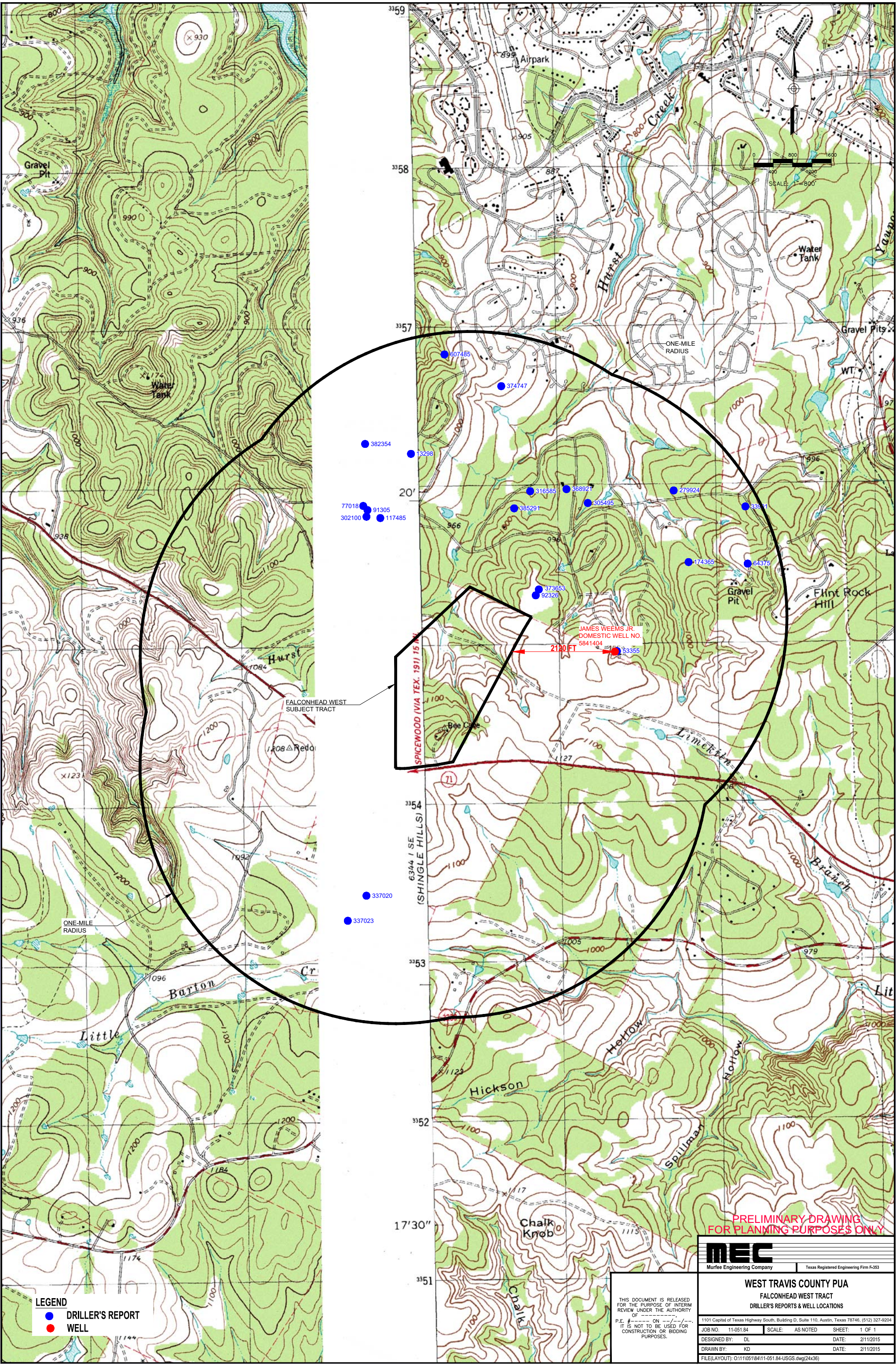
Unnamed

Percent of map unit: 12 percent

Data Source Information

Soil Survey Area: Travis County, Texas

Survey Area Data: Version 15, Sep 29, 2014



TWDB Groundwater Database Query Result

REPORTED WATER WELL DATA ON STATE WELL NUMBER = 5841404

Query for another State Well Number:

Submit

[Water Quality](#) | [Infrequent Constituent](#) | [Water Level](#) | [5 Day Water Level](#) | [Well Casing](#) | [Remarks](#) | [Scanned Images](#) |

*For a complete explanation, [click here to read the TWDB Groundwater Data System Data Dictionary](#).

Field	Value	*Explanation
STATE WELL NUMBER	5841404	
COUNTY CODE	453	Travis County, Texas
BASIN	14	Colorado River Basin
PREVIOUS WELL NUMBER	T	
LATITUDE	301927	DMS (in decimal degrees: 30.324167)
LAT DEC	30.324166	
LONGITUDE	975915	DMS (in decimal degrees: -97.987500)
LONG DEC	-97.987499	
OWNER 1	James Weems Jr.	
OWNER 2		
DRILLER 1	Glass Drilling Co.	
DRILLER 2		
SOURCE OF COORDINATES	1	
AQUIFER CODE	218GLRSL	Glen Rose Limestone, Lower Member
AQUIFER ID1	28	Trinity Aquifer
AQUIFER ID2		
AQUIFER ID3		
ELEVATION	1080	feet

ELEVATION MEASUREMENT METHOD	M	Interpolated From Topo Map
ALPHA CODE		
DATE DRILLED	02141973	
WELL TYPE	W	Withdrawal of Water
WELL DEPTH	547	feet
SOURCE OF DEPTH	D	Driller's Log
TYPE OF LIFT	S	Submersible Pump
TYPE OF POWER	E	Electric Motor
HORSEPOWER		
PRIMARY WATER USE	H	Domestic
SECONDARY WATER USE		
TERTIARY WATER USE		
WATER LEVEL AVAILABLE	M	Click here for water level data
WATER QUALITY AVAILABLE	Y	Click here for water quality data
WELL LOGS AVAILABLE		
OTHER DATA AVAILABLE	M	
DATE COLLECTED OR UPDATED	00001991	
REPORTING AGENCY	01	TWDB or Predecessor Agency
WELL SCHEDULE IN FILE		
CONTRUCTION METHOD		
COMPLETION	X	Open Hole
CASING MATERIAL	S	Steel
SCREEN MATERIAL		
GMA	9	
RWPA	K	
DISTRICTID		

Groundwater Database Disclaimer

The Groundwater Database (GWDB) of the Texas Water Development Board (TWDB) contains information about more than 123,500 water well, spring, and oil/gas test sites in Texas including associated water level and water quality data. Because data collection methods and data maintenance have varied and evolved over the years, the information in the GWDB has a range of accuracy that the

user needs to be aware of. See [Explanation of Groundwater Data](#) for information on the sources of information and level of accuracy in the document.

The TWDB is providing information via this Web site as a public service. Except where noted, all of the information provided is believed to be accurate and reliable; however, the Texas Water Development Board (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 this Web site 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 this Web site. TWDB specifically disclaims any and all liability for any claims or damages that may result from providing the Web site or the information it contains, including any Web sites maintained by third parties and linked to the TWDB Web site. TWDB makes no effort to verify independently, and does not exert editorial control over information on pages outside of the www.twdb.texas.gov domain and its sub-domains. It is the user's responsibility to take precautions to ensure that whatever is selected is free of such items as viruses, worms, Trojan horses and other items of a destructive nature.

For additional information or answers to questions concerning the TWDB GWDB contact [David Thorkildsen](#) at (512) 936-0871 or [Janie Hopkins](#) at (512) 936-0841.

[You can download Groundwater Database Reports in ASCII text files from this link.](#) The files are organized by Texas counties.

*This page is maintained by [WIID Staff](#)
Last updated on 1/27/2012 9:43:57 AM*

STATE OF TEXAS WELL REPORT for Tracking #53355

Owner:	JIM WEEMS	Owner Well #:	No Data
Address:	16327 FLINTROCK RD. AUSTIN , TX 78734	Grid #:	58-41-4
Well Location:	16327 FLINTROCK RD. AUSTIN , TX 78734	Latitude:	30° 19' 27" N
Well County:	Travis	Longitude:	097° 59' 15" W
Elevation:	846 ft.	GPS Brand Used:	GARMIN
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Date: Started: **1/4/2005**
Completed: **1/5/2005**

Diameter of Hole: Diameter: **10 in From Surface To 13 ft**
Diameter: **13 in From 13 ft To 790 ft**

Drilling Method: **Air Rotary**

Borehole Completion: Gravel Packed From: **690 ft to 790 ft**
Gravel Pack Size:

Annular Seal Data: 1st Interval: **From 0 ft to 100 ft with 12 CEMENT (#sacks and material)**
2nd Interval: **From 685 ft to 690 ft with 2 HOLE PLUG (#sacks and material)**
3rd Interval: **No Data**
Method Used: **PRESSURE CEMENTED**
Cemented By: **MARTIN LINGLE**
Distance to Septic Field or other Concentrated Contamination: **200 ft**
Distance to Property Line: **No Data**
Method of Verification: **STEEL TAPE**
Approved by Variance: **No Data**

Surface Completion: **Surface Sleeve Installed**

Water Level: Static level: **515 ft. below land surface on 1/6/2005**
Artesian flow: **No Data**

Packers: **PLASTIC 100**

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **Submersible**
Depth to pump bowl: **640 ft**

Well Tests: **Jetted \ Estimated**
Yield: **12 GPM with (No Data) ft drawdown after (No Data) hours**

Water Quality: Type of Water: **No Data**
Depth of Strata: **No Data**
Chemical Analysis Made: **No**
Did the driller knowingly penetrate any strata which contained undesirable 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 log(s) being returned for completion and resubmittal.

Company Information: **BEE CAVE DRILLING, INC.**
185 ANGELFIRE DR.
DRIPPING SPRINGS , TX 78620

Driller License Number: **54416**

Licensed Well Driller Signature: **MARTIN LINGLE**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **No Data**

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 (Tracking #53355) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 20 BROWN CLAY
20 - 540 BLUE LIMESTONE
540 - 580 GREY SANDSTONE
580 - 650 GREY LIMESTONE
650 - 720 RED SANDSTONE, BLACK ROCK W/
YELLOW CLAY
720 - 790 LIMESTONE W/ LAYERS OF SAND

CASING, BLANK PIPE & WELL SCREEN DATA

Dia.	New/Used	Type	Setting From/To
4.5	NEW	PLASTIC	0 - 725
4.5	NEW	SCREEN MFG.	725 - 785 .50
4.5	NEW	PLASTIC	785 - 790

STATE OF TEXAS WELL REPORT for Tracking #91305

Owner:	Fred Edlin	Owner Well #:	No Data
Address:	129 Royal Oaks Lane Lakeway , TX 78734	Grid #:	57-48-3
Well Location:	4313 Travis Vista Lakeway , TX 78734	Latitude:	30° 20' 01" N
Well County:	Travis	Longitude:	098° 00' 19" W
Elevation:	No Data	GPS Brand Used:	e-Trax
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Date: Started: **9/10/2005**
Completed: **9/11/2005**

Diameter of Hole: Diameter: **8 in From Surface To 20 ft**
Diameter: **6 in From 20 ft To 875 ft**

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data: 1st Interval: **From 0 ft to 20 ft with 4 of Portland (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **Slurry**
Cemented By: **Apex Drilling, Inc**
Distance to Septic Field or other Concentrated Contamination: **100 ft**
Distance to Property Line: **50 ft**
Method of Verification: **Landowner**
Approved by Variance: **No Data**

Surface Completion: **Surface Sleeve Installed**

Water Level: Static level: **No Data**
Artesian flow: **No Data**

Packers: **Burlap 700', 695', 20'**

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **No Data**

Well Tests: **Jetted \ Estimated**
Yield: **35 GPM with (No Data) ft drawdown after (No Data) hours**

Water Quality: Type of Water: **Trinity**
Depth of Strata: **700-875 ft.**
Chemical Analysis Made: **No**
Did the driller knowingly penetrate any strata which contained undesirable 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 log(s) being returned for completion and resubmittal.

Company Information: **Apex Drilling, Inc**
PO Box 867
Marble Falls , TX 78654

Driller License Number: **54516**

Licensed Well Driller Signature: **Michael G Becker P.G.**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **No Data**

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Please include the report's Tracking number (Tracking #91305) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft)	To (ft)	Description
000-032		Tan Limestone
032-320		Tan-Grey Limestone
320-440		Tan Limestone
440-620		Grey & Tan Limestone
620-675		Grey Limestone w/ Clay
675-700		Red Clay w/ Sand H2O
700-710		Gravel
710-755		Red Sand
755-785		Tan Limestone
785-840		Red Sandstone
840-860		White Limestone
860-875		Gravel

CASING, BLANK PIPE & WELL SCREEN DATA

Dia.	New/Used	Type	Setting From/To
4.5"	(5" OD)	New PVC	+2' to 775' SDR17
4.5"	(5" OD)	New PVC Slotted	775' to 795' .035
4.5"	(5" OD)	New PVC	795' to 855' SDR17
4.5"	(5" OD)	New PVC Slotted	855' to 875' .035

STATE OF TEXAS WELL REPORT for Tracking #385291

Owner:	Jim Stanislaus	Owner Well #:	No Data
Address:	16500 Flint Rock Rd. Austin , TX 78734	Grid #:	58-41-4
Well Location:	16500 Flint Rock Rd. Austin , TX 78734	Latitude:	30° 19' 57" N
Well County:	Travis	Longitude:	097° 59' 39" W
Elevation:	No Data	GPS Brand Used:	google
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Date: Started: **11/18/2014**
Completed: **11/18/2014**

Diameter of Hole: Diameter: **9 in From Surface To 50 ft**
Diameter: **6.25 in From 50 ft To 810 ft**

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall Other: cased**

Annular Seal Data: 1st Interval: **From 1 ft to 50 ft with 6cmt 2gel (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **hand poured**
Cemented By: **ADC**
Distance to Septic Field or other Concentrated Contamination: **150+ ft**
Distance to Property Line: **60+ ft**
Method of Verification: **owner**
Approved by Variance: **No Data**

Surface Completion: **Surface Sleeve Installed**

Water Level: Static level: **564 ft. below land surface on 11/18/2014**
Artesian flow: **No Data**

Packers: **burlap,plastic,rubber @ 710,690,630,50**

Plugging Info: Casing left in well: Cement/Bentonite left in well:
From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used
n/a

Type Of Pump: **Submersible**
Depth to pump bowl: **0 ft**

Well Tests: **Jettied \ Estimated**
Yield: **15-20 GPM with (No Data) ft drawdown after (No Data) hours**

Water Quality: Type of Water: **Trinity**
Depth of Strata: **710-810 ft.**
Chemical Analysis Made: **No**
Did the driller knowingly penetrate any strata which contained undesirable 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 log(s) being returned for completion and resubmittal.

Company Information: **Associated Drilling Inc.**
PO Box 673
Dripping Springs , TX 78620

Driller License Number: **4064**

Licensed Well Driller Signature: **James Benoit**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **Glass Well Service**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Please include the report's Tracking number (Tracking #**385291**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

CASING, BLANK PIPE & WELL SCREEN DATA

From (ft) To (ft) Description

0- 2 top bedrock

2-25 white caliche

25-540 gray lime

540-565 tan white limestone

565-590 gray limestone

590-635 gray lime and shale

635-705 gray and white limestone

705-770 red sandstone

770-790 multi-colored limestones (gravel)

790-810 yellow limestone

Dia. New/Used Type Setting From/To

5 od new sdr17 pvc -3 to 710

5 od new sdr17 pvc (.032) screen 710 to 790

5 od new sdr17 pvc 790 to 810

STATE OF TEXAS WELL REPORT for Tracking #373653

Owner: Ray and Mary Hennig	Owner Well #: No Data
Address: 4411 Hennig Rd. Austin , TX 78738	Grid #: 58-41-4
Well Location: 4411 Hennig Rd. Austin , TX 78738	Latitude: 30° 19' 40" N
Well County: Travis	Longitude: 097° 59' 33" W
Elevation: No Data	GPS Brand Used: google
<hr/>	
Type of Work: New Well	Proposed Use: Irrigation

Drilling Date: Started: **7/22/2014**
Completed: **7/22/2014**

Diameter of Hole: Diameter: **9 in From Surface To 50 ft**
Diameter: **6.25 in From 50 ft To 930 ft**

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall Other: cased**

Annular Seal Data: 1st Interval: **From 1 ft to 50 ft with 5cmt 3gel (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **hand poured**
Cemented By: **ADC**
Distance to Septic Field or other Concentrated Contamination: **150+ ft**
Distance to Property Line: **55 ft**
Method of Verification: **tape**
Approved by Variance: **No Data**

Surface Completion: **Surface Sleeve Installed**

Water Level: Static level: **662 ft. below land surface on 7/22/2014**
Artesian flow: **No Data**

Packers: **burlap,plastic,rubber @ 710,690,670,50**

Plugging Info: Casing left in well: Cement/Bentonite left in well:
From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used
n/a

Type Of Pump: **Submersible**
Depth to pump bowl: **810 ft**

Well Tests: **Jetted \ Estimated**
Yield: **10-15 GPM with (No Data) ft drawdown after (No Data) hours**

Water Quality: Type of Water: **trinity**
Depth of Strata: **705-930 ft.**
Chemical Analysis Made: **No**
Did the driller knowingly penetrate any strata which contained undesirable 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 log(s) being returned for completion and resubmittal.

Company Information: **Associated Drilling Inc**
PO Box 673
Dripping Springs , TX 78620

Driller License Number: **4064**

Licensed Well Driller Signature: **James Benoit**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Please include the report's Tracking number (Tracking #373653) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description

0-15 white chalk
15-545 gray lime
545-590 tan lime
590-615 gray lime
615-645 gray shale
645-705 gray and white limestone
705-770 red sandstone
770-790 tan and white limestone
790-850 red sandstone
850-860 multi-colored limestones
860-900 red sandstone
900-930 yellow limestone

CASING, BLANK PIPE & WELL SCREEN DATA

Dia.	New/Used	Type	Setting From/To
5 od	new	sdr17 pvc	-3 to 790
5 od	new	sdr17 pvc (.032)	screen 790 to 890
5 od	new	sdr17 pvc	890 to 930

STATE OF TEXAS WELL REPORT for Tracking #316585

Owner:	Cassie & Creed Ford	Owner Well #:	No Data
Address:	325 Ranch Rd. 620 S #104 Lakeway , TX 78734	Grid #:	58-41-4
Well Location:	16490 Flint Rock Rd. Lakeway , TX 78734	Latitude:	30° 19' 59" N
Well County:	Travis	Longitude:	097° 59' 37" W
Elevation:	No Data	GPS Brand Used:	Not Given
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Date: Started: **12/20/2012**
Completed: **12/29/2012**

Diameter of Hole: Diameter: **9 in From Surface To 20 ft**
Diameter: **8 in From 20 ft To 815 ft**

Drilling Method: **Air Hammer**

Borehole Completion: **Straight Wall**

Annular Seal Data: 1st Interval: **From 0 ft to 20 ft with 6 (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **Hand Poured**
Cemented By: **Tom Arnold Drilling**
Distance to Septic Field or other Concentrated Contamination: **180 ft**
Distance to Property Line: **No Data**
Method of Verification: **Tape Measure**
Approved by Variance: **No Data**

Surface Completion: **Pitless Adapter Used**

Water Level: Static level: **487 ft. below land surface on 12/21/2012**
Artesian flow: **No Data**

Packers: **Shale Trap 750', 709', 705', 685', 20'**

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **Submersible**
Depth to pump bowl: **600 ft**

Well Tests: **Estimated**
Yield: **20 GPM with (No Data) ft drawdown after (No Data) hours**

Water Quality: Type of Water: **No Data**
Depth of Strata: **No Data**
Chemical Analysis Made: **No**
Did the driller knowingly penetrate any strata which contained undesirable 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 log(s) being returned for completion and resubmittal.

Company Information: **Tom Arnold Drilling
2750 S Q. W. Grimes Blvd.
Roundrock , TX 78664**

Driller License Number: **2096**

Licensed Well Driller Signature: **Tommy D. Arnold**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **See note in late report file.
^EAD**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Please include the report's Tracking number (Tracking #316585) on your written request.

**Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880**

DESC. & COLOR OF FORMATION MATERIAL

CASING, BLANK PIPE & WELL SCREEN DATA

From (ft) To (ft) Description	Dia. New/Used Type	Setting From/To
0-1 fill	4 1/2" N Plastic 0'-810'	
1-11 yellow limestone	Perf. 709'-730'	
11-34 blue limestone	Perf. 750'-770'	
34-41 brown limestone		
41-230 gay limestone		
230-245 brown limestone		
245-412 gray limestone		
412-430 gray limestone & shale		
430-511 gray limestone		
511-560 red & blue shale		
560-580 red sandstone		
580-640 red shale		
640-709 red sandstone		
709-730 red cemented gravel & sand		
730-750 red sandstone & shale		
750-770 cemented gravel & sand		
770-790 gray liemstone & shale		
790-815 blue shale		

STATE OF TEXAS WELL REPORT for Tracking #305495

Owner:	BURK EDWARDS	Owner Well #:	No Data
Address:	3001 RANCH RD. 620 N., STE.321 AUSTIN , TX 78738	Grid #:	58-41-4
Well Location:	4023 PAWNEE PASS AUSTIN , TX 78738	Latitude:	30° 19' 58" N
Well County:	Travis	Longitude:	097° 59' 21" W
Elevation:	No Data	GPS Brand Used:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Date: Started: **10/10/2012**
Completed: **10/10/2012**

Diameter of Hole: Diameter: **9 in From Surface To 50 ft**
Diameter: **6.5 in From 50 ft To 760 ft**

Drilling Method: **Air Rotary**

Borehole Completion: Other: **CASED**

Annular Seal Data: 1st Interval: **From 0 ft to 50 ft with 8 CEMENT (#sacks and material)**
2nd Interval: **From 0 ft to 50 ft with 4 VOLCLAY (#sacks and material)**
3rd Interval: **No Data**
Method Used: **SLURRY**
Cemented By: **CENTEX PUMP & SUPPLY, INC.**
Distance to Septic Field or other Concentrated Contamination: **100+ ft**
Distance to Property Line: **50+ ft**
Method of Verification: **OWNER**
Approved by Variance: **No Data**

Surface Completion: **Surface Sleeve Installed**

Water Level: Static level: **522.6 ft. below land surface on 10/10/2012**
Artesian flow: **No Data**

Packers: **6 BURLAP,PVC 50',500',520',540',620',700**

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **Submersible**
Depth to pump bowl: **(No Data) ft**

Well Tests: **Jetted**
Yield: **40 GPM with (No Data) ft drawdown after (No Data) hours**

Water Quality: Type of Water: **TRINITY**
Depth of Strata: **80 ft.**
Chemical Analysis Made: **No**
Did the driller knowingly penetrate any strata which contained undesirable 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 log(s) being returned for completion and resubmittal.

Company Information: **CENTEX PUMP & SUPPLY, INC.**
2520 HWY. 290 WEST
DRIPPING SPRINGS , TX 78620

Driller License Number: **4227**

Licensed Well Driller Signature: **AARON GLASS**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **No Data**

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 (Tracking #305495) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft)	To (ft)	Description
0-1		TOP SOIL
1-14		CALICHE
14-18		BLUE/GRAY LIMESTONE
18-260		GRAY LIMESTONE
260-370		GRAY/TAN LIMESTONE
370-460		TAN/GRAY LIMESTONE
460-490		TAN LIMESTONE
490-530		GRAY LIMESTONE W/HAMMETT CLAY
530-540		HAMMETT & RED CLAY
540-560		GRAY LIMESTONE
560-570		SANDSTONE H2O
570-630		RED/TAN SANDSTONE
630-730		RED/TAN LIMESTONE STRIPS
730-760		RED SAND AND GRAVEL

CASING, BLANK PIPE & WELL SCREEN DATA

Dia.	New/Used	Type	Setting From/To
5"	OD N	PVC SDR17	+3 TO 760
5"	OD N	PVC SDR17	SLOT 600 TO 760 .032

STATE OF TEXAS WELL REPORT for Tracking #302100

Owner:	Mike Meyer	Owner Well #:	No Data
Address:	402 Aria Dr Austin , TX 78738	Grid #:	57-48-3
Well Location:	17204 Flint Rock Rd Austin , TX 78738	Latitude:	30° 20' 00" N
Well County:	Travis	Longitude:	098° 00' 19" W
Elevation:	No Data	GPS Brand Used:	e-Trax
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Date: Started: **9/24/2012**
Completed: **9/25/2012**

Diameter of Hole: Diameter: **8 in From Surface To 100 ft**
Diameter: **6.5 in From 100 ft To 875 ft**

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data: 1st Interval: **From 0 ft to 100 ft with 9-Bens 1-Port (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **Pressure**
Cemented By: **Apex Drilling, Inc.**
Distance to Septic Field or other Concentrated Contamination: **50+ ft**
Distance to Property Line: **20 ft**
Method of Verification: **Landowner**
Approved by Variance: **No Data**

Surface Completion: **Surface Sleeve Installed**

Water Level: Static level: **No Data**
Artesian flow: **No Data**

Packers: **Brulap/Neoprene 690', 680', 660', 400', 105', 100'**

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **No Data**

Well Tests: **Jetted**
Yield: **15 GPM with (No Data) ft drawdown after (No Data) hours**

Water Quality: Type of Water: **Trinity**
Depth of Strata: **700-875 ft.**
Chemical Analysis Made: **No**
Did the driller knowingly penetrate any strata which contained undesirable 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 log(s) being returned for completion and resubmittal.

Company Information: **Apex Drilling, Inc.**
P.O. Box 867
Marble Falls , TX 78654

Driller License Number: **54516**

Licensed Well Driller Signature: **Michael G. Becker**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft)	To (ft)	Description
000-001		Topsoil
001-033		Tan Limestone
033-421		Gray/Tan Limestone
421-435		Tan Limestone
432-557		Gray/Tan Limestone
557-575		Tan/White Limestone
575-615		Gray/Tan Limestone
615-660		Gray Clay
660-700		Red Sandstone
700-705		Gravel
705-747		Red Sandstone
747-756		Gravel
756-860		Red Sandstone **H2O
860-875		Gravel **H2O

CASING, BLANK PIPE & WELL SCREEN DATA

Dia.	New/Used	Type	Setting From/To
4.5"	(5" OD)	New PVC	+2' to 795' SDR17
4.5"	(5" OD)	New Slotted PVC	795' to 815' .035
4.5"	(5" OD)	New PVC	815' to 835' SDR17
4.5"	(5" OD)	New Slotted PVC	835' to 855' .035
4.5"	(5" OD)	New PVC	855' to 875' SDR17

STATE OF TEXAS WELL REPORT for Tracking #117485

Owner:	Mollison Homes c/o Mike Mollison	Owner Well #:	No Data
Address:	17115 Majestic Ridge Lakeway , TX 78738	Grid #:	57-48-6
Well Location:	17012 Flint Rock RD Lakeway , TX 78738	Latitude:	30° 19' 59" N
Well County:	Travis	Longitude:	098° 00' 14" W
Elevation:	No Data	GPS Brand Used:	e-Trax
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Date: Started: **4/25/2007**
Completed: **4/25/2007**

Diameter of Hole: Diameter: **8 in From Surface To 20 ft**
Diameter: **6.5 in From 20 ft To 845 ft**

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data: 1st Interval: **From 0 ft to 20 ft with 4 of Portland (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **Slurry**
Cemented By: **Apex Drilling, Inc**
Distance to Septic Field or other Concentrated Contamination: **100 ft**
Distance to Property Line: **50 ft**
Method of Verification: **Landowner**
Approved by Variance: **No Data**

Surface Completion: **Surface Sleeve Installed**

Water Level: Static level: **No Data**
Artesian flow: **No Data**

Packers: **Neoprene 635', 630', 625', 20**

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **No Data**

Well Tests: **Estimated**
Yield: **50 GPM with (No Data) ft drawdown after (No Data) hours**

Water Quality: Type of Water: **Trinity**
Depth of Strata: **637-835 ft.**
Chemical Analysis Made: **No**
Did the driller knowingly penetrate any strata which contained undesirable 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 log(s) being returned for completion and resubmittal.

Company Information: **Apex Drilling, Inc**
PO Box 867
Marble Falls , TX 78654

Driller License Number: **54989**

Licensed Well Driller Signature: **Andrew J Johnson**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Please include the report's Tracking number (Tracking #117485) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

CASING, BLANK PIPE & WELL SCREEN DATA

From (ft) To (ft) Description	Dia. New/Used Type Setting From/To
000-030 Caliche	4.5" (5" OD) New PVC +2' to 715' SDR17
030-090 Blue Limestone	4.5" (5" OD) New Slotted PVC 715' to 735' .035
090-210 Grey Limestone	4.5" (5" OD) New PVC 735' to 755' SDR17
210-410 Grey-Tan Limestone	4.5" (5" OD) New Slotted PVC 755' to 775' .035
410-450 Tan Limestone	4.5" (5" OD) New PVC 775' to 795' SDR17
450-525 Grey Limestone	4.5" (5" OD) New Slotted PVC 795' to 835' .035
525-560 Tan Limestone	4.5" (5" OD) New PVC 835' to 845' SDR17
560-580 Grey Limestone / Clay	
580-605 Clay	
605-637 Grey Sandy Limestone	
637-645 Red Sandstone	
645-660 Sand	
660-704 Red Sandstone	
704-715 White Limestone	
715-740 Sand	
740-782 Tan Limestone	
782-835 Sand / Gravel	
835-845 Tan Clay	

STATE OF TEXAS WELL REPORT for Tracking #92326

Owner:	Andrew Heller	Owner Well #:	No Data
Address:	4501 Henning Dr Austin , TX 78738	Grid #:	58-41-4
Well Location:	4501 Henning Dr Austin , TX 78738	Latitude:	30° 19' 39" N
Well County:	Travis	Longitude:	097° 59' 34" W
Elevation:	No Data	GPS Brand Used:	e-Trax
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Date: Started: **8/23/2005**
Completed: **8/23/2005**

Diameter of Hole: Diameter: **8 in From Surface To 20 ft**
Diameter: **6 in From 20 ft To 880 ft**

Drilling Method: **Air Rotary**

Borehole Completion: **Straight Wall**

Annular Seal Data: 1st Interval: **From 0 ft to 20 ft with 4 of Portland (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **Slurry**
Cemented By: **Apex Drilling, Inc**
Distance to Septic Field or other Concentrated Contamination: **100 ft**
Distance to Property Line: **50 ft**
Method of Verification: **Landowner**
Approved by Variance: **No Data**

Surface Completion: **Surface Sleeve Installed**

Water Level: Static level: **No Data**
Artesian flow: **No Data**

Packers: **Burlap 700', 695', 20'**

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **No Data**

Well Tests: **Jetted \ Estimated**
Yield: **30 GPM with (No Data) ft drawdown after (No Data) hours**

Water Quality: Type of Water: **Trinity**
Depth of Strata: **705-860 ft.**
Chemical Analysis Made: **No**
Did the driller knowingly penetrate any strata which contained undesirable 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 log(s) being returned for completion and resubmittal.

Company Information: **Apex Drilling, Inc**
PO Box 867
Marble Falls , TX 78654

Driller License Number: **54516**

Licensed Well Driller Signature: **Michael G Becker P.G.**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft)	To (ft)	Description
000-028		Caliche
028-080		Blue Limestone
080-180		Grey-Tan Limestone
180-350		Grey-Limestone w/ Clay
350-530		Tan-Grey Limestone
530-590		Tan Limestone
590-640		White Limestone
640-655		Grey Limestone
655-690		Clay
690-705		Grey Sandstone
705-770		Red Sand H2O
770-810		Tan Limestone
810-845		Red Sand H2O
845-860		Gravel
860-880		Tan-Blue Clay

CASING, BLANK PIPE & WELL SCREEN DATA

Dia.	New/Used	Type	Setting From/To
4.5"	(5" OD)	New PVC	+2' to 780' SDR17
4.5"	(5" OD)	New Slotted PVC	780' to 860' .035
4.5"	(5" OD)	New PVC	860' to 880' SDR17

Public GIS Viewer Legend








































Well Number



Well Locations

	Permitted Location		Water Supply from Oil / Gas
	Dry Hole		Observation
	Oil		Observation from Oil
	Gas		Observation from Gas
	Oil / Gas		Observation from Oil / Gas
	Plugged Oil		Storage
	Plugged Gas		Service
	Canceled / Abandoned Location		Service from Oil
	Plugged Oil / Gas		Service from Gas
	Injection / Disposal		Service from Oil / Gas
	Core Test		Storage from Oil / Gas
	Sulfur Test		Injection / Disposal from Storage
	Storage from Oil		Injection / Disposal from Storage / Oil
	Storage from Gas		Injection / Disposal from Storage / Gas
	Shut-In Oil		Injection / Disposal from Storage / Oil / Gas
	Shut-In Gas		Observation from Storage
	Injection / Disposal from Oil		Observation from Storage / Oil
	Injection / Disposal from Gas		Observation from Storage / Gas
	Injection / Disposal from Oil / Gas		Observation from Storage / Oil / Gas
	Geothermal		Service from Storage
	Brine Mining		Service from Storage / Oil
	Water Supply		Service from Storage / Gas
	Water Supply from Oil		Service from Storage / Oil / Gas
	Water Supply from Gas		Plugged Storage
			Plugged Storage / Oil

Public GIS Viewer Legend

	Plugged Storage / Gas		Storage / Brine Mining / Gas
	Plugged Storage Oil / Gas		Storage / Brine Mining / Oil / Gas
	Brine Mining		Injection / Disposal from Storage / Brine Mining
	Brine Mining / Oil		Injection / Disposal from Storage / Brine Mining / Oil
	Brine Mining / Gas		Injection / Disposal from Storage / Brine Mining / Gas
	Brine Mining / Oil / Gas		Injection / Disposal from Storage / Brine Mining / Oil / Gas
	Injection / Disposal from Brine Mining		Injection / Disposal from Storage / Brine Mining / Oil / Gas
	Injection / Disposal from Brine Mining / Oil		Observation from Storage / Brine Mining
	Injection / Disposal from Brine Mining / Gas		Observation from Storage / Brine Mining / Oil
	Injection / Disposal from Brine Mining / Oil / Gas		Observation from Storage / Brine Mining / Gas
	Observation from Brine Mining		Observation from Storage / Brine Mining / Oil / Gas
	Observation from Brine Mining / Oil		Plugged Storage / Brine Mining
	Observation from Brine Mining / Gas		Plugged Storage / Brine Mining / Oil
	Observation from Brine Mining / Oil / Gas		Plugged Storage / Brine Mining / Gas
	Service from Brine Mining		Plugged Storage / Brine Mining / Oil / Gas
	Service from Brine Mining / Oil		
	Service from Brine Mining / Gas		
	Service from Brine Mining / Oil / Gas		
	Plugged Brine Mining		
	Plugged Brine Mining / Oil		
	Plugged Brine Mining / Gas		
	Plugged Brine Mining / Oil / Gas		
	Storage / Brine Mining		
	Storage / Brine Mining / Oil		

Orphan Wells



Commercial Disposal



Injection/Disposal



HCTS Deeper than 15,000 ft.



Public GIS Viewer Legend

High Cost Tight Sands



EOR H13 Oil Wells



Well Logs



Horiz/Dir Surface Locations



Horizontal Well



Directional Well

Horizontal/Directional Lines



LPGAS Sites



QPipelines



Pipelines



Pipelines



Bay Tracts



Offshore Areas



Offshore Tracts



Water Lines



Subdivisions



Railroads



Surveys



Quads



Alert Areas



Water



City Limits



Counties



Operator Cleanup Program Sites



Active



Closed

RRC District Offices



Oil and Gas Districts

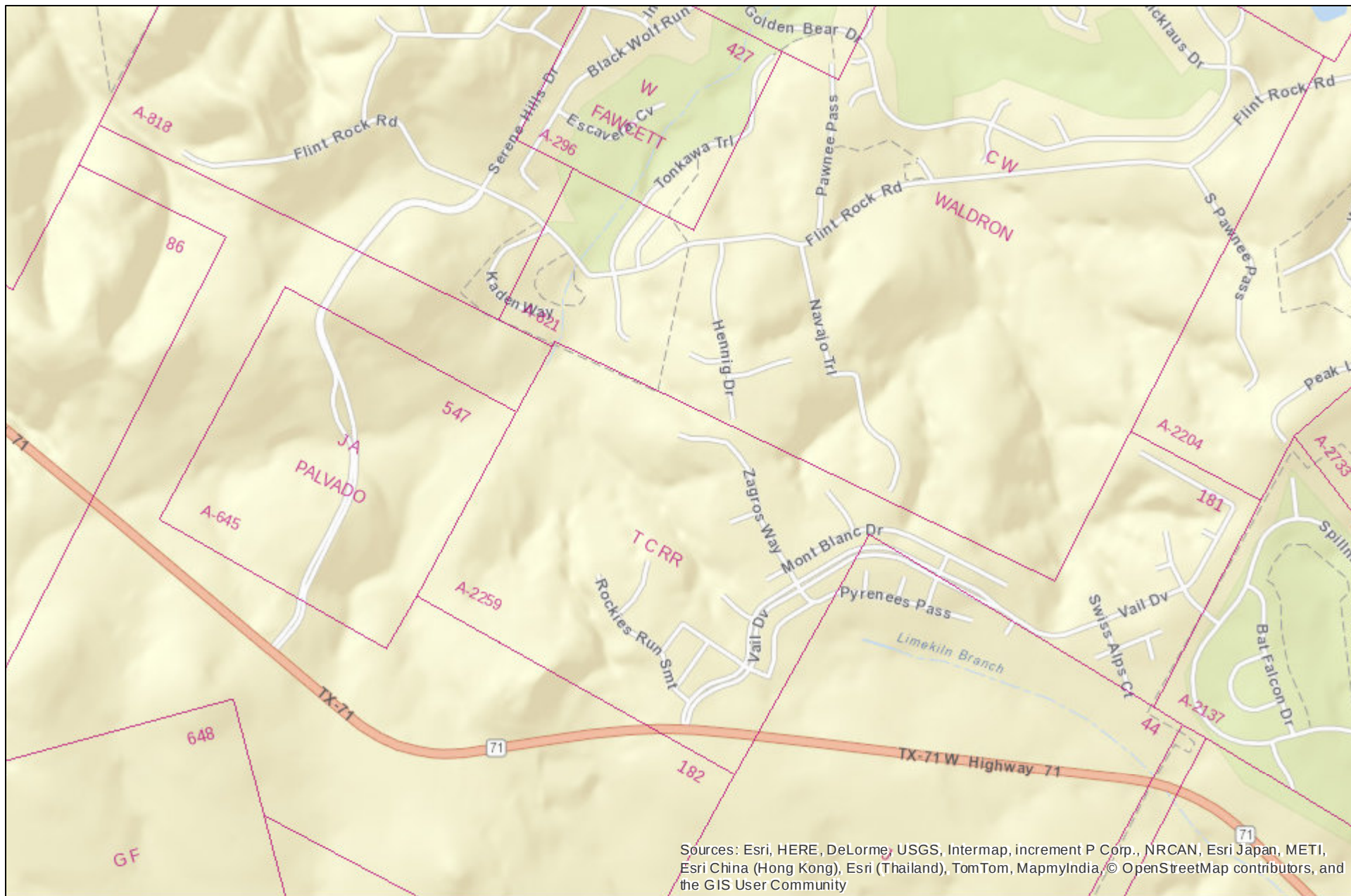


AED Districts



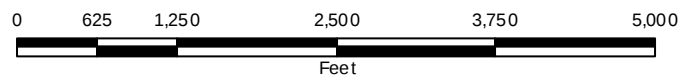
Pipeline Safety Regions





February 9, 2015

1 inch = 1,505 feet



NOTICE/DISCLAIMER: Mapping data sets are provided for informational purposes only. These data sets are continuously being updated and refined. Users are responsible for checking the accuracy, completeness, currency, and/or suitability of these data sets themselves. This is not a survey grade product and should not be used to define or establish survey boundaries.



WEST TRAVIS PUA GEOLOGIC EXHIBIT

Source: UT Bureau of Economic Geology, Geologic Atlas of Texas, Austin Sheet, 1974

Attachment U
Soil Evaluation

WEST TRAVIS COUNTY PUA
SITE SOILS INVESTIGATION REPORT
AND MANAGEMENT PLAN
TLAP Major Amendment
WQ 0013594001

Prepared For:
Murfee Engineering
1101 S Capital of TX Hwy, Bldg D
Austin, TX 78746

Prepared By:

Erin Banks, P.E.
WWD Engineering
9217 Hwy 290 West, Suite 110
Austin, TX 78736

TABLE OF CONTENTS

1	Introduction
1	Management Plan
2	Geology
2	USDA-Soil Survey
2	Climate
2	Vegetation
2	Soil Descriptions
5	On-site Soils Descriptions

Introduction

This project is located on the north side of Highway 71 between Vail Divide (to the east) and Serene Hills (to the west) in Travis County, Texas. This site will be used to drip irrigate effluent that is produced and treated elsewhere in the West Travis Public Utility Agency (PUA) service area under a major amendment to the existing Texas Land Application Permit (TLAP).

In environmentally sensitive areas, such as the Texas Hill Country, wastewater treatment systems can surface irrigate (spray systems) or use drip irrigation technology. Topographically, the typical Hill Country landscapes generally prohibit the use of surface spray systems for treated effluent application. Characteristics of major concern are slope, rock outcrop, potential erosion hazards, and shallow soils to ensure that the system will allow for even distribution.

Due to site characteristics, such as shallow soils, generally believed to be non-arable, and sloping topography, it is being proposed to utilize sub surface drip irrigation for the ultimate treated effluent disposal system for the West Travis PUA site. The treated effluent irrigation system will utilize a drip irrigation management system to allow for accurate control of the proposed surface drip treated effluent irrigation system. The surface drip irrigation system will utilize drip tubing that is embedded with pressure compensating drip emitters to ensure accurate and uniform dosing of the irrigation sites. The site will retain some of the hardwood and specimen ashe juniper trees that are present now. The tubing will be buried 6" – 8" below the surface of the ground.

A site investigation was performed to obtain information that would assist in the design of the drip irrigation system. This report will summarize these results and will be utilized to assist in the development of the drip fields to be used for treated effluent application.

Management Plan

The subsurface area drip disposal system (SADDS) will utilize Bermuda grass and Winter Rye for establishing a cover crop. Herbaceous vegetation will be used to vegetate the areas where soils will be imported and areas where clearing will occur.

In developing the irrigation areas, upslope surface drainage will be diverted to prevent run-on onto the treated effluent application areas. Areas where drainage appears to be concentrated and active should be buffered from application of treated effluent.

Where soils are not sufficient, a suitable material will need to be imported to ensure that there is at least one foot of rootable material beneath the dripper lines. This will ensure that there is sufficient rooting

depth to allow for the growth of herbaceous vegetation that will uptake the treated effluent.

All areas will be seeded with high performance turf grass vegetation and will include warm season and cool season vegetation. This will help ensure that there is a viable cover crop growing at all times to uptake the water and nutrients associated with the treated effluent. Most species can and will utilize Nitrogen (N) levels much greater than 100-150 lbs of N/acre/yr. These areas will be mowed to ensure that the vegetation continues to exhibit vigorous growth habits, to maximize the uptake potentials and to ensure that a standing crop does not interfere with the establishment of the following seasons vegetation emergence.

Site Details

Geology

According to the Geologic Atlas of Texas, Austin Sheet, this site is located on the Fredericksburg Group (Kfr) of the Edwards Limestone, undivided between the Edwards Limestone, the Comanche Peak Limestone, the Keys Valley Marl, the Cedar Park Limestone, the Bee Cave Marl and the Walnut Formation. This formation is described as consisting of limestone, dolomite, chert, and marl. The limestone is nodular, aphanitic, marly, gray, yellow, white, and pink. The dolomite is described as fine grained and gray. The chert is present in thin layers and nodules. The marl is locally gypsiferous and gray. The Edwards Limestone, Group consisting of limestone, dolomite and chert can range from 60-350 feet thick. The Comanche Peak Limestone is approximately 80 feet thick. The Keys Valley Marl, is soft and white and can be as much as 50 feet thick. The Cedar Park Limestone is similar to Comanche Peak Limestone (fine to very fine grained, fairly hard, nodular, light gray, and burrowed). The Bee Cave Marl is soft, white *Exogyra texana* about 25-40 feet thick¹.

USDA – Soil Survey

A soils map from the Natural Resource Conservation Service is included in this submittal. The soil survey indicates that the on site soils consist of Brackett Rock Outcrop Complex, 1 to 12 percent slopes. These soils consist typically of gravelly clay loam and clay loam underlain by bedrock (at an approximate depth of 48 inches). This is fairly consistent with the results of the field investigation, although the field results indicate that several inches of silty clay and silty clay loam with little gravel overly the gravelly clay loam/clay loam.

Climate

According to the USDA-SCS Soil Survey for Travis County, Texas, the climate in Travis County is humid subtropical and is characterized by hot summers and relatively mild winters. Temperature and rainfall are the climatic factors that have

¹ Bureau of Economic Geology, 1974, rev'd 1995, Austin Sheet, Geologic Atlas of Texas, University of Texas

the greatest influence on the formation of soils in this area. The pattern of rainfall consists of interspersed wet and dry periods.

Vegetation

Some of the existing vegetation, particularly small to medium ashe juniper and lesser specimen hardwoods will be removed in the disposal areas to allow for more vibrant ground cover of grasses and turf. Vegetation (grasses) within the areas to be utilized for the SADDs will be planted to improved turf grasses. These areas will be mowed and managed to ensure that the vegetation is actively growing at all times.

Soils

According to the Soil Survey, soils of the treated effluent application site consist of clay of the Brackett-Rock outcrop complex, 1 to 12 Percent Slopes undulating (mapped as BiD).

Travis County, Texas

BID—Brackett-Rock outcrop complex, 1 to 12 percent slopes

Map Unit Setting

National map unit symbol: f52k

Elevation: 300 to 8,700 feet

Mean annual precipitation: 10 to 35 inches

Mean annual air temperature: 52 to 73 degrees F

Frost-free period: 120 to 320 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 map unit.

Description of Brackett

Setting

Landform: Ridges

Landform position (two-dimensional):

Shoulder Landform position (three-

dimensional): Side slope Down-slope

shape: Convex

Across-slope shape: Convex

Parent material: Residuum weathered from limestone

Typical profile

H1 - 0 to 6 inches: gravelly clay loam

H2 - 6 to 18 inches: clay loam

H3 - 18 to 48 inches: bedrock

Properties and qualities

Slope: 1 to 12 percent

Depth to restrictive feature: 6 to 20 inches to paralithic bedrock

Natural drainage class: Well drained

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 in profile: 90 percent

Gypsum, maximum in profile: 5 percent

Available water storage in profile: 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: Adobe 29-35" pz (R081CY355TX)

Description of Rock Outcrop

Setting

Landform: Ridges

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Limestone

Typical profile

H1 - 0 to 80 inches: bedrock

Properties and qualities

Slope: 3 to 12 percent

Depth to restrictive feature: 0 to 2 inches to lithic bedrock

Capacity of the most limiting layer to transmit water (Ksat):

Moderately low to very high (0.06 to 19.98 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8s *Hydrologic
Soil Group:* D

Minor Components

Unnamed

Percent of map unit: 12 percent

Test Hole Selection

Erin Banks, P.E., selected 15 representative sites within the proposed effluent irrigation area. This equated to approximately one profile hole per five acres. The profile hole locations were selected based upon a review of topography, aerial photographs, vegetative cover, and soils maps. Soil samples were obtained at each discrete soil series as well as at intervals from 0-6", 6-18" and 18-30" in each hole. A composite sample from each of the sampling depths, 0-6", 6-18" and 18-30" was created and sent to the lab for analysis. Each discrete sample type was also sent to the lab for analysis. We feel the number and selection of the test holes was adequate to give representation of the proposed treated effluent application areas.

A description of the soils encountered in each of the profile holes, as well as a photo(s) is presented below.

Profile Hole #1

Vegetation Characteristics

The woody vegetation of this site consisted of 60% Large Oak, Juniper and Small Oak with 60% canopy cover. The litter layer coverage was estimated at 0%. There was 20% herbaceous plant growth in the immediate area of this hole. Slope of this area was 2-4%. Surface Fragments were at 40%.

Soil Characteristics

Total soil depth was 30 inches where excavation was terminated. The profile consisted of three horizons. The primary rooting depth in the hole was approximately 6 inches.

Depth of the 1st horizon was 6 inches. The 1st horizon consisted of a sandy loam material. The 1st horizon consisted of a material that was sandy loam in texture, coarse in structure and brown in color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of 0% coarse fragments.

Depth of the 2nd horizon was 12 inches. The 2nd horizon consisted of a caliche material. The 2nd horizon consisted of a material that was clay/limestone residual material in texture, blocky in structure and tan in color. There was no mottling evident in the 2nd horizon. The 2nd horizon consisted of 20% coarse fragments.

Depth of the 3rd horizon was 30 inches. The 3rd horizon consisted of a caliche/clay material. The 3rd horizon consisted of a material that was coarse in texture and structure. The material in the 3rd horizon was light brown in color. There was no mottling evident in the 3rd horizon. The 3rd horizon consisted of <15% coarse fragments.

No restrictive horizon was reached at 30 inches. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



Profile Hole #2

Vegetation Characteristics

The woody vegetation of this site consisted of 50% Large Oak, Juniper and Small Oak with 50% canopy cover. The litter layer coverage was estimated at 0%. There was 50% herbaceous plant growth in the immediate area of this hole. Slope of this area was 3-6%. Surface Fragments were at 20%.

Soil Characteristics

Total soil depth was 30 inches where excavation was terminated. The profile consisted of three horizons. The primary rooting depth in the hole was approximately 8 inches.

Depth of the 1st horizon was 8 inches. The 1st horizon consisted of a silty clay material. The 1st horizon consisted of a material that was coarse silty clay in texture, coarse in structure and red brown in color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of less than 10% coarse fragments.

Depth of the 2nd horizon was 18 inches. The 2nd horizon consisted of a silty loam material. The 2nd horizon consisted of a material that was blocky in texture and structure. The material in the 2nd horizon was red brown in color. There was no mottling evident in the 2nd horizon. The 2nd horizon consisted of 20% coarse fragments.

Depth of the 3rd horizon was 30 inches. The 3rd horizon consisted of a caliche material. The 3rd horizon consisted of a material that was residual limestone blocky in texture and structure. The material in the 3rd horizon was tan in color. There was no mottling evident in the 3rd horizon. The 3rd horizon consisted of 20% coarse fragments.

No restrictive horizon was reached at 30 inches. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



Profile Hole #3

Vegetation Characteristics

The woody vegetation of this site consisted of 30% Large Oak, Juniper and Small Oak with 40% canopy cover. The litter layer coverage was estimated at 0%. There was 70% herbaceous plant growth in the immediate area of this hole. Slope of this area was 2-6%. Surface Fragments were at 50%.

Soil Characteristics

Total soil depth was 22 inches where backhoe refusal was encountered. The profile consisted of two horizons. The primary rooting depth in the hole was approximately 2 inches.

Depth of the 1st horizon was 20 inches. The 1st horizon consisted of a silty clay material. The 1st horizon consisted of a material that was silty clay in texture, blocky in structure and brown in color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of 30% coarse fragments.

Depth of the 2nd horizon was 22 inches. The 2nd horizon consisted of a clay material. The 2nd horizon consisted of a material that was blocky in texture and structure. The material in the 2nd horizon was red brown in color. There was no mottling evident in the 2nd horizon. The 2nd horizon consisted of 40% coarse fragments.

A restrictive horizon was reached at 22 inches. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



Profile Hole #4

Vegetation Characteristics

The woody vegetation of this site consisted of 30% Large Oak, Juniper and Small Oak with 30% canopy cover. The litter layer coverage was estimated at 0%. There was 40% herbaceous plant growth in the immediate area of this hole. Slope of this area was 2-7%. Surface Fragments were at 30%.

Soil Characteristics

Total soil depth was 26 inches where backhoe refusal was encountered. The profile consisted of two horizons. The primary rooting depth in the hole was approximately 4 inches.

Depth of the 1st horizon was 6 inches. The material in the 1st horizon was silty clay, coarse material and tan in color. There was no mottling evident in the 1st horizon.

Depth of the 2nd horizon was 26 inches. The material in the 2nd horizon residual limestone, blocky in structure and was tan/grey in color. There was no mottling evident in the 2nd horizon.

A restrictive horizon was reached at 26 inches. In this hole, one potential water bearing zone were encountered. In this hole one active water bearing zone was encountered.



Profile Hole #5

Vegetation Characteristics

The woody vegetation of this site consisted of 50% Large Oak, Juniper and Small Oak with 50% canopy cover. The litter layer coverage was estimated at 0%. There was 50% herbaceous plant growth in the immediate area of this hole. Slope of this area was 2-4%. Surface Fragments were at 20%.

Soil Characteristics

Total soil depth was 30 inches where excavation was terminated. The profile consisted of two horizons. The primary rooting depth in the hole was approximately 4 inches.

Depth of the 1st horizon was 4 inches. The 1st horizon consisted of a loam material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was brown in color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% coarse fragments.

Depth of the 2nd horizon was 30 inches. The 2nd horizon consisted of a silty clay 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 <20% coarse fragments.

No restrictive horizon was reached at 30 inches. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



Profile Hole #6

Vegetation Characteristics

The woody vegetation of this site consisted of 60% Large Oak, Juniper and Small Oak with 60% canopy cover. The litter layer coverage was estimated at 0%. There was 40% herbaceous plant growth in the immediate area of this hole. Slope of this area was 4-6%. Surface Fragments were at 30%.

Soil Characteristics

Total soil depth was 24 inches where backhoe refusal was encountered. The profile consisted of two horizons. The primary rooting depth in the hole was approximately 6 inches.

Depth of the 1st horizon was 15 inches. The 1st horizon consisted of a silty clay material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was brown in color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% coarse fragments.

Depth of the 2nd horizon was 24 inches. The 2nd horizon consisted of a caliche material. The 2nd horizon consisted of a material that was coarse 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 <30% coarse fragments.

A restrictive horizon was reached at 30 inches. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



Profile Hole #7

Vegetation Characteristics

The woody vegetation of this site consisted of 30% Large Oak, Juniper and Small Oak with 30% canopy cover. The litter layer coverage was estimated at 0%. There was 30% herbaceous plant growth in the immediate area of this hole. Slope of this area was 2-6%. Surface Fragments were at 30%.

Soil Characteristics

Total soil depth was 24 inches backhoe refusal was encountered. The profile consisted of three horizons. The primary rooting depth in the hole was approximately 4 inches.

Depth of the 1st horizon was 6 inches. The 1st horizon consisted of a silty material. The 1st horizon consisted of a material that was blocky in texture and structure. The material in the 1st horizon was brown in color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <15% coarse fragments.

Depth of the 2nd horizon was 18 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 mottling evident in the 2nd horizon. The 2nd horizon consisted of <30% coarse fragments.

A shelf was encountered at 24. In this hole one potential water bearing zone was encountered. In this hole one active water bearing zone was encountered.



Profile Hole #8

Vegetation Characteristics

The woody vegetation of this site consisted of 20% Large Oak, Juniper and Small Oak with 20% canopy cover. The litter layer coverage was estimated at 0%. There was 35% herbaceous plant growth in the immediate area of this hole. Slope of this area was 2-6%. Surface Fragments were at 35%.

Soil Characteristics

Total soil depth was 22 inches where backhoe refusal was encountered. The profile consisted of two horizons. The primary rooting depth in the hole was approximately 4 inches.

Depth of the 1st horizon was 6 inches. The 1st horizon consisted of a silty clay material. The 1st horizon consisted of a material that was blocky in texture and structure. The material in the 1st horizon was brown in color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% coarse fragments.

Depth of the 2nd horizon was 22 inches. The 2nd horizon consisted of a silty clay loam 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 mottling evident at 20" in the 2nd horizon. The 2nd horizon consisted of <20% coarse fragments.

A restrictive horizon was reached at 22 inches. In this hole one potential water bearing zone was encountered. In this hole one active water bearing zones was encountered.



Profile Hole #9

Vegetation Characteristics

The woody vegetation of this site consisted of 30% Large Oak, Juniper and Small Oak with 30% canopy cover. The litter layer coverage was estimated at 0%. There was 40% herbaceous plant growth in the immediate area of this hole. Slope of this area was 4-6%. Surface Fragments were at 30%.

Soil Characteristics

Total soil depth was 16 inches where backhoe refusal was encountered. The profile consisted of one horizon. The primary rooting depth in the hole was approximately 2 inches.

Depth of the 1st horizon was 16 inches. The 1st horizon consisted of a clay loam material. The 1st horizon consisted of a material that was blocky in texture and structure. The material in the 1st horizon was tan in color. There was mottling evident in the 1st horizon. The 1st horizon consisted of <30% coarse fragments.

A restrictive horizon was reached at 16 inches. In this hole one potential water bearing zone was encountered. In this hole one active water bearing zone was encountered.



Profile Hole #10

Vegetation Characteristics

The woody vegetation of this site consisted of 30% Large Oak, Juniper and Small Oak with 30% canopy cover. The litter layer coverage was estimated at 0%. There was 30% herbaceous plant growth in the immediate area of this hole. Slope of this area was 2-4%. Surface Fragments were at 25%.

Soil Characteristics

Total soil depth was 30 inches where backhoe refusal was encountered. The profile consisted of three horizons. The primary rooting depth in the hole was approximately 4 inches.

Depth of the 1st horizon was 6 inches. The 1st horizon consisted of a silty clay material. The 1st horizon consisted of a material that was blocky in texture and structure. The material in the 1st horizon was brown in color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% coarse fragments.

Depth of the 2nd horizon was 24 inches. The 2nd horizon consisted of a silty clay material. The 2nd horizon consisted of a material that was blocky in texture and structure. The material in the 2nd horizon was light brown in color. There was no mottling evident in the 2nd horizon. The 2nd horizon consisted of <20% coarse fragments.

Depth of the 3rd horizon was 30 inches. The 3rd horizon consisted of a clay loam material. The 3rd horizon consisted of a material that was blocky in texture and structure. The material in the 3rd horizon was tan in color. There was no mottling evident in the 3rd horizon. The 3rd horizon consisted of <20% coarse fragments.

A restrictive horizon was reached at 30 inches. 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 40% Large Oak, Juniper and Small Oak with 40% canopy cover. The litter layer coverage was estimated at 0%. There was 35% herbaceous plant growth in the immediate area of this hole. Slope of this area was 0-4%. Surface Fragments were at 20%.

Soil Characteristics

Total soil depth was 30 inches where backhoe refusal was encountered. The profile consisted of three horizons. The primary rooting depth in the hole was approximately 6 inches. The secondary rooting depth in the hole was approximately 12 inches.

Depth of the 1st horizon was 8 inches. The 1st horizon consisted of a silty clay material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was light brown in color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% coarse fragments.

Depth of the 2nd horizon was 24 inches. The 2nd horizon consisted of a silty loam material. The 2nd horizon consisted of a material that was blocky in texture and structure. The material in the 2nd horizon was light brown in color. There was no mottling evident in the 2nd horizon. The 2nd horizon consisted of <25% coarse fragments.

Depth of the 3rd horizon was 30 inches. The 3rd horizon consisted of a clay loam material. The 3rd horizon consisted of a material that was blocky in texture and structure. The material in the 3rd horizon was light brown in color. There was no mottling evident in the 3rd horizon. The 3rd horizon consisted of <20% coarse fragments.

A restrictive horizon was reached at 30 inches. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



Profile Hole #12

Vegetation Characteristics

The woody vegetation of this site consisted of 35% Large Oak, Juniper and Small Oak with 35% canopy cover. The litter layer coverage was estimated at 0%. There was 30% herbaceous plant growth in the immediate area of this hole. Slope of this area was 3-6%. Surface Fragments were at 30%.

Soil Characteristics

Total soil depth was 28 inches where backhoe refusal was encountered. The profile consisted of three horizons. The primary rooting depth in the hole was approximately 6 inches.

Depth of the 1st horizon was 8 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 brown in color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% coarse fragments.

Depth of the 2nd horizon was 16 inches. The 2nd horizon consisted of a sandy clay material. The 2nd horizon consisted of a material that was blocky in texture and structure. The material in the 2nd horizon was light brown in color. There was no mottling evident in the 2nd horizon. The 2nd horizon consisted of <20% coarse fragments.

Depth of the 3rd horizon was 28 inches. The 3rd horizon consisted of a silty clay material. The 3rd horizon consisted of a material that was coarse in texture and structure. The material in the 3rd horizon was tan in color. There was no mottling evident in the 3rd horizon. The 3rd horizon consisted of <30% coarse fragments.

A restrictive horizon was reached at 28 inches. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



Profile Hole #13

Vegetation Characteristics

The woody vegetation of this site consisted of 30% Large Oak, Juniper and Small Oak with 30% canopy cover. The litter layer coverage was estimated at 0%. There was 40% herbaceous plant growth in the immediate area of this hole. Slope of this area was 3-5%. Surface Fragments were at 20%.

Soil Characteristics

Total soil depth was 24 inches where backhoe refusal was encountered. The profile consisted of two horizons. The primary rooting depth in the hole was approximately 6 inches.

Depth of the 1st horizon was 6 inches. The 1st horizon consisted of a silty clay material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was brown in color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <10% coarse fragments.

Depth of the 2nd horizon was 24 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 <20% coarse fragments.

A restrictive horizon was reached at 24 inches. In this hole no potential water bearing zones were encountered. In this hole no active water bearing zones were encountered.



Profile Hole #14

Vegetation Characteristics

The woody vegetation of this site consisted of 40% Large Oak, Juniper and Small Oak with 40% canopy cover. The litter layer coverage was estimated at 0%. There was 30% herbaceous plant growth in the immediate area of this hole. Slope of this area was 3-6%. Surface Fragments were at 30%.

Soil Characteristics

Total soil depth was 24 inches where backhoe refusal was encountered. The profile consisted of two horizons. The primary rooting depth in the hole was approximately 6 inches.

Depth of the 1st horizon was 8 inches. The 1st horizon consisted of a silty clay material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was dark brown in color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <20% coarse fragments.

Depth of the 2nd horizon was 24 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 mottling evident in the 2nd horizon. The 2nd horizon consisted of <30% coarse fragments.

A restrictive horizon was reached at 24 inches. In this hole one potential water bearing zone was encountered. In this hole one active water bearing zone was encountered.



Profile Hole #15

Vegetation Characteristics

The woody vegetation of this site consisted of 30% Large Oak, Juniper and Small Oak with 30% canopy cover. The litter layer coverage was estimated at 0%. There was 25% herbaceous plant growth in the immediate area of this hole. Slope of this area was 3-6%. Surface Fragments were at 30%.

Soil Characteristics

Total soil depth was 18 inches where backhoe refusal was encountered. The profile consisted of two horizons. The primary rooting depth in the hole was approximately 4 inches.

Depth of the 1st horizon was 4 inches. The 1st horizon consisted of a silty loam material. The 1st horizon consisted of a material that was coarse in texture and structure. The material in the 1st horizon was dark brown in color. There was no mottling evident in the 1st horizon. The 1st horizon consisted of <15% coarse fragments.

Depth of the 2nd horizon was 18 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 mottling evident in the 2nd horizon. The 2nd horizon consisted of <20% coarse fragments.

A restrictive horizon was reached at 18 inches. In this hole one potential water bearing zone was encountered. In this hole one active water bearing zone was encountered.





Project West Travis PUA Profile Hole # 1 County Travis Date _____

1 Total Depth of Profile hole 30"
2 Primary Rooting Depth 6"
3 Secondary Rooting Depth _____
4 Horizons Descriptions Shall Include _____

A Depth of Horizon 0-6"
B Soil Texture Sandy Loam
C Soil Structure Coarse
D Soil Color Brown
E Mottling No
F Percent Coarse Fragments 0%

A Depth of Horizon 6-12"
B Soil Texture Caliche
C Soil Structure Blocky
D Soil Color Tan
E Mottling No
F Percent Coarse Fragments <20%

A Depth of Horizon 12-30"
B Soil Texture Caliche/Clay
C Soil Structure Coarse
D Soil Color Light Brown
E Mottling No
F Percent Coarse Fragments <15%

5 Boundary Descriptions (Soil Horizons) NA
6 Restrictive Horizons NA
7 Potential Water Bearing Zones 0
8 Active Water Bearing Zones 0

Site Characteristics

<u>Vegetation</u>				<u>Surface Fragments</u>	<u>Litter</u>		<u>Slope Type</u>
Large Oak	<u>x</u>	<u>60</u> % Woody	<u>20</u> % Herbaceous	<u>40</u> % Visible	<u>0</u> %	<u>2</u>	% - <u>4</u> %
Juniper	<u>x</u>	<u>60</u> % Canopy Cover	<u>20</u> % Cover				
Small Oak	<u>x</u>						

Comments Pictures 1 Refusal at: NA Stopped Digging at: 30 inches



Project West Travis PUA Profile Hole # 2 County Travis Date _____

1 Total Depth of Profile hole 30"
2 Primary Rooting Depth 8"
3 Secondary Rooting Depth _____
4 Horizons Descriptions Shall Include

A Depth of Horizon	<u>0-8"</u>	A Depth of Horizon	<u>8-18</u>	A Depth of Horizon	<u>18-30</u>
B Soil Texture	<u>silty clay</u>	B Soil Texture	<u>clay</u>	B Soil Texture	<u>caliche</u>
C Soil Structure	<u>coarse</u>	C Soil Structure	<u>blocky</u>	C Soil Structure	<u>blocky</u>
D Soil Color	<u>red brown</u>	D Soil Color	<u>red brown</u>	D Soil Color	<u>tan</u>
E Mottling	<u>NA</u>	E Mottling	<u>NA</u>	E Mottling	<u>NA</u>
F Percent Coarse Fragments	<u><10%</u>	F Percent Coarse Fragments	<u>20%</u>	F Percent Coarse Fragments	<u>>20%</u>

5 Boundary Descriptions (Soil Horizons) Refusal
6 Restrictive Horizons 30"
7 Potential Water Bearing Zones 0
8 Active Water Bearing Zones 0

Site Characteristics

<u>Vegetation</u>		<u>Surface Fragments</u>		<u>Litter</u>	<u>Slope Type</u>
Large Oak	<u>x</u>	<u>50 % Woody</u>	<u>50 % Herbaceous</u>	<u>20 % Visible</u>	<u>0 %</u>
Juniper	<u>x</u>	<u>50 % Canopy Cover</u>	<u>50 % Cover</u>		<u>3 % - 6 %</u>
Small Oak	<u>x</u>				

Comments Pictures 1 Refusal at: 30 Stopped Digging at: 30 inches



Project West Travis PUA Profile Hole # 3 County Travis Date _____

1 Total Depth of Profile hole 22
2 Primary Rooting Depth 2"
3 Secondary Rooting Depth _____
4 Horizons Descriptions Shall Include _____

A Depth of Horizon	<u>0-20"</u>	A Depth of Horizon	<u>20-22"</u>	A Depth of Horizon	_____
B Soil Texture	<u>silty clay</u>	B Soil Texture	<u>clay</u>	B Soil Texture	_____
C Soil Structure	<u>blocky</u>	C Soil Structure	<u>blocky</u>	C Soil Structure	_____
D Soil Color	<u>dark brown</u>	D Soil Color	<u>red brown</u>	D Soil Color	_____
E Mottling	<u>NA</u>	E Mottling	<u>NA</u>	E Mottling	_____
F Percent Coarse Fragments	<u>30</u>	F Percent Coarse Fragments	<u>40</u>	F Percent Coarse Fragments	_____

5 Boundary Descriptions (Soil Horizons) refusal
6 Restrictive Horizons 22"
7 Potential Water Bearing Zones 0
8 Active Water Bearing Zones 0

Site Characteristics

<u>Vegetation</u>			<u>Surface Fragments</u>	<u>Litter</u>	<u>Slope Type</u>
Large Oak	<u>x</u>	<u>30</u> % Woody	<u>70</u> % Herbaceous	<u>50</u> % Visible	<u>0</u> %
Juniper	<u>x</u>	<u>40</u> % Canopy Cover	<u>50</u> % Cover		<u>2</u> % - <u>6</u> %
Small Oak	<u>x</u>				

Comments Pictures 1 Refusal at: 22" Stopped Digging at: 22 inches



Project West Travis PUA Profile Hole # 4 County Travis Date _____

1 Total Depth of Profile hole 26"
2 Primary Rooting Depth 4"
3 Secondary Rooting Depth _____
4 Horizons Descriptions Shall Include _____

A Depth of Horizon	<u>0-6"</u>	A Depth of Horizon	<u>6-26"</u>	A Depth of Horizon	_____
B Soil Texture	<u>silty clay</u>	B Soil Texture	<u>caliche</u>	B Soil Texture	_____
C Soil Structure	<u>blocky</u>	C Soil Structure	<u>coarse</u>	C Soil Structure	_____
D Soil Color	<u>tan</u>	D Soil Color	<u>tan/grey</u>	D Soil Color	_____
E Mottling	<u>N/A</u>	E Mottling	<u>N/A</u>	E Mottling	_____
F Percent Coarse Fragments	<u><15%</u>	F Percent Coarse Fragments	<u><30%</u>	F Percent Coarse Fragments	_____

5 Boundary Descriptions (Soil Horizons) refusal
6 Restrictive Horizons 26"
7 Potential Water Bearing Zones 1
8 Active Water Bearing Zones 1

Site Characteristics

<u>Vegetation</u>			<u>Surface Fragments</u>	<u>Litter</u>	<u>Slope Type</u>
Large Oak	<u>x</u>	<u>30 %</u> Woody	<u>40 %</u> Herbaceous	<u>30 %</u> Visible	<u>0 %</u>
Juniper	<u>x</u>	<u>30 %</u> Canopy Cover	<u>40 %</u> Cover		<u>2 %</u> - <u>7 %</u>
Small Oak	<u>x</u>				

Comments Pictures 1 Refusal at: 26 Stopped Digging at: 26 inches



Project West Travis PUA Profile Hole # 5 County Travis Date _____

1 Total Depth of Profile hole 30"
2 Primary Rooting Depth 4"
3 Secondary Rooting Depth _____
4 Horizons Descriptions Shall Include _____

A Depth of Horizon	<u>0-4"</u>	A Depth of Horizon	<u>4-30"</u>	A Depth of Horizon	_____
B Soil Texture	<u>silty clay loam</u>	B Soil Texture	<u>silty clay</u>	B Soil Texture	_____
C Soil Structure	<u>coarse</u>	C Soil Structure	<u>blocky</u>	C Soil Structure	_____
D Soil Color	<u>brown</u>	D Soil Color	<u>tan</u>	D Soil Color	_____
E Mottling	<u>N/A</u>	E Mottling	<u>N/A</u>	E Mottling	_____
F Percent Coarse Fragments	<u><10%</u>	F Percent Coarse Fragments	<u><20%</u>	F Percent Coarse Fragments	_____

5 Boundary Descriptions (Soil Horizons) NA
6 Restrictive Horizons NA
7 Potential Water Bearing Zones 0
8 Active Water Bearing Zones 0

Site Characteristics

<u>Vegetation</u>			<u>Surface Fragments</u>	<u>Litter</u>	<u>Slope Type</u>
Large Oak	<u>x</u>	<u>50 % Woody</u>	<u>50 % Herbaceous</u>	<u>20 % Visible</u>	<u>0 %</u>
Juniper	<u>x</u>	<u>50 % Canopy Cover</u>	<u>50 % Cover</u>		<u>2 % - 4 %</u>
Small Oak	<u>x</u>				

Comments Pictures 1 Refusal at: N/A Stopped Digging at: 30 inches



Project West Travis PUA Profile Hole # 6 County Travis Date _____

1 Total Depth of Profile hole 24"
 2 Primary Rooting Depth 6"
 3 Secondary Rooting Depth _____
 4 Horizons Descriptions Shall Include _____

A Depth of Horizon	<u>0-15"</u>	A Depth of Horizon	<u>15-24"</u>	A Depth of Horizon	_____
B Soil Texture	<u>silty clay</u>	B Soil Texture	<u>caliche</u>	B Soil Texture	_____
C Soil Structure	<u>coarse</u>	C Soil Structure	<u>blocky/coarse</u>	C Soil Structure	_____
D Soil Color	<u>brown</u>	D Soil Color	<u>tan</u>	D Soil Color	_____
E Mottling	<u>N/A</u>	E Mottling	<u>N/A</u>	E Mottling	_____
F Percent Coarse Fragments	<u><10</u>	F Percent Coarse Fragments	<u><30</u>	F Percent Coarse Fragments	_____

5 Boundary Descriptions (Soil Horizons) refusal
 6 Restrictive Horizons 24"
 7 Potential Water Bearing Zones 0
 8 Active Water Bearing Zones 0

Site Characteristics

<u>Vegetation</u>			<u>Surface Fragments</u>	<u>Litter</u>	<u>Slope Type</u>
Large Oak	<u>x</u>	<u>60</u> % Woody	<u>40</u> % Herbaceous	<u>30</u> % Visible	<u>0</u> %
Juniper	<u>x</u>	<u>60</u> % Canopy Cover	<u>40</u> % Cover		<u>4</u> % - <u>6</u> %
Small Oak	<u>x</u>				

Comments Pictures 1 Refusal at: 24" Stopped Digging at: 24 inches



Project West Travis PUA Profile Hole # 7 County Travis Date _____

1 Total Depth of Profile hole 24"
2 Primary Rooting Depth 4"
3 Secondary Rooting Depth _____
4 Horizons Descriptions Shall Include _____

A Depth of Horizon	<u>0-6"</u>	A Depth of Horizon	<u>6-24"</u>	A Depth of Horizon	_____
B Soil Texture	<u>silty</u>	B Soil Texture	<u>blocky</u>	B Soil Texture	_____
C Soil Structure	<u>blocky</u>	C Soil Structure	<u>caliche</u>	C Soil Structure	_____
D Soil Color	<u>brown</u>	D Soil Color	<u>tan</u>	D Soil Color	_____
E Mottling	<u>N/A</u>	E Mottling	<u>18"</u>	E Mottling	_____
F Percent Coarse Fragments	<u><15%</u>	F Percent Coarse Fragments	<u><30%</u>	F Percent Coarse Fragments	_____

5 Boundary Descriptions (Soil Horizons) shelf
6 Restrictive Horizons 24"
7 Potential Water Bearing Zones 1
8 Active Water Bearing Zones 1

Site Characteristics

<u>Vegetation</u>			<u>Surface Fragments</u>	<u>Litter</u>	<u>Slope Type</u>
Large Oak	<u>x</u>	<u>30 % Woody</u>	<u>30 % Herbaceous</u>	<u>30 % Visible</u>	<u>0 %</u>
Juniper	<u>x</u>	<u>30 % Canopy Cover</u>	<u>30 % Cover</u>		<u>2 % - 6 %</u>
Small Oak	<u>x</u>				

Comments Pictures 1 Refusal at: 24" Stopped Digging at: 24 inches



Project West Travis PUA Profile Hole # 8 County Travis Date _____

1 Total Depth of Profile hole 22"
2 Primary Rooting Depth 4"
3 Secondary Rooting Depth _____
4 Horizons Descriptions Shall Include _____

A Depth of Horizon	<u>0-6"</u>	A Depth of Horizon	<u>6-22</u>	A Depth of Horizon	_____
B Soil Texture	<u>silty clay</u>	B Soil Texture	<u>silty clay loam</u>	B Soil Texture	_____
C Soil Structure	<u>blocky</u>	C Soil Structure	<u>blocky</u>	C Soil Structure	_____
D Soil Color	<u>brown</u>	D Soil Color	<u>tan</u>	D Soil Color	_____
E Mottling	<u>no</u>	E Mottling	<u>20"</u>	E Mottling	_____
F Percent Coarse Fragments	<u><10%</u>	F Percent Coarse Fragments	<u><20%</u>	F Percent Coarse Fragments	_____

5 Boundary Descriptions (Soil Horizons) refusal
6 Restrictive Horizons 22"
7 Potential Water Bearing Zones 1
8 Active Water Bearing Zones 1

Site Characteristics

<u>Vegetation</u>			<u>Surface Fragments</u>	<u>Litter</u>	<u>Slope Type</u>
Large Oak	<u>x</u>	<u>20</u> % Woody	<u>35</u> % Herbaceous	<u>35</u> % Visible	<u>0</u> %
Juniper	<u>x</u>	<u>20</u> % Canopy Cover	<u>35</u> % Cover		<u>2</u> % - <u>6</u> %
Small Oak	<u>x</u>				

Comments Pictures 1 Refusal at: 22" Stopped Digging at: 22 inches



Project West Travis PUA Profile Hole # 9 County Travis Date _____

1 Total Depth of Profile hole 16"
2 Primary Rooting Depth 2"
3 Secondary Rooting Depth _____
4 Horizons Descriptions Shall Include _____

A Depth of Horizon 0-16"
B Soil Texture clay loam
C Soil Structure blocky
D Soil Color tan
E Mottling 16"
F Percent Coarse Fragments <30%

A Depth of Horizon _____
B Soil Texture _____
C Soil Structure _____
D Soil Color _____
E Mottling _____
F Percent Coarse Fragments _____

A Depth of Horizon _____
B Soil Texture _____
C Soil Structure _____
D Soil Color _____
E Mottling _____
F Percent Coarse Fragments _____

5 Boundary Descriptions (Soil Horizons) refusal
6 Restrictive Horizons 16"
7 Potential Water Bearing Zones 1
8 Active Water Bearing Zones 1

Site Characteristics

<u>Vegetation</u>				<u>Surface Fragments</u>	<u>Litter</u>	<u>Slope Type</u>
Large Oak	<u>x</u>	<u>30 %</u> Woody	<u>40 %</u> Herbaceous	<u>30 %</u> Visible	<u>0 %</u>	<u>4 %</u> - <u>6 %</u>
Juniper	<u>x</u>	<u>30 %</u> Canopy Cover	<u>40 %</u> Cover			
Small Oak	<u>x</u>					

Comments Pictures 1 Refusal at: 16" Stopped Digging at: 16 inches



Project West Travis PUA Profile Hole # 10 County Travis Date _____

1 Total Depth of Profile hole 30"
 2 Primary Rooting Depth 4"
 3 Secondary Rooting Depth _____
 4 Horizons Descriptions Shall Include _____

A Depth of Horizon	<u>0-6"</u>	A Depth of Horizon	<u>6-24"</u>	A Depth of Horizon	<u>24-30"</u>
B Soil Texture	<u>silty clay</u>	B Soil Texture	<u>silty clay</u>	B Soil Texture	<u>clay loam</u>
C Soil Structure	<u>blocky</u>	C Soil Structure	<u>blocky</u>	C Soil Structure	<u>blocky</u>
D Soil Color	<u>brown</u>	D Soil Color	<u>light brown</u>	D Soil Color	<u>tan</u>
E Mottling	<u>no</u>	E Mottling	<u>no</u>	E Mottling	<u>no</u>
F Percent Coarse Fragments	<u><10%</u>	F Percent Coarse Fragments	<u><20%</u>	F Percent Coarse Fragments	<u><20%</u>

5 Boundary Descriptions (Soil Horizons) refusal
 6 Restrictive Horizons 30"
 7 Potential Water Bearing Zones 0
 8 Active Water Bearing Zones 0

Site Characteristics

<u>Vegetation</u>			<u>Surface Fragments</u>	<u>Litter</u>	<u>Slope Type</u>
Large Oak	<u>x</u>	<u>30</u> % Woody	<u>30</u> % Herbaceous	<u>25</u> % Visible	<u>0</u> %
Juniper	<u>x</u>	<u>30</u> % Canopy Cover	<u>30</u> % Cover		<u>2</u> % - <u>4</u> %
Small Oak	<u>x</u>				

Comments Pictures 1 Refusal at: 30 Stopped Digging at: 30 inches



Project West Travis PUA Profile Hole # 11 County Travis Date _____

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	<u>0-8"</u>	A Depth of Horizon	<u>8-24"</u>	A Depth of Horizon	<u>24-30"</u>
B Soil Texture	<u>silty clay</u>	B Soil Texture	<u>silty loam</u>	B Soil Texture	<u>clay loam</u>
C Soil Structure	<u>coarse</u>	C Soil Structure	<u>blocky</u>	C Soil Structure	<u>blocky</u>
D Soil Color	<u>light brown</u>	D Soil Color	<u>light brown</u>	D Soil Color	<u>light brown</u>
E Mottling	<u>no</u>	E Mottling	<u>no</u>	E Mottling	<u>no</u>
F Percent Coarse Fragments	<u><10%</u>	F Percent Coarse Fragments	<u><25%</u>	F Percent Coarse Fragments	<u><20%</u>

5 Boundary Descriptions (Soil Horizons) refusal
 6 Restrictive Horizons 30"
 7 Potential Water Bearing Zones 0
 8 Active Water Bearing Zones 0

Site Characteristics

<u>Vegetation</u>			<u>Surface Fragments</u>	<u>Litter</u>	<u>Slope Type</u>
Large Oak	<u>x</u>	<u>40</u> % Woody	<u>35</u> % Herbaceous	<u>20</u> % Visible	<u>0</u> %
Juniper	<u>x</u>	<u>40</u> % Canopy Cover	<u>35</u> % Cover		<u>0</u> % - <u>4</u> %
Small Oak	<u>x</u>				

Comments Pictures 1 Refusal at: 30" Stopped Digging at: 30 inches



Project West Travis PUA Profile Hole # 12 County Travis Date _____

1 Total Depth of Profile hole 28"
 2 Primary Rooting Depth 6"
 3 Secondary Rooting Depth _____
 4 Horizons Descriptions Shall Include _____

A Depth of Horizon	<u>0-8"</u>	A Depth of Horizon	<u>8-16"</u>	A Depth of Horizon	<u>16-28"</u>
B Soil Texture	<u>clay loam</u>	B Soil Texture	<u>sandy clay</u>	B Soil Texture	<u>silty clay</u>
C Soil Structure	<u>coarse</u>	C Soil Structure	<u>blocky</u>	C Soil Structure	<u>coarse</u>
D Soil Color	<u>brown</u>	D Soil Color	<u>light brown</u>	D Soil Color	<u>tan</u>
E Mottling	<u>no</u>	E Mottling	<u>no</u>	E Mottling	<u>no</u>
F Percent Coarse Fragments	<u><10%</u>	F Percent Coarse Fragments	<u><20%</u>	F Percent Coarse Fragments	<u><30%</u>

5 Boundary Descriptions (Soil Horizons) refusal
 6 Restrictive Horizons 28"
 7 Potential Water Bearing Zones 0
 8 Active Water Bearing Zones 0

Site Characteristics

<u>Vegetation</u>			<u>Surface Fragments</u>	<u>Litter</u>	<u>Slope Type</u>
Large Oak	<u>x</u>	<u>35 % Woody</u>	<u>30 % Herbaceous</u>	<u>30 % Visible</u>	<u>0 %</u>
Juniper	<u>x</u>	<u>35 % Canopy Cover</u>	<u>30 % Cover</u>		<u>3 % - 6 %</u>
Small Oak	<u>x</u>				

Comments Pictures 1 Refusal at: 28" Stopped Digging at: 28 inches



Project West Travis PUA Profile Hole # 13 County Travis Date _____

1 Total Depth of Profile hole 24"
2 Primary Rooting Depth 6"
3 Secondary Rooting Depth _____
4 Horizons Descriptions Shall Include

A Depth of Horizon	<u>0-6"</u>	A Depth of Horizon	<u>6-24"</u>	A Depth of Horizon	_____
B Soil Texture	<u>silty clay</u>	B Soil Texture	<u>caliche</u>	B Soil Texture	_____
C Soil Structure	<u>coarse</u>	C Soil Structure	<u>blocky</u>	C Soil Structure	_____
D Soil Color	<u>brown</u>	D Soil Color	<u>tan</u>	D Soil Color	_____
E Mottling	<u>no</u>	E Mottling	<u>no</u>	E Mottling	_____
F Percent Coarse Fragments	<u><10%</u>	F Percent Coarse Fragments	<u><20%</u>	F Percent Coarse Fragments	_____

5 Boundary Descriptions (Soil Horizons) refusal
6 Restrictive Horizons 24"
7 Potential Water Bearing Zones 0
8 Active Water Bearing Zones 0

Site Characteristics

<u>Vegetation</u>			<u>Surface Fragments</u>	<u>Litter</u>	<u>Slope Type</u>
Large Oak	<u>x</u>	<u>30 % Woody</u>	<u>40 % Herbaceous</u>	<u>20 % Visible</u>	<u>0 %</u>
Juniper	<u>x</u>	<u>30 % Canopy Cover</u>	<u>40 % Cover</u>		<u>3 % - 5 %</u>
Small Oak	<u>x</u>				

Comments Pictures 1 Refusal at: 24" Stopped Digging at: 24 inches



Project West Travis PUA Profile Hole # 14 County Travis Date _____

1 Total Depth of Profile hole 24"
2 Primary Rooting Depth 6"
3 Secondary Rooting Depth _____
4 Horizons Descriptions Shall Include _____

A Depth of Horizon	<u>0-8"</u>	A Depth of Horizon	<u>8-24"</u>	A Depth of Horizon	_____
B Soil Texture	<u>silty clay</u>	B Soil Texture	<u>caliche</u>	B Soil Texture	_____
C Soil Structure	<u>coarse</u>	C Soil Structure	<u>blocky</u>	C Soil Structure	_____
D Soil Color	<u>dark brown</u>	D Soil Color	<u>tan</u>	D Soil Color	_____
E Mottling	<u>N/A</u>	E Mottling	<u>18"</u>	E Mottling	_____
F Percent Coarse Fragments	<u><20%</u>	F Percent Coarse Fragments	<u><30%</u>	F Percent Coarse Fragments	_____

5 Boundary Descriptions (Soil Horizons) refusal
6 Restrictive Horizons 24"
7 Potential Water Bearing Zones 1
8 Active Water Bearing Zones 1

Site Characteristics

<u>Vegetation</u>			<u>Surface Fragments</u>	<u>Litter</u>	<u>Slope Type</u>
Large Oak	<u>x</u>	<u>40</u> % Woody	<u>30</u> % Herbaceous	<u>30</u> % Visible	<u>0</u> %
Juniper	<u>x</u>	<u>40</u> % Canopy Cover	<u>30</u> % Cover		<u>3</u> % - <u>6</u> %
Small Oak	<u>x</u>				

Comments Pictures 1 Refusal at: 24" Stopped Digging at: 24 inches



Project West Travis PUA Profile Hole # 15 County Travis Date _____

1 Total Depth of Profile hole 18"
2 Primary Rooting Depth 4"
3 Secondary Rooting Depth _____
4 Horizons Descriptions Shall Include _____

A Depth of Horizon	<u>0-4"</u>	A Depth of Horizon	<u>4-18"</u>	A Depth of Horizon	_____
B Soil Texture	<u>silty loam</u>	B Soil Texture	<u>caliche</u>	B Soil Texture	_____
C Soil Structure	<u>coarse</u>	C Soil Structure	<u>blocky</u>	C Soil Structure	_____
D Soil Color	<u>dark brown</u>	D Soil Color	<u>tan</u>	D Soil Color	_____
E Mottling	<u>no</u>	E Mottling	<u>12"</u>	E Mottling	_____
F Percent Coarse Fragments	<u><15%</u>	F Percent Coarse Fragments	<u><20%</u>	F Percent Coarse Fragments	_____

5 Boundary Descriptions (Soil Horizons) refusal
6 Restrictive Horizons 18"
7 Potential Water Bearing Zones 1
8 Active Water Bearing Zones 1

Site Characteristics

<u>Vegetation</u>			<u>Surface Fragments</u>	<u>Litter</u>	<u>Slope Type</u>
Large Oak	<u>x</u>	<u>30 % Woody</u>	<u>25 % Herbaceous</u>	<u>30 % Visible</u>	<u>0 %</u>
Juniper	<u>x</u>	<u>30 % Canopy Cover</u>	<u>25 % Cover</u>		<u>3 % - 6 %</u>
Small Oak	<u>x</u>				

Comments Pictures 1 Refusal at: 18" Stopped Digging at: 18 inches

Attachment V
Site Preparation Plan

Site Preparation Plan

Please see the information that is provided below that is in accordance with 30 TAC 222.75 with regards to a site preparation plan. This plan will include the following:

- (1) A site plan to minimize rainfall run-on and maximize rainfall runoff from the dispersal zones. **We will place berms or swales above the drip irrigation fields to avoid rainfall run-on. We will avoid installing the surface drip irrigation lines in areas that evidence of rainfall channeling can be seen. We will not be making any grading changes to the site so the tubing will be in areas that the rainfall run off does not collect.**
- (2) Design criteria to compensate for any restrictive horizons within the soil column. **There are no restrictive horizons in the soil column. The only restrictive horizon we had was at the refusal point at the bottom of the hole.**
- (3) Soil importation with descriptions of the chemical and physical characteristics of the proposed import material. **There will soil imported on this site. The soil imported to this site will be compatible with the growth of turf grass**
- (4) Any planned removal of existing vegetation. **Some of the existing trees will remain and the existing native vegetation will be replaced with turf grass. There will be a cool season grass and a warm season grass.**

Attachment W

Soil Sampling and Testing

Report generated for:
WWD Engineering, Erin Banks
West Travis Co PUA
9217 Highway 290 W, Ste 110
Austin, TX 78736

Travis County
Laboratory Number: 427937
Customer Sample ID: Comp 1

Crop Grown: **IMPROVED AND HYBRID BERMUDA GRASS (ESTABLISHMENT)**

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU
College Station, TX 77843-2478
979-845-4816 (phone)
979-845-5958 (FAX)
Visit our website: <http://soiltesting.tamu.edu>

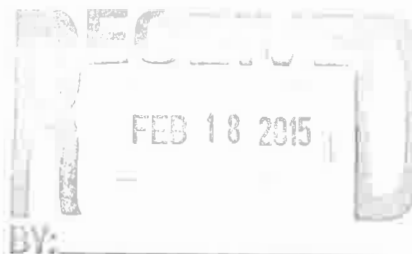
Sample received on: 2/4/2015
Printed on: 2/11/2015
Area Represented: 80 acres
SWFTL recommends <40 acres/sample

Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHigh	Excess.		
pH	8.3	(5.8)	-	Mod. Alkaline								
Conductivity	197	(-)	umho/cm	None							CL*	Fertilizer Recommended
Nitrate-N	1	(-)	ppm**									35 lbs N/acre
Phosphorus	4	(50)	ppm									95 lbs P2O5/acre
Potassium	89	(125)	ppm									25 lbs K2O/acre
Calcium	18,987	(180)	ppm									0 lbs Ca/acre
Magnesium	227	(50)	ppm									0 lbs Mg/acre
Sulfur	16	(13)	ppm									0 lbs S/acre
Sodium	7	(-)	ppm									
Iron												
Zinc												
Manganese												
Copper												
Boron												
Limestone Requirement											0.00 tons 100ECCE/acre	

Detailed Salinity Test (Saturated Paste Extract)				
pH	7.0			
Conductivity	0.47 mmhos/cm			
Sodium	26 ppm	1.111 meq/L		
Potassium	5 ppm	0.138 meq/L		
Calcium	78 ppm	3.893 meq/L		
Magnesium	7 ppm	0.558 meq/L		
Total N	139	ppm	SAR	0.75
			SSP	19.50

*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 40 lbs/A of nitrogen upon 75% vegetative cover.



New online fertilizer calculators have been placed on the laboratory's website to determine appropriate fertilizers to purchase and determine their application rates.
<http://soiltesting.tamu.edu/webpages/calculator.html>

Report generated for:
WWD Engineering, Erin Banks
West Travis Co PUA
9217 Highway 290 W, Ste 110
Austin, TX 78736

Travis County
Laboratory Number: 427938
Customer Sample ID: Comp 2

Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU
College Station, TX 77843-2478
979-845-4816 (phone)
979-845-5958 (FAX)
Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 2/4/2015
Printed on: 2/11/2015
Area Represented: 80 acres
SWFTL recommends <40 acres/sample

Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHigh	Excess.		
pH	8.4	(5.8)	-	Mod. Alkaline								
Conductivity	148	(-)	umho/cm	None							CL*	Fertilizer Recommended
Nitrate-N	0	(-)	ppm**								35 lbs N/acre	
Phosphorus	0	(50)	ppm								105 lbs P2O5/acre	
Potassium	66	(125)	ppm								45 lbs K2O/acre	
Calcium	42,699	(180)	ppm								0 lbs Ca/acre	
Magnesium	430	(50)	ppm								0 lbs Mg/acre	
Sulfur	16	(13)	ppm								0 lbs S/acre	
Sodium	10	(-)	ppm									
Iron												
Zinc												
Manganese												
Copper												
Boron												
Limestone Requirement											0.00 tons 100ECCE/acre	

Detailed Salinity Test (Saturated Paste Extract)			
	pH	7.3	
	Conductivity	0.32 mmhos/cm	
	Sodium	31 ppm	1.329 meq/L
	Potassium	5 ppm	0.124 meq/L
	Calcium	37 ppm	1.844 meq/L
	Magnesium	4 ppm	0.368 meq/L
Total N	47	ppm	
	SAR	1.26	
	SSP	36.26	

*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 40 lbs/A of nitrogen upon 75% vegetative cover.

New online fertilizer calculators have been placed on the laboratory's website to determine appropriate fertilizers to purchase and determine their application rates.
<http://soiltesting.tamu.edu/webpages/calculator.html>

Report generated for:
WWD Engineering, Erin Banks
West Travis Co PUA
9217 Highway 290 W, Ste 110
Austin, TX 78736

Travis County
Laboratory Number: 427939
Customer Sample ID: Comp 3

Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478
979-845-4816 (phone)
979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 2/4/2015

Printed on: 2/11/2015

Area Represented: 80 acres

SWFTL recommends <40 acres/sample

Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHigh	Excess.	
pH	8.2	(5.8)	-	Mod. Alkaline							
Conductivity	228	(-)	umho/cm	None							Fertilizer Recommended 35 lbs N/acre 105 lbs P2O5/acre 10 lbs K2O/acre 0 lbs Ca/acre 0 lbs Mg/acre 0 lbs S/acre
Nitrate-N	0	(-)	ppm**	CL*							
Phosphorus	0	(50)	ppm								
Potassium	112	(125)	ppm								
Calcium	42,308	(180)	ppm								
Magnesium	448	(50)	ppm								
Sulfur	17	(13)	ppm								
Sodium	12	(-)	ppm								
Iron											
Zinc											
Manganese											
Copper											
Boron											
Limestone Requirement											0.00 tons 100ECCE/acre
Detailed Salinity Test (Saturated Paste Extract)											
pH				7.3							
Conductivity				0.26 mmhos/cm							
Sodium				21 ppm				0.935 meq/L			
Potassium				3 ppm				0.067 meq/L			
Calcium				36 ppm				1.771 meq/L			
Magnesium				3 ppm				0.282 meq/L			
Total N	68		ppm	SAR				0.92			
				SSP				30.61			

*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 40 lbs/A of nitrogen upon 75% vegetative cover.

New online fertilizer calculators have been placed on the laboratory's website to determine appropriate fertilizers to purchase and determine their application rates.
<http://soiltesting.tamu.edu/webpages/calculator.html>

Report generated for:
WWD Engineering, Erin Banks
West Travis Co PUA
9217 Highway 290 W, Ste 110
Austin, TX 78736

Travis County

Laboratory Number: 427940

Customer Sample ID: Samp 1

Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478

979-845-4816 (phone)

979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 2/4/2015

Printed on: 2/11/2015

Area Represented: 80 acres

SWFTL recommends <40 acres/sample

Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHigh	Excess.	
pH	8.6	(5.8)	-	Mod. Alkaline							
Conductivity	155	(-)	umho/cm	None							Fertilizer Recommended
Nitrate-N	1	(-)	ppm**								35 lbs N/acre
Phosphorus	0	(50)	ppm								105 lbs P2O5/acre
Potassium	58	(125)	ppm								50 lbs K2O/acre
Calcium	42,282	(180)	ppm								0 lbs Ca/acre
Magnesium	357	(50)	ppm								0 lbs Mg/acre
Sulfur	22	(13)	ppm								0 lbs S/acre
Sodium	12	(-)	ppm								
Iron											
Zinc											
Manganese											
Copper											
Boron											
Limestone Requirement											0.00 tons 100ECCE/acre
Textural Analysis Test (hydrometer)											
Sand	68	%									
Silt	13	%									
Clay	19	%									
Textural Class:	Sandy 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 40 lbs/A of nitrogen upon 75% vegetative cover.

New online fertilizer calculators have been placed on the laboratory's website to determine appropriate fertilizers to purchase and determine their application rates.
<http://soiltesting.tamu.edu/webpages/calculator.html>

Report generated for:
WWD Engineering, Erin Banks
West Travis Co PUA
9217 Highway 290 W, Ste 110
Austin, TX 78736

Travis County
Laboratory Number: 427941
Customer Sample ID: Samp 2

Crop Grown: **IMPROVED AND HYBRID BERMUDA GRASS (ESTABLISHMENT)**

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478
979-845-4816 (phone)
979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 2/4/2015

Printed on: 2/11/2015

Area Represented: 80 acres

SWFTL recommends <40 acres/sample

Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHigh	Excess.	
pH	8.7	(5.8)	-	Mod. Alkaline							
Conductivity	158	(-)	umho/cm	None							Fertilizer Recommended
Nitrate-N	1	(-)	ppm**								35 lbs N/acre
Phosphorus	1	(50)	ppm								100 lbs P2O5/acre
Potassium	40	(125)	ppm								65 lbs K2O/acre
Calcium	43,348	(180)	ppm								0 lbs Ca/acre
Magnesium	112	(50)	ppm								0 lbs Mg/acre
Sulfur	15	(13)	ppm								0 lbs S/acre
Sodium	8	(-)	ppm								
Iron											
Zinc											
Manganese											
Copper											
Boron											
Limestone Requirement											0.00 tons 100ECCE/acre
Textural Analysis Test (hydrometer)											
Sand	44	%									
Silt	27	%									
Clay	29	%									
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 40 lbs/A of nitrogen upon 75% vegetative cover.

New online fertilizer calculators have been placed on the laboratory's website to determine appropriate fertilizers to purchase and determine their application rates.
<http://soiltesting.tamu.edu/webpages/calculator.html>



Report generated for:
WWD Engineering, Erin Banks
West Travis Co PUA
9217 Highway 290 W, Ste 110
Austin, TX 78736

Travis County
Laboratory Number: 427942
Customer Sample ID: Samp 3

Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478
979-845-4816 (phone)
979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 2/4/2015

Printed on: 2/11/2015

Area Represented: 80 acres

SWFTL recommends <40 acres/sample

Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHigh	Excess.	
pH	8.8	(5.8)	-	Strongly Alkaline							
Conductivity	142	(-)	umho/cm	None							Fertilizer Recommended
Nitrate-N	0	(-)	ppm**								35 lbs N/acre
Phosphorus	0	(50)	ppm								105 lbs P2O5/acre
Potassium	28	(125)	ppm								75 lbs K2O/acre
Calcium	43,627	(180)	ppm								0 lbs Ca/acre
Magnesium	99	(50)	ppm								0 lbs Mg/acre
Sulfur	18	(13)	ppm								0 lbs S/acre
Sodium	7	(-)	ppm								
Iron											
Zinc											
Manganese											
Copper											
Boron											
Limestone Requirement											0.00 tons 100ECCE/acre
Textural Analysis Test (hydrometer)											
Sand	66	%									
Silt	15	%									
Clay	19	%									
Textural Class:	Sandy 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 40 lbs/A of nitrogen upon 75% vegetative cover.

Potassium: Split apply potassium fertilizer if recommendation is for more than 75 lbs K2O per acre.

New online fertilizer calculators have been placed on the laboratory's website to determine appropriate fertilizers to purchase and determine their application rates.
<http://soiltesting.tamu.edu/webpages/calculator.html>

Report generated for:
WWD Engineering, Erin Banks
West Travis Co PUA
9217 Highway 290 W, Ste 110
Austin, TX 78736

Travis County
Laboratory Number: 427943
Customer Sample ID: Samp 4

Crop Grown: IMPROVED AND HYBRID BERMUDA GRASS (ESTABLISHMENT)

Soil Analysis Report

Soil, Water and Forage Testing Laboratory
Department of Soil and Crop Sciences
2478 TAMU

College Station, TX 77843-2478

979-845-4816 (phone)

979-845-5958 (FAX)

Visit our website: <http://soiltesting.tamu.edu>

Sample received on: 2/4/2015

Printed on: 2/11/2015

Area Represented: 80 acres

SWFTL recommends <40 acres/sample

Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHigh	Excess.	
pH	8.4	(5.8)	-	Mod. Alkaline							
Conductivity	309	(-)	umho/cm	None							Fertilizer Recommended
Nitrate-N	0	(-)	ppm**								35 lbs N/acre
Phosphorus	2	(50)	ppm								100 lbs P2O5/acre
Potassium	170	(125)	ppm								0 lbs K2O/acre
Calcium	19,198	(180)	ppm								0 lbs Ca/acre
Magnesium	591	(50)	ppm								0 lbs Mg/acre
Sulfur	8	(13)	ppm								5 lbs S/acre
Sodium	11	(-)	ppm								
Iron											
Zinc											
Manganese											
Copper											
Boron											
Limestone Requirement											0.00 tons 100ECCE/acre
Textural Analysis Test (hydrometer)											
Sand	26	%									
Silt	31	%									
Clay	43	%									
Textural Class:	Clay										

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

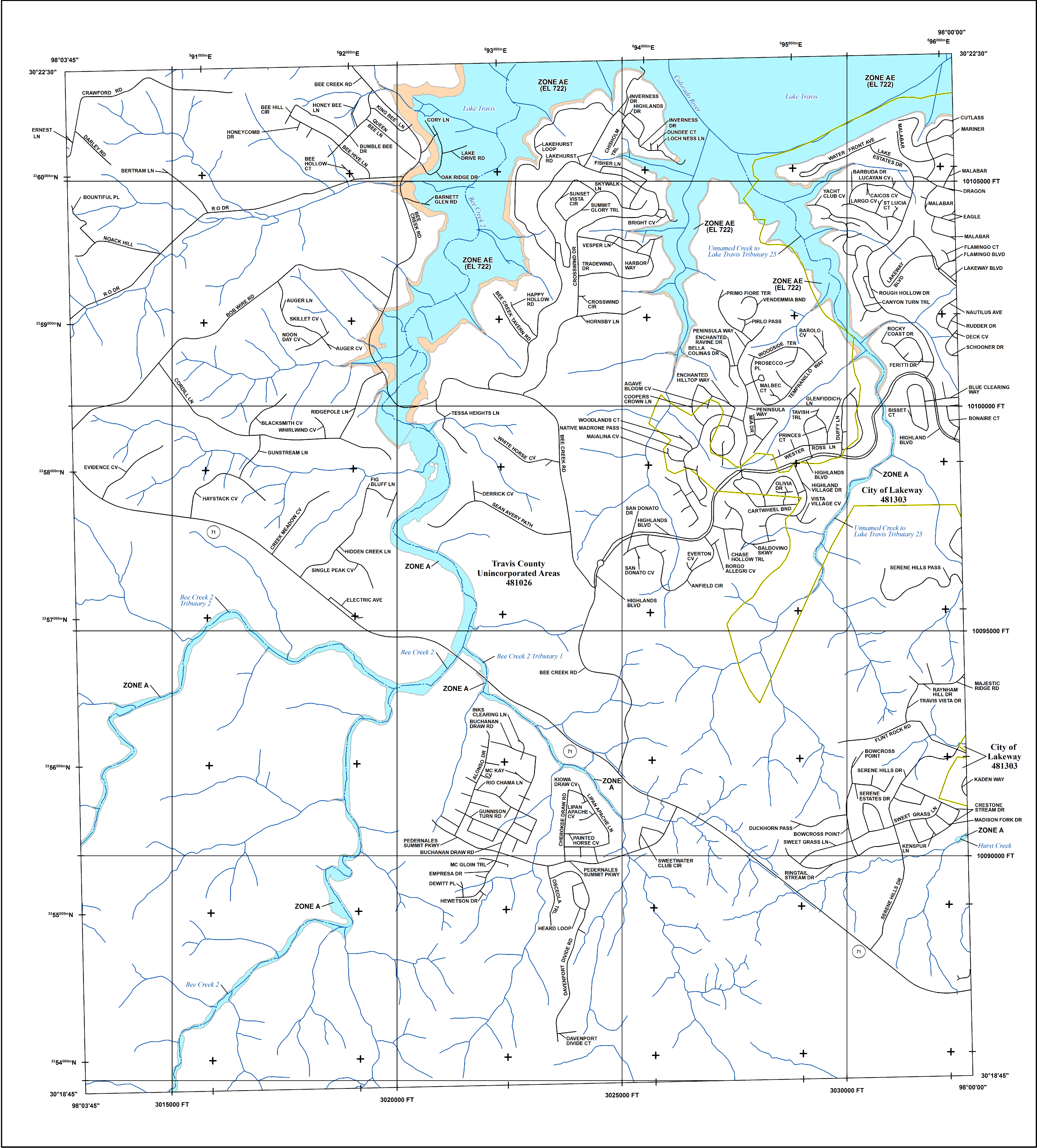
Nitrogen: Apply an additional 40 lbs/A of nitrogen upon 75% vegetative cover.

Sulfur: Available sulfur may be found deeper in soil profile, thus limiting any response to added sulfur.

New online fertilizer calculators have been placed on the laboratory's website to determine appropriate fertilizers to purchase and determine their application rates.
<http://soiltesting.tamu.edu/webpages/calculator.html>

Attachment X

FEMA Maps



FLOOD HAZARD INFORMATION

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

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://msc.fema.gov)

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone A,V, A99	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway	
OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee See Notes. Zone X	Area with Flood Risk due to Levee Zone D
OTHER AREAS	NO SCREEN Area of Minimal Flood Hazard Zone X	Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer	Levee, Dike, or Floodwall
	Cross Sections with 1% Annual Chance Water Surface Elevation	
	Coastal Transect	Coastal Transect Baseline
	Profile Baseline	Hydrographic Feature
OTHER FEATURES	Base Flood Elevation Line (BFE)	Limit of Study
	Jurisdiction Boundary	

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at <https://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

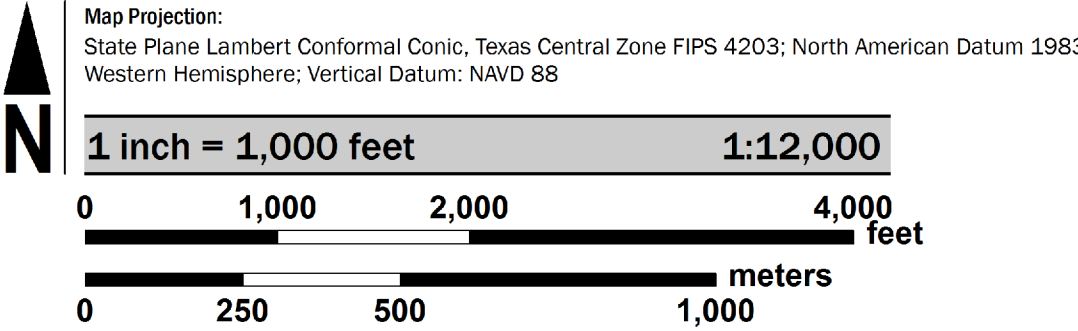
Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

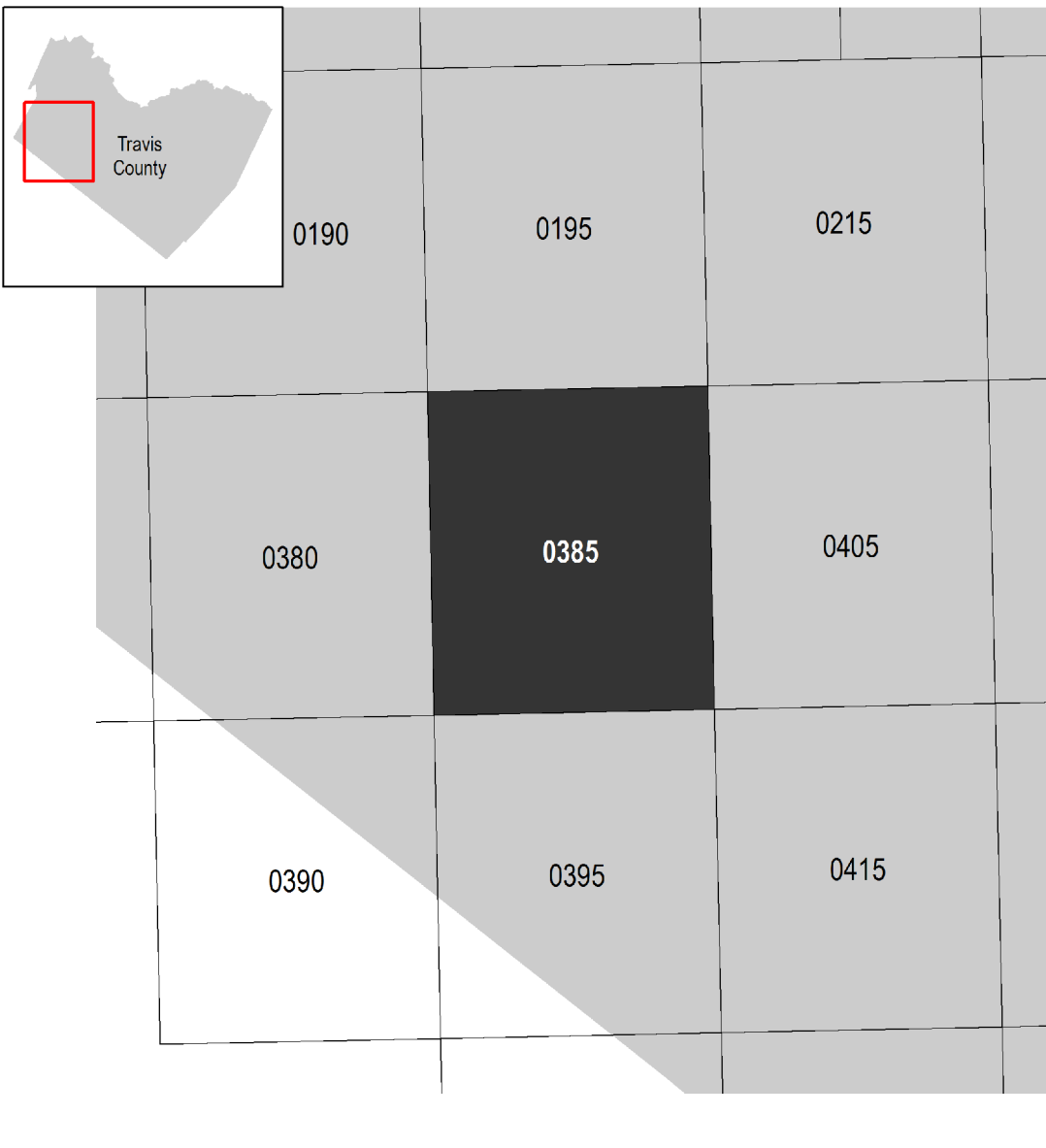
To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was derived from digital data obtained from City of Austin dated 2016, NFHL dated 2014, and CAPCOG dated 2014 and 2016.

SCALE



PANEL LOCATOR



National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

TRAVIS COUNTY, TEXAS
and Incorporated Areas

PANEL 385 OF 730

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
LAKEWAY, CITY OF	481303	0385	J
TRAVIS COUNTY	481026	0385	J

VERSION NUMBER

2.3.3.3

MAP NUMBER

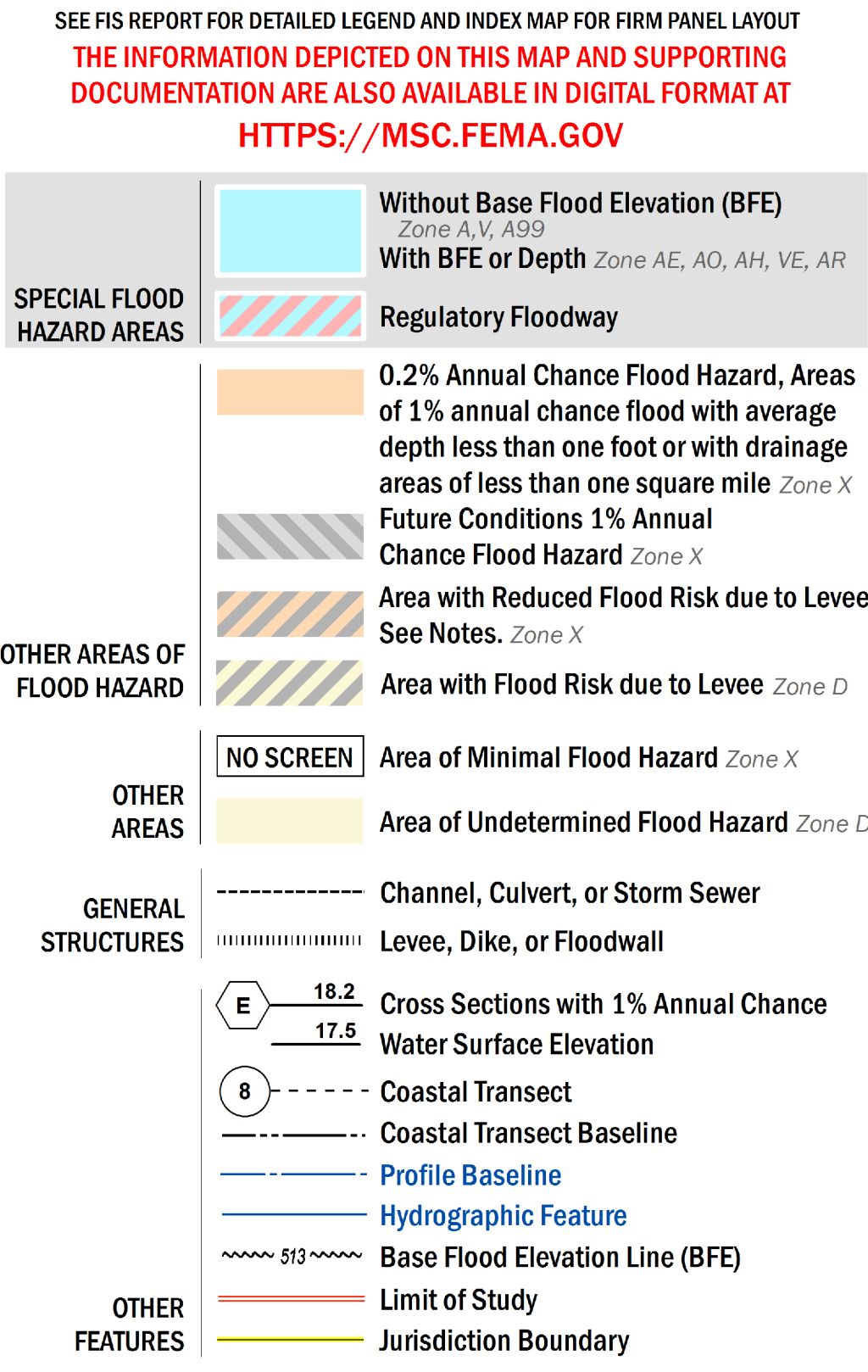
48453C0385J

MAP REVISED

JANUARY 22, 2020



FLOOD HAZARD INFORMATION



NOTES TO USERS

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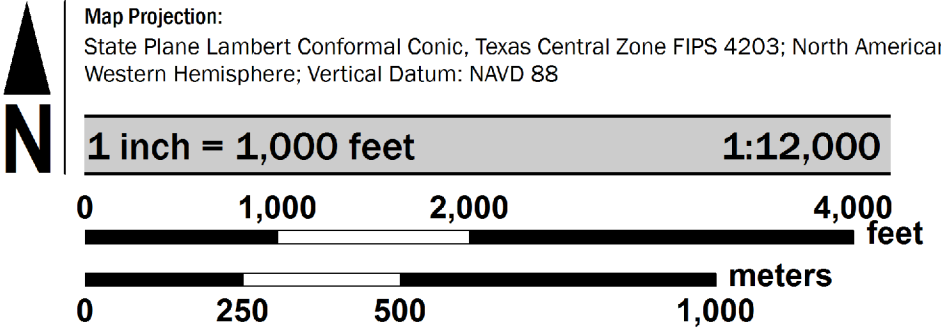
Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

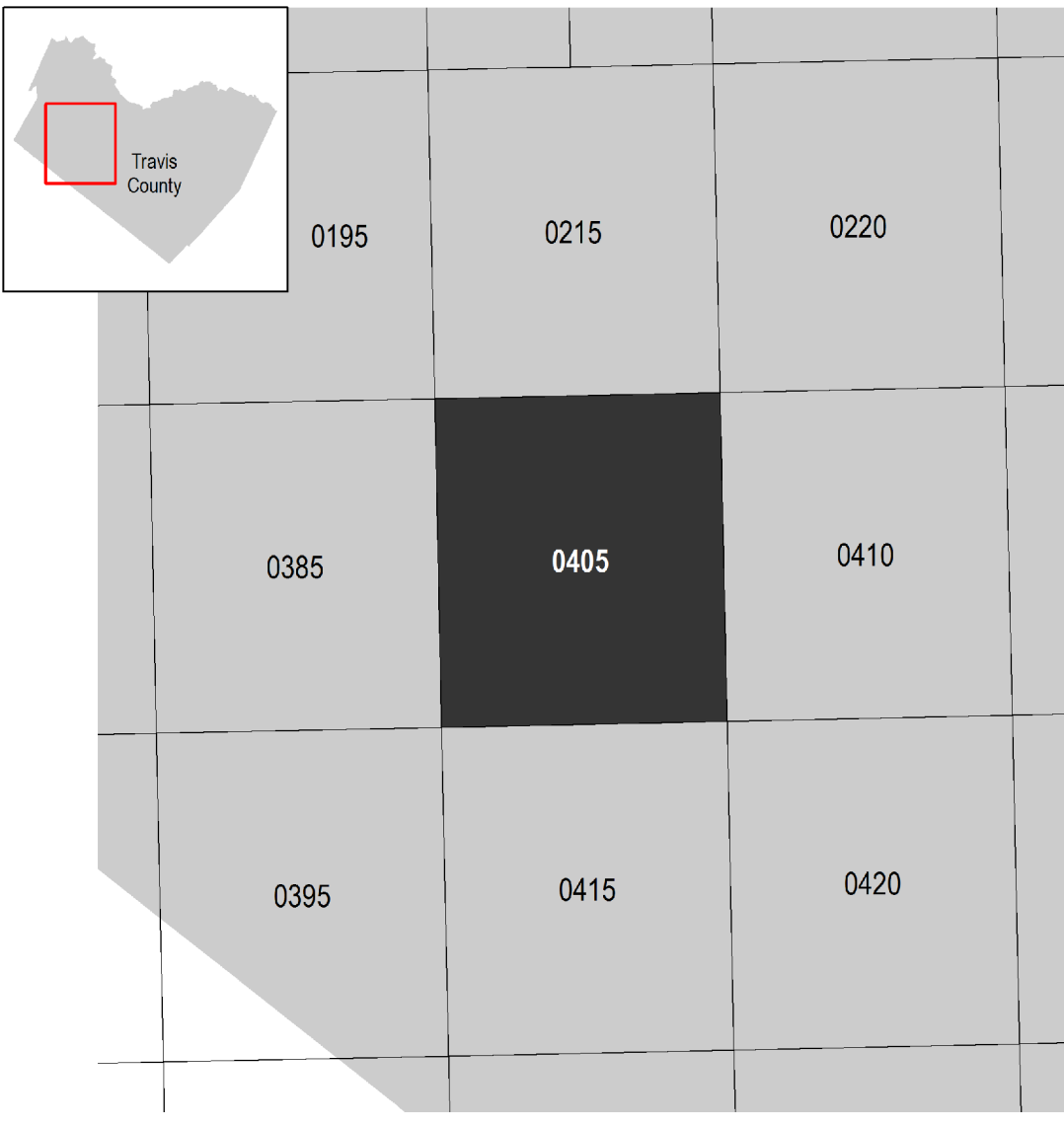
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was derived from digital data obtained from City of Austin dated 2016, NFHL dated 2014, and CAPCOG dated 2014 and 2016.

SCALE



PANEL LOCATOR

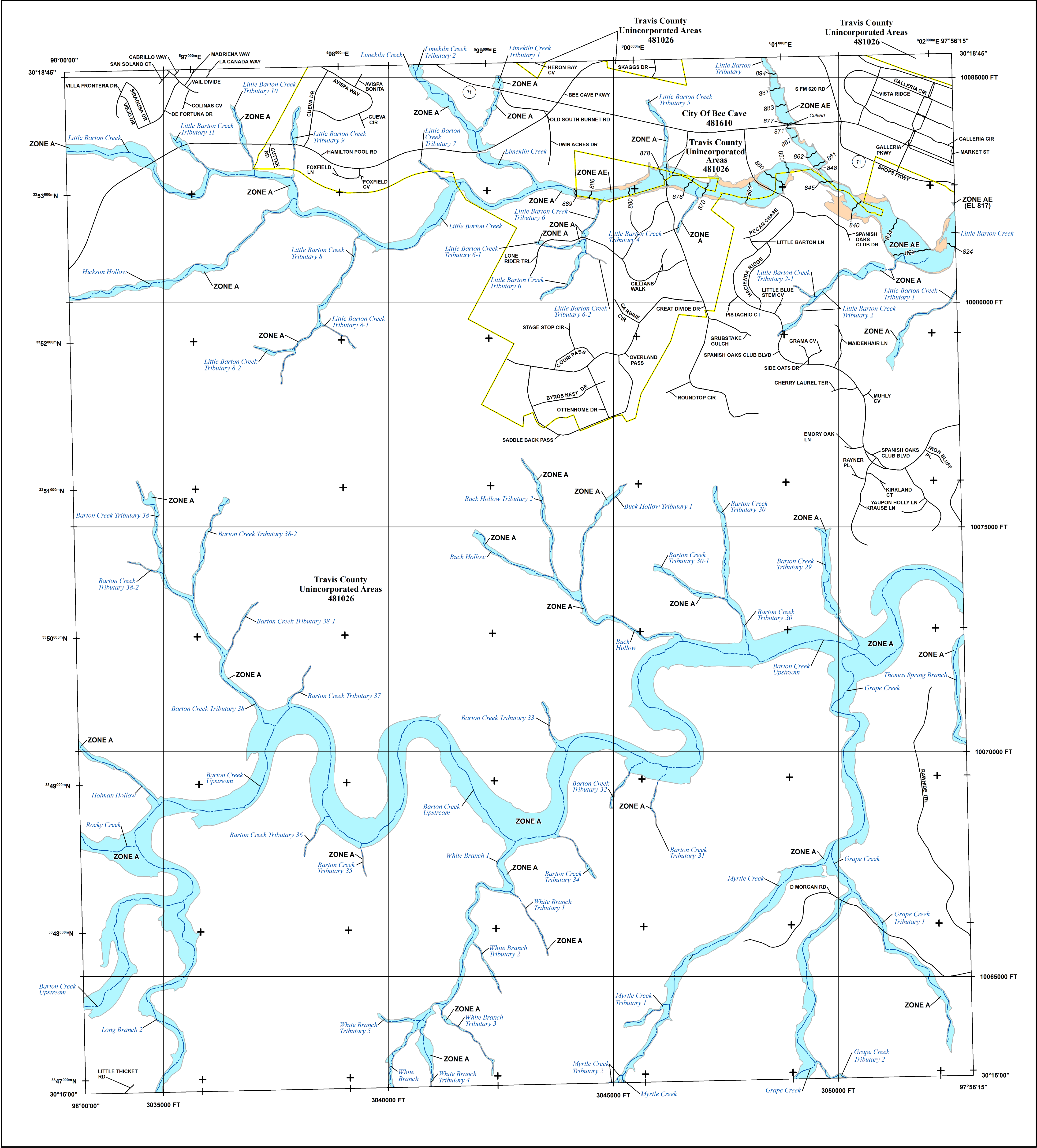


NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

TRAVIS COUNTY, TEXAS
and Incorporated Areas
PANEL 405 OF 730

COMMUNITY	NUMBER	PANEL	SUFFIX
AUSTIN, CITY OF	480624	0405	J
LAKEWAY, CITY OF	481303	0405	J
TRAVIS COUNTY	481026	0405	J
BEE CAVE, CITY OF	481610	0405	J
THE HILLS, VILLAGE OF	480063	0405	J

VERSION NUMBER
2.3.3.3
MAP NUMBER
48453C0405J
MAP REVISED
JANUARY 22, 2020



FLOOD HAZARD INFORMATION

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

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://msc.fema.gov)

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A,V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS OF FLOOD HAZARD		Area of Minimal Flood Hazard Zone X
		Area of Undetermined Flood Hazard Zone D
OTHER AREAS		
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
		Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Base Flood Elevation Line (BFE)
OTHER FEATURES		Limit of Study
		Jurisdiction Boundary

NOTES TO USERS

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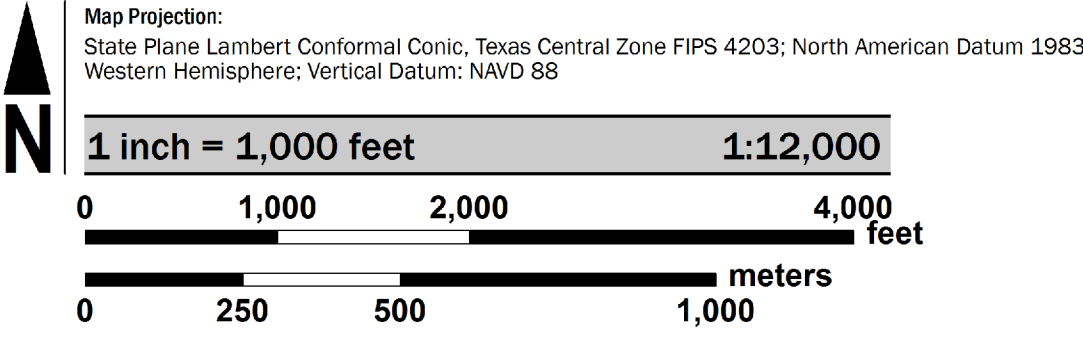
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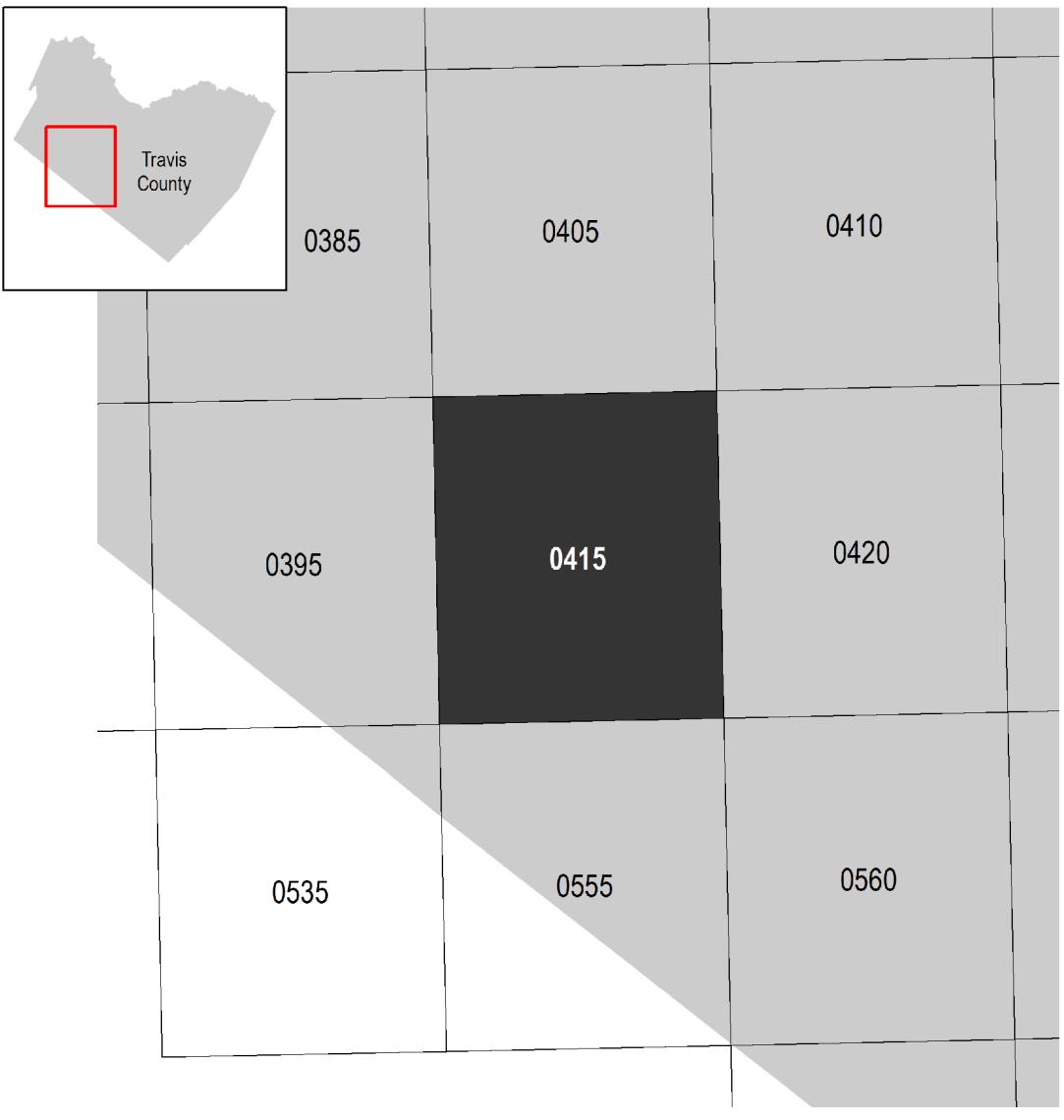
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SCALE



PANEL LOCATOR



National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

TRAVIS COUNTY, TEXAS
and Incorporated Areas

PANEL 415 OF 730

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
BEE CAVE, CITY OF	481026	0415	J
TRAVIS COUNTY	481610	0415	J

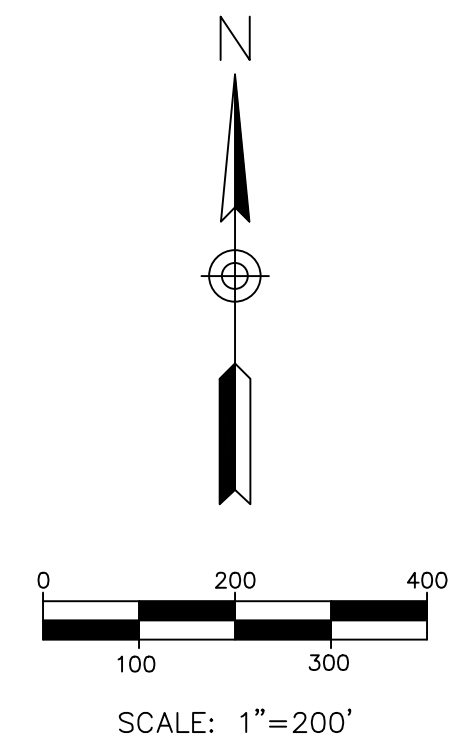
VERSION NUMBER
2.3.3.3




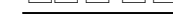
MAP NUMBER
48453C0415J



MAP REVISED
JANUARY 22, 2020



Attachment Y

Buffer Map



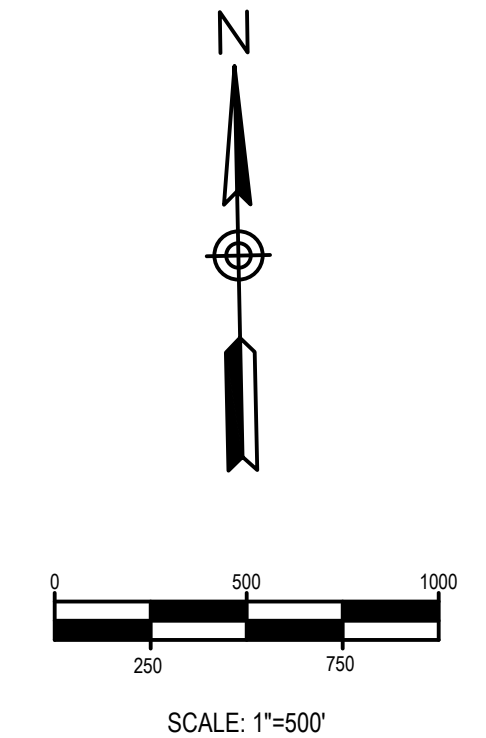
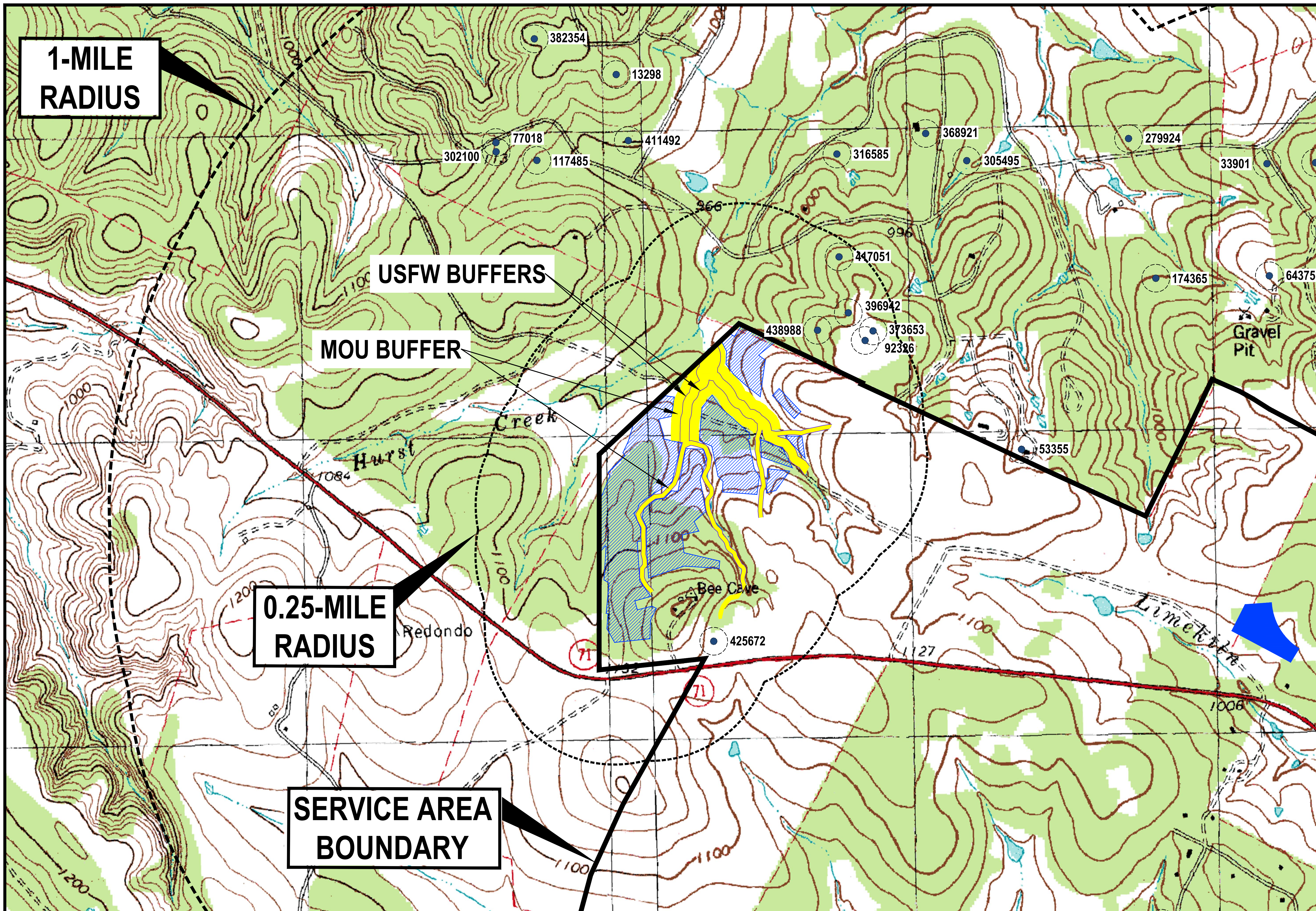





			
Murfee Engineering Company		Texas Registered Engineering Firm F-353	
<h2 style="margin: 0;">WEST TRAVIS COUNTY P.U.A.</h2> <p style="margin: 0;">TLAP MINOR AMENDMENT W/ RENEWAL</p> <p style="margin: 0;">ATTACHMENT Y - SUBSURFACE IRRIGATION PLANNING EXHIBIT</p>			
1101 Capital of Texas Highway South, Building D, Suite 1101, Austin, Texas 78746, (512) 327-9204			
JOB NO.	11-051.84	SCALE:	AS NOTED
DESIGNED BY:	DL	SHEET:	1 OF 1
DRAWN BY:	RWH	DATE:	10/23/2014
		DATE:	10/27/2014
FILE(LAYOUT): 0:1110518411-051.84-SLOPE.dwg (24x36)			

Attachment Z

Water Wells 0.25mi Radius



- SDRDB WELLS
- TWDB WELLS
- 150' WELL BUFFER

- SERVICE AREA BOUNDARY
- - - 1-MILE RADIUS
- 0.25-MILE RADIUS

- EFFLUENT IRRIGATION AREA
- ▨ SUBSURFACE DRIP FIELDS

MEC
Murfee Engineering Company

Texas Registered Engineering Firm F-353

WEST TRAVIS COUNTY PUA
TLAP MINOR AMENDMENT W/ RENEWAL
ATTACHMENT Z

1101 Capital of Texas Highway South, Building D, Suite 110, Austin, Texas 78746, (512) 327-9204

JOB NO. 11-051.84	SCALE: AS NOTED	SHEET: 1 OF 1
DESIGNED BY: BC	DATE: 6/2/2017	
DRAWN BY: LDD	DATE: 6/29/2017	
FILE(LAYOUT): O:\11\051\84\TLAP.dwg(DRIP IRR - 25 MILE - 24x36)		