

This file contains the following documents:

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



Portada de Paquete Técnico

Este archivo contiene los siguientes documentos:

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

TCEQ

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

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

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

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

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS Enter 'INDUSTRIAL' or 'DOMESTIC' here WASTEWATER/STORMWATER

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Arbor Way, Inc. (CN: 603257957) proposes to operate Two Rivers Wastewater Treatment Plant (RN: 104790332), a wastewater treatment facility. The facility will be located at approximately 1,200-feet northwest of the intersection of Haynie Flat Road and Travis Lakeside Drive, in Spicewood, Travis County, Texas 78669. Permit renewal with minor amendment to add 0.160 MGD flow phase. This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain five-day biological oxygen demand (BOD5), total suspended solids (TSS), and Escherichia coli. Domestic wastewater will be treated by an activated sludge process plant and the treatment units include a bar screen, digester, aeration basin, clarifier, and chlorine contact basin.

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

AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí /AGUAS PLUVIALES

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

Arbor way, Inc (CN: 603257957) propone operar la Planta de Tratamiento de Aguas Residuales Two Rivers RN: 104790332, una instalación de tratamiento de aguas residuales. La instalación estará ubicada en aproximadamente a 1,200 pies al noroeste de la intersección de Haynie Flat Road y Travis Lakeside Drive, en Spicewood, Condado de Travis, Texas 78669. Renovación del permiso con enmienda menor para agregar una fase de flujo de 0.160 MGD. Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan demanda biologica de oxigeno de cinco dias (BOD5), solidos suspendidos totales (TSS), y Escherichia coli . Aguas residuales domesticas. estará tratado por una planta de proceso de lodos activados y las unidades de tratamiento incluyen criba de barras, digestor, balsa de aireación, clarificador y balsa de contacto de cloro.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



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

PERMIT NO. WQ0014649001

APPLICATION. Arbor Way, Inc., 3100 West Alabama Street, Houston, Texas 77098, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Land Application Permit (TLAP) No. WQ0014649001 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 320,000 gallons per day via surface irrigation on 170 acres of golf course. The domestic wastewater treatment facility and disposal area are located approximately 1,200 feet northwest of the intersection of Haynie Flat Road and Lakeside Drive, in Travis County, Texas 78669. TCEQ received this application on November 7, 2024. The permit application will be available for viewing and copying at Lake Travis Community Library, 1938 Lohmans Crossing Road, Lakeway, in Travis County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.075277,30.450277&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 countywide mailing list and to those who are on the mailing list for this application. That notice will contain the deadline for submitting public comments.

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

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

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

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

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

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

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

INFORMATION AVAILABLE ONLINE. For details about the status of the application, visit the Commissioners' Integrated Database at 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 Arbor Way, Inc. at the address stated above or by calling Ms. Yvonne Rivera, P.E., Project Manager, DE Corp., at 713-520-9570.

Issuance Date: December 13, 2024

Comisión de Calidad Ambiental del Estado de Texas



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

PERMISO NO. WQ0014649001

SOLICITUD. Arbor Way, Inc., 3100 West Alabama Street, Houston, Texas 77098, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) para el propuesto Permiso No. WQ0014649001 de disposición de aguas residuales para autorizar la disposición de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 320,000 galones por día via irrigación en 170 hectares de tierra de campo de golf. La planta de tratamiento de aguas domésticos residuales y el área de disposición están ubicados en 1,200 pies al noroeste de la intersección de Haynie Flat Road y Travis Lakeside Drive en el Condado de Travis, Texas 78669. La TCEQ recibió esta solicitud el día 7 de noviembre de 2024. La solicitud para el permiso estará disponible para leer y copiar en Lake Travis Community Library, 1938 Lohmans Crossing Road, Lakeway, en el condado Travis, Texas antes de la fecha de publicación de este aviso en el periódico. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web:

https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.075277,30.450277&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.

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

CONTACTOS E INFORMACIÓN DE LA TCEQ. Todos los comentarios escritos del

público y los para pedidos una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at www.tceq.texas.gov/about/comments.html. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: www.tceq.texas.gov.

También se puede obtener información adicional del Arbor Way, Inc. a la dirección indicada arriba o llamando a Senora Yvonne Rivera, DECorp., al 713-520-9570.

Fecha de emission: 13 de diciembre de 2024

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



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

RENEWAL

PERMIT NO. WQ0014649001

APPLICATION AND PRELIMINARY DECISION. Arbor Way, Inc., 3100 West Alabama Street, Houston, Texas 77098, has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of TCEQ Permit No. WQ0014649001 which authorizes the disposal of treated domestic wastewater at a daily average flow not to exceed 430,000 gallons per day via surface irrigation on 170 acres of golf course. The draft permit authorizes the disposal of treated domestic wastewater at a daily average flow not to exceed 320,000 gallons per day via surface irrigation on 170 acres of golf course. This permit will not authorize a discharge of pollutants into water in the state. TCEQ received this application on November 7, 2024.

The wastewater treatment facility and disposal site will be located approximately 1,200 feet northwest of the intersection of Haynie Flat Road and Lakeside Drive, in Travis County, Texas 78669. The wastewater treatment facility and disposal site will be located in the drainage basin of Lake Travis in Segment No. 1404 of the Colorado River Basin. This link to an electronic map of the site or facility's general location is provided as a public courtesy and is not part of the application or notice. For the exact location, refer to the application. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.075277,30.450277&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 Lake Travis Community Library, 1938 Lohmans Crossing Road, Lakeway, in Travis County, Texas. The application, including any updates, and associated notices are available electronically at the following webpage:

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

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

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

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

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

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

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

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

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

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

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

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

Further information may also be obtained from Arbor Way, Inc. at the address stated above or by calling Ms. Yvonne Rivera, P.E., Project Manager, DE Corp., at 713-520-9570.

Issuance Date: April 29, 2025

Comisión De Calidad Ambiental Del Estado De Texas



AVISO DE SOLICITUD Y DECISIÓN PRELIMINAR PARA PERMISO PARA APLICACIÓN DE LA CALIDAD DEL AGUA EN TERRENOS PARA AGUAS RESIDUALES MUNICIPALES

RENOVACIÓN

PERMISO NO. WQ0014649001

SOLICITUD Y DECISIÓN PRELIMINAR. Arbor Way, Inc., 3100 W Alabama Street, Houston, Texas 77098, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) por una renovación para autorizar la disposición de aguas residuales domésticas tratadas con un caudal medio diario que no supere los 430.000 galones diarios mediante riego superficial en 170 acres de campo de golf. El proyecto de permiso autoriza la disposición de aguas residuales domésticas tratadas con un caudal medio diario que no supere los 320.000 galones diarios mediante riego superficial en 170 acres de campo de golf. Este permiso no autorizará una descarga de contaminantes a las aguas del estado. La TCEQ recibió esta solicitud el 7 de noviembre de 2024.

La planta y el sitio de disposición están ubicadas en aproximadamente a 1200 pies al noroeste de la intersección de Haynie Flat Road y Lakeside Drive en el Condado de Travis, Texas. La planta y el sitio de disposición están ubicados en la cuenca de drenaje de Lake Travis en el Segmento No. 1404 de la Cuenca del Río Colorado. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud. https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.075277,30.450277&level=18

El Director Ejecutivo de la TCEQ ha completado la revisión técnica de la solicitud y ha preparado un borrador del permiso. El borrador del permiso, si es aprobado, establecería las condiciones bajo las cuales la instalación debe operar. El Director Ejecutivo ha tomado una decisión preliminar que si este permiso es emitido, cumple con todos los requisitos normativos y legales. La solicitud del permiso, la decisión preliminar del Director Ejecutivo y el borrador del permiso están disponibles para leer y copiar en Lake Travis Community Library, 1938 Lohmans Crossing Road, Lakeway, in Travis County, Texas. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications.

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

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

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO.

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

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

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

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

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

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

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

También se puede obtener información adicional del Arbor Way, Inc. a la dirección indicada arriba o llamando a Senora Yvonne Rivera, P.E. al 713-520-9570.

Fecha de emission: 29 de abril de 2025



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

This is a renewal of Permit No. WQ0014649001 issued on September 30, 2015.

PERMIT TO DISCHARGE WASTES

under provisions of Chapter 26 of the Texas Water Code

Arbor Way, Inc.

whose mailing address is

3100 West Alabama Street, Houston, Texas 77098,

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

General Description and Location of Waste Disposal System:

Description: The Two Rivers Wastewater Treatment Facility consists of an activated sludge process plant using the complete mix mode of single staged nitrification. Treatment units for Interim phase include a bar screen, two aeration basins, a final clarifier, two aerobic digesters, and a chlorine contact chamber. Treatment units for Final phase include a bar screen, four aeration basins, two final clarifiers, four aerobic digesters, and two chlorine contact chambers.

The permittee is authorized to dispose of treated domestic wastewater effluent at a daily average flow not to exceed 0.16 million gallons per day (MGD) in the Interim phase, and 0.32 MGD in the Final phase via surface irrigation on 170 acres of golf course. The facility includes four storage ponds with a total surface area of 8.6 acres and total capacity of 78.5 acre-feet for storage of treated effluent prior to irrigation.

Application rates to the irrigated land shall not exceed 1.05 acre-feet per year per acre irrigated in the Interim Phase and 2.11 acre-feet per year per acre irrigated in the Final Phase. The irrigated crops include Bermuda grass and native grasses.

Location: The wastewater treatment facility and disposal site are located approximately 1,200 feet northwest of the intersection of Haynie Flat Road and Lakeside Drive, in Travis County, Texas 78669. (See Attachment A.)

Drainage Area: The wastewater treatment facility and disposal site are located in the drainage basin of Lake Travis in Segment No. 1404 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, **ten years from the date of issuance**.

ISSUED DATE:	
	For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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

A. Effluent Limitations

<u>Character</u>: Treated Domestic Sewage Effluent

<u>Volume</u>: Daily Average Flow – 0.16 MGD in the Interim phase

0.32 MGD in the Final phase

<u>Quality</u>: The following effluent limitations are required:

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

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

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

B. <u>Monitoring Requirements</u>:

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

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

STANDARD PERMIT CONDITIONS

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

DEFINITIONS

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

1. Flow Measurements

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

2. Concentration Measurements

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

3. Sample Type

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

MONITORING REQUIREMENTS

1. Monitoring Requirements

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

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

2. Test Procedures

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

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

3. Records of Results

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

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

4. Additional Monitoring by Permittee

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

5. Calibration of Instruments

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

6. Compliance Schedule Reports

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

7. Noncompliance Notification

- a. In accordance with 30 TAC § 305.125(9), any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Except as allowed by 30 TAC § 305.132, report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
- b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
 - i. Unauthorized discharges as defined in Permit Condition 2(g).
 - ii. Any unanticipated bypass which exceeds any effluent limitation in the permit.
- c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.
- d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible.
- 8. In accordance with the procedures described in 30 TAC §§ 35.301 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.
- 9. Changes in Discharges of Toxic Substances

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

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

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

10. Signatories to Reports

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

PERMIT CONDITIONS

1. General

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

2. Compliance

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

3. Inspections and Entry

- a. Inspection and entry shall be allowed as prescribed in the Texas Water Code Chapters 26, 27, and 28, and Texas Health and Safety Code Chapter 361.
- b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission.

 Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to

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

4. Permit Amendment and/or Renewal

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

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

5. Permit Transfer

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

6. Relationship to Hazardous Waste Activities

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

7. Property Rights

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

8. Permit Enforceability

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

9. Relationship to Permit Application

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

10. Notice of Bankruptcy.

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

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

OPERATIONAL REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

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SLUDGE PROVISIONS

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

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

A. General Requirements

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

B. Testing Requirements

1. Sewage sludge or biosolids shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 11) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. The permittee shall submit the following information in an annual report to the TCEQ by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through TCEQ's website. If the permittee requests and obtains an electronic reporting waiver, the annual report can be submitted in hard copy to the TCEQ Regional Office (MC Region 11) and the Enforcement Division (MC 224).

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

TABLE 1

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

^{*} Dry weight basis

3. Pathogen Control

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

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

<u>Alternative 1</u> - 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:

<u>Alternative 2</u> - 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

<u>Alternative 4</u> - 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).

<u>Alternative 2</u> - 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.

<u>Alternative 3</u> - 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.

- <u>Alternative 1</u> 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
PCBs

- once during the term of this permit
- once during the term of this permit

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

Amount of biosolids (*)

metric tons per 365-day period Monitoring Frequency

o to less than 290 Once/Year

290 to less than 1,500 Once/Quarter

1,500 to less than 15,000 Once/Two Months

15,000 or greater Once/Month

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

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

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

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

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

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

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

A. Pollutant Limits

Table 2

	Cumulative Pollutant Loading Rate
<u>Pollutant</u>	(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

	Monthly Average
	Concentration
<u>Pollutant</u>	(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 <u>five years</u>. 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 <u>indefinitely</u>. 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 once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR § 261.24. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 11) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 11) and the Enforcement Division (MC 224), by September 30_{th} of each year.

- 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.

TCEQ Revision 06/2020

SPECIAL PROVISIONS:

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

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

- *A Class D Wastewater Treatment Operator license is not renewable for operators of a facility listed in 30 TAC Section 30.342(c) and must be upgraded to a Class C Wastewater Treatment Operator license or higher prior to the expiration date of the Class D license.
- 3. The permittee shall maintain and operate the treatment facility in order to achieve optimum efficiency of treatment capability. This shall include required monitoring of effluent flow and quality as well as appropriate grounds and building maintenance.
- 4. Prior to construction of the 0.16 MGD and 0.32 MGD 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.

Plans and specifications have been approved for the 0.16 MGD wastewater treatment

facility, in accordance with 30 TAC § 217, Design Criteria for Domestic Wastewater Systems. A summary transmittal approval letter was issued (July 13, 2023) (Log No. 0523/022). A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ.

- 5. Reporting requirements according to 30 TAC § 319.1-319.11 and any additional effluent reporting requirements contained in this permit are suspended from the effective date of the permit until plant startup or discharge, whichever occurs first, from the facility described by this permit. The permittee shall provide written notice to the TCEQ Regional Office (MC Region 11) and the Applications Review and Processing Team (MC 148) of the Water Quality Division at least forty-five (45) days prior to plant startup or anticipated discharge, whichever occurs first, and prior to completion of each additional phase on Notification of Completion Form 20007.
- 6. On June 5, 2014, the permittee submitted 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 permittee shall also comply with the requirements of 30 TAC § 309.13(a) through (d). (See Attachment B.)
- 7. The irrigated crops include Bermuda grass and native grasses. Application rates to the irrigated land shall not exceed 1.05 acre-feet per year per acre irrigated in the Interim I Phase and 2.11 acre-feet per year per acre irrigated in the Final Phase. 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.
- 8. Irrigation practices shall be designed and managed as to prevent ponding of effluent or contamination of ground and surface waters and to prevent the occurrence of nuisance conditions in the area. To promote effluent and nutrient uptake by the crop, and to prevent pathways for effluent surfacing, the Bermuda grass and native grasses shall be established and well maintained in the irrigation area throughout the year. Tailwater control facilities shall be provided as necessary to prevent the discharge of any effluent from the irrigated land.
- 9. Effluent shall not be applied for irrigation during rainfall events or when the ground is frozen or saturated.
- 10. For any area where treated effluent is stored or where there exist hose bibs or faucets, the permittee shall erect adequate signs stating that the irrigation water is from a non-potable water supply. Signs shall consist of a red slash superimposed over the international symbol for drinking water accompanied by the message "DO NOT DRINK THE WATER" in both English and Spanish. All piping transporting the effluent shall be clearly marked with these same signs.
- 11. Spray fixtures for the irrigation system shall be of such design that they cannot be operated by unauthorized personnel.
- 12. Irrigation with effluent shall be accomplished only when the area specified is not in use.
- 13. The permittee shall obtain representative soil samples from the root zones of the land

application area. Composite sampling techniques shall be used. Each composite sample shall represent no more than 80 acres with no fewer than 10 to 15 subsamples representing each composite sample. For analysis and reporting, subsamples shall be composited by like sampling depth, type of crop, and soil type. Soil types are soils that have like topsoil or plow layer textures. These soils shall be sampled individually from 0 to 6 inches, 6 to 18 inches and 18 to 30 inches below ground level. The permittee shall sample soils in December to February of each year. Soil samples shall be analyzed within 30 days of sample collection.

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
рН	2:1 (v/v) water to soil mixture		Reported to 0.1 pH units after calibration of pH meter
Electrical Conductivity	2:1 (v/v) water to soil mixture	0.01	dS/m (same as mmho/cm)
Nitrate-nitrogen	From a 1 <u>N</u> KCl soil extract	1	mg/kg (dry weight basis)
Total Kjeldahl Nitrogen (TKN)	For determination of Organic plus Ammonium Nitrogen. Procedures that use Mercury (Hg) are not acceptable.	20	mg/kg (dry weight basis)
Total Nitrogen	= TKN + nitrate-nitrogen (same as, organic-nitrogen + ammonium-nitrogen + nitrate-nitrogen)		mg/kg (dry weight basis)
Plant-available: Phosphorus (P)	Mehlich III with inductively coupled plasma	1	mg/kg (dry weight basis)
Plant-available: Potassium (K) Calcium (Ca) Magnesium (Mg) Sodium (Na) Sulfur (S)	May be determined in the same Mehlich III extract with inductively coupled plasma	5 (K) 10 (Ca) 5 (Mg) 10 (Na) 1 (S)	mg/kg (dry weight basis)
Amendment addition, e.g., gypsum			Report in <i>short</i> tons/acre in the year effected

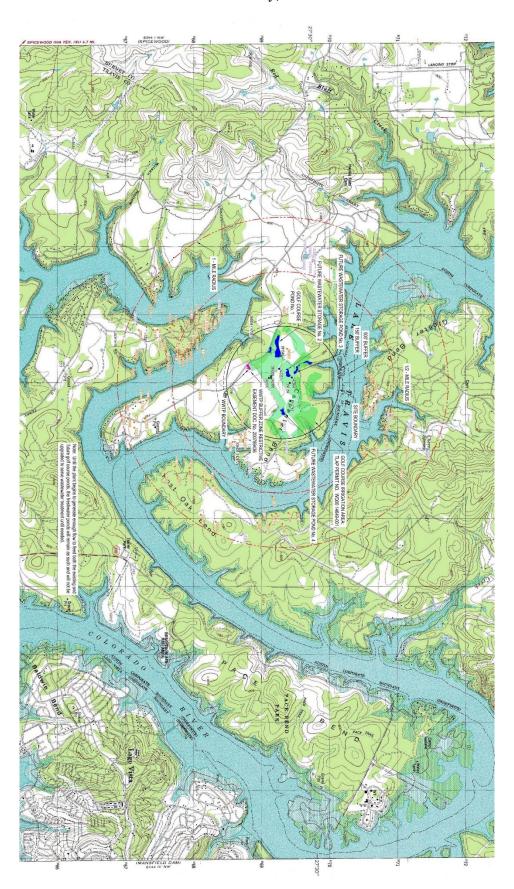
The permittee shall provide a copy of this plan to the analytical laboratory prior to sample analysis. The permittee shall submit the results of the annual soil sample analyses with copies of the laboratory reports and a map depicting the areas that have received wastewater within the permanent land application fields to the Water Quality Assessment Team (MC 150), TCEQ Regional Office (MC Region 11) and the Enforcement Division (MC 224) no later than end of September following the sampling date of each 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 disposal sites during that year.

- 14. The permittee shall use cultural practices to promote and maintain the health and propagation of the Bermuda grass and native grass crops and avoid plant lodging. The permittee shall harvest the crops (cut and remove it from the field) at least one time 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. The physical condition of the spray irrigation fields will be monitored on a weekly basis when the fields are being utilized for the purpose of wastewater irrigation. Any areas with problems such as surface runoff, surficial erosion, stressed or damaged vegetation will be recorded in the field log kept onsite and corrective measures will be initiated within 24 hours of discovery.
- 16. 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.
- 17. Permanent transmission lines shall be installed from the holding pond to each tract of land to be irrigated utilizing effluent from that pond.
- 18. The permittee shall comply with buffer zone requirements of 30 TAC §309.13(c). A wastewater treatment plant unit, defined by 30 TAC Section §309.11(9), must be located a minimum horizontal distance of 250 feet from a private well and a minimum horizontal distance of 500 feet from a public water well site, spring, or other similar sources of public drinking water, as provided by §290.41(c)(1)(C) of this title.
- 19. The permittee shall comply with the buffer zone requirements of 30 TAC §309.13(c), specifically regarding water wells and waters in the state. The permittee must locate the wastewater irrigation fields a minimum horizontal distance of 500 feet from public water wells, springs, or other similar sources of public drinking water and 150 feet from private water wells. A vegetative buffer of 150 feet minimum shall be maintained around the surface water bodies, water courses, and Lake Travis where the application of wastewater will not occur.
 - 20. Facilities for the retention of treated or untreated wastewater (Golf Course Pond 1 and Future Golf Course Ponds 2, 3, and 4) shall be adequately lined to control seepage in accordance with 30 TAC §217.203 and 30 TAC §309.13(d) since the facility overlies the recharge zone of an aquifer. New or modified wastewater ponds shall not be put into service until the permittee demonstrates that the pond liners meet the requirements of 30 TAC §217.203 and 30 TAC §309.13(d). The permittee shall demonstrate that the number, location, and test results of samples collected for geotechnical testing are in accordance with 30 TAC §217.203(d) and (e), and that the liner has a minimum thickness of 3 feet in

accordance with 30 TAC §309.13(d) since the facility overlies the recharge zone of an aquifer. The report providing this demonstration shall be submitted to the Water Quality Assessment Team (MC-150) and the TCEQ Regional Office (MC-Region 11) for review and approval prior to use of the wastewater ponds. If a synthetic liner is to be used, the liner thickness shall be a minimum of 40 mils and be constructed with an underground leak detection system with appropriate sampling points.

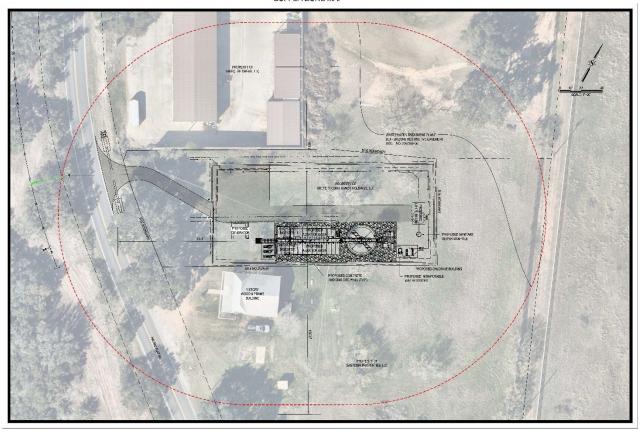
- 21. The permittee shall submit the liner certification for a newly-constructed or modified wastewater pond to the Water Quality Assessment Team (MC-150), the TCEQ Regional Office (MC-Region 11), and the TCEQ Compliance Monitoring Section (MC-224) within 30 days of completion and prior to use. The certification shall be signed and sealed by a Texaslicensed Professional Engineer and include a description of how the liner meets the requirements of 30 TAC §217.203 and 30 TAC §309.13(d).
- 22. Discharge from wastewater ponds is prohibited. New or modified wastewater ponds shall not be put into service until the permittee demonstrates that the connection of canals or surface water conveyances to the wastewater ponds is removed or the canal or surface water conveyance is lined to meet the standards above. The permittee shall submit documentation that the wastewater ponds are not connected to surface water conveyances with the liner certification 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.
- 23. Facilities for the retention of treated or untreated wastewater shall be adequately managed and lined to control seepage. At least once per month, the permittee shall inspect the sides and bottom (if visible) of the wastewater ponds for signs of damage and leakage, and any pond leak detection systems that are in service. Leaking ponds shall be removed from service, or operated in a manner to prevent discharge, until repairs are made or replacement ponds are constructed. A record of the monthly inspections shall be maintained in a field log and kept onsite for TCEO inspection.
- 24. Pond liner certifications and all liner construction and repair documentation shall be maintained by the Permittee for the life of the facility and be made available for TCEQ personnel for inspection and review.
- 25. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.

Attachment A – Site Map TCEQ Permit No. WQ0014649001 Arbor Way, Inc.



Attachment B – Buffer Zone Map TCEQ Permit No. WQ0014649001 Arbor Way, Inc.

ATTACHMENT 6 BUFFER ZONE MAP



TECHNICAL SUMMARY AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

DESCRIPTION OF APPLICATION

Applicant: Arbor Way, Inc.

TCEQ Permit No. WQ0014649001

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. draft permit includes an expiration date of **ten 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

Arbor Way, Inc. has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of Permit No. WQ0014649001 to authorize the disposal of treated domestic wastewater at a daily average flow not to exceed 0.43 million gallons per day (MGD) via surface irrigation on 170 acres of golf course. In the Interim phase, the facility will include one storage pond with a total surface area of 4.5 acres and a total capacity of 40.5 acre-feet for storage. In the Final phase, the facility will include three storage ponds with a total surface area of 1.3 acres, 1.8 acres, and 1.0 acres, and total capacity of 12.0 acre-feet, 17.0 acre-feet and 9.0 acre-feet for storage of treated effluent prior to irrigation. The proposed wastewater treatment facility will serve Travis County Improvement District No. 1, a 1,250-acre single family residential development.

PROJECT DESCRIPTION AND LOCATION

The Two Rivers Wastewater Treatment Facility will consist of an activated sludge process plant using the complete mix mode of single staged nitrification. Treatment units for Interim phase include a bar screen, two aeration basins, a final clarifier, two aerobic digesters, and a chlorine contact chamber. Treatment units for Final phase include a bar screen, four aeration basins, two final clarifiers, four aerobic digesters, and two chlorine contact chambers. The facility has not been constructed.

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

The wastewater treatment facility and disposal site will be located approximately 1,200 feet

Arbor Way, Inc.

Permit No. WQ0014649001

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

northwest of the intersection of Haynie Flat Road and Lakeside Drive in Travis County, Texas 78669.

The wastewater treatment facility and disposal site will be located in the drainage basin of Lake Travis in Segment No. 1404 of the Colorado River Basin. No discharge of pollutants into water in the state is authorized by this permit.

SUMMARY OF EFFLUENT DATA

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

DRAFT PERMIT CONDITIONS

The draft permit authorizes the disposal of treated domestic wastewater effluent at a daily average flow not to exceed 0.16 MGD in the Interim phase and 0.32 MGD in the Final phase via surface irrigation on 170 acres of golf course. The facility will include four storage ponds with a total surface area of 8.6 acres and total capacity of 78.5 acre-feet for storage of treated effluent prior to irrigation. Application rates to the irrigated land shall not exceed 1.05 acre-feet per year per acre irrigated in the Interim Phase and 2.11 acre-feet per year per acre irrigated in the Final Phase. The irrigated crops include Bermuda grass and native grasses.

The effluent limitations in the draft permit, based on a daily average, are 20 mg/l biochemical oxygen demand (BOD_5) and 20 mg/l total suspended solids (TSS). The effluent shall contain a total chlorine residual of at least 1.0 mg/l after a detention time of at least 20 minutes based on peak flow.

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

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal, and Transportation.

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 permittee has applied for a minor amendment to add an Interim phase of 0.16 MGD and a reduction of the Final phase permitted flow (from 0.43 MGD to 0.32 MGD).

The Interim phase II and III in the existing permit are no longer applicable to the draft permit,

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they have been removed. The Interim phase of the draft permit has been revised to include updated special provisions.

Special Provisions Nos. 7, 8,10, 13, 18, 19, 20, 21, 22, 23 and 24 in the existing permit has been updated in the draft permit.

Special Provisions Nos. 14 and 15 have been added to the draft permit.

Special Provision No. 2 in the existing permit has been updated to reflect the requirements of 30 TAC § 30.342, which does not allow renewal of a Class D operator's license for mechanical treatment plants.

Special Provision No. 22 in the existing permit has been removed based on recommendations of the Water Quality Assessment Team.

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

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 November 7, 2024, and additional information received on December 12, 2024 and March 19, 2025.
- 2. Existing TCEQ permit: Permit No. WQ0014649001 issued on September 30, 2015.
- 3. Interoffice Memorandum from the Water Quality Assessment Team, Water Quality Assessment & Standards Section, Water Quality Division.

PROCEDURES FOR FINAL DECISION

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

Once a draft permit is completed, it is sent, along with the Executive Director's preliminary decision, as contained in the technical summary or fact sheet, to the Chief Clerk. At that time, the Notice of Application and Preliminary Decision will be mailed to the same people and

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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 Paula Palmar at (512) 239-4561.

Paula Palmar	March 24, 2025
Paula Palmar	Date
Municipal Permits Team	
Wastewater Permitting Section (MC 148)	

Erwin Madrid

From: Hendrix, Rebecca <rhendrix@gfnet.com>
Sent: Thursday, December 12, 2024 5:05 PM

To: Erwin Madrid

Cc: Carter Jr., Jack; Rivera, Yvonne

Subject: RE: WQ0014649001 - NOD Response to letter dated 11 22 2024

Attachments: NORI_Spanish.docx

Good Evening. Please see attached for the word document of the NORI in Spanish. I have changed the contact to Yvonne as well. Rebecca

From: Erwin Madrid < Erwin. Madrid@tceq.texas.gov>

Sent: Thursday, December 12, 2024 4:59 PM **To:** Hendrix, Rebecca <rhendrix@gfnet.com>

Cc: Carter Jr., Jack <jcarter@gfnet.com>; Rivera, Yvonne <yrivera@gfnet.com> **Subject:** RE: WQ0014649001 - NOD Response to letter dated 11 22 2024

[EXTERNAL EMAIL]: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Rebecca,

I am working to declare the application admin complete; can you please supply the Spanish NORI in a Word doc?

Also, the Spanish notice lists Mr. Richard Grayum as the contact for Arbor Way, but the English has Yvonne Rivera. These don't have to match, but I wan to confirm that this is what you are wanting to list.

Regards,

Erwin Madrid
Team Lead
ARP Team | Water Quality Division
512-239-2191
Texas Commission on Environmental Quality



Please consider whether it is necessary to print this e-mail.

From: Hendrix, Rebecca < rhendrix@gfnet.com>
Sent: Wednesday, December 4, 2024 11:56 AM
To: Erwin Madrid < Erwin.Madrid@tceq.texas.gov>

Cc: Carter Jr., Jack <jcarter@gfnet.com>; Rivera, Yvonne <yrivera@gfnet.com>

Subject: WQ0014649001 - NOD Response to letter dated 11 22 2024

Good Morning Erwin. Please see attached for our response to the Notice of Deficiency letter dated November 22, 2024 in regards to the renewal of the permit for Arbor Way, Inc (WQ0014649001). Would you like a hard copy mailed to you as well? Please advise. If you need anything additional, please let me know. Rebecca

Comisión de Calidad Ambiental del Estado de Texas



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

PERMISO PROPUESTO NO. WQoo14649001

SOLICITUD. Arbor Way, Inc., 3100 W Alabama St, Houston TX 77098 ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) para el propuesto Permiso No.WQ0014649001 de disposición de aguas residuales] para autorizar la disposición de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 320,000 galones por día via irrigación en 170 hectares de tierra de campo de golf. La planta de tratamiento de aguas domésticos residuales y el área de disposición están ubicados en 1,200 pies al noroeste de la intersección de Haynie Flat Road y Travis Lakeside Drive en el Condado de Travis, Texas. La TCEO recibió esta solicitud el día 19 de Enero, 2024. La solicitud para el permiso estará disponible para leer y copiar en Lake Travis Community Library, 1938 Lohmans Crossing Road, Lakeway TX antes de la fecha de publicación de este aviso en el periódico. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: https://www.tceg.texas.gov/permitting/wastewater/pending-permits/tlap-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

[Insert web link from English notice]

Include the following non-italicized sentence if the facility is located in the Coastal Management Program boundary. The Coastal Management Program boundary is the area along the Texas Coast of the Gulf of México as depicted on the map in 31 TAC §503.1 and includes part or all of the following counties: Cameron, Willacy, Kenedy, Kleberg, Nueces, San Patricio, Aransas, Refugio, Calhoun, Victoria, Jackson, Matagorda, Brazoria, Galveston, Harris, Chambers, Jefferson y Orange. El Director Ejecutivo de la TCEQ ha revisado esta medida para ver si está de acuerdo con los objetivos y las regulaciones del Programa de Administración Costero de Texas (CMP) de acuerdo con las regulaciones del Consejo Coordinador de la Costa (CCC) y ha determinado que la acción es conforme con las metas y regulaciones pertinentes del CMP.

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar

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

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

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO

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

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

miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

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

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

CONTACTOS E INFORMACIÓN DE LA TCEQ. Todos los comentarios escritos del público y los para pedidos una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at www.tceq.texas.gov/about/comments.html. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: www.tceq.texas.gov.

También se puede	obtener información adicional del Arbor Way, Inc. a la dirección
indicada arriba o ll	amando a Senora Yvonne Rivera, DECorp. al 713-520-9570.
Fecha de emisión _	[Date notice issued]

Erwin Madrid

From: Hendrix, Rebecca <rhendrix@gfnet.com>
Sent: Wednesday, December 4, 2024 11:56 AM

To: Erwin Madrid

Cc: Carter Jr., Jack; Rivera, Yvonne

Subject: WQ0014649001 - NOD Response to letter dated 11 22 2024 **Attachments:** WQ0014649001 - NOD Response to letter dated 11 22 2024.pdf

Good Morning Erwin. Please see attached for our response to the Notice of Deficiency letter dated November 22, 2024 in regards to the renewal of the permit for Arbor Way, Inc (WQ0014649001). Would you like a hard copy mailed to you as well? Please advise. If you need anything additional, please let me know. Rebecca



3100 W. Alabama Houston, TX 77098 P 713.520.9570 | F 713.533.4111 gannettfleming.com

December 3, 2024

Mr. Erwin Madrid Texas Commission on Environmental Quality Applications Review and Processing Team (MC148) P.O. Box 13087 Austin, Texas 78711

RE:

Application to Renew Permit No. WQ0014649001 Applicant Name: Arbor Way, Inc. (CN603257957) Site Name: Two Rivers WWTP (RN104790332) Type of Application: Renewal with Changes

Dear Mr. Madrid:

In response to your letter dated November 22, 2024, the following items have been addressed:

- 1) The TCEQ Core Data Form is attached.
- 2) Attached are copies of the "Acquisition of Water Rights and Related Assets" between South Central Water Company and Arbor Way, Inc. This contains the "Assignment" of Facilities from South Central Water Company to Arbor Way, Inc. and the "Agreement for the Delivery and Use of Treated Wastewater Effluent for Permitted Purposes". These same agreements were provided to the TCEQ during the renewal of the permit in 2010. This same permit was also renewed in 2014. I hope this clarifies the transfer of rights from South Central Water Company to Arbor Way, Inc.
- 3) We are not requesting to add sludge disposal provisions to the current permit. Section 12.B of the Administrative Report has been marked Not Applicable.
- 4) We request to use the original signature pages submitted with the original application for Arbor Way, Inc signed by Ralph Thomas as Mr. Thomas is currently out of the country. Any former signature pages from Arete Thomas Ranch Holdings, LLC should be voided.
- 5) We are intending to reduce the permitted flow from .430 MGD to .320 MGD.
- 6) The NORI in the letter is inaccurate. The address should be 3100 W Alabama Street, Houston, Texas 77098. The daily average flow not to be exceeded should be 320,000 gallons.

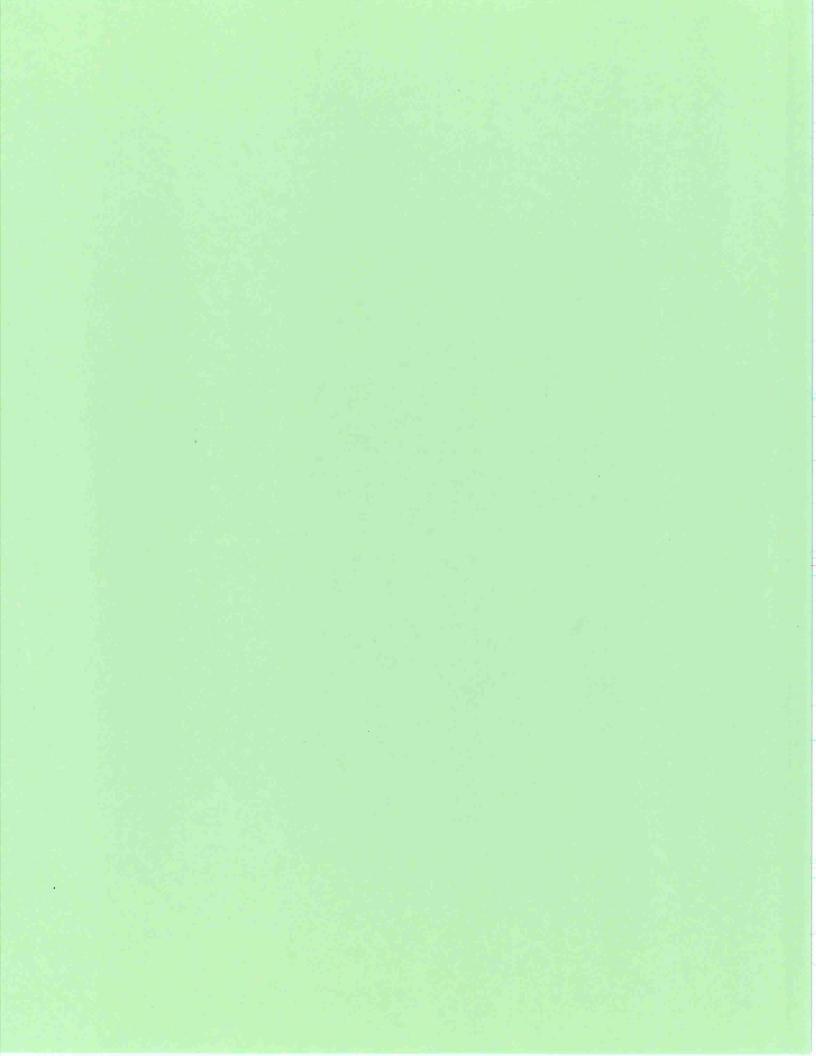


7) The NORI in Spanish is attached as requested with an address of 3100 W Alabama Street, Houston, Texas 77098 and a daily average flow of 320,000 gallons not to be exceeded.

Sincerely,

Yvonne Rivera, P.E.

Project Manager



TCEQ Use Only



TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for	Submissi	on (If other is checked	please describe	in space pro	ovided.)						
☐ New Pern	nit, Registra	ition or Authorization (Core Data Form	should be s	ubmitte	ed with	the progi	ram application.)			
⊠ Renewal ((Core Data	Form should be submit	ted with the ren	newal form)				ther			
2. Customer Reference Number (if issued) Follow this link to s							3. Reg	gulated Entity Ref	erence	Number (if	issued)
CN 6032579	57		1	or CN or RN Central R			RN 1	.04790332		-	
SECTION	V II:	Customer	Inform	ation	Ĺ						
4. General Cu	ıstomer In	formation	5. Effective I	Date for Cu	ıstome	r Info	rmation	Updates (mm/dd/	уууу)	25	T
☐ New Custor	mer	U	pdate to Custon	ner Informat	tion		Chan	ge in Regulated Ent	ity Owne	ership	
☐Change in Le	egal Name ((Verifiable with the Tex	as Secretary of	State or Tex	as Com	ptrolle	r of Public	Accounts)			
		ubmitted here may l oller of Public Accou		tomaticall	ly base	d on	what is c	urrent and active	with th	e Texas Sec	retary of State
6. Customer	Legal Nam	ne (If an individual, pri	nt last name firs	t: eg: Doe, J	ohn)			If new Customer, e	enter pre	evious Custom	ner below:
Arbor Way, Inc.	•										
7. TX SOS/CP	7. TX SOS/CPA Filing Number 8. TX State Tax ID (11 digits)							9. Federal Tax ID (9 digits)			Number (if
11. Type of C	ustomer:	☐ Corporat	ion					idual Partnership: 🗌 General 🔲 Limit			
		County Federal	Local 🗌 State	☑ Other			Sole Pi	roprietorship	Otl	ner:	
12. Number o	of Employ	ees			-			13. Independen	tly Ow	ned and Op	erated?
⊠ 0-20 □ Z	21-100	101-250 251-	500 🗌 501 a	ind higher				⊠ Yes [□No		
14. Customer	r Role (Pro	posed or Actual) – as i	t relates to the F	Regulated Er	ntity list	ed on	this form.	Please check one of	the follo	wing	
Owner Occupation	al Licensee	Operator Responsible Par		ner & Opera CP/BSA App				Other:			
15. Mailing	Arbor Wa	ay, Inc									
Address:	c/o Yvoni	ne Rivera, P.E., DE Corp	o., 3100 W Alaba	ama St							_
	City	Houston		State	TX		ZIP	77098		ZIP + 4	
16. Country N	Mailing In	formation (if outside	USA)			17.	E-Mail Ad	ddress (if applicable	e)		-

19. Extension or Code

TCEQ-10400 (11/22)

18. Telephone Number

20. Fax Number (if applicable)

(713)520-957

)

SECTION III: Regulated Entity Information

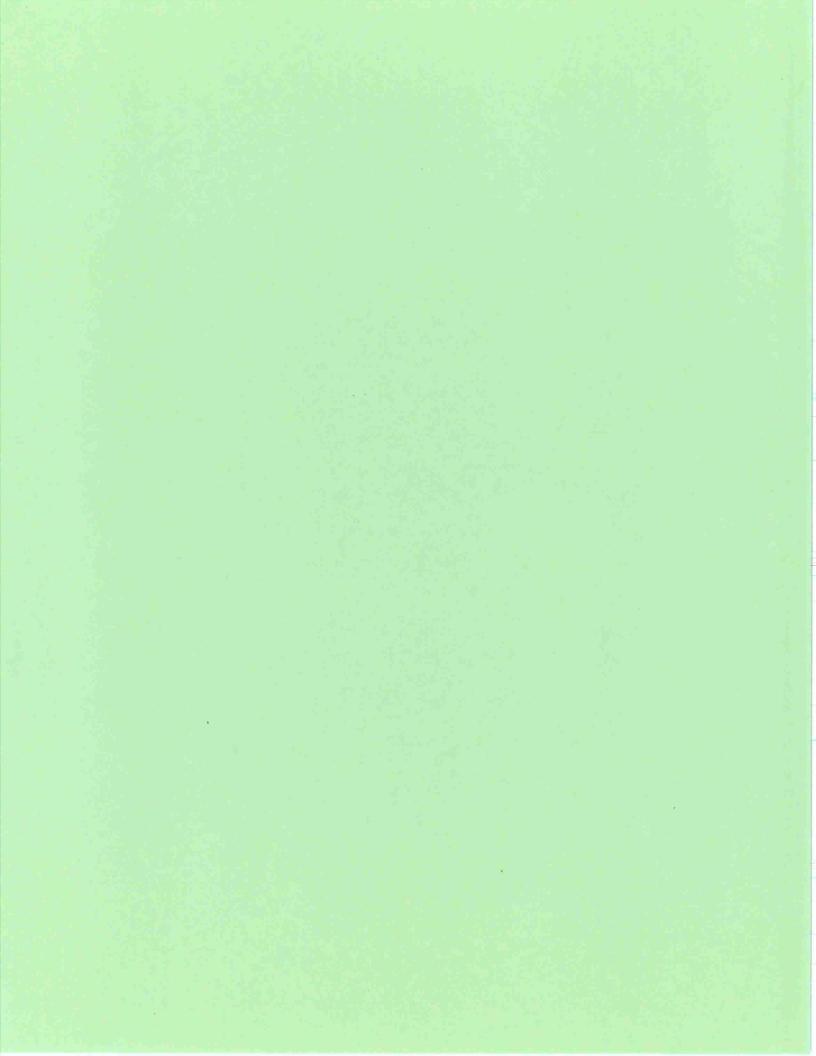
21. General Regulated Entity Information (If 'New Regulated Entity" is selected, a new permit application is also required.)											
☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information											
The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).											
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)											
Arbor Way, Inc.											
23. Street Address of	Two Rivers	Two Rivers Wastewater Treatment Plant									
the Regulated Entity:	24902 Stab	leford Circle									
(No PO Boxes)	City	Spicewood	State	ТХ		ZIP		78669		ZIP + 4	
24. County				······				•	1		
<u> </u>		If no Stre	et Address is prov	/ided, f	ields 25	5-28 ar	re rec	quired.			
25. Description to											
Physical Location:											
26. Nearest City								State		Nea	rest ZIP Code
Latitude/Longitude are re used to supply coordinate	-					ata Sta	anda	rds. (Ge	ocoding of th	e Physical	Address may be
27. Latitude (N) In Decima	al:				28. Lo	ngituc	de (W	V) In De	cimal:		
Degrees	Minutes		Seconds		Degrees Min			Minutes	Ainutes Seconds		
29. Primary SIC Code	30.	Secondary SIC	Code		Primary		CS Co	de	32. Secon	ndary NAI	CS Code
(4 digits)	(4 c	ligits)		(5 0	(5 or 6 digits) (5 or 6 digits)						
33. What is the Primary B	usiness of	this entity? (D	o not repeat the SIC	or NAIC	S descrip	otion.)					
34. Mailing	Arbor Wa	y, Inc.									
Address:	202 Arboi	Way Court									
, tuar door	City	Houston	State	тх		ZII	P	77057		ZIP + 4	
			į		i			1	1		1
35. E-Mail Address:	Ral	ph@rthomastx.co	om			····					J
35. E-Mail Address: 36. Telephone Number	Ral	ph@rthomastx.co	om 37. Extension o	or Code		3	38. Fa	ax Num	ber (if applicab	le)	

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.

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

☐ Dam Safety		Districts	Edwards Aquifer	Emissions I		ventory Air	☐ Industrial Hazardous Waste	
☐ Municipal Solid \	☐ Municipal Solid Waste ☐ New Source Review Air ☐ OSSF			Petroleum Si	orage Tank	☐ PWS		
Sludge		Storm Water	☐ Title V Air		☐ Tires		Used Oil	
☐ Voluntary Cleant	nb	☐ Wastewater	☐ Wastewater Agricul	Agriculture			Other:	
SECTION IV: Preparer Information								
	40. Name: Yvonne Rivera, P.E. 41. Title: Project Manager 42. Telephone Number 43. Ext./Code 44. Fax Number 45. E-Mail Address							
(713)520-9570			() -	yvonne.rive	ra@decorp.co	m		
SECTION V: Authorized Signature 16. 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 o 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:	Company: Arbor Way, Inc. Job Title: Preside							
Name (In Print):	Ralph Tho	omas		1	1	Phone:	(713)542- 6159	
Signature:						Date:		

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



01-7050068-LG/49 ASSIGNMENT

STATE OF TEXAS COUNTY OF TRAVIS

South Central Water Company (hereinafter "SCWC") for ten dollars (\$10.00) and other good and valuable consideration in hand paid Arbor Way, Inc. (hereinafter "Arbor"), by this instrument grants and conveys to ARBOR all right, title, and interest now owned by SCWC in the following:

- (1) That certain "Sewage Treatment Plant Site Easement and Buffer Zone Easement" granted to SCWC by Lakecliff on Lake Travis, LP. and attached hereto and incorporated herein as Exhibit "A". The parties agree that the plant site easement and buffer zone easement assigned herein to Arbor shall be limited to the site shown in Exhibit "G" attached hereto.
- (2) That certain "Agreement for the Delivery and Use of Treated Effluent for Permitted Purposes" including the First and Second Amendments thereto all of which were granted by Lakecliff on Lake Travis, LP to SCWC and all of which are attached hereto and incorporated herein as Exhibit "B".
- That certain Treated Effluent Line Easement between Club and Seller dated (3)June 9, 2006 ("Effluent Line Easement) attached hereto as Exhibit "D"; and
- (4) A beneficial capacity interest in that certain Waterline Capacity and Waterline Easement between the Club and Seller dated June 9, 2006 ("Waterline Capacity Agreement") attached hereto as Exhibit "E".

This assignment is made subject to the following terms:

WARRANTY. SCWC hereby warrants and represents that SCWC is a duly 1. organized and validly existing company under the laws of the State of Texas, and M. D. Bailey is authorized to act on behalf of SCWC. SCWC further warrants and represents that this assignment constitutes a valid and binding obligation on behalf of SCWC in accordance with the terms hereof. Except as stated above, SCWC makes this assignment without any other warranties either, express, implied, or statutory. SCWC does represent and warrant that to its best knowledge and belief, the instruments being assigned and attached hereto as Exhibits A,B,C,D and E are duly executed and binding documents.



- 2. INDEMNITIES. Arbor agrees to indemnify SCWC from any liability to third parties arising out of or in connection with the beneficial capacity interest in the Lake Water Facilities being conveyed to Buyer and the easement and other rights being assigned to Buyer.
- 3. BINDING EFFECT. This Assignment and all of its terms and conditions, are binding on SCWC and its successors and assigns, and on Arbor and its successors and assigns.

ADDITIONAL CONDITIONS: This assignment is also made subject to the following terms:

- (1) SCWC's request to transfer its Texas Commission on Environment Quality ("TCEQ") Wastewater Discharge Permit to ARBOR or its assigns.
- (2) SCWC does hereby assign and convey to ARBOR sufficient capacity in the Lake Water Facilities to provide 660 acre feet of Lake Water to the ARBOR development Project. No other capacity interest in the Waterline Capacity Agreement are conveyed.
- (3) Arbor agrees that it will assume and comply with the duties and obligations, if any, of SCWC under the assigned rights and easements and will comply with the requirements of the Seller's LCRA contract for the 1300 acre feet of water.

SIGNED AND DELIVERED this 15th day of MAY, 2007

SOUTH CENTRAL WATER COMPANY

BY: Malcolm Bailey, President

BEFORE ME, the undersigned authority, on this day personally appeared MALCOLM BAILEY, known to me to be the President of SCWC, whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

ACCEPTANCE

Arbor Way LLC, in consideration of the interest assigned to us herein, accept all of the right, title, and interest is the rights and obligations of SCWC pursuant to those certain easements, copies of which are attached to this Assignment as Exhibits "A", "B", "D", "E" and "G" and agree to assume and perform all the duties, if any, of SCWC pursuant to those easements. Arbor Way LLC further agrees it will be responsible for any liability for performance or nonperformance of the duties and obligations assumed by them or specified herein.

EXECUTED this 15 day of may, 2007.

ARBOR WAY, INC.

Robert G. Carle, PRESIDENT

Ş

BEFORE ME, the undersigned authority, on this day personally appeared Nobert A. Seals, known to me to be the President of ARBOR WAY, INC., whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER my hand and seal of office, this the

day of

Care Paris

LILLIAN LUCILLE GENTRY
Notary Public, Sinte of Texas
My Commission Expires
JUNE 30, 2011

Notary Public, State of Texas

CONSENT OF LIENHOLDER

The undersigned, Security State Bank and Trust, Fredericksburg, Texas, as the holder of an existing lien(s) against the real property described in Exhibits A to E, has heretofore consented to the original easements and conveyances to South Central Water Company ("SCWC") and by the terms and conditions of the original easements and conveyances, such easements and conveyances were granted to SCWC, their heirs or assigns. The undersigned hereby acknowledges receipt of this assignment and hereby consents to the assignment by SCWC to Arbor Way, Inc..

This consent shall not be construed or operate as a release of any mortgage or liens owned and held by the undersigned, or any part thereof.

SIGNED this the 15 day of May, 2007.

SECURITY STATE BANK AND TRUST FREDERICKSBURG, TEXAS

BY: Usu

Name: Joe David Sherra

Title: Sr. Vice President

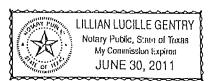
THE STATE OF TEXAS COUNTY OF GILLESPIE TRAVIS & §

appeared JUE DAVID SHERRY OF Security State Bank and Trust, Fredericksburg, Texas, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

GIVEN under my hand and seal this the

_, 2007.

THE PERSON NAMED IN THE PARTY NA



Notary Public-State of Texas Printed Name of Notary:

My Commission Expires:

After recording return to:

ARBOR Way, Inc.

FIRST City Tower

1001 Jannin, Ste. 1800

Attn: Robert A. Seale

Houston, TX 77002-4102

나는 그 사람들은 사람들은 사람들은 사람들이 되었다.	

SEWAGE TREATMENT PLANT SITE EXSE AND BUFFER ZONE EASEMENT

THE STATE OF TEXAS
COUNTY OF TRAVIS

KNOW ALL MEN BY THESE PRESENTS:

THAT LAKECLIFF ON LAKE TRAVIS, L.P., a Texas limited partnership (hereinafter called "Grantor"), for Ten and No/100 Dollars (\$10.00) and other good and valuable consideration to Grantor in hand paid by SOUTH CENTRAL WATER COMPANY, the wildress of which is SCWC, c/o Paul A. Philbin & Assoc., P.C., 6363 Woodway Drive, Suite 725, Houston, Texas 77057 (hereinafter called "Grantee"), the receipt and adequacy of which are hereby acknowledged and confessed, and subject to the matters set forth below, has GRANTED, SOLD and CONVEYED, and by these presents does GRANT, SELL, and CONVEY, unto Grantee a non-exclusive easement (the "Easement") for the purpose of constructing, maintaining, operating, repairing and reconstructing a sewage treatment plant and related facilities, subject to the terms and provisions hereinafter set forth, under, across, and through those certain tract of land containing 5.002 acres of land (the "Easement Tract") and described more fully in Exhibit "A", attached hereto and incorporated herein by this reference for all purposes.

Prior to the initial construction of the sewage treatment plant, Grantee shall have the right to go over and across the land of Grantor within the Easement Tract for purposes of performing surveys and other such necessary pre-construction work; provided, however, that no excavation work, earth moving work, or other such work shall be undertaken by Grantee on any lands of Grantor other than for the sewage treatment plant as hereinafter provided.

After the construction of the sewage treatment plant, the Easement Tract shall be limited to a portion of the Easement Tract which is located immediately adjacent to the existing golf cart barn and lies between the cart barn and an existing house. Said tract is

EXHIBIT Significant of the second of the sec

approximately 130 feet wide and 200 feet deep and fronts on Haynie Flat Road which shall, after construction, be the sole access to the Easement that is to be used for the sewage treatment plant. Except as otherwise specifically set forth in this paragraph, Grantee shall have no right to go or travel upon, over, or across any lands of the Grantor except the Easement Tract before and during construction and the approximate 130 foot by 200 foot tract after construction. Nothing contained herein shall grant or be construed as granting to Grantee the right to use the Easement Tract for any purpose other than for the purposes herein specified.

Grantor hereby grants to Grantee a buffer zone easement of 150 feet around the sewage treatment plant site. Said buffer zone easement shall comply with all Texas Commission on Environmental Quality ("TCEQ") requirements. If requested by Grantee, Grantor shall execute a separate Buffer Zone Easement in a form acceptable to the TCEQ.

Upon completion of the sewage treatment plant construction, Grantee agrees that he will execute a replacement easement which will accurately describe the sewage treatment plant easement. The final sewage treatment plant easement shall not exceed the projected 130 foot by 200 foot site by more than 10%. Grantor may elect to convey said site to the Grantee by special warranty deed.

It is expressly provided that Grantor reserves unto itself its heirs and assigns, all other rights in and to the Easement which do not unreasonably interfere with or prevent the use of the Easement herein granted and conveyed to Grantee. It is expressly agreed and provided that Grantee shall have the right to make reasonable use of the surface of the Easement Tract for the installation of surface facilities and equipment appurtenant to the treated effluent line. It is additionally provided that the use the this Easement shall not unreasonably interfere with any existing easements on the Easement Tract and that, if required, the Grantee will obtain any approval required.

The Easement hereby granted is non-exclusive, and Grantor, its successors,

substitutes, and assigns, shall have the right from time to time to grant further easements over, across, through, and under the Easement Tract for any lawful purpose, provided that the holder of such easements does not unduly or unreasonably interfere with Easement rights herein granted.

Grantor acknowledges that the Security State Bank and Trust, Fredericksburg, Texas, has a lien or liens on the Easement Tract and that he will obtain their consent and joinder in this conveyance and said consent and joinder is attached hereto and made a part hereof as Exhibit "B".

and singular, the rights and appurtenances thereto anywise belonging unto the said Grantee, its successors and assigns forever; and Grantor does hereby bind Grantor and Grantor's heirs, executors, administrators, successors, and assigns to WARRANT AND FOREVER DEFEND, all and singular, the said Easement unto the said Grantee, and its respective successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, subject to all of the terms, conditions, provisions, and limitations herein above set forth and provided.

LAKECLIFF ON LAKE TRAVIS, L.P.

ROBERT DAY General Partner

Notary Public, State of Texas My Commission Expires

COUNTSEY CLEANING

CASH STAT

AFTER RECORDATION, RETURN TO:
PAUL A. PHILBIN & ASSOC.
6363 WOODWAY, SUITE 725
HOUSTON, TX 77057

BEING 5.002 ACRES OF LAND OUT OF AND A PART OF THE JOHN ENERS SURVEY NO 410, ABSTRACT 264 IN TRAVIS COUNTY TEXAS, AND BEING OUT OF AND A PART OF TEXT CERTAIN 80 ACRE TRACT CONVEYED UNTO ANDREW ENGLISH BY DEED RECORDED IN VOLUME 348, PAGE 18 OF THE DEED RECORDS OF TRAVIS COUNTY, TEXAS, AND BEING COMPRISED OF TEXT DESCRIBED IN VOLUME 2455, FAGE 455 OF THE DEED RECORDS OF TRAVIS COUNTY, TEXAS, AND 1.93 ACRES OUT OF THAT CERTAIN 5 ACRE TRACT DESCRIBED IN VOLUME 2455, FAGE 457 OF THE DRED RECORDS OF TRAVIS COUNTY, TEXAS, SAID 5.002 ACRES OF LAND BEING THAT SAME 5.00 ACRES OF LAND CONVEYED UNTO T.L. ANGLIN BY DEED RECORDED IN VOLUME 3823, PAGE 563 OF THE REAL PROPERTY RECORDED OF TRAVIS COUNTY, TEXAS, AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at a 1/2" diameter iron pin found near a fence corner at the northern most corner hereof on the southeast line of that certain 152.041 acre tract conveyed unto Lakecliff Development Corp. by Special Marranty Deed recorded in Volume 12130, Page 1704, of the Real Property Records of Travis County, Texas, said iron pin bears 561*-00' W 2075.3 feat from the cortherly corner of said 80 acre tract and said 75 acre tract on the easterly line of said John Ewers Survey No. 410;

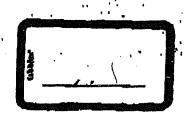
THENCE with the northwest line hereof and the southeast line of daid 152.041 wore tract as fenced, the following two (2) calls:

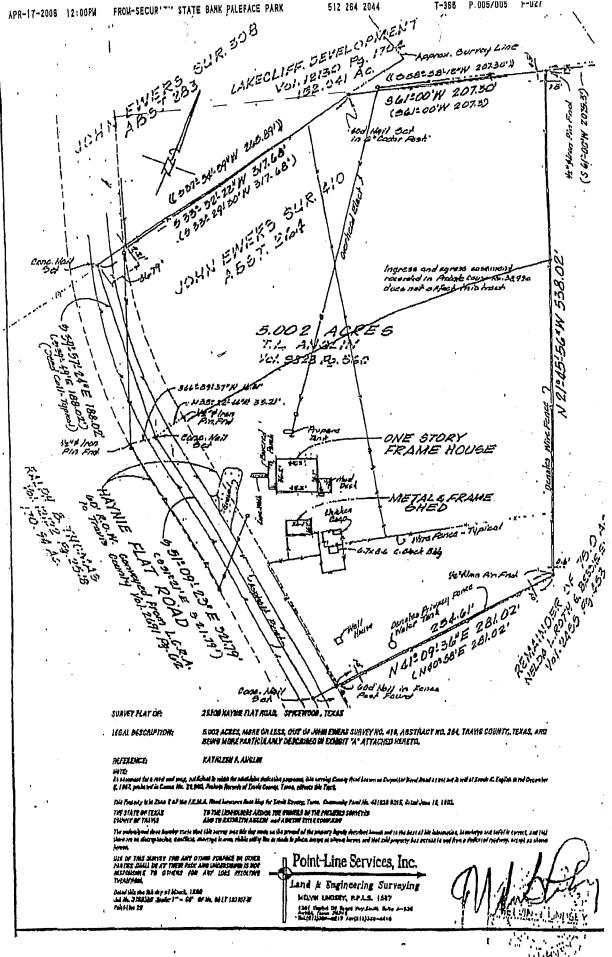
- 5 61°-00'W 207.30 feet to a 60d nail set in a 6" Cedar Post at a corner of said feach;
- 2. S 33*-32'-22*W at 280.89 feet pass a fence corner post 2.21 feat left of and perpendicular to property line, in all 317.68 feet to a cond. nail set in asphalt pavement in the center line of Haynis Flat Road, a public road having been conveyed from Lover Colorado River Authority to the County of Travio by Right-of-Way Deed recorded in Volume 2691, Page 62 of the Deed Records of Travia County, Texas;

THENCE with the southwesterly line horsest and the center line of said Maynia Flat Road, the following two (2) Galls:

- 2. 5 55-57'-24"E 188.02 feet to a conc. nail set in asphalt pavement, from which & 1/2" diameter iron pin found bears N 15-22'-44"E 35.21 feet and another 1/2" diameter iron pin found bears S66"-59'-37"W 16.81 feet;
- 2. g 51°-09'-23'E 321.79 feet to come. mail set for the southern most sommer hereof;

THENCE with the southerstarty line here of and the remainder of said 75 acre tract, N 41°-09'-36"B at 26.42 feet pass a 60d nail in corner feace post found, continuing with said feace in all 281.02 feet to a 1/2' dismeter iron pin found at the exetern most corner hereof:





T-388 P.005/005 F-02/

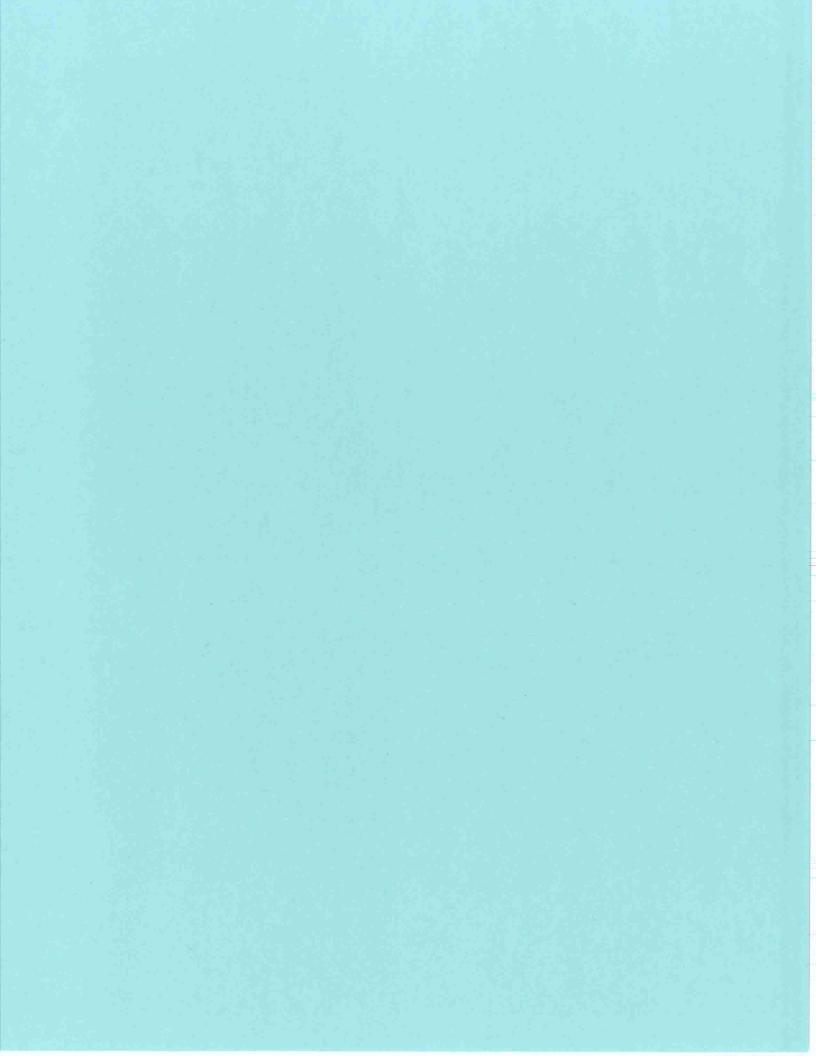
CONSENT OF LIENHOLDER

The undersigned, Security State Bank and Trust, Fredericksburg, Texas, being the owners and holders of an existing lien(s) upon and against the real property described in the foregoing Sewage Treatment Plant Easement, as such lienholder, do hereby consent to and join in said Easement.

This consent and joinder shall not be construed or operate as a release of any mortgage or liens owned and held by the undersigned, or any part thereof. SIGNED this the 9th day of June, 2006. SECURITY STATE BANK AND TRUST FREDERICKSBURG, TEXAS Name: J Title: THE STATE OF TEXAS COUNTY OF GILLESPIE

appeared Toron of Security State Bank and Trust, Fredericksburg, Texas, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

GIVEN under my hand and seal this the Notary Public-State of Texas DIANA MITCHELL Notary Public, State of Texas Printed Name of Notary: My Commission Expires 10-10-2008 My Commission Expires:





AGREEMENT FOR THE DELIVERY AND USE OF TREATED WASTEWATER EFFLUENT FOR PERMITTED PURPOSES

This Agreement is entered into between LAKECLIFF ON LAKE TRAVIS, LP (Club), a Texas partnership whose principal place of business is in Burnet County, Texas, and SOUTH CENTRAL WATER COMPANY, INC. (SCWC), a Texas corporation whose principal place of business is in Harris County, Texas.

1. PURPOSE

The purpose of this Agreement is to establish a mutually acceptable arrangement that complies with applicable state and federal regulations herein SCWC, a state-licensed retail public sewer utility, can deliver treated wastewater effluent (effluent) to the Club for use as an irrigation media on those portions of Club's golf course at the Lakecliff Country Club in Travis County, Texas suitable for such uses under the rules of the Texas Commission on Environmental Quality (TCEQ).

2. TERM

- 2.1 This Agreement shall become effective on the date of signature indicated herein.
- 2.2 Delivery of effluent shall not commence until:
 - all necessary governmental permits for the wastewater treatment plant (WWTP) and other components of SCWC's sewer system that will generate the effluent have been received from the appropriate regulatory authorities;
 - the WWTP and all associated plant and sewage collection system have been constructed and placed into commercial operation in conformance with their permits;
 - c) the effluent disposal system, including all facilities necessary to transport the effluent to the Club for storage and/or irrigation have been constructed and tested; and
 - d) SCWC has developed a sufficient customer base to generate a sufficient quantity of effluent to Club without disrupting the proper operation of the WWTP and causing a violation of its water quality permit.
- 2.2 Once effluent delivery from the WWTP to the Club has begun, this Agreement shall be in affect and run concurrent with the terms and extensions of all wastewater discharge permits associated with this plant.



PRICE

- 3.1 Club initially shall pay SCWC \$0.00 per 1,000 gallons of effluent delivered.
- 3.2 The price may be re-negotiated by the parties commencing in January of odd numbered years during any term of the Agreement. If no agreement on a new price is reached after a party has requested re-negotiation, the price shall remained fixed for one (1) additional two (2) year term. If a party asks to re-negotiate the price on the odd numbered year following the two (2) years of automatic no-price change and no agreement on price change is reached for a second consecutive time, the price shall automatically escalate ten (10%) percent. The price shall escalate ten (10%) every in January of odd number year thereafter until the parties re-negotiate a new base price; at which time, this cycle shall start again.

4. DELIVERY OF EFFLUENT

- 4.1 SCWC shall deliver the effluent through a pipeline(s) owned and operated by SCWC that shall transport the effluent from the WWTP to a retention pond or lagoon located near or on the Club's golf course. The retention pond or lagoon shall be clay- or plastic-lined or otherwise meet the regulations of the TCEQ for effluent retention impoundments.
- 4.2 SCWC shall be responsible for maintaining and operating the effluent delivery lines to Club's retention pond.
- 4.3. Club shall be responsible for maintaining the retention pond and all facilities required thereafter (downstream) to deliver and disburse the effluent as an irrigation media over areas of the golf course (and any approved proximate areas). This shall include all irrigation system lines, controls, pumps, sprinkler heads, and other irrigation water supplies.
- 4.4 All facilities constructed by either party and all repairs made thereto shall be in conformance with applicable TCEQ rules.

5. CONTROL

5.1 Since the wastewater permittee is always responsible to the TCEQ of the proper management and disposal of the treated effluent in conformance with the permit, SCWC must retain the exclusive right to terminate the flow of effluent at any time to insure that it is not discharge at inappropriate times or places in violation of health and environmental laws. SCWC's licensed operators shall be empowered to order anyone operating a holding pond or irrigating system using effluent to cease and desist from any act that violates the TCEQ permit. This authority shall not extend to ordering the cessation of use of other sources of water not produced by SCWC's WWTP, unless those other water supplies have been commingled with SCWC effluent.

- 5.2 SCWC's effluent delivery system shall contain sufficient valves and controls that it can be closed at either end by SCWC employees or Contractors. Except during emergencies when necessary to prevent hazards to public health or safety or endangerment to public waters, the Club, its employees or contractors shall not have access to or the right to use such controls without the direct supervision of a licensed SCWC sewer operator being on-site at that time.
- 5.3 SCWC, its employees and contractors shall have an easement to enter and travel over and across the Club's property for the purpose of constructing, inspecting, maintaining, repairing, identifying and replacing any portion of the effluent transportation, retention and disbursal system on said property. SCWC's employees and contractors shall not interfere with or disturb portions of the irrigation system not owned by SCWC without prior notice to the Club unless delay would result in an immediate hazard to public health or safety or endangerment to state waters. In such emergency cases, SCWC's personnel shall take only such remedial actions as are necessary to fix the immediate problem and remove the threat(s).
- Club shall provide SCWC with exclusive recorded easements for all SCWC 5.4 pipelines and other facilities on Club property necessary to construct and operate the facilities necessary to fulfill SCWC's obligations under this Agreement. The Club shall be responsible for obtaining, at its cost, all easements necessary off the Club's property to construct and maintain the necessary effluent pipeline(s) and appurtenances. All pipeline easements shall be no less than twenty (20) feet in width, measured off the centerline of the pipeline. All pipeline easements shall have an adjacent parallel twenty (20) foot construction easement for the period of initial construction and testing. Easements for all other facilities shall extend no less than twenty (20) feet beyond the outermost points of the physical plant in question in all directions. Ingress/egress to all facilities must be granted. These easements may terminate one (1) year after the facilities have been permanently removed from any type of public utility service under state or federal permit(s). license(s) or certificate(s). SCWC shall have the right to abandon any underground plant or facilities, including pipelines, in place without obligation to the Club. other landowner or third party if such abandonment is permitted by state or federal regulations governing sewer utilities.
- 5.5 SCWS' exclusive rights to use the easements to be provided hereunder shall also include the right to remove or trim trees, shrubs, plants or other encumbrances as may be necessary to maintain the integrity of SCWC's facilities, make repairs, perform inspections or tests or otherwise comply with TCEQ rules. SCWC shall have a duty to restore the easement to its preconstruction condition as reasonably as possible. No permanent structures may be built in or across any easement; however, roadways and drives shall be permitted so long as they are not wider than Texas Department of Transportation specifications for a Farm-to-Market road without improved shoulders. Wider drives or roadways may be permitted on a case-by-case basis after the submission of plans to SCWC and the accommodation of SCWC's need of access to the pipeline under such paving.

- 5.6 Once effluent is delivered to the Club's retention pond, it shall be Club's responsibility (as SCWC's agent under the water quality permit) to manage and control the effluent in a manner that complies with all provisions of SCWC's wastewater permit, the Texas Water Code, TCEQ rules and USEPA rules. The Club shall not (without limitation):
 - a) irrigate with effluent in places or under conditions that could reasonably result in the effluent coming into contact with humans;
 - b) irrigate during a rainfall event;
 - c) irrigate or release effluent any place where the effluent could run off into the waters of the state;
 - d) irrigate with effluent at a rate greater than that authorized in SCWC's permit; or
 - e) fail to use and record the data from any monitoring equipment ordered by the TCEQ in SCWC's wastewater permit or by rule or order.
- 5.7 If the Club violates any provision of §5.5 or other provision of SCWC's wastewater permit or TCEQ rule or order related to the maintenance or use of effluent, SCWC may terminate deliveries of effluent to the Club immediately. SCWC shall have the right to have all facilities capable of removing effluent from the retention pond and transporting it for irrigation use taken out of operation and locked under SCWC's control. In such cases, effluent deliveries and usage shall remain terminated until the offending condition has been adequately remedied. The Club shall be liable for all fines, penalties, clean up costs and other expenses arising from any such violation. SCWC shall be reimbursed for all reasonable expenses and costs it incurs in responding to or defending such violations within thirty (30) days of billing the Club for the same. The parties agree that they may use the same counsel and consultants to defend any enforcement action arising from such violation in the interest of keeping common costs low.

6. OTHER

- 6.1 This exclusive Agreement may not be canceled by SCWC or the Club their heirs, assigns, or successors in title or interest, by sale, gift, foreclosure, inheritance or otherwise, without the written consent of the other party.
- 6.2 The Club shall indemnify and save harmless SCWC and its agents and employees from all suits, actions, or claims of any character, type, or description brought or made on account of negligence or acts of omission or commission by the Club or its representatives, assigns or heirs occurring after the date of this agreement and relating in any way to water service to the effluent irrigation system. In the event a claim is made or a lawsuit is filed which would be subject to this indemnity, SCWC, its agents or employees, shall have the right to employ counsel, which counsel shall be satisfactory to the Club, and

the Club shall pay the reasonable and necessary attorney's fees incurred in defending such claim at the time fees are billed by the attorney.

- 6.3 SCWC shall indemnify and save harmless the Club and its agents and employees from all suits, actions, or claims of any character, type, or description brought or made on account of negligence or acts of omission or commission by SCWC or its representatives, assigns or heirs relating in any way to wastewater service to SCWC's certificated service area, the operation of the WWTP, or the delivery of effluent to the point of discharge at the retention pond. In the event a claim is made or a lawsuit is filed which would be subject to this indemnity, the Club, its agents or employees, shall have the right to employ counsel, which counsel shall be satisfactory to SCWC, and SCWC shall pay the reasonable and necessary attorney's fees incurred in defending such claim at the time fees are billed by the attorney.
- This Agreement is performable in Harris and Burnet Counties, Texas. All parties agree that if any party(ies) should default on any of the conditions and covenants hereunder or threaten to do so, or should it be necessary for any reason for either to hire or retain an attorney to represent them in connection with this Agreement, the party(ies) found to be responsible agrees to pay to the prevailing party(ies) a reasonable amount for costs and attorney's fees. Before the commencement of litigation, the parties agree to submit any dispute arising hereunder not resolved by mutual agreement to mediation before a neutral third-party mediator ("Mediator"). The Mediator shall be selected by mutual agreement of the parties or by court order absent such agreement. The parties agree that this agreement may be enforceable by specific performance as well as any other remedy available at law or in equity. Venue over any civil cause of action arising from this agreement shall lie in the courts of Harris County, Texas and shall be subject to and interpreted by the laws of the State of Texas. Venue over any administrative cause of action arising from this agreement shall lie in TCEQ and the courts of Travis County, Texas.
- 6.5 SCWC and the Club acknowledge receipt of a complete copy of this Agreement and further acknowledge that they have carefully examined all terms and conditions and fully understand it.
- 6.6 The official addresses of the parties for purposes of notices, correspondence or other matters arising herefrom shall be the following until written notice to the other parties of any change:

Lakecliff on Lake Travis, LP Attn: Robert J. Day 111 Clubland Court Spicewood, Texas 78669 The Club

South Central Water Company Attn: Malcolm D. Bailey, President 5818 Beverly Hill, Suite 200 Houston, Texas 77057 SCWC

Any and all notices or other communications required or permitted by this Agreement or by law to be delivered to, served on or given to either party to this Agreement, by the other party to this Agreement, shall be in writing and shall be deemed properly delivered, given or served when personally delivered to either party, the Club or SCWC, to whom it is directed, or in lieu of personal service, when deposited in the United States mail, first-class postage prepaid, certified mail, return receipt requested, at the address for notices set forth in this Agreement. The Club or SCWC may change this address for the purposes of this Paragraph by giving written notice of the change to the other party in the manner provided in this Agreement.

- 6.7 This Agreement supersedes any and all other agreements, either oral or in writing, between the parties hereto with respect to the subject matter hereof, and no other agreement, statement or promise relating to the subject matter of this Agreement which is not contained herein shall be valid or binding,
- 6.8 This Agreement shall be binding on the heirs, executors, administrators, legal representatives, successors and permitted assigns of the respective parties.
- 6.9 This Agreement may be amended by the mutual agreement of the parties herein in a written instrument specifically referencing this Agreement.

ENTERED on the Z9 day of Jum, 2005.	
THE CLUB SCWC	
BY: Roberta Day, Paras. Af Done Malcolm D. Bailey, Presider print name & title Heneral Partmer for Labertal Marchet TRAVIS, L. P	nt

EXIIIBIT & 3%

JAMES E. GARON

REGISTERED PROFESSIONAL LAND SURVEYOR

Email: jgaron@austin.rr.com

924 Main Street Eastrop, Texas 78602 512-303-4185 512-321-2107 fax

July 17, 2002

TRACT ONE:

LEGAL DESCRIPTION: BEING A 70.896 ACRE TRACT OF LAND LYING IN AND SITUATED OUT OF THE JOHN EWERS SURVEY NO. 308, THE JOHN EWERS SURVEY NO. 410 AND THE JOHN MOAT SURVEY NO. 412, ALL IN TRAVIS COUNTY, TEXAS AND BEING

PORTIONS OF THAT CERTAIN 247.604 ACRE TRACT OF LAND AND 33.977 ACRE TRACT OF LAND CONVEYED TO LAKECLIFF ON LAKE TRAVIS L.P. BY DEED RECORDED IN DOCUMENT NO. 2000075155;

A PORTION OF THAT CERTAIN 5.86 ACRE TRACT OF LAND CONVEYED TO LAKE TRAVIS PROPERTIES, INC. BY DEED RECORDED IN VOLUME 12750, PAGE 1417 AND FORMERLY PLATTED AS LOT 1, BLOCK "C"; LAKECLIFF ON LAKE TRAVIS SECTION ONE BY PLAT RECORDED IN VOLUME 94, PAGE 118 OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS;

A PORTION OF THAT CERTAIN 14.575 ACRE TRACT OF LAND CONVEYED TO LAKECLIFF ON LAKE TRAVIS L.P. BY DEED RECORDED IN DOCUMENT NO. 2000202389;

AND A PORTION OF THAT CERTAIN 5.002 ACRE TRACT OF LAND CONVEYED TO LAKECLIFF ON LAKE TRAVIS L.P. BY DEED RECORDED IN DOCUMENT NO. 2001013138;

ALL OF THE OFFICIAL DEED RECORDS OF TRAVIS COUNTY, TEXAS; SAID 70.896 ACRE TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS AND AS SURVEYED UNDER THE SUPERVISION OF JAMES E. GARON & ASSOCIATES IN JUNE, 2002:

BEGINNING at an iron rod set on the southerly right-of-way line of Kahala Sunset Drive, being Lot 43, LakeCliff on Lake Travis Section Eleven as recorded by plat in Document No. 200100315 of the plat records of Travis County, Texas for the northwesterly comer of Lot 23 of said subdivision;

THENCE South 15°22'23" West a distance of 118.16 feet to an iron rod set for the southwest corner of said Lot 23;

THENCE along the southerly line of Lots 23-42 of said subdivision the following eight (8) calls:

- 1. South 74°37'37" East a distance of 170.19 feet to an iron rod set for comer of Lots 23 and 24;
- 2. South 86°58'15" East a distance of 199,92 feet to an iron rod set for corner of Lots 24 and 25;
- 3. North 80°46'55" East a distance of 77.31 feet to an iron rod set for corner of Lots 25 and 26;

- 4. North 75°5'38" East a distance of 76.61 feet to an iron rod set for corner of Lots 28 and 27;
- 5. North 69°22'47" East a distance of 78.95 feet to an iron rod set for corner of Lots 27 and 28;
- 6. North 63°39'05" East a distance of 77.41 feet to an iron rod set for corner of Lots 28 and 29:
- North 60°36'38" East a distance of 448.00 feet to an iron rod set for corner of Lots 35 and 36;
- North 58°38'00" East a distance of 585.56 feet to an iron rod set on the southerly line
 of Stableford Cove, being Lot 12, LakeCliff on Lake Travis Section Eight as recorded
 by plat in Document No. 200100316 of said plat records, for the most easterly corner
 of Lot 42;

THENCE along said line of Stableford Cove the following five (5) calls:

- 1. South 64°16'03" East a distance of 55.16 feet to an iron rod set for point of curvature of a curve to the left;
- a length of 274.13 feet along the arc of said curve to the left having a radius of 360,00 feet and a chord bearing South 87°47'02" East a distance of 267.56 feet to an iron rod set for point of tangency;
- North 70°24'05" East a distance of 63.09 feet to an iron rod set for point of curvature
 of a curve to the right;
- a length of 203.30 feet along the arc of a said curve to the right having a radius of 360.00 feet and a chord bearing North 86"34'47" East a distance of 200.61 feet to an iron rod set for point of tangency;
- South 77°14'31" East a distance of 56.11 feet to an iron rod set for the northwest corner of Lot 1, LakeCliff on Lake Travis Section Nine as recorded by plat in Document No. 200100314 of said plat records;

THENCE South 33*48'16" West a distance of 131.62 feet to an rod set for the most westerly comer of said Lot 1:

THENCE South 36"28"01" East a distance of 519.00 feet to an iron rod set for the most southerly corner of Lots 3 and 4 of said subdivision;

THENCE South 89°39'26" East a distance of 114.56 feet to an iron rod set for angle point on the southerly line of said Lot 4;

THENCE North 59°42'41" East a distance of 207.74 feet to an iron rod set for angle point on the southwesterly line of Lot 5 of said subdivision;

THENCE North 36°25'01" East a distance of 128.63 feet to an iron rod set for the most easterly corner of Lots 5 and 6 of said subdivision;

THENCE North 20°38'33" East a distance of 377.94 feet to an iron rod set on the curving southeasterly r-o-w line of Stableford Cove for the northeasterly comer of Lot 7, Lakediff on Lake Travis Section Nine:

THENCE along said line of Stableford Cove the following four (4) calls:

- a length of 18.40 feet along the arc of a curve to the left having a radius of 880,00 feet and a chord bearing North 63°5'10" East a distance of 18.40 feet to an iron rod set for point of tangency;
- 2. North 62°29'14" East a distance of 90.55 feet to an iron rod set for point of curvature of a curve to the left.
- a length of 179.06 feet along the arc of said curve to the left having a radius of 330.00 feet and a chord bearing North 46°56'29" East a distance of 176.89 feet to an iron rod set for point of tangency;
- North 31°23'43" East a distance of 17.08 feet to an iron rod set for the westerly comer
 of Lot 11, of said Lake Cliff on Lake Travis Section Eight;

THENCE along said Lot 11, South 58°36'17" East a distance of 67.13 feet to an iron rod set for angle point and South 6°47'43" East a distance of 225.10 feet to an iron rod set for the most southerly corner of said Lot 11, common with an angle point of Lot 1A, Block "A", Replat of Lot 1, Block "A"; Travis Lakeside Phase One as recorded by plat in Document No. 200100318 of said plat records;

THENCE along said Lot 1A the following nine (9) calls:

- 1. South 7°41'16" West a distance of 391.64 feet to an iron rod set for angle point:
- 2. South 47°24'05" West a distance of 328.85 feet to an iron rod set for angle point.
- 3. South 60°1'39" West a distance of 554.55 feet to an iron rod set for corner.
- 4. North 53°53'00" West a distance of 376.98 feet to an iron rod set for corner.
- 5. South 25°0'58" West a distance of 10.19 feet to an iron rod set for corner.
- 6. North 52"1'30" West a distance of 670.31 feet to an iron rod set for comer;
- 7. South 58°47'40" West a distance of 1190.33 feet to an iron rod set for angle point;
- . 8. South 58°38'12" West a distance of 883.92 feet to an iron rod found for the most northerly corner of said 5.002 acre tract;
 - 9. South 24"1'41" East a distance of 271.88 feet to an iron rod set for comer;

THENCE South 59°34'59" West a distance of 452.50 feet to an iron rod set on the northeasterly line of Haynie Flat Road;

THENCE along said line of Haynie Flat Road the following nine (9) calls:

- 1. North 21°49'35" West a distance of 552.80 feet to a point of curvature of a curve to the left:
- a length of 415.97 feet along the arc of said curve to the left having a radius of 778.68 feet and a chord bearing North 33°9'08" West a distance of 411.04 feet to a point of compound curvature;
- 3. a length of 218.81 feet a curve to the left having a radius of 932.48 feet and a chord bearing North 56°26'30" West a distance of 218.32 feet to an endpoint:
- 4. North 64°25'35" West a distance of 182.76 feet to a point for corner.
- 5. North 25°34'27" East a distance of 5.22 feet to a point for comer,
- 6. North 64"25'35" West a distance of 56.48 feet to an angle point
- 7. North 70°0'37" West a distance of 393.28 feet to an angle point,
- 8. North 69°10'15" West a distance of 195.53 feet to an angle point;
- 9. North 69°14'34" West a distance of 305.06 feet to an iron rod set for corner.

THENCE North 20°55'26" East a distance of 267.19 feet to an iron rod set for comer:

THENCE South 80°1948" East a distance of 50.67 feet to an iron rod set for corner.

THENCE North 9°4012" East a distance of 28.90 feet to an iron rod set for corner on the southerly reast line of Gallery Drive and Lot 43, LakeCliff on Lake Travis Section Eleven;

THENCE along Gallery Drive and said Lot 43 the following three (3) calls:

- 1. South 80°19'48" East a distance of 535.50 feet to an iron rod set for point of curvature of a curve to the left.
- a length of 476.60 feet along the arc of said curve to the left having a radius of 818.20 feet and a chord bearing North 82*58'57" East a distance of 469.89 feet to an iron rod set for point of tangency;
- 3. North 65°17'43" East a distance of 481.07 feet to an iron rod set for point of curvature of a curve to the right;

THENCE a length of 39.43 feet along the arc of said curve to the right having a radius of 25.00 feet and a chord bearing South 68°31'08" East a distance of 35.47 feet to an iron rod set for point of tangency on the southwesterly r-o-w line of Kahala Sunset Drive;

THENCE along said line of Kahala Sunset Drive and Lot 43 the following three (3) calls:

- 1. South 23"19'55" East a distance of 63.13 feet to an iron rod set for point of curvature of a curve to the left;
- a length of 390.54 feet along the arc of said curve to the left having a radius of 436.18 feet and a chord bearing South 48°58'55" East a distance of 377.62 feet to an iron rod set for point of tangency;

3. South 74°37'37" East a distance of 258.83 feet

to the POINT OF BEGINNING and containing 70.898 acres of land, more or less, and as shown on map of survey prepared herewith.

Surveyed by:

James E. Garon

Registered Professional Land Surveyor

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JAMES E. GAPON
4903
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SURVEY

JAMES E. GARON

REGISTERED PROFESSIONAL LAND SURVEYOR

Email: jgaron@austin.rr.com

924 Main Street Bastrop, Texas 78802 512-303-4186 512-321-2107 fax

July 17, 2002

TRACT TWO:

LEGAL DESCRIPTION: BEING A 54.455 ACRE TRACT OF LAND LYING IN AND SITUATED OUT OF THE JOHN EWERS SURVEY NO. 308, THE JOHN EWERS SURVEY NO. 410 AND THE JOHN MOAT SURVEY NO. 412, ALL IN TRAVIS COUNTY, TEXAS AND BEING

PORTIONS OF THAT CERTAIN 247.604 ACRE TRACT OF LAND AND 33.977 ACRE TRACT OF LAND CONVEYED TO LAKECLIFF ON LAKE TRAVIS L.P. BY DEED RECORDED IN DOCUMENT NO. 2000075155; A PORTION OF THAT CERTAIN 5.86 ACRE TRACT OF LAND CONVEYED TO LAKE TRAVIS PROPERTIES, INC. BY DEED RECORDED IN VOLUME 12750, PAGE 1417 AND FORMERLY PLATTED AS LOT 1, BLOCK "C"; LAKECLIFF ON LAKE TRAVIS SECTION ONE BY PLAT RECORDED IN VOLUME 94, PAGE 116 OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS; AND A PORTION OF THAT CERTAIN 152.041 ACRE TRACT OF LAND CONVEYED TO LAKE TRAVIS PROPERTIES, INC. BY DEED RECORDED IN VOLUME 12130, PAGE 1704 AND FORMERLY PLATTED AS LOTS 2-7, BLOCK "C"; LAKECLIFF ON LAKE TRAVIS SECTION ONE BY PLAT RECORDED IN VOLUME 94, PAGE 118 OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS;

ALL OF THE OFFICIAL DEED RECORDS OF TRAVIS COUNTY, TEXAS; SAID 54.455 ACRE TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS AND AS SURVEYED UNDER THE SUPERVISION OF JAMES E. GARON & ASSOCIATES IN JUNE, 2002:

BEGINNING at an iron rod set on the northerly right-of-way line of Gallery Drive, being Lot 43, LakeCliff on Lake Travis Section Eleven as recorded by plat in Document No. 200100315 of the plat records of Travis County, Texas for the southwesterly corner of Lot 9, LakeCliff on Lake Travis Section Twelve as recorded by plat in Document No. 200100324 of said plat records:

THENCE along Gallery Drive the following three (3) calls:

North 80°19'48" West a distance of 42.27 feet to an iron rod set for point of curvature
of a curve to the right;

a length of 48.52 feet along the arc of said curve to the right having a radius of 440.00 feet and a chord bearing North 77°10'16" West a distance of 48.49 feet to an iron rod set for point of tangency;

3. North 74°0'44" West a distance of 153.27 feet to an iron rod set for point of curvature of a curve to the right;

THENCE a length of 39.27 feet along the arc of said curve to the right having a radius of 25,00 feet and a chord bearing North 29°0'44" West a distance of 35.36 feet to an iron rod set

for point of tangency on the easterly r-o-w line of Cliff Point as dedicated by plat of LakeCliff on Lake Travis Section One;

THENCE along said line of Cliff Point the following three (4) calls:

1. North 15°59'16" East a distance of 147.25 feet;

 a length of 177.40 feet a curve to the right having a radius of 430.00 feet and with a chord bearing of North 27*48*24* East;

3. a length of 38.07 feet a curve to the right having a radius of 430.00 feet and with a

chord bearing of North 42"9'43" East;

4. North 44*41'53" East a distance of 1017.26 feet,

THENCE South 48"27"31" East a distance of 122.58 feet to an iron rod set for angle point;

THENCE North 75°21'44" East a distance of 287.38 feet to an iron rod set for angle point;

THENCE North 39'6'27" East a distance of 379.01 feet to an iron rod set for the most westerly corner of Lot 1, LakeCliff on Lake Travis Section Thirteen as recorded by plat in Document No. 200100319 of said plat records;

THENCE South 48"46"22" East a distance of 244.08 feet to an iron rod set for the southerty corner of said Lot 1;

THENCE North 37°12'12" East a distance of 243.34 feet to an iron rod set on the southeasterly r-o-w line of Cliff Crossing for the most easterly comer of said Lot 1;

THENCE South 52°5'14" East a distance of 171.71 feet along said line of Cliff Crossing to an iron rod set for the most northerly comer of Lot 2, LakeCliff on Lake Travis Section Thirteen;

THENCE South 37°54'46" West a distance of 135.00 feet to an iron rod set for the westerly comer of said Lot 2;

THENCE South 52°5'14" East a distance of 240.00 feet to an iron rod set for the common corner of Lots 3 and 4 of said subdivision;

THENCE South 16°37'49" West a distance of 135.52 feet to an iron rod set for angle point;

THENCE South 51°9'56" East a distance of 421.12 feet along the southeasterly line of Lots 4 through 8 of said subdivision to an iron rod set for angle point;

THENCE North 66"33"17" East a distance of 170.21 feet to an iron rod set for angle point,

THENCE North 35°40'53" East a distance of 159,80 feet to an iron rod set on the curving southerty r-o-w line of Cliff Crossing for the easterly corner of Lot 9, LakeCliff on Lake Travis Section Thirteen:

THENCE along said line of Cliff Crossing the following four (4) calls:

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 a length of 459,36 feet along the arc of a curve to the left having a radius of 830.00 feet and a chord bearing South 86"1'49" East a distance of 453.52 feet to an iron rod set for point of tangency;

2. North 78°6'53" East a distance of 412.72 feet to an iron rod set for point of curvature

of a curve to the right

 a length of 91.92 feet along the arc of said curve to the right having a radius of 300.00 feet and a chord bearing North 86*53'34" East a distance of 91.56 feet to an iron rod set for point of tangency;

4. South 84"19'45" East a distance of 50.00 feet to an iron rod set for point of curvature

of a curve to the right

THENCE a length of 39.27 feet along the arc of said curve to the right having a radius of 25.00 feet and a chord bearing South 39°19'45" East a distance of 35.36 feet to an iron rod set for point of tangency on the west r-o-w line of Kahala Sunset Drive;

THENCE along said r-o-w line, South 5°58'02" West a distance of 311.83 feet to an iron rod set for point of curvature of a curve to the right and a length of 148.54 feet along the arc of said curve to the right having a radius of 770.01 feet and a chord bearing South 11°29'41" West a distance of 148.31 feet to an iron rod set for the northeasterly corner of Lot 22, LakeCliff on Lake Travis Section Eleven;

THENCE North 67°45'48" West a distance of 115.00 feet to an iron rod set for the northwest corner of said Lot 22;

THENCE South 39°27'22" West a distance of 410.51 feet along the westerly line of Lots 16-22 of said subdivision to an iron rod set for the common westerly corner of Lots 15 and 16;

THENCE South 61°8'39" West a distance of 670.24 feet along the northwesterly line of Lots 5-15 of said subdivision to an iron rod set for the common corner of Lots 4 and 5;

THENCE South 77°41'11" West a distance of 167.68 feet to an iron rod set for angle point in the northerly line of Lot 2 of said subdivision;

THENCE North 74°44′23" West a distance of 288.44 feet to an iron rod set for the northwest corner of Lot 1, of said subdivision;

THENCE South 16°2'50" West a distance of 102.69 feet to an iron rod set on the northerly row line of Kahala Sunset Drive for the southwest comer of said Lot 1;

THENCE along said r-o-w line the following four (4) calls:

1. North 74"37"37" West a distance of 97.15 feet to an iron rod set for the point of curvature of a curve to the right;

 a length of 336.82 feet along the arc of said curve to the right having a radius of 376.18 feet and a chord bearing North 48*58'56" West a distance of 325.68 feet to an iron rod set for point of tangency;

3, North 23°19'55" West a distance of 222.88 feet to an iron rod set for the point of

curvature of a curve to the left.

4. a length of 39.95 feet along the arc of said curve to the left having a radius of 1146.96 feet and with a chord bearing of North 27'2'21" West a distance of 39.94 feet to an

iron rod set for the southerly comer of Lot 22, LakeCliff on Lake Travis Section Twelve;

THENCE North 64"26"28" East a distance of 277.25 feet to an iron rod set for the easterly corner of said Lot 22;

THENCE North 41°53'00" West a distance of 646.05 feet along the northeasterly line of Lots 19-22 of said subdivision to an iron rod set for the most northerly point of said Lot 19;

THENCE South 51°7'22" West a distance of 110.59 feet to an iron rod set for the common northerly corner of Lots 18 and 19 of said subdivision;

THENCE South 52°0'44" West a distance of 403.78 feet to an iron rod set for the common northerty corner of Lots 15 and 16 of said subdivision;

THENCE South 76°38'36" West a distance of 548,18 feet to an iron rod set for angle point in the northerty line of Lot 11;

THENCE South 58°6'51" West a distance of 286.93 feet to an iron rod set for angle point in the westerly line of Lot 10 of said subdivision;

THENCE South 11°3'59" West a distance of 307.41 feet to the POINT OF BEGINNING and containing 54.455 acres of land, more or less, and as shown on map of survey prepared herewith.

Surveyed by:

James E Garon

Registered Professional Land Surveyor

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JAMES E. GARON

REGISTERED PROFESSIONAL LAND SURVEYOR Email: jgaron@austin.cr.com

924 Mein Street Bastrop, Texas 78602 512-303-4185 512-321-2107 fax

July 17, 2002

TRACT THREE:

LEGAL DESCRIPTION: BEING A 12.115 ACRE TRACT OF LAND LYING IN AND SITUATED OUT OF THE JOHN MOAT SURVEY NO. 412, ALL IN TRAVIS COUNTY, TEXAS AND BEING

A PORTION OF THAT CERTAIN 247.804 ACRE TRACT OF LAND CONVEYED TO LAKECLIFF ON LAKE TRAVIS L.P. BY DEED RECORDED IN DOCUMENT NO. 2000075155; A PORTION OF THAT CERTAIN 152.041 ACRE TRACT OF LAND CONVEYED TO LAKE TRAVIS PROPERTIES, INC. BY DEED RECORDED IN VOLUME 12130, PAGE 1704 AND FORMERLY PLATTED AS LOT 1, BLOCK "C"; LAKECLIFF ON LAKE TRAVIS SECTION ONE BY PLAT RECORDED IN VOLUME 94, PAGE 116 OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS: AND A PORTION OF THAT CERTAIN TRACT OF LAND CONVEYED TO LAKECLIFF ON LAKE TRAVIS L.P. BY DEED RECORDED IN DOCUMENT NO. 200167661 AND FORMERLY PLATTED AS LOT 1, BLOCK "F"; LAKECLIFF ON LAKE TRAVIS SECTION FOUR BY PLAT RECORDED IN VOLUME 98. PAGE 25 OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS:

ALL OF THE OFFICIAL DEED RECORDS OF TRAVIS COUNTY, TEXAS; SAID 12.115 ACRE TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS AND AS SURVEYED UNDER THE SUPERVISION OF JAMES E. GARON & ASSOCIATES IN JUNE, 2002:

BEGINNING at an iron rod set on the curving, easterly right-of-way line of Cliff Overlook for the northwesterly corner of Lot 10, LakeCliff on Lake Travis Section Thirteen as recorded by plat in Document No. 200100319 of said plat records;

THENCE along said right-of-way line the following four (4) calls:

1. a length of 28.45 feet along the arc of a curve to the left having a radius of 346.26 feet and a chord bearing North 29°3'25" East a distance of 28.45 feet to an iron rod set for point of compound curvature;

2. a length of 48.37 feet along the arc of said compound curve to the left having a radius of 330.00 feet and a chord bearing

North 22*22'19" East a distance of 48.32 feet to an iron rod set for endpoint;

3. North 18°10'23" East a distance of 286.57 feet to an iron rod

set for point of curvature of a curve to the left;

4. a length of 51.32 feet along the arc of said curve to the left having a radius of 330.00 feet and a chord bearing North 13°43'05" East a distance of 51.27 feet to an iron rod set for the southwest corner of Lot 15, LakeCliff on Lake Travis Section Thirteen;

THENCE South 77°11'25" East a distance of 114.35 feet to an iron rod set for the common corner of Lots 15 and 16 of said subdivision:

THENCE South 56°22'48" East a distance of 48.73 feet to an iron rod set for the common corner of Lots 16 and 17 of said subdivision:

THENCE South 35°18'11" East a distance of 123.43 feet to an iron rod set for the common corner of Lots 17 and 18 of said subdivision;

THENCE South 20°43'26" East a distance of 140.36 feet to an iron rod set for the southwesterly corner of Lot 18 of said subdivision;

THENCE South 89°23'09" East a distance of 66.77 feet to an iron rod set on the curving r-o-w line of Cliff Overlook for the southeasterly corner of Lot 18, LakeCliff on Lake Travis Section Thirteen;

THENCE a length of 59.31 feet along the arc of said curving r-o-w line to the left having a radius of 55.00 feet and a chord bearing South 30°16'37" East a distance of 56.47 feet to an iron rod set for endpoint;

THENCE South 65°51'13" East a distance of 59.72 feet to an iron rod set for angle point on the southerly line of Lot 43, LakeCliff on Lake Travis Section Five as recorded by plat in Volume 102, page 267 of said plat records;

THENCE continuing along said Lot 43 the following four (4) calls:

1. South 66°1'38" East a distance of 75.64 feet to an iron rod set for angle point;

2. South 85°36'41" East a distance of 184.23 feet to an iron rod set for angle point;

3. North 73*27'24" East a distance of 180.97 feet to an iron rod set for angle point;

4. North 44°56'06" East a distance of 141.91 feet to an iron rod set for corner of Lot 43 and angle point of Lot 10, LakeCliff on Lake Travis Section Six as recorded by plat in Document No. 2000075155 of said plat records;

THENCE South 41°7'14" East a distance of 82,88 feet to an iron rod set for the common corner of Lots 9 and 10, LakeCliff on Lake Travis Section Six;

THENCE South 10°23'21" West a distance of 132.34 feet to an iron rod set for the southwest corner of Lot 9 of said subdivision;

THENCE North 89°35'45" East a distance of 98.36 feet to an iron rod set for the northwest corner of Lot 8 of said subdivision;

THENCE South 0°24'15" East a distance of 142.41 feet to an iron rod set for the common corner of Lots 7 and 8 of said subdivision;

THENCE South 2°22'40" East a distance of 89.05 feet to an iron rod set for angle point;

THENCE South 5°8'05" East a distance of 63.30 feet to an iron rod set for the common corner of Lots 5, 8 and 7 of said subdivision;

THENCE South 78°6'53" West a distance of 144.97 feet to an iron rod set for the northwest corner of Lot 5 of said subdivision;

THENCE South 11°53'07" East a distance of 170.00 feet to an iron rod set on the northerly r-o-w line of Cliff Crossing for the southwest corner of Lot 5 of said subdivision;

THENCE South 78°6'53" West a distance of 25.00 feet along said row line to an iron rod set for the southeast corner of Lot 4 of said subdivision;

THENCE North 11°53'07" West a distance of 170.00 feet to an iron rod set for the northeast corner of Lot 4 of said subdivision;

THENCE South 78°6'53" West a distance of 270.00 feet to an iron rod set for the common corner of Lots 2 and 3 of said subdivision;

THENCE North 86°49'32" West a distance of 122.63 feet to an iron rod set for the common corner of Lots 1 and 2 of said subdivision;

THENCE North 53°12'34" West a distance of 97.78 feet to an iron rod set for the common corner of Lot 1, LakeCliff on Lake Travis Section Six and Lot 14, LakeCliff on Lake Travis Section Thirteen;

THENCE North 74°0'06" West a distance of 397.82 feet to an iron rod set for angle point on the north line of Lot 12, LakeCliff on Lake Travis Section Thirteen;

THENCE North 31'59'53" West a distance of 152.22 feet to an iron . rod set for the common corner of Lots 10 and 11 of said subdivision;

THENCE North 13*51'16" West a distance of 119.75 feet to an iron rod set for angle point on the north line of Lot 10 and North 80°48'59" West a distance of 100.69 feet to the POINT OF BEGINNING and containing 12.115 acres of land, more or less, and as shown on map of survey prepared herewith

Surveyed by:

James E. Garon

Registered Professional Land Surveyor

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JAMES E. GARUN

REGISTERED PROFESSIONAL LAND SURVEYOR Email: jgsron@austin.rr.com

924 Main Street Bastrop, Texas 78602 512-303-4185 512-321-2107 fax

July 3, 2002

TRACT FOUR:

LEGAL DESCRIPTION: BEING A 39.335 ACRE TRACT OF LAND LYING IN AND SITUATED OUT OF THE JOHN MOAT SURVEY NO. 412, IN TRAVIS COUNTY, TEXAS AND BEING A PORTION OF THAT CERTAIN 247.604 ACRE TRACT OF LAND CONVEYED TO LAKECLIFF ON LAKE TRAVIS L.P. BY DEED RECORDED IN DOCUMENT NO. 2000075155 OF THE OFFICIAL DEED RECORDS OF TRAVIS COUNTY, TEXAS; SAID 39.335 ACRE TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS AND AS SURVEYED UNDER THE SUPERVISION OF JAMES E. GARON & ASSOCIATES IN JUNE, 2002:

BEGINNING at an iron rod set on the curving westerly right-of-way line of Stableford Cove, being Lot 12, LakeCliff on Lake Travis Section Eight as recorded by plat in Document No. 200100318 of the plat records of Travis County, Texas, for the southerly corner of Lot 1, LakeCliff on Lake Travis Section Eight;

THENCE along said line of Stableford Cove the following eight (8) calls:

 a length of 107.77 feet along the arc of a curve to the left having a radius of 60.00 feet and a chord bearing South 64°2'20" East a distance of 93.86 feet to an iron rod set for point of reverse curvature;

 a length of 25.59 feet along the arc of said reverse curve to the right having a radius of 25.00 feet and a chord bearing South 86°10'30" East a distance of 24.49 feet to an iron rod set for point of compound curvature;

3. a length of 86.85 feet along the arc of said compound curve to the right having a radius of 220.00 feet and a chord bearing South 45°32'31" East a distance of 86.30 feet to an iron rod set for endpoint;

4. South 34°13'51" East a distance of 112.87 feet to an iron rod set for the point of curvature of a curve to the right;

5. a length of 49.12 feet along the arc of said curve to the right having a radius of 220.00 feet and a chord bearing South 27°50'05" East a distance of 49.02 feet to an iron rod set for endpoint;

6. South 21*26'18" East a distance of 68.66 feet to an iron rod set for point of curvature of a curve to the right;

7. a length of 202.87 feet along the arc of said curve to the right having a radius of 220.00 feet and a chord bearing South 4.58.43" West a distance of 195.76 feet to an iron rod set for endpoint;

8. South 31°23'43" West a distance of 159.41 feet to an iron rod set for the most easterly corner of Lot 12, LakeCliff on Lake Travis Section Ten as recorded by plat in Document No.

200100313 of said plat records;

THENCE North 41°25'41" West a distance of 518.49 feet to an iron rod set for the common northerly corner of Lots 8 and 9, LakeCliff on Lake Travis Section Ten;

THENCE South 88°28'13" West a distance of 157.10 feet to an iron rod set for the common northerly corner of Lots 7 and 8, LakeCliff on Lake Travis Section Ten;

THENCE South 48°12'42" West a distance of 817.16 feet to an iron rod set on the curving, northerly line of Stableford Cove for the most westerly corner of Lot 1, LakeCliff on Lake Travis Section Ten:

THENCE along said line off Stableford Cove the following four (4) calls:

1. a length of 81.80 feet along the arc of a curve to the left having a radius of 420.00 feet and a chord bearing South 75°58'50" West a distance of 81.67 feet to an iron rod set for point of tangency;

2. South 70°23'17" West a distance of 63.09 feet to an iron rod

sat for point of curvature of a curve to the right;

3. a length of 227.57 feet along the arc of said curve to the right having a radius of 299.84 feet and a chord bearing North 87*52'08" West a distance of 222.15 feet to an iron rod set for point of tangency;

4. North 64°14'22" West a distance of 303.13 feet to an iron rod

set for the point of curvature of a curve to the right;

THENCE a length of 38.53 feet along the arc of said curve to the right having a radius of 25.00 feet and a chord bearing North 20°4'59" West a distance of 34.83 feet to an iron rod set for point of reverse curvature on the east line of Kahala Sunset Drive;

THENCE along said line of Kahala Sunset Drive the following six (6) calls:

1. a length of 262.27 feet along the arc of said reverse curve to the left having a radius of 830.01 feet and a chord bearing North 15"1'13" East a distance of 261.18 feet to an iron rod set for point of tangency;

2. North 5*58'02" East a distance of 312.14 feet to an iron rod set for angle point;

3. North 5"40'15" East a distance of 160.00 feet to an iron rod

set for point of curvature of a curve to the right;

4. a length of 127.74 feet along the arc of said curve to the right having a radius of 324.70 feet and a chord bearing North 18°56'30" East a distance of 126.92 feet to an iron rod set for point of reverse curvature;

5. a length of 127.11 feet along the arc of said reverse curve to the left having a radius of 330.00 feet and a chord bearing North 10°37'51" East a distance of 126.33 feet to an iron rod

set for point of tangency;

6. North 0°24'15" West a distance of 82.70 feet to an iron rod set for corner:

THENCE North 86°56'55" East a distance of 200.93 feet to an iron rod set for corner:

THENCE North 18°29'05" East a distance of 196.61 feet to an iron rod set for angle point;

THENCE North 46°52'53" East a distance of 153.87 feet to an iron rod set for angle point;

THENCE South 82°24'34" East a distance of 143.90 feet to an iron rod set for the southwest corner of Lot 5, LakeCliff on Lake Travis Section Seven as recorded by plat in Document No. 200100317 of .. said plat records;

THENCE along the south line of said LakeCliff on Lake Travis Section Seven the following five (5) calls:

1. South 65°40'38" East a distance of 133.00 feet to an iron rod set for angle point;

2. South 71°40'13" East a distance of 149.17 feet to an iron rod

set for angle point;

3. South 79°9'11" East a distance of 155.46 feet to an iron rod set for angle point:

4. South 86°20'14" East a distance of 134.03 feet to an iron rod set for angle point;

5. South 89*58'36" East a distance of 160.85 feet to an iron rod set for the southeast corner of Lot 1, LakeCliff on Lake Travis Section Seven:

THENCE South 0°1'24" West a distance of 167.81 feet to a point for the southwest corner of Lot 29, LakeCliff on Lake Travis Section Six as recorded by plat in Document No. 200000343 of said plat records and northwest corner of Lot 1, LakeCliff on Lake Travis Section Eight:

THENCE South 14*48'06" East a distance of 371.06 feet to an iron rod set for the southwesterly corner of said Lot 1;

THENCE South 85°30'06" East a distance of 81.57 feet to the POINT OF BEGINNING and containing 39.335 acres of land, more or less, and as shown on map of survey prepared herewith.

Surveyed by:

James E. Garon

Registered Professional Land Surveyor

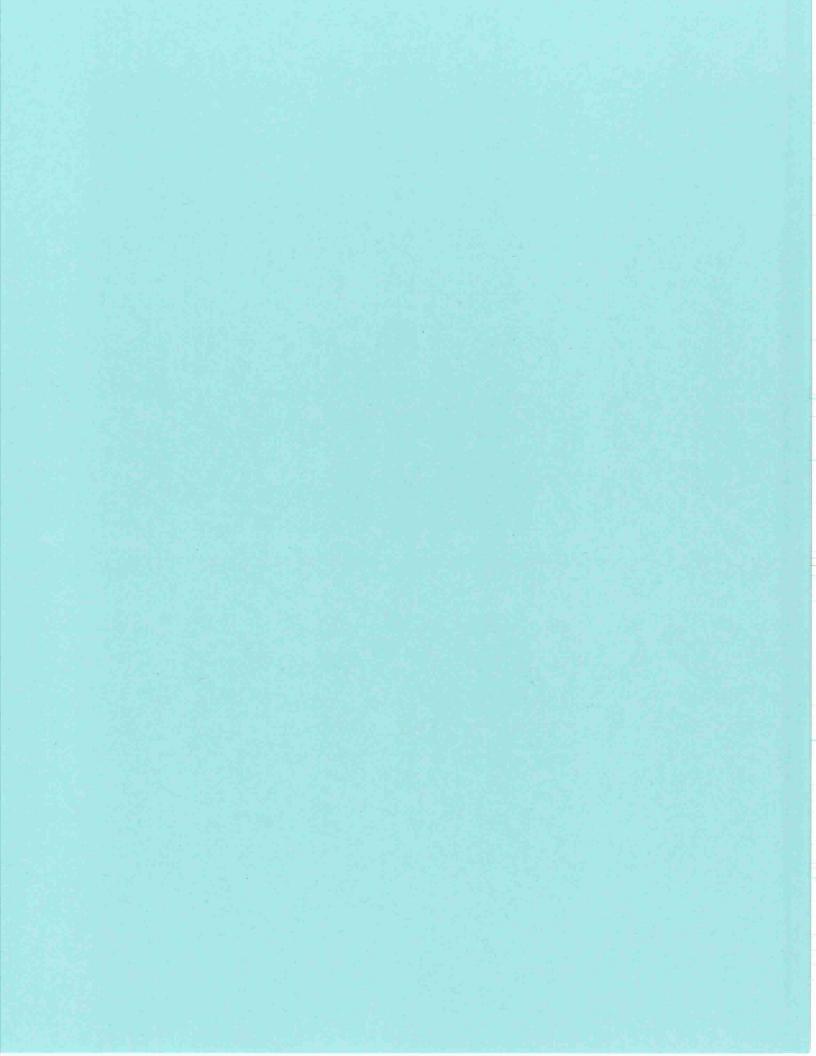
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EXMIBIT

CONSENT OF LIENHOLDER

The undersigned, Security State Bank and Trust, Fredericksburg, Texas, being the owners and holders of an existing lien(s) upon and against the real property described in the foregoing First Amendment to Agreement for the Delivery and Use of Treated Wastewater Effluent for Permitted Purposes, as such lienholder, do hereby consent to and j

	•	
oin in said Agreement.		
This consent and joinder shall	not be construed or operate as a release of any	
mortgage or liens owned and held by the und	lersigned, or any part thereof.	
SIGNED this the9 day o	f	
	SECURITY STATE BANK AND TRUST FREDERICK SBURG, TEXAS	
	BY: San h	
	Name: Joe David Sherro.	
	Name: Joc David Sherro. Title: Sr. V.C.	
THE STATE OF TEXAS COUNTY OF GILLESPIE	§ §	
appeared be build and of Security State Bank and Trust Fredericksburg, Texas, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and considerations therein expressed.		
GIVEN under my hand and seal this	the 9th day of June, 2006.	
DIANA MITCHELL. Notary Public, State of Texas NOTATION Commission Expires 10–10–2008	Notary Public-State of Texas Printed Name of Notary: Diana Mitzkel My Commission Expires: Oct. 10, 2008	





FIRST AMENDMENT TO AGREEMENT FOR THE DELIVERY AND USE OF TREATED EFFLUENT FOR PERMITTED PURPOSES



This Agreement is entered into by and between LAKECLIFF ON LAKE TRAVIS, L.P. ("Club") and SOUTH CENTRAL WATER COMPANY, INC. ("SCWC").

The above referenced Club and SCWC have heretofore entered into an "AGREEMENT FOR THE DELIVERY AND USE OF TREATED WASTEWATER EFFLUENT FOR PERMITTED PURPOSES" dated June 29, 2005,

The Club and SCWC hereby agree to adopt certain additional provisions as follows:

- 1) The June 29, 2005 agreement is affirmed, ratified, and incorporated herein as Exhibit "A."
- Attached hereto and made a part hereof is Exhibit "B," a legal description of approximately 176 acres upon which the Club's golf course is located. The Club hereby commits to take and use the effluent to irrigate the golf course located within the tract described in Exhibit "B."
- The Club acknowledges that the Security State Bank and Trust, Fredericksburg, Texas is the holder of lien or liens upon the property described in Exhibit "B" and the Club will obtain the Consent and Joinder of the Bank to the Agreement and the First Amendment thereto. Said Consent and Joinder is attached hereto as Exhibit "C" and made a part hereof.
- 4) All terms and conditions of the original agreement shall remain in full force and effect.

EXHIBIT B-7

EXECUTED this the ______ day of _______, 2006.

LAKECLIFF ON LAKE TRAVIS, L.P.

Robert Day, General Manager

STATE OF TEXAS

COUNTY OF TRAVIS

8

This instrument was acknowledged before me on the 4th day of 7006, by ROBERT DAY, General Partner of Lakecliff on Lake Travis. L.P.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the ghay of June, 2006.

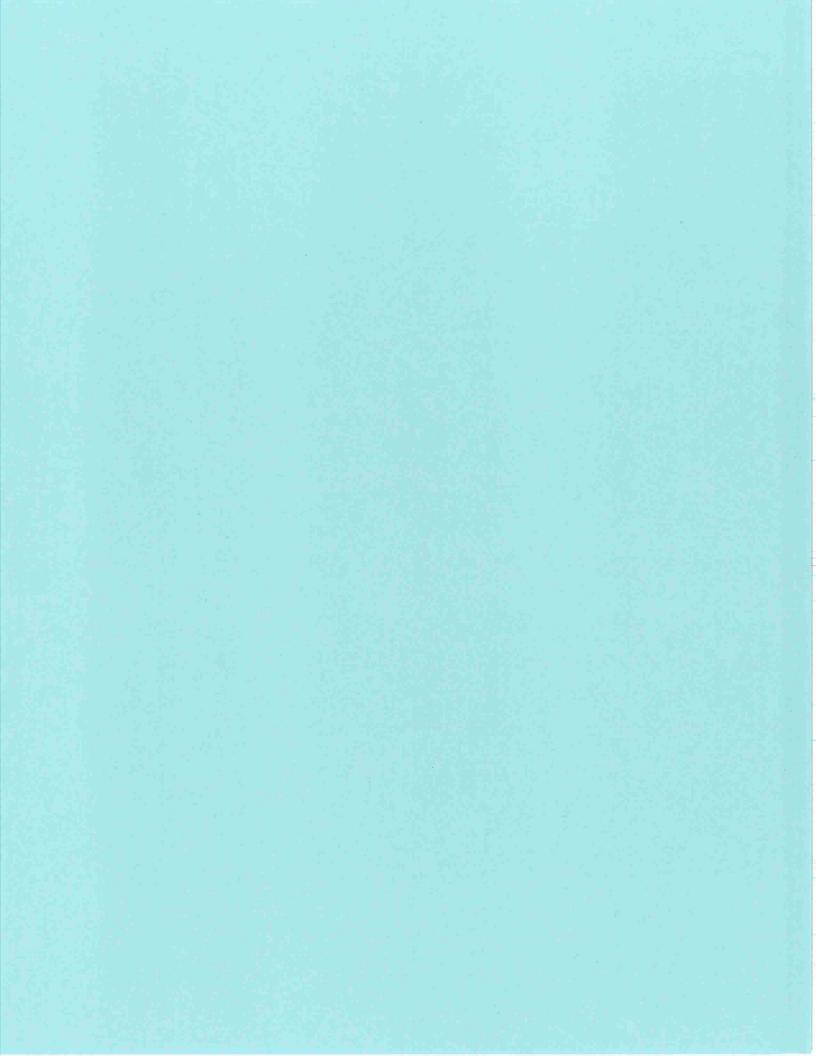
Notary Public in and for the State of Texas

Commission Expires
10-2008

Executed this the	9 day of 16, 2006.
	SOUTH CENTRAL WATER COMPANY, INC.
	BY: Malcolm Bailey, President
STATE OF TEXAS	9 9
COUNTY OF TRAVIS	· ·
This instrument was 2006, by MALCOLM BAILEY, P	s acknowledged before me on the Alba day of Three, resident of South Central Water Company, Inc.
	Y HAND AND SEAL OF OFFICE this the 9 day of
	Notary Bullion and for

Notary Public in and for the State of Texas





01-6120076 BP





SECOND AMENDMENT TO AGREEMENT FOR THE DELIVERY AND USE OF TREATED EFFLUENT FOR PERMITTED PURPOSES

This Agreement is entered into by and between LAKECLIFF ON LAKE TRAVIS, L.P. ("Club") and SOUTH CENTRAL WATER COMPANY, INC. "SCWC").

The above referenced Club and SCWC have heretofore entered into an "AGREEMENT FOR THE DELIVERY AND USE OF TREATED WASTEWATER EFFLUENT FOR PERMITTED PURPOSES" dated June 29, 2005 and the 'FIRST AMENDMENT TO AGREEMENT FOR DELIVERY AND USE OF TREATED EFFLUENT FOR PERMITTED PURPOSES," dated June 9, 2006, hereinafter called "Prior Agreements," and said Prior Agreements are incorporated herein by reference.

The Club and SCWC hereby agree to adopt the following amendments and additional provisions:

- 1) The Club and SCWC agree that an additional treated effluent holding pond capacity will be needed by SCWC, and the Club hereby grants to SCWC an easement for the construction, installation, operation, repair, and maintenance of additional effluent holding pond or ponds capable of holding 23.3 acre feet of treated effluent. The easement granted herein shall be located within the approximate 70.896 acre tract described in the Prior Agreements and may utilize the existing effluent holding pond and adjacent sand trap area located near Haynie Flat Road to achieve the required holding capacity. Prior to constructing the holding pond, SCWC shall notify the Club of the exact dimensions of the pond and appurtenant access and maintenance berms, and SCWC and the Club agree to execute a revised easement for the holding point site and appurtenances.
- The Club acknowledges that the Security State Bank and Trust, Fredericksburg, Texas is the holder of lien or liens upon the 70.896 acres described in the Prior Agreements, and the Club will obtain

EXHIBIT

B-Z

SAMUD OTHERWASEMENTSWIBARAYANDAMENDAGEMENTOELVRYSUSELEFFLENT. wed. 1

the Consent and Joinder of the Bank to the Agreement and the First Amendment thereto. Said Consent and Joinder is attached hereto as Exhibit "" and made a part hereof.

- The Grantee shall have the right to assign any and all of its rights 3) and interest herein and under the Prior Agreements.
- All other terms and conditions of the original agreement and the 4) First Amendment shall remain in full force and effect.

EXECUTED this the 5 day of 4an

LAKECLIFF ON LAKE TRAVIS, L.P.

General Partner for

Lakecliff on Lake Travis, L.P.

STATE OF TEXAS

COUNTY OF TRAVIS

This instrument was acknowledged before me on the day of 2006, by ROBERT DAY, General Partner for Lakecliff on Lake Travis. L.P.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the $\underline{\mathcal{S}}$ day of

vickie c. Williams Notary Public State of Texas My Commission Expires Vovember 30, 2007

the State of Texas

SOUTH CENTRAL WATER COMPANY, INC.

BY: State OF TEXAS

STATE OF TEXAS

COUNTY OF TRAVIS

This instrument was acknowledged before me on the day of form and for south Central Water Company, Inc.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the day of form, 2006.

VICKIE C. WILLIAMS
Notary Public in and for

the State of Texas

STA-CASH -COUNTSEY
AFTER RECORDING, RETURNED:
MALCOLM BAILEY
5818 BEVERLY HILL, Suite 200
HOUSTON, TX 77057

CONSENT OF LIENHOLDER

The undersigned, Security State Bank and Trust, Fredericksburg, Texas, being the owners and holders of an existing lien(s) upon and against the real property described in the foregoing "SECOND AMENDMENT TO AGREEMENT FOR THE DELIVERY AND USE OF TREATED EFFLUENT FOR PERMITTED PURPOSES," as such lienholder, do hereby consent to and join in said Easement.

This consent and joinder shall not be construed or operate as a release of said mortgage or liens owned and held by the undersigned, or any part thereof.

SIGNED this the 5 day of Jones, 2006.7

SECURITY STATE BANK AND TRUST

Name: Joe Dovid Sterred
Title: <u>Sr. V. or President</u>

FREDERICKSBURG, TEXAS

THE STATE OF TEXAS COUNTY OF GILLESPIE Travis

appeared Toe Name of Security State Bank and Trust, Fredericksburg, Texas, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

GIVEN under my hand and scal this the

day of

, 200*%*. 1

Notary Public-State of Texas

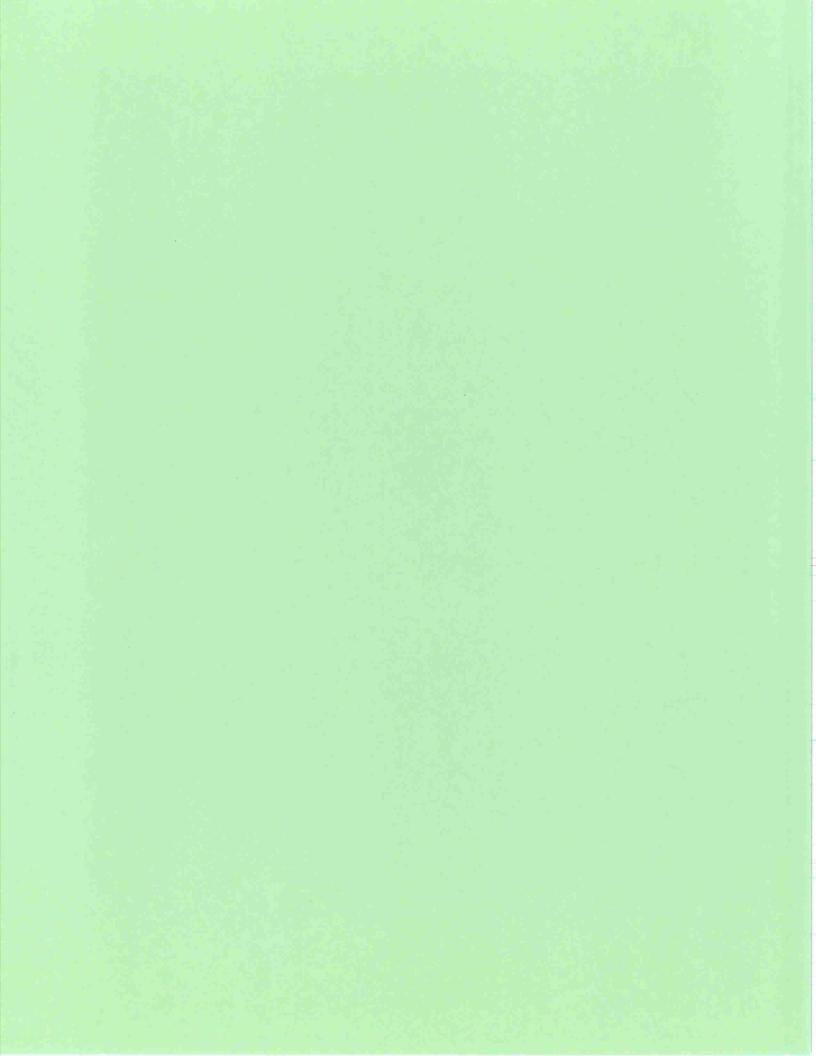
Printed Name of Notary:

My Co

State of My Committee

State of Texas
My Commission Expires
November 30, 2007

5.MUD OTHURISASEMENTSWIDAILBYINDAMEND AGRMNTDBLVRYAUSE DEFEND with 4

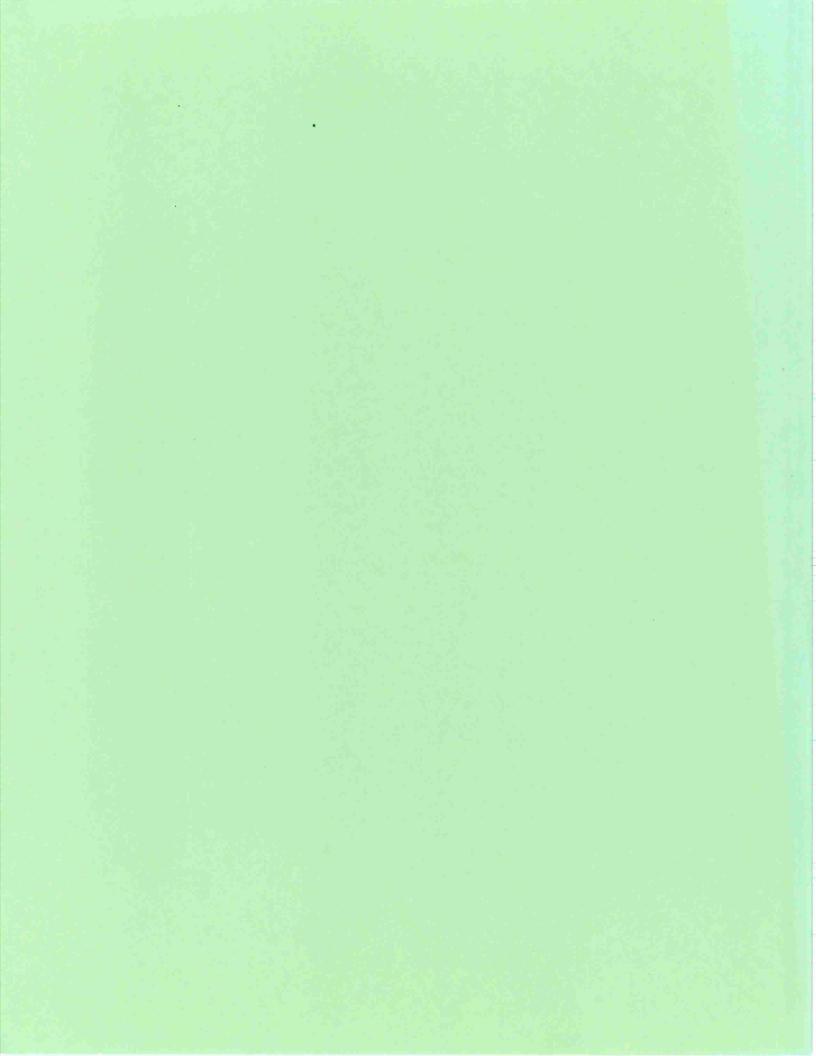


	□ Yes ⊠ No
B .	If the existing permit contains an onsite sludge disposal authorization, is the location of the sewage sludge disposal site in the existing permit accurate?
	□ Yes □ No ⊠ Not Applicable
	If No, or if a new onsite sludge disposal authorization is being requested in this permit application, provide an accurate location description of the sewage sludge disposal site.
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:
	was paid for service regarding the application.
D.	Do you owe any fees to the TCEQ?
	□ Yes ⊠ No
	If yes , provide the following information:
	Account number: Amount past due:
E.	Do you owe any penalties to the TCEQ?
	□ Yes ⊠ No
	If yes , please provide the following information:
	Enforcement order number: Amount past due:

Section 13. Attachments (Instructions Page 38)

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.
- $oxed{\boxtimes}$ Original full-size USGS Topographic Map with the following information:
 - Applicant's property boundary



Comisión de Calidad Ambiental del Estado de Texas



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

PERMISO PROPUESTO NO. WQoo14649001

SOLICITUD. Arbor Way, Inc., 3100 W Alabama St, Houston TX 77098 ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) para el propuesto Permiso No.WQ0014649001 de disposición de aguas residuales] para autorizar la disposición de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 320,000 galones por día via irrigación en 170 hectares de tierra de campo de golf. La planta de tratamiento de aguas domésticos residuales y el área de disposición están ubicados en 1,200 pies al noroeste de la intersección de Haynie Flat Road y Travis Lakeside Drive en el Condado de Travis, Texas. La TCEQ recibió esta solicitud el día 19 de Enero, 2024. La solicitud para el permiso estará disponible para leer y copiar en Lake Travis Community Library, 1938 Lohmans Crossing Road, Lakeway TX antes de la fecha de publicación de este aviso en el periódico. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud. [Insert web link from English notice]

Include the following non-italicized sentence if the facility is located in the Coastal Management Program boundary. The Coastal Management Program boundary is the area along the Texas Coast of the Gulf of México as depicted on the map in 31 TAC §503.1 and includes part or all of the following counties: Cameron, Willacy, Kenedy, Kleberg, Nueces, San Patricio, Aransas, Refugio, Calhoun, Victoria, Jackson, Matagorda, Brazoria, Galveston, Harris, Chambers, Jefferson y Orange. El Director Ejecutivo de la TCEQ ha revisado esta medida para ver si está de acuerdo con los objetivos y las regulaciones del Programa de Administración Costero de Texas (CMP) de acuerdo con las regulaciones del Consejo Coordinador de la Costa (CCC) y ha determinado que la acción es conforme con las metas y regulaciones pertinentes del CMP.

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar

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

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

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO

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

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

miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

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

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

CONTACTOS E INFORMACIÓN DE LA TCEQ. Todos los comentarios escritos del público y los para pedidos una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at www.tceq.texas.gov/about/comments.html. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: www.tceq.texas.gov.

También	se pued	e obtener i	nformac	ción adic	ional del	Arbor V	Vay, I	nc. a la	direcció	n
indicada	arriba o	llamando	a Senor	Richard	Grayum,	DECorp	o. al 5	12-427-	-3237.	

Fecha de emisión	[l]	Эа	te	no	ti	ice	iss	ue	$d_{ m J}$	
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Erwin Madrid

From: Erwin Madrid

Sent: Friday, December 6, 2024 5:08 PM

To: Hendrix, Rebecca

Cc: Carter Jr., Jack; Rivera, Yvonne

Subject: RE: WQ0014649001 - NOD Response to letter dated 11 22 2024

Hi Rebecca,

Thank you for taking my call earlier today. Per our conversation, I can work to declare the application administratively complete without the original signature pages included. However, this will not satisfy the requirement of needing the signature pages submitted with the application, therefore, please make sure to follow up with the original signature pages as soon as possible because the permit will not be issued until these are received.

If you cannot obtain the signature of Mr. Ralph Thomas, he can designate an authorize signatory by supplying a memo giving authority to the signatory to sign or have someone else in the company who meets the rule TAC 305.44 requirement to sign.

If you have any additional questions, please let me know.

Regards,

Erwin Madrid
Team Lead
ARP Team | Water Quality Division
512-239-2191
Texas Commission on Environmental Quality



Please consider whether it is necessary to print this e-mail.

From: Hendrix, Rebecca <rhendrix@gfnet.com>
Sent: Wednesday, December 4, 2024 11:56 AM
To: Erwin Madrid <Erwin.Madrid@tceq.texas.gov>

Cc: Carter Jr., Jack <jcarter@gfnet.com>; Rivera, Yvonne <yrivera@gfnet.com>

Subject: WQ0014649001 - NOD Response to letter dated 11 22 2024

Good Morning Erwin. Please see attached for our response to the Notice of Deficiency letter dated November 22, 2024 in regards to the renewal of the permit for Arbor Way, Inc (WQ0014649001). Would you like a hard copy mailed to you as well? Please advise. If you need anything additional, please let me know. Rebecca

Erwin Madrid

From: Hendrix, Rebecca <rhendrix@gfnet.com>
Sent: Tuesday, December 10, 2024 4:27 PM

To: Hannah Zellner; Sara Holmes
Cc: Erwin Madrid; Carter Jr., Jack

Subject: Permit Renewal for Arbor Way, Inc - WQ0014649001 - Technical Completeness Review

Response

Attachments: ARBOR WAY - Technical Completeness Review Response.pdf; USGS Exhibit - 2024.pdf;

Surface Water Bodies - 2024.pdf; Surface Water Bodies - 2019.pdf; 5 - Facility Site Drawing.pdf; 10054.pdf; Half Mile & 1 Mile Radius Well Logs.pdf; 2 Mile Radius Well

Logs.pdf

Good Afternoon. Please see attached. If you need anything additional, please let us know

THE TONMENTAL OUR

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

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

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

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

A. Existing/Interim I Phase

Design Flow (MGD): <u>0.16</u>

2-Hr Peak Flow (MGD): <u>o.64</u>

Estimated construction start date: to be determined

Estimated waste disposal start date: Click to enter text.

B. Interim II Phase

Design Flow (MGD): N/A - There is no Interim II Phase

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

Estimated construction start date: <u>Click to enter text.</u>
Estimated waste disposal start date: <u>Click to enter text.</u>

C. Final Phase

Design Flow (MGD): <u>0.32</u> 2-Hr Peak Flow (MGD): <u>1.28</u>

Estimated construction start date: to be determined

Estimated waste disposal start date: Click to enter text.

D. Current Operating Phase

Provide the startup date of the facility: to be determined

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**.

The facility will employ the complete mix variation of the activated sludge process designed for single stage nitrification - From the lift station the wastewater will travel through a coarse bar screen then to the complete mix basin; from the basin the mix-liquor will be transferred to the clarifier where solids will be settled out and clear water will flow over the weirs then into the chlorine contact basin. The settled solids will either be transferred to the digester or returned to the head works. Currently the facility is getting ready to be constructed and is not in operation.

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)
See Attachment 3		

C. Process Flow Diagram

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

Attachment: 4

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

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

Latitude: Click to enter text.

• Longitude: Click to enter text.

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

• Latitude: Click to enter text.

Longitude: Click to enter text.

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: 5

Provide the name and a des	cription of the area	a served by the treatmen	t facility.
Travis County Improvement	District No. 1. A 1,25	o-acre single family resider	ntial development
Collection System Informati each uniquely owned collection systems. examples.	ction system, existi	ng and new, served by th	his facility, including
Collection System Informatio	n Owner Name	Owner Type	Population Serve
		Choose an item.	•
		Choose an item.	
		Choose an item.	
		Choose an item.	
L			
If yes, does the existing per years of being authorized being authorized being authorized being authorized being a look of the sufficient of the sufficient commending denial denia	y the TCEQ? scussion regarding nt justification may	the continued need for y result in the Executive	the unbuilt phase.
To provide water and wastew	ater service to prope	ty owners within the Distr	ict.
		D 45	
Section 5. Closure I	Plans (Instructi	ons Page 45)	
Have any treatment units be		rvice permanently, or wi	ll any units be taken

□ 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.	
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 propose phase?	ed
□ Yes ⊠ No	
If yes, provide the date(s) of approval for each phase: Click to enter text.	
Provide information, including dates, on any actions taken to meet a <i>requirement or provision</i> pertaining to the submission of a summary transmittal letter. Provide a copy an approval letter from the TCEQ, if applicable.	of
Click to enter text.	
B. Buffer zones	
Have the buffer zone requirements been met?	
⊠ Yes □ No	
Provide information below, including dates, on any actions taken to meet the conditions the buffer zone. If available, provide any new documentation relevant to maintaining the buffer zones.	
Click to enter text.	

C. Other actions required by the current permit

	sul	es the <i>Other Requirements</i> or <i>Special Provisions</i> section in the existing permit require omission of any other information or other required actions? Examples include tification of Completion, progress reports, soil monitoring data, etc.
		□ Yes ⊠ No
		yes, provide information below on the status of any actions taken to meet the nditions of an <i>Other Requirement</i> or <i>Special Provision</i> .
	C	lick to enter text.
Ь		t and magaziness
D.		it and grease treatment Acceptance of grit and grease waste
	1.	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.
	<i>2.</i>	Grit and grease processing
		Describe below how the grit and grease waste is treated at the facility. In your description, include how and where the grit and grease is introduced to the treatment works and how it is separated or processed. Provide a flow diagram showing how grit and grease is processed at the facility.
		Click to enter text.
	3.	Grit disposal
		Does the facility have a Municipal Solid Waste (MSW) registration or permit for grit disposal?
		□ Yes □ No
		If No , contact the TCEQ Municipal Solid Waste team at 512-239-2335. Note: A registration or permit is required for grit disposal. Grit shall not be combined with treatment plant sludge. See the instruction booklet for additional information on grit disposal requirements and restrictions.
		Describe the method of grit disposal.

		Click to enter text.
	1	Grease and decanted liquid disposal
	7.	Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-2335.
		Describe how the decant and grease are treated and disposed of after grit separation.
		Click to enter text.
E.	Sto	ormwater management
	1.	Applicability
		Does the facility have a design flow of 1.0 MGD or greater in any phase?
		□ Yes ⊠ No
		Does the facility have an approved pretreatment program, under 40 CFR Part 403?
		□ Yes ⊠ No
		If no to both of the above, then skip to Subsection F, Other Wastes Received.
	2.	MSGP coverage
		Is the stormwater runoff from the WWTP and dedicated lands for sewage disposal currently permitted under the TPDES Multi-Sector General Permit (MSGP), TXR050000?
		□ Yes □ No
		If yes , please provide MSGP Authorization Number and skip to Subsection F, Other Wastes Received:
		TXR05 Click to enter text. or TXRNE Click to enter text.
		If no, do you intend to seek coverage under TXR050000?
		□ Yes □ No
	3.	Conditional exclusion
		Alternatively, do you intend to apply for a conditional exclusion from permitting based TXR050000 (Multi Sector General Permit) Part II B.2 or TXR050000 (Multi Sector General Permit) Part V, Sector T 3(b)?
		□ Yes □ No
		If yes, please explain below then proceed to Subsection F, Other Wastes Received:

	Click to enter text.
1.	Existing coverage in individual permit
	Is your stormwater discharge currently permitted through this individual TPDES or TLAP permit?
	□ Yes □ No
	If yes , provide a description of stormwater runoff management practices at the site that are authorized in the wastewater permit then skip to Subsection F, Other Wastes Received.
	Click to enter text.
5.	Zero stormwater discharge
	Do you intend to have no discharge of stormwater via use of evaporation or other means?
	□ Yes □ No
	If yes, explain below then skip to Subsection F. Other Wastes Received.
	Click to enter text.
	Note: If there is a notential to discharge any stormwater to surface water in the state as
	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.
5.	Request for coverage in individual permit
	Are you requesting coverage of stormwater discharges associated with your treatment plant under this individual permit?
	□ Yes □ No
	If yes, provide a description of stormwater runoff management practices at the site for which you are requesting authorization in this individual wastewater permit and describe whether you intend to comingle this discharge with your treated effluent or discharge it via a separate dedicated stormwater outfall. Please also indicate if you intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.

		Click to enter text.
		Note: Direct stormwater discharges to waters in the state authorized through this
		individual permit will require the development and implementation of a stormwater pollution prevention plan (SWPPP) and will be subject to additional monitoring and reporting requirements. Indirect discharges of stormwater via headworks recycling will require compliance with all individual permit requirements including 2-hour peak flow limitations. All stormwater discharge authorization requests will require additional information during the technical review of your application.
F.	Di	scharges to the Lake Houston Watershed
	Do	es the facility discharge in the Lake Houston watershed?
		□ Yes ⊠ No
		yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions. ck to enter text.
G.	Ot	her wastes received including sludge from other WWTPs and septic waste
	1.	Acceptance of sludge from other WWTPs
		Does or will the facility accept sludge from other treatment plants at the facility site?
		□ Yes ⊠ No
		If yes, attach sewage sludge solids management plan. See Example 5 of 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 BOD_5 concentration of the sludge, and the design BOD_5 concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.
		Click to enter text.
		Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.
	2.	Acceptance of septic waste
		Is the facility accepting or will it accept septic waste?
		□ Yes ⊠ No
		If yes, does the facility have a Type V processing unit?
		□ Yes □ No
		If yes, does the unit have a Municipal Solid Waste permit?
		□ Yes □ No

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

Click to enter text.			

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

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

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

	Yes	No
ш	163	INO

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

Click to enter text.			

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

Is the facility in operation?

□ Yes ⊠ No

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

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

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

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , mg/l					
Total Suspended Solids, mg/l					
Ammonia Nitrogen, mg/l					
Nitrate Nitrogen, mg/l					

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

^{*}TPDES permits only †TLAP permits only

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

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

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: to be determined

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

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

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

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

 \square Design flow>= 1 MGD

	Serves >= 10,000 people
	Class I Sludge Management Facility (per 40 CFR § 503.9)
	Biosolids generator
	Biosolids end user – land application (onsite)
	Biosolids end user – surface disposal (onsite)
	Biosolids end user – incinerator (onsite)
ww	TP's Biosolids Treatment Process
Che	ck all that apply. See instructions for guidance.
	Aerobic Digestion
	Air Drying (or sludge drying beds)
	Lower Temperature Composting
	Lime Stabilization
	Higher Temperature Composting
	Heat Drying
	Thermophilic Aerobic Digestion
	Beta Ray Irradiation
	Gamma Ray Irradiation
	Pasteurization
	Preliminary Operation (e.g. grinding, de-gritting, blending)
	Thickening (e.g. gravity thickening, centrifugation, filter press, vacuum filter)
	Sludge Lagoon
	Temporary Storage (< 2 years)
	Long Term Storage (>= 2 years)
	Methane or Biogas Recovery
	Other Treatment Process: Click to enter text.

C. Biosolids Management

B.

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): Click to enter text.

D. Disposal site

Disposal site name: to be determined

TCEQ permit or registration number: Click to enter text.

County where disposal site is located: Click to enter text.

E. Transportation method

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

Name of the hauler: to be determined

Hauler registration number: <u>Click to enter text.</u>

Sludge is transported as a:

Liquid \square semi-liquid \square semi-solid \square solid \square

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

A. Beneficial use authorization

Does the existing permit include authorization	for land applie	cation 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 f storage or disposal options?	or an	y of the	follow	ving sludge processing,
Sludge Composting		Yes		No
Marketing and Distribution of sludge		Yes		No
Sludge Surface Disposal or Sludge Monofill		Yes	\boxtimes	No
Temporary storage in sludge lagoons		Yes	\boxtimes	No
If yes to any of the above sludge options and the authorization, is the completed Domestic Waste Technical Report (TCEQ Form No. 10056) attack	wate	r Permi	t Appl	ication: Sewage Sludge
□ Yes □ No				
Section 11. Sewage Sludge Lagoons (Ins	stru	ctions	Page	e 53)
Does this facility include sewage sludge lagoons?				
□ Yes ⊠ No				
If yes, complete the remainder of this section. If no,	proc	eed to S	Section	12.
A. Location information				
The following maps are required to be submitted provide the Attachment Number.	d as p	art of t	he app	lication. For each map,
 Original General Highway (County) Map: 				
Attachment: Click to enter text.				
 USDA Natural Resources Conservation Ser 	vice	Soil Ma _l) :	
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 eapply.	xist v	vithin th	ne lago	on area. Check all that
Overlap a designated 100-year frequency	floo	d 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 the protective measures to be utilized including				

Click to enter text.
Temporary storage information
Provide the results for the pollutant screening of sludge lagoons. These results are in addition to pollutant results in <i>Section 7 of Technical Report 1.0.</i>
Nitrate Nitrogen, mg/kg: Click to enter text.
Total Kjeldahl Nitrogen, mg/kg: 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: <u>Click to enter text.</u>
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: <u>Click to enter text.</u>
Liner information
Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of $1x10^{-7}$ cm/sec?
□ Yes □ No
If yes, describe the liner below. Please note that a liner is required.

B.

C.

	Click	to enter text.
D.	Site d	evelopment plan
	Provid	le a detailed description of the methods used to deposit sludge in the lagoon(s):
	Click	to enter text.
	Attac	n the following documents to the application.
	•	Plan view and cross-section of the sludge lagoon(s)
		Attachment: Click to enter text.
	•	Copy of the closure plan
		Attachment: Click to enter text.
	•	Copy of deed recordation for the site
		Attachment: Click to enter text.
	•	Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons
		Attachment: Click to enter text.
	•	Description of the method of controlling infiltration of groundwater and surface water from entering the site
		Attachment: Click to enter text.
	•	Procedures to prevent the occurrence of nuisance conditions
		Attachment: Click to enter text.
E.	Groui	ndwater monitoring
	groun	undwater monitoring currently conducted at this site, or are any wells available for dwater monitoring, or are groundwater monitoring data otherwise available for the e lagoon(s)?
		Yes □ No
	types	undwater monitoring data are available, provide a copy. Provide a profile of soil encountered down to the groundwater table and the depth to the shallowest dwater as a separate attachment.
	At	tachment: Click to enter text.

Section 12. Authorizations/Compliance/Enforcement (Instructions

Page 55)

A	A d d!#! 1		
Α.	Additional	aurnoriz	anons

C	Does the permittee have additional authorizations for this facility, such as reuse authorization, sludge permit, etc? ☐ Yes ☑ No If yes, provide the TCEQ authorization number and description of the authorization: Click to enter text.
В.	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.
S	ection 13. RCRA/CERCLA Wastes (Instructions Page 55)
	RCRA hazardous wastes Has the facility received in the past three years, does it currently receive, or will it receive RCRA hazardous waste? Yes No

B. Remediation activity wastewater

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

□ Yes ⊠ No

C. Details about wastes received

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

Attachment: Click to enter text.

Section 14. Laboratory Accreditation (Instructions Page 56)

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

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

Title: <u>President</u>	
Signature:	
Date:	

Printed Name: Ralph Thomas

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)

٨	Justification	of.	normit	nood
A.	Justincation	ΟI	berim	neeu

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

	_					
	(Click to enter text.				
B.	Re	gionalization of facilities				
	For additional guidance, please review <u>TCEQ's Regionalization Policy for Wastewater Treatment</u> ¹ .					
		ovide the following information concerning the potential for regionalization of domest astewater 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): <u>Click to enter text.</u>					
racinty Design Flow (now being requested in application). Chek to enter text.					
Average Influent Organic Strength or BOD ₅ Concentration in mg/l: <u>Click to enter text.</u>					
Average Influent Loading (lbs/day = total average flow X average BOD ₅ conc. X 8.34): $\frac{\text{Click}}{\text{to enter text.}}$					
Provide the source of the average organic strength or BOD ₅ concentration.					
Click to enter text					

B. Proposed organic loading

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

Table 1.1(1) - Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD5 Concentration (mg/l)
Municipality		
Subdivision		
Trailer park - transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources		
AVERAGE BOD ₅ from all sources		

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

A. Existing/Interim I Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: Click to enter text.

Ammonia Nitrogen, mg/l: <u>Click to enter text.</u>
Total Phosphorus, mg/l: <u>Click to enter text.</u>
Dissolved Oxygen, mg/l: <u>Click to enter text.</u>

Other: Click to enter text.

B. Interim it Phase Design Effluent Quanty						
	Biochemical Oxygen Demand (5-day), mg/l: <u>Click to enter text.</u>					
	Total Suspended Solids, mg/l: Click to enter text.					
	Ammonia Nitrogen, mg/l: Click to enter text.					
	Total Phosphorus, mg/l: Click to enter text.					
	Dissolved Oxygen, mg/l: Click to enter text.					
	Other: Click to enter text.					
C.	Final Phase Design Effluent Quality					
	Biochemical Oxygen Demand (5-day), mg/l: Click to enter text.					
	Total Suspended Solids, mg/l: Click to enter text.					
	Ammonia Nitrogen, mg/l: Click to enter text.					
	Total Phosphorus, mg/l: Click to enter text.					
	Dissolved Oxygen, mg/l: Click to enter text.					
	Other: Click to enter text.					
D.	Disinfection Method					
	Identify the proposed method of disinfection.					
	☐ Chlorine: Click to enter text. mg/l after Click to enter text. minutes detention time at peak flow					
	Dechlorination process: Click to enter text.					
	□ Ultraviolet Light: Click to enter text. seconds contact time at peak flow					
	□ Other: Click to enter text.					
Ç.	ection 4 Decign Calculations (Instructions Page 50)					
	ection 4. Design Calculations (Instructions Page 59)					
	tach design calculations and plant features for each proposed phase. Example 4 of the structions includes sample design calculations and plant features.					
	Attachment: Click to enter text.					
-						
Se	ction 5. Facility Site (Instructions Page 60)					
A.	100-year floodplain					
	Will the proposed facilities be located <u>above</u> the 100-year frequency flood level?					
	□ Yes □ No					
	If no , describe measures used to protect the facility during a flood event. Include a site map showing the location of the treatment plant within the 100-year frequency flood level. If applicable, provide the size and types of protective structures.					
	Click to enter text.					

	Provide the source(s) used to determine 100-year frequency flood plain.
	Click to enter text.
	For a new or expansion of a facility, will a wetland or part of a wetland be filled?
	□ Yes □ No
	If yes, has the applicant applied for a US Corps of Engineers 404 Dredge and Fill Permit?
	□ Yes □ No
	If yes, provide the permit number: Click to enter text.
	If no, provide the approximate date you anticipate submitting your application to the Corps: Click to enter text.
B.	Wind rose
	Attach a wind rose: Click to enter text.
Se	ection 6. Permit Authorization for Sewage Sludge Disposal
	(Instructions Page 60)
Α.	Beneficial use authorization
	Are you requesting to include authorization to land apply sewage sludge for beneficial use on property located adjacent to the wastewater treatment facility under the wastewater permit?
	□ Yes □ No
	If yes, attach the completed 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.
Se	ection 7. Sewage Sludge Solids Management Plan (Instructions Page
	61)
_	

Attach a solids management plan to the application.

Attachment: Click to enter text.

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

Treatment units and processes dimensions and capacities

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

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

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

Section 1. Domestic Drinking Water Supply (Instructions Page 64)
Is there a surface water intake for domestic drinking water supply located within 5 miles downstream from the point or proposed point of discharge?
□ Yes □ No
If no , proceed it Section 2. If yes , provide the following:
Owner of the drinking water supply: <u>Click to enter text.</u>
Distance and direction to the intake: Click to enter text.
Attach a USGS map that identifies the location of the intake.
Attachment: Click to enter text.
Section 2. Discharge into Tidally Affected Waters (Instructions Page 64)
Does the facility discharge into tidally affected waters?
□ Yes □ No
If no , proceed to Section 3. If yes , complete the remainder of this section. If no, proceed to Section 3.
A. Receiving water outfall
Width of the receiving water at the outfall, in feet: Click to enter text.
B. Oyster waters
Are there oyster waters in the vicinity of the discharge?
□ Yes □ No
If yes, provide the distance and direction from outfall(s).
Click to enter text.
C. Sea grasses
Are there any sea grasses within the vicinity of the point of discharge?
□ Yes □ No
If yes, provide the distance and direction from the outfall(s).
Click to enter text.

36	CHOIL	5. Classified Segments (instructions Page 64)
Is	the disc	harge directly into (or within 300 feet of) a classified segment?
	□ Ye	es 🗆 No
If	yes , this	s Worksheet is complete.
If	no , com	plete Sections 4 and 5 of this Worksheet.
Se	ection	4. Description of Immediate Receiving Waters (Instructions Page 65)
Na	ame of t	he immediate receiving waters: <u>Click to enter text.</u>
A.	Receiv	ring water type
	Identif	y the appropriate description of the receiving waters.
		Stream
		Freshwater Swamp or Marsh
		Lake or Pond
		Surface area, in acres: Click to enter text.
		Average depth of the entire water body, in feet: Click to enter text.
		Average depth of water body within a 500-foot radius of discharge point, in feet: Click to enter text.
		Man-made Channel or Ditch
		Open Bay
		Tidal Stream, Bayou, or Marsh
		Other, specify: <u>Click to enter text.</u>
B.	Flow c	haracteristics
	existin	eam, man-made channel or ditch was checked above, provide the following. For g discharges, check one of the following that best characterizes the area <i>upstream</i> discharge. For new discharges, characterize the area <i>downstream</i> of the discharge one).
		Intermittent - dry for at least one week during most years
	□ mai	Intermittent with Perennial Pools - enduring pools with sufficient habitat to intain significant aquatic life uses
		Perennial - normally flowing
	Check dischar	the method used to characterize the area upstream (or downstream for new rgers).
		USGS flow records
		Historical observation by adjacent landowners
		Personal observation
		Other, specify: Click to enter text.

	List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point.						
	Click t	o enter text.					
D.	Downs	stream characteristics					
		rge (e.g., natural or man-mad		ithin three miles downstream of the ds, reservoirs, etc.)?			
		Yes □ No					
		discuss how.					
	Click t	o enter text.					
E. Normal dry weather characteristics Provide general observations of the water body during normal dry weather conditions. Click to enter text.							
	Date and time of observation: Click to enter text.						
		e water body influenced by					
		Yes □ No					
Se	ection	5. General Characte Page 66)	eristics of	the Waterbody (Instructions			
A.	Upstre	am influences					
		mmediate receiving water unced by any of the following		ne discharge or proposed discharge site nat apply.			
		Oil field activities		Urban runoff			
		Upstream discharges		Agricultural runoff			
		Septic tanks		Other(s), specify: <u>Click to enter text.</u>			

C. Downstream perennial confluences

B. Waterbody uses Observed or evidences of the following uses. Check all that apply. Livestock watering Contact recreation Irrigation withdrawal Non-contact recreation **Fishing Navigation** Domestic water supply Industrial water supply Park activities Other(s), specify: Click to enter text. C. Waterbody aesthetics Check one of the following that best describes the aesthetics of the receiving water and the surrounding area. Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional Natural Area: trees and/or native vegetation; some development evident (from fields, pastures, dwellings); water clarity discolored Common Setting: not offensive; developed but uncluttered; water may be colored or turbid Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.1: STREAM PHYSICAL CHARACTERISTICS

Required for new applications, major facilities, and applications adding an outfall.

Worksheet 2.1 is not required for discharges to intermittent streams or discharges directly to (or within 300 feet of) a classified segment.

Section 1. General Information (Instructions Page 66)
Date of study: Click to enter text. Time of study: Click to enter text.
Stream name: Click to enter text.
Location: Click to enter text.
Type of stream upstream of existing discharge or downstream of proposed discharge (check one).
\square Perennial \square Intermittent with perennial pools
Section 2. Data Collection (Instructions Page 66)
Number of stream bends that are well defined: Click to enter text.
Number of stream bends that are moderately defined: Click to enter text.
Number of stream bends that are poorly defined: Click to enter text.
Number of riffles: Click to enter text.
Evidence of flow fluctuations (check one):
□ Minor □ moderate □ severe
Indicate the observed stream uses and if there is evidence of flow fluctuations or channel obstruction/modification.
Click to enter text.

Stream transects

In the table below, provide the following information for each transect downstream of the existing or proposed discharges. Use a separate row for each transect.

Table 2.1(1) - Stream Transect Records

Stream type at transect	Transect location	Water surface	Stream depths (ft) at 4 to 10 points along each
Select riffle, run, glide, or pool. See Instructions, Definitions section.		width (ft)	transect from the channel bed to the water surface. Separate the measurements with commas.
Choose an item.			

Section 3. Summarize Measurements (Instructions Page 66)

Streambed slope of entire reach, from USGS map in feet/feet: Click to enter text.

Approximate drainage area above the most downstream transect (from USGS map or county highway map, in square miles): <u>Click to enter text.</u>

Length of stream evaluated, in feet: <u>Click to enter text.</u>

Number of lateral transects made: Click to enter text.

Average stream width, in feet: Click to enter text.

Average stream depth, in feet: Click to enter text.

Average stream velocity, in feet/second: Click to enter text.

Instantaneous stream flow, in cubic feet/second: Click to enter text.

Indicate flow measurement method (type of meter, floating chip timed over a fixed distance, etc.): <u>Click to enter text.</u>

Size of pools (large, small, moderate, none): Click to enter text.

Maximum pool depth, in feet: Click to enter text.

DOMESTIC WASTEWATER PERMIT APPLICATION **WORKSHEET 3.0: LAND DISPOSAL OF EFFLUENT**

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

Type of Disposal System (Instructions Page 68)

dentif	y the method of land disposal:			
	Surface application		Subsurface application	
\boxtimes	Irrigation		Subsurface soils absorption	
	Drip irrigation system		Subsurface area drip dispersal system	
	Evaporation		Evapotranspiration beds	
	Other (describe in detail): Click	to er	nter text.	
OTE: All applicants without authorization or proposing new/amended subsurface disposa				

ıl N

For existing authorizations, provide Registration Number: Click to enter text.

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

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, Bermuda, and Native Grasses	170	320,000	No
Zoysia grass, A1 A4 bent grass	170	320,000	No

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

Table 3.0(2) – Storage and Evaporation Ponds

Pond Number	Surface Area (acres)	Storage Volume (acre-feet)	Dimensions	Liner Type
1	4.5	40.5	1070' x 850' x 9.5'	Synthetic
2	1.3	12.0	410' x 150' x 9.5'	
3	1.8	17.0	385' x 105' x 9.5'	
4	1.0	9.0	350' x 125' x 9.5'	

	a liner certification t ional engineer for eac		ned, and sealed by a	Texas
Attachment:	Click to enter text.			
Section 4.	Flood and Runof	f Protection (Ins	tructions Page 6	58)
Is the land appli	cation site <u>within</u> the	100-year frequency fl	lood level?	
□ Yes ⊠	No			
If yes, describe	how the site will be pi	rotected from inunda	tion.	
Click to enter tex	xt.			
Provide the sour	ce used to determine	the 100-year frequen	cy flood level:	
FEMA FIRM 484	453Co18oH, Revised Se	ptember 26, 2008		
Provide a descripapplication site.	ption of tailwater con	trols and rainfall run-	on controls used for	the land
	the golf course will be n before it reaches Lake T		off. Dams on the golf co	ourse property

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**: <u>6</u>

- 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**: <u>a</u>

- 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
548603	Domestic	Y	Choose an item.	
281349	Irrigation	Y	Choose an item.	
342767	Irrigation	Y	Choose an item.	
342864	Irrigation	Y	Choose an item.	
356159	Irrigation	Y	Choose an item.	

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

Attachment: Click to enter text.

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: Click to enter text.
Are groundwater monitoring wells available onsite? \square Yes \boxtimes No
Do you plan to install ground water monitoring wells or lysimeters around the land application site? \Box Yes \boxtimes No
If yes, provide the proposed location of the monitoring wells or lysimeters on a site map.
Attachment: Click to enter text.

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

A. Soil map

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

Attachment: 7

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: A soils analysis has not been conducted.

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

Section 9. Effluent Monitoring Data (Instructions Page 71)

Is the facility in operation?

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

No

Yes 🗵

Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	pН	Chlorine Residual mg/l	Acres irrigated

lick to enter text.		

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.1: SURFACE LAND DISPOSAL OF EFFLUENT

The following is required for new and major amendment permit applications. Renewal and minor amendment permit applications may be asked for this worksheet on a case by case basis.

Section 1. Surface Disposal (Instructions Page 72)

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

A. Irrigation

Area under irrigation, in acres: Click to enter text.

Design application frequency:

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

Land grade (slope):

average percent (%): Click to enter text.

maximum percent (%): Click to enter text.

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

Design total nitrogen loading rate, in lbs N/acre/year: Click to enter text.

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

Method of application: Click to enter text.

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

Attachment: Click to enter text.

B. Evaporation ponds

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

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

Attachment: Click to enter text.

C. Evapotranspiration beds

Number of beds: Click to enter text.

Area of bed(s), in acres: <u>Click to enter text.</u>

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

Void ratio of soil in the beds: <u>Click to enter text.</u>

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: <u>Click to enter text.</u>
	Design BOD ₅ loading rate, in lbs BOD ₅ /acre/day: <u>Click to enter text.</u>
	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.
Se	ction 2. Edwards Aquifer (Instructions Page 73)
	ction 2. Edwards Aquifer (Instructions Page 73) he facility subject to 30 TAC Chapter 213, Edwards Aquifer Rules?
	<u>-</u>
	he facility subject to 30 TAC Chapter 213, Edwards Aquifer Rules?
Is t	he facility subject to 30 TAC Chapter 213, Edwards Aquifer Rules?
Is t	he facility subject to <i>30 TAC Chapter 213</i> , Edwards Aquifer Rules? Property See No
Is t	he facility subject to <i>30 TAC Chapter 213</i> , Edwards Aquifer Rules? Yes No res, is the facility located on the Edwards Aquifer Recharge Zone?
Is t	he facility subject to <i>30 TAC Chapter 213</i> , Edwards Aquifer Rules? Yes No res, is the facility located on the Edwards Aquifer Recharge Zone?
Is t	he facility subject to <i>30 TAC Chapter 213</i> , Edwards Aquifer Rules? Yes No res, is the facility located on the Edwards Aquifer Recharge Zone?

DOMESTIC WASTEWATER PERMIT APPLICATION **WORKSHEET 3.2: SURFACE LAND DISPOSAL OF EFFLUENT**

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

NOTE: All applicants proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0. This worksheet applies to any subsurface disposal system that **does not meet** the definition of a subsurface area drip dispersal system as defined in 30 TAC Chapter 222, Subsurface Area Drip Dispersal System.

Section 1. Subsurface Application (Instructions Page 74)
Identify the type of system:
□ Conventional Gravity Drainfield, Beds, or Trenches (new systems must be less than 5,000 GPD)
□ Low Pressure Dosing
☐ Other, specify: <u>Click to enter text.</u>
Application area, in acres: Click to enter text.
Area of drainfield, in square feet: Click to enter text.
Application rate, in gal/square foot/day: Click to enter text.
Depth to groundwater, in feet: Click to enter text.
Area of trench, in square feet: Click to enter text.
Dosing duration per area, in hours: <u>Click to enter text.</u>
Number of beds: Click to enter text.
Dosing amount per area, in inches/day: Click to enter text.
Infiltration rate, in inches/hour: Click to enter text.
Storage volume, in gallons: <u>Click to enter text.</u>
Area of bed(s), in square feet: Click to enter text.
Soil Classification: <u>Click to enter text.</u>
Attach a separate engineering report with the information required in $30\ TAC\ \S\ 309.20$, excluding the requirements of $\S\ 309.20\ b(3)(A)$ and (B) design analysis which may be asked for on a case by case basis. Include a description of the schedule of dosing basin rotation.
Attachment: Click to enter text.
Section 2. Edwards Aquifer (Instructions Page 74)
Is the subsurface system over the Edwards Aquifer Recharge Zone as mapped by TCEQ?
□ Yes □ No
Is the subsurface system over the Edwards Aquifer Transition Zone as mapped by TCEQ?
□ Yes □ No
If ves to either question, the subsurface system may be prohibited by 30 TAC §213.8. Please

call the Municipal Permits Team, at 512-239-4671, to schedule a pre-application meeting.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.3: SUBSURFACE AREA DRIP DISPERSAL (SADDS) LAND DISPOSAL OF EFFLUENT

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

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

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

Section 2. Subsurface Area Drip Dispersal System (Instructions Page

A.	Type of system
	□ Subsurface Drip Irrigation
	□ Surface Drip Irrigation
	□ Other, specify: <u>Click to enter text.</u>
B.	Irrigation operations
	Application area, in acres: Click to enter text.
	Infiltration Rate, in inches/hour: Click to enter text.
	Average slope of the application area, percent (%): Click to enter text.
	Maximum slope of the application area, percent (%): Click to enter text.
	Storage volume, in gallons: <u>Click to enter text.</u>
	Major soil series: Click to enter text.
	Depth to groundwater, in feet: Click to enter text.
C.	Application rate
	Is the facility located west of the boundary shown in <i>30 TAC § 222.83</i> 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 <i>30 TAC § 222.83</i> 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 <i>30 TAC §222.83</i> to calculate the maximum hydraulic application rate.
	Do you plan to submit an alternative method to calculate the hydraulic application rate for approval by the executive director?
	□ Yes □ No
	Hydraulic application rate, in gal/square foot/day: Click to enter text.
	Nitrogen application rate, in lbs/gal/day: Click to enter text.
D.	Dosing information
	Number of doses per day: <u>Click to enter text.</u>
	Dosing duration per area, in hours: Click to enter text.

Rest period between doses, in hours: Click to enter text.

Dosing amount per area, in inches/day: Click to enter text.

	Number of zones: Click to enter text.
	Does the proposed subsurface drip irrigation system use tree vegetative cover as a crop?
	□ Yes □ No
	If yes , provide a vegetation survey by a certified arborist. Please call the Water Quality Assessment Team at (512) 239-4671 to schedule a pre-application meeting.
	Attachment: Click to enter text.
Se	ction 3. Required Plans (Instructions Page 75)
A.	Recharge feature plan
	Attach a Recharge Feature Plan with all information required in 30 TAC §222.79.
	Attachment: Click to enter text.
B.	Soil evaluation
	Attach a Soil Evaluation with all information required in 30 TAC §222.73.
	Attachment: Click to enter text.
C.	Site preparation plan
	Attach a Site Preparation Plan with all information required in 30 TAC §222.75.
	Attachment: Click to enter text.
D.	Soil sampling/testing
	Attach soil sampling and testing that includes all information required in <i>30 TAC</i> §222.157.
	Attachment: Click to enter text.
C	
Se	ction 4. Floodway Designation (Instructions Page 76)
A.	Site location
	Is the existing/proposed land application site within a designated floodway?
	□ Yes □ No
B.	Flood map
	Attach either the FEMA flood map or alternate information used to determine the floodway.
	Attachment: Click to enter text.
C	
26	ction 5. Surface Waters in the State (Instructions Page 76)

S

A. Buffer Map

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

Attachment: Click to enter text.

Do you plan to request a buffer variance from water wells or waters in the state?
□ Yes □ No
If yes, then attach the additional information required in 30 TAC § 222.81(c).
Attachment: Click to enter text.
Section 6 Edwards Aquifor (Instructions Dags 76)
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 <i>30 TAC §213.8</i> . Please call the Municipal Permits Team at 512-239-4671 to schedule a pre-application meeting.

B. Buffer variance request

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: POLLUTANT ANALYSIS REQUIREMENTS

The following **is required** for facilities with a permitted or proposed flow of **1.0 MGD or greater**, facilities with an approved **pretreatment** program, or facilities classified as a **major** facility. See instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Toxic Pollutants (Instructions Page 78)

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

Grab □ Composite □

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

Table 4.0(1) - Toxics Analysis

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

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

Pollutant	AVG Effluent Conc. (μg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (μg/l)
Endosulfan II (beta)				0.02
Endosulfan Sulfate				0.1
Endrin				0.02
Ethylbenzene				10
Fluoride				500
Guthion				0.1
Heptachlor				0.01
Heptachlor Epoxide				0.01
Hexachlorobenzene				5
Hexachlorobutadiene				10
Hexachlorocyclohexane (alpha)				0.05
Hexachlorocyclohexane (beta)				0.05
gamma-Hexachlorocyclohexane				0.05
(Lindane)				
Hexachlorocyclopentadiene				10
Hexachloroethane				20
Hexachlorophene				10
Lead				0.5
Malathion				0.1
Mercury				0.005
Methoxychlor				2
Methyl Ethyl Ketone				50
Mirex				0.02
Nickel				2
Nitrate-Nitrogen				100
Nitrobenzene				10
N-Nitrosodiethylamine				20
N-Nitroso-di-n-Butylamine				20
Nonylphenol				333
Parathion (ethyl)				0.1
Pentachlorobenzene				20
Pentachlorophenol				5
Phenanthrene				10

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

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

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

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

Section 2. Priority Pollutants

For 1	pollutants	identified	in	Tables	4.0(2)A-E	indicate	type	of	sample.
-------	------------	------------	----	---------------	-----------	----------	------	----	---------

Grab □ Composite □

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

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

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

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

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

Table 4.0(2)B - Volatile Compounds

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

Table 4.0(2)C - Acid Compounds

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

Table 4.0(2)D - Base/Neutral Compounds

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

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

Table 4.0(2)E - Pesticides

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

^{*} For PCBS, if all are non-detects, enter the highest non-detect preceded by a "<".

Section 3. Dioxin/Furan Compounds A. Indicate which of the following compounds from may be present in the influent from a contributing industrial user or significant industrial user. Check all that apply. 2,4,5-trichlorophenoxy acetic acid Common Name 2,4,5-T, CASRN 93-76-5 2-(2,4,5-trichlorophenoxy) propanoic acid Common Name Silvex or 2,4,5-TP, CASRN 93-72-1 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate Common Name Erbon, CASRN 136-25-4 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate Common Name Ronnel, CASRN 299-84-3 2,4,5-trichlorophenol Common Name TCP, CASRN 95-95-4 hexachlorophene Common Name HCP, CASRN 70-30-4 For each compound identified, provide a brief description of the conditions of its/their presence at the facility. Click to enter text.

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

□ Yes □ No

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

Click to enter text.			

C.	If any of the compounds in Subsection A ${f or}$ B are present, complete Table 4.0(2)F.
	For pollutants identified in Table 4.0(2)F, indicate the type of sample.

Grab □ Composite □

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

Table 4.0(2)F - Dioxin/Furan Compounds

Compound	Toxic Equivalenc y Factors	Wastewater Concentration (ppq)	Wastewater Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Equivalents (ppt)	MAL (ppq)
2,3,7,8 TCDD	1					10
1,2,3,7,8 PeCDD	0.5					50
2,3,7,8 HxCDDs	0.1					50
1,2,3,4,6,7,8 HpCDD	0.01					50
2,3,7,8 TCDF	0.1					10
1,2,3,7,8 PeCDF	0.05					50
2,3,4,7,8 PeCDF	0.5					50
2,3,7,8 HxCDFs	0.1					50
2,3,4,7,8 HpCDFs	0.01					50
OCDD	0.0003					100
OCDF	0.0003					100
PCB 77	0.0001					0.5
PCB 81	0.0003					0.5
PCB 126	0.1					0.5
PCB 169	0.03					0.5
Total						

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 5.0: TOXICITY TESTING REQUIREMENTS

The following **is required** for facilities with a current operating design flow of **1.0 MGD or greater**, with an EPA-approved **pretreatment** program (or those required to have one under 40 CFR Part 403), or are required to perform Whole Effluent Toxicity testing. See instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Required Tests (Instructions Page 88)

Indicate the number of 7-day chronic or 48-hour acute Whole Effluent Toxicity (WET) tests performed in the four and one-half years prior to submission of the application.

7-day Chronic: <u>Click to enter text.</u> 48-hour Acute: <u>Click to enter text.</u>

Section 2. Toxicity Reduction Evaluations (TREs)	
Has this facility completed a TRE in the past four and a half years? Or is the facility curperforming a TRE?	rently
□ Yes □ No	
If yes, describe the progress to date, if applicable, in identifying and confirming the to	xicant.
Click to enter text.	

Section 3. Summary of WET Tests

If the required biomonitoring test information has not been previously submitted via both the Discharge Monitoring Reports (DMRs) and the Table 1 (as found in the permit), provide a summary of the testing results for all valid and invalid tests performed over the past four and one-half years. Make additional copies of this table as needed.

Table 5.0(1) Summary of WET Tests

Test Date	Test Species	NOEC Survival	NOEC Sub-lethal

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

The following is required for all publicly owned treatment works.

Section 1. All POTWs (Instructions Page 89)

A. Industrial users (IUs)

B.

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.

0 ,
If there are no users, enter 0 (zero).
Categorical IUs:
Number of IUs: Click to enter text.
Average Daily Flows, in MGD: Click to enter text.
Significant IUs - non-categorical:
Number of IUs: Click to enter text.
Average Daily Flows, in MGD: Click to enter text.
Other IUs:
Number of IUs: Click to enter text.
Average Daily Flows, in MGD: <u>Click to enter text.</u>
Treatment plant interference
In the past three years, has your POTW experienced treatment plant interference (see instructions)?
□ Yes □ No
If yes, identify the dates, duration, description of interference, and probable cause(s) and possible source(s) of each interference event. Include the names of the IUs that may have caused the interference.
Click to enter text.

C.	Treatment plant pass through
	In the past three years, has your POTW experienced pass through (see instructions)?
	□ Yes □ No
	If yes, identify the dates, duration, a description of the pollutants passing through the treatment plant, and probable cause(s) and possible source(s) of each pass through event. Include the names of the IUs that may have caused pass through.
	Click to enter text.
D	Pretreatment program
υ.	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.
Se	ction 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 <i>40 CFR §403.18</i> ?
	□ Yes □ No
	If yes , identify the modifications that have not been submitted to TCEQ, including the purpose of the modification.

Clials to ant	on tout			
Click to ent	er text.			
R Non-substa	ntial modifications			
	peen any non-substantia	l modification	s to the approved	nretreatment
	at have not been submitt			
□ Yes	□ No			
If yes, ident	ify all non-substantial m	odifications th	at have not been	submitted to TCEQ,
including th	e purpose of the modific	cation.		
Click to ente	er text.			
C. Effluent par	cameters above the MAI			
_	(1), list all parameters m		the MAI in the P	OTW's effluent
	during the last three yea			
Table 6.0(1) – P	arameters Above the MAL			
Pollutant	Concentration	MAL	Units	Date
D. Industrial u	ser interruptions			
	, CIU, or other IU caused	or contributo	d to any problems	(oveluding
	s or pass throughs) at yo			
□ Yes	□ No		•	
_	ify the industry, describ	e each episode	e. including dates.	duration, description

of the problems, and probable pollutants.

	Click to enter text.
Se	ction 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.

	see the histractions for definitions of process and hon-process wastewater.
	Process Wastewater:
	Discharge, in gallons/day: Click to enter text.
	Discharge Type: \square Continuous \square Batch \square Intermittent
	Non-Process Wastewater:
	Discharge, in gallons/day: Click to enter text.
	Discharge Type: \square Continuous \square Batch \square Intermittent
E.	Pretreatment standards
	Is the SIU or CIU subject to technically based local limits as defined in the <i>i</i> nstructions?
	□ Yes □ No
	Is the SIU or CIU subject to categorical pretreatment standards found in 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: <u>Click to enter text.</u>
	Category: Click to enter text.
	Subcategories: <u>Click to enter text.</u>
	Category: Click to enter text.
	Subcategories: <u>Click to enter text.</u>
F.	Industrial user interruptions
	Has the SIU or CIU caused or contributed to any problems (e.g., interferences, pass through, odors, corrosion, blockages) at your POTW in the past three years?
	□ Yes □ No
	If yes , identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants.
	Click to enter text.

WORKSHEET 7.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CLASS V INJECTION WELL INVENTORY/AUTHORIZATION FORM

Submit the completed form to:

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

For TCEQ Use Only
Reg. No
Date Received
Date Authorized

Section 1. General Information (Instructions Page 92)

1.	TCEQ Program	Area
----	--------------	------

Program Area (PST, VCP, IHW, etc.): Click to enter text.

Program ID: Click to enter text.

Contact Name: <u>Click to enter text.</u> Phone Number: <u>Click to enter text.</u>

2. Agent/Consultant Contact Information

Contact Name: Click to enter text.

Address: Click to enter text.

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

Phone Number: Click to enter text.

3. Owner/Operator Contact Information

□ Owner □ Operator

Owner/Operator Name: Click to enter text.

Contact Name: Click to enter text.

Address: Click to enter text.

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

Phone Number: Click to enter text.

4. Facility Contact Information

Facility Name: Click to enter text.

Address: Click to enter text.

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

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

Facility Contact Person: Click to enter text.

Phone Number: Click to enter text.

5.	Lantude and Longitude, in degrees-minutes-seconds				
	Latitude: Click to enter text.				
	Longitude: Click to enter text.				
	Method of determination (GPS, TOPO, etc.): Click to enter text.				
	Attach topographic quadrangle map as attachment A.				
6.	Well Information				
	Type of Well Construction, select one:				
	□ Vertical Injection				
	□ Subsurface Fluid Distribution System				
	□ Infiltration Gallery				
	☐ Temporary Injection Points				
	☐ Other, Specify: <u>Click to enter text.</u>				
	Number of Injection Wells: <u>Click to enter text.</u>				
7.	Purpose				
	Detailed Description regarding purpose of Injection System:				
	Click to enter text.				
	Attach a Site Map as Attachment B (Attach the Approved Remediation Plan, if appropriate.)				
8.	Water Well Driller/Installer				
	Water Well Driller/Installer Name: Click to enter text.				
	City, State, and Zip Code: <u>Click to enter text.</u>				
	Phone Number: <u>Click to enter text.</u>				
	License Number: <u>Click to enter text.</u>				
Section	n 2. Proposed Down Hole Design				
Attach a	diagram signed and sealed by a licensed engineer as Attachment C.				
Table 7.0	D(1) - Down Hole Design Table				
F					

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

Casing
Tubing
Screen

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

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

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

Section 4.	Site Hydrogeo	logical and In	jection Zone Data

- 1. Name of Contaminated Aquifer: Click to enter text.
- 2. Receiving Formation Name of Injection Zone: Click to enter text.
- **3.** Well/Trench Total Depth: Click to enter text.
- **4.** Surface Elevation: Click to enter text.
- **5.** Depth to Ground Water: <u>Click to enter text.</u>
- **6.** Injection Zone Depth: Click to enter text.
- 7. Injection Zone vertically isolated geologically? \square Yes \square No Impervious Strata between Injection Zone and nearest Underground Source of Drinking Water:

Name: Click to enter text.

Thickness: Click to enter text.

- **8.** Provide a list of contaminants and the levels (ppm) in contaminated aquifer Attach as Attachment E.
- **9.** Horizontal and Vertical extent of contamination and injection plume Attach as Attachment F.
- **10.** Formation (Injection Zone) Water Chemistry (Background levels) TDS, etc. Attach as Attachment G.
- **11.** Injection Fluid Chemistry in PPM at point of injection Attach as Attachment H.
- 12. Lowest Known Depth of Ground Water with < 10,000 PPM TDS: Click to enter text.
- 13. Maximum injection Rate/Volume/Pressure: Click to enter text.
- **14.** Water wells within 1/4 mile radius (attach map as Attachment I): <u>Click to enter text.</u>
- 15. Injection wells within 1/4 mile radius (attach map as Attachment J): <u>Click to enter text.</u>
- 16. Monitor wells within 1/4 mile radius (attach drillers logs and map as Attachment K): Click to enter text.
- **17.** Sampling frequency: Click to enter text.
- **18.** Known hazardous components in injection fluid: Click to enter text.

Section 5. Site History

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

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

Class V Injection Well Designations

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

ARBOR WAY, INC PERMIT NO. WQ0014649001 APPLICATION FOR A MINOR AMENDMENT WITH RENEWAL

Technical Completeness Review

12/9/2024

The following items have been addressed:

GEOLOGY

- 1) Domestic Worksheet 3.0, Section 3 The table has been updated to show the surface area, storage volume, and dimensions of the future golf course ponds.
- 2) Domestic Worksheet 3.0, Section 6 A revised USGS map has been provided as requested. All existing water wells within a ½-mile, 1-mile and 2-mile radius of the wastewater treatment plant site including land application areas have been shown on the map and the corresponding well log attached. Only one public water supply well was found, well #629045 completed on December 2, 2022 with a total depth of 225-feet.

A separate map showing Lake Travis with a 100-foot vegetative buffer has also been provided as requested.

We are proposing to convert the golf course ponds into wastewater holding ponds once the plant begins to generate enough flow. A note stating "Until the plant begins to generate enough flow to feed both the existing and future golf course ponds, the freshwater ponds will remain as such and will not be upgraded to serve wastewater treatment until needed" has been added to the map.

The map has been revised and no longer shows a point of discharge.

- 3) Domestic Worksheet 3.0, Section 6 The well table has been revised to include the water wells shown on the USGS map. The Proposed Best Management Practice column has been completed as requested.
- 4) A Groundwater Quality Report has been included as requested.

AGRONOMY

- Domestic Technical Report 1.0, Section 1 Our intention is to replace the Interim Phase I with the 0.160 MGD that was requested. We have removed Interim Phase II and have decreased the Final Phase flow to 0.320 MGD.
- 2) Domestic Technical Report 1.0, Section 2 A detailed description of the treatment process has been added as requested.

- 3) Worksheet 3.0, Section 2 Land Application Site: Table 3.0(1) lists the Effluent Application as 320,000 gallons per day which is correct. Zoysia grass and A1 A4 bent grass have been added to Table 3.0(1).
- 4) Worksheet 3.0, Section 5 Cropping Plan: Salt tolerances for Zoysia grass and Bermuda grass have been added to the cropping plan. The results were taken from a study done by Texas A&M University that was published in 2008 examining the effects of using reclaimed water for irrigating golf courses.

Two Rivers WWTP - Half Mile & One Mile Radius

Well#	Proposed Use	Date of	Bore Depth	Plugged?	Proposed Best
		Completion			Management Practice
Half Mile Ra	dius				
548603	Domestic	5/7/2020	246	N	meets the 500 ft buffer
281349	Irrigation	3/13/2012	220	N	meets the 500 ft buffer
342767	Irrigation	9/23/2013	240	N	meets the 500 ft buffer
342864	Irrigation	9/25/2013	220	N	meets the 500 ft buffer
356159	Irrigation	2/24/2014	200	N	meets the 500 ft buffer
342763	Irrigation	9/23/2013	200	N	meets the 500 ft buffer
366269	Irrigation	6/4/2014	240	N	meets the 500 ft buffer
342868	Irrigation	9/27/2013	260	N	meets the 500 ft buffer
342870	Irrigation	9/23/2013	280	N	meets the 500 ft buffer
273402	Domestic	10/15/2011	200	N	meets the 500 ft buffer
121336	Domestic	8/27/2007	140	N	meets the 500 ft buffer
369054	Closed-Loop Geothermal	5/23/2014	250	N	meets the 500 ft buffer
111526	Domestic	4/12/2007	170	N	meets the 500 ft buffer
Mile Radius					
111526	Domestic	4/12/2007	170	N	meets the 500 ft buffer
147051	Plugged	5/23/2014	250	Υ	meets the 500 ft buffer
184974	Domestic	5/28/2009	205	N	meets the 500 ft buffer
187078	Plugged	No Data	150	Υ	meets the 500 ft buffer
34122	Domestic	7/25/2003	230	N	meets the 500 ft buffer
123725	Domestic	9/7/2007	195	N	meets the 500 ft buffer
228211	Domestic	7/31/2010	272	N	meets the 500 ft buffer
339438	Domestic	7/1/2013	270	N	meets the 500 ft buffer
339449	Domestic	7/2/2013	245	N	meets the 500 ft buffer
274163	Irrigation	11/3/2011	170	N	meets the 500 ft buffer
64169	Domestic	5/13/2005	215	N	meets the 500 ft buffer
64164	Domestic	5/12/2005	215	N	meets the 500 ft buffer
365694	Monitor	6/14/2014	15	N	meets the 500 ft buffer
280364	Domestic	12/21/2011	225	N	meets the 500 ft buffer
365693	Domestic	4/16/2014	210	N	meets the 500 ft buffer
553035	Domestic	7/30/2020	170	N	meets the 500 ft buffer
474708	Domestic	3/3/2018	200	N	meets the 500 ft buffer
217963	Domestic	4/14/2010	15	N	meets the 500 ft buffer
676449	Domestic	7/11/2024	220	N	meets the 500 ft buffer
457629	Domestic	6/29/2017	205	N	meets the 500 ft buffer
162929	Domestic	11/25/2008	170	N	meets the 500 ft buffer
532132	Domestic	12/5/2019	175	N	meets the 500 ft buffer
99843	Domestic	11/16/2006	170	N	meets the 500 ft buffer
108237	Domestic	3/13/2007	210	N	meets the 500 ft buffer

Well #	Proposed Use	Date of	Bore Depth	Plugged?	Proposed Best
		Completion			Management Practice
616691	Domestic	8/15/2022	213	N	meets the 500 ft buffer
91343	Domestic	7/25/2006	200	N	meets the 500 ft buffer
656699	Domestic	12/27/2023	190	N	meets the 500 ft buffer
563205	Domestic	12/28/2020	185	N	meets the 500 ft buffer
476156	Domestic	3/1/2018	185	N	meets the 500 ft buffer
131575	Domestic	12/1/2007	155	N	meets the 500 ft buffer
34418	Domestic	8/19/2003	200	N	meets the 500 ft buffer
34419	Domestic	8/20/2003	200	N	meets the 500 ft buffer

	Proposed Best agement Practice
9680 Domestic 6/24/2002 185 N meets	s the 500 ft buffer
12390 Domestic 7/12/2002 190 N meets	the 500 ft buffer
12925 Domestic 7/13/2002 205 N meets	the 500 ft buffer
94940 Domestic 5/15/2006 232 N meets	s the 500 ft buffer
279310 Domestic 12/27/2011 230 N meets	s the 500 ft buffer
286700 Irrigation 4/5/2012 220 N meets	s the 500 ft buffer
342763 Irrigation 9/23/2013 200 N meets	the 500 ft buffer
350415 Irrigation 11/4/2013 210 N meets	the 500 ft buffer
356159 Irrigation 2/24/2014 200 N meets	the 500 ft buffer
365939 Domestic 3/13/2014 205 N meets	the 500 ft buffer
367826 Domestic 4/14/2014 245 N meets	the 500 ft buffer
400701 Test Well 7/28/2015 420 N meets	the 500 ft buffer
512901 Domestic 4/12/2019 215 N meets	the 500 ft buffer
591722 Domestic 11/11/2021 200 N meets	s the 500 ft buffer
54926 Domestic 1/3/2002 180 N meets	s the 500 ft buffer
	the 500 ft buffer
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	the 500 ft buffer

Well#	Proposed Use	Date of	Bore	Plugged?	Proposed Best
		Completion	Depth		Management Practice
471117	Domestic	2/14/2018	250	N	meets the 500 ft buffer
102822	Domestic	12/7/2006	215	N	meets the 500 ft buffer
268589	Domestic	8/9/2011	170	N	meets the 500 ft buffer
536204	Monitor	2/14/2020	70	N	meets the 500 ft buffer
425667	Domestic	5/18/2016	200	N	meets the 500 ft buffer
386480	Domestic	12/15/2014	210	N	meets the 500 ft buffer
227962	Test Well	7/30/2010	200	Υ	meets the 500 ft buffer
63788	Domestic	6/24/2005	120	Υ	meets the 500 ft buffer
603203	Domestic	3/29/2022	215	N	meets the 500 ft buffer
537867	Domestic	1/20/2020	200	N	meets the 500 ft buffer
655444	Domestic	12/7/2023	220	N	meets the 500 ft buffer
538512	Domestic	2/24/2020	230	N	meets the 500 ft buffer
253127	Domestic	4/27/2011	217	N	meets the 500 ft buffer
600456	Unknown	3/18/2022	180	N	meets the 500 ft buffer
421110	Domestic	4/15/2016	187	N	meets the 500 ft buffer
309625	Stock	12/6/2012	400	N	meets the 500 ft buffer
63738	Domestic	6/24/2005	120	Υ	meets the 500 ft buffer
603203	Domestic	3/29/2002	215	N	meets the 500 ft buffer
50664	Domestic	12/6/2004	220	N	meets the 500 ft buffer
11657	Domestic	4/23/2002	225	N	meets the 500 ft buffer
559779	Domestic	11/12/2020	196	N	meets the 500 ft buffer
171112	Domestic	2/16/2009	200	Υ	meets the 500 ft buffer
629045	Public Supply	12/2/2022	225	N	meets the 500 ft buffer
9667	Domestic	6/21/2022	155	Υ	meets the 500 ft buffer
261764	Irrigation	6/3/2011	350	N	meets the 500 ft buffer
88589	Domestic	4/20/2005	205	N	meets the 500 ft buffer
88588	Domestic	4/19/2005	205	N	meets the 500 ft buffer
171128	Domestic	2/16/2009	120	Υ	meets the 500 ft buffer
52638	Domestic	9/30/2004	220	N	meets the 500 ft buffer
272820	Domestic	9/30/2011	240	N	meets the 500 ft buffer
39460	Domestic	5/13/2004	210	N	meets the 500 ft buffer
603201	Domestic	3/29/2022	210	N	meets the 500 ft buffer
72623	Domestic	11/22/2005	270	N	meets the 500 ft buffer
182186	Domestic	10/19/2004	260	N	meets the 500 ft buffer
58488	Domestic	4/19/2005	232	N	meets the 500 ft buffer
603203	Domestic	3/29/2022	215	N	meets the 500 ft buffer
394995	Domestic	3/24/2015	225	N	meets the 500 ft buffer
202458	Domestic	11/19/2009	190	N	meets the 500 ft buffer
511022	Domestic	3/19/2019	224	N	meets the 500 ft buffer
202942	Domestic	1/27/2007	110	N	meets the 500 ft buffer
19564	Domestic	9/6/2022	230	N	meets the 500 ft buffer

Well #	Proposed Use	Date of	Bore	Plugged?	Proposed Best Management Practice
		Completion	Depth		Management Practice
84738	Domestic	5/3/2006	200	N	meets the 500 ft buffer
489225	Domestic	7/27/2018	204	N	meets the 500 ft buffer
123252	Domestic	8/31/2007	200	N	meets the 500 ft buffer
328696	Domestic	5/31/2013	190	N	meets the 500 ft buffer
666222	Domestic	5/6/2024	176	N	meets the 500 ft buffer
666223	Domestic	5/7/2024	180	N	meets the 500 ft buffer
586742	Unknown	10/8/2021	182	N	meets the 500 ft buffer
307898	Domestic	12/6/2012	210	N	meets the 500 ft buffer
311600	Domestic	1/7/2013	205	N	meets the 500 ft buffer
228199	Domestic	7/10/2010	200	N	meets the 500 ft buffer
166479	Domestic	12/11/2008	205	N	meets the 500 ft buffer
506806	Domestic	3/11/2019	200	N	meets the 500 ft buffer
544267	Domestic	4/20/2020	190	N	meets the 500 ft buffer
207661	Monitor	12/16/2009	30	N	meets the 500 ft buffer
207669	Monitor	12/16/2009	35	N	meets the 500 ft buffer
23609	Oil or Gas	10/24/1957	2868	N	meets the 500 ft buffer
103092	Domestic	10/20/2006	320	N	meets the 500 ft buffer
402044	Domestic	7/8/2015	180	N	meets the 500 ft buffer
401733	Domestic	7/10/2015	200	Υ	meets the 500 ft buffer
438698	Domestic	10/20/2016	180	N	meets the 500 ft buffer
146397	Domestic	5/3/2008	200	N	meets the 500 ft buffer
250203	Domestic	3/15/2011	165	N	meets the 500 ft buffer
153340	Domestic	8/8/2008	195	N	meets the 500 ft buffer
188862	Domestic	7/20/2009	185	N	meets the 500 ft buffer
188861	Domestic	7/20/2009	155	Υ	meets the 500 ft buffer
281847	Closed-Loop Geothermal	2/16/2012	300	N	meets the 500 ft buffer
324857	Closed-Loop Geothermal	7/7/2013	300	N	meets the 500 ft buffer
283991	Test Well	1/30/2012	210	N	meets the 500 ft buffer
105073	Domestic	1/10/2007	260	Υ	meets the 500 ft buffer
90499	Oil or Gas	6/3/1981	9467	N	meets the 500 ft buffer
586295	Domestic	10/6/2021	200	N	meets the 500 ft buffer
91533	Oil or Gas	4/3/1978	7828	N	meets the 500 ft buffer
102754	Domestic	12/8/2006	285	N	meets the 500 ft buffer
610596	Domestic	6/29/2022	213	N	meets the 500 ft buffer
380214	Test Well	9/15/2014	320	Υ	meets the 500 ft buffer
286612	Domestic	5/9/2012	220	N	meets the 500 ft buffer
78808	No Data	No Data	No Data	-	-
261828	Irrigation	6/23/2011	85	N	meets the 500 ft buffer
350471	Domestic	10/25/2013	300	N	meets the 500 ft buffer
379880	Domestic	8/15/2014	145	N	meets the 500 ft buffer
380217	Test Well	9/16/2014	263	Υ	meets the 500 ft buffer

Arbor Way, Inc.

Permit No. WQ0014649001

Groundwater Quality Report

See excerpt from:

Ecological Assessment prepared for Thomas Ranch Conservation Development, Travis and Burnet Counties, Texas prepared by SWCA Environmental Consultants

SWCA Project Number 34519

January 2016

As stated above, Paleface Ranch Road/County Road 404 separates the western portion of the Project Area from the eastern portion and forms the majority of the western portion's eastern and northern boundaries. East of Paleface Ranch Road, light- to medium-density residential development exists up to and beyond the Pedernales River. Commercial development is limited to a Cypress Valley Canopy Tours and the Austin Golf Club course. Texas State Highway (SH) 71 constitutes the southern boundary of the Project Area, beyond which the land is lightly developed and much remains open rangeland. The western boundary of the Project Area aligns with parcel boundaries, beyond which is open rangeland with the occasional ranch house or home.

3. ECOLOGICAL/REGIONAL SETTING

3.1 Ecoregion

The Project Area is located in the Level III Edwards Plateau ecoregion (Griffith et al. 2007). The Edwards Plateau is a limestone plateau that contains a sparse network of perennial streams. As a result of underground drainage (related to the dissolution of the limestone substrate), the streams are cooler and clearer than those of surrounding areas.

More specifically, the Project Area is located in the Level IV Balcones Canyonlands ecoregion, which supports a relative abundance of running water due to the Trinity and Edwards Aquifers discharging through highly erodible Edwards Formation (Griffith et al. 2007). The water resources and the significant elevation change inherent in the canyonlands promote diverse vegetation communities, such as mesic riparian forest, deciduous forest, and drought-tolerant evergreen woodland which grow along the soil and moisture gradients. General vegetation communities are discussed in Section 3.5. Detailed descriptions of vegetation communities observed within the Project Area are further discussed in Section 3.6.2.

3.2 Hydrology and Topography

The Project Area is located over the Trinity Aquifer, which extends from Central Texas to the north and east (Texas Parks and Wildlife Department [TPWD] 2016a). It consists of materials such as limestones, sands, clays, gravels, and conglomerates, and freshwater saturated thickness is approximately 1,900 feet on average in the region. The Trinity Aquifer is one of the largest and most extensively used groundwater resources in the state, mainly utilized by municipalities.

The Project Area lies within the Colorado River basin, which extends from the Texas coast northwesterly into New Mexico; on a more regional level, the Project Area is located near the eastern extent of the Pedernales River sub basin, which extends from west of the Pedernales River eastward into Kimble and Kerr Counties (TPWD 2016b). On a local scale, the Project Area overlaps the boundary between the Pedernales River-Lake Travis watershed and the Cow Creek-Lake Travis watershed as shown in Figure 3 (TPWD 2016b). Due to the adjacency of the Project Area to the Pedernales River, the 100-year floodplain, as mapped by the Federal Emergency Management Agency (FEMA), overlaps the boundaries of the eastern portion (FEMA 2008a and 2008b). Approximately 96.2 acres of the Project Area are located within the 100-year floodplain.

DRAFT Ecological Assessment prepared for Thomas Ranch Conservation Development, Travis and Burnet Counties, Texas

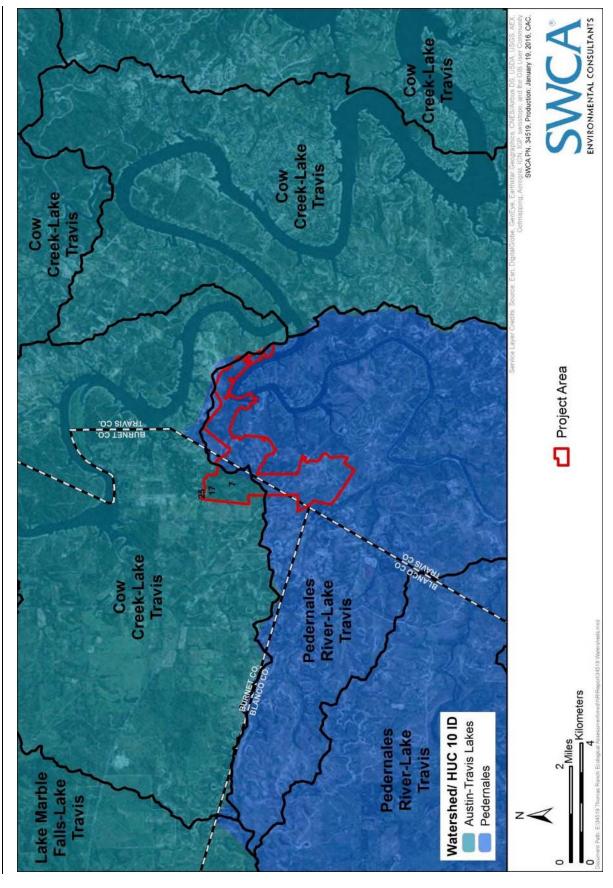


Figure 3. Watershed map

Elevations range from approximately 634 feet above mean sea level (amsl) along the Pedernales River to approximately 1,060 feet amsl in the central portion of the Project Area. The eastern portion of the Project Area lies on the south side of a relatively flat-topped ridge that lies between the Colorado River to the north and the Pedernales River to the south. Topography of most of this area is relatively flat to gently rolling. Steeper topography occurs along the southern margin of the tract where it has been incised by drainages that lead down to the Pedernales River, or by the river itself. Small canyons and steep bluffs characterize this portion of the Project Area. West of Paleface Ranch Road, the topography more closely resembles the relief typical of the Balcones Canyonlands ecoregion. The southern portion of the Project Area, nearer SH 71, is characterized by fewer ridgelines and the topography gently rolls southward into more even terrain.

General relief across the Project Area directs surface water flow to the south and southeast toward the Pedernales River confluence at the Colorado River/Lake Travis. Several ephemeral waterways and their tributaries traverse the Project Area (Figures 4–8). The impounded waterways are limited to the western portion where historical land use included ranching. Since precipitation and spring discharge within stream channels are the primary sources of hydrology, permanent surface water is not common within the Project Area except during periods of significant and consistent rainfall. However, several stream segments receive a small amount of intermittent to perennial water flow from seeps and springs, dependent upon precipitation totals.

3.3 Geology

The geology of the Project Area is mapped as Cretaceous-aged Glen Rose Limestone, Hensell Sand, and Cow Creek Limestone, Hammett Shale, and Sycamore Sand, undivided (Figure 9; Barnes 1981). The Glen Rose Limestone formation, forming the uplands of the western portion of the Project Area, is composed of limestone, dolomite, and marl with an approximate thickness of 380 feet. This formation covers approximately 1,036.8 acres with the Project Area. Canyon bottoms on the north and east sides of the property have cut through the Glen Rose Formation and have exposed the underlying Hensell Sand Formation.

The Hensell Sand Formation is exposed on Thomas Ranch down to an elevation of approximately 800 feet amsl and covers approximately 796.6 acres within the Project Area. The Hensell Sand formation consists of sand, silt, and clay deposits approximately 220 feet thick. This formation is mapped along the slope edges of the uplands and terraces above the Pedernales River in the eastern portion of the Project Area and overlies the Lower Cretaceous Cow Creek Formation.

Below the Hensell Sand at 800 feet amsl, surface geology on the property is mapped as the undivided Lower Cretaceous Cow Creek Limestone, Hammett Shale, and Sycamore Sand formations. This undivided formation is composed of a fossiliferous limestone and shale with sand, silt, gravel, and conglomerate approximately 120 feet thick and covers approximately 331.4 acres within the Project Area. These deposits are exposed on the south side of the eastern portion and form the steep bluffs present along the Pedernales River.

<u>Annual Cropping Plan – Lake Cliff on Lake Travis Golf Course</u>

The golf course consists of approximately 177 +/- acres over 18 holes. There is A1 A4 bent grass, Bermuda Ultradwarf, and Zoysia on the greens, Bermuda and Zoysia on the tees, and Bermuda sport turf and Zoysia on the fairways. Grass for the golf course grows April to mid-November and does not grow when night temperatures fall below 70 degrees. Fertilizer is applied 3 to 4 times a year beginning when growing season starts and weed control is done by hand. Additional fertilizer is applied to the greens and tee boxes only when necessary to maintain the vitality of the grass. The greens are mowed daily at or near 0.25-inches and the fairways are mowed two to three times per week at or near 1-inch. The grasses remain the same year round. A soil map with areas to be irrigated is attached. Additional nitrogen is estimated to be required, see attached Nitrogen Balance.

In 2008, Texas A&M University published a study examining the effects of salinity on different grasses, plants, and trees. This research was specific to the impacts of using reclaimed water as the source of irrigation on various varieties of these plants. One of the primary reasons for the study was the use of reclaimed water for irrigating golf courses. Findings indicated that Zoysia grass and Bermuda grass can withstand the salinity levels commonly associated with reclaimed water, while rye grass, typically used in winter, demonstrated a high level of tolerance as well. A typical concentration of sodium in treated effluent is around 50-100 mg/L. Per the study, Zoysia grass can tolerate between 2000-5000 mg/L salinity of total dissolved solids and Bermuda grass can tolerate 5000 mg/L salinity of total dissolved solids.

NITROGEN BALANCE

Plant Ultimate Capacity = 320,000 gallons per day Area to be irrigated = 170 Acres

Two Rivers WWTP

320,000 gal/day (365 days/year) = 116,800,000 gallons per year

116,800,000 / 170 acres irrigated = 687,059 gallons per acre per year

687,059 gal/ac / 326,000 gal/ acre-feet = 2.11 acre-Feet / acre

2.11 x 81.6 lbs of Nitrogen/acre-feet = 172 lbs per acre per year

172 lbs per acre per year = 0.0039 lbs/square foot

Lake Cliff Golf Course

Greens:

Bermuda Ultradwarf 3-4 lbs/m Bent 2-3 lbs/m Zoysia 1 lbs/m

Tees:

Bermuda 3-4 lbs/m Zoysia 2 lbs /m

Fairways/Rough:

Bermuda 2-3 lbs/m Zoysia 1.5 lbs/m

M=1,000ft2

STATE OF TEXAS WELL REPORT for Tracking #9680

Owner: PATTI MILLER Owner Well #: 001

Address: 1404 SUCCESSOR Grid #: 57-40-5

SPICEWOOD, TX 78669

Well Location: PEDERNALES DR. NAUMANN CAMP

Latitude: 30° 26' 01" N

SPICEWOOD, TX 78669 Longitude: 098° 04' 13" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 6/24/2002 Drilling End Date: 6/24/2002

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

Borehole: 8.75 0 100

6.125 100 185

Drilling Method: Air Rotary

Borehole Completion: Open Hole

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

Annular Seal Data: 0 100

Seal Method: PRESSURE CEMENTED 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: 85 ft. below land surface on 2002-07-08 Measurement Method: Unknown

Packers: PLASTIC 100

PLASTIC 135

Type of Pump: Submersible Pump Depth (ft.): 160

Well Tests: Jetted Yield: 20 GPM

Water Type
Water Quality:

No Data

No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: BEE CAVE DRILLING, INC.

185 ANGELFIRE DR.

DRIPPING SPRINGS, TX 78620

Driller Name: JIM BLAIR License Number: 54416

Apprentice Name: BOBBY ROBERTS Apprentice Number: WWDAPP00001

234

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Гор (ft.)	Bottom (ft.)	Description
0	1	TOPSOIL
1	10	GREY ROCK
10	15	CALICHE
15	30	TAN ROCK
30	35	GREY SHALE
35	45	BLUE SHALE
45	50	TAN SHALE
50	57	GREY LIMESTONE
57	70	BLUE SHALE
70	130	TAN SHALE
130	185	RED ROCK W/B 20 GPM

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5 NEW PLASTIC	C 0 - 14	15	
4.5 NEW SCREEN	N MFG.	145 - 185 .040	

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 #12390**

Owner: William Folch Owner Well #: No Data

Address: 1200 Uplands Ridge Drive Grid #: 57-40-5

Austin, TX 78738

Well Location: 1805 Pedernales Drive Latitude: 30° 25' 59" N

Spicewood, TX 78669 Longitude: 098° 03' 57" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 7/12/2002 Drilling End Date: 7/12/2002

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

Borehole: 8 0 90

6 90 190

Drilling Method: Air Rotary

Borehole Completion: cased

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

Annular Seal Data: 0 90

Seal Method: **Pressure** 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: as per landowner

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: Burlap 90',87'

Type of Pump: No Data

Well Tests: Estimated Yield: 60 GPM

Water Quality: Strata Depth (ft.) Water Type

Water Quality: 90-187 Trinity

Chemical Analysis Made: No

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Michael Becker License Number: 54516

Apprentice Name: Andrew Johnson Apprentice Number: 1116

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 1 **Top Soil** 1 25 Tan LS 25 30 Gry LS w/Clay 30 60 Blue Clay 60 65 **Red Clay** 65 72 Gravel (H20) 72 90 **Red Clay** 90 110 Redsand-Gravel (H20) Wht LS 110 125 Redsand Wht LS 125 187 187 190 **Tan Clay**

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5 New	PVC +2 to	190 Sc	ch40

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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 #12925

Owner: Action Water Well Owner Well : No Data

Address: 100 Spanish Oak Trail Grid #: 57-40-5

Spicewood, TX 78669

Well Location: Travis Lakeside Cove

Latitude: 30° 27' 26" N

Spicewood, TX 78669 Longitude: 098° 03' 41" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 7/13/2002 Drilling End Date: 7/13/2002

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

Borehole: 8 0 90

6 90 205

Drilling Method: Air Rotary

Borehole Completion: cased

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

Annular Seal Data: 0 90 10

Seal Method: **Pressure** 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: as per landowner

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: Burlap 90',87'

Type of Pump: No Data

Well Tests: Estimated Yield: 60 GPM

Water Type Strata Depth (ft.) Water Quality: **Trinity**

No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: **APEX Drilling**

P.O. Box 867

Marble Falls, TX 78654

Michael Becker License Number: Driller Name: 54516

Apprentice Name: **Andrew Johnson** Apprentice Number: 1116

Comments: No Data

Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL**

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	28	Tan LS
28	38	Gry Ls
38	55	Blue Clay
55	65	Tan Sand-Clay
65	80	Sand-Gravel (H20)
80	90	Red Clay
90	108	Sand (Gravel) (H20)
108	135	Red SS-Clay
135	145	Gravel (H20)
145	152	Tan LS-Red SS
152	163	Gravel (H20)
163	195	Tan LS
195	205	Tan Blue Clay

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)	
5 New I	PVC +2 to	205 Sc	:h40	

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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 #94940

Owner: Belva Rasmussen Owner Well #: No Data

Address: 24319 Havnie Flat Rd Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 24323 Haynie Flat Rd Latitude: 30° 26' 02" N

Spicewood, TX 78669 Longitude: 098° 04' 05" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 5/15/2006 Drilling End Date: 5/15/2006

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

Borehole: 8 0 232

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 100 232 Gravel 3/8" Pgrvl

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

Annular Seal Data: 0 100 11 of Portland

Seal Method: **Pressure Trimmie** Distance to Property Line (ft.): **15**

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: No Data

Type of Pump: No Data

Well Tests: Jetted Yield: 35 GPM

Water Type
Water Quality: 105-220 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc

PO Box 867

Marble Falls, TX 78654

Driller Name: Michael G Becker, P.G. License Number: 54516

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	55	White-Tan Limestone
55	65	Grey Limestone
65	105	Blue Clay
105	110	Gravel
110	135	Red Clay
135	140	Gravel
140	170	White Limestone
170	220	Gravel
220	232	Tan Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5" (5"	OD) New	PVC +	2' to 140' Sch40
4.5" (5"	OD) New	Slotte	d PVC 140' to 160' .035
4.5" (5"	OD) New	PVC 1	60' to 180' Sch40
4.5" (5"	OD) New	Slotte	d 180' to 223' .035

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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

Owner Well #: Owner: GlosterBn#1 **Gloster Bend Resource**

Address: PO Box 679000 Grid #: 57-40-2

Austin, TX 78767

Latitude: 30° 28' 15" N Well Location: Singleton Bend Rd

Austin, TX 78767 Longitude: 098° 04' 56" W

Well County: **Travis** Elevation: 697 ft. above sea level

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 5/30/2007 Drilling End Date: 8/31/2007

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

Borehole: 8 0 200

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

Borehole Completion: **Filter Packed**

Bottom Depth (ft.) Filter Material Size Top Depth (ft.)

Filter Pack Intervals: 100 160 Gravel 6-12

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

Annular Seal Data: 100 24portland2baro

Seal Method: pressure grout 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: n/a

Surface Sleeve Installed Surface Completion:

Water Level: 68 ft. below land surface on 2007-06-24 Measurement Method: Unknown

Packers: gravel packed 100-160

Pump Depth (ft.): 140 Type of Pump: **Submersible**

Well Tests: **Pump** Yield: 16+ GPM Strata Depth (ft.) Water Type

Water Quality: 125-160 Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services, Inc.

PO Box 525

Dripping Springs, TX 78620

Driller Name: Martin D. Lingle, Jr. License Number: 54813

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 2 topsoil 2 45 sand gravel 45 48 gray clay 48 57 gravel clay 57 65 red clay 75 65 gravel gray clay 75 125 red clay gravel 125 140 gravel sand 140 152 brown limestone 152 157 yellow clay 157 165 brown clay 165 167 hard limestone 167 174 light gray clay 174 200 dark clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Туре	Setting From/To (ft.)	
4.5 N PVC-SDR 1	7 IB 5- 1	100	
4.5 N PVC-17 SL	OTTED	.035 100-160	

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

Owner: Kerry Emmott Owner Well #: #1

Address: 24427 Pedernales Drive Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 24427 Redernales Drive Latitude: 30° 26' 08" N

Spicewood, TX 78669 Longitude: 098° 04' 14" W

Well County: Travis Elevation: 748 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 12/27/2011 Drilling End Date: 12/27/2011

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

 Borehole:
 10
 0
 10

 8
 10
 100

 6.75
 100
 230

Drilling Method: Air Hammer; Air Rotary

Borehole Completion: Open Hole

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

Annular Seal Data: 1 100 18 / Cement

Seal Method: **Pressure** Distance to Property Line (ft.): **28**

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **60**

Distance to Septic Tank (ft.): 55

Distance to Septio Tank (it.).

Method of Verification: survey

Surface Completion: Pitless Adapter Used Surface Completion by Driller

Water Level: No Data

Packers: Neoprene 100'

Neoprene 150' and 155'

Type of Pump: Submersible

Well Tests: **Jetted Yield: 30 GPM**

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

Plug Information: N/A

Strata Depth (ft.) Water Type

Water Quality: 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 License Number: 58658

Comments: well was pressure cemented 100'

Report Amended on 7/9/2021 by Request #34461

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	3	topsoil
3	7	white limestone
7	12	pink limestone
12	30	tan caliche
30	45	gray limestone
45	90	gray clay
90	150	red clay
150	230	red sandstone-1st H2O-30 gpm-1200 tds

Dia. (in.)	New/Used	Type	Setting From/To (ft.)	
4.5 Nev	v Plastic 0	to 190)'	
4.5 Nev	v Screen ,	Mfg. 1	90' to 230' .050	

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

Owner: Gloria Frame Owner Well #: 1

Address: 2930 Travis Lakeside Dr. Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 2930 Travis Lakeside Dr.

Latitude: 30° 27' 20" N

Spicewood, TX 78669 Longitude: 098° 03' 43" W

Well County: Travis Elevation: 730 ft. above sea level

Type of Work: New Well Proposed Use: Irrigation

Drilling Start Date: 4/4/2012 Drilling End Date: 4/5/2012

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

Borehole: 7.875 0 220

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 20 Gravel

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

Annular Seal Data: 20 24 1hlplg6prtInd

Seal Method: **Pos. Displacement** Distance to Property Line (ft.): **75**

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **150+**

Distance to Septic Tank (ft.): No Data

Method of Verification: measured

Surface Completion: Pitless Adapter Used

Water Level: 88 ft. below land surface on 2012-04-04 Measurement Method: Unknown

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 180

Well Tests: Jetted Yield: 10+ GPM

Water Type
Water Quality: 160'/200' Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	18	Brown Sandstone Big Rock
18	40	Brown Red Sandstone
40	60	Blue Red Clay
60	180	Red Sandstone Gravel
180	190	Red Sandstone Rock
190	200	Calcite
200	220	Black Brown Clay

Dia. (in.) New/Used Type Setting From/To (ft.) 4.5 New PVC-SDR 17IB +2'/160' 4.5 New PVC-17 Slotted .035 160'/200' 4.5 New PVC-SDR 17IB 200'/220'

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

Owner Well #: Owner: **Stephan James**

Address: 3030 Cliff Overlook Grid #: 57-40-5

Spicewood, TX 78669

Latitude: 30° 27' 20" N Well Location: 3030 Cliff Overlook

> Spicewood, TX 78669 Longitude: 098° 04' 13" W

Well County: **Travis** Elevation: 950 ft. above sea level

Type of Work: **New Well** Proposed Use: Irrigation

Drilling End Date: 9/23/2013 Drilling Start Date: 9/19/2013

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

Borehole: 8 0 200

Drilling Method: Air Rotary

Borehole Completion: **Straight Wall**

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

Annular Seal Data: 0 130 2hpg5bnsl6TypH

Seal Method: Pos. Displacement Distance to Property Line (ft.): 9'

Sealed By: Driller Distance to Septic Field or other concentrated contamination (ft.): 200+

Distance to Septic Tank (ft.): No Data

Method of Verification: Measured

Surface Completion: **Pitless Adapter Used**

Water Level: 125 ft. below land surface on 2013-09-24 Measurement Method: Unknown

Packers: **6MIL Poly 100'**

Type of Pump: **Submersible**

Well Tests: Jetted Yield: 06 GPM Strata Depth (ft.) Water Type

Water Quality: 160/195 Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Apprentice Name: Travis Haffelder

Comments: TDS 500

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	5	White Limestone
5	6	Brown Limestone
6	16	Brown White Limestone
16	50	Gray Limestone
50	55	Gray Shale
55	70	Gray Red Shale
70	78	Gray Limestone
78	90	Brown Red Sand
90	180	Red Sand Rock
180	195	Brown Sand Rock
195	200	Black Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5 New PVC-SDI	R 17IB	+2'/140'	
4.5 New PVC-17	Slotted	.035 140'/180'	
4.5 New PVC-SDF	R 17IB	180'/200'	

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

Owner: Howard Moench Owner Well #: No Data

Address: 1215 Janice Ln. Grid #: 57-40-5

Spicewood, TX 78669

Latitude: 30° 26' 15" N

Well Location: 24350 Haynie Flatt Rd.

Spicewood, TX 78669 Longitude: 098° 04' 00" W

Well County: Travis Elevation: 757 ft. above sea level

Type of Work: New Well Proposed Use: Irrigation

Drilling Start Date: 11/4/2013 Drilling End Date: 11/4/2013

Borehole: Top Depth (ft.) Bottom Depth (ft.)

8 o 10

8.5 10 210

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 100 210 Gravel 3/8"

210 314401 370

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

Annular Seal Data: 0 100 22 cement

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

Sealed By: **Steve Stewart**Distance to Septic Field or other

concentrated contamination (ft.): **none**

Distance to Septic Tank (ft.): No Data

Method of Verification: No Data

Surface Completion: Surface Sleeve Installed

Water Level: 135 ft. below land surface on 2013-11-06 Measurement Method: Unknown

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 190

Well Tests: **Jetted Yield: 75 GPM**

Strata Depth (ft.) Water Type

Water Quality: 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	50	white & tan limestone
50	70	gray limestone
70	110	gray clay
110	140	red clay & gravel
140	190	white & tan limestone wb
190	210	gravel wb

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5 new sdr-17 0	110		
4.5 new perf 110	210		

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

Owner: Bart Jones Owner Well #: 1

Address: 25630 Cliff Crossing Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 25630 Cliff Crossing

Latitude: 30° 27' 20" N

Spicewood, TX 78669 Longitude: 098° 04' 23" W

Well County: Travis Elevation: 731 ft. above sea level

Type of Work: New Well Proposed Use: Irrigation

Drilling Start Date: 2/21/2014 Drilling End Date: 2/24/2014

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

Borehole: 8.5 0 200

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 140 200 Gravel

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

Annular Seal Data: 0 140 10bns/7hlp/3tyH

Seal Method: **Pos. Displacement** Distance to Property Line (ft.): **20**

Sealed By: **Driller**Distance to Septic Field or other

Variance Number: 032-14 concentrated contamination (ft.): 6

Distance to Septic Tank (ft.): No Data

Method of Verification: Measured

Surface Completion: Unknown

Water Level: 112 ft. below land surface on 2014-02-24 Measurement Method: Unknown

Packers: No Data

Type of Pump: No Data

Well Tests: Jetted Yield: 15-18 GPM

Water Type
Water Quality: 140/200 Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Apprentice Name: Travis Haffelder

Comments: TDS 650

Variance 032-14

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	6	White Limestone Hard
6	7	Brown Limestone
7	15	Brown White Limestone Hard
15	17	Brown Sandstone
17	32	Gray Limestone
32	55	Gray Limestone
55	60	Gray Shale
60	62	Brown Sandstone
62	80	Gray Limestone
80	90	Red Sandstone Damp
90	92	Blue Shale Gravel
92	120	Red Sandstone
120	140	Gravel Red Sandstone
140	198	Gravel & Rock
198	200	Blue Shale Clay

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5 New PVC-SDI	R 17IB	+2'/140'	
4.5 PVC-17 Slotte	ed .035	140'/200'	

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

Owner: AUSTIN OUTLINE, INC. Owner Well #: No Data

Address: P. O. BOX 91956 Grid #: 57-40-5

AUSTIN, TX 78749

Well Location: 3004 TRAVIS LAKESIDE DRIVE

Latitude: 30° 27' 22" N

SPICEWOOD, TX 78669 Longitude: 098° 03' 34" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 3/13/2014 Drilling End Date: 3/13/2014

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

Borehole: 12 0 20 8.5 20 205

Drilling Method: Air Hammer

Borehole Completion: CASED

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

Annular Seal Data: 0 20 11 CEMENT

0 140 10 CLASS H CEM.

0 140 4 VOLCLAY

Seal Method: PRESSURE TRIMMIE Distance to Property Line (ft.): 7

CEMENT

Sealed By: **Driller**Distance to Septic Field or other

Variance Number: **019-14** concentrated contamination (ft.): **25**

Distance to Septic Tank (ft.): No Data

Method of Verification: TAPE MEASURE

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: 2 BURLAP, PVC 140', 150'

Type of Pump: Submersible

Well Tests: Jetted Yield: 40 GPM

Strata Depth (ft.) Water Type
Water Quality: 60 TRINITY

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: CENTEX PUMP & SUPPLY, INC.

2520 HWY. 290 WEST

DRIPPING SPRINGS, TX 78620

Driller Name: AARON GLASS License Number: 4227

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 **TOP SOIL** 1 1 20 **TAN ROCK** 20 50 **GRAY LIMESTONE** 50 60 HAMMETT CLAY **HAMMETT CLAY & RED** 60 75 CLAY 75 80 TAN/RED LIMESTONE 80 95 **GRAVEL** 115 95 **RED CLAY RED/GRAY LIMESTONE** 115 150 W/STRIPS OF CLAY 150 198 **RED/TAN SANDSTONE BLUE/YELLOW LIMESTONE** 198 205

W/SHALE

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) N	lew/Used	Туре	Setting From/To (ft.)
8 5/8" N S	STEEL +	1 TO 2	0
4 1/2" N I	PVC SDF	R17 +3	TO 205
4 1/2" N I	PVC SDF	R17 SL	OT 160 TO 205 .025

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

Owner: Jay Ledbetter (Dennis Day) Owner Well #: No Data

Address: 100 Spanish Oaks Trail Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 24341 Haynie Flat Rd Latitude: 30° 26' 10" N

Spicewood, TX 78669 Longitude: 098° 04' 05" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 4/14/2014 Drilling End Date: 4/14/2014

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

Borehole: 8 0 100

6.25 100 245

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 100 7ben1port

Seal Method: **Pressure** Distance to Property Line (ft.): **10**

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **50+**

,

Distance to Septic Tank (ft.): No Data

Method of Verification: Land Owner

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: Burlap/ Neoprene 160,155

Type of Pump: No Data

Well Tests: **Jetted Yield: 10 GPM**

Water Type
Water Quality: 175-223 L Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling INC.

P O Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Гор (ft.)	Bottom (ft.)	Description	
0	1	Top Soil	
1	4	Tan Limestone	
4	8	Gravel Limestone	
8	54	Tan & White Limestone	
54	75	Gray Tan Limestone	
75	114	Gray Clay	
114	175	Red Sandstone	
175	223	Gravel	
223	225	Turquois Clay	
225	245	Tan Clay	

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)	
4.5" (5	OD) New	PVC +	2' to 165' SDR17	
4.5" (5	OD) New	Slotte	d 165' to 225' .035	
4.5" (5	OD) New	PVC 2	25' to 245 SDR17	

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

Latitude:

Owner: **Aqua Texas** Owner Well #: **BCLakesideTW**

Address: 3209 Hillbilly Ln Grid #: 57-40-1

Austin, TX 78669

30° 27' 41" N Well Location: 26413 Sailpoint Ct.

Spicewood, TX 78669 Longitude: 098° 05' 26" W

Well County: **Travis** Elevation: 765 ft. above sea level

Plugged Within 48 Hours

This well has been plugged Plugging Report Tracking #151258

Type of Work: New Well Proposed Use: **Test Well**

Drilling Start Date: 7/21/2015 Drilling End Date: 7/28/2015

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

Borehole: 8.75 420

Drilling Method: Air Rotary

Borehole Completion: **Plugged**

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

Annular Seal Data: -1 15 3 Cement

> 15 420 53 Bentonite

Seal Method: Pos. Displacement Distance to Property Line (ft.): 50+

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: Unknown

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: Yield: 15 GPM **Jetted**

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

Plug Information: -1 to 15 3 Cement

15-420 53 Bentonite

Water Type
Water Quality: 120/180 No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

Dia. (in.) New/Used

No Data

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

Type

Setting From/To (ft.)

Top (ft.)	Bottom (ft.)	Description
1	25	Gray Limestone
25	50	Tan Limestone
50	80	Shale
80	120	Brown Limestone
120	180	Gravel
180	420	Shale

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

Owner: Clayton Mitchell Owner Well #: No Data

Address: 24215 Haynie Flat Rd Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 24215 Haynie Flat Rd Latitude: 30° 25' 59" N

Spicewood, TX 78669 Longitude: 098° 04' 07" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 4/12/2019 Drilling End Date: 4/12/2019

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

Borehole: 8 0 80

6.25 80 215

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 80 6 Benseal 1 Portland 7 Bags/Sacks

Seal Method: **Pressure** Distance to Property Line (ft.): **5**

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

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 80 ft.

Burlap/Neoprene at 82 ft.

Type of Pump: No Data

Well Tests: Jetted Yield: 17 GPM

Strata Depth (ft.) Water Type

Water Quality: 80 - 195 Trinity - TDS 680

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. 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	38	Tan LS	
38	52	Gray Tan LS	
52	77	Gray Clay	
77	91	Red SS	
91	96	Gravel	
96	154	Red SS	
154	195	Gravel	
195	196	Turquoise Clay	
196	206	Tan Clay	
206	215	Gray Shale	

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	135
4.5	Screen	New Plastic (PVC)	.035	135	195
4.5	Blank	New Plastic (PVC)	SDR17	195	215

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

Owner: Bill Stone Owner Well #: No Data

Address: 24423 Pedernales Drive Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 24423 Pedernales Drive Latitude: 30° 26' 07.5" N

Spicewood, TX 78669 Longitude: 098° 04' 15.7" W

Well County: Travis Elevation: 739 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 11/10/2021 Drilling End Date: 11/11/2021

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

 Borehole:
 10.625
 0
 10

 8.5
 10
 100

 6.75
 100
 200

Drilling Method: Air Rotary

Borehole Completion: Perforated or Slotted

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

Annular Seal Data: 0 10 Cement 3

10 100 Bentonite 15

Seal Method: **Pressure** Distance to Property Line (ft.): **6**

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **80**

Distance to Septic Tank (ft.): 60

Distance to Septio Tank (it.): 00

Method of Verification: No Data

Surface Completion: Pitless Adapter Used

Water Level: 77 ft. below land surface on 2021-11-15 Measurement Method: Electric Line

Packers: Rubber at 100 ft.

Rubber at 105 ft. Rubber at 135 ft. Rubber at 140 ft.

Type of Pump: Submersible Pump Depth (ft.): 180

Well Tests: Jetted Yield: 40 GPM

Water Quality:

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

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Bee Cave Drilling, Inc.

185 Angel Fire Rd.

Dripping Springs, TX 78620

Driller Name: Michael Scott License Number: 59719

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description		
0	4	topsoil		
4	12	white limestone		
12	30	tan limestone		
30	45	grey limestone		
45	60	grey clay		
60	80	blue clay		
80	100	brown sandstone		
100	120	brown clay		
120	140	brown sandstone		
140	180	porous limestone		
180	200	grey clay		

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr-17	0	140
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	140	180
4.5	Blank	New Plastic (PVC)	sdr-17	180	200

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

Owner: RICK GARDNER # 2 Owner Well #: 001

Address: **3516 TANGLEY** Grid #: **57-40-4**

HOUSTON, TX 77005

Well Location: 25242 PALEFACE LAKE DR.

Latitude: 30° 25' 23" N

SPICEWOOD, TX 78669 Longitude: 098° 05' 38" W

Well County: Travis Elevation: 1200 ft. above sea level

Plugged Within 48 Hours

This well has been plugged

Plugging Report Tracking #106256

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 6/21/2002 Drilling End Date: 6/21/2002

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

Borehole: 8.75 0 10 6.125 10 155

Drilling Method: Air Rotary

Borehole Completion: Open Hole

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

Annular Seal Data: 0 3

Seal Method: N/A Distance to Property Line (ft.): No Data

Sealed By: **BOBBY ROBERTS**Distance to Septic Field or other concentrated contamination (ft.): **0**

Distance to Septic Tank (ft.): No Data

Method of Verification: N/A

Surface Completion: Surface Sleeve Installed

Water Level: No Data on 2002-06-21 Measurement Method: Unknown

Packers: N/A

Type of Pump: **NONE**

Well Tests: Jetted Yield: 0 GPM

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

Plug Information: NONE 0 3 CEMENT 3

Strata Depth (ft.) Water Type

Water Quality: No Data No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: BEE CAVE DRILLING, INC.

185 ANGELFIRE DR.

DRIPPING SPRINGS, TX 78620

Driller Name: JIM BLAIR License Number: 54416

Apprentice Name: BOBBY ROBERTS Apprentice Number: WWDAPP00001

234

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 2 **TOPSOIL** 2 10 **GREY ROCK** 10 15 CALICHE 15 35 **GREY LIMESTONE** 35 80 **GREY SHALE** 80 95 **TAN SHALE** 95 115 **RED ROCK** 115 120 **TAN CLAY** 120 145 **RED ROCK** 145 155 **TAN ROCK**

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)

NONE

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

Owner: Action Water Well Owner Well : No Data

Address: 100 Spanish Oak Trail Grid #: 57-40-4

Spicewood, TX 78669

Well Location: Vicinity Trail

Latitude: 30° 25' 53" N

Spicewood, TX 78669 Longitude: 098° 05' 13" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 7/12/2002 Drilling End Date: 7/12/2002

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

Borehole: 8 0 100

6 100 185

Drilling Method: Air Rotary

Borehole Completion: cased

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

Annular Seal Data: 0 100 9

Seal Method: **Pressure** 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: as per landowner

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: Burlap 125',115',100'

Type of Pump: No Data

Well Tests: Estimated Yield: 60 GPM

Water Quality: Strata Depth (ft.) Water Type

Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Michael Becker License Number: 54516

Apprentice Name: Andrew Johnson Apprentice Number: 1116

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 2 Top Soil 2 10 Wht LS 10 25 Tan LS 25 42 **Gry LS** 42 65 **Blue Clay** 65 85 Red Clay 85 88 **Red Sand-Gravel** 125 88 Wht LS-Red Clay 125 165 Gravel (H20) 165 172 Tan LS 172 185 **Tan-Blue Clay**

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)

5 New PVC +2 to 185 Sch40

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

Owner: Pedernales Fire Dept. ATTN: Ken

VanRens

Address: 801 Bee Creek Road

Spicewood, TX 78669

Well Location: 311 Paleface Ranch

Spicewood, TX 78669

Well County: Travis

Owner Well #: No Data

Grid #: **57-40-4**

Latitude: 30° 26' 32" N

Longitude: 098° 05' 59" W

Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 9/6/2002 Drilling End Date: 9/6/2002

Diameter (in.)

Top Depth (ft.)

Bottom Depth (ft.)

Borehole:

8

0 20 20 230

Drilling Method:

Air Rotary

Borehole Completion: cased

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

Annular Seal Data:

0

20

4

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: as per landowner

Surface Completion: Surface Sleeve Installed

Water Level:

No Data

Packers:

Burlap 117',114',20'

Type of Pump:

No Data

Well Tests:

Unknown

Yield: 9-10 GPM

Water Quality: Strata Depth (ft.) Water Type

Water Quality: 118-210 Trinity

Chemical Analysis Made: No

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Michael Becker License Number: 54516

Apprentice Name: Andrew Johnson Apprentice Number: 1116

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	15	Tan Clay
15	27	Tan Red Clay w/Wht LS
27	70	Tan Wht LS
70	85	Gry LS
85	107	Blue Clay
107	118	Gry Sand-Blue Clay
118	128	Red SS-Clay
128	141	Gravel-Sand (H20)
141	158	Red Clay
158	210	Gravel-Sand (H20)
210	225	Tan LS-Clay
225	230	Blue Clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)	
5 New F	PVC +2 to	230 SE	DR17	

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

Owner: OLEN WARDLAW Owner Well #: No Data

Address: 16100 STEWARD RD Grid #: 57-40-4

AUSTIN, TX 78734

Well Location: 312 PARKFACE POINT

Latitude: 30° 26' 05" N

SPICEWOOD, TX 78669 Longitude: 098° 05' 44" W

Well County: Travis Elevation: 819 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 5/13/2004 Drilling End Date: 5/13/2004

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

Borehole: 10 0 13

7 13 210

Drilling Method: Air Hammer

Borehole Completion: Filter Packed

Filter Pack Intervals:

110
210
Gravel

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals:

110
Description (number of sacks & material)

Annular Seal Data:
0 10 12 CEMENT

95 110 2 HOLE PLUG

Seal Method: **SLURRIED & POURED**Distance to Property Line (ft.): **No Data**

Sealed By: **JACOB CROUSE**Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): No Data

Method of Verification: NOT YET INSTALLED

Surface Completion: Surface Sleeve Installed

Water Level: 48 ft. below land surface on 2004-05-17 Measurement Method: Unknown

Packers: PLASTIC 10

Type of Pump: Submersible Pump Depth (ft.): 200

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

Water Type
Water Quality:

No Data

No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: BEE CAVE DRILLING, INC.

185 ANGEL FIRE DR

DRIPPING SPRINGS, TX 78620

Driller Name: JIM BLAIR License Number: 54416

Apprentice Name: JACOB CROUSE Apprentice Number: WWDAPP00001

862

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	TOPSOIL
1	8	RED CLAY & CALICHE
8	36	CALICHE
36	52	TAN SAND & GRAVEL
52	93	GREY CLAY
93	111	GREY CLAY & LIMESTONE
111	124	RED CLAY
124	140	RED CLAY & SANDSTONE
140	155	YELLOW / TAN ROCK & CLAY (RED)
155	173	TAN ROCK / BLUE SANDSTONE W/B 5 GPM
173	201	TAN & WHITE ROCK
201	210	BLUE SHALE / GOLD CLAY

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Туре	Setting From/To (ft.)	
4.5 NEW PLASTIC	C 0 - 13	30	
4.5 NEW SCREEN	N MFG	130 - 190 .10	
4.5 NEW PLASTIC	C 190 -	210	

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

Owner: WILLIAM & JANET FREE Owner Well #: No Data

Address: 23 EGON GREEN CIRCLE Grid #: 57-40-5

SAN ANTONIO, TX 78257

Well Location: 24600 LAKEVIEW DR

SPICEWOOD, TX 78669 Longitude: 098° 04' 58" W

Well County: Travis Elevation: 785 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 5/19/2004 Drilling End Date: 5/19/2004

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

 Borehole:
 10
 0
 13

7 13 190

Drilling Method: Air Hammer

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 70 190 Gravel

Annular Seal Data:

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

8 CEMENT

55 70 2 HOLE PLUG

Seal Method: **SLURRIED & POURED** Distance to Property Line (ft.): **165**

Sealed By: **JACOB CROUSE**Distance to Septic Field or other

concentrated contamination (ft.): No Data

Distance to Septic Tank (ft.): No Data

Method of Verification: STEEL TAPE

Surface Completion: Surface Sleeve Installed

Water Level: 75 ft. below land surface on 2004-05-19 Measurement Method: Unknown

Packers: PLASTIC 10

Type of Pump: Submersible Pump Depth (ft.): 180

Well Tests: **Jetted Yield: 25 GPM**

Water Type
Water Quality:

No Data

No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: BEE CAVE DRILLING, INC.

185 ANGEL FIRE DR

DRIPPING SPRINGS, TX 78620

Driller Name: JIM BLAIR License Number: 54416

Apprentice Name: JACOB CROUSE Apprentice Number: WWDAPP00001

862

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	TOPSOIL
1	20	CALICHE & WHITE ROCK
20	32	TAN LIMESTONE
32	43	GREY LIMESTONE
43	70	GREY SHALE
70	99	RED CLAY
99	104	GRAVEL BAR
104	115	GREY ROCK / CLAY STREAKS
115	135	RED SANDSTONE
135	186	YELLOW ROCK W/B 25 GPM
186	190	GOLD CLAY

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Туре	Setting From/To (ft.)	
4.5 NEW PLASTIC	C 0 - 11	10	
4.5 NEW SCREEN	N MFG	110 - 170 .10	
4.5 NEW PLASTIC	C 170 -	190	

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

Owner: Norman Sadik Owner Well #: 512-784-5263

Address: 22304 Moulin Drive Grid #: 57-40-4

Briarcliff, TX 78669

Well Location: 24804 Lakeview Drive

Latitude: 30° 25' 31" N

Spicewood, TX 78669 Longitude: 098° 05' 02" W

Well County: Travis Elevation: 782 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 9/20/2004 Drilling End Date: 9/21/2004

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

Borehole: 8 0 120

6.75 120 200

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 120 59

Seal Method: tremmie tube pressure Distance to Property Line (ft.): No Data

cemented

Sealed By: ADC 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: 88 ft. below land surface on 2004-10-20 Measurement Method: Unknown

Packers: Neoprene 120

Burlap 180

Type of Pump: Submersible Pump Depth (ft.): 180

Well Tests: Estimated Yield: 15 GPM

Strata Depth (ft.) Water Type
Water Quality: 120-200 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Associated Drilling Company

P.O. Box 1060

Manchaca, TX 78652

Driller Name: James Benoit License Number: 4064

Comments: Amended 11-11-04 Ref#652

Amended 11-10-04 Ref#635

Report Amended on by Request #635

Report Amended on by Request #652

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	20	Hard white and tan limestone
20	35	Yellow clay
35	80	Gray lime and clay
80	90	Red clay
90	110	Red sandstone
110	120	Tan and white sandstone
120	140	Red sandstone
140	180	Broken yellow and purple limestone
180	200	Hard yellow limestone

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Туре	Setting From/To (ft.)			
4.5 New Plastic -2 200 SDR17					
Perf. from 140-180					

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

Latitude:

Longitude:

Owner: Cotie Properties Owner Well #: 1

Address: 1403 Hargis Creek Trail Grid #: 57-40-4

Austin, TX 78717

Well Location: 629 Nomad

Spicewood, TX 78669

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 12/6/2004 Drilling End Date: 12/6/2004

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

Borehole: 8 0 100

6 100 220

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 100

Seal Method: **Pressure Tremmie** Distance to Property Line (ft.): **7**

Sealed By: **Driller**Distance to Septic Field or other
concentrated contamination (ft.): **N/A**

concentrated contamination (ft.): N/A

Distance to Septic Tank (ft.): No Data

Method of Verification: landowner

30° 25' 33.19" N

098° 05' 31.05" W

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: Burlap 120', 110', 100'

Type of Pump: No Data

Well Tests: **Jetted Yield: 2 - 3 GPM**

Strata Depth (ft.) Water Type

Water Quality: 120 - 210 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling Inc.

PO Box 867

Marble Falls, TX 78654

Driller Name: Michael G Becker License Number: 54516

Comments: No Data

Report Amended on 7/31/2023 by Request #40060

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	42	White Limestone
42	65	Grey Limestone
65	95	Blue Clay
95	120	Red Clay
120	125	Gravel
125	145	Red Clay
145	210	Gravel
210	220	Tan-Blue Clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)	
4.5" (50	DD") New	PVC +	2' to 220' Sch 40	
4.5" (50	DD") New	PVC S	creen 150' to 210' .035	

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

Owner: Nick Nicoson Owner Well #: 1

Address: 24001 Pedernales Dr. Grid #: 57-40-5

Spicewood, TX 78669

Well Location: Lot # 5 Haynie Flats

Latitude: 30° 26' 05" N

Spicewood, TX 78669 Longitude: 098° 04' 03" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 9/6/2004 Drilling End Date: 9/6/2004

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

Borehole: 8 0 10

6 10 235

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 20

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 155', 150', 20'

Type of Pump: No Data

Well Tests: Pump Yield: 10+ GPM

Strata Depth (ft.) Water Type

175 230 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

Water Quality:

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	10	Tan Limestone
10	45	Tan Limestone-Gravel
45	62	Grey Limestone
62	105	Blue Clay
105	162	Red Sandstone with Clay
162	165	Gravel
165	170	White Limestone
170	235	White-Tan Limestone with Clay

Dia. (in.) New/Used	Туре	Setting From/To (ft.)	
4.5" (5"OD) New	PVC +2	2' to 235' Sch40	

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

Latitude:

Longitude:

Owner: Randy Hinkle Owner Well #: 1

Address: 8600 RR 620 Apt. 1025 Grid #: 57-40-4

Austin, TX 78726

Well Location: 504 Nomad

Spicewood, TX 78669

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 9/30/2004 Drilling End Date: 9/30/2004

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

Borehole: 8 0 75

6 75 220

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 75

Seal Method: **Pressure Tremmie** 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

30° 25' 45" N

098° 05' 41" W

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: Burlap 80', 75'

Type of Pump: No Data

Well Tests: **Jetted Yield: 25 GPM**

Water Type
Water Quality: 75 - 220 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling Inc.

PO Box 867

Marble Falls, TX 78654

Driller Name: Michael G Becker, P.G. License Number: 54516

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Setting From/To (ft.)

Top (ft.)	Bottom (ft.)	Description
0	30	Tan-Grey Limestone
30	40	Grey Limestone
40	75	Blue Clay
75	180	Red Sandstone with Gravel
180	205	Tan Clay
205	220	Grey Clay

4.5" (5"OD) New PVC +2' to 220' Sch40

Dia. (in.) New/Used Type

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

Owner Well #: Owner: No Data **BILL BUVENS**

Address: 2215 SOUTH PACE BEND RD. Grid #: 57-40-5

SPICEWOOD,, TX 78669

Well Location: 25042 RIVER RD.

SPICEWOOD, TX 78669

Latitude: 30° 26' 06" N

Longitude: 098° 04' 33" W

Well County: **Travis** Elevation: No Data

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling End Date: 1/3/2005 Drilling Start Date: 1/3/2005

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

Borehole: 8.625 0 30

> 6.5 180 30

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 30 6

Seal Method: Slurry Distance to Property Line (ft.): N/A

Sealed By: C. T. D. 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 Sleeve Installed Surface Completion:

Water Level: No Data

Packers: 5 RUBBER & BURLAP 30',70',90',130',150'

Type of Pump: **Submersible**

Well Tests: Jetted Yield: 25-30 GPM Strata Depth (ft.) Water Type
Water Quality: 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: Amended 3/16/05

Reference #1260

Report Amended on by Request #1260

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	40	ROCK W/WHITE TAN
40	50	GRAY LIMESTONE
50	70	HAMMID CLAY
70	80	HAMMID CLAY W/RED CLAY
80	90	GRAY LIMESTONE
90	100	RED CLAY
100	130	TRINITY SAND & GRAVEL
130	140	RED CLAY
140	150	RED W/CLAY
150	180	TRINITY SAND W/LARGE GRAVEL

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)

5" OD NEW PVC SDR17 +3 TO 180 .025

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

Latitude:

Owner: Owner Well #: No Data **CHRIS HIGHTOWER**

Address: **705 JIM BOWIE** Grid #: 57-40-4

SPICEWOOD, TX 78669

Well Location: **501 PALEFACE RANCH RD.** SPICEWOOD, TX 78669 Longitude: 098° 06' 12" W

Well County: **Travis** Elevation: 770 ft. above sea level

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 4/19/2005 Drilling End Date: 4/19/2005

118

Diameter (in.) Top Depth (ft.) Bottom Depth (ft.) Borehole: 0 13 10 8 232

13

Drilling Method: Air Rotary

Borehole Completion: **Filter Packed**

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size Filter Pack Intervals: 128 232 Gravel Description (number of sacks & material) Top Depth (ft.) Bottom Depth (ft.) Annular Seal Data: 0 10 10 CEMENT

128 Seal Method: SLURRIED & 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: NOT YET INSTALLED

3 HOLE PLUG

30° 26' 04" N

Surface Sleeve Installed Surface Completion:

Water Level: 97 ft. below land surface on 2005-04-20 Measurement Method: Unknown

Packers: **PLASTIC 10**

Type of Pump: **Submersible** Pump Depth (ft.): 212

Well Tests: **Pump** Yield: 3.8 GPM Water Type
Water Quality:

No Data

No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: BEE CAVE DRILLING, INC.

185 ANGEL FIRE DR.

DRIPPING SPRINGS, TX 78620

Driller Name: GREG SVETLIK License Number: 54416

Comments: updated county by TWDB on 2/14/08 - BA

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOPSOIL
1	10	TAN LIMESTONE
10	30	FRACTURED WHITE ROCK
30	55	GREY LIMESTONE
55	67	BLUE SHALE
67	75	BROWN SHALE
75	88	BLUE CLAY
88	100	RED CLAY
100	120	RED SANDSTONE
120	140	FRACTURED YELLOW LIMESTONE
140	155	PURPLE ROCK
155	195	BROKEN YELLOW LIMESTONE W/B 2 GPM
195	215	RED CLAY
215	225	BLUE ROCK W/B 5 GPM
225	232	BLACK LIMESTONE

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)	
4.5 NE\	N PLASTI	C 0 - 16	57	
4.5 NE\	W SCREEN	N MFG.	. 167 - 227 .050	
4.5 NE	N PLASTI	C 227 -	232	

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

Owner: CALVIN FAUGHT Owner Well #: No Data

Address: 4703 BALCONES WOODS DR. Grid #: 57-40-4

AUSTIN, TX 78759

Well Location: 25209 LAKEVIEW Latitude: 30° 25' 44" N

SPICEWOOD, TX 78669 Longitude: 098° 05' 23" W

Well County: Travis Elevation: 678 ft. above sea level

Plugged Within 48 Hours

This well has been plugged

Plugging Report Tracking #112095

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 6/24/2005 Drilling End Date: 6/24/2005

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

Borehole: 8 0 120

Drilling Method: Air Rotary

Borehole Completion: Unknown

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: NOT YET INSTALLED

Surface Completion: Unknown

Water Level: No Data

Packers: NONE

Type of Pump: DID NOT SET

Well Tests: **Jetted Yield: 0 GPM**

Description (number of sacks & material)

Top Depth (ft.) Bottom Depth (ft.)

Plug Information: NONE 0 - 2 2 CEMENT

2 - 120 CUTTINGS

Water Type
Water Quality:

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

Dia. (in.) New/Used

NONE

the report(s) being returned for completion and resubmittal.

Company Information: BEE CAVE DRILLING, INC.

185 ANGELFIRE DR.

DRIPPING SPRINGS, TX 78620

Driller Name: BOBBY ROBERTS License Number: 54416

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Setting From/To (ft.)

Type

Top (ft.)	Bottom (ft.)	Description
0	1	TOPSOIL
1	15	GRAVEL
15	37	RED CLAY
37	40	RED ROCK
40	44	RED CLAY
44	55	RED ROCK
55	67	RED CLAY
67	95	TAN ROCK
95	120	GREY CLAY

-			

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

Owner: Jenny Pia Stanley Owner Well #: 1

Address: **25114 River Rd.** Grid #: **57-40-5**

Spicewood, TX 78669

Well Location: 25114 River Rd.

Spicewood, TX 78669 Longitude: 098° 04' 54" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 5/12/2005 Drilling End Date: 5/12/2005

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

Borehole: 8 0 215

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 100 215 Gravel 3/8" Pea

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

Annular Seal Data: 0 100 12

Seal Method: **Pressure Tremmie** Distance to Property Line (ft.): **30**

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **60**

Distance to Septic Tank (ft.): No Data

Method of Verification: landowner

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: Gravel - See above

Type of Pump: No Data

Well Tests: Jetted Yield: 40 GPM

Strata Depth (ft.) Water Type Water Quality: **Trinity** 110 - 205

> Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. 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

Bottom (ft.)

200

215

Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL**

Top (ft.) Description 0 3 Top Soil 3 23 **Tan Limestone** 23 53 **Grey Limestone** 53 95 **Grey Clay** 95 110 **Red Sandstone** 110 120 Gravel 120 140 **Red Sandstone**

Gravel

Tan Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5" (5'	'OD) New	PVC +	2' to 145' SDR17
4.5" (5'	'OD) New	Slotted	d PVC 145' to 205' .035
4.5" (5'	'OD) New	PVC 2	05' to 215' SDR17

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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

140

200

Owner Well #: Owner: **Ron Stanley**

25110 River Rd. Address: Grid #: 57-40-5

Spicewood, TX 78669

Latitude: 30° 26' 15" N Well Location: 25110 River Rd.

> Spicewood, TX 78669 Longitude: 098° 04' 54" W

Well County: **Travis** Elevation: No Data

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling End Date: 5/13/2005 Drilling Start Date: 5/13/2005

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

Borehole: 8 0 215

Drilling Method: Air Rotary

Borehole Completion: **Filter Packed**

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 100 3/8" Pea 215 Gravel

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

Annular Seal Data: 100 12

Seal Method: Pressure Tremmie Distance to Property Line (ft.): 10

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 Sleeve Installed Surface Completion:

Water Level: No Data

Packers: **Gravel - See above**

Type of Pump: No Data

Well Tests: **Jetted** Yield: 40 GPM Water Type
Water Quality: 110 - 205 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling Inc.

PO Box 867

Marble Falls, TX 78654

Driller Name: Michael G Becker, P.G. License Number: 54516

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	Top Soil
2	30	Tan Limestone
30	57	Grey Limestone
57	97	Grey Clay
97	110	Red Sandstone
110	130	Gravel
130	145	Red Clay
145	205	Gravel
205	215	Tan Clay

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)
4.5" (5'	'OD) New	PVC +	2' to 145' SDR17
4.5" (5'	'OD) New	Slotted	d PVC 145' to 205' .035
4.5" (5'	'OD) New	PVC 2	05' to 215' SDR17

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

Owner: LISA SCHELLENBERG Owner Well #: No Data

Address: **702 LAKEWAY DR.** Grid #: **57-40-4**

AUSTIN, TX 78734

Well Location: RED BRANGUS Latitude: 30° 25' 33" N

SPICEWOOD, TX 78669 Longitude: 098° 06' 11" W

Well County: Travis Elevation: 875 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 11/22/2005 Drilling End Date: 11/22/2005

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

Borehole: 8 0 10

6.75 10 270

Drilling Method: Air Rotary

Borehole Completion: Open Hole

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

Annular Seal Data: 0 8 6 CEMENT

8 10 1 HOLEPLUG

Seal Method: SLURRIED & 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: NOT YET INSTALLED

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: **NEOPRENE 10**

NEOPRENE 180

Type of Pump: DID NOT SET

Well Tests: **Jetted Yield: 3.5 GPM**

Strata Depth (ft.) Water Type

Water Quality: No Data No Data

Chemical Analysis Made: Yes

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: BEE CAVE DRILLING, INC.

185 ANGELFIRE DR.

DRIPPING SPRINGS, TX 78620

Driller Name: BOBBY ROBERTS License Number: 54416

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOPSOIL
1	8	CALICHE
8	11	WHITE SAND
11	15	YELLOW CLAY
15	20	GREY CLAY
20	43	RED CLAY
43	55	WHITE ROCK W/B 1 GPM TDS 530
55	60	BLUE CLAY
60	83	WHITE ROCK
83	90	YELLOW CLAY
90	105	GREY LIMESTONE
105	130	GREY CLAY
130	176	RED SANDSTONE
176	225	WHITE & RED ROCK W/B 3.4 GPM TDS 840
225	230	RED CLAY
230	235	RED ROCK
235	245	RED CLAY

Dia. (in.) New/Used	Туре	Setting From/To (ft.)	
4.5 NEW PLASTI	C 0 - 18	35	
4.5 NEW SCREE	N MFG.	. 185 - 225 .05	

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

Owner Well #: Owner: **Summit Buiders**

Address: P. O. 340277 Grid #: 57-40-4

Austin, TX 78734

Latitude: 30° 26' 14" N 25400 Love Drive Well Location:

Spicewood, TX 78669 Longitude: 098° 05' 15" W

Well County: **Travis** Elevation: 674 ft. above sea level

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling End Date: 5/3/2006 Drilling Start Date: 5/2/2006

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

Borehole: 9 0 120

> 7 120 200

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 120 42

Seal Method: Unknown Distance to Property Line (ft.): 40

Sealed By: Unknown Distance to Septic Field or other

concentrated contamination (ft.): 150

Distance to Septic Tank (ft.): No Data

Method of Verification: measured

Surface Completion: **Surface Sleeve Installed**

Water Level: 82 ft. below land surface on 2006-05-11 Measurement Method: Unknown

Packers: **NEOPHRENE 120**

Type of Pump: **Submersible** Pump Depth (ft.): 180

Well Tests: **Estimated** Yield: 10 GPM Water Type
Water Quality: 135-180 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Associated Drilling Company

P.O. Box 1060

Manchaca, TX 78652

Driller Name: James Benoit / 4064wi License Number: 4064

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	black topsoil
1	65	yellow limestone
65	95	gray limestone
95	110	tan limestone
110	135	red sandstone
135	180	broken sandstone
180	200	hard tan limestone

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5 new plastic -2 200 SDR17			
screen from 135-200			

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

Owner: Cotie Properties Owner Well #: 2

Address: 1403 Hargis Creek Trail Grid #: 57-40-4

Austin, TX 78628

Well Location: Red Brangus, Lot # 11

Spicewood, TX 78669 Longitude: 098° 05' 45" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 4/19/2005 Drilling End Date: 4/19/2005

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

Borehole: 8 0 20

6 20 205

Drilling Method: Air Rotary

Borehole Completion: Backfilled

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: N/A

Type of Pump: No Data

Well Tests: Jetted Yield: 0 GPM

Strata Depth (ft.) Water Type Water Quality: N/A **Trinity**

> Chemical Analysis Made: No

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

No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

PO Box 867

Marble Falls, TX 78654

Michael G. Becker P.G. Driller Name: License Number: 54516

Comments: **Backfilled with 2' Cement Cap**

Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL**

Top (ft.) Bottom (ft.) Description 0 37 **Tan-Grey Limestone** 37 45 **Grey Limestone** 45 55 Grey Limestone w/ Clay 55 90 **Grey Clay** 90 104 Red Sandstone w/ Clay 104 115 Gravel 115 140 Sandy Clay 140 165 Gravel 165 170 **Turquoise Clay** 170 205 Tan Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Туре	Setting From/To (ft.)	
No Data			

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

Owner: Cotie Properties Owner Well #: 3

Address: 1403 Hargis Creek Trail Grid #: 57-40-4

Austin, TX 78628

Well Location: Red Brangus, Lot # 11

Spicewood, TX 78669 Longitude: 098° 05' 49" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 4/20/2005 Drilling End Date: 4/20/2005

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

Borehole: 8 0 20

6 20 205

Drilling Method: Air Hammer; Air Rotary

Borehole Completion: Straight Wall

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

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**

concentrated contamination (ft.): 100

Distance to Septic Tank (ft.): No Data

Method of Verification: Landowner

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: Burlap 102', 100', 20'

Type of Pump: No Data

Well Tests: **Jetted Yield: 1.9 GPM**

Water Type
Water Quality: 102-180 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

PO Box 867

Marble Falls, TX 78654

Driller Name: Michael G. Becker P.G. License Number: 54516

Comments: Backfilled with 2' Cement Cap

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 2 Top Soil 2 **Tan-White Limestone** 28 28 40 **Grey Limestone** 40 85 **Blue Clay** 85 88 **Tan Limestone** 88 102 Red Clay 102 106 Gravel 106 118 Clay 118 135 **Tan Limestone** 135 142 Clay 142 165 Gravel 180 165 Tan Limestone w/ Clay 180 205 **Tan-Blue Clay**

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)	
4.5" (5"	OD) New	PVC +	2' to 125' Sch40	
4.5" (5"	OD) New	Slotted	d 125' to 165' .035	
4.5" (5"	OD) New	PVC 10	65' to 205 Sch40	

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

Owner: GARY BOSSOW Owner Well #: No Data

Address: 10001 RIVERCLIFF COVE Grid #: 57-40-4

SPICEWOOD, TX 78669

Well Location: 803 RIVERCLIFF DRIVE

Latitude: 30° 25' 23" N

SPICEWOOD, TX 78669 Longitude: 098° 05' 01" W

Well County: Travis Elevation: 760 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 12/7/2006 Drilling End Date: 12/7/2006

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

Borehole: 10 0 11

6.75 11 200

Drilling Method: Air Rotary

Borehole Completion: Open Hole

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

Annular Seal Data: 0 9

9 11 1

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: 166 ft. below land surface on 2006-12-08 Measurement Method: Unknown

Packers: **NEOPRENE 11**

NEOPRENE 148 NEOPRENE 150

Type of Pump: Submersible Pump Depth (ft.): 180

Well Tests: Jetted Yield: 7 GPM

Strata Depth (ft.) Water Type Water Quality:

No Data No Data

> Chemical Analysis Made: Yes

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: **BEE CAVE DRILLING**

185 ANGELFIRE DRIVE

DRIPPING SPRINGS, TX 78620

License Number: Driller Name: JIM BLAIR 54416

Apprentice Name: **CESAR RAMOS** Apprentice Number: 3090

Comments: No Data

Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL**

Top (ft.)	Bottom (ft.)	Description
0	1	TOPSOIL
1	5	CALICHE
5	45	WHITE ROCK
45	62	GRAY LIMESTONE
62	70	GRAY SHALE
70	80	BROWN SHALE
80	95	GRAY SHALE
95	100	YELLOW SANDSTONE
100	150	RED SHALE
150	200	RED ROCK W/B 7 GPM

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)	
4.5 NE\	V PLASTIC	C 0-155		
4.5 NE\	V SCREEN	N MFG	155-195 .050	
4.5 NE\	W PLASTIC	C 195-2	200	

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

Owner: GARY BOSSOW Owner Well #: No Data

Address: 10001 RIVERCLIFF COVE Grid #: 57-40-4

SPICEWOOD, TX 78669

Well Location: 803 RIVERCLIFF DR.

Latitude: 30° 25' 29" N

SPICEWOOD, TX 78669 Longitude: 098° 05' 02" W

Well County: Travis Elevation: 772 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 12/7/2006 Drilling End Date: 12/7/2006

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

Borehole: 10 0 11

6.75 11 215

Drilling Method: Air Hammer

Borehole Completion: Open Hole

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: NONE

Type of Pump: DID NOT SET

Well Tests: Jetted Yield: 0 GPM

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

Plug Information: WELL PLUGGED BY OWNER

Strata Depth (ft.) Water Type Water Quality:

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

License Number: Driller Name: 54416

Apprentice Name: **CESAR RAMOS** Apprentice Number: 3090

Comments: No Data

Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL**

Casing: BLANK PIPE & WELL SCREEN DATA

Гор (ft.)	Bottom (ft.)	Description
0	1	TOPSOIL
1	5	CALICHE
5	45	WHITE ROCK
45	62	GREY LIMESTONE
62	70	GREY SHALE
70	80	BROWN SHALE
80	95	GREY SHALE
95	100	YELLOW SANDSTONE
100	150	RED SHALE
150	200	RED ROCK
200	215	YELLOW CLAY

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
NONE			

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

Owner: Don Adkins Owner Well #: No Data

Address: 2326 Campden Grid #: 57-40-5

Austin, TX 78745

Well Location: 24331 Haynie Flat Rd Latitude: 30° 26' 05" N

Spicewood, TX 78669 Longitude: 098° 04' 00" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 11/28/2005 Drilling End Date: 11/28/2005

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

Borehole: 8 0 20

6 20 230

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 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 120', 100', 20'

Type of Pump: No Data

Well Tests: **Jetted Yield: 30 GPM**

Strata Depth (ft.) Water Type

Water Quality: 125-217 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc

PO Box 867

Marble Falls, TX 78654

Driller Name: Michael G Becker, P.G. License Number: 54516

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 50 Tan/White Limestone 50 65 **Grey Limestone** 65 105 Grey Limestone w/ Clay 105 125 Red Clay / White Limestone 125 132 Gravel 137 Sand/Clay 132 137 145 Gravel 145 175 White Limestone 175 185 **Red Sandstone** 185 215 Gravel 215 217 Sand 220 217 **Turquoise Clay** 220 230 **Tan Clay**

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)	
4.5" (5'	OD) New	PVC +	-2' to 160' Sch40	
4.5" (5'	OD) New	Slotte	d PVC 160' to 230' .035	

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

Owner: HAL SHUMATE Owner Well #: No Data

Address: **3516 PACE BEND RD.** Grid #: **57-40-5**

SPICEWOOD, TX 78669

Latitude: 30° 25' 54" N

Well Location: 0 LAKESHORE DR.
SPICEWOOD, TX 78669
Longitude: 098° 04' 50" W

Well County: Travis Elevation: 638 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 2/26/2007 Drilling End Date: 2/27/2007

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

 Borehole:
 10
 0
 12

 8
 12
 100

 6.75
 100
 170

Drilling Method: Air Rotary

Borehole Completion: Open Hole

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

Annular Seal Data: 0 2

2 105 14

Seal Method: PRESSURE CEMENTED 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: 77 ft. below land surface on 2007-02-28 Measurement Method: Unknown

Packers: NEOPRENE 105

NEOPRENE 107 NEOPRENE 109

Type of Pump: Submersible Pump Depth (ft.): 160

Well Tests: **Jetted Yield: 10 GPM**

Water Type
Water Quality:

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: 3090

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	3	TOPSOIL
3	20	TAN SAND & GRAVEL
20	30	YELLOW CLAY
30	45	BLUE SHALE
45	75	RED SANDSTONE
75	85	RED ROCK
85	110	BLUE SHALE
110	165	RED ROCK W/B 10 GPM TDS 620
165	170	GOLD CLAY

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5 NEW PLASTIC	C 0-110)	
4.5 NEW SCREEN MFG. 110-170 .050			

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

Owner Well #: Owner: No Data Jeff Elliott

Address: 100 Spanish Oak Trail Grid #: 57-40-5

Spicewood, TX 78669

Latitude: 30° 25' 39" N Well Location: 24300 Old Ferry Rd

> Spicewood, TX 78669 Longitude: 098° 04' 21" W

Well County: **Travis** Elevation: No Data

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 10/23/2007 Drilling End Date: 10/23/2007

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

Borehole: 8 0 20

> 6.5 20 260

Drilling Method: Air Rotary

Borehole Completion: **Straight Wall**

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

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 150', 140', 20'

Type of Pump: No Data

Well Tests: Jetted Yield: 14-15 GPM Water Type
Water Quality: 150-240 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc

PO Box 867

Marble Falls, TX 78654

Driller Name: Michael G Becker, P.G. License Number: 54516

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	2	Top Soil
2	35	Grey-Tan Limestone
35	70	White Limestone
70	90	Grey Limestone
90	120	Blue Clay
120	150	Red Clay
150	180	Gravel
180	200	Tan Limestone
200	240	Gravel
240	260	Tan Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5" (5"	OD) New	PVC +	2' to 160' Sch40
4.5" (5"	OD) New	Slotte	d PVC 160' to 180' .035
4.5" (5"	OD) New	PVC 1	80' to 200' Sch40
4.5" (5"	OD) New	Slotte	d PVC 200' to 240' .035
4.5" (5"	OD) New	PVC 2	40' to 260' Sch40

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

Owner: Faught, Sybil Owner Well #: Faught#2

Address: 40703 Balcones Woods Drive Grid #: 57-40-4

Austin, TX 78759

Well Location: 25209 Lakeview Drive Latitude: 30° 25' 44" N

Spicewood, TX 78669 Longitude: 098° 05' 40" W

Well County: Travis Elevation: 700 ft. above sea level

Plugged Within 48 Hours

This well has been plugged

Plugging Report Tracking #123550

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 2/16/2009 Drilling End Date: 2/16/2009

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

Borehole: 8 0 120

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 2 1PortlandCement

2 120 Dry Cuttings

Seal Method: **Pour** Distance to Property Line (ft.): **11**

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

Distance to Septic Tank (ft.): No Data

Method of Verification: MEASURED

Surface Completion: Unknown

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: No Test Data Specified

Strata Depth (ft.) Water Type

Water Quality: No Data No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Service

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin D Lingle License Number: 54813

Apprentice Name: Gary S Tucker Apprentice Number: 58291

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	15	white rock sand
15	17	white limestone hard
17	60	red sand clay
60	65	red shale
65	85	white limestone hard
85	120	brown blue red clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
No Data	a		
NO Date	1		

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

Owner: C.R.I. Development, attn: Mike

Jennings

Address: 2007 Big Canyon Drive

Austin, TX 78746

Well Location: 801 Paleface Ranch Rd S

Spicewood, TX 78669

Well County: **Travis** Owner Well #: No Data

Grid #: 57-40-4

Latitude: 30° 25' 46" N

Longitude: 098° 06' 22" W

Elevation: No Data

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 10/19/2004 Drilling End Date: 10/19/2004

Diameter (in.)

Top Depth (ft.)

Bottom Depth (ft.)

Borehole:

9 6

0 30

30 260

Drilling Method:

Air Rotary

Borehole Completion: **Straight Wall**

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

Annular Seal Data:

30

6

Seal Method: Slurry

Distance to Septic Field or other

Sealed By: Driller

concentrated contamination (ft.): 100+

Distance to Septic Tank (ft.): No Data

Distance to Property Line (ft.): No Data

Method of Verification: owner

Surface Completion: **Surface Sleeve Installed**

Water Level:

No Data

Packers:

2 PVC and burlap, 30' and 130'

Type of Pump:

Submersible

Well Tests:

Jetted

Yield: 2-4 GPM

Strata Depth (ft.) Water Type
Water Quality: 30 Trinity

Chemical Analysis Made: No

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

Dia. (in.) New/Used Type

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

Setting From/To (ft.)

No

Top (ft.)	Bottom (ft.)	Description
0	3	topsoil
3	22	clay
22	30	blue lime
30	55	white lime
55	120	gray lime and clay
120	200	red beds Trinity
200	260	blue clay
		+

5 OD N plastic +2-260 sch40	

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

Owner: **ENCINO HOMES**

Address: 110 WINCHESTER

DRIPPING SPRINGS, TX 78620

Well Location: **LOT 3 PALEFACE RANCH RD**

SPICEWOOD, TX 78669

001

57-40-4

30° 26' 27" N

Owner Well #:

Grid #:

Latitude:

Longitude: 098° 06' 43" W

Well County: **Travis** Elevation: 795 ft. above sea level

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 11/19/2009 Drilling End Date: 11/19/2009

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

Borehole: 10 0 12

> 6.75 12 190

Drilling Method: Air Rotary

Borehole Completion: **Open Hole**

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

Annular Seal Data: 0 10 **8 CEMENT**

10 17 **4 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: NOT YET INSTALLED

Surface Completion: **Surface Sleeve Installed**

Water Level: 16 ft. below land surface on 2009-11-25 Measurement Method: Unknown

Packers: 1 NEOPRENE 17Æ

Pump Depth (ft.): 70 Type of Pump: **Submersible**

Yield: 15 GPM Well Tests: Jetted

Strata Depth (ft.) Water Type Water Quality:

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

License Number: Driller Name: JIM BLAIR 54416

Apprentice Name: **CESAR RAMOS** Apprentice Number: 3090

Comments: No Data

Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL**

Top (ft.)	Bottom (ft.)	Description
0	2	TOPSOIL
2	15	CALICHE
15	60	WHITE ROCK W/B 15 GPM TDS 400
60	100	BLUE SHALE
100	125	TAN CLAY
125	140	BLACK ROCK
140	150	TAN CLAY
150	180	RED ROCK
180	190	BLUE SHALE

Casing: **BLANK PIPE & WELL SCREEN DATA**

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5 NEW PLASTIC	C 0 20		
4.5 NEW PLASTIC	C 20 60	.050	
4.5 NEW PLASTIC	C 60 80		

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

Owner: Tom's Water Well Owner Well #: 1

Address: 1414 ECR 130 Grid #: 45-08-5

Midland, TX 79706

Well Location: ECR 140 Latitude: 31° 55' 53" N

Midland, TX Longitude: 102° 02' 55" W

Well County: Midland Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 1/27/2007 Drilling End Date: 1/27/2007

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

Borehole: 8.5 0 110

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 90 110 Gravel

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

Annular Seal Data: 0 90 28 cement

Seal Method: **Pumped** Distance to Property Line (ft.): **10**

Sealed By: **jason**Distance to Septic Field or other concentrated contamination (ft.): **na**

Distance to Septic Tank (ft.): No Data

Method of Verification: measured

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: Estimated Yield: 15 GPM

Water Type
Water Quality:

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: Wheeler Drilling

4223 West 16th St. Odessa, TX 79763

Driller Name: Ron Wheeler License Number: 2355

Comments: \$mb

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0	2	top soil	5 n pvc 0 90
2	70	dry sand	5 n pvc-slotted 90 110
70	90	wet sand	
90	108	water sand	
108	110	red bed	

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

Owner: Pat Di Iorio Owner Well #: 1

Address: 3525 Katy Hockley Rd Grid #: 57-40-4

Katy, TX 77493

Well Location: 25215 Lakeview Dr

Spicewood, TX 78669 Longitude: 098° 05' 22" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 6/2/2010 Drilling End Date: 6/2/2010

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

Borehole: 8 0 125

Drilling Method: Air Rotary; Mud (Hydraulic) Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 84 9 of Portland

Seal Method: **Pressure Tremmie** Distance to Property Line (ft.): **6**

Sealed By: **Driller**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

Packers: Burlap/Neoprene 84, 80

No Data

Type of Pump: No Data

Well Tests: Estimated Yield: 25 GPM

Water Level:

Water Type
Water Quality:

No Data

Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P O Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	5	Gravel
5	17	Sand
17	20	Gravel
20	48	Red Sandy Clay
48	55	Red Sand
55	66	Red Sandstone & Clay
66	67	Turquoise Clay
67	71	Red Clay
71	82	Tan Limestone
82	84	Tan Clay
84	105	Gravel & H2O
105	115	Tan Clay
115	125	Blue Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5" (5"	OD) New	PVC +	2' to 85' SDR17
4.5" (5"	OD) New	Slotte	d PVC 85' to 105' .035
4.5" (5"	OD) New	PVC 1	05' to 125' SDR17

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

Owner: Sybil Faught Owner Well #: Faught #3 test

Address: 4703 Balcones Woods Dr. Grid #: 57-40-4

Austin, TX 78759

Well Location: 25209 Lakeview Dr

Spicewood, TX 78669 Longitude: 098° 05' 21" W

Well County: Travis Elevation: 736 ft. above sea level

Plugged Within 48 Hours

This well has been plugged

Plugging Report Tracking #128251

Type of Work: New Well Proposed Use: Test Well

Drilling Start Date: 7/30/2010 Drilling End Date: 7/30/2010

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

Borehole: 8 0 200

Drilling Method: Air Rotary

Borehole Completion: Plug

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

Annular Seal Data: 0 20 6 portland

20 200 PlugDryCuttings

Seal Method: Pressure grout Distance to Property Line (ft.): 22

Sealed By: Whisenant & Lyle Water Distance to Septic Field or other

Services concentrated contamination (ft.): 150

Distance to Septic Tank (ft.): No Data

Method of Verification: measured

Surface Completion: Unknown

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: Unknown Yield: 0 GPM

Strata Depth (ft.) Water Type

Water Quality: No Data No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

PO Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

day

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	3	white limestone hard
3	5	gray limestone
5	15	white gray limestone
15	17	red clay
17	19	brown clay
19	25	red clay sandstone
25	40	white-red sandstone hard
40	47	brown limestone
47	112	red sandstone red clay
112	137	white limestone hard
137	200	brown clay shale

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)

Plug hole - Dry - Pulled back with dry cuttings same

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

Owner Well #: Owner: No Data LYLE VEGA

Address: **25012 WHITNEY DRIVE** Grid #: 57-40-4

SPICEWOOD, TX 78669

Latitude: 30° 25' 44" N Well Location: **25012 WHITNEY DRIVE**

SPICEWOOD, TX 78669 Longitude: 098° 05' 10" W

Well County: **Travis** Elevation: No Data

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 1/13/2011 Drilling End Date: 1/13/2011

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

Borehole: 9 0 100

> 100 220 6.5

Drilling Method: Air Hammer

Borehole Completion: **CASED**

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

Annular Seal Data: 0 100 **6 CEMENT**

0 100 **6 VOLCLAY**

Seal Method: PRESSURE TRIMMY Distance to Property Line (ft.): N/A

CEMENTING

Sealed By: **CENTRAL TEXAS** Distance to Septic Field or other DRILLING, INC.

concentrated contamination (ft.): N/A

Distance to Septic Tank (ft.): No Data

Method of Verification: WELL DRILLED

FIRST

Surface Sleeve Installed Surface Completion:

Water Level: 148.6 ft. below land surface on 2011-01-Measurement Method: Unknown

Packers: 4 BURLAP, PVC, RUBBER 100', 120', 140', 190'

Type of Pump: **Submersible**

Well Tests: **Jetted** Yield: 5 GPM Strata Depth (ft.)Water TypeWater Quality:40TRINITY

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. 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: Amended 7/25/11 Ref.# 9311

Amended 8/10/11 Ref.# 9379

Report Amended on by Request #9311

Report Amended on by Request #9379

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	40	TAN LIMESTONE
40	45	GRAY/BROWN LIMESTONE
45	50	GRAY LIMESTONE
50	65	HAMMIT CLAY
65	105	HAMMIT CLAY W/RED CLAY
105	110	TRINITY SAND & GRAVEL
110	135	SAND & RED CLAY
135	145	RED W/SHALE RED LIMESTONE
145	185	SAND & GRAVEL
185	190	CLAY STRIPS
190	220	BLUE CLAY

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Type	Setting From/To (ft.)
5" OD N PVC SDI	R17 +3	TO 220
5" OD N PVC SDI	R17 SL	OT 140 TO 180 .032

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

Owner Well #: Owner: No Data **Brandi Severence**

25709 Paleface Shore Dr. Address: Grid #: 57-40-4

Spicewood, TX 78669

30° 26' 08" N Well Location: 25709 Paleface Shore Dr.

Spicewood, TX 78669 Longitude: 098° 05' 31" W

Latitude:

Well County: **Travis** Elevation: No Data

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 4/27/2011 Drilling End Date: 4/27/2011

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

Borehole: 8 0 20

> 6.5 20 217

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

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 155,150,140,20

Type of Pump: No Data

Well Tests: Jetted Yield: 30 GPM Water Type
Water Quality: 157-195 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P O Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	37	White Limestone
37	45	Tan Limestone
45	55	Gray Limestone
55	99	Blue Clay
99	122	Red Clay
122	134	Sandstone & Red Clay
134	157	White Limestone & Clay
157	178	Gravel & H2O
178	195	Gravel (Big) & H2O
195	217	Tan Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5" (5'	' OD) New	PVC +	- 2' to 157' SDR17
4.5" (5'	' OD) New	Slotte	d PVC 157' to 197' .035
4.5" (5'	' OD) New	PVC 1	97' to 217' SDR17

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

Owner: Sam Lane Owner Well #: No Data

Address: 25102 Whitney Dr. Grid #: 57-40-4

Spicewood, TX 78669

Latitude: 30° 25' 45" N

Well Location: 25102 Whitney Dr.

Spicewood, TX 78669 Longitude: 098° 05' 12" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 5/5/2011 Drilling End Date: 5/5/2011

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

Borehole: 8 0 100

6.25 100 200

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 100 11 of Portland

Seal Method: **Pressure** Distance to Property Line (ft.): **10**

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **50+**

, ,

Distance to Septic Tank (ft.): No Data

Method of Verification: Landowner

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: Burlap/Neoprene 100, 105, 20

Type of Pump: No Data

Well Tests: Unknown Yield: 15 GPM

Water Type
Water Quality: 122-180 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P O Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 1 Top Soil 1 42 **Tan Limestone** 42 75 Grey Limestone w/ Clay 75 82 **Grey Sandstone** 82 122 **Red Sandstone** 122 130 **Gravel H2O** 130 140 **Red Sandstone** 140 180 Gravel 180 200 **Tan Clay**

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)
4.5" (5'	' OD) New	PVC +	- 2' to 120' SDR17
4.5" (5'	' OD) New	Slotte	d PVC 120' to 180' .035
4.5" (5'	' OD) New	PVC 1	80' to 200' SDR17

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

Owner: Stephen Miller Owner Well #: #1

Address: 24901 Lakeview Drive Grid #: 57-40-4

Spicewood, TX 78669

Latitude: 30° 25' 31" N

Well Location: 24901 Lakeview Drive Spicewood, TX 78669 Longitude: 098° 05' 05" W

Well County: Travis Elevation: 740 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 8/9/2011 Drilling End Date: 8/9/2011

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	10	0	10
	8	10	100
	6.75	100	170

Drilling Method: Air Hammer; Air Rotary

Borehole Completion: Open Hole

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

Annular Seal Data: 1 100 18 / Cement

Seal Method: **Trimmie pipe - Slurry and**Distance to Property Line (ft.): **No Data**

poured

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **100**

concentrated contamination (it.).

Distance to Septic Tank (ft.): No Data

Method of Verification: Tape - wheel

Surface Completion: Pitless Adapter Used

Water Level: No Data

Packers: Neoprene 100'

Neoprene 120'

Type of Pump: Submersible

Well Tests: Jetted Yield: 75 GPM

Description (number of sacks & material)

Top Depth (ft.) Bottom Depth (ft.)

Plug Information: N/A

Strata Depth (ft.) Water Type Water Quality: 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**

Setting From/To (ft.)

From (ft) To (ft) Description Dia. (in.) New/Used Type 4.5 New Plastic 0 to 130' 0-1 Topsoil 4.5 New Screen, Mfg. 130' to 170' .050 1 to 4 White rock 4 to 10 Tan caliche 10 to 30 Tan limestone 30 to 35 Void 35 to 60 Grey clay 60 to 90 Red clay 90 to 120 Red sandstone with clay 120 to 170 Multi color rock-1st H2O 75 gpm

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

Owner: Owner Well #: **Bryan Haye**

Address: 501 Nomad Grid #: 57-40-4

Latitude: 30° 25' 49" N Well Location: 501 Nomad

Spicewood, TX 78669 Longitude: 098° 06' 00" W

Well County: **Travis** Elevation: 712 ft. above sea level

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 9/30/2011 Drilling End Date: 9/30/2011

Spicewood, TX 78669

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

6.75 10 240

Drilling Method: Air Hammer; Air Rotary

Borehole Completion: **Filter Packed**

Top Depth (ft.) Bottom Depth (ft.) Filter Material Filter Pack Intervals: 100 240 Gravel .25

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

Annular Seal Data: 100 19 / Cement

Seal Method: Trimmie pipe - Slurry and Distance to Property Line (ft.): 50

poured

Sealed By: Driller Distance to Septic Field or other concentrated contamination (ft.): No Data

Distance to Septic Tank (ft.): No Data

Method of Verification: Tape - wheel

Size

Pitless Adapter Used Surface Completion:

Water Level: No Data

Packers: Neoprene 100'

Type of Pump: **Submersible**

Jetted Yield: 2 GPM Well Tests:

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

Plug Information: N/A Strata Depth (ft.) Water Type

Water Quality: 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

Top (ft.)	Bottom (ft.)	Description
0	3	Topsoil
3	7	White limestone
7	10	Tan caliche
10	20	Tan limestone
20	26	Multi color limestone
26	35	Grey limestone
35	60	Grey shale
60	65	Grey limestone
65	75	Grey shale
75	100	Red clay
100	140	Red sandstone
140	170	Multi color sandstone
170	200	Red clay
200	240	Brown clay

Dia. (in.) N	lew/Used	Type	Setting From/To (ft.)	
4.5 New I	Plastic 0	to 120	•	
4.5 New 9	Screen ,	Mfg. 12	20' to 240' .050	

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

Owner: CASTLETOP RANCH Owner Well #: No Data

Address: 3600 N.CAP.OF TX.HWY.BLDG.B Grid #: 57-40-4

AUSTIN, TX 78746

Well Location: 25800 COX CROSSINGS RD.

Latitude: 30° 26' 24" N

SPICEWOOD, TX 78669 Longitude: 098° 05' 12" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Irrigation

Drilling Start Date: 11/3/2011 Drilling End Date: 11/3/2011

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

Borehole: 10 0 40

6 40 170

Drilling Method: Air Rotary

Borehole Completion: CASED

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

Annular Seal Data: 0 90 8 CEMENT

0 90 4 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: No Data

Packers: 3 BURLAP, PVC 90',100',150'

Type of Pump: Submersible

Well Tests: Jetted Yield: 35-40 GPM

Strata Depth (ft.) Water Type
Water Quality: 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

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	10	CALICHE/TAN LIMESTONE
10	30	TAN LIMESTONE
30	35	TAN CLAY
35	70	RED LIMESTONE
70	90	TAN LIMESTONE & RED CLAY
90	160	RED SAND & GRAVEL
160	165	YELLOW CLAY
165	170	BLUE CLAY

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5" OD 1	N SDR17 F	VC +3	TO 170
E" OD 1	I CDD47 E	יייר פו	OT 90 TO 150 .032

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

Owner: Timothy White Owner Well #: #2

Address: 25201 Old Ferry Road Grid #: 57-40-4

Spicewood, TX 78669

Well Location: 25201 Old Ferry Road Latitude: 30° 25' 48" N

Spicewood, TX 78669 Longitude: 098° 05' 14" W

Well County: Travis Elevation: 742 ft. above sea level

This well has been plugged

Plugging Report Tracking #79120

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 10/12/2011 Drilling End Date: 10/12/2011

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

 Borehole:
 10
 0
 10

 8
 10
 100

6.75 100 230

Drilling Method: Air Hammer; Air Rotary

Borehole Completion: Open Hole

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

Annular Seal Data: 1 100 18 / Cement

Seal Method: **Trimmie pipe - Slurry and**Distance to Property Line (ft.): **10**

poured

Sealed By: **Driller** Distance to Septic Field or other

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

Distance to Septic Tank (it.). No Data

Method of Verification: **Tape - wheel**

Surface Completion: Pitless Adapter Used

Water Level: No Data

Packers: Neoprene 100'

Neoprene 120' and 125'

Neoprene 220'

Type of Pump: Submersible

Well Tests: Jetted Yield: 3 GPM

Plug Information:

Description (number of sacks & material)

Top Depth (ft.)

Bottom Depth (ft.)

Water Quality: No Data Fresh

Chemical Analysis Made: No

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Bee Cave Drilling

185 Angelfire Drive

Dripping Springs, TX 78620

Driller Name: Charles Coffindaffer #58658 License Number: 58658

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description 0 to 3 Topsoil 3 to 10 Flint 10 to 30 White limestone 30 to 35 Grey limestone and clay 35 to 80 Grey clay 80 to 120 Red clay and rock 120 to 140 Red sandstone 130 1st H2O-3 gpm 140 to 180 Tan sandstone 180 to 220 Tan clay 220 to 230 Tan shale

Casing: BLANK PIPE & WELL SCREEN DATA

Setting From/To (ft.)

Dia. (in.) New/Used Type
4.5 New Plastic 0 to 120'

4.5 New Screen , Mfg. 120' to 160' .050

4.5 New Plastic 160' to 220'

4.5 New Screen , Mfg. 220' to 230' .050

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

Owner: Todd & Penelope Kemper Owner Well #: No Data

Address: **25216 River Rd.** Grid #: **57-40-5**

Well Location: 25216 River Rd. Latitude: 30° 26' 23" N

Spicewood, TX 78669 Longitude: 098° 04' 55" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 12/21/2011 Drilling End Date: 12/21/2011

Spicewood, TX 78669

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

Borehole: 8 0 100

6.5 100 225

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 100 11 of Portland

Seal Method: **Pressure** Distance to Property Line (ft.): **10**

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 125, 120, 100

Type of Pump: No Data

Well Tests: **Jetted Yield: 25 GPM**

Strata Depth (ft.) Water Type

Water Quality: 125-210 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Michael G. Becker, P. G. License Number: 54516

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	41	Tan Limestone
41	52	Tan/Grey Limestone
52	96	Grey Clay
96	115	Red Sandstone
115	119	Gravel
119	125	Red Sandstone
125	133	Gravel
133	147	Red Sandstone
147	210	Sand/Gravel
210	212	Tourquoise Clay
212	225	Tan Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)
4.5" (5'	' OD) New	PVC +	- 2' to 150' SDR17
4.5" (5'	' OD) New	Slotte	d PVC 150' to 210' .035
4.5" (5'	' OD) New	PVC 2	10' to 225' SDR17

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

Owner: SERGIO CRUZ Owner Well #: No Data

Address: 25001 WHITNEY DRIVE Grid #: 57-40-4

SPICEWOOD, TX 78669

Well Location: 25001 WHITNEY DRIVE Latitude: 30° 25' 41" N

SPICEWOOD, TX 78669 Longitude: 098° 05' 06" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 6/14/2012 Drilling End Date: 6/14/2012

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

Borehole: 9 0 50

6.5 50 570

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 6 VOLCLAY

Seal Method: PRESSURE TRIMMIE Distance to Property Line (ft.): N/A

CEMENTING

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **N/A**

concentrated contamination (it.).

Distance to Septic Tank (ft.): No Data

Method of Verification: **OWNER**

Surface Completion: Surface Sleeve Installed

Water Level: 140 ft. below land surface on 2012-06-14 Measurement Method: Unknown

Packers: 3 BURLAP, PVC, RUBBER 100', 120', 140'

Type of Pump: Submersible

Well Tests: Jetted Yield: 7-10 GPM

Strata Depth (ft.) Water Type
Water Quality:
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: **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
 Dia. (in.) New/Used
 Type
 Setting From/To (ft.)

 0-1 ROCK
 5" OD N SDR17 PVC +3 TO 205

 1-10 CALICHE
 5" OD N SDR17 PVC SLOT 160 TO 200 .032

10-12 BLUE/GRAY LIMESTONE

12-16 GRAY LIMESTONE

16-42 TAN LIMESTONE

42-60 GRAY LIMESTONE

60-75 HAMMETT CLAY

75-100 HAMMETT CLAY W/RED CLAY

100-110 GRAY LIMESTONE W/SAND

W/CLAY

110-115 RED CLAY

115-130 RED SAND

130-140 RED W/CLAY LIMESTONE

140-150 RED/TAN SAND

150-155 TAN SAND

155-160 RED/TAN SAND

160-200 SAND & GRAVEL H20

200-205 TAN LIMESTONE W/BLUE CLAY

Submitted on: 7/9/2012

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

Owner: MIKE & DEBBIE BOYER Owner Well #: No Data

Address: 21210 KELLIWOOD GREENS DRIVE Grid #: 57-40-5

KATY, TX 77450

Well Location: 25036 RIVER RD. Latitude: 30° 26' 08" N

SPICEWOOD, TX 78669 Longitude: 098° 04' 54" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 8/31/2012 Drilling End Date: 8/31/2012

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

Borehole: 9 0 100

6 100 185

Drilling Method: Air Rotary

Borehole Completion: CASED

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

Annular Seal Data: 0 105 15 CEMENT

0 105 3 VOLCLAY

Seal Method: PRESSURE TRIMMIE Distance to Property Line (ft.): N/A

CEMENT

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **N/A**

concentrated contamination (it.).

Distance to Septic Tank (ft.): No Data

Method of Verification: WELL DRILLED

FIRST

Surface Completion: Surface Sleeve Installed

Water Level: 100 ft. below land surface on 2012-08-31 Measurement Method: Unknown

Packers: 3 BURLAP, PVC 105', 125', 145'

Type of Pump: Submersible

Well Tests: Jetted Yield: 25-30 GPM

Water Type
Water Quality:
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: 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
 Dia. (in.) New/Used
 Type
 Setting From/To (ft.)

 0-1 TOP SOIL
 5" OD N PVC SDR17 +3 TO 185

 1-10 CALICHE
 5" OD N PVC SDR17 SLOT 145 TO 185 .025

10-60 GRAY LIMESTONE

60-70 HAMMETT CLAY

70-100 HAMMETT CLAY W/RED CLAY

100-105 RED SANDSTONE

105-115 RED/TAN SAND & GRAVEL

115-120 RED/TAN LIMESTONE W/RED

CLAY

120-125 RED SAND & GRAVEL

125-145 SAND & CLAY

145-185 SAND & GRAVEL

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

Owner: Mertz 09 Ranch Owner Well #: No Data

Address: 427 West Concho Ave. Grid #: 55-01-3

San Angelo, TX 76901

Well Location: west of Eldorado

Latitude: 30° 57' 57" N

TX Longitude: 100° 53' 57" W

Well County: Schleicher Elevation: No Data

Type of Work: New Well Proposed Use: Stock

Drilling Start Date: 12/5/2012 Drilling End Date: 12/6/2012

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

Borehole: 8 0 20

6.75 20 400

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: -2 20 9 cement

Seal Method: **poured from top**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

Water Level: No Data

Packers: rubber 20

Type of Pump: No Data

Well Tests: Estimated Yield: 20-30 GPM

Strata Depth (ft.) Water Type Water Quality: 375 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: Lange Drilling Co.

PO Box 283

Rowena, TX 76875

Driller Name: **Chris Lange** License Number: 54577

Comments: No Data

Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL**

Casing: **BLANK PIPE & WELL SCREEN DATA**

Setting From/To (ft.)

From (ft) To (ft) Description	Dia. (in.) New/Used Type
0-147 white lime	5 new sch 40 pvc +2-400
147-214 gray lime	mill slot 320-400 .035
214-270 white lime	
235-water-5gpm	
270-315 gray lime	
315-321 white lime	
321-325 gray lime	
325-328 white lime	
328-400 white-yellow lime	
375-378 cave-water	

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

Owner: WENDY CORREA Owner Well #: No Data

Address: **24906 MARTIN LANE** Grid #: **57-40-4**

SPICEWOOD, TX 78669

Well Location: 24907 MARTIN LANE

Latitude: 30° 25' 37" N

SPICEWOOD, TX 78669 Longitude: 098° 05' 05" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 5/20/2013 Drilling End Date: 5/20/2013

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

Borehole: 9 0 100

6.5 100 205

Drilling Method: Air Hammer

Borehole Completion: CASED

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

Annular Seal Data: 0 100 7 VOLCLAY

0 100 14 CEMENT

Seal Method: PRESSURE TRIMMIE Distance to Property Line (ft.): N/A

CEMENT

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: 147 ft. below land surface on 2013-05-20 Measurement Method: Unknown

Packers: 5 BURLAP, PVC 100',110',135',155',195'

Type of Pump: Submersible

Well Tests: Jetted Yield: 10 GPM

Strata Depth (ft.) Water Type
Water Quality:
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: 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

Setting From/To (ft.)

From (ft) To (ft) Description 0-1 ROCK 1-30 TAN LIMESTONE 30-40 GRAY/TAN LIMESTONE **40-55 GRAY LIMESTONE** 55-70 GRAY LIMESTONE (HAMMETT CLAY) 70-100 GRAY LIMESTONE (HAMMETT **CLAY) W/RED CLAY 100-105 GRAY ROCK** 105-155 RED LIMESTONE W/CLAY **STRIPS** 155-165 RED SANDSTONE 165-195 SAND & GRAVEL 195-205 BLUE CLAY STRIPS

BLANK PIPE & WELL SCREEN DATA

5" OD N SDR17 PVC +3 TO 205

Dia. (in.) New/Used Type

5" OD N SDR17 PVC SLOT 155 TO 195 .032

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

Owner: Bill O'Dell Owner Well #: No Data

Address: **2520 Sono,a Cove** Grid #: **57-40-4**

Austin, TX 78738

Well Location: 24800 Lakeview Dr

Spicewood, TX 78669 Longitude: 098° 05' 01" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 8/22/2013 Drilling End Date: 8/22/2013

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

Borehole: 8 0 99

6.25 99 210

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 99 7 ben 1 port

Seal Method: **Pressure** 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: Land Owner

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: Burlap 99,98

Type of Pump: No Data

Well Tests: Jetted Yield: 8 GPM

Water Type
Water Quality: 99-190 Trinity

Chemical Analysis Made: No

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling Inc.

P O Box 867

Marble Falls, TX 78654

Driller Name: Michael G Becker P.G. License Number: 54516

Comments: No Data

DESCRIPTION & COLOR OF FORMATION MATERIAL From (ft) To (ft) Description 000-001 Top Soil 001-024 Tan Limestone 024-055 Gray Tan Limestone 055-081 Gray Clay 081-099 Red Sandstone 099-104 Gravel H2o 104-109 Red Sandstone 109-120 Gravel 120-145 Red Sandstone 145-176 Gravel H2o 176-185 Red Sand stone 185-190 Gravel H2o 190-192

Lithology:

Casing: BLANK PIPE & WELL SCREEN DATA

BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)

4.5" (50D) New PVC +2 to 130 SDR 17

4.5" (50D) Slotted 130 to 190 .035

4.5" (50D) New PVC 190 to 210 SDR 17

192 210 Tan Clay

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

Owner: **George Tannehill** Owner Well #: No Data

Address: 24802 Lakeview Dr

Spicewood, TX 78669

Latitude:

Grid #:

57-40-4

Well Location: 24802 Lakeview Dr

Spicewod, TX 78669

30° 25' 30" N

Longitude:

098° 05' 00" W

Well County: **Travis**

Elevation:

No Data

Domestic

Type of Work: **New Well** Proposed Use:

Drilling End Date: 8/27/2013 Drilling Start Date: 8/27/2013

Diameter (in.)

Top Depth (ft.)

Bottom Depth (ft.)

Borehole:

8

0

100

6.25

100

220

Drilling Method:

Air Rotary

Borehole Completion:

Straight Wall

Bottom Depth (ft.)

Description (number of sacks & material)

Annular Seal Data:

Top Depth (ft.) 0

100

8ben1port

Seal Method: Pressure Tremmie

Distance to Property Line (ft.): 25

Sealed By: APEX Dilling Inc.

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

Distance to Septic Tank (ft.): No Data

Method of Verification: Land Owner

Surface Completion:

Surface Sleeve Installed

Water Level:

No Data

Packers:

Burlap 125,120,105,100

Type of Pump:

No Data

Well Tests:

Jetted

Yield: 5-6 GPM

Water Type
Water Quality: 125-201 Trinity

Chemical Analysis Made: No

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling Inc.

P O Box 867

Marble Falls, TX 78654

Driller Name: Michael G Becker P.G. License Number: 54516

Comments: No Data

Casing: Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL BLANK PIPE & WELL SCREEN DATA** From (ft) To (ft) Description Dia. (in.) New/Used Type Setting From/To (ft.) 000-036 Tan White Limestone 4.5" (50D) New PVC +2 to 140 SDR 17 4.5" (50D) Slotted 140 to 200 .035 036-055 Gray Limestone 4.5" (50D) New PVC 200 to 220 SDR 17 055-090 Clay 090-107 Red Clay 107-109 Gravel 109-120 Red Clay Sandstone 120-153 Red Sandstone H2o 153-201 Gravel H2o

201-203 Turquois Clay

203 Tan Blue Clay

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

Owner: DAHR JAMAIL Owner Well #: No Data

Address: 500 DALLAS ST., SUITE 3434 Grid #: 57-40-5

HOUSTON, TX 77002

Well Location: 600 RIVER RD. Latitude: 30° 26' 06" N

SPICEWOOD, TX 78669 Longitude: 098° 04' 38" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 11/9/2013 Drilling End Date: 11/9/2013

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

Borehole: 9 0 50

6.5 50 225

Drilling Method: Air Hammer

Borehole Completion: CASED

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

Annular Seal Data: 0 50 8 CEMENT

0 50 3 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: 112.6 ft. below land surface on 2013-11- Measurement Method: Unknown

09

Packers: 5 BURLAP, PVC 50',100',120',150',200'

Type of Pump: Submersible

Well Tests: Jetted Yield: 5-10 GPM

Strata Depth (ft.) Water Type Water Quality: 50 **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.

CENTEX PUMP & SUPPLY, INC. Company Information:

2520 HWY. 290 WEST

DRIPPING SPRINGS, TX 78620

Driller Name: **AARON GLASS** License Number: 4227

No Data Comments:

Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL**

Casing: BLANK PIPE & WELL SCREEN DATA

From (ft) To (ft) Description 0-1 TOP SOIL 1-18 TAN/GRAY LIMESTONE **18-40 GRAY LIMESTONE 40-50 HAMMETT CLAY** 50-55 HAMMETT CLAY W/RED CLAY 55-60 GRAY LIMESTONE 60-90 HAMMETT & RED CLAY 90-95 GRAVEL & SAND 95-120 RED CLAY **120-140 GRAVEL -SAND** 140-150 ROCK W/STRIPS OF YELLOW **CLAY** 150-195 SAND 195-225 RED/YELLOW/BLUE CLAY

Setting From/To (ft.) 5" OD N SDR17 PVC +3 TO 165

Dia. (in.) New/Used Type

5" OD N SDR17 PVC SLOT 165 TO 225 .032

STRIPS

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

Owner: John Morgan Owner Well #: No Data

Address: **25222 River Rd.** Grid #: **57-40-5**

Spicewood, TX 78669

Latitude: 30° 26' 25" N

Spicewood, TX 78669 Longitude: 098° 04' 56" W

Well County: Travis Elevation: 774 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 4/16/2014 Drilling End Date: 4/16/2014

25228 River Rd.

Borehole: Top Depth (ft.) Bottom Depth (ft.)

8 o 10

8.5 10 210

Drilling Method: Air Rotary

Well Location:

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 100 210 Gravel 3/8"

210 314401 370

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

Annular Seal Data: 0 100 21 cement

Seal Method: pressure cemented 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: Pitless Adapter Used

Water Level: 147 ft. below land surface on 2014-04-17 Measurement Method: Unknown

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 200

Well Tests: Jetted Yield: 10 GPM

Water Type
Water Quality:

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 limestone	
6	35	hard white rock	
35	40	yellow limestone	
40	70	gray limestone	
70	100	gray clay	
100	130	red clay	
130	145	red clay & gravel	
145	200	red & tan trinity gravel wb 1 gpm	
200	210	yellow clay	

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

Owner: **Cherry Creek Plaza Partnership**

Owner Well #: MW-3

Address: 1300 West Lynn Street

Austin, TX 78703

Latitude: 30° 12' 55" N

Grid #:

5700 Manchaca Well Location:

Austin, TX 78745

58-50-2

Longitude:

097° 48' 00" W

Well County: **Travis** Elevation: No Data

Type of Work: **New Well** Proposed Use: **Monitor**

Drilling Start Date: 6/14/2014 Drilling End Date: 6/14/2014

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

Borehole: 15 6 0

Drilling Method: Air Rotary

Borehole Completion: **Filter Packed**

> Size Top Depth (ft.) Bottom Depth (ft.) Filter Material

Filter Pack Intervals: 8 15 Gravel 12/20

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

Annular Seal Data: 0 2 1 Bag Concrete

> 8 1.68 Bentonite

Seal Method: HAND 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: **Alternative Procedure Used**

Water Level: No Data

Packers: N/A

Type of Pump: No Data

Well Tests: No Test Data Specified

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

Plug Information: N/A

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

Chemical Analysis Made: Unknown

Did the driller knowingly penetrate any strata which

contained injurious constituents?: Unknown

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Vortex Drilling Inc.

4412 Bluemel Road San Antonio, TX 78745

Driller Name: William A. Clayton License Number: 53420

Apprentice Name: Eddie Martinez

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL	Casing: BLANK PIPE & WELL SCREEN DATA		
From (ft) To (ft) Description	Dia. (in.) New/Used Type Setting From/To (ft.)		
05"Concrete.	2" New SCH 40 PVC .010 15' to 10' Screen		
.5"-4 Silty clay, medium brown, sl. moist, stiff.	2" New SCH 40 PVC 10' to 0 to Riser		
4-11 LS, tan, dry, hard.	2" New Top and Bottom Cap		
11 -15 Color change to gray.			

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

Owner: Owner Well #: No Data **Fernando Cruz**

Address: 25108 Whitney Dr. Grid #: 57-40-4

Spicewood, TX 78669 Latitude: 30° 25' 45" N

Well Location: 25108 Whitney Dr. Spicewood, TX 78669 Longitude: 098° 05' 13" W

Well County: **Travis** Elevation: No Data

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 12/15/2014 Drilling End Date: 12/15/2014

Diameter (in.) Top Depth (ft.) Bottom Depth (ft.) Borehole: 9 0 100

6.25 100 210

Drilling Method: Air Rotary

Borehole Completion: cased; Straight Wall

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

Annular Seal Data: 1 100 13cmt 4gel

Seal Method: pressure pumped / trimmie Distance to Property Line (ft.): 6

Sealed By: ADC Distance to Septic Field or other

concentrated contamination (ft.): 50

Distance to Septic Tank (ft.): No Data

Method of Verification: owner

Surface Completion: **Surface Sleeve Installed**

Water Level: 122 ft. below land surface on 2014-12-15 Measurement Method: Unknown

Packers: burlap,plastic,rubber @ 105,100

Type of Pump: **Submersible** Pump Depth (ft.): 0

Well Tests: Jetted Yield: 2-3 GPM

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

Plug Information: n/a

Strata Depth (ft.) Water Type Water Quality: 105-210 **Trinity**

> Chemical Analysis Made: No

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

No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Associated Drilling Inc.

PO Box 673

Dripping Springs, TX 78620

Driller Name: **James Benoit** License Number: 4064

Glass Well Service Comments:

Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL**

Top (ft.) Bottom (ft.) Description 0 10 white and tan lime 10 15 tan clay 15 55 gray lime 55 75 gray shale 75 105 gray and white limestone 105 130 red sandstone 130 150 tan and white limestone 150 180 red and white sandstone 180 205 yellow limestone 205 210 gray shale

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5 od ne	w sdr17 p	vc -3 t	o 150
5 od ne	w sdr17 p	vc (.03	32) screen 150 to 190
5 od ne	w sdr17 p	vc 190	to 210

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

Owner: Owner Well #: No Data Tom Etheredge

Address: 500 Paleface Ranch Rd. S. Grid #: 57-40-4

Spicewood, TX 78669

Latitude: 30° 26' 14" N Well Location: 500 Paleface Ranch Rd. S.

> Spicewood, TX 78669 Longitude: 098° 06' 25" W

Well County: **Travis** Elevation: 817 ft. above sea level

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 3/24/2015 Drilling End Date: 3/24/2015

Diameter (in.) Top Depth (ft.) Bottom Depth (ft.) Borehole: 9 10 0

> 8.5 9 225

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Filter Pack Intervals: 90 225 3/8" Gravel Description (number of sacks & material) Top Depth (ft.) Bottom Depth (ft.) Annular Seal Data:

0 40 6 cement 40 90 4 bentonite

Seal Method: slurried & poured Distance to Property Line (ft.): No Data

Sealed By: Derek Scott Distance to Septic Field or other

concentrated contamination (ft.): No Data

Distance to Septic Tank (ft.): No Data

Method of Verification: No Data

Size

Surface Completion: **Pitless Adapter Used**

Water Level: 145 ft. below land surface on No Data Measurement Method: Unknown

Packers: No Data

Type of Pump: **Submersible** Pump Depth (ft.): 195

Well Tests: **Jetted** Yield: 15 GPM Water Type
Water Quality:

No Data

Water Type
Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: 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	15	tan limestone & clay
15	20	red clay
20	70	tan sandstone
70	110	clay
110	140	red sandstone & clay
140	190	trinity mix w/ gravel wb
190	225	red clay

Dia. (in.) New/Used	Туре	Setting From/To (ft.)	
4.5 new sdr-17 0	225		
perf 140 - 200			

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

Owner: Eric Debner Owner Well #: No Data

Address: 600 Twisted Oaks Grid #: 57-40-4

Well Location: 25583 Pedernales Pt

Latitude: 30° 25' 57" N

Spicewood, TX 78669 Longitude: 098° 05' 37" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 4/15/2016 Drilling End Date: 4/15/2016

Horseshoe Bay, TX 78657

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

Borehole: 8 0 85

6.25 85 187

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 5 Portland 2 Bags/Sacks

5 85 Benseal 6 Bags/Sacks

Seal Method: **Pressure** Distance to Property Line (ft.): **50+**

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 85 ft.

Burlap/Neoprene at 90 ft.

Type of Pump: No Data

Well Tests: Pump Yield: 5 1/2 GPM

Water Quality:

Strata Depth (ft.)	Water Type
85 - 167	Trinity - TDS 920

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

The driller did certify that while drilling, deepening or otherwise altering the above described well, injurious water or constituents was encountered and the landowner or person having the well drilled was informed that such well must be completed or plugged in such a manner as to avoid injury or pollution.

Certification Data:

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

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

License Number: Driller Name: **Andrew Jackson Johnson** 54989

Comments: No Data

Report Amended on 3/9/2023 by Request #38895

Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL**

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	45	Tan White LS
45	52	Gray LS w/ Clay
52	85	Gray Clay
85	145	Red SS
145	167	Gravel
167	187	Tan Clay

Casing: **BLANK PIPE & WELL SCREEN DATA**

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	107
4.5	Screen	New Plastic (PVC)	.035	107	167
4.5	Blank	New Plastic (PVC)	SDR17	167	187

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

Owner: Owner Well #: No Data **Casey Williams**

Address: 25102 Lakeview Dr. Grid #: 57-40-4

Spicewood, TX 78669 Latitude:

30° 25' 40.99" N Well Location: 25102 Lakeview Dr. Spicewood, TX 78669

Travis

Well County: Elevation: 761 ft. above sea level

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 5/18/2016 Drilling End Date: 5/18/2016

Diameter (in.) Top Depth (ft.) Bottom Depth (ft.) Borehole: 10 0 12

> 8.5 12 200

Longitude:

098° 05' 14.5" W

Drilling Method: Air Rotary

Borehole Completion: **Filter Packed**

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size Filter Pack Intervals: 100 200 3/8" Gravel Top Depth (ft.) Bottom Depth (ft.) Description (number of sacks & material)

Annular Seal Data: 0 20 Cement 3 Bags/Sacks

20 100 **Bentonite 8 Bags/Sacks**

Seal Method: Pressure 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 Sleeve Installed Surface Completion: Surface Completion by Driller

Water Level: 88 ft. below land surface on 2016-05-20

Packers: No Data

Type of Pump: **Submersible** Pump Depth (ft.): 180

Well Tests: **Jetted** Yield: 3 GPM Water Type
Water Quality: 115 - 190 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: 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	25	tan limestone
25	75	gray limestone
75	85	brown clay
85	95	gray clay
95	115	red clay
115	190	red sandstone with sandy clay
190	200	yellow clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr-17	0	140
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	140	200

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

Owner: Joshua Buckner Owner Well #: No Data

Address: **8407 Selway** Grid #: **57-40-4**

Austin , TX 78736

Well Location: 121 Mels Rd

Spicewood, TX 78669 Longitude: 098° 05' 06" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 4/21/2016 Drilling End Date: 9/21/2016

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

Borehole: 8 0 12

6.25 12 208

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 20 Portland 4 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 20 ft.

Burlap/Neoprene at 30 ft. Burlap/Neoprene at 110 ft. Burlap/Neoprene at 115 ft. Burlap/Neoprene at 120 ft.

Type of Pump: No Data

Well Tests: Jetted Yield: 30 GPM

Strata Depth (ft.) Water Type

Water Quality: 120 - 188 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	33	Tan LS
33	53	Gray Tan LS
53	90	Gray Clay
90	120	Red SS
120	188	Gravel
188	200	Tan Clay
200	208	Gray Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	128
4.5	Screen	New Plastic (PVC)	.035	128	188
4.5	Blank	New Plastic (PVC)	SDR17	188	208

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

Owner: Enterline Owner Well #: No Data

Address: 24800 River Rd. Grid #: 57-40-4

Spicewood, TX 78669

Well Location: 24800 River Rd. Latitude: 30° 25' 45.4" N

Spicewood, TX 78669 Longitude: 098° 05' 00.5" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 7/27/2017 Drilling End Date: 7/27/2017

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

Borehole: 9 0 50

6.25 50 205

Drilling Method: Air Hammer

Borehole Completion: Straight Wall

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

Annular Seal Data: -1 50 6 cement 2 bentonite gelclay Bags/Sacks

Seal Method: **Hand Mixed** Distance to Property Line (ft.): >70

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 50 ft.

Burlap and Plastic at 125 ft. Burlap and Plastic at 145 ft.

Type of Pump: Submersible

Well Tests: Estimated Yield: 15-20 GPM

Strata Depth (ft.) Water Type

Water Quality: 110 - 205 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: Glass Well Service

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	40	tan lime
40	70	blue lime
70	95	blue lime and shale
95	110	gray white limestone
110	150	red sandstone and clay
150	165	red white limestone
165	185	multi-colored limestones gravel (h2o)
185	205	yellow limestone and clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr17	-3	145
4.5	Screen	New Plastic (PVC)	sdr17 0.032	145	205

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

Owner: ARELI LOPEZ Owner Well #: No Data

Address: 24904 MARTIN LANE Grid #: 57-40-4

SPICEWOOD, TX 78669

Well Location: 24904 MARTIN LANE

Latitude: 30° 25' 36.24" N

SPICEWOOD, TX 78669 Longitude: 098° 05' 04.14" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 8/31/2017 Drilling End Date: 8/31/2017

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

Borehole: 9 0 100

6.125 100 210

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 6 Bags/Sacks

0 100 Bentonite 3 Bags/Sacks

Seal Method: PRESSURE TREMIE Distance to Property Line (ft.): 10

CEMENTING

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **N/A**

concentrated contamination (it.). WA

Distance to Septic Tank (ft.): 50

Method of Verification: TAPE MEASURE

Surface Completion: Surface Sleeve Installed Surface Completion by Driller

Water Level: 110 ft. below land surface on 2017-09-04 Measurement Method: Electric Line

Packers: Burlap at 100 ft.

BURLAP & PLASTIC at 169 ft.

Type of Pump: Submersible Pump Depth (ft.): 180

Well Tests: Jetted Yield: 10 GPM

Strata Depth (ft.) Water Type

Water Quality: 170 - 210 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	1	TOP SOIL
1	22	WHITE LIMESTONE
22	25	BROWN LIMESTONE
25	80	GRAY LIMESTONE
80	100	BROWN CLAY
100	140	RED CLAY
140	170	BROWN LIMESTONE
170	205	GRAVEL
205	210	BROWN CLAY

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	2	170
5	Perforated or Slotted	New Plastic (PVC)	SDR17	170	210

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

Owner: Rick Shealy Owner Well #:

Address: 24613 Pedernales Cliff Trail Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 24613 Pedernales Cliff Trail

Latitude: 30° 25' 21.89" N

Spicewood, TX 78669 Longitude: 098° 04' 53.2" W

Well County: Travis Elevation: 749 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 2/14/2018 Drilling End Date: 2/14/2018

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

 Borehole:
 10
 0
 10

8.5 10 250

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size
Filter Pack Intervals: 160 250 Gravel 3/8"

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

Annular Seal Data: 0 160 Cement 39 Bags/Sacks

Seal Method: **Pressure** Distance to Property Line (ft.): **25**

Sealed By: **Driller**Variance Number: **008-18**Distance to Septic Field or other concentrated contamination (ft.): **30**

Distance to Septic Tank (ft.): 30

Method of Verification: tape

2

Surface Completion: Pitless Adapter Used Surface Completion by Driller

Water Level: No Data

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 220

Well Tests: **Jetted Yield: 15 GPM**

Strata Depth (ft.) Water Type

Water Quality: 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: 800 tds

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	13	white limestone
13	20	tan limestone
20	60	gray limestone
60	80	gray clay
80	130	red sandstone
130	160	red clay
160	180	gravel
180	210	red limestone
210	240	gray clay
240	250	tan limestone

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr-17	0	170
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	170	210
4.5	Blank	New Plastic (PVC)	sdr-17	210	250

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

Owner: Lee Grote

Owner Well #: No Data

Address:

25300 Pedernales Point

Spicewood, TX 78669

Latitude:

Well Location:

25300 Pedernales Point

Grid #:

30° 26' 14.91" N

Spicewood, TX 78669

Longitude:

098° 05' 07.7" W

Well County:

Travis

Elevation:

701 ft. above sea level

Type of Work:

New Well

Proposed Use:

Domestic

57-40-4

Drilling Start Date: 7/27/2018

Drilling End Date: 7/27/2018

Diameter (in.)

Top Depth (ft.)

Bottom Depth (ft.)

Borehole:

10.5

0

8.5

8.5

8.5

204

Drilling Method:

Air Rotary

Borehole Completion:

Filter Packed

Top Depth (ft.)

-...

Size

Filter Pack Intervals:

Bottom Depth (ft.)

Filter Material

3/8"

Filler Pack Intervals

Annular Seal Data:

80

0

204

Gravel

0.0

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

80

Cement 14 Bags/Sacks

Seal Method: Pressure

Distance to Septic Field or other

Sealed By: **Driller**

concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): No Data

Distance to Property Line (ft.): No Data

Method of Verification: No Data

Surface Completion:

Surface Sleeve Installed

Surface Completion by Driller

Water Level:

No Data

Packers:

No Data

Type of Pump:

Submersible

Well Tests:

Jetted

Yield: 10-15 GPM

Water Type
Water Quality: 80 - 160 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Bee Cave Drilling, Inc.

185 Angel Fire Dr.

Dripping Springs, TX 78620

Driller Name: Jim Blair License Number: 54416

Comments: top of production zone was at 80'

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	11	caliche
11	21	red shale
21	35	gravel
35	72	gray limestone
72	92	gravel
92	111	shale
111	130	tan limestone
130	140	gravel
140	160	gray limestone
160	204	gray limestone w/ shale stringers

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr-17	0	80
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	80	200

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

Owner: Craig Roberts Owner Well #: No Data

Address: **24900 River Rd** Grid #: **57-40-5**

Spicewood, TX 78669

Well Location: 24900 River Rd Latitude: 30° 25' 50" N

Spicewood, TX 78669 Longitude: 098° 04' 59" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 7/26/2018 Drilling End Date: 7/26/2018

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

Borehole: 8 0 100 6.25 100 225

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 100 7 Benseal 2 Portland 9 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.

Type of Pump: No Data

Well Tests: Jetted Yield: 45 GPM

Water Quality:

Strata Depth (ft.)	Water Type	
152 - 205	No Data	

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: No Data

Report Amended on 10/1/2018 by Request #26132

Report Amended on 10/1/2018 by Request #26140

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	30	Tan LS
30	42	Gray Tan LS
42	53	Tan LS
53	58	Gray Tam LS
58	92	Gray Clay
92	152	Red SS
152	205	Gravel
205	225	Tan Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	145
4.5	Screen	New Plastic (PVC)	.035	145	205
4.5	Blank	New Plastic (PVC)	SDR17	205	225

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

Owner: Jorge Burgos Owner Well #: No Data

Address: 201 N. Paleface Ranch Grid #: 57-40-4

Spicewood, TX 78669

Latitude: 30° 26' 25" N

Well Location: 201 N. Paleface Ranch
Spicewood, TX 78669
Longitude: 098° 06' 00" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 3/19/2019 Drilling End Date: 3/19/2019

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

Borehole: 8 0 18

6.25 18 224

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 20 Portland 4 Bags/Sacks

Seal Method: Slurry Distance to Property Line (ft.): 50

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **100**

concentrated contamination (ft.): 100

Distance to Septic Tank (ft.): 50

Method of Verification: Land Owner

Surface Completion: Surface Sleeve Installed Surface Completion by Driller

Water Level: No Data

Packers: Burlap/Neoprene at 20 ft.

Burlap/Neoprene at 25 ft. Burlap/Neoprene at 120 ft. Burlap/Neoprene at 130 ft.

Type of Pump: No Data

Well Tests: Jetted Yield: 5 GPM

Strata Depth (ft.) Water Type

Water Quality: 137 - 204 Trinity - TDS 620

> Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: **Andrew Jackson Johnson** License Number: 54989

Comments:

No Data

Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL**

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	35	Tan Red LS
35	61	Tan White LS
61	77	Gray Tan LS
77	85	Gray LS w/ Clay
85	114	Gray Clay
114	137	Red LS
137	141	Gravel
141	160	Red SS
160	204	Gravel
204	205	Turquoise Clay
205	224	Tan Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	144
4.5	Screen	New Plastic (PVC)	.035	144	204
4.5	Blank	New Plastic (PVC)	SDR17	204	224

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

Owner: Petroleum Wholesale, LP Owner Well #:

Address: P.O. Box 4456 Grid #: 45-13-5

Houston, TX 77210

Well Location: 5934 I-20 West Latitude: 31° 48' 43.14" N

Odessa, TX 79763 Longitude: 102° 25' 56.93" W

Well County: Ector Elevation: No Data

Type of Work: New Well Proposed Use: Monitor

Drilling Start Date: 2/14/2020 Drilling End Date: 2/14/2020

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

Borehole: 8 0 70

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 48 70 Sand 20/40

Annular Seal Data: No Data

Seal Method: **Tremie** 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

MW-2

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 Type
Water Quality:

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: Talon/LPE

921 N. Bivins

Amarillo, TX 79107

Driller Name: Shane Currie License Number: 54499

Apprentice Name: Colby Chapa

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Asphalt Pavement/Caliche Base
1	26	Sand, Fine Grained, Pinkish Tan w/ Small Caliche Gravel
26	70	Sand, Fine-Medium Grained, Tan-Orange

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
2	Blank	New Plastic (PVC)	40	0.25	50
2	Screen	New Plastic (PVC)	40/ 0.010	50	70

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

Owner: Greg Mcbride Owner Well #: No Data

Address: **25011 Lakeview dr** Grid #: **57-40-4**

Spicewood , TX 78669

Well Location: 25011 Lakeview dr

Spicewood, TX 78669 Longitude: 098° 05' 16.25" W

Well County: Travis Elevation: 717 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 1/16/2020 Drilling End Date: 1/20/2020

10

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

 Borehole:
 10.625
 0
 10

8.5 10 200

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Filter Pack Intervals:

100
200
Gravel

Top Depth (ft.) Bottom Depth (ft.) Gravel

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

Annular Seal Data:
0
10
Cement 3

Seal Method: **Pressure**Distance to Property Line (ft.): **20**

Sealed By: **Driller** Distance to Septic Field or other

100

concentrated contamination (ft.): 100+

Distance to Septic Tank (ft.): 85+

Method of Verification: No Data

Bentonite 8

Surface Completion: Pitless Adapter Used

Water Level: 53 ft. below land surface on 2020-01-22 Measurement Method: Electric Line

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 180

Well Tests: No Test Data Specified

Strata Depth (ft.) Water Type

Water Quality: No Data No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Bee Cave Drilling, Inc.

185 Angel Fire Dr.

Dripping Springs, TX 78620

Driller Name: jim blair License Number: 54416

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	2	top soil
2	10	caliche
10	30	tan clay/limestone
30	40	grey clay
40	70	grey limestone/with clay
70	110	red gravel
110	135	tan sandstone wb 5-10 gpm
135	145	grey sandstone
145	170	multi colored sandstone
170	200	dark grey clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr-17	0	140
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	140	200

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

Owner: Alejandra Paredon Owner Well #: No Data

Address: **25104 Lakeview Dr.** Grid #: **57-40-4**

Spicewood, TX 78669

Well Location: 25104 Lakeview Dr.
Spicewood, TX 78669
Latitude: 30° 26' 08.6" N

Spicewood, 1X 78669 Longitude: 098° 05' 26.2" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 2/24/2020 Drilling End Date: 2/24/2020

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

Borehole: 9 0 100

6.125 100 230

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

Annular Seal Data: No Data

Seal Method: CUTTINGS/ CEMENT 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: No Data

Surface Completion: No Data Surface Completion NOT by Driller

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: No Test Data Specified

Description (number of sacks & material)

Top Depth (ft.) Bottom Depth (ft.)

Plug Information: Cement 0 5

Cuttings 5 230

Water Quality:

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

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

The driller did certify that while drilling, deepening or otherwise altering the above described well, injurious water or constituents was encountered and the landowner or person having the well drilled was informed that such well must be completed or plugged in such a manner as to avoid injury or pollution.

Certification Data:

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

Company Information: Centex Pump & Supply, Inc.

2520 Hwy. 290 West

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	SAND/ROCK
20	25	GRAY LIMESTONE
25	60	GRAY W/ CLAY LIMESTONE
60	65	RED CLAY
65	85	GRAY LIMESTONE/CLAY
85	120	RED SAND/ GRAVEL
120	125	BROWN CLAY
125	190	RED BROWN
190	230	YELLOW CLAY

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

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

Owner: David June Owner Well #: No Data

Address: 14622 Carols Way Dr. Grid #: 57-40-4

Houston, TX 77070

Well Location: 521 Nomad Dr

Spicewood, TX 78669 Longitude: 098° 05' 37" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 11/12/2020 Drilling End Date: 11/12/2020

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

Borehole: **8.5 0 100**

6.25 100 196

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 100 7 Benseal 2 Portland 9 Bags/Sacks

Seal Method: **Pressure** Distance to Property Line (ft.): **10**

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.

Type of Pump: No Data

Well Tests: Jetted Yield: 25 GPM

Strata Depth (ft.) Water Type

Water Quality: 105 - 176 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

S. Travis Co

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number:

Comments:

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	20	Tan White LS
20	40	Gray LS
40	55	Gray LS w/ Clay
55	60	Brown Clay
60	76	Gray LS w/ Clay
76	132	Red SS
132	138	Gravel Red SS
138	142	Gravel W/ Sand
142	174	Gravel W/ Sand
174	176	Turquoise Clay
176	196	Tan Clay

Casing: BLANK PIPE & WELL SCREEN DATA

54989

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	116
4.5	Screen	New Plastic (PVC)	.035	116	176
4.5	Blank	New Plastic (PVC)	SDR17	176	196

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

Owner: Lloyd Helms Owner Well #: No Data

Address: 26000 Master Parkway Grid #: 57-40-4

Spicewood, TX 78669

Well Location: 25646 Pedernales Point Dr

Spicewood, TX 78669 Longitude: 098° 05' 37" W

Well County: Travis Elevation: No Data

Type of Work: Unknown Proposed Use: Unknown

Drilling Start Date: 3/18/2022 Drilling End Date: 3/18/2022

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

Borehole: 8 0 92

6.25 92 180

Drilling Method: Unknown

Borehole Completion: Unknown

Annular Seal Data: No Data

Seal Method: Unknown Distance to Property Line (ft.): UNKNOWN

Sealed By: **Driller** Distance to Septic Field or other

concentrated contamination (ft.): UNKNOWN

Distance to Septic Tank (ft.): UNKNOWN

Method of Verification: No Data

Surface Completion: Unknown Surface Completion by Driller

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: No Test Data Specified

Water Quality:

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

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data:

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

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: **Andrew Jackson Johnson** License Number: 54989

Apprentice Name: Alfonso Rodriguez Jr. 60952 Apprentice Number:

SWTCGCD - Approved Comments:

DRY

Backfilled 2' Cement Cap

Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL**

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	27	White Tan LS
27	36	Tan LS
36	53	Gray Tan LS
53	92	Gray Clay (Hammet)
92	106	Red SS
106	112	Red Tan SS
112	149	Red Tan LS w/ Gravel
149	175	Gravel
175	180	Turquoise Tan Clay

Dia. (in.) New/Used Type Setting From/To (ft.) No Data	BEART II E & WELE GOREEN BATA									
No Data										
	No Data									

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

Owner: Forestar Real Estate Group Inc Owner Well #: 2

Address: **2221 E. Lamar Blvd.** Grid #: **57-40-4**

Arlington, TX 76006

Well Location: 316 Paleface Point Dr

Spicewood, TX 78669 Longitude: 098° 05' 52.32" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 3/28/2022 Drilling End Date: 3/29/2022

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

Borehole: 8.75 0 210

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size
Filter Pack Intervals: 400 Gravel 375

Filter Pack Intervals: 100 210 Gravel .375

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

Annular Seal Data: 0 20 Cement 5 Bags/Sacks

20 100 Quilkgrout 10 Bags/Sacks

Seal Method: **Pumped** Distance to Property Line (ft.): **300+**

Sealed By: **Driller** Distance to Septic Field or other

concentrated contamination (ft.): 300+

Distance to Septic Tank (ft.): 300+

Method of Verification: Map

Surface Completion: Surface Sleeve Installed Surface Completion by Driller

Water Level: 124 ft. below land surface on 2022-04-04 Measurement Method: Electric Line

Packers: No Data

Type of Pump: No Data

Well Tests: Pump Yield: 4 GPM with 60 ft. drawdown after 24 hours

Water Type
Water Quality:

No Data

No Data

Chemical Analysis Made: Yes

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: NextGen Water Well Service

11911 West County Road 56

Midland, TX 79707

Driller Name: Cody Myers License Number: 60303

Apprentice Name: Billy Sheckler

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	8	Top Soil/Clay
8	40	Limestone
40	110	Gray Shale and Clay
110	135	Sandstone
135	145	Brown Clay
145	200	Sandstone with Clay Stringers
200	210	Gray Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR 17	0	130
4.5	Screen	New Plastic (PVC)	SDr 17 0.035	130	210

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

Owner: Forestar Real Estate Group Inc Owner Well #:

Address: 2221 E. Lamar Blvd. Grid #: 57-40-4

Arlington, TX 76006

Well Location: 316 Paleface Point Dr

Spicewood, TX 78669 Longitude: 098° 05' 56.58" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 3/28/2022 Drilling End Date: 3/29/2022

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

Borehole: 8.75 0 215

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 110 215 Gravel .375

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

Annular Seal Data: 0 20 Cement 5 Bags/Sacks

20 110 Quikgrout 10 Bags/Sacks

Seal Method: Pumped Distance to Property Line (ft.): 300+

Sealed By: **Driller** Distance to Septic Field or other

concentrated contamination (ft.): 300+

Distance to Septic Tank (ft.): 300+

Method of Verification: Map

Surface Completion: Surface Sleeve Installed Surface Completion by Driller

Water Level: 121 ft. below land surface on 2022-03-30 Measurement Method: Electric Line

Packers: No Data

Type of Pump: No Data

Well Tests: No Test Data Specified

Water Type
Water Quality:

No Data

No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: NextGen Water Well Service

11911 West County Road 56

Midland, TX 79707

Driller Name: Cody Myers License Number: 60303

Apprentice Name: Billy Sheckler

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	6	Top Soil
6	30	Limestone
30	110	Gray Shale and Clay
110	145	Tan Sandstone
145	155	Brown CLay
155	205	Sandstone with clay stringers
205	215	Gray Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR 17	0	135
4.5	Screen	New Plastic (PVC)	SDR 17 0.035	135	215

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

Owner: Jay Raulerson Owner Well #: 57404JR

Address: 115 Vicinty Trail Grid #: 57-40-4

Spicewood, TX 78669

Well Location: 115 Vicinty Trail

Latitude: 30° 25' 53" N

Spicewood, TX 78669 Longitude: 098° 05' 14" W

Well County: Travis Elevation: 710 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 3/29/2023 Drilling End Date: 3/29/2023

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

Borehole: 9 0 100

6.13 100 250

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 12 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 Sentia Tenk (#1): 60

Distance to Septic Tank (ft.): 60

Method of Verification: Owner

Surface Completion: Surface Sleeve Installed Surface Completion by Driller

Water Level: 71 ft. below land surface, and 1 GPM Measurement Method: Electric Line

artesian flow on 2023-04-04

Packers: Burlap at 100 ft.

Burlap/Plastic at 120 ft. Burlap/Plastic at 200 ft.

Type of Pump: Submersible Pump Depth (ft.): 220

Well Tests: Jetted Yield: 1 GPM

Strata Depth (ft.) Water Type Water Quality: 210 - 250 No Data

> Chemical Analysis Made: No

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

No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Centex Pump & Supply, Inc.

2520 Hwy. 290 West

Dripping Springs, TX 78620

Driller Name: **Martin Lingle** License Number: 54813

Comments: No Data

Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL**

Top (ft.) Bottom (ft.) Description 0 **Brown Tan Shale** 10 10 15 Gray 15 22 **Red Clay** 22 90 **Red Sandy Clay** 90 110 **Brown Tan** 110 140 **Red Sand Stone** 220 140 Tan Sand w/ Gravel 220 240 Sand Gravel 250 Tan Shale 240

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	210
4.5	Perforated or Slotted	New Plastic (PVC)	SDR17	210	250

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

Owner: Spice To Fit LLC. Owner Well #: 57407SF

Address: 19409 Sean Avery Path Grid #: 57-40-4

Spicewood, TX 78669

Well Location: 4316 Cypress Canyon

Spicewood, TX 78669 Longitude: 098° 05' 14" W

Well County: Travis Elevation: 794 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 12/7/2023 Drilling End Date: 12/7/2023

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

Borehole: 9 0 100

7 100 230

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 13 Bags/Sacks

Seal Method: **Pressure** Distance to Property Line (ft.): **50+**

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: 177 ft. below land surface on 2023-12-07

Packers: Burlap/Plastic at 100 ft.

Burlap/Plastic at 120 ft. Burlap/Plastic at 150 ft.

Type of Pump: Submersible Pump Depth (ft.): 210

Well Tests: Jetted Yield: 10/15 GPM

Strata Depth (ft.) Water Type

Water Quality: 170 - 230 Lower Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Centex Pump & Supply, Inc.

2520 Hwy. 290 West

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	37	Caliche
37	85	Gray
85	95	Gray Strip Clay
95	110	Red Sand Stone Clay
110	115	Gray
115	130	Red Clay
130	150	Gray
150	180	Red Sand Stone
180	190	Gravel
190	225	Brown Sand Gravel
225	230	Blue Shale

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	0	170
4.5	Perforated or Slotted	New Plastic (PVC)	SDR17	170	230

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

Owner: **Griseld Benitez & Jesus Cardoso**

Jaimes

Address: 15503 Ulman Dr.

Austin, TX 78734

Well Location: 24805 Leatha Lane

Spicewood, TX 78669

Travis

Owner Well #: 57405GB

Grid #: 57-40-5

Latitude: 30° 25' 36" N

Longitude: 098° 04' 58" W

Elevation: 786 ft. above sea level

Type of Work: **New Well Domestic** Proposed Use:

Drilling Start Date: 7/16/2024 Drilling End Date: 7/16/2024

Diameter (in.)

Top Depth (ft.)

Bottom Depth (ft.)

Borehole:

Well County:

9

0

100

6.125

100

230

Drilling Method:

Air Rotary

Straight Wall

Borehole Completion:

Bottom Depth (ft.)

Description (number of sacks & material)

Annular Seal Data:

Top Depth (ft.)

100

Cement 14 Bags/Sacks

Seal Method: Positive Displacement

Distance to Property Line (ft.): 5

Sealed By: Driller

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: 163 ft. below land surface on 2024-07-16 Measurement Method: Electric Line

Packers:

Burlap at 100 ft.

Burlap/Plastic at 120 ft. Burlap/Plastic at 140 ft. Burlap/Plastic at 166 ft.

Type of Pump:

Submersible

Pump Depth (ft.): 210

Well Tests:

Jetted

Yield: 5/7 GPM

Strata Depth (ft.) Water Type

Water Quality: 170 - 230 Lower Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Centex Pump & Supply, Inc.

2520 Hwy. 290 West

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description	
0	1	Top Soil	
1	30	White	
30	60	Tan Brown	
60	80	Gray	
80	110	Gray w/ Strip Clay	
110	170	Red	
170	210	LG Red Gravel	
210	225	SM Gravel	
225	230	Brown Clay	

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	0	170
4.5	Perforated or Slotted	New Plastic (PVC)	SDR17	170	230

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

Owner: Michelle Lane Owner Well #: No Data

Address: **25104 Whitney Dr.** Grid #: **57-40-4**

Well Location: 25104 Whitney Dr.

Latitude: 30° 25' 46" N

Spicewood, TX 78669 Longitude: 098° 05' 12" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 7/24/2024 Drilling End Date: 7/24/2024

Spicewood, TX 78669

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

Borehole: 8.5 0 100

6.25 100 199

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 100 7 Benseal 2 Portland 9 Bags/Sacks

Seal Method: **Pressure** Distance to Property Line (ft.): **32'**

Sealed By: **Driller**Distance to Septic Field or other

concentrated contamination (ft.): NA

Distance to Septic Tank (ft.): NA

Method of Verification: Land Owner

Surface Completion: Surface Sleeve Installed Surface Completion by Driller

Water Level: No Data

Packers: Burlap/Neoprene at 100 ft.

Burlap/Neoprene at 105 ft.

Type of Pump: No Data

Well Tests: Jetted Yield: 12 GPM

Water Type
Water Quality: 105 - 180 L. Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: SW Travis Co 57404ML

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 1 Top Soil 1 25 Tan LS 25 81 **Gray Tan LS** 81 145 Red SS 145 179 Gravel 179 180 **Torquise Clay** 180 191 Tan Clay 191 199 **Gray Clay**

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	119
4.5	Screen	New Plastic (PVC)	.035	119	179
4.5	Blank	New Plastic (PVC)	SDR17	179	199

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

Owner: David Searcy Owner Well #: No Data

Address: 24428 Pedernales Drive Grid #: 57-40-1

Spicewood, TX 78669

Well Location: 24428 Pedernales Drive

Latitude: 30° 28' 04" N

Spicewood, TX 78669 Longitude: 098° 05' 35" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 7/25/2003 Drilling End Date: 7/25/2003

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

Borehole: 8 0 20

6.5 20 230

Drilling Method: Air Rotary

Borehole Completion: cased

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

Annular Seal Data: 0 20

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: landowner

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: Burlap 140', 130', 20'

Type of Pump: Submersible Pump Depth (ft.): 200

Well Tests: Estimated Yield: 60 GPM

Water Type

Water Quality:

140' - 220'

Trinity

Chemical Analysis Made: Unknown

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

Dia. (in.) New/Used

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling

PO Box 867

Marble Falls, TX 78654

Driller Name: Michael Becker License Number: 54516

Apprentice Name: Andrew Johnson Apprentice Number: 1116

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Setting From/To (ft.)

Top (ft.)	Bottom (ft.)	Description
0	3	Gravel
3	13	Caliche
13	35	Sand-Gravel
35	45	Tan LS
45	50	Tan-Gry LS
50	57	Gry LS
57	65	Gry Clay
65	75	Tan Clay
75	95	Gry Clay
95	120	Red Clay-Tan LS
120	140	Red Clay-Red SS
140	150	Gravel (H2O)
150	160	Red SS
160	198	Gravel (H2O)
198	205	Red-Tan SS
205	220	Gravel (H2O)
220	225	Tan LS

4.5" (5"OD) New PVC +2 to 230' Sch40						

Type

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

Owner: Lou Harris Owner Well #: 1

Address: 312 CR 420 Grid #: 57-40-1

Spicewood, TX 78669

Latitude: 30° 27' 36" N

Well Location: 312 CR 420 Spicewood, TX 78669 Longitude: 098° 06' 53" W

Well County: Burnet Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 4/26/2006 Drilling End Date: 4/26/2006

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

Borehole: 8 0 20

6 20 210

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 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 98', 95', 20'

Type of Pump: No Data

Well Tests: Jetted Yield: 8 GPM

Water Type
Water Quality: 98 - 190 Trinity

Chemical Analysis Made: No

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling, Inc.

PO Box 867

Marble Falls, TX 78654

Driller Name: Michael G. Becker, P.G. License Number: 54516

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	20	Tan Clay
20	34	White-Tan Limestone
34	60	Grey Limestone
60	98	Blue Clay
98	112	Red Clay
112	122	Gravel
122	145	Red Clay
145	190	Gravel
190	210	Tan Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)
4.5" (5"	OD) New	PVC +	2' to 150' Sch40
4.5" (5"	OD) New	Slotted	d 150' to 190' .035
4.5" (5"	OD) New	PVC 19	90' to 210' Sch40

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

Owner Well #: Owner: No Data **Donald Gilde**

21918 Briarcliff Dr Address: Grid #: 57-40-1

Spicewood, TX 78669

Latitude: 30° 27' 33" N Well Location: 201 Red Bluff Rd Lot #36

> Spicewood, TX 78669 Longitude: 098° 07' 07" W

Well County: **Burnet** Elevation: No Data

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling End Date: 6/12/2006 Drilling Start Date: 6/12/2006

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

Borehole: 8 0 20

20 6 180

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 20 5 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 75', 70', 20'

Type of Pump: No Data

Well Tests: Jetted Yield: 1/2 GPM Water Type
Water Quality: 120-160 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc

PO Box 867

Marble Falls, TX 78654

Driller Name: Michael G Becker P.G. License Number: 54516

Comments: Assigned SWN 57-40-104 by TWDB on 6/13/2012.

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	30	Grey & Tan Limestone
30	45	Grey Limestone
45	75	Grey Clay
75	85	Red Sandstone
85	90	Gravel
90	100	Red Sandstone
100	160	Gravel
160	165	Tan clay
165	180	Grey Clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)	
4.5" (5"	OD) New	PVC +	2' to 120' Sch40	
4.5" (5"	OD) New	Slotte	d 120' to 160' .035	
4.5" (5"	OD) New	PVC 1	60' to 180' Sch40	

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

Owner: BRANDY & EDWARDO SALMERON Owner Well #: No Data

Address: 12501 CR 404 Grid #: 57-40-4

SPICEWOOD, TX 78669

Latitude: 30° 27' 28" N

Well Location: 12501 CR 404 SPICEWOOD, TX 78669 Longitude: 098° 06' 26" W

Well County: Burnet Elevation: 908 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 12/8/2006 Drilling End Date: 12/8/2006

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

Borehole: 10 0 11

6.75 11 285

Drilling Method: Air Hammer

Borehole Completion: Open Hole

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

Annular Seal Data: 0 9 5

9 11 1

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: 118 ft. below land surface on 2006-12-11 Measurement Method: Unknown

Packers: **NEOPRENE 11**

NEOPRENE 235 NEOPRENE 240

Type of Pump: Submersible Pump Depth (ft.): 260

Well Tests: Jetted Yield: 7 GPM

Strata Depth (ft.) Water Type

Water Quality: No Data No Data

Chemical Analysis Made: Yes

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: BEE CAVE DRILLING

185 ANGELFIRE DRIVE

DRIPPING SPRINGS, TX 78620

Driller Name: JIM BLAIR License Number: 54416

Apprentice Name: CESAR RAMOS Apprentice Number: 3090

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	10	WHITE ROCK
10	30	GRAY LIMESTONE
30	70	YELLOW SANDSTONE
70	85	RED SANDSTONE
85	100	RED CLAY
100	130	WHITE ROCK W/B 4 GPM
130	145	GRAY ROCK
145	195	GRAY CLAY
195	200	GRAY ROCK
200	235	RED CLAY
235	275	BROWN ROCK W/B 3 GPM
275	285	GOLD CLAY

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)
4.5 NEW PLASTIC 0-242
4.5 NEW SCREEN MFG. 242-282 .050
4.5 NEW PLASTIC 282-285

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

Owner Well #: Owner: No Data **DAVE BIEHN**

26904 Founders Place Address: Grid #: 57-40-1

Spicewood, TX 78669 Latitude: 30° 28' 03" N

Well Location: 26904 Founders Place Spicewood, TX 78669

Well County: **Travis** Elevation: No Data

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 10/20/2006 Drilling End Date: 10/20/2006

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

Borehole: 9 0 30

> 6 30 320

Longitude:

098° 05' 42" W

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 30 6

Seal Method: Slurry Distance to Property Line (ft.): 50+

Sealed By: Central Texas Drilling Distance to Septic Field or other

concentrated contamination (ft.): 100+

Distance to Septic Tank (ft.): No Data

Method of Verification: Owner

Surface Completion: **Surface Sleeve Installed**

Water Level: No Data

Packers: 3 Packers at 30', 110', 115'

Type of Pump: **Submersible**

Well Tests: Jetted Yield: 8 GPM

Strata Depth (ft.) Water Type Water Quality: **Trinity** 40

> Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: **Central Texas Drilling Inc.**

> 500 Southland Drive **Burnet, TX 78611**

Driller Name: Frank Glass License Number: 1313

Comments: No Data

Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL**

Casing: **BLANK PIPE & WELL SCREEN DATA**

From (ft) To (ft) Description	Dia. (in.) New/Used Type Setting From/To (ft.)	
000-001 Top soil	4.5" New Plastic +2-320 17 & 40	
001-020 Caliche	60' Screen	
020-100 Blue lime		
100-115 Clay brown		
115-160 Large gravel		
160-200 Blue clay		
200-320 Smithwick shale or Marble Falls		
limestone		

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

Owner: ROBERT DAY Owner Well #: No Data

Address: 111 Cloudland Court Grid #: 57-40-1

Spicewood, TX 78669

Well Location: 111 Cloudland Court

Latitude: 30° 27' 38" N

Spicewood, TX 78669 Longitude: 098° 06' 24" W

Well County: Travis Elevation: No Data

This well has been plugged

Plugging Report Tracking #37418

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 1/10/2007 Drilling End Date: 1/10/2007

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

Borehole: 9 0 20

6 20 260

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

Annular Seal Data: No Data

Seal Method: **Not Applicable** Distance to Property Line (ft.): **50+**

Sealed By: **Unknown** Distance to Septic Field or other

concentrated contamination (ft.): 100+

Distance to Septic Tank (ft.): No Data

Method of Verification: Owner

Surface Completion: Unknown

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: Jetted Yield: 5 GPM

Strata Depth (ft.) Water Type
Water Quality: 30 Trinity

Chemical Analysis Made: No

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

Dia. (in.) New/Used

No Data

the report(s) being returned for completion and resubmittal.

Company Information: Western Water Wells LLC

500 Southland Drive Burnet, TX 78611

Driller Name: Frank Glass License Number: 1313

Comments: Well to be plugged.

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Setting From/To (ft.)

Туре

No

Top (ft.)	Bottom (ft.)	Description
0	3	Top soil
3	55	Caliche & clay
55	75	Cow creek white porous lime
75	140	Gray lime & Hammond
140	225	Red clay & gravel Trinity
225	245	Yellow clay
245	260	Smithwick

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

Latitude:

30° 28' 15" N

Owner: Gloster Bend Resource Owner Well #: GlosterBn#1

Address: PO Box 679000 Grid #: 57-40-2

Austin, TX 78767

Well Location: Singleton Bend Rd
Austin, TX 78767 Longitude: 098° 04' 56" W

Well County: Travis Elevation: 697 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 5/30/2007 Drilling End Date: 8/31/2007

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

Borehole: 8 0 200

Drilling Method: Mud (Hydraulic) Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 100 160 Gravel 6-12

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

Annular Seal Data: 0 100 24portland2baro

Seal Method: **pressure grout** Distance to Property Line (ft.): **n/a**

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **n/a**

concentrated contamination (tt.): Iva

Distance to Septic Tank (ft.): No Data

Method of Verification: n/a

Surface Completion: Surface Sleeve Installed

Water Level: 68 ft. below land surface on 2007-06-24 Measurement Method: Unknown

Packers: gravel packed 100-160

Type of Pump: Submersible Pump Depth (ft.): 140

Well Tests: Pump Yield: 16+ GPM

Strata Depth (ft.) Water Type

Water Quality: 125-160 Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services, Inc.

PO Box 525

Dripping Springs, TX 78620

Driller Name: Martin D. Lingle, Jr. License Number: 54813

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 2 topsoil 2 45 sand gravel 45 48 gray clay 48 57 gravel clay 57 65 red clay 75 65 gravel gray clay 75 125 red clay gravel 125 140 gravel sand 140 152 brown limestone 152 157 yellow clay 157 165 brown clay 165 167 hard limestone 167 174 light gray clay 174 200 dark clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)	
4.5 N P	VC-SDR 1	7IB 5-1	00	
4.5 N P	VC-17 SL	OTTED	.035 100-160	

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

Owner: Paul Jones Owner Well #: No Data

Address: 3500 McNeil Dr Grid #: 57-40-1

Austin, TX 78727

Well Location: 1229 CR 420 Latitude: 30° 27' 52" N

Spicewood, TX 78669 Longitude: 098° 06' 21" W

Well County: Burnet Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 5/3/2008 Drilling End Date: 5/3/2008

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

Borehole: 8 0 20

6.5 20 200

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 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 120', 115', 20'

Type of Pump: No Data

Well Tests: Jetted Yield: 7-8 GPM

Strata Depth (ft.) Water Type

Water Quality: 127-180 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc

PO Box 867

Marble Falls, TX 78654

Driller Name: Andrew J Johnson License Number: 54989

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 2 **Top Soil** 2 10 **Tan Limestone** 10 34 Tan Limestone w/ Red Clay 34 80 **Grey-Tan Limestone** 80 102 **Grey Clay** 102 127 **Red Sandstone** 127 135 **Gravel H2O** 135 153 Sandstone 153 157 **Gravel H2O** 157 163 Sandstone 163 180 **Gravel H2O** 183 180 **Turquoise Clay** 183 200 **Tan Clay**

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5" (5"	OD) New	PVC +	-2' to 120' SDR17
4.5" (5"	OD) New	Slotte	d PVC 120' to 180' .035

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

Owner Well #: Owner: No Data **GEORGE DODGE**

Address: 200 JIM DAVIDSON DR Grid #: 57-40-1

SUGAR LAND, TX 77478

Latitude: 30° 27' 51" N Well Location: **304 HIDDEN HILLS**

> SPICEWOOD, TX 78669 Longitude: 098° 06' 48" W

Well County: **Burnet** Elevation: 800 ft. above sea level

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling End Date: 8/8/2008 Drilling Start Date: 8/8/2008

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

Borehole: 10 0 12

> 12 195 6.75

Drilling Method: Air Hammer

Borehole Completion: **Open Hole**

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

Annular Seal Data: 0 6 5

6 12

Seal Method: SLURRIED & POURED Distance to Property Line (ft.): No Data

Sealed By: CESAR RAMOS Distance to Septic Field or other

concentrated contamination (ft.): 82

Distance to Septic Tank (ft.): No Data

Method of Verification: TAPE (CITY SEWER)

Surface Completion: **Surface Sleeve Installed**

Water Level: **102 ft.** below land surface on **2008-08-12** Measurement Method: Unknown

Packers: **NEOPRENE 12**

> **NEOPRENE 128 NEOPRENE 130**

Type of Pump: **Submersible** Pump Depth (ft.): 180

Yield: 2 GPM Well Tests: Jetted

Strata Depth (ft.) Water Type Water Quality: 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** 57534 Apprentice Number:

No Data Comments:

Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL**

Top (ft.)	Bottom (ft.)	Description
0	3	WHITE ROCK
3	25	GRAY LIMESTONE
25	55	TAN LIMESTONE
55	65	TAN SANDSTONE
65	80	TAN LIMESTONE
80	126	RED CLAY
126	145	WHITE ROCK W/B 2 GPM TDS 400
145	170	GRAY ROCK
170	195	GRAY SHALE

Casing: BLANK PIPE & WELL SCREEN DATA

	DL/ ((()))	~	WEEL CONCERN BANA
Dia. (in.)	New/Used	Туре	Setting From/To (ft.)
4.5 NE\	N PLASTI	C 0-13	5

4.5 NEW SCREEN MFG 135-165 .050

4.5 NEW PLASTIC 165-195

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

Owner: Connie Boynton Owner Well #: No Data

Address: 5400 Apache Creek Cove Grid #: 57-40-1

Austin, TX 78735

Well Location: 119 Indian Mound Road

Latitude: 30° 28' 21" N

Spicewood, TX 78669 Longitude: 098° 06' 24" W

Well County: Burnet Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 12/11/2008 Drilling End Date: 12/11/2008

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

Borehole: 8.62 0 20

6.75 20 205

Drilling Method: Air Hammer

Borehole Completion: Straight Wall

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

Annular Seal Data: 1 25 1.5 cement

Seal Method: **gravity cemented** Distance to Property Line (ft.): **200**

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **n/a**

concentrated contamination (ft.): n/a

Distance to Septic Tank (ft.): No Data

Method of Verification: estimated

Surface Completion: Pitless Adapter Used

Water Level: 121.5 ft. below land surface on 2008-12- Measurement Method: Unknown

12

Packers: poor boy 25'

Type of Pump: No Data

Well Tests: Jetted Yield: 2 GPM

Water Type
Water Quality: 119 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: L & L Drilling Co.

P.O. Box 217 Hye, TX 78635

Driller Name: Gregory A. Smith License Number: 1595

Apprentice Name: Lynette Smith Apprentice Number: 56980

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	brown topsoil
1	11	white limestone & yellow caliche
11	67	gray shale & clay
67	119	red shale
119	179	red & white limestone
119	179	water 2 gpm
179	188	brown shale
188	205	oily gray shale

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Type	Setting From/To (ft.)		
5 new plastic solid 0 - 119 0.265				
5 new plastic slo	tted 11	9 - 205 0.265		

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

Owner: Owner Well #: No Data **Richard Ragland**

Address: 1133 CR 420 Grid #: 57-40-1 Spicewood, TX 78669

Latitude: 30° 27' 49" N 1133 CR 4420

Spicewood, TX 78669 Longitude: 098° 06' 30" W

Well County: **Burnet** Elevation: No Data

Plugged Within 48 Hours

This well has been plugged Plugging Report Tracking #124928

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 7/20/2009 Drilling End Date: 7/20/2009

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

Borehole: 6.75 0 155

Drilling Method: Air Hammer

Well Location:

Borehole Completion: **Straight Wall**

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

Annular Seal Data: 15 1 cement

Seal Method: gravity cemented Distance to Property Line (ft.): >75

Sealed By: Driller Distance to Septic Field or other concentrated contamination (ft.): 125

Distance to Septic Tank (ft.): No Data

Method of Verification: estimated

Surface Completion: Unknown

Water Level: No Data

Packers: none

Type of Pump: No Data

Well Tests: **Jetted** Yield: 0 GPM

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

Plug Information: no casing 0 - 15 cement 1 sack Water Type

Water Quality:

n/a

n/a

Chemical Analysis Made: No

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: L & L Drilling Co.

P.O. Box 217 Hye, TX 78635

Driller Name: Gregory A. Smith License Number: 1595

Apprentice Name: Lynette Smith Apprentice Number: 56980

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	9	yellow clay
9	14	white limestone & caliche
14	16	yellow limestone & caliche
16	38	gray limestone & gray shale
38	54	gray limestone
54	74	gray shale & clay
74	76	gray limestone with some brown
76	88	gray shale & clay
88	109	brown & red clay
109	112	gravel
124	128	gravel
128	146	red, white & brown limestone
146	147	gravel
147	151	red, white & brown limestone
151	155	yellow shale
1112	124	red clay

Dia. (in.)	New/Used	туре	Setting From/To (ft.)	
none				

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

Owner: Richard Ragland Owner Well #: No Data

Address: 1133 CR 420 Grid #: 57-40-1 Spicewood, TX 78669

Well Location: 1133 CR 4420 Latitude: 30° 27' 51" N

Spicewood, TX 78669 Longitude: 098° 06' 28" W

Well County: Burnet Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 7/20/2009 Drilling End Date: 7/20/2009

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

Borehole: 8.75 0 25

6.75 25 185

Drilling Method: Air Hammer

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 25 2 cement

Seal Method: gravity cemented Distance to Property Line (ft.): >75

Sealed By: **Driller**Distance to Septic Field or other

concentrated contamination (ft.): 125

Distance to Septic Tank (ft.): No Data

Method of Verification: estimated

Surface Completion: Surface Sleeve Installed

Water Level: 170 ft. below land surface on 2009-07-20 Measurement Method: Unknown

Packers: poor boy 25'

Type of Pump: No Data

Well Tests: Jetted Yield: 2 GPM

Water Quality: 145 Water Type

800 TDS

Chemical Analysis Made: No

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: L & L Drilling Co.

P.O. Box 217 Hye, TX 78635

Driller Name: Gregory A. Smith License Number: 1595

Apprentice Name: Lynette Smith Apprentice Number: 56980

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	3	brown clay
3	8	yellow limestone & caliche
8	13	yellow clay
13	18	yellow limestone
18	21	gray limestone
21	23	gray shale & clay
23	26	black limestone
26	37	gray limestone
37	39	gray & brown limestone
39	56	gray limestone
56	89	gray shale & clay with layers of gray limestone
89	104	red clay
104	106	gravel
106	128	red clay
128	129	gravel
129	134	red, white & brown limestone

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)	
5 new p	olastic soli	id 0 - 1	04 0.265	
5 new p	plastic slo	ted 10	4 - 108 0.265	
5 new p	olastic soli	d 108 ·	- 125 0.265	
5 new p	olastic slo	ted 12	5 - 165 0.265	
5 new p	olastic soli	d 165 ·	· 185 0.265	

134	137	yellow limestone
137	147	red, white & brown limestone
145	165	water 2 gpm
147	150	gravel
150	163	gravel & red, white & brown limestone
163	185	yellow shale

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

Owner: Owner Well #: **WLB-01** Joe Wyatt

Address: 2917 Marina Shores Drive Grid #: 57-40-1

Spicewood, TX 78669

Latitude: 30° 28' 15" N Well Location: **Marina Shores Drive**

> Spicewood, TX 78669 Longitude: 098° 05' 45" W

Well County: **Travis** Elevation: 758 ft. above sea level

Type of Work: **New Well** Proposed Use: **Monitor**

Drilling Start Date: 12/16/2009 Drilling End Date: 12/16/2009

5

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

Borehole: 0 30 4

Drilling Method: Bored

Borehole Completion: **Filter Packed**

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size Filter Pack Intervals: 5 20/40 Sand 30 Gravel Top Depth (ft.) Bottom Depth (ft.) Description (number of sacks & material) Annular Seal Data: 2 0 1 Ready Mix 5 2 1 Bentonite

30 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

3 Bags Sand

Surface Completion: **Surface Slab Installed**

Water Level: 22.2 ft. below land surface on 2009-12-16 Measurement Method: Unknown

Packers: None

Type of Pump: No Data

Well Tests: No Test Data Specified Water Type
Water Quality:
No Data
No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Holt Engineering, Inc.

2220 Barton Skyway Austin, TX 78704

Driller Name: John Webb License Number: 3023

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL	Casing: BLANK PIPE & WELL SCREEN DATA
From (ft) To (ft) Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0 to .1 Brick Pavers	2" New Plastic 0 Ft. to 10 Ft.
.1 to .3 Sand Base	2" New Slotted 10 Ft. to 30 Ft.
.3 to 5 Fill-Tan & light brown	
5 to 23.3 Limestone, tan & light brown	
23.3 to 30 Clay, greenish tan	

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

Owner: Joe Wyatt Owner Well #: WLB-02

Address: 2917 Marina Shores Drive Grid #: 57-40-1

Spicewood, TX 78669 Latitude: 30° 28' 14" N

Well Location: Marina Shores Drive Spicewood, TX 78669 Longitude: 098° 05' 44" W

Well County: Travis Elevation: 758 ft. above sea level

Type of Work: New Well Proposed Use: Monitor

Drilling Start Date: 12/16/2009 Drilling End Date: 12/16/2009

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

Borehole: 4 0 35

Drilling Method: Bored

Borehole Completion: Filter Packed

Annular Seal Data:

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

1 Ready Mix

2 3 1 Bentonite

3 35 3.5 Bags Sand

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 Slab Installed

Water Level: 34.7 ft. below land surface on 2009-12-18 Measurement Method: Unknown

Packers: None

Type of Pump: No Data

Well Tests: No Test Data Specified

Water Type
Water Quality:

No Data

No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Holt Engineering, Inc.

2220 Barton Skyway Austin, TX 78704

Driller Name: John Webb License Number: 3023

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0	0.1	Asphalt	2" New Plastic 0 Ft. to 10 Ft.
0.1	0.9	Base Tan	2" New Slotted 10 Ft. to 35 Ft.
0.9	1.4	Fill Light brown	
1.4	2	Clayey silt Tan	
2	28.5	Limestone Tan	
28.5	35	Clayshale Gray	

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

Owner: Pamela Hucht Owner Well #: 1

Address: 905 Indian Mound Rd. Grid #: 57-40-1

Spicewood, TX 78669

Well Location: 905 Indian Mound Rd.

Latitude: 30° 28' 20" N

Spicewood, TX 78669 Longitude: 098° 06' 02" W

Well County: Burnet Elevation: 775 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 7/9/2010 Drilling End Date: 7/10/2010

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

 Borehole:
 10
 0
 12

 8
 12
 100

 6.75
 100
 200

Drilling Method: Air Rotary

Borehole Completion: Open Hole

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

Annular Seal Data: 42

0 2 2 cement

2 100 40 bentonite

Seal Method: **pressure cement**Distance to Property Line (ft.): 15

Sealed By: Alonzo Duke Distance to Septic Field or other

concentrated contamination (ft.): not yet inst

Distance to Septic Tank (ft.): No Data

Method of Verification: customer

Surface Completion: Surface Sleeve Installed

Water Level: 100 ft. below land surface on 2010-07-10 Measurement Method: Unknown

Packers: neoprene 105

neoprene 110

Type of Pump: Submersible Pump Depth (ft.): 180

Well Tests: Jetted Yield: 30 GPM

Water Type
Water Quality:

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

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	30	caliche
30	90	blue clay
90	100	red clay
100	120	tan rock
120	170	red gravel
170	190	red rock
190	200	blue clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)	
4.5 New	Plastic 0	140		
4.5 New	/ Plastic p	erf 140	180	
4.5 New	/ Plastic 1	80 200		

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

Owner: Robert Shebesta Owner Well #: 1

Address: 650 CR 450 Grid #: 57-40-1

Burnet, TX 78611

Well Location: 650 CR 420 Latitude: 30° 27' 53" N

Burnet, TX 78611 Longitude: 098° 06' 52" W

Well County: Burnet Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 3/15/2011 Drilling End Date: 3/15/2011

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

Borehole: 8 0 20

6.5 20 165

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 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 85, 80, 25, 20

Type of Pump: No Data

Well Tests: No Test Data Specified

Water Type
Water Quality: 108-150 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P O Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	4	Red Clay
4	42	Tan, Gray Limestone
42	75	Gray Clay
75	108	Red Sandstone
108	110	Gravel
110	118	Red Sandstone
118	150	Gravel & H2O
150	165	Tan Clay

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)
4.5" (5"	OD) New	PVC +	· 2' to 90' SDR17
4.5" (5"	OD) New	Slotte	d PVC 90' to 150' .035
4.5" (5"	OD) New	PVC 1	50' to 165' SDR17

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

Owner: **Steve Cook** Owner Well #: #2

Address:

12000 Starcrest Drive Ste. 107

San Antonio, TX 78247

57-40-4

Well Location:

North Paleface Ranch Road

Spicewood, TX 78669

Latitude:

Grid #:

30° 27' 01" N

Longitude:

098° 06' 15" W

Well County: **Travis**

Elevation:

823 ft. above sea level

Type of Work:

New Well

Proposed Use:

Drilling Start Date: 6/23/2011

Drilling End Date: 6/23/2011

Diameter (in.)

Top Depth (ft.)

Bottom Depth (ft.)

Irrigation

Borehole:

10 6.75

0 10 10 85

Drilling Method:

Air Hammer; Air Rotary

Borehole Completion:

Open Hole

Bottom Depth (ft.)

Description (number of sacks & material)

Annular Seal Data:

Top Depth (ft.) 1

20

10 / Concrete

Seal Method: Unknown

Distance to Septic Field or other

Sealed By: Driller

concentrated contamination (ft.): N/A

Distance to Septic Tank (ft.): No Data

Distance to Property Line (ft.): No Data

Method of Verification: Tape - wheel

Surface Completion:

Pitless Adapter Used

Water Level:

No Data

Packers:

Neoprene 20'

Type of Pump:

Submersible

Well Tests:

Jetted

Yield: 10 GPM

Description (number of sacks & material)

Top Depth (ft.)

Bottom Depth (ft.)

Plug Information:

N/A

Water Quality:

No Data

Fresh

Chemical Analysis Made:

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

No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. 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	Dia. (in.) New/Used Type Setting From/To (ft.)	
0 to 3 Topsoil	4.5 New Plastic 0 to 65'	
3 to 10 Tan limestone	4.5 New Screen , Mfg. 65' to 85' .050	
10 to 55 Red rock		
55 to 65 White sandstone		
65 to 75 Brown / tan limestone		
75 to 85 Grey rock		
85 Grey clay		

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

Owner: david raring Owner Well #: No Data

Address: 481 scenic ridge Grid #: 57-40-1

spicewood, TX

Well Location: 481 scenic ridge Latitude: 30° 27' 42" N

spicewood, TX Longitude: 098° 06' 12" W

Well County: Burnet Elevation: No Data

Type of Work: New Well Proposed Use: Closed-Loop Geothermal

Drilling Start Date: 2/15/2012 Drilling End Date: 2/16/2012

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

Borehole: 4.5 0 300

Drilling Method: Air Rotary

Borehole Completion: **bh 20**

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

Annular Seal Data: 9

Seal Method: **tremipe** 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: Unknown

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: No Test Data Specified

Water Type
Water Quality:

No Data

No Data

Chemical Analysis Made: Unknown

Did the driller knowingly penetrate any strata which

contained injurious constituents?: Unknown

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: geothermal advantage

3200 nottingham dr mckinney, TX 75070

Driller Name: freddie wright License Number: 58667

Comments: 4 wells

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
1	5	Clay	No Data
5	300	chale	

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

Owner Well #: Owner: No Data **COUNTRY CLUB AT LAKESIDE**

Address: 1900 CLUBHOUSE HILL DRIVE Grid #: 57-40-1

SPICEWOOD, TX 78669

Latitude: Well Location: 1900 CLUBHOUSE HILL DRIVE

SPICEWOOD, TX 78669

30° 27' 39" N

Longitude: 098° 06' 05" W

Well County: **Travis** Elevation: No Data

Type of Work: **New Well** Proposed Use: **Test Well**

Drilling End Date: 1/30/2012 Drilling Start Date: 1/30/2012

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

Borehole: 10 0 18

> 6.25 18 210

Drilling Method: Air Hammer

Borehole Completion: **Open Hole**

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

Annular Seal Data: 0 18 **4 BENTONITE**

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: OWNER

Surface Completion: **Surface Sleeve Installed**

Water Level: 160 ft. below land surface on 2012-01-30 Measurement Method: Unknown

Packers: N/A

Type of Pump: No Data

Well Tests: Jetted Yield: 8-10 GPM Strata Depth (ft.) Water Type
Water Quality: 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 0-2 TOP SOIL 2-15 TAN LIMESTONE 15-20 RED LIMESTONE W/CLAY 20-30 TAN W/RED LIMESTONE **30-40 TAN LIMESTONE 40-65 GRAY LIMESTONE** 65-75 TAN W/GRAY LIMESTONE 75-80 BLUE/GRAY LIMESTONE 80-90 BLUE/GRAY LIMESTONE W/CLAY 90-125 BLUE/GRAY LIMESTONE W/RED CLAY 125-135 RED LIMESTONE W/RED SANDSTONE 135-140 RED SAND W/GRAVEL STRIPS 140-155 SAND W/RED CLAY

Dia. (in.) New/Used Type Setting From/To (ft.)

6 1/4" N SCH. 40 PVC +2 TO 18'

155-195 RED SAND & GRAVEL 195-210 BLUE CLAY STRIPS

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

Owner: WAYNE MOCK Owner Well #: 1

Address: LOT 29,BLOCK b,SECTION 1 Grid #: 57-40-4

MARBLE FALLS, TX 78654

Well Location: ROCK CANYON COVE

Latitude: 30° 27' 14" N

MARBLE FALLS, TX 78654 Longitude: 098° 07' 18" W

Well County: Travis Elevation: 740 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 5/7/2012 Drilling End Date: 5/9/2012

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

Borehole: 9.75 0 40

6.25 40 220

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 100

Seal Method: PRESSURE CEMENTED 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

Water Level: 103 ft. below land surface on 2012-05-09 Measurement Method: Unknown

Packers: RUBBER 100'

RUBBER 180'

Type of Pump: Submersible Pump Depth (ft.): 200

Well Tests: Jetted Yield: 35 GPM

Strata Depth (ft.) Water Type

Water Quality: No Data TRINITY

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: HILL COUNTRY WATER WELL

POBOX 220

BRIGGS, TX 78608

Driller Name: JOE MCDEARMON License Number: 2334

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	12	CALICHE
12	14	YELLOW CLAY
14	24	SAND
24	30	GRAVEL
30	50	WHITE LIME
50	120	GRAY LIME
120	160	RED SHALE
160	180	SANSTONE
180	190	BROWN SANDSTONE
190	195	SANDSTONE
195	200	TRINITY SAND
200	205	SANDSTONE
205	210	TRINITY SAND
210	220	ELLENBERG

- NEW COREEN COOKER COOK	.5 NEW I	PLASTIC 0	/180 SDR17	•
5 NEW SCREEN 200/220 .032	.5 NEW S	SCREEN 2	00/220 .032	

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

Owner: Jay Cheek Owner Well #: 3

Address: 1013 Indain Mound Grid #: 57-40-1

Spicewood, TX 78669

Well Location: 1013 Indian Mound

Latitude: 30° 28' 23" N

Spicewood, TX 78669 Longitude: 098° 05' 59" W

Well County: Travis Elevation: 773 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 12/6/2012 Drilling End Date: 12/6/2012

Borehole: Top Depth (ft.) Bottom Depth (ft.)

8 0 10

8 10 210

Drilling Method: Air Hammer

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 100 210 Gravel 3/8"

100 210 0.000

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

Annular Seal Data: 0 100 20 cement

Seal Method: **pressure cemented**Distance to Property Line (ft.): 8

Sealed By: **Steve Stewart**Distance to Septic Field or other concentrated contamination (ft.): **52**

Distance to Septic Tank (ft.): No Data

Method of Verification: tape

Surface Completion: Pitless Adapter Used

Water Level: 124 ft. below land surface on 2012-12-07 Measurement Method: Unknown

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 200

Well Tests: **Jetted Yield: 40 GPM**

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

Water Quality:

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 1 topsoil 1 4 red caliche 4 28 white limestone 28 50 gray clay 50 60 tan limestone 60 70 brown clay 70 95 red sandstone w/ tan rock tan & red limestone & 95 190 sandstone wb 40gpm 500 tds 190 brown & black rock 210

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Туре	Setting From/To (ft.)	
4.5 new sdr-17	pvc 0 13	30	
4.5 new sdr-17	pvc slot	ted 130 210	

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

Owner: Janice Warren Owner Well #: No Data

Address: 7309 Old Spicewood Rd. Grid #: 57-40-1

Spicewood, TX 78667

Well Location: 1017 Indian Mound Rd.

Latitude: 30° 28' 21" N

Spicewood, TX 78667 Longitude: 098° 06' 00" W

Well County: Burnet Elevation: No Data

Type of Work: **Deepening** Proposed Use: **Domestic**

Drilling Start Date: 1/7/2013 Drilling End Date: 1/7/2013

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

Borehole: 7 0 160

6.125 160 205

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

Annular Seal Data: No Data

Seal Method: unknown 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: Surface Sleeve Installed

Water Level: 155 ft. below land surface on 2013-01-07 Measurement Method: Unknown

Packers: burlap,plastic 155 and 135

Type of Pump: Submersible Pump Depth (ft.): 200

Well Tests: Jetted Yield: 5-7 GPM

Description (number of sacks & material)

Top Depth (ft.)

Bottom Depth (ft.)

Plug Information: n/a

Water Quality: Strata Depth (ft.) Water Type

160-175 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: Western Water Wells

CTGCD

clean out exsisting well

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	160	exsisting borehole
160	170	multi-colored limestones (gravel)
170	175	yellow limestone
175	190	yellow clay
190	205	gray clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
5 od. n	ew sdr17 _l	ovc -3	to 145
5 od. n	ew sdr17 _l	ovc (.0	32) screen 145 to 185
5 od. n	ew sdr17 _l	ovc 18	5 to 205

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

Owner: Sheila & Craig Nickels Owner Well #: No Data

Address: 4300 Travis Peak Trail Grid #: 57-40-1

Marble falls, TX 78654

Well Location: Latitude: 30° 27' 42" N

marble falls, TX 78654 Longitude: 098° 05' 59" W

Well County: Burnet Elevation: 784 ft. above sea level

Type of Work: New Well Proposed Use: Closed-Loop Geothermal

Drilling Start Date: 7/1/2013 Drilling End Date: 7/7/2013

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

Borehole: 4.5 0 300

Drilling Method: Air Hammer; Air Rotary

Borehole Completion: **BH20**

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

Annular Seal Data: 0 300 9 BH20

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

Sealed By: **Freddie Wright**Distance to Septic Field or other

concentrated contamination (ft.): No Data

Distance to Septic Tank (ft.): No Data

Method of Verification: No Data

Surface Completion: Unknown

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: No Test Data Specified

Water Type
Water Quality:

No Data

No Data

Chemical Analysis Made: Unknown

Did the driller knowingly penetrate any strata which

contained injurious constituents?: Unknown

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Geothermal Advantage

2425 Brenham Dr McKinney, TX 75070

Driller Name: Michael Wright License Number: 58690

Comments: 6 Geothermal Bore Holes

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0	7	top soil	No Data
8	300	hard sandstone/shale	

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

Owner: Jim Henry Owner Well #: No Data

Address: 1007 Indian Mound Rd. Grid #: 57-40-1

Spicewood, TX 78669

Well Location: 1007 Indian Mound Rd.

Latitude: 30° 28' 27" N

Spicewood, TX 78669 Longitude: 098° 05' 56" W

Well County: Travis Elevation: 758 ft. above sea level

Type of Work: **Deepening** Proposed Use: **Domestic**

Drilling Start Date: 5/30/2013 Drilling End Date: 5/31/2013

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

Borehole: 6 160 190

Drilling Method: Air Rotary

Borehole Completion: Open Hole

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

Annular Seal Data: 0 50 6 cement

Seal Method: slurry and pour 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 Slab Installed

Water Level: 124 ft. below land surface on 2013-06-01 Measurement Method: Unknown

Packers: shale trap 20, 110

Type of Pump: Submersible Pump Depth (ft.): 170

Well Tests: No Test Data Specified

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	Dia. (in.) New/Used Type Setting From/To (ft.)
160	175	red & white gravel	4.5" new sdr-17 pvc 0 135
175	180	blue clay	4.5" new sdr-17 perf 135 175
180	190	black shale	4.5" new sdr-17 pvc 175 190

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

Owner: Mike Delamore Owner Well #: No Data

Address: 1313 Majesctic Hill Blvd Grid #: 57-40-4

Spicewood, TX 78669

Latitude: 30° 27' 16" N

Well Location: 1117 Starlight Canyon Ct.
Spicewood, TX 78669
Longitude: 098° 06' 22" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 10/25/2013 Drilling End Date: 10/25/2013

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

Borehole: 8 0 20

6.25 20 300

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 20 4 port

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: Land Owner

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: Burlap/Neoprene 215,210,105,20

Type of Pump: No Data

Well Tests: Jetted Yield: 2-3 GPM

Water Type
Water Quality: 216-279 L Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling Inc.

P O Box 867

Marble Falls, TX 78654

Driller Name: Michael G Becker P.G License Number: 54516

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	8	Tan Limestone
8	8	Gray Tan Limestone
8	81	Tan Limestone w/Sand
81	111	Red Sandstone w/ clay
111	127	Tan Limestone
127	164	Gray Tan Limestone
164	196	Gray Clay
196	216	Red Sandstone
216	224	Gravel H2o
224	236	Red Sandstone
236	279	Gravel H2o
279	300	Tan Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5" (5OD) New F	VC +2	to 225 SDR 17	
4.5" (50D) New S	lotted	225 to 285 .035	
4.5" (50D) New F	VC 28	5 to 300 SDR 17	

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

Owner Well #: Owner: No Data **Paul Motheral**

26100 Country Side Dr Address: Grid #: 57-40-4

Spicewood, TX 78669

Latitude: 30° 27' 19" N Well Location: 1116 Saddlebrook Canyon Ct

Spicewood, TX 78669 Longitude: 098° 06' 05" W

Well County: **Travis** Elevation: No Data

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 8/15/2014 Drilling End Date: 8/15/2014

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

Borehole: 8 0 70

> 6.25 70 145

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 60 3ben 1 port

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.): No Data

Method of Verification: Land Owner

Surface Completion: **Surface Sleeve Installed**

Water Level: No Data

Packers: **Burlap/Neoprene 60**

Type of Pump: No Data

Well Tests: Jetted Yield: 16 GPM Strata Depth (ft.) Water Type

60-117 M Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling INC.

P O Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: No Data

Water Quality:

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	16	Tan Limestone
16	18	Gray Tan Limestone
18	58	Tan Limestone
58	60	Red Clay
60	72	Red Tan Sandstone
72	76	Sand
76	82	Red Tan Sandstone
82	103	Tan Limestone w Red Clay
103	117	Tan White Limestone
117	144	Gray Limestone
144	145	Gray Limestone w Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)	
4.5" (5	OD) New	PVC +2	2' to 65' SDR17	
4.5" (5	OD) New	Slotted	l 65' to 85' .035	
4.5" (5	OD) New	PVC 8	5' to 105' SDR17	
4.5" (5	OD) New	Slotted	l 105' to 125' .035	
4.5" (5	OD) New	PVC 12	25' to 145' SDR17	

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

Latitude:

Owner: Aqua Texas Inc. Owner Well #: 1

Address: 1106 Clayton Lane, Suite 400W Grid #: 57-40-4

Austin, TX 78723

Well Location: Barton Creek

ΤX

Longitude: 098° 06' 15" W

30° 27' 20" N

Well County: Travis Elevation: No Data

Plugged Within 48 Hours

This well has been plugged

Plugging Report Tracking #97872

Type of Work: New Well Proposed Use: Test Well

Drilling Start Date: 9/15/2014 Drilling End Date: 9/15/2014

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

Borehole: 8 0 20 6.25 20 320

Drilling Method: Air Rotary

Borehole Completion: Plugged

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

Annular Seal Data: 0 320 18 Benseal

Seal Method: **Pressure** 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: Unknown

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: Jetted Yield: 2.6 GPM

Description (number of sacks & material)

Top Depth (ft.) Bottom Depth (ft.)

Plug Information: None 320 3 18 Benseal

3 0 1 Portland

Strata Depth (ft.) Water Type
Water Quality: 110-271 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling INC.

P O Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description		
0	1	Top Soil		
1	9	Tan Limestone		
9	41	Gray Tan Limestone		
41	55	Tan Limestone w Sand		
55	110	Red Sandstone w Clay		
110	122	Tan White Limestone H2o 1.6gpm		
122	153	Gray Tan Limestone		
153	195	Gray Clay (Hammet)		
170	271	Torques Clay		
195	220	Red Sandstone		
220	225	Gravel		
225	270	Red Sandstone & Gravel H2d		
271	295	Tan Clay		
295	320	Gray Clay (Smithwick)		

Casing: BLANK PIPE & WELL SCREEN DATA

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

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

Owner: Aqua Texas Inc. Owner Well #: 2

Address: 1106 Clayton Lane, Suite 400W Grid #: 57-40-4

Austin, TX 78723

Well Location: Barton Creek

TX

Longitude: 098° 06' 09" W

30° 27' 13" N

Latitude:

Well County: Travis Elevation: No Data

Plugged Within 48 Hours

This well has been plugged

Plugging Report Tracking #97873

Type of Work: New Well Proposed Use: Test Well

Drilling Start Date: 9/16/2014 Drilling End Date: 9/16/2014

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

Borehole: 8 0 20 6.25 20 263

Drilling Method: Air Rotary

Borehole Completion: Plugged

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

Annular Seal Data: 0 263 14 Benseal

Seal Method: **Pressure** 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: Unknown

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: Jetted Yield: 7.3 GPM

Description (number of sacks & material)

Top Depth (ft.) Bottom Depth (ft.)

Plug Information: None 263 3 14 Benseal

3 0 1 Portland

Water Type
Water Quality: 55-223 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling INC.

P O Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description		
0	2	Top Soil		
2	33	Tan Red Sandstone w Clay		
33	42	Red Clay		
42	55	Red Clay Tan Limestone		
55	80	Tan White Limestone 4gpm		
80	107	Gray Tan Limestone		
107	140	Gray Clay		
140	179	Red Sandstone		
179	193	Red Sandstone w gravel		
193	223	Gravel 3.3gpm		
223	225	Turquoise Clay		
225	258	Tan Clay		
258	263	Gray Clay		

Casing: BLANK PIPE & WELL SCREEN DATA

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

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

Owner: Amelia Bryant Owner Well #: TW#1

Address: 1400 CR 420 Grid #: 57-40-1 Spicewood, TX 78669

Well Location: 1400 CR 420 Latitude: 30° 27' 58" N

Spicewood, TX 78669 Longitude: 098° 06' 20" W

Well County: Burnet Elevation: 854 ft. above sea level

Plugged Within 48 Hours

This well has been plugged

Plugging Report Tracking #151478

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 7/10/2015 Drilling End Date: 7/10/2015

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

Borehole: 7.875 0 200

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

Annular Seal Data: No Data

Seal Method: **Pour** Distance to Property Line (ft.): **51**

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: Unknown

Water Level: 0 ft. below land surface on 2015-07-10 Measurement Method: Unknown

Packers: No Data

Type of Pump: No Data

Well Tests: No Test Data Specified

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

Plug Information: 2 to 200 Backfill Cutting

0 to 2 2 Portland cement

Water Type
Water Quality: No Data
No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

PO Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Comments: No Data

Report Amended on 11/30/2015 by Request #15252

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0	0	Plug	No Data

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

Owner: Amelia Bryant Owner Well #: Well#2

Address: 1400 CR 420 Grid #: 57-40-1

Spicewood, TX 78669

Well Location: 1400 CR 420 Latitude: 30° 28' 01.42" N

Spicewood, TX 78669 Longitude: 098° 06' 20.16" W

Well County: Burnet Elevation: 779 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 7/2/2015 Drilling End Date: 7/8/2015

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

Borehole: 7.875 0 180

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 60 10 cement

Seal Method: **Pos Displacement** Distance to Property Line (ft.): **51**

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: 114 ft. below land surface on 2015-07-06 Measurement Method: Unknown

Packers: Shale Packer 65

6Mil Poly 70 Shale Packer 75 6Mil Poly 80

Type of Pump: Submersible Pump Depth (ft.): 160

Well Tests: Jetted Yield: .5 GPM

Strata Depth (ft.) Water Type

Water Quality: 60-180 Good TDS 600

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

PO Box 525

Dripping Springs, TX 78620

Driller Name: Brice Bormann License Number: 54855

Apprentice Name: Tyler Loman

Comments: No Data

Report Amended on 11/30/2015 by Request #15262

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	n (ft.) Description	
0	1	topsoil	
1	5	brown sandy loam	
5	60	gray red sandstone shale	
60	175	rock gravel sand	
175	180	smith wick clay	

Dia. (in.) New/Used	Type	Setting From/To (ft.)			
4.5 New PVC-SDF	R 17IB	+2-140			
4.5 New PVC-17 Slotted 140-180 .032					

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

Owner: Paul D. & Cynthia G. Jones Owner Well #: No Data

Address: 1229 CR 420 Grid #: 57-40-1

Spicewood, TX 78669

Latitude: 30° 27' 54" N

Well Location: 1229 CR 420 Spicewood, TX 78669 Longitude: 098° 06' 21" W

Well County: Burnet Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 10/20/2016 Drilling End Date: 10/20/2016

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

Borehole: 8 0 15

6.25 15 180

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 20 Portland 4 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 20 ft.

Burlap/Neoprene at 30 ft. Burlap/Neoprene at 85 ft. Burlap/Neoprene at 90 ft.

Type of Pump: No Data

Well Tests: Jetted Yield: 2.5 GPM

Strata Depth (ft.) Water Type

Water Quality: 85 - 160 Trinity - TDS 600

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Гор (ft.)	Bottom (ft.)	Description	
0	1	Top Soil	
1	20	Tan Red LS	
20	52	Gray LS	
52	58	Gray Clay	
58	160	Red SS	
160	161	Tortoise Clay	
161	180	Tan Clay	

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	100
4.5	Screen	New Plastic (PVC)	.035	100	160
4.5	Blank	New Plastic (PVC)	SDR17	160	180

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

Owner: Glenn DaGian Owner Well #: No Data

Address: 215 Antigua Way Grid #: 57-40-1

Austin, TX 78738

Well Location: Indian Mound Rd.

Latitude: 30° 28' 19.14" N

Spicewood, TX 78669 Longitude: 098° 06' 05.22" W

Well County: Burnet Elevation: 755 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 3/11/2019 Drilling End Date: 3/11/2019

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

Borehole: 10.5 0 10

8.5 10 200

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size Filter Pack Intervals: 100 200 3/8" Gravel Top Depth (ft.) Bottom Depth (ft.) Description (number of sacks & material) Annular Seal Data: 0 13 Cement 4 Bags/Sacks

Seal Method: **Pressure** Distance to Property Line (ft.): **5'**

Sealed By: **Driller** Distance to Septic Field or other

100

concentrated contamination (ft.): No Data

Distance to Septic Tank (ft.): No Data

Method of Verification: No Data

Bentonite 13 Bags/Sacks

Surface Completion: Pitless Adapter Used Surface Completion by Driller

Water Level: 92 ft. below land surface on 2019-03-18

13

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 180

Well Tests: Jetted Yield: 40-45 GPM

Water Quality: 120 - 180 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Bee Cave Drilling, Inc.

185 Angel Fire Dr.

Dripping Springs, TX 78620

Driller Name: Jim Blair License Number: 54416

Comments: 800 tds

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	topsoil
2	25	caliche
25	75	brown clay
75	185	tan sandstone
185	200	green clay

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr-17	0	120
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	120	180
4.5	Blank	New Plastic (PVC)	sdr-17	180	200

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

Owner: Dominique Randall Owner Well #: No Data

Address: 1121 Indian Mound Grid #: 57-40-1 Spicewood, TX 78665

Well Location: 1121 Indian Mound

Latitude: 30° 28' 18" N

Spicewood, TX 78665 Longitude: 098° 06' 01" W

Well County: Burnet Elevation: 775 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 4/16/2020 Drilling End Date: 4/20/2020

Borehole: Top Depth (ft.) Bottom Depth (ft.)

8 0 3

8.5 3 190

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Filter Pack Intervals: 100 190 Gravel Size

7 op Depth (ft.) Bottom Depth (ft.) Filter Material Size

4 of Depth (ft.) Filter Material Size

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

Annular Seal Data: 0 100 Cement 18

Seal Method: **Pressure** Distance to Property Line (ft.): **8**

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **100+**

Distance to Septic Tank (ft.): 90

Method of Verification: No Data

Surface Completion: Surface Sleeve Installed

Water Level: 100 ft. below land surface on 2020-04-21 Measurement Method: Electric Line

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 160

Well Tests: **Jetted Yield: 15+ GPM**

Water Type
Water Quality:

No Data

No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Bee Cave Drilling, Inc.

185 Angel Fire Dr.

Dripping Springs, TX 78620

Driller Name: jim blair License Number: 54416

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description	
0	2	topsoil	
2	30	white limestone	
30	55	grey clay	
55	60	tan limestone	
60	80	red clay	
80	110	red sandstone / clay	
110	170	red limestone	
170	190	black /tan/white sandstone	
190	195	grey shale	

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr-17	0	150
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	150	190

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

Owner: Gary Wier Owner Well #: No Data

Address: P O Box 268 Grid #: 57-40-1

Well Location: 293 Oaks Rd Latitude: 30° 27' 38" N

Spicewood, TX 78669 Longitude: 098° 07' 19" W

Well County: Burnet Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 10/6/2021 Drilling End Date: 10/6/2021

Spicewood, TX 78611

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

Borehole: 8 0 20

6.25 20 200

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 20 Portland 4 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 20 ft.

Burlap/Neoprene at 25 ft. Burlap/Neoprene at 105 ft. Burlap/Neoprene at 110 ft.

Type of Pump: No Data

Well Tests: Jetted Yield: 1.6 GPM

Water Quality: 112 - 180 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: CTGCD # 8288

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description	
0	1	Top SOil	
1	11	Tan LS w /Red Clay	
11	17	White Tan LS	
17	30	Tan LS w/ Sand	
30	37	Gray LS	
37	48	Gray LS w/ Clay	
48	59	Gray Tan LS	
59	64	Gray Tan LS w/ CLay	
64	98	Hammet Clay	
98	112	Red SS	
112	135	Red SS w / Gravel	
135	180	Gravel	
180	198	Tan Clay	
198	200	Gray Clay	

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	120
4.5	Screen	New Plastic (PVC)	.035	120	180
4.5	Blank	New Plastic (PVC)	SDR17	180	200

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

Owner: Kirk Covington Owner Well #: No Data

Address: 921 Lauder Dr. Grid #: 57-40-1

Spicewood , TX 78669

Well Location: 1345 CR 414 Latitude: 30° 28' 24" N

Spicewood, TX 78669 Longitude: 098° 06' 38" W

Well County: Burnet Elevation: No Data

Type of Work: New Well Proposed Use: Unknown

Drilling Start Date: 10/8/2021 Drilling End Date: 10/8/2021

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

Borehole: 8 0 20

6.25 20 182

Drilling Method: Unknown

Borehole Completion: Backfilled 2' Cement Cap (Dry)

Annular Seal Data: No Data

Seal Method: Unknown 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: No Data

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: Jetted Yield: 0 GPM

Water Quality:

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

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data:

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

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson

License Number: 54989

Comments: CTGCD # 8300

Dry Backfilled 2' Cement Cap

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 1 **Top Soil** 1 13 Tan Red LS 13 28 White Tan LS 28 37 Tan LS 37 53 Gray LS w/ Clay 72 53 **Hammet Clay** 72 79 Red SS 79 87 Red SS w/ Gravel and Sand 87 109 Red SS w/ Sand 109 155 Red SS w/ Gravel Sand 155 172 Gravel 172 182 Tan Clay

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

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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

Submitted on: 10/18/2021

Owner: Dereck Norwood Owner Well #: No Data

Address: 126 CR 420 Grid #: 57-40-4

Spicewood , TX 78669

Latitude: 30° 27' 29" N

Well Location: 12001 CR 404

Spicewood, TX 78669 Longitude: 098° 07' 01" W

Well County: Burnet Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 6/29/2022 Drilling End Date: 6/29/2022

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

Borehole: 8 0 20

6.25 20 213

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 20 Portland 4 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 20 ft.

Burlap/Neoprene at 25 ft. Burlap/Neoprene at 108 ft.

Type of Pump: No Data

Well Tests: Jetted Yield: 3 GPM

Water Quality: 108 - 193 Trinity - TDS 360

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Apprentice Name: Alfonso Rodriguez Jr. Apprentice Number: 60952

Comments: CTGCD # 8769

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description	
0	1	Top Soil	
1	6	Tan Clay	
6	14	Tan LS w/ Gravel	
14	21	Tan KS w Red Clay	
21	39	White Tan LS	
39	53	Gray LS	
53	63	Gray LS w/ Clay	
63	85	Hammet Clay	
85	101	Red SS	
101	108	Red SS w/ Gravel	
108	126	Sand Red SS Gravel Mix	
126	140	Red SS	
140	193	Gravel	
193	213	Turquoise Tan Clay	

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	133
4.5	Screen	New Plastic (PVC)	.035	133	193
4.5	Blank	New Plastic (PVC)	SDR17	193	213

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

Latitude:

Owner Well #: Owner: **Wolfgang Maasberg**

Address: 309 Bedford Dr Grid #: 57-40-1

Spicewood, TX 78669

30° 28' 31" N Well Location: 222 Indian Mound Rd

Spicewood, TX 78669 Longitude: 098° 06' 25" W

Well County: **Burnet** Elevation: No Data

Number of Wells Drilled: 2

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 5/6/2024 Drilling End Date: 5/6/2024

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

Borehole: 8 0 50

> 6.25 50 176

Drilling Method: Air Rotary

Borehole Completion: **Straight Wall**

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

Annular Seal Data: 0 50 3 Benseal 4 Portland 7 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 Sleeve Installed Surface Completion: Surface Completion by Driller

Water Level: No Data

Packers: Burlap/Neoprene at 50 ft.

> Burlap/Neoprene at 55 ft. Burlap/Neoprene at 65 ft. **Burlap/Neoprene** at 68 ft.

Type of Pump: No Data

Well Tests: **Jetted** Yield: 2 GPM Water Type
Water Quality: 69 - 156 Trinity

Chemical Analysis Made: No

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: CTGCD # 9436

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 1 **Top Soil** 1 21 Tan LS 21 25 **Gray Tan LS** 25 57 **Gray Clay** 57 69 Red LS 69 156 Red LS w/ Gravel 156 157 **Turquoise Clay** 157 170 **Tan Clay** 170 176 **Gray Shale**

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	96
4.5	Screen	New Plastic (PVC)	.035	96	156
4.5	Blank	New Plastic (PVC)	SDR17	156	176

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

Owner: Wolfgang Maasberg Owner Well #: 2

Address: 309 Bedford Dr Grid #: 57-40-1

Well Location: 222 Indian Mound Rd Latitude: 30° 28' 29" N

Spicewood, TX 78669 Longitude: 098° 06' 22" W

Well County: Burnet Elevation: No Data

Number of Wells Drilled: 2

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 5/7/2024 Drilling End Date: 5/7/2024

Spicewood, TX 78669

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

Borehole: 8 0 50

6.25 50 180

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 3 Benseal 3 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 Onwer

Surface Completion: Surface Sleeve Installed Surface Completion by Driller

Water Level: No Data

Packers: Burlap/Neoprene at 50 ft.

Burlap/Neoprene at 55 ft. Burlap/Neoprene at 70 ft. Burlap/Neoprene at 75 ft.

Type of Pump: No Data

Well Tests: **Jetted Yield: 1 GPM**

Water Type
Water Quality: 79 - 161 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: CTGCD # 9443

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	14	Tan LS
14	24	Gray Tan LS
24	55	Gray Clay
55	79	Red SS
79	160	Sand and Gravel
160	161	Turquoise Clay
161	180	Tan Clay

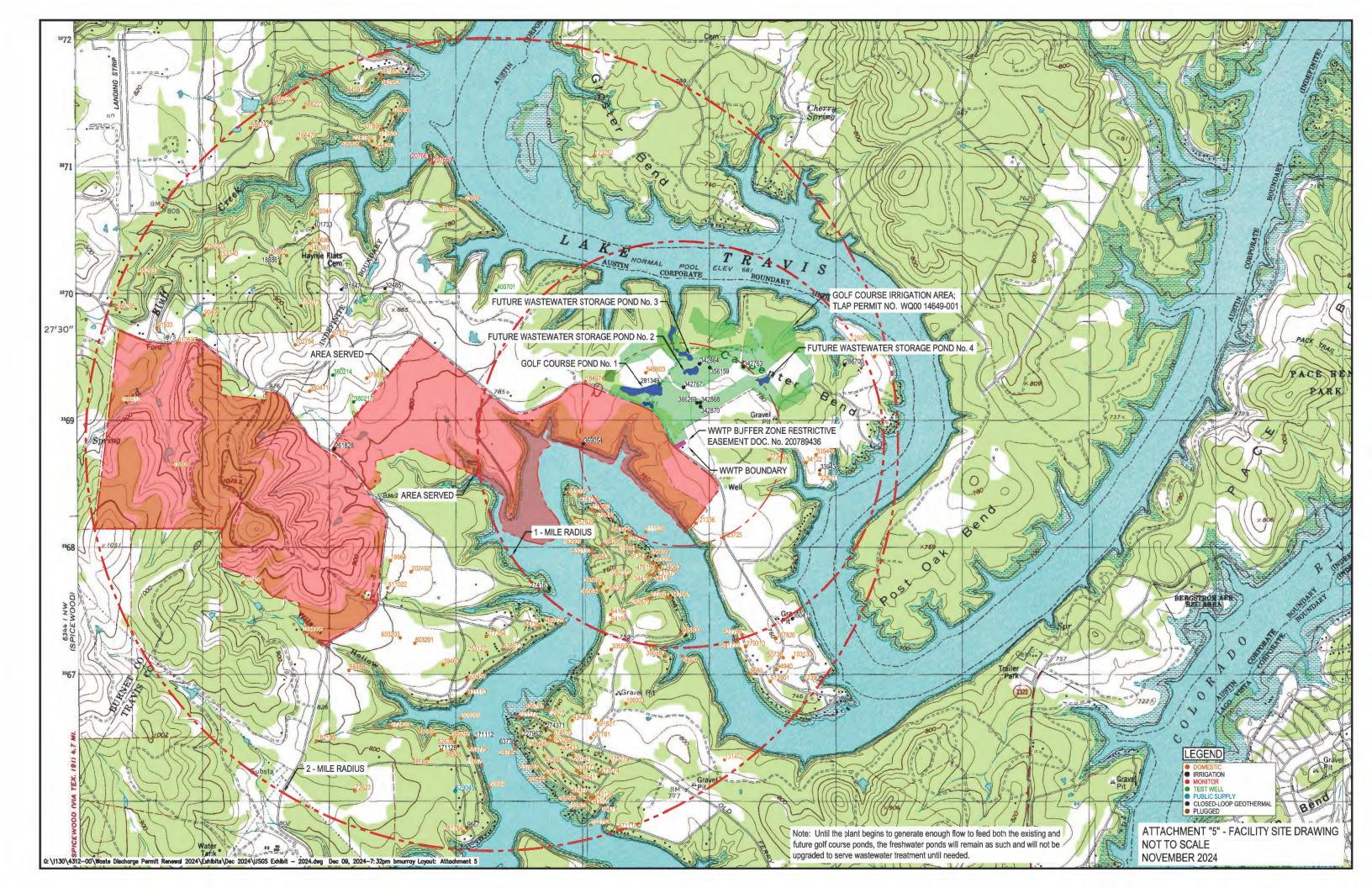
Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	100
4.5	Screen	New Plastic (PVC)	.035	100	160
4.5	Blank	New Plastic (PVC)	SDR17	160	180

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



Owner: Lakecliff Racquet Club Owner Well #: No Data

Address: 25609 Kahala Sunset Ct Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 25609 Kahala Sunset Ct

Spicewood, TX 78669 Longitude: 098° 04' 42" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 5/7/2020 Drilling End Date: 5/7/2020

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

Borehole: 8.5 0 246

Drilling Method: Air Rotary

Borehole Completion: 3/8 Pea Gravel 100-246

Annular Seal Data: No Data

Seal Method: **Pressure** Distance to Property Line (ft.): **15**

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: No Data

Type of Pump: No Data

Well Tests: Jetted Yield: 60+ GPM

Water Quality: 107 - 226 Trinity - TDS 650

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	22	Ta Red LS
22	47	Tan LS
47	80	Gray Tan LS
80	107	Gray Clay
107	128	Red SS
128	159	Gravel
159	169	Red SS
169	226	Gravel
226	246	Tan Clay

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	166
4.5	Screen	New Plastic (PVC)	.035	166	226
4.5	Blank	New Plastic (PVC)	SDR17	226	246

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

Owner: Lakecliff Country Club Owner Well #:

Address: 1700 Kahala Sunset Drive Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 1700 Kahala Sunset Drive

Spicewood, TX 78669 Longitude: 098° 04' 38" W

Well County: Travis Elevation: 809 ft. above sea level

Type of Work: New Well Proposed Use: Irrigation

Drilling Start Date: 2/29/2012 Drilling End Date: 3/13/2012

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

Borehole: 9.875 0 220

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 16 220 Gravel

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

Annular Seal Data: 0 116 15ptln2hlpl2bns

Seal Method: **Pos. Displacement** Distance to Property Line (ft.): **200+**

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

30° 27' 16" N

Surface Completion: Surface Sleeve Installed

Water Level: 153 ft. below land surface on 2012-03-06 Measurement Method: Unknown

Packers: Gravel Pack

Type of Pump: Submersible Pump Depth (ft.): 200

Well Tests: Pump Yield: 30 GPM

Water Quality: 160-220 Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	4	Topsoil
4	18	Brown Red Limestone
18	19	Yellow White Limestone
19	28	White Limestone
28	29	Yellow Limestone
29	39	Yellow White Limestone
39	40	Void
40	45	Brown Limestone
45	70	Gray Limestone
70	75	Brown Clay
75	83	Gray Limestone
83	86	Blue Clay
86	140	Sand Brown Limestone
140	155	Red Clay Sand
155	218	Red Sand Big Rock
218	240	Black Clay-Smith Wick

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
6.9 New PVC-SDF	R 17IB	+2'/106'	
6.9 New PVC-17	Slotted	.035 160'/220'	

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

Owner: Mark Sitterle Owner Well #: 1

Address: 2400 Cliff Point Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 2400 Cliff Point Latitude: 30° 27' 15" N

Spicewood, TX 78669 Longitude: 098° 04' 31" W

Well County: Travis Elevation: 535 ft. above sea level

Type of Work: New Well Proposed Use: Irrigation

Drilling Start Date: 9/17/2013 Drilling End Date: 9/23/2013

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

Borehole: 8 0 240

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 124 240 Gravel

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

Annular Seal Data: 0 124 1hlp5bns6TypH

Seal Method: **Pos. Displacement** Distance to Property Line (ft.): **35**

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **300+**

Distance to Septic Tank (ft.): No Data

Method of Verification: Measured

Surface Completion: Pitless Adapter Used

Water Level: 124 ft. below land surface on 2013-09-18 Measurement Method: Unknown

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 180

Well Tests: Jetted Yield: 15+ GPM

Water Type
Water Quality: 160/230 Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Apprentice Name: Travis Haffelder

Comments: TDS 500

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 2 Topsoil White Brown Yellow 2 18 Limestone 18 20 **Brown Limestone** 20 30 **Tan Brown Limestone** 30 40 **Gray Limestone wet** 40 43 **Brown Limestone** 43 74 **Gray Limestone** 74 76 **Brown Shale** 76 85 **Gray Limestone Shale** 85 110 **Red Sandstone Rock** 140 **Brown Limestone Rock** 110 140 230 **Brown Rock** 230 240 **Gravel Black Clay**

Dia. (in.) New/Used	Type	Setting From/To (ft.)			
4.5 New PVC-SDF	R 17IB	+2'/180'			
4.5 New PVC-17 Slotted .035 180'/240'					

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

Owner: Rod Sellers Owner Well #: 1

Address: P.O. Box 890649 Grid #: 57-40-5

Houston, TX 77289

Well Location: 25714 Cliff Circle Latitude: 30° 27' 21" N

Spicewood, TX 78669 Longitude: 098° 04' 26" W

Well County: Travis Elevation: 768 ft. above sea level

Type of Work: New Well Proposed Use: Irrigation

Drilling Start Date: 9/24/2013 Drilling End Date: 9/25/2013

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

Borehole: 8 0 220

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 100 220 Gravel

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

Annular Seal Data: 0 177 2hlpg5bnsl9TypH

Seal Method: **Pos. Displacement** Distance to Property Line (ft.): 5

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **250+**

Distance to Septic Tank (ft.): No Data

Distance to deptie rank (it.). No Data

Method of Verification: Measured

Surface Completion: Pitless Adapter Used

Water Level: 144 ft. below land surface on 2013-09-26 Measurement Method: Unknown

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 180

Well Tests: Jetted Yield: 15+ GPM

Water Quality: 160/220 Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Apprentice Name: Travis Haffelder

Comments: TDS 500

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 1 Topsoil 1 22 White Limestone 22 45 **Brown Limestone Sand Wet** 45 95 **Gray Limestone Shale** 118 **Red Sandstone Sand** 95 118 160 **Red Brown Sandstone Brown Sandstone Rock** 160 216 220 216 **Gray Black Clay**

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5 New PVC-SDF	R 17IB	+2'/160'	
4.5 New PVC-17 \$	Slotted	.035 160'/220'	

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.

Owner: Bart Jones Owner Well #: 1

Address: 25630 Cliff Crossing Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 25630 Cliff Crossing

Latitude: 30° 27' 20" N

Spicewood, TX 78669 Longitude: 098° 04' 23" W

Well County: Travis Elevation: 731 ft. above sea level

Type of Work: New Well Proposed Use: Irrigation

Drilling Start Date: 2/21/2014 Drilling End Date: 2/24/2014

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

Borehole: 8.5 0 200

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 140 200 Gravel

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

Annular Seal Data: 0 140 10bns/7hlp/3tyH

Seal Method: **Pos. Displacement** Distance to Property Line (ft.): **20**

Sealed By: **Driller**Distance to Septic Field or other

Variance Number: 032-14 concentrated contamination (ft.): 6

Distance to Septic Tank (ft.): No Data

Method of Verification: Measured

Surface Completion: Unknown

Water Level: 112 ft. below land surface on 2014-02-24 Measurement Method: Unknown

Packers: No Data

Type of Pump: No Data

Well Tests: Jetted Yield: 15-18 GPM

Strata Depth (ft.) Water Type
Water Quality: 140/200 Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Apprentice Name: Travis Haffelder

Comments: TDS 650

Variance 032-14

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	6	White Limestone Hard
6	7	Brown Limestone
7	15	Brown White Limestone Hard
15	17	Brown Sandstone
17	32	Gray Limestone
32	55	Gray Limestone
55	60	Gray Shale
60	62	Brown Sandstone
62	80	Gray Limestone
80	90	Red Sandstone Damp
90	92	Blue Shale Gravel
92	120	Red Sandstone
120	140	Gravel Red Sandstone
140	198	Gravel & Rock
198	200	Blue Shale Clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)	
4.5 New	PVC-SDI	R 17IB	+2'/140'	
4.5 PVC	-17 Slotte	ed .035	140'/200'	

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

Owner: Stephan James Owner Well #: 1

Address: 3030 Cliff Overlook Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 3030 Cliff Overlook

Latitude: 30° 27' 20" N

Spicewood, TX 78669 Longitude: 098° 04' 13" W

Well County: Travis Elevation: 950 ft. above sea level

Type of Work: New Well Proposed Use: Irrigation

Drilling Start Date: 9/19/2013 Drilling End Date: 9/23/2013

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

Borehole: 8 0 200

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 130 2hpg5bnsl6TypH

Seal Method: **Pos. Displacement** Distance to Property Line (ft.): **9'**

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **200+**

concentrated contamination (m): =cc

Distance to Septic Tank (ft.): No Data

Method of Verification: Measured

Surface Completion: Pitless Adapter Used

Water Level: 125 ft. below land surface on 2013-09-24 Measurement Method: Unknown

Packers: 6MIL Poly 100'

Type of Pump: Submersible

Well Tests: Jetted Yield: 06 GPM

Water Quality: 160/195 Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Apprentice Name: Travis Haffelder

Comments: TDS 500

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	5	White Limestone
5	6	Brown Limestone
6	16	Brown White Limestone
16	50	Gray Limestone
50	55	Gray Shale
55	70	Gray Red Shale
70	78	Gray Limestone
78	90	Brown Red Sand
90	180	Red Sand Rock
180	195	Brown Sand Rock
195	200	Black Clay

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5 New PVC-SDF	R 17IB	+2'/140'	
4.5 New PVC-17 \$	Slotted	.035 140'/180'	
4.5 New PVC-SDF	R 17IB	180'/200'	

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

Owner: Terry Neiman Owner Well #: No Data

Address: **PO Box 4007** Grid #: **57-40-5**

Horseshoe Bay, TX 78657

Well Location: 25264 Kahala Sunset Court Latitude: 30° 27' 11" N

Spicewood, TX 78669 Longitude: 098° 04' 27" W

Well County: Travis Elevation: 771 ft. above sea level

Type of Work: New Well Proposed Use: Irrigation

Drilling Start Date: 6/2/2014 Drilling End Date: 6/4/2014

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

Borehole: **8.75 0 240**

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 154 240 Gravel

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

Annular Seal Data: 0 154 2 3/8hp12bs2ptl

Seal Method: **Pos. displacement** Distance to Property Line (ft.): **15**

Sealed By: **Driller** Distance to Septic Field or other

Variance Number: **064-14** concentrated contamination (ft.): **N/A**

Distance to Septic Tank (ft.): No Data

Method of Verification: Measured

Surface Completion: Pitless Adapter Used

Water Level: 160 ft. below land surface on 2014-06-02 Measurement Method: Unknown

Packers: Gravel Pack

Type of Pump: Submersible Pump Depth (ft.): 200

Well Tests: Jetted Yield: 10-15 GPM

Strata Depth (ft.) Water Type

Water Quality: 140-240 Good TDS 470

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

PO Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Apprentice Name: Travis Haffelder Apprentice Number: 58603

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	3	Red tan sandstone
3	4	White limestone
4	10	Brown tan limestone sandstone
10	21	Red tan sand clay
21	24	White limestone
24	44	White brown sandstone
44	51	Brown sandstone
51	85	Gray limestone
85	90	Gray shale
90	95	Red gray shale
95	113	Gray sandstone
113	130	Red sandstone
130	230	Brown sandstone rock
230	240	Blue brown shale

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)	
4.5 Nev	V PVC-SDI	R 17IB	+2 to 160	
4.5 Nev	v PVC-17 \$	Slotted	I .035 160 to 220	
4.5 Nev	V PVC-SDI	R 17IB	220 to 240	

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

Owner Well #: Owner: **Bill Thomas**

Address: 25616 Kahala Sunset Ct. Grid #: 57-40-5

Spicewood, TX 78669

Latitude: 30° 27' 11" N Well Location: 25616 Kahala Sunset Ct.

> Spicewood, TX 78669 Longitude: 098° 04' 26" W

Well County: **Travis** Elevation: 793 ft. above sea level

Type of Work: **New Well** Proposed Use: Irrigation

Drilling Start Date: 9/25/2013 Drilling End Date: 9/27/2013

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

Borehole: 8 0 260

Drilling Method: Air Rotary

Borehole Completion: **Filter Packed**

Bottom Depth (ft.) Filter Material Size Top Depth (ft.)

Filter Pack Intervals: 200 123 Gravel

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

Annular Seal Data: 127 1hlpg5bnsl6TypH

Seal Method: Pos. Displacement Distance to Property Line (ft.): 6

Sealed By: Driller Distance to Septic Field or other

concentrated contamination (ft.): 150+

Distance to Septic Tank (ft.): No Data

Method of Verification: Measured

Surface Completion: **Pitless Adapter Used**

Water Level: 167 ft. below land surface on 2013-09-26 Measurement Method: Unknown

Packers: No Data

Type of Pump: **Submersible** Pump Depth (ft.): 200

Jetted Well Tests: Yield: 20+ GPM Strata Depth (ft.) Water Type

Water Quality: 200/260 Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Apprentice Name: Travis Haffelder

Comments: TDS 500

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

From (ft) To (ft) Description Dia. (in.) New/Used Type Setting From/To (ft.)

0-1/2 Topsoil 4.5 New PVC-SDR 17IB +2'/200'

1/2-6 Red Clay Sand 4.5 New PVC-17 Slotted .035 200'/260'

6-18 Red Sandstone White Limestone

45-47 Brown Sandstone White Limestone

47-53 Brown Limestone

18-20 Brown Limestone
20-45 White Limestone

53-110 Gray Limestone

110-135 Red Sandstone

135-137 Brown Sandstone

137-200 Red Rock Sandstone

200-250 Brown Limestone

250-260 Black Clay

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

Owner Well #: Owner: John & Sheryl Scott

Address: 25617 Kahala Sunset Ct. Grid #: 57-40-5

Spicewood, TX 78669

Latitude: 30° 27' 10" N Well Location: 25617 Kahala Sunset Ct

> Spicewood, TX 78669 Longitude: 098° 04' 26" W

Well County: **Travis** Elevation: 793 ft. above sea level

Type of Work: **New Well** Proposed Use: Irrigation

Drilling End Date: 9/23/2013 Drilling Start Date: 9/18/2013

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

Borehole: 8 0 280

Drilling Method: Air Rotary

Borehole Completion: **Filter Packed**

Bottom Depth (ft.) Filter Material Size Top Depth (ft.)

Filter Pack Intervals: 164 280 Gravel

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

Annular Seal Data: 153 1hlpg6bnsl6TypH

Seal Method: Pos. Displacement Distance to Property Line (ft.): 8

Sealed By: Driller Distance to Septic Field or other

concentrated contamination (ft.): 300+

Distance to Septic Tank (ft.): No Data

Method of Verification: Measured

Surface Completion: **Pitless Adapter Used**

Water Level: 163 ft. below land surface on 2013-09-18 Measurement Method: Unknown

Packers: No Data

Type of Pump: **Submersible** Pump Depth (ft.): 240

Well Tests: Jetted Yield: 15+ GPM Water Type
Water Quality: 230/275 Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Apprentice Name: Travis Haffelder

Comments: TDS 500

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	Caliche
1	5	Red Sandstone
5	8	Brown Sandstone
8	10	Gray Brown Sandstone
10	12	Brown Red Limestone
12	18	Red Sandstone
18	20	Brown Limestone
20	21	Red Shale
21	23	Brown Limestone
23	30	Light Brown Red Sandstone
30	32	Yellow Limestone
32	50	White Limestone
50	55	Brown Red Sand
55	95	Gray Limestone
95	97	Brown Red Shale
97	115	Gray Limestone
115	117	Red Sandstone

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5 New PVC-SDF	R 17IB	+2'/240'	
4.5 New PVC-17	Slotted	.035 240'/280'	

117	140	Brown Red Sandstone
140	145	Rock Red Sandstone
145	200	Red Sandstone
200	275	Brown Rock Sandstone
275	280	Gray & Black Clay

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

Owner: Heiser Development c/oJason Mann Owner Well #:

Address: 901 S. Mopac, Bldg 2, Ste 505 Grid #: 57-40-5

Austin, TX 78746

Well Location: 2205 Haney Creek Dr.

Latitude: 30° 26' 56" N

Spicewood, TX 78669 Longitude: 098° 04' 06" W

Well County: Travis Elevation: 764 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 8/24/2011 Drilling End Date: 10/15/2011

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

Borehole: 7.875 0 200

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 60 2hlplg 15ptld

Seal Method: **Pos. Displacement** Distance to Property Line (ft.): **100+**

Sealed By: Whisenant & Lyle Water Distance to Septic Field or other

Service

concentrated contamination (ft.): No Data

Distance to Septic Tank (ft.): No Data

Method of Verification: measured

Surface Completion: Surface Sleeve Installed

Water Level: 116 ft. below land surface on 2011-08-25 Measurement Method: Unknown

Packers: 6Mil poly 60

6Mil poly 100

6Mil poly-Shale packer 160

Type of Pump: Submersible Pump Depth (ft.): 160

Well Tests: Jetted Yield: 20+ GPM

Water Type
Water Quality: 140/ 200 good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

PO Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	18	White limestone
18	37	Brown sand limestone
37	70	Gray limestone sand
70	80	Gray shale
80	95	Gray clay
95	98	Gray limestone
98	140	Red sandstone
140	198	Gravel
198	200	Blue clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5 New PVC-SDI	R 17IB	+2 / 140'	
4.5 New PVC-17	Slotted	.035 140-200	

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

Latitude:

Owner: STEVE HUGHES Owner Well #: No Data

Address: 1251 LAKESHORE DR Grid #: 57-40-5

SPICEWOOD, TX 78669

Well Location: 1231 LAKESHORE DR SPICEWOOD, TX 78669 Longitude: 098° 04' 28" W

Well County: Travis Elevation: 853 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 8/27/2007 Drilling End Date: 8/27/2007

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

Borehole: 10 0 140

Drilling Method: Air Rotary

Borehole Completion: Open Hole

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

Annular Seal Data: 0 2

2 100 16

Seal Method: PRESSURE CEMENTED 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: NOT YET INSTALLED

30° 26' 40" N

Surface Completion: Surface Sleeve Installed

Water Level: 55 ft. below land surface on 2007-08-28 Measurement Method: Unknown

Packers: **NEOPRENE 100**

NEOPRENE 118 NEOPRENE 120

Type of Pump: Submersible Pump Depth (ft.): 126

Well Tests: Jetted Yield: 80 GPM

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

Chemical Analysis Made: Yes

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: BEE CAVE DRILLING INC

185 ANGELFIRE DR

DRIPPING SPRINGS, TX 78620

Driller Name: BOBBY ROBERTS License Number: 54416

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOPSOIL
1	2	SURFACE ROCK
2	14	BROWN GRAVEL
14	35	TAN LIMESTONE
35	70	BLUE SHALE
70	80	RED SHALE
80	115	RED CLAY
115	140	RED ROCK W/B 80 GPM TDS 660

Dia. (in.) New/Used	Туре	Setting From/To (ft.)		
4.5 NEW PLASTIC	C 0-120)		
4.5 NEW SCREEN MFG 120-140 .050				

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

Owner Well #: Owner: No Data LARRY EISENBERG

Address: 3004 SPARKLING BROOK LN Grid #: 57-40-5

AUSTIN, TX 78746

Latitude: 30° 26' 38" N Well Location: **25204 SUNSET RIVER CR**

> SPICEWOOD, TX 78669 Longitude: 098° 04' 43" W

Well County: **Travis** Elevation: 800 ft. above sea level

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 4/12/2007 Drilling End Date: 4/12/2007

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

Borehole: 0 12 10

> 8 12 170

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 9 105

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

Sealed By: CESAR RAMOS Distance to Septic Field or other

concentrated contamination (ft.): 86

Distance to Septic Tank (ft.): No Data

Method of Verification: STEEL TAPE

Surface Completion: **Surface Sleeve Installed**

Water Level: 90 ft. below land surface on 2007-04-14 Measurement Method: Unknown

Packers: **NEOPRENE 105**

> **NEOPRENE 110 NEOPRENE 128 NEOPRENE 130**

Type of Pump: Pump Depth (ft.): 160 Submersible

Yield: 30 GPM Well Tests: **Jetted**

Strata Depth (ft.) Water Type

Water Quality: No Data No Data

Chemical Analysis Made: Yes

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: BEE CAVE DRILLING

185 ANGELFIRE DR

DRIPPING SPRINGS, TX 78620

Driller Name: JIM BLAIR License Number: 54416

Apprentice Name: CESAR RAMOS Apprentice Number: 57534

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	2	TOPSOIL
2	28	TAN ROCK
28	38	GREY ROCK
38	90	BLUE SHALE
90	115	BLACK ROCK
115	130	RED CLAY
130	170	RED ROCK W/B 30 GPM TDS 690

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5 NEW PLASTIC	C 0-130		
4.5 NEW SCREEN	NMFG.	130-170 .050	

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

STATE OF TEXAS PLUGGING REPORT for Tracking #147051

Owner: Holzapfel Owner Well #: No Data

Address: 26804 masters parkway Grid #: 57-40-4

spicewood, TX 78669

Well Location: 26804 masters parkway

Latitude: 30° 27' 01" N

spicewood, TX 78669 Longitude: 098° 05' 01" W

Well County: Travis Elevation: No Data

Well Type: Closed-Loop Geothermal

Drilling Information

Company: Sarris well Drilling Date Drilled: 5/23/2014

Driller: Anthony Sarris License Number: 58870

Well Report Tracking #369054

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

Borehole: 4.5 0 250

Plugging Information

Date Plugged: 5/23/2014 Plugger: Anthony Sarris

Plug Method: Unknown

Casing Left in Well: Plug(s) Placed in Well:

Description (number of sacks & material)

No Data Not Provided

Certification Data: The driller certified that the driller plugged this well (or the well was plugged under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the reports(s) being returned for completion and resubmittal.

Company Information: Sarris well Drilling

p o box

austin, TX 78760

Driller Name: Anthony Sarris License Number: 58870

Comments: drilled 5 new geothermal closed loop wells 0-250

Latitude:

Owner: Carl Jones Owner Well #: 1

Address: 2525 Bainbridge Street Grid #: 57-40-4

Odessa, TX 79762

Well Location: 24017 Haynie Flat Road

Spicewood, TX 78669

Longitude: 098° 05' 00" W

30° 27' 17" N

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 5/27/2009 Drilling End Date: 5/28/2009

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

Borehole: 8 0 205

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 125 30

Seal Method: **Tremie** Distance to Property Line (ft.): **31**

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: 97 ft. below land surface on 2009-06-13 Measurement Method: Unknown

Packers: neophrene/burlap 125'

Type of Pump: Submersible Pump Depth (ft.): 100

Well Tests: Estimated Yield: 10 GPM

Strata Depth (ft.) Water Type

Water Quality: 125'-205' Trinity

Chemical Analysis Made: No

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Associated Drilling Co.

PO Box 1060

Manchaca, TX 78652

Driller Name: Byron Benoit License Number: 1955

Apprentice Name: Frank Barnard Apprentice Number: 56366

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0	1	topsoil	4.5" New Plastic -2' to 205' sdr17
1	125	tan lime	slotted 125'-205'
125	205	broken red sandstone	

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

STATE OF TEXAS PLUGGING REPORT for Tracking #187078

Owner: **OAR Spicewood Real Estate Holdings**

LLC

Travis

Address: 25928 Haynie Flatt Rd

spicewood, TX 78669

25928 Haynie Flatt Rd

spicewood, TX 78669

Latitude:

Grid #:

30° 27' 15.84" N

Longitude:

Owner Well #:

098° 05' 09.24" W

Elevation:

784

57-40-4

Well Type:

Well County:

Well Location:

Domestic

Drilling Information

Company: no data

no data

Date Drilled: No Data

License Number:

no data

Diameter (in.)

Top Depth (ft.)

Bottom Depth (ft.)

Borehole:

Driller:

5

1

150

Plugging Information

Date Plugged: 5/6/2019 Plugger: Jay Ledbetter

Plug Method:

Pour in 3/8 bentonite chips when standing water in well is less than 100 feet depth,

cement top 2 feet

no

Variance Number:

Casing Left in Well:

Plug(s) Placed in Well:

Dla (in.)

Top (ft.)

Bottom (ft.)

Top (ft.)

Bottom (ft.)

Description (number of sacks & material)

5

-2

150

2

150

Bentonite 30 Bags/Sacks

Certification Data:

The driller certified that the driller plugged this well (or the well was plugged under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the reports(s) being returned for completion and resubmittal.

Company Information:

Action Water Well Service

100 Spanish Oak Trail Spicewood, TX 78669

Driller Name:

Jay Ledbetter

License Number:

54182

Comments:

top with 2' cement cap to - 2' grade

Owner: David Searcy Owner Well #: 1

Address: 24428 Pedernales Drive Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 24428 Pedernales Drive Latitude: 30° 26' 55" N

Spicewood, TX 78669 Longitude: 098° 03' 55" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 7/25/2003 Drilling End Date: 7/25/2003

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

Borehole: 8 0 20

6 20 230

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 20

Seal Method: Slurry 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: landowner

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: Burlap 140', 130', 20'

Type of Pump: No Data

Well Tests: Estimated Yield: 60 GPM

Water Type
Water Quality: 95-220 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling, Inc.

PO Box 867

Marble Falls, TX 78654

Driller Name: Michael G. Becker License Number: 54516

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	13	Caliche
13	35	Sand-Gravel
35	45	Tan LS
45	75	Gry LS w/ Clay
75	95	Gry Clay
95	120	Red Clay-SS
120	140	Red Clay & SS
140	150	Gravel (H2O)
150	160	Red SS
160	198	Gravel-Sand (H2O)
198	202	Red SS
202	220	Gravel-Sand (H2O)
220	230	Tan-Blue Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)
4.5"(5"OD) New PVC +2 to 230 Sch40

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

Owner: JOHN SCHMID Owner Well #: No Data

Address: 3800 N LAMAR, STE 730-180 Grid #: 57-40-5

AUSTIN, TX 78756

Well Location: 24603 HAYNIE FLAT RD Latitude: 30° 26' 36" N

SPICEWOOD, TX 78669 Longitude: 098° 04' 20" W

Well County: Travis Elevation: 760 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 8/6/2007 Drilling End Date: 9/7/2007

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

Borehole: 10 0 12

8 12 195

Drilling Method: Air Rotary

Borehole Completion: Open Hole

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

Annular Seal Data: 0 2

2 161 25

Seal Method: PRESSURE CEMENTED 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: 79 ft. below land surface on 2007-09-10 Measurement Method: Unknown

Packers: **NEOPRENE 161**

NEOPRENE 162 NEOPRENE 163

Type of Pump: Submersible Pump Depth (ft.): 180

Well Tests: Jetted Yield: 70 GPM

Strata Depth (ft.) Water Type Water Quality:

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

License Number: Driller Name: JIM BLAIR 54416

Apprentice Name: **CESAR RAMOS** Apprentice Number: 57534

Comments: No Data

Lithology: **DESCRIPTION & COLOR OF FORMATION MATERIAL**

Top (ft.)	Bottom (ft.)	Description
0	1	TOPSOIL
1	5	GRAY SURFACE ROCK
5	7	TAN SAND
7	43	WHITE ROCK
43	75	GRAY ROCK
75	105	BLUE SHALE
105	125	RED ROCK W/B 10 GPM TDS 840
125	163	RED SHALE
163	190	RED ROCK W/B 70 GPM TDS 700
190	195	BLUE CLAY

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Type	Setting From/To (ft.)		
4.5 NEW PLASTIC	C 0-163			
4.5 NEW SCREEN MFG 163-183 .050				
4.5 NEW PLASTIC	C 183-1	95		

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

Owner: Brian Bailey Homes Owner Well #: 1

Address: 11610 Bee Caves Rd. #230 Grid #: 57-40-5

Austin, TX 78734

Well Location: Haynie Creek Rd.

Latitude: 30° 26' 52" N

Spicewood, TX 78669 Longitude: 098° 03' 51" W

Well County: Travis Elevation: 727 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 7/30/2010 Drilling End Date: 7/31/2010

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

Borehole: 10 0 12

6.75 12 272

Drilling Method: Air Rotary

Borehole Completion: Open Hole

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

Annular Seal Data: 0 8 4 cement

8 12 2 bentonite

Seal Method: **slurry and pour** Distance to Property Line (ft.): **200**

Sealed By: **Alonzo Duke**Distance to Septic Field or other

concentrated contamination (ft.): not yet inst

Distance to Septic Tank (ft.): No Data

Method of Verification: customer

Surface Completion: Surface Sleeve Installed

Water Level: 62 ft. below land surface on 2010-07-31 Measurement Method: Unknown

Packers: neoprene 12

neoprene 170 neoprene 175

Type of Pump: Submersible Pump Depth (ft.): 260

Well Tests: Pump Yield: 7 GPM

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

Comments: No Data

Water Quality:

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	10	white rock
10	30	brown sandstone
30	85	grey clay
85	100	red clay
100	110	black rock
110	170	red clay
170	250	brown limestone wb
250	272	grey clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)			
4.5 new	plastic 0	232				
4.5 new plastic perf 232 272						

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

Owner: Ben Morelan Owner Well #: 3

Address: 2750 Haynie Creek Ln. Grid #: 57-40-5

Spicewood, TX 78669

Latitude: 30° 26' 53" N

Well Location: 2750 Haynie Creek Ln.

Spicewood, TX 78669 Longitude: 098° 03' 51" W

Well County: Travis Elevation: 1514 ft. above sea level

Plugged Within 48 Hours

This well has been plugged

Plugging Report Tracking #142872

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 6/28/2013 Drilling End Date: 7/1/2013

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

Borehole: 10 0 10

8.5 10 270

Drilling Method: Air Rotary

Borehole Completion: Open Hole

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

Annular Seal Data: 0 10 6 cement

Seal Method: **slurry and pour** 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: Unknown

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: Unknown Yield: 0 GPM

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

Plug Information: no casing installed

backfilled with dry cuttings to 10'

cement from 10' to surface

Water Quality: No Data Water Type

No Data

Chemical Analysis Made: Unknown

Did the driller knowingly penetrate any strata which

contained injurious constituents?: Unknown

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: 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	8	white limestone
8	15	tan limestone
15	40	yellow & tan limestone
40	100	gray shale
100	110	brown shale
110	140	black shale
140	170	tan clay
170	210	brown rock w/ clay
210	270	tan & red clay

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)	
none				

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

Owner: Ben Morelan Owner Well #: 4

Address: 2750 Haynie Creek Ln. Grid #: 57-40-5

Spicewood, TX 78669

Latitude: 30° 26' 57" N

Well Location: 2750 Haynie Creek Ln.
Spicewood, TX 78669
Longitude: 098° 03' 52" W

Well County: Travis Elevation: 1514 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 7/1/2013 Drilling End Date: 7/2/2013

Top Depth (ft.)

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

Borehole: 10 0 10

8.5 10 245

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Filter Pack Intervals: 100 245 Gravel 3/8"

Bottom Depth (ft.)

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

Annular Seal Data: 0 50 8 cement

Seal Method: **slurry and pour** Distance to Property Line (ft.): **No Data**

Sealed By: **Steve Stewart**Distance to Septic Field or other

concentrated contamination (ft.): none

Distance to Septic Tank (ft.): No Data

Filter Material

Method of Verification: No Data

Size

Surface Completion: Pitless Adapter Used

Water Level: 77 ft. below land surface on 2013-07-05 Measurement Method: Unknown

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 230

Well Tests: Pump Yield: 3 GPM

Strata Depth (ft.) Water Type

Water Quality: No Data No Data

Chemical Analysis Made: Unknown

Did the driller knowingly penetrate any strata which

contained injurious constituents?: Unknown

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Bee Cave Drilling, Inc.

185 Angel Fire Dr.

Dripping Springs, TX 78620

Driller Name: Jim Blair License Number: 54416

Apprentice Name: Steve Stewart

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 1 topsoil 1 8 white limestone 8 15 tan limestone 15 40 yellow & tan limestone 40 80 gray shale 80 100 red clay 100 110 red clay w/ rock 160 110 red clay 160 245 red clay and gravel wb

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Type	Setting From/To (ft.)			
4.5" new sdr-17 0	100				
4.5 new perf 100 245					

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

Owner: Holzapfel Owner Well #: No Data

Address: 26804 masters parkway Grid #: 57-40-4

spicewood, TX 78669

Well Location: 26804 masters parkway

Latitude: 30° 27' 01" N

spicewood, TX 78669 Longitude: 098° 05' 01" W

Well County: Travis Elevation: No Data

Plugged Within 48 Hours

This well has been plugged

Plugging Report Tracking #147051

Type of Work: New Well Proposed Use: Closed-Loop Geothermal

Drilling Start Date: 5/17/2014 Drilling End Date: 5/23/2014

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

Borehole: **4.5 0 250**

Drilling Method: Air Hammer

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 20 250 Gravel 3/8

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

Annular Seal Data: 0 20 3 bentonite

Seal Method: **Poured** 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

Diotarios to Copilo Tariit (III). 110 Duta

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 Type
Water Quality:

No Data

No Data

Chemical Analysis Made: Unknown

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Sarris well Drilling

p o box

austin, TX 78760

Driller Name: Anthony Sarris License Number: 58870

Comments: drilled 5 new geothermal closed loop wells 0-250

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL BLANK PIP

Casing: BLANK PIPE & WELL SCREEN DATA

From (ft) To (ft) Description Dia. (in.) New/Used Type Setting From/To (ft.)

0-3 ft clay one inch new polyethlene pipe 0 -250

3-250 rock and limestone

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

Owner: Kevin Woodstock c/o Action Water

Wells

Address: 100 Spanish Oak Trail

Spicewood, TX 78669

Well Location: Spicewood

Spicewood, TX 78669

Well County: Travis

Owner Well #: 1

Grid #: **57-40-5**

Latitude: 30° 26' 27" N

Longitude: 098° 04' 42" W

Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 8/19/2003 Drilling End Date: 8/19/2003

Diameter (in.)

Top Depth (ft.)

Bottom Depth (ft.)

Borehole:

8

0 100 100 200

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

Annular Seal Data:

0

100

11

Seal Method: Pressure Tremmie

Distance to Property Line (ft.): <50

Sealed By: APEX Drilling, Inc

Distance to Septic Field or other

concentrated contamination (ft.): 150+

Distance to Septic Tank (ft.): No Data

Method of Verification: landowner /

contractor

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: Burlap 108', 104', 100'

Type of Pump: No Data

Well Tests: Estimated Yield: 50 GPM

Water Type
Water Quality: 108-182 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling, Inc.

PO Box 867

Marble Falls, TX 78654

Driller Name: Michael G. Becker License Number: 54516

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	22	Tan LS
22	38	Gry LS
38	63	Blue Clay
63	108	Red Clay
108	112	Gravel
112	120	Red Clay
120	160	Gravel-H2O
160	165	Tan LS
165	182	Gravel-H2O
182	200	Tan Blue Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5"(5"od) New P	VC +2	to 200 Sch40	
4.5" New Slotted	160 to	180 .035	
4.5" New Slotted	140 to	160 .035	

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

Owner: Kevin Woodstock c/o Action Water

Wells

Address: 100 Spanish Oak Trail

Spicewood, TX 78669

Well Location: Spicewood

Spicewood, TX 78669

Well County: Travis

Owner Well #: 2

Grid #: **57-40-5**

Latitude: 30° 26' 27" N

Longitude: 098° 04' 41" W

Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 8/20/2003 Drilling End Date: 8/20/2003

Diameter (in.)

Top Depth (ft.)

Bottom Depth (ft.)

Borehole:

8

0

100

100

200

Drilling Method:

Air Rotary

Borehole Completion: St

Straight Wall

Bottom Depth (ft.)

Description (number of sacks & material)

Annular Seal Data:

Top Depth (ft.)

100

11

Seal Method: Pressure Tremmie

Distance to Property Line (ft.): <50

Sealed By: APEX Drilling, Inc

Distance to Septic Field or other

concentrated contamination (ft.): 150+

Distance to Septic Tank (ft.): No Data

Method of Verification: landowner /

contractor

Surface Completion:

Surface Sleeve Installed

Water Level:

No Data

Packers:

Burlap 120', 110', 100'

Type of Pump:

No Data

Well Tests:

Estimated

Yield: 50 GPM

Water Type
Water Quality: 124-179 Trinity

Chemical Analysis Made: No

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: APEX Drilling, Inc.

PO Box 867

Marble Falls, TX 78654

Driller Name: Michael G. Becker License Number: 54516

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 5 Caliche 5 Tan LS 20 20 **Gry LS** 30 30 55 Tan LS 55 67 **Gry Clay** 67 124 Red SS w/ Clay 124 170 Gravel-H2O 170 175 Tan LS 175 179 Gravel-H2O 200 179 **Tan Blue Clay**

Casing: BLANK PIPE & WELL SCREEN DATA

No

Dia. (in.)	New/Used	Type	Setting From/To (ft.)	
4.5"(5"	od) New P	VC +2	to 200 Sch40	
4.5" Ne	w Slotted	160 to	180 .035	
4.5" Ne	w Slotted	140 to	160 .035	

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

Owner: Austin Classic Builders Owner Well #: No Data

Address: 100 Spanish Oak Trail Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 1129 Lake Shore Dr

Spicewood, TX 78669 Longitude: 098° 04' 43" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 7/25/2006 Drilling End Date: 7/25/2006

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

Borehole: 8 0 100

6.5 100 200

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 100 11 of Portland

Seal Method: **Pressure Tremmie** Distance to Property Line (ft.): **5**

Sealed By: **Apex Drilling, Inc.**Distance to Septic Field or other concentrated contamination (ft.): **80**

concentrated contamination (it.):

Distance to Septic Tank (ft.): No Data

Method of Verification: Landowner

Surface Completion: Surface Sleeve Installed

Water Level: No Data

Packers: Burlap 105', 100'

Type of Pump: No Data

Well Tests: **Jetted Yield: 45 GPM**

Water Type
Water Quality: 75-181 Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc

PO Box 867

Marble Falls, TX 78654

Driller Name: Michael G Becker P.G. License Number: 54516

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	8	Gravel
8	30	Tan Limestone
30	65	Grey Limestone w/ Clay
65	95	Red Clay
95	98	Gravel
98	118	Clay
118	157	Gravel
157	181	Sand-Red-Tan
181	200	Tan Clay

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4.5" (5"	OD) New	PVC +	-2 to 120' Sch40
4.5" (5"	OD) New	Slotte	d PVC 120' to 180' .035
4.5" (5"	OD) New	PVC 1	80' to 200' Sch40

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

Owner: CASTLETOP RANCH Owner Well #: No Data

Address: COX'S CROSSING Grid #: 57-40-5

SPICEWOOD, TX 78669

Well Location: 25800 COX'S CROSSING

Latitude: 30° 26' 33" N

SPICEWOOD, TX 78669 Longitude: 098° 04' 59" W

Well County: Travis Elevation: 734 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 11/16/2006 Drilling End Date: 11/16/2006

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

Borehole: 10 0 11

6.75 11 170

Drilling Method: Air Rotary

Borehole Completion: Open Hole

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

Annular Seal Data: 0 6

6 11 4

Seal Method: SLURRIED & POURED Distance to Property Line (ft.): No Data

Sealed By: **CESAR RAMOS**Distance to Septic Field or other concentrated contamination (ft.): **250**

concentrated contamination (it.). 200

Distance to Septic Tank (ft.): No Data

Method of Verification: STEEL TAPE

Surface Completion: Surface Sleeve Installed

Water Level: 78 ft. below land surface on 2006-11-20 Measurement Method: Unknown

Packers: **NEOPRENE 13**

NEOPRENE 95 NEOPRENE 100

Type of Pump: Submersible Pump Depth (ft.): 160

Well Tests: Jetted Yield: 50 GPM

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

Chemical Analysis Made: Yes

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: BEE CAVE DRILLING

185 ANGELFIRE DR

DRIPPING SPRINGS, TX 78620

Driller Name: JIM BLAIR 54416 License Number: 54416

Apprentice Name: CESAR RAMOS Apprentice Number: 3090

Comments: Amended 1/22/07 ref#4180

Report Amended on by Request #4180

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	2	TOPSOIL
2	20	TAN SHALE
20	48	TAN SANDSTONE
48	58	BROWN ROCK
58	65	BROWN SANDSTONE
65	69	BROWN CLAY
69	100	BROWN SANDSTONE
100	167	BROWN ROCK W/B 50 GPM TDS 650
167	170	YELLOW CLAY

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Туре	Setting From/To (ft.)	
4.5 NEW PLASTIC	C 0-105	5	
4.5 NEW SCREEN MFG. 105-165 .050			
4.5 NEW PLASTIC	C 165-1	170	

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

Owner Well #: Owner: No Data **BECKY MADISON**

Address: 1251 LAKESHORE DR Grid #: 57-40-5

SPICEWOOD, TX 78669

Latitude: 30° 26' 26.83" N Well Location: **25219 RIVER RD**

Longitude: 098° 04' 48.43" W

Well County: **Travis** Elevation: 750 ft. above sea level

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 3/13/2007 Drilling End Date: 3/13/2007

SPICEWOOD, TX 78669

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

Borehole: 10 0 12

> 6.75 12 210

Drilling Method: Air Rotary

Borehole Completion: **Open Hole**

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

Annular Seal Data: 0 6 4

5 12

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: **122 ft.** below land surface on **2007-03-13** Measurement Method: Unknown

Packers: **NEOPRENE 12**

> **NEOPRENE 125 NEOPRENE 135**

Type of Pump: **Submersible** Pump Depth (ft.): 200

Yield: 15 GPM Well Tests: Jetted

Strata Depth (ft.) Water Type

Water Quality: 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

Description

DRIPPING SPRINGS, TX 78620

Driller Name: Jim Blair License Number: 54416

Comments: No Data

Bottom (ft.)

130

210

Top (ft.)

96

130

Report Amended on 7/31/2023 by Request #40056

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

0	3	WHITE ROCK
3	7	TAN SANDSTONE
7	40	WHITE ROCK
40	53	YELLOW ROCK
53	56	GRAY ROCK
56	70	BLUE SHALE
70	80	RED SHALE
80	96	BLACK SHALE

610

RED SANDSTONE

RED ROCK W/B 15 GPM TDS

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)	
4.5 NEW	/ PLASTIC	C 0-140		
4.5 NEW	SCREE	N MFG	140-200 .050	
4.5 NEW	/ PLASTIC	C 200-2	21	

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

Owner: LARRY EISENBERG Owner Well #: No Data

Address: 3004 SPARKLING BROOK LN Grid #: 57-40-5

AUSTIN, TX 78746

Well Location: 25204 SUNSET RIVER CR

SPICEWOOD, TX 78669 Longitude: 098° 04' 43" W

Well County: Travis Elevation: 800 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 4/12/2007 Drilling End Date: 4/12/2007

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

Borehole: 10 0 12

8 12 170

Drilling Method: Air Rotary

Borehole Completion: Open Hole

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

Annular Seal Data: 0 2

2 105 9

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

Sealed By: **CESAR RAMOS**Distance to Septic Field or other concentrated contamination (ft.): **86**

Distance to Septic Tank (ft.): No Data

Method of Verification: STEEL TAPE

Surface Completion: Surface Sleeve Installed

Water Level: 90 ft. below land surface on 2007-04-14 Measurement Method: Unknown

Packers: **NEOPRENE 105**

NEOPRENE 110 NEOPRENE 128 NEOPRENE 130

Type of Pump: Submersible Pump Depth (ft.): 160

Well Tests: Jetted Yield: 30 GPM

Strata Depth (ft.) Water Type

Water Quality: No Data No Data

Chemical Analysis Made: Yes

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: BEE CAVE DRILLING

185 ANGELFIRE DR

DRIPPING SPRINGS, TX 78620

Driller Name: JIM BLAIR License Number: 54416

Apprentice Name: CESAR RAMOS Apprentice Number: 57534

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	2	TOPSOIL
2	28	TAN ROCK
28	38	GREY ROCK
38	90	BLUE SHALE
90	115	BLACK ROCK
115	130	RED CLAY
130	170	RED ROCK W/B 30 GPM TDS 690

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5 NEW PLASTIC	C 0-130)	
4.5 NEW SCREEN	N MFG.	130-170 .050	

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

Owner: TODD COPENHAVER Owner Well #: No Data

Address: 1403 HARGIS CREEK TR Grid #: 57-40-5

AUSTIN, TX 78717

Well Location: 1209 LAKESHORE DR

SPICEWOOD, TX 78669 Longitude: 098° 04' 40" W

Well County: Travis Elevation: 741 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 12/1/2007 Drilling End Date: 12/1/2007

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

Borehole: 10 0 12 8 12 155

._ ...

Drilling Method: Air Hammer

Borehole Completion: Open Hole

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

Annular Seal Data: 0 2

2 105 16

Seal Method: PRESSURE CEMENTED 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: 55 ft. below land surface on 2007-12-04 Measurement Method: Unknown

Packers: NEOPRENE 105

NEOPRENE 107 NEOPRENE 125 NEOPRENE 127

Type of Pump: Submersible Pump Depth (ft.): 140

Well Tests: Jetted Yield: 100 GPM

Strata Depth (ft.) Water Type Water Quality:

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.

BEE CAVE DRILLING INC Company Information:

185 ANGEL FIRE DR

DRIPPING SPRINGS, TX 78620

Driller Name: JIM BLAIR License Number: 54416

CESAR RAMOS Apprentice Name: 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	20	CALICHE
20	75	BLUE SHALE
75	125	RED SANDSTONE
125	155	RED ROCK W/B 100 GPM TDS 730

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5 NEW PLASTI	C 0-13	5	
4.5 NEW SCREE	N MFG	135-155 .050	

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

Owner: CLARK ASPY Owner Well #: No Data

Address: 8310 CAP OF TX HWY N, STE 490 Grid #: 57-40-4

AUSTIN, TX 78731

Well Location: 7 MATHIS CIRCLE Latitude: 30° 26' 35" N

SPICEWOOD, TX 78669 Longitude: 098° 05' 02" W

Well County: Travis Elevation: 715 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 11/25/2008 Drilling End Date: 11/25/2008

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

Borehole: 10 0 12

8 12 170

Drilling Method: Air Hammer

Borehole Completion: Open Hole

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

Annular Seal Data: 0 100 20

Seal Method: PRESSURE CEMENTED 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: 68 ft. below land surface on 2008-11-26 Measurement Method: Unknown

Packers: **NEOPRENE 100**

NEOPRENE 105 NEOPRENE 108

Type of Pump: Submersible Pump Depth (ft.): 150

Well Tests: Jetted Yield: 30 GPM

Strata Depth (ft.) Water Type

Water Quality: No Data No Data

Chemical Analysis Made: Yes

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: BEE CAVE DRILLING INC

185 ANGELFIRE DR

DRIPPING SPRINGS, TX 78620

Driller Name: BOBBY ROBERTS License Number: 54416

Apprentice Name: CESAR RAMOS Apprentice Number: 57534

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	10	FILL
10	20	TAN SHALE
20	40	SAND
40	60	RED SANDSTONE
60	90	BLACK ROCK
90	105	BLUE SHALE
105	120	GREY ROCK
120	170	GRAVEL W/B 30 GPM TDS 600

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Type	Setting From/To (ft.)		
4.5 NEW PLASTIC	C 0-130			
4.5 NEW SCREEN MFG 130-170				

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

Owner: SHERRY ELLENBOGEN Owner Well #: 001

Address: 1327 LAKESHORE DR. Grid #: 57-40-5

SPICEWOOD, TX 78669

Latitude: 30° 26' 44" N

Well Location: 1327 LAKESHORE DR.

SPICEWOOD, TX 78669 Longitude: 098° 04' 59" W

Well County: Travis Elevation: 716 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 4/14/2010 Drilling End Date: 4/14/2010

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

Borehole: 10 0 12

8 12 15

Drilling Method: Air Rotary

Borehole Completion: Open Hole

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

Annular Seal Data: 0 2 3 CEMENT

2 85 9 CEMENT

Seal Method: PRESSURE CEMENTED Distance to Property Line (ft.): 150

Sealed By: **Driller**Distance to Septic Field or other

concentrated contamination (ft.): 80

Distance to Septic Tank (ft.): No Data

Method of Verification: STEEL TAPE

Surface Completion: Surface Sleeve Installed

Water Level: 31 ft. below land surface on 2010-04-15 Measurement Method: Unknown

Packers: 1 NEOPRENE 85

1 NEOPRENE 87

Type of Pump: Submersible Pump Depth (ft.): 90

Well Tests: Jetted Yield: 150 GPM

Water Type
Water Quality:

No Data

No Data

Chemical Analysis Made: Yes

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: BEE CAVE DRILLING

185 ANGLE FIRE DR.

DRIPPING SPRINGS, TX 78620

Driller Name: BOBBY ROBERTS License Number: 54416

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	2	TOPSOIL
2	10	FILL
10	45	BROWN CLAY
45	60	BROWN ROCK
60	70	BROWN SHALE
70	80	BROWN ROCK
80	85	BROWN CLAY
85	105	BROWN ROCK W/B 150 TDS 500

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5 NEW PLASTIC	СОТО	85	
4.5 NEW SCREEN	N MFG	85 TO 105 .050	

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

Owner: John Morgan Owner Well #: No Data

Address: **25222 River Rd.** Grid #: **57-40-5**

Spicewood, TX 78669

Latitude: 30° 26' 25" N

Spicewood, TX 78669 Longitude: 098° 04' 56" W

Well County: Travis Elevation: 774 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 4/16/2014 Drilling End Date: 4/16/2014

25228 River Rd.

Borehole: Top Depth (ft.) Bottom Depth (ft.)

8 o 10

8.5 10 210

Drilling Method: Air Rotary

Well Location:

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 100 210 Gravel 3/8"

210 314401 370

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

Annular Seal Data: 0 100 21 cement

Seal Method: pressure cemented 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: Pitless Adapter Used

Water Level: 147 ft. below land surface on 2014-04-17 Measurement Method: Unknown

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 200

Well Tests: Jetted Yield: 10 GPM

Water Type
Water Quality:

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 limestone	
6	35	hard white rock	
35	40	yellow limestone	
40	70	gray limestone	
70	100	gray clay	
100	130	red clay	
130	145	red clay & gravel	
145	200	red & tan trinity gravel wb 10 gpm	
200	210	yellow clay	

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

Owner: Kristin Bevis Owner Well #: No Data

Address: P O Box 12992 Grid #: 57-40-4

Austin , TX 78711

Well Location: 1320 Lakeshore Dr

Spicewood, TX 78669 Longitude: 098° 05' 04" W

Latitude:

30° 26' 42" N

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 6/29/2017 Drilling End Date: 6/29/2017

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

Borehole: 8 0 95

6.25 95 205

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 95 6 Benseal 2 Portland 8 Bags/Sacks

Seal Method: **Pressure** Distance to Property Line (ft.): **20**

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **50+**

Distance to Septic Tank (ft.): 50+

Distance to Septic Tank (it.). 30+

Method of Verification: Land Owner

Surface Completion: Surface Sleeve Installed Surface Completion by Driller

Water Level: No Data

Packers: Burlap/Neoprene at 95 ft.

Burlap/Neoprene at 97 ft.

Type of Pump: No Data

Well Tests: Jetted Yield: 25 GPM

Strata Depth (ft.) Water Type

Water Quality: 95 - 185 Trinity TDS-500

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description	
0	1	Top Soil	
1	20	Tan LS	
20	32	Gray Tan LS	
32	64	Gray Clay	
64	95	Red SS	
95	185	Gravel	
185	205	Tan Clay	

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	125
4.5	Screen	New Plastic (PVC)	.035	125	185
4.5	Blank	New Plastic (PVC)	SDR17	185	205

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

Latitude:

30° 26' 47.8" N

Size

Owner: Brian Parker Owner Well #: No Data

Address: 1335 Lakeshore Dr. Grid #: 57-40-4

Spicewood, TX 78669

Well Location: 1335 Lakeshore Dr.
Spicewood, TX 78669
Longitude: 098° 05' 02.54" W

Well County: Travis Elevation: 708 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 3/3/2018 Drilling End Date: 3/3/2018

Top Depth (ft.)

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

Borehole: 10 0 8

8.5 8 200

Bottom Depth (ft.)

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Filter Pack Intervals: 100 200 Gravel 3/8"

Annular Seal Data:

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

Cement 30 Bags/Sacks

98 100 Bentonite 2 Bags/Sacks

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

Sealed By: **Driller** Distance to Septic Field or other

concentrated contamination (ft.): No Data

Filter Material

Distance to Septic Tank (ft.): No Data

Method of Verification: No Data

Surface Completion: Surface Sleeve Installed Surface Completion by Driller

Water Level: 40 ft. below land surface on 2018-03-07

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 180

Well Tests: Jetted Yield: 50+ GPM

Water Type
Water Quality:

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	8	tan limestone	
8	76	red clay and limestone	
76	148	red sandstone & rock	
148	160	gray shale and clay	
160	200	gray limestone & sandstone w/ gravel layers	

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr-17	0	140
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	140	200

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

Owner: Mac (David) Lane

Owner Well #: No Data

Address:

5204 Crystal Water Dr

Grid #: **57-40-5**

Austin , TX 78735

Latitude:

30° 26' 29" N

Well Location:

1215 Lakeshore Dr

Spicewood, TX 78669

Longitude:

098° 04' 40" W

Well County:

Elevation:

No Data

Type of Work:

New Well

Travis

Proposed Use:

Domestic

Drilling Start Date: 3/1/2018

Drilling End Date: 3/1/2018

Diameter (in.)

Top Depth (ft.)

Bottom Depth (ft.)

Borehole:

8

0

100

6.25

100

185

Drilling Method:

Air Rotary

Borehole Completion:

Straight Wall

Bottom Depth (ft.)

Description (number of sacks & material)

Annular Seal Data:

Top Depth (ft.)

100

7 Benseal 1 Portland 8 Bags/Sacks

Seal Method: Pressure

Sealed By: **Driller**

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

Distance to Property Line (ft.): 5

Distance to Septic Tank (ft.): 50

Method of Verification: Land Owner

Surface Completion:

Surface Sleeve Installed

Surface Completion by Driller

Water Level:

No Data

Packers:

Burlap/Neoprene at 100 ft. Burlap/Neoprene at 105 ft.

Type of Pump:

No Data

Well Tests:

Jetted

Yield: 60 GPM

Strata Depth (ft.) Water Type

Water Quality: 119 - 165 Trinity / TDS 600

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description			
0	1	Top Soil			
1	7	Tan LS			
7	15	Gravel			
15	27	Tan LS			
27	50	Tan Red Clay			
50	54	Tan LS			
54	60	Gray Clay			
60	119	Red SS			
119	165	Gravel			
165	185	Tan Red Clay			

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	105
4.5	Screen	New Plastic (PVC)	.035	105	165
4.5	Blank	New Plastic (PVC)	SDR17	165	185

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

Owner: Action Water Wells (Pour) Owner Well #:

Address: 100 Spanish Oak Trail Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 24443 Pedernales Dr

Spicewood, TX 78669 Longitude: 098° 04' 15" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 10/30/2019 Drilling End Date: 10/30/2019

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

Borehole: 8.5 0 100

6.25 100 232

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 100 7 Benseal 2 Portland 9 Bags/Sacks

Seal Method: **Pressure** Distance to Property Line (ft.): **30**

Sealed By: **Driller**Distance to Septic Field or other

concentrated contamination (ft.): 50

Distance to Septic Tank (ft.): 50

Method of Verification: Land Owner

No Data

Surface Completion: Surface Sleeve Installed Surface Completion by Driller

Water Level: No Data

Packers: Burlap/ Neoprene at 100 ft.

Burlap/ Neoprene at 102 ft.

Type of Pump: No Data

Well Tests: Jetted Yield: 45 GPM

Strata Depth (ft.) Water Type

Water Quality: 100 - 212 Trinity - TDS 530

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. 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	15	Tan LS	
15	29	Sand and Gravel	
29	40	Tan LS	
40	60	Gray LS	
60	90	Gray Clay	
90	142	Red SS	
142	192	Gravel	
192	199	Red SS	
199	212	Gravel	
212	213	Turquoise Clay	
212	225	Tan Clay	
225	232	Gray Clay	

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	152
4.5	Screen	New Plastic (PVC)	.035	152	212
4.5	Blank	New Plastic (PVC)	SDR17	212	232

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

Owner: Mike Lorenz Owner Well #: No Data

Address: 25409 Mathis Circle Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 25409 Mathis Circle Latitude: 30° 26' 34" N

Spicewood, TX 78669 Longitude: 098° 04' 59" W

Well County: Travis Elevation: 737 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 12/5/2019 Drilling End Date: 12/5/2019

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

 Borehole:
 10.5
 0
 10

 8.5
 10
 100

 6.75
 100
 175

Drilling Method: Air Rotary

Borehole Completion: Perforated or Slotted

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

Annular Seal Data: 0 90 Cement 18

90 100 Bentonite 3

Seal Method: **Pressure** Distance to Property Line (ft.): **40**

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **120**

concentrated contamination (ft.): 120

Distance to Septic Tank (ft.): 100

Method of Verification: No Data

Surface Completion: Pitless Adapter Used

Water Level: No Data

Packers: Rubber at 100 ft.

Rubber at 102 ft.

Type of Pump: No Data

Well Tests: **Jetted Yield: 70 GPM**

Water Type
Water Quality:

No Data

No Data

Chemical Analysis Made: No

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Bee Cave Drilling, Inc.

185 Angel Fire Dr.

Dripping Springs, TX 78620

Driller Name: jim blair License Number: 54416

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description		
0	2	Topsoil		
2	15	gravel/sand		
15	40	tan shale		
40	50	brown shale		
50	55	dark grey shale		
55	60	tan sandstone		
60	65	grey limestone/clay		
65	75	red sandstone		
75	80	black rock		
80	90	shale		
90	125	gravel wb 20-25 gpm at 700 tds		
125	170	gravel wb 50 gpm at 560 tds		
170	175	tan clay		

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr-17	0	115
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	115	175

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

STATE OF TEXAS WELL REPORT for Tracking #553035

Owner: William Huynh Owner Well #: No Data

Address: 1352 Lakeshore Dr Grid #: 57-40-4

Spicewood, TX 78669

Well Location: 1352 Lakeshore Dr

Spicewood, TX 78669 Longitude: 098° 05' 06" W

Well County: Travis Elevation: 706 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 7/29/2020 Drilling End Date: 7/30/2020

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

 Borehole:
 10.625
 0
 10

 8.5
 10
 100

 6.75
 100
 170

Drilling Method: Air Rotary

Borehole Completion: Perforated or Slotted

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

Annular Seal Data: 2 8 Cement 2

8 100 Bentonite 9

Seal Method: **Pressure**Distance to Property Line (ft.): **25**

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: Pitless Adapter Used

Water Level: 54 ft. below land surface on 2020-09-03 Measurement Method: Electric Line

Packers: Rubber at 100 ft.

Rubber at 105 ft. Rubber at 110 ft. Rubber at 115 ft.

Type of Pump: Submersible Pump Depth (ft.): 160

Well Tests: Jetted Yield: 20+ GPM

Water Quality:

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

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Bee Cave Drilling, Inc.

185 Angel Fire Dr.

Dripping Springs, TX 78620

Driller Name: jim blair License Number: 54416

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	2	topsoil
2	18	sand/sandstone
18	22	grey clay
22	30	limestone w/clay
30	90	red limestone
90	105	hard limestone
105	160	tan sandstone
160	170	grey clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	sdr-17	0	120
4.5	Perforated or Slotted	New Plastic (PVC)	sdr-17	120	170

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

STATE OF TEXAS WELL REPORT for Tracking #563205

Owner: Ryan Nesloney Owner Well #: No Data

Address: 1215 Lakeshore Dr Grid #: 57-40-5

Spicewood , TX 78669

Well Location: 1215 Lakeshore Dr

Spicewood, TX 78669 Longitude: 098° 04' 41" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 12/28/2020 Drilling End Date: 12/28/2020

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

Borehole: 8.5 0 100

6.5 100 185

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 100 7 Benseal 2 Portland 9 Bags/Sacks

Seal Method: **Pressure** Distance to Property Line (ft.): **15**

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.

Type of Pump: No Data

Well Tests: Jetted Yield: 60 GPM

Water Type
Water Quality: 118 - 166 L. Trinity

Chemical Analysis Made: No

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: S. Travis Co

Reg. ONLY

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description	
0	1	Top Soil	
1	5	Tan LS	
5	22	Gravel	
22	37	Gray Red Clay	
37	42	Tan LS	
42	58	Gray LS	
58	118	Red SS	
118	165	Gravel	
165	166	Turquoise Clay	
166	185	Tan Clay	

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	105
4.5	Screen	New Plastic (PVC)	.035	105	165
4.5	Blank	New Plastic (PVC)	SDR17	165	185

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

STATE OF TEXAS WELL REPORT for Tracking #616691

Owner: Shumate Homes Inc. Owner Well #: No Data

Address: 3516 S. Pace Bend Rd Grid #: 57-40-5

Spicewood , TX 78611

Well Location: 1248 Lakeshore Dr

Spicewood, TX 78669 Longitude: 098° 04' 46" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 8/15/2022 Drilling End Date: 8/15/2022

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

Borehole: 8 0 100

6.25 100 213

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

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

Annular Seal Data: 0 100 6 Benseal 5 Portland 11 Bags/Sacks

Seal Method: **Pressure** Distance to Property Line (ft.): **60+**

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 120 ft. Burlap/Neoprene at 125 ft.

Type of Pump: No Data

Well Tests: Jetted Yield: 42 GPM

Water Quality: Strata Depth (ft.) Water Type

Trinity

Chemical Analysis Made: No

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Apprentice Name: Alfonso Rodriguez Jr Apprentice Number: 60952

Comments: SW Travis Co Approved

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	7	Gravel
7	18	White Tan LS w/ Gravel
18	32	Gravel
32	45	Gray LS w/ Clay
45	77	Hammet Clay
77	130	Red SS
130	141	Gravel w/ Red SS (H20)
141	193	Gravel w/ Sand (H2o)
193	213	Turquoise Tan Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	133
4.5	Screen	New Plastic (PVC)	.035	133	193
4.5	Blank	New Plastic (PVC)	SDR17	193	213

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

STATE OF TEXAS WELL REPORT for Tracking #656699

Owner: Hunter Mark F 2010 Living Trust Owner Well #: 57405MH2

Address: 1227 Lakeshore Dr. Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 1227 Lakeshore Dr.

Latitude: 30° 26' 32" N

Spicewood, TX 78669 Longitude: 098° 04' 42" W

Well County: Travis Elevation: 743 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 12/27/2023 Drilling End Date: 12/27/2023

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

Borehole: 9 0 100

6.25 100 190

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 12 Bags/Sacks

Seal Method: **Pressure** Distance to Property Line (ft.): **5**

Sealed By: **Driller**Distance to Septic Field or other

concentrated contamination (ft.): **100+**Distance to Septic Tank (ft.): **100+**

Method of Verification: Owner

Surface Completion: Pitless Adapter Used Surface Completion by Driller

Water Level: 120 ft. below land surface on 2023-12-27

Packers: Burlap at 100 ft.

Burlap/Plastic at 110 ft. Burlap/Plastic at 120 ft. Burlap/Plastic at 130 ft.

Type of Pump: Submersible Pump Depth (ft.): 180

Well Tests: Jetted No Test Data Specified

Strata Depth (ft.) Water Type

Water Quality: 130 - 190 Lower Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Centex Pump & Supply, Inc.

2520 Hwy. 290 West

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Гор (ft.)	Bottom (ft.)	Description
0	20	Caliche/Rock
20	65	Tan-Gray Strip Clay
65	95	Red Clay
95	120	Gravel w/ Red Clay
120	130	Gray Clay
130	160	Gravel
160	181	Sand & Sand Stone
181	190	Tan w/ Yellow Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	0	130
4.5	Perforated or Slotted	New Plastic (PVC)	SDR17	130	190

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

STATE OF TEXAS WELL REPORT for Tracking #676449

Owner: Russell Young Owner Well #: No Data

Address: 1323 Lakeshore Drive Grid #: 57-40-5

Spicewood , TX 78669

Well Location: 1323 Lakeshore Drive Latitude: 30° 26' 43.7" N

Spicewood, TX 78669 Longitude: 098° 04' 57.9" W

Well County: Travis Elevation: 725 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 7/10/2024 Drilling End Date: 7/11/2024

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

Borehole: 10.625 0 10

8.5 10 220

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size
Filter Pack Intervals: 100 220 Gravel 3/8

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

Annular Seal Data: 0 10 Cement 4

10 100 Bentonite 12

Seal Method: **Pressure** Distance to Property Line (ft.): **40**

Sealed By: **Driller** Distance to Septic Field or other

concentrated contamination (ft.): 100

Distance to Septic Tank (ft.): 100

Method of Verification: No Data

Surface Completion: Pitless Adapter Used

Water Level: 86 ft. below land surface on 2024-07-19 Measurement Method: Electric Line

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 200

Well Tests: **Jetted Yield: 15 GPM**

Strata Depth (ft.) Water Type

Water Quality: No Data No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Bee Cave Drilling, Inc.

185 Angel Fire Rd.

Dripping Springs, TX 78620

Driller Name: Michael Scott License Number: 59719

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	4	topsoil
4	10	tan limestone
10	100	grey limestone
100	130	red clay
130	140	red sand
140	160	tan limestone / gravel
160	180	grey clay / limestone
180	200	tan sandstone / grey clay wb
200	220	tan limestone

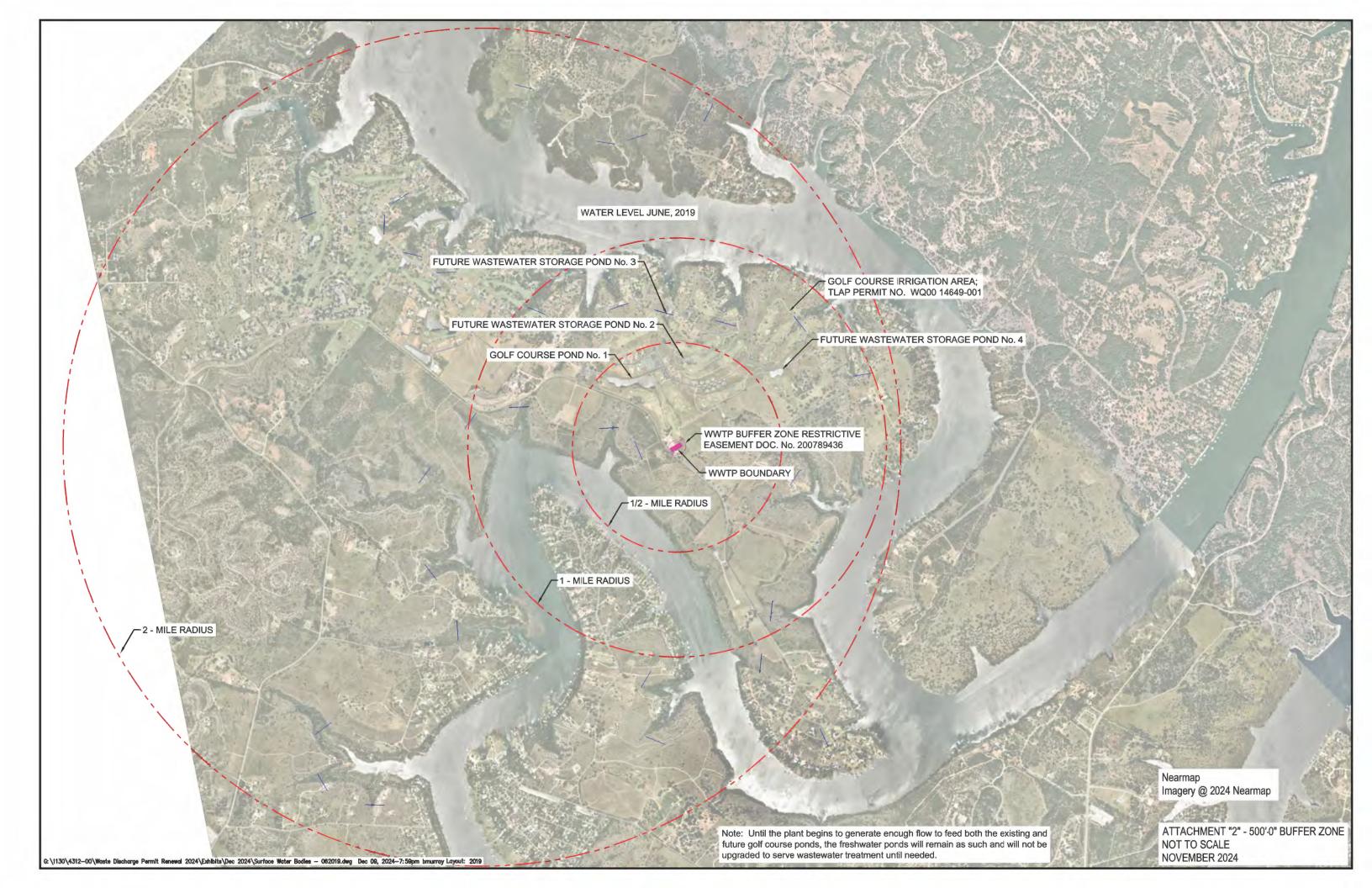
Casing: BLANK PIPE & WELL SCREEN DATA

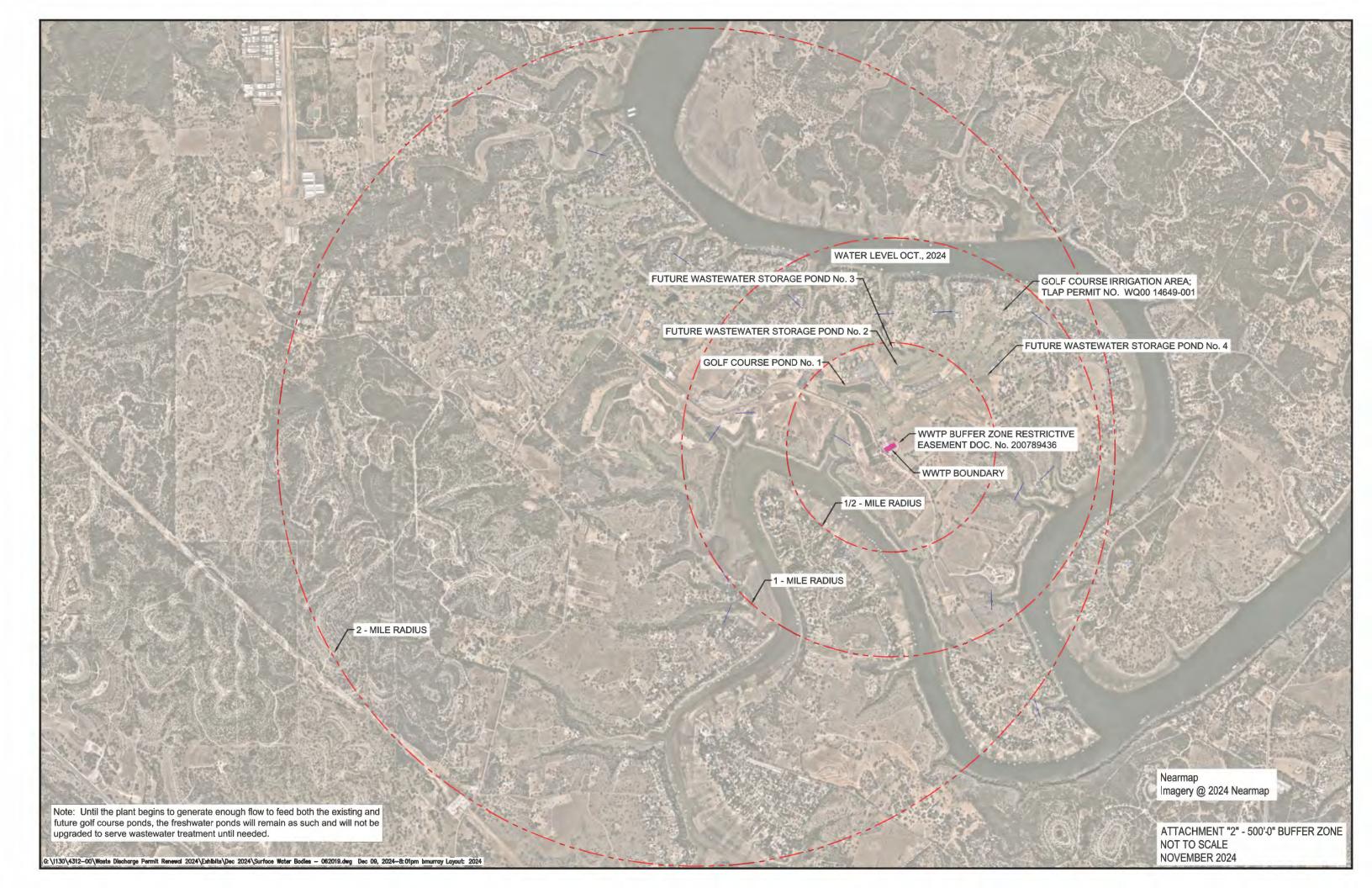
Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)		0	180
5	Screen	New Plastic (PVC)		180	220

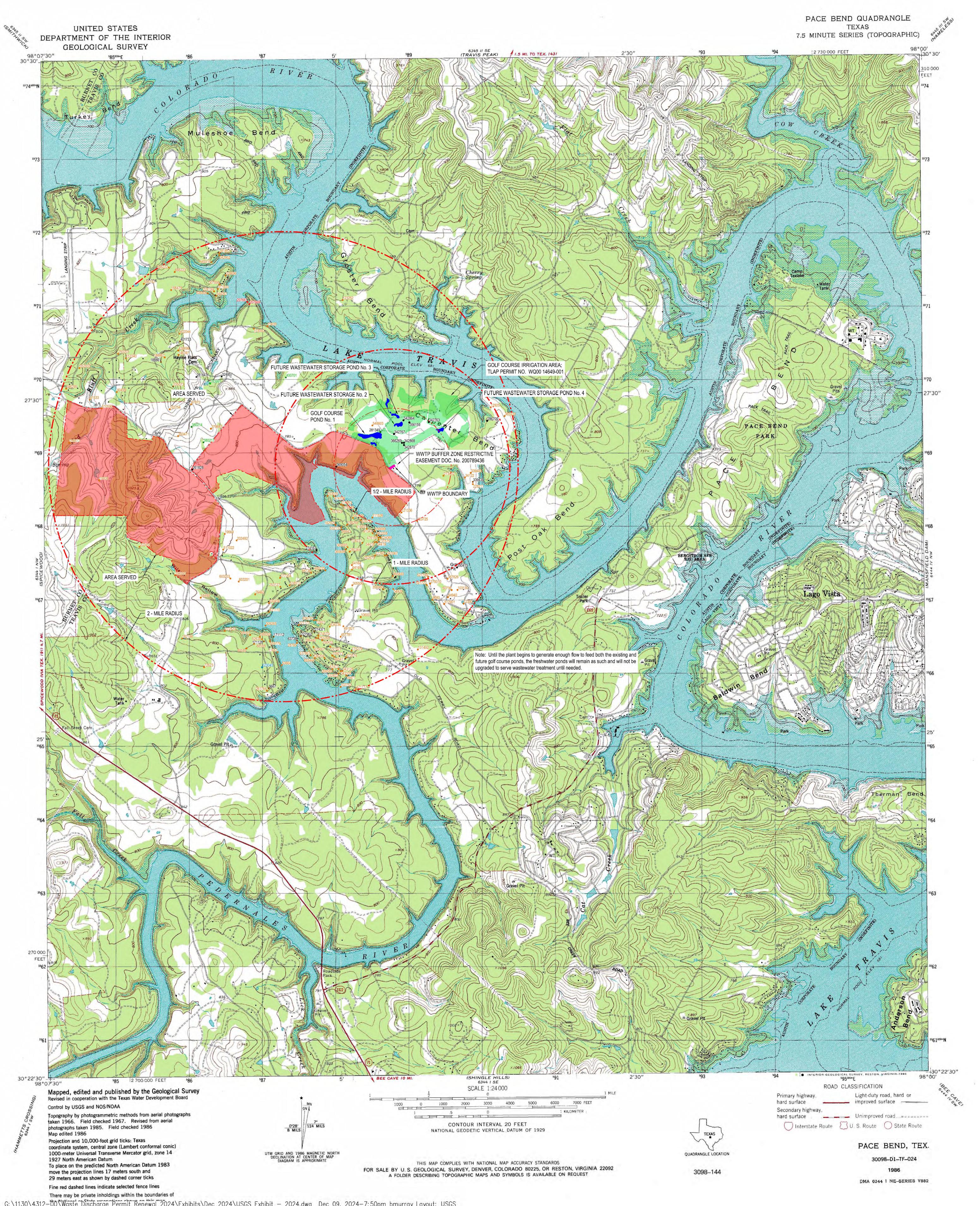
IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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.









DOMESTIC WASTEWATER PERMIT APPLICATION – MINOR AMENDMENT with RENEWAL

PERMIT WQ0014649001

TWO RIVERS WASTEWATER TREATMENT PLANT ARBOR WAY, INC.

DEC Job No. 4312-00

November 2024



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PERMIT WQ0014649001

DOMESTIC WASTEWATER PERMIT APPLICATION – MINOR AMENDMENT with RENEWAL

OVERNIGHT TO: Executive Director

Application Review and Processing Team (MC 148)

Texas Commission on Environmental Quality

12100 Park 35 Circle Austin, TX 78753

SUBMITTED BY: DE Corp.

3100 West Alabama Houston, TX 77098

DEC Job No. 4312-00

ON BEHALF OF: Arbor Way, Inc.



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COPY OF APPLICATION FEE CHECK	N/A
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TECHNICAL REPORT 1.0	PAGES 1-20
WORKSHEET 3.0	PAGES 36-42

ATTACHMENTS

- 1) Lease Agreement with Lake Cliff on Lake Travis, L.P. for Effluent Disposal Site
- 2) USGS Quadrangle Map
- 3) Flow Diagram
- 4) Treatment Unit Dimensions
- 5) Facility Site Drawing
- 6) Annual Cropping Plan
- 7) USDA Soil Survey Map

TCFQ

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT: Arbor Way, Inc.

PERMIT NUMBER: WQ0014649001

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

	Y	N		Y	N
Administrative Report 1.0	\boxtimes		Original USGS Map	\boxtimes	
Administrative Report 1.1			Affected Landowners Map		
SPIF			Landowner Disk or Labels		
Core Data Form	\boxtimes		Buffer Zone Map		
Public Involvement Plan Form			Flow Diagram	\boxtimes	
Technical Report 1.0	\boxtimes		Site Drawing	\boxtimes	
Technical Report 1.1			Original Photographs		
Worksheet 2.0			Design Calculations		
Worksheet 2.1			Solids Management Plan		
Worksheet 3.0	\boxtimes		Water Balance		
Worksheet 3.1					
Worksheet 3.2					
Worksheet 3.3					
Worksheet 4.0					
Worksheet 5.0					
Worksheet 6.0					
Worksheet 7.0					
For TCEQ Use Only					
Segment Number			County		
Expiration Date			_Region		_
Permit Number					



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

APPLICATION FOR A DOMESTIC WASTEWATER PERMIT ADMINISTRATIVE REPORT 1.0

If you have questions about completing this form please contact the Applications Review and Processing Team at 512-239-4671.

Section 1. Application Fees (Instructions Page 29)

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

Flow	New/Major Amendment	Renewal
<0.05 MGD	\$350.00 □	\$315.00 □
≥0.05 but <0.10 MGD	\$550.00 □	\$515.00 □
≥0.10 but <0.25 MGD	\$850.00 □	\$815.00 □
≥0.25 but <0.50 MGD	\$1,250.00 □	\$1,215.00
≥0.50 but <1.0 MGD	\$1,650.00 □	\$1,615.00 ⊠
≥1.0 MGD	\$2,050.00 □	\$2,015.00
25	m) 0170 00 F	

Minor Amendment (for any flow) \$150.00 ⊠

Payment Information

Mailed Check/Money Order Number: 329313 Check/Money Order Amount: \$1,065.00

Name Printed on Check: DE Corp.

EPAY Voucher Number:

Copy of Payment Voucher enclosed? Yes □

Section 2. Type of Application (Instructions Page 29)

	New TPDES		New TLAP
	Major Amendment <u>with</u> Renewal	\boxtimes	Minor Amendment with Renewal
	Major Amendment <u>without</u> Renewal		Minor Amendment <u>without</u> Renewal
	Renewal without changes		Minor Modification of permit
For	amendments or modifications, describe the pr	ropo	sed changes: add 0.160 MGD flow phase

For existing permits:

Permit Number: WQ0014649001

EPA I.D. (TPDES only): TX

Expiration Date: <u>December 1, 2024</u>

Section 3. Facility Owner (Applicant) and Co-Applicant Information (Instructions Page 29)

Α.	The owner	of the	facility	must a	apply	for	the '	permit.

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

Arbor Way, Inc.

(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: 603257957

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

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

First and Last Name: Ralph Thomas

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

Title: President

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/

CNT.			
CIN.			

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

Prefix (Mr., Ms., Miss):	
First and Last Name:	
Credential (P.E, P.G., Ph.D., etc.):	
Title: Wick here to enter text	

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

C. Core Data Form

Complete the Core Data Form for each customer and include as an attachment. If the customer type selected on the Core Data Form is **Individual**, complete **Attachment 1** of Administrative Report 1.0.

Attachment: N/A

Section 4. Application Contact Information (Instructions Page 30)

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., Ms., Miss): <u>Ms.</u>		
	First and Last Name: <u>Yvonne Rivera</u>		
	Credential (P.E, P.G., Ph.D., etc.): <u>P.E.</u>		
	Title: <u>Project Manager</u>		
	Organization Name: <u>DE Corp.</u>		
	Mailing Address: <u>3100 W Alabama St.</u>		
	City, State, Zip Code: <u>Houston, TX 77098</u>		
	Phone No.: <u>713-520-9570</u> Ext.: Fax No.:		
	E-mail Address: <u>yvonne.rivera@decorp.com</u>		
	Check one or both: Administrative Contact	\boxtimes	Technical Contact
B.	Prefix (Mr., Ms., Miss):		
	First and Last Name:		
	Credential (P.E, P.G., Ph.D., etc.):		
	Title: Wick have to enter text		
	Organization Name:		
	Mailing Address:		
	City, State, Zip Code:		
		Fax 1	No.: Click here to ente
	ext		
	E-mail Address:		
	Check one or both: Administrative Contact		Technical Contact

Section 5. Permit Contact Information (Instructions Page 30)

Provide two names of individuals that can be contacted throughout the permit term.

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

First and Last Name: Yvonne Rivera Credential (P.E, P.G., Ph.D., etc.): P.E. Title: Project Manager Organization Name: DE Corp. Mailing Address: 3100 W Alabama St. City, State, Zip Code: Houston, TX 77098 Phone No.: 713-520-9570 Ext.: Fax No.: E-mail Address: yvonne.rivera@decorp.com **B.** Prefix (Mr., Ms., Miss): First and Last Name: Credential (P.E, P.G., Ph.D., etc.): Title: Organization Name: Mailing Address: City, State, Zip Code: Phone No.: Fax No.: E-mail Address:

Section 6. Billing Information (Instructions Page 30)

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

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

First and Last Name: Ralph Thomas

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

Title: President

Organization Name: <u>Arbor Way, Inc.</u>
Mailing Address: <u>202 Arborway Court</u>
City, State, Zip Code: <u>Houston, TX</u> 77057

Phone No.: <u>713-542-6159</u> Ext.: Fax No.:

E-mail Address: Ralph@rthomastx.com

Section 7. DMR/MER Contact Information (Instructions Page 31)

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

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

First and Last Name: Ralph Thomas

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

Title: President

Organization Name: <u>Arbor Way, Inc.</u>
Mailing Address: <u>202 Arborway Court</u>
City, State, Zip Code: <u>Houston, TX 77057</u>

Phone No.: 713-542-6159 Ext.: Fax No.:

E-mail Address: Ralph@rthomastx.com

DMR data is required to be submitted electronically. Create an account at:

https://www.tceq.texas.gov/permitting/netdmr/netdmr.html.

Section 8. Public Notice Information (Instructions Page 31)

A. Individual Publishing the Notices

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

First and Last Name: <u>Yvonne Rivera</u> Credential (P.E, P.G., Ph.D., etc.): <u>P.E.</u>

Title: Project Manager

Organization Name: <u>DE Corp.</u>

Mailing Address: 3100 W Alabama St.

City, State, Zip Code: Houston, TX 77098

Phone No.: 713-520-9570 Ext.: Fax No.:

E-mail Address: yvonne.rivera@decorp.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:

□ Fax

□ Regular Mail

C. Contact person to be listed in the Notices

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

First and Last Name: **Yvonne Rivera**

	Credential (P.E, P.G., Ph.D., etc.): <u>P.E.</u>
	Title: <u>Project Manager</u>
	Organization Name: <u>DE Corp.</u>
	Phone No.: <u>713-520-9570</u> Ext.:
	E-mail: yvonne.rivera@decorp.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: <u>Lake Travis Community Library</u>
	Location within the building:
	Physical Address of Building: <u>1938 Lohmans Crossing</u>
	City: <u>Austin</u> County: <u>Travis</u>
	Contact Name: <u>Morgan McMilliam</u>
	Phone No.: <u>512-263-2885</u> Ext.:
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?
	a bilingual education program at that school?
	a bilingual education program at that school? ☐ Yes ☑ No 3. Do the students at these schools attend a bilingual education program at another

		lld the schoo waived out o							gram l	out the school	ĺ
		Yes	\boxtimes	No							
		e answer is y iired. Which l	_							ive language a	are
F.	Public I	involvement	Plan Fo	rm							
		te the Public rmit or maj o								plication for a t.	a
	Attachr	nent: <u>N/A</u>									
Se		9. Regulat ge 33)	ed Ent	ity and	l Perr	nitted S	ite In	format	ion (I	Instruction	ıs
Α.		te is currentl site. RN <u>1047</u>	, .	ited by T	CEQ, pi	covide the	Regula	ited Entit	y Num	ıber (RN) issu	ed
		the TCEQ's C is currently				<u>//www15.t</u>	<u>ceq.tex</u>	<u>as.gov/c</u>	rpub/	to determine	if
B.	Name o	f project or s	ite (the	name kn	own by	the comn	nunity	where lo	cated):		
	Two Riv	vers Wastewa	<u>ter Trea</u>	<u>tment Pl</u>	<u>ant</u>						
C.	Owner o	of treatment	facility:	Arbor W	<u>ay, Inc.</u>						
	Owners	hip of Facilit	y: 🗆	Public		Private		Both		Federal	
D.	Owner o	of land where	e treatm	ent facili	ty is or	will be:					
	Prefix (1	Mr., Ms., Miss): Click			kt.					
	First an	d Last Name:	Arbor V	Way, Inc.							
	Mailing	Address: 202	2 Arbory	way Cour	<u>'t</u>						
	City, Sta	ate, Zip Code	: <u>Housto</u>	on, TX 77	057						
	Phone N	No.: <u>713-542-</u>	<u>6159</u>		E-mail	Address: <u>I</u>	Ralph@	rthomas	tx.com	Ĺ	
		ndowner is r ent or deed r		-		,		or co-ar	plican	t, attach a lea	se
	Atta	chment:			ext.						
E.	Owner o	of effluent di	sposal s	site:							
	Prefix (1	Mr., Ms., Miss): <u>Rober</u>	t J. Day							
	First an	d Last Name:	<u>Lakecli</u>	ff on Lak	<u>e Travi</u>	<u>s, L.P.</u>					
	Mailing	Address: 112	l Clubla	nd Court	- <u>-</u>						
	City, Sta	ate, Zip Code	: <u>Spicew</u>	ood, TX	78669						

	Phone No.: E-mail Address:
	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: See Attachment 1
F.	Owner of sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant):
	Prefix (Mr., Ms., Miss): N/A
	First and Last Name: Wick here to enter toxt
	Mailing Address:
	City, State, Zip Code:
	Phone No.: E-mail Address:
	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: Mick here to enter text
Se	ection 10. TPDES Discharge Information (Instructions Page 34)
	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 here to enter text
_	
В.	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 here to enter text
	City nearest the outfall(s):
	County in which the outfalls(s) is/are located:
	Outfall Latitude: Longitude:
C.	

	□ Yes □ No
	If yes , indicate by a check mark if:
	\square Authorization granted \square Authorization pending
	For new and amendment applications, provide copies of letters that show proof of contact and the approval letter upon receipt.
	Attachment:
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.
Se	ction 11. TLAP Disposal Information (Instructions Page 36)
	ection 11. 11. in Disposar information (instructions rage 30)
Α.	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 here to enter text.
B.	City nearest the disposal site: <u>Spicewood</u>
C.	County in which the disposal site is located: <u>Travis</u>
D.	Disposal Site Latitude: <u>30deg 27' 01" N</u> Longitude: <u>98deg 04" 31" W</u>
E.	For TLAPs , describe the routing of effluent from the treatment facility to the disposal site:
	From the Wastewater Treatment Facility via underground pipe to the Golf Course Holding Ponds
F.	For TLAPs , please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained:
	Segment 1404 of the Colorado River Basin

Section 12. Miscellaneous Information (Instructions Page 37)

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 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 here to enter text.		
С.	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 here to enter text.		
D.	Do you owe any fees to the TCEQ?		
	□ Yes ⊠ No		
	If yes , provide the following information:		
	Account number: Amount past due:		
Ε.	Do you owe any penalties to the TCEQ?		
	□ Yes ⊠ No		
	If yes , please provide the following information:		
	Enforcement order number: Amount past due:		
	enter text		

Section 13. Attachments (Instructions Page 38)

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:

Section 14. Signature Page (Instructions Page 39)

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

Permit Number: <u>WQ0014649001</u>

Applicant: Areté Thomas Ranch Holdings, LLC

Certification:

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

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

Signatory name (typed or printed):	ick here to enter text.	
Signatory title:		
Signature:	Da	te:
(Use blue ink)		
Subscribed and Sworn to before me b	y the said	
n thisday of		, 20
My commission expires on the	day of	, 20
Notary Public		[SEAL]
Notary Fublic		[SEAL]
County, Texas		

TCEQ

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PLAIN LANGUAGE SUMMARY FOR TPDES OR TLAP PERMIT APPLICATIONS

Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

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

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

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

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS Enter 'INDUSTRIAL' or 'DOMESTIC' here WASTEWATER/STORMWATER

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Arbor Way, Inc. (CN: 603257957) proposes to operate Two Rivers Wastewater Treatment Plant (RN: 104790332), a wastewater treatment facility. The facility will be located at approximately 1,200-feet northwest of the intersection of Haynie Flat Road and Travis Lakeside Drive, in Spicewood, Travis County, Texas 78669. Permit renewal with minor amendment to add 0.160 MGD flow phase. This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain five-day biological oxygen demand (BOD5), total suspended solids (TSS), and Escherichia coli. Domestic wastewater will be treated by an activated sludge process plant and the treatment units include a bar screen, digester, aeration basin, clarifier, and chlorine contact basin.

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

AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí /AGUAS PLUVIALES

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

Arbor way, Inc (CN: 603257957) propone operar la Planta de Tratamiento de Aguas Residuales Two Rivers RN: 104790332, una instalación de tratamiento de aguas residuales. La instalación estará ubicada en aproximadamente a 1,200 pies al noroeste de la intersección de Haynie Flat Road y Travis Lakeside Drive, en Spicewood, Condado de Travis, Texas 78669. Renovación del permiso con enmienda menor para agregar una fase de flujo de 0.160 MGD. Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan demanda biologica de oxigeno de cinco dias (BOD5), solidos suspendidos totales (TSS), y Escherichia coli . Aguas residuales domesticas. estará tratado por una planta de proceso de lodos activados y las unidades de tratamiento incluyen criba de barras, digestor, balsa de aireación, clarificador y balsa de contacto de cloro.

DOMESTIC ADMINISTRATIVE REPORT 1.1

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page

Α.		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		
В.		Indicate by a check mark that a separate list with the landowners' names and mailing resses 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.	Prov	vide the source of the landowners' names and mailing addresses:		
Е.	As required by <i>Texas Water Code § 5.115</i> , is any permanent school fund land affected by this application?			
	[□ Yes □ No		

	If y o	es , provide the location and foreseeable impacts and effects this application has on the $d(s)$:
	Cli	ck here to enter text.
Se	ecti	on 2. Original Photographs (Instructions Page 44)
Pro	ovide	e original ground level photographs. Indicate with checkmarks that the following ation 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
S	ecti	on 3. Buffer Zone Map (Instructions Page 44)
A.	info	fer zone map. Provide a buffer zone map on 8.5×11 -inch paper with all of the following brmation. The applicant's property line and the buffer zone line may be distinguished by ag dashes or symbols and appropriate labels.
	•	 The applicant's property boundary; The required buffer zone; and Each treatment unit; and The distance from each treatment unit to the property boundaries.
В.		fer zone compliance method. Indicate how the buffer zone requirements will be met. ck all that apply.
	ı	□ Ownership
	I	☐ Restrictive easement
	I	□ Nuisance odor control
	I	□ Variance
C.		uitable site characteristics. Does the facility comply with the requirements regarding uitable site characteristic found in 30 TAC § 309.13(a) through (d)?
	ļ	□ Yes □ No

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:	
Application type:RenewalMajor Am	endment Minor Amendment New
County:	
Admin Complete Date:	
Agency Receiving SPIF:	-
Texas Historical Commission	U.S. Fish and Wildlife
Texas Parks and Wildlife Department	
remo rumo una virianzo E eponement	old. This, corps of Engineers
This form applies to TPDES permit applications	s only. (Instructions, Page 53)
The SPIF must be completed as a separate documeach agency as required by the TCEQ agreement addressed or further information is needed, you before the permit is issued. Each item must be completed.	with EPA. If any of the items are not completely will be contacted to provide the information
Do not refer to a response of any item in the pobe provided with this form separately from the application will not be declared administratively its entirety including all attachments.	
The following applies to all applications:	
1. Permittee:	
Permit No. WQ00	EPA ID No. TX
Address of the project (or a location descript and county):	tion that includes street/highway, city/vicinity,
fick here to enter text	

	Provide the name, address, phone and fax number of an individual that can be contacted to answer specific questions about the property.
	Prefix (Mr., Ms., Miss):
	First and Last Name:
	Credential (P.E, P.G., Ph.D., etc.):
	Title: Click here to enter text.
	Mailing Address:
	City, State, Zip Code:
	Phone No.: Fax No.:
	E-mail Address:
2.	List the county in which the facility is located:
3.	If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.
4.	Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of discharge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify the classified segment number.
	Click here to enter text.
5.	Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is required in addition to the map in the administrative report).
	Provide original photographs of any structures 50 years or older on the property.
	Does your project involve any of the following? Check all that apply.
	☐ Proposed access roads, utility lines, construction easements
	☐ Visual effects that could damage or detract from a historic property's integrity
	☐ Vibration effects during construction or as a result of project design
	☐ Additional phases of development that are planned for the future

		Sealing caves, fractures, sinkholes, other karst features
		Disturbance of vegetation or wetlands
6.		oposed construction impact (surface acres to be impacted, depth of excavation, sealing es, or other karst features):
	Click	here to enter text.
7.	Descri	be existing disturbances, vegetation, and land use:
	Click	here to enfer text.
		OWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR ENTS TO TPDES PERMITS
8.	List co	nstruction dates of all buildings and structures on the property:
	Click	
9.	Provid	e a brief history of the property, and name of the architect/builder, if known.
	Click	

WATER QUALITY PERMIT

PAYMENT SUBMITTAL FORM

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

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

Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality

Texas Commission on Environmental Quality

Financial Administration Division Financial Administration Division

Cashier's Office, MC-214
P.O. Box 13088
Cashier's Office, MC-214
12100 Park 35 Circle

Austin, Texas 78711-3088 Austin, Texas 78753

Fee Code: WQP Waste Permit No: WQ0014649001

1. Check or Money Order Number: <u>329313</u>

2. Check or Money Order Amount: \$1,065.00

3. Date of Check or Money Order: 02/29/24

4. Name on Check or Money Order: <u>DE Corp.</u>

5. APPLICATION INFORMATION

Name of Project or Site: Two Rivers Wastewater Treatment Plant

Physical Address of Project or Site:

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

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ATTACHMENT 1

INDIVIDUAL INFORMATION

Section 1. Individual Information (Instructions Page 50)

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

	Prefix (Mr., Ms., Miss):
	Full legal name (first, middle, last):
	Driver's License or State Identification Number:
	Date of Birth:
	Mailing Address:
	City, State, and Zip Code:
	Phone Number: Fax Number:
	E-mail Address:
	CN: Mick here to enter text
F	For Commission Use Only:
C	Customer Number:
R	Legulated Entity Number:
P	Permit Number:

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) (Required for all applications types. Must be completed in its entirety and signed. Note: Form may be signed by applicant representative.)				Yes
Correct and Current Industrial Wastewater Permit Application Forms (TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or later.)				Yes
Water Quality Permit Payment Submittal Form (Page 19) (Original payment sent to TCEQ Revenue Section. See instructions for mail	ing ad	'dress.)		Yes
7.5 Minute USGS Quadrangle Topographic Map Attached (Full-size map if seeking "New" permit. 8 ½ x 11 acceptable for Renewals and Amendments)				Yes
Current/Non-Expired, Executed Lease Agreement or Easement Attached		N/A		Yes
Landowners Map (See instructions for landowner requirements)		N/A		Yes
 Things to Know: All the items shown on the map must be labeled. The applicant's complete property boundaries must be delineat boundaries of contiguous property owned by the applicant. The applicant cannot be its own adjacent landowner. You must landowners immediately adjacent to their property, regardless from the actual facility. If the applicant's property is adjacent to a road, creek, or stream the opposite side must be identified. Although the properties a applicant's property boundary, they are considered potentially the adjacent road is a divided highway as identified on the USG applicant does not have to identify the landowners on the opposition. 	identiof how n, the re not affecte S topo	ify the v far th landov adjace ed land graphi	ey are vners nt to lowne c maj	e on ers. If
Landowners Cross Reference List (See instructions for landowner requirements)		N/A		Yes
Landowners Labels or USB Drive attached (See instructions for landowner requirements)		N/A		Yes
Original signature per 30 TAC § 305.44 - Blue Ink Preferred (If signature page is not signed by an elected official or principle executive a copy of signature authority/delegation letter must be attached)	office	r,		Yes

THE COMMISSION OF THE PROPERTY OF THE PROPERTY

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

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

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

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

A. Existing/Interim I Phase

Design Flow (MGD): <u>0.16</u>

2-Hr Peak Flow (MGD): o.64

Estimated construction start date: to be determined

Estimated waste disposal start date: Click to enter text.

B. Interim II Phase

Design Flow (MGD): N/A - There is no Interim II Phase

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

Estimated construction start date: <u>Click to enter text.</u> Estimated waste disposal start date: <u>Click to enter text.</u>

C. Final Phase

Design Flow (MGD): <u>0.32</u>

2-Hr Peak Flow (MGD): $\underline{1.28}$

Estimated construction start date: to be determined

Estimated waste disposal start date: Click to enter text.

D. Current Operating Phase

Provide the startup date of the facility: to be determined

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

than one phase exists or is proposed, a description of *each phase* must be provided.

See previous application

finish with the point of discharge. Include all sludge processing and drying units. **If more**

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)
See Attachment 3		

C. Process Flow Diagram

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

Attachment: 4

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

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

• Latitude: Click to enter text.

• Longitude: Click to enter text.

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

• Latitude: Click to enter text.

• Longitude: Click to enter text.

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: 5

Provide the name and a des	cription of the area	a served by the treatmen	t facility.
Travis County Improvement	District No. 1. A 1,25	o-acre single family resider	ntial development
Collection System Informati each uniquely owned collection systems. examples.	ction system, existi	ng and new, served by th	his facility, including
Collection System Informatio	n Owner Name	Owner Type	Population Serve
		Choose an item.	•
		Choose an item.	
		Choose an item.	
		Choose an item.	
L			
If yes, does the existing per years of being authorized being authorized being authorized being authorized being a look of the sufficient of the sufficient commending denial denia	y the TCEQ? scussion regarding nt justification may	the continued need for y result in the Executive	the unbuilt phase.
To provide water and wastew	ater service to prope	ty owners within the Distr	ict.
		D 45	
Section 5. Closure I	Plans (Instructi	ons Page 45)	
Have any treatment units be		rvice permanently, or wi	ll any units be taken

□ Yes ⊠ No

ш	yes, was a closure plan submitted to the TCEQ?
	□ Yes □ No
If y	yes, provide a brief description of the closure and the date of plan approval.
C	lick to enter text.
Se	ection 6. Permit Specific Requirements (Instructions Page 45)
	r applicants with an existing permit, check the Other Requirements or Special ovisions of the permit.
Α.	Summary transmittal
	Have plans and specifications been approved for the existing facilities and each proposed phase?
	□ Yes ⊠ No
	If yes, provide the date(s) of approval for each phase: Click to enter text.
	Provide information, including dates, on any actions taken to meet a <i>requirement or provision</i> pertaining to the submission of a summary transmittal letter. Provide a copy of an approval letter from the TCEQ, if applicable .
	Click to enter text.
B.	Buffer zones
	Have the buffer zone requirements been met?
	⊠ Yes □ No
	Provide information below, including dates, on any actions taken to meet the conditions of the buffer zone. If available, provide any new documentation relevant to maintaining the buffer zones.
	Click to enter text.

C. Other actions required by the current permit

	bes the <i>Other Requirements</i> or <i>Special Provisions</i> section in the existing permit require bmission of any other information or other required actions? Examples include otification of Completion, progress reports, soil monitoring data, etc.
	□ Yes ⊠ No
	yes , provide information below on the status of any actions taken to meet the nditions of an <i>Other Requirement</i> or <i>Special Provision</i> .
\mathbf{C}	lick to enter text.
_	
	it and grease treatment
1.	Acceptance of grit and grease waste
	Does the facility have a grit and/or grease processing facility onsite that treats and decants or accepts transported loads of grit and grease waste that are discharged directly to the wastewater treatment plant prior to any treatment?
	□ Yes ⊠ No
	If No, stop here and continue with Subsection E. Stormwater Management.
•	
۷.	Grit and grease processing
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.
2.	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
2.	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.
2.	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.
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	Describe below how the grit and grease waste is treated at the facility. In your description, include how and where the grit and grease is introduced to the treatment works and how it is separated or processed. Provide a flow diagram showing how grit and grease is processed at the facility. Click to enter text.
	Describe below how the grit and grease waste is treated at the facility. In your description, include how and where the grit and grease is introduced to the treatment works and how it is separated or processed. Provide a flow diagram showing how grit and grease is processed at the facility. Click to enter text. Click to enter text. Does the facility have a Municipal Solid Waste (MSW) registration or permit for grit
	Describe below how the grit and grease waste is treated at the facility. In your description, include how and where the grit and grease is introduced to the treatment works and how it is separated or processed. Provide a flow diagram showing how grit and grease is processed at the facility. Click to enter text. Grit disposal Does the facility have a Municipal Solid Waste (MSW) registration or permit for grit disposal?
	If con

		Click to enter text.
	1	Grease and decanted liquid disposal
	7.	Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-2335.
		Describe how the decant and grease are treated and disposed of after grit separation.
		Click to enter text.
E.	Sto	ormwater management
	1.	Applicability
		Does the facility have a design flow of 1.0 MGD or greater in any phase?
		□ Yes ⊠ No
		Does the facility have an approved pretreatment program, under 40 CFR Part 403?
		□ Yes ⊠ No
		If no to both of the above, then skip to Subsection F, Other Wastes Received.
	2.	MSGP coverage
		Is the stormwater runoff from the WWTP and dedicated lands for sewage disposal currently permitted under the TPDES Multi-Sector General Permit (MSGP), TXR050000?
		□ Yes □ No
		If yes , please provide MSGP Authorization Number and skip to Subsection F, Other Wastes Received:
		TXR05 Click to enter text. or TXRNE Click to enter text.
		If no, do you intend to seek coverage under TXR050000?
		□ Yes □ No
	3.	Conditional exclusion
		Alternatively, do you intend to apply for a conditional exclusion from permitting based TXR050000 (Multi Sector General Permit) Part II B.2 or TXR050000 (Multi Sector General Permit) Part V, Sector T 3(b)?
		□ Yes □ No
		If yes, please explain below then proceed to Subsection F, Other Wastes Received:

	Click to enter text.
1.	Existing coverage in individual permit
	Is your stormwater discharge currently permitted through this individual TPDES or TLAP permit?
	□ Yes □ No
	If yes , provide a description of stormwater runoff management practices at the site that are authorized in the wastewater permit then skip to Subsection F, Other Wastes Received.
	Click to enter text.
-	Zero stormwater discharge
٠.	Do you intend to have no discharge of stormwater via use of evaporation or other
	means?
	□ Yes □ No
	If yes, explain below then skip to Subsection F. Other Wastes Received.
	Click to enter text.
	Note: If there is a potential to discharge any stormwater to surface water in the state as the result of any storm event, then permit coverage is required under the MSGP or an individual discharge permit. This requirement applies to all areas of facilities with treatment plants or systems that treat, store, recycle, or reclaim domestic sewage, wastewater or sewage sludge (including dedicated lands for sewage sludge disposal located within the onsite property boundaries) that meet the applicability criteria of above. You have the option of obtaining coverage under the MSGP for direct discharges, (recommended), or obtaining coverage under this individual permit.
5.	Request for coverage in individual permit
	Are you requesting coverage of stormwater discharges associated with your treatment plant under this individual permit?
	□ Yes □ No
	If yes, provide a description of stormwater runoff management practices at the site for which you are requesting authorization in this individual wastewater permit and describe whether you intend to comingle this discharge with your treated effluent or discharge it via a separate dedicated stormwater outfall. Please also indicate if you intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.

		Click to enter text.
		Note: Direct stormwater discharges to waters in the state authorized through this
		individual permit will require the development and implementation of a stormwater pollution prevention plan (SWPPP) and will be subject to additional monitoring and reporting requirements. Indirect discharges of stormwater via headworks recycling will require compliance with all individual permit requirements including 2-hour peak flow limitations. All stormwater discharge authorization requests will require additional information during the technical review of your application.
F.	Di	scharges to the Lake Houston Watershed
	Do	es the facility discharge in the Lake Houston watershed?
		□ Yes ⊠ No
		yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions. ck to enter text.
G.	Ot	her wastes received including sludge from other WWTPs and septic waste
	1.	Acceptance of sludge from other WWTPs
		Does or will the facility accept sludge from other treatment plants at the facility site?
		□ Yes ⊠ No
		If yes, attach sewage sludge solids management plan. See Example 5 of 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 BOD_5 concentration of the sludge, and the design BOD_5 concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.
		Click to enter text.
		Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.
	2.	Acceptance of septic waste
		Is the facility accepting or will it accept septic waste?
		□ Yes ⊠ No
		If yes, does the facility have a Type V processing unit?
		□ Yes □ No
		If yes, does the unit have a Municipal Solid Waste permit?
		□ Yes □ No

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

Click to enter text.			

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

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

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

	Yes	No
ш	163	INO

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

Click to enter text.			

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

Is the facility in operation?

□ Yes ⊠ No

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

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

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

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

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
CBOD ₅ , mg/l					
Total Suspended Solids, mg/l					
Ammonia Nitrogen, mg/l					
Nitrate Nitrogen, mg/l					

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

^{*}TPDES permits only †TLAP permits only

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

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

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: to be determined

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

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

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

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

 \square Design flow>= 1 MGD

	Serves >= 10,000 people
	Class I Sludge Management Facility (per 40 CFR § 503.9)
	Biosolids generator
	Biosolids end user – land application (onsite)
	Biosolids end user – surface disposal (onsite)
	Biosolids end user – incinerator (onsite)
ww	TP's Biosolids Treatment Process
Che	ck all that apply. See instructions for guidance.
	Aerobic Digestion
	Air Drying (or sludge drying beds)
	Lower Temperature Composting
	Lime Stabilization
	Higher Temperature Composting
	Heat Drying
	Thermophilic Aerobic Digestion
	Beta Ray Irradiation
	Gamma Ray Irradiation
	Pasteurization
	Preliminary Operation (e.g. grinding, de-gritting, blending)
	Thickening (e.g. gravity thickening, centrifugation, filter press, vacuum filter)
	Sludge Lagoon
	Temporary Storage (< 2 years)
	Long Term Storage (>= 2 years)
	Methane or Biogas Recovery
	Other Treatment Process: Click to enter text.

C. Biosolids Management

B.

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): Click to enter text.

D. Disposal site

Disposal site name: to be determined

TCEQ permit or registration number: Click to enter text.

County where disposal site is located: Click to enter text.

E. Transportation method

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

Name of the hauler: to be determined

Hauler registration number: <u>Click to enter text.</u>

Sludge is transported as a:

Liquid \square semi-liquid \square semi-solid \square solid \square

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

A. Beneficial use authorization

Does the existing permit include authorization	for land applie	cation 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 f storage or disposal options?	or an	y of the	follow	ving sludge processing,
Sludge Composting		Yes		No
Marketing and Distribution of sludge		Yes		No
Sludge Surface Disposal or Sludge Monofill		Yes	\boxtimes	No
Temporary storage in sludge lagoons		Yes	\boxtimes	No
If yes to any of the above sludge options and the authorization, is the completed Domestic Waste Technical Report (TCEQ Form No. 10056) attack	wate	r Permi	t Appl	ication: Sewage Sludge
□ Yes □ No				
Section 11. Sewage Sludge Lagoons (Ins	stru	ctions	Page	e 53)
Does this facility include sewage sludge lagoons?				
□ Yes ⊠ No				
If yes, complete the remainder of this section. If no,	proc	eed to S	Section	12.
A. Location information				
The following maps are required to be submitted provide the Attachment Number.	d as p	art of t	he app	lication. For each map,
 Original General Highway (County) Map: 				
Attachment: Click to enter text.				
 USDA Natural Resources Conservation Ser 	vice	Soil Ma _l) :	
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 eapply.	xist v	vithin th	ne lago	on area. Check all that
Overlap a designated 100-year frequency	floo	d 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 the protective measures to be utilized including				

Click to enter text.
Temporary storage information
Provide the results for the pollutant screening of sludge lagoons. These results are in addition to pollutant results in <i>Section 7 of Technical Report 1.0.</i>
Nitrate Nitrogen, mg/kg: Click to enter text.
Total Kjeldahl Nitrogen, mg/kg: 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: <u>Click to enter text.</u>
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: <u>Click to enter text.</u>
Liner information
Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of $1x10^{-7}$ cm/sec?
□ Yes □ No
If yes, describe the liner below. Please note that a liner is required.

B.

C.

	Click	to enter text.
D.	Site d	evelopment plan
	Provid	le a detailed description of the methods used to deposit sludge in the lagoon(s):
	Click	to enter text.
	Attac	n the following documents to the application.
	•	Plan view and cross-section of the sludge lagoon(s)
		Attachment: Click to enter text.
	•	Copy of the closure plan
		Attachment: Click to enter text.
	•	Copy of deed recordation for the site
		Attachment: Click to enter text.
	•	Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons
		Attachment: Click to enter text.
	•	Description of the method of controlling infiltration of groundwater and surface water from entering the site
		Attachment: Click to enter text.
	•	Procedures to prevent the occurrence of nuisance conditions
		Attachment: Click to enter text.
E.	Groui	ndwater monitoring
	groun	undwater monitoring currently conducted at this site, or are any wells available for dwater monitoring, or are groundwater monitoring data otherwise available for the e lagoon(s)?
		Yes □ No
	types	undwater monitoring data are available, provide a copy. Provide a profile of soil encountered down to the groundwater table and the depth to the shallowest dwater as a separate attachment.
	At	tachment: Click to enter text.

Section 12. Authorizations/Compliance/Enforcement (Instructions

Page 55)

A	A d d!#! 1		
Α.	Additional	aurnoriz	anons

C	Does the permittee have additional authorizations for this facility, such as reuse authorization, sludge permit, etc? ☐ Yes ☑ No If yes, provide the TCEQ authorization number and description of the authorization: Click to enter text.	
В.	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:	or
	Click to enter text.	
S	ection 13. RCRA/CERCLA Wastes (Instructions Page 55)	
	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	2

B. Remediation activity wastewater

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

□ Yes ⊠ No

C. Details about wastes received

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

Attachment: Click to enter text.

Section 14. Laboratory Accreditation (Instructions Page 56)

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

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

Title: <u>President</u>	
Signature:	
Date:	

Printed Name: Ralph Thomas

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)

٨	Justification	of.	normit	nood
A.	Justincation	ΟI	регищ	neeu

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

	_	
	(Click to enter text.
B.	Re	gionalization of facilities
		r additional guidance, please review <u>TCEQ's Regionalization Policy for Wastewater</u> <u>eatment</u> ¹ .
		ovide the following information concerning the potential for regionalization of domest stewater treatment facilities:
	1.	Municipally incorporated areas
		If the applicant is a city, then Item 1 is not applicable. Proceed to Item 2 Utility CCN areas.
		Is any portion of the proposed service area located in an incorporated city?
		□ Yes □ No □ Not Applicable
		If yes, within the city limits of: 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): <u>Click to enter text.</u>
racinty Design Flow (now being requested in application). Chek to enter text.
Average Influent Organic Strength or BOD ₅ Concentration in mg/l: <u>Click to enter text.</u>
Average Influent Loading (lbs/day = total average flow X average BOD ₅ conc. X 8.34): $\frac{\text{Click}}{\text{to enter text.}}$
Provide the source of the average organic strength or BOD ₅ concentration.
Click to enter text

B. Proposed organic loading

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

Table 1.1(1) - Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD5 Concentration (mg/l)
Municipality		
Subdivision		
Trailer park - transient		
Mobile home park		
School with cafeteria and showers		
School with cafeteria, no showers		
Recreational park, overnight use		
Recreational park, day use		
Office building or factory		
Motel		
Restaurant		
Hospital		
Nursing home		
Other		
TOTAL FLOW from all sources		
AVERAGE BOD ₅ from all sources		

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

A. Existing/Interim I Phase Design Effluent Quality

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

Total Suspended Solids, mg/l: Click to enter text.

Ammonia Nitrogen, mg/l: <u>Click to enter text.</u>
Total Phosphorus, mg/l: <u>Click to enter text.</u>
Dissolved Oxygen, mg/l: <u>Click to enter text.</u>

Other: Click to enter text.

В.	interim ii Phase Design Efficient Quanty
	Biochemical Oxygen Demand (5-day), mg/l: Click to enter text.
	Total Suspended Solids, mg/l: Click to enter text.
	Ammonia Nitrogen, mg/l: Click to enter text.
	Total Phosphorus, mg/l: Click to enter text.
	Dissolved Oxygen, mg/l: Click to enter text.
	Other: Click to enter text.
C.	Final Phase Design Effluent Quality
	Biochemical Oxygen Demand (5-day), mg/l: Click to enter text.
	Total Suspended Solids, mg/l: Click to enter text.
	Ammonia Nitrogen, mg/l: Click to enter text.
	Total Phosphorus, mg/l: Click to enter text.
	Dissolved Oxygen, mg/l: Click to enter text.
	Other: Click to enter text.
D.	Disinfection Method
	Identify the proposed method of disinfection.
	☐ Chlorine: Click to enter text. mg/l after Click to enter text. minutes detention time at peak flow
	Dechlorination process: Click to enter text.
	□ Ultraviolet Light: Click to enter text. seconds contact time at peak flow
	□ Other: Click to enter text.
Ç.	ection 4 Decign Calculations (Instructions Page 50)
	ection 4. Design Calculations (Instructions Page 59)
	tach design calculations and plant features for each proposed phase. Example 4 of the structions includes sample design calculations and plant features.
	Attachment: Click to enter text.
-	
Se	ction 5. Facility Site (Instructions Page 60)
A.	100-year floodplain
	Will the proposed facilities be located <u>above</u> the 100-year frequency flood level?
	□ Yes □ No
	If no , describe measures used to protect the facility during a flood event. Include a site map showing the location of the treatment plant within the 100-year frequency flood level. If applicable, provide the size and types of protective structures.
	Click to enter text.

	Provide the source(s) used to determine 100-year frequency flood plain.
	Click to enter text.
	For a new or expansion of a facility, will a wetland or part of a wetland be filled?
	□ Yes □ No
	If yes, has the applicant applied for a US Corps of Engineers 404 Dredge and Fill Permit?
	□ Yes □ No
	If yes, provide the permit number: Click to enter text.
	If no, provide the approximate date you anticipate submitting your application to the Corps: Click to enter text.
B.	Wind rose
	Attach a wind rose: Click to enter text.
Se	ection 6. Permit Authorization for Sewage Sludge Disposal
	(Instructions Page 60)
Α.	Beneficial use authorization
	Are you requesting to include authorization to land apply sewage sludge for beneficial use on property located adjacent to the wastewater treatment facility under the wastewater permit?
	□ Yes □ No
	If yes, attach the completed 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.
Se	ection 7. Sewage Sludge Solids Management Plan (Instructions Page
	61)
_	

Attach a solids management plan to the application.

Attachment: Click to enter text.

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

Treatment units and processes dimensions and capacities

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

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

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

Section 1. Domestic Drinking Water Supply (Instructions Page 64)
Is there a surface water intake for domestic drinking water supply located within 5 miles downstream from the point or proposed point of discharge?
□ Yes □ No
If no , proceed it Section 2. If yes , provide the following:
Owner of the drinking water supply: <u>Click to enter text.</u>
Distance and direction to the intake: Click to enter text.
Attach a USGS map that identifies the location of the intake.
Attachment: Click to enter text.
Section 2. Discharge into Tidally Affected Waters (Instructions Page 64)
Does the facility discharge into tidally affected waters?
□ Yes □ No
If no , proceed to Section 3. If yes , complete the remainder of this section. If no, proceed to Section 3.
A. Receiving water outfall
Width of the receiving water at the outfall, in feet: Click to enter text.
B. Oyster waters
Are there oyster waters in the vicinity of the discharge?
□ Yes □ No
If yes, provide the distance and direction from outfall(s).
Click to enter text.
C. Sea grasses
Are there any sea grasses within the vicinity of the point of discharge?
□ Yes □ No
If yes, provide the distance and direction from the outfall(s).
Click to enter text.

36	CHOIL	5. Classified Segments (instructions Page 64)
Is	the disc	harge directly into (or within 300 feet of) a classified segment?
	□ Ye	es 🗆 No
If	yes , this	s Worksheet is complete.
If	no , com	plete Sections 4 and 5 of this Worksheet.
Se	ection	4. Description of Immediate Receiving Waters (Instructions Page 65)
Na	ame of t	he immediate receiving waters: <u>Click to enter text.</u>
A.	Receiv	ring water type
	Identif	y the appropriate description of the receiving waters.
		Stream
		Freshwater Swamp or Marsh
		Lake or Pond
		Surface area, in acres: Click to enter text.
		Average depth of the entire water body, in feet: Click to enter text.
		Average depth of water body within a 500-foot radius of discharge point, in feet: Click to enter text.
		Man-made Channel or Ditch
		Open Bay
		Tidal Stream, Bayou, or Marsh
		Other, specify: <u>Click to enter text.</u>
B.	Flow c	haracteristics
	existin	eam, man-made channel or ditch was checked above, provide the following. For g discharges, check one of the following that best characterizes the area <i>upstream</i> discharge. For new discharges, characterize the area <i>downstream</i> of the discharge one).
		Intermittent - dry for at least one week during most years
	□ mai	Intermittent with Perennial Pools - enduring pools with sufficient habitat to intain significant aquatic life uses
		Perennial - normally flowing
	Check dischar	the method used to characterize the area upstream (or downstream for new rgers).
		USGS flow records
		Historical observation by adjacent landowners
		Personal observation
		Other, specify: Click to enter text.

	List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point.			
	Click t	o enter text.		
D.	Downstream characteristics			
	Do the receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.)?			
		Yes □ No		
If yes, discuss how.				
	Click t	o enter text.		
E.	Normal dry weather characteristics Provide general observations of the water body during normal dry weather conditions. Click to enter text.			
Date and time of observation: Click to enter text.				t
	Was the water body influenced by stormwater runoff during observations?			
	☐ Yes ☐ No			
Section 5. General Characteristics of the Waterbody (Instructions Page 66)				
A. Upstream influences				
	Is the immediate receiving water upstream of the discharge or proposed discharge influenced by any of the following? Check all that apply.			
		Oil field activities		Urban runoff
		Upstream discharges		Agricultural runoff
		Septic tanks		Other(s), specify: Click to enter text.

C. Downstream perennial confluences

B. Waterbody uses Observed or evidences of the following uses. Check all that apply. Livestock watering Contact recreation Irrigation withdrawal Non-contact recreation **Fishing Navigation** Domestic water supply Industrial water supply Park activities Other(s), specify: Click to enter text. C. Waterbody aesthetics Check one of the following that best describes the aesthetics of the receiving water and the surrounding area. Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional Natural Area: trees and/or native vegetation; some development evident (from fields, pastures, dwellings); water clarity discolored Common Setting: not offensive; developed but uncluttered; water may be colored or turbid Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.1: STREAM PHYSICAL CHARACTERISTICS

Required for new applications, major facilities, and applications adding an outfall.

Worksheet 2.1 is not required for discharges to intermittent streams or discharges directly to (or within 300 feet of) a classified segment.

Section 1. General Information (Instructions Page 66)
Date of study: Click to enter text. Time of study: Click to enter text.
Stream name: Click to enter text.
Location: Click to enter text.
Type of stream upstream of existing discharge or downstream of proposed discharge (check one).
\square Perennial \square Intermittent with perennial pools
Section 2. Data Collection (Instructions Page 66)
Number of stream bends that are well defined: Click to enter text.
Number of stream bends that are moderately defined: Click to enter text.
Number of stream bends that are poorly defined: Click to enter text.
Number of riffles: Click to enter text.
Evidence of flow fluctuations (check one):
□ Minor □ moderate □ severe
Indicate the observed stream uses and if there is evidence of flow fluctuations or channel obstruction/modification.
Click to enter text.

Stream transects

In the table below, provide the following information for each transect downstream of the existing or proposed discharges. Use a separate row for each transect.

Table 2.1(1) - Stream Transect Records

Stream type at transect	Transect location	Water surface	Stream depths (ft) at 4 to 10 points along each
Select riffle, run, glide, or pool. See Instructions, Definitions section.		width (ft)	transect from the channel bed to the water surface. Separate the measurements with commas.
Choose an item.			

Section 3. Summarize Measurements (Instructions Page 66)

Streambed slope of entire reach, from USGS map in feet/feet: Click to enter text.

Approximate drainage area above the most downstream transect (from USGS map or county highway map, in square miles): <u>Click to enter text.</u>

Length of stream evaluated, in feet: <u>Click to enter text.</u>

Number of lateral transects made: Click to enter text.

Average stream width, in feet: Click to enter text.

Average stream depth, in feet: Click to enter text.

Average stream velocity, in feet/second: Click to enter text.

Instantaneous stream flow, in cubic feet/second: Click to enter text.

Indicate flow measurement method (type of meter, floating chip timed over a fixed distance, etc.): <u>Click to enter text.</u>

Size of pools (large, small, moderate, none): Click to enter text.

Maximum pool depth, in feet: Click to enter text.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.0: LAND DISPOSAL OF EFFLUENT

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

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

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

For existing authorizations, provide Registration Number: <u>Click to enter text.</u>

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, Bermuda, and Native Grasses	170	320,000	No

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

Table 3.0(2) – Storage and Evaporation Ponds

Pond Number	Surface Area (acres)	Storage Volume (acre-feet)	Dimensions	Liner Type
1	4.5	40.5	1070' x 850' x 9.5'	Synthetic
2	To be determined	Pond not built yet		
3	To be determined	Pond not built yet		
4	To be determined	Pond not built yet		

	a liner certification the ional engineer for eac		ned, and sealed by a	Texas
Attachment:	Click to enter text.			
	-1 1 1- 0			
Section 4.	Flood and Runof	f Protection (Ins	tructions Page 6	58)
Is the land appli	cation site <u>within</u> the	100-year frequency f	lood level?	
□ Yes ⊠	No			
If yes, describe l	how the site will be pr	rotected from inunda	tion.	
Click to enter tex	t.			
Provide the sour	ce used to determine	the 100-year frequen	cy flood level:	
FEMA FIRM 484	53Co18oH, Revised Se	ptember 26, 2008		
Provide a descripapplication site.	otion of tailwater con	trols and rainfall run-	on controls used for	the land
	the golf course will be moefore it reaches Lake T		off. Dams on the golf co	ourse property

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**: <u>6</u>

- 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**: <u>a</u>

- 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
548603	Domestic	Y	Choose an item.	
281349	Irrigation	Y	Choose an item.	
342767	Irrigation	Y	Choose an item.	
342864	Irrigation	Y	Choose an item.	
356159	Irrigation	Y	Choose an item.	

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
342763	Irrigation	Y	Choose an item.	
366269	Irrigation	Y	Choose an item.	
342868	Irrigation	Y	Choose an item.	
342870	Irrigation	Y	Choose an item.	
273402	Domestic	Y	Choose an item.	

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
121336	Domestic	Y	Choose an item.	
111526	Domestic	Y	Choose an item.	
369054		N	Plugged	
184974	Domestic	Y	Choose an item.	
			Choose an item.	

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

Attachment: Click to enter text.

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: Click to enter text.
Are groundwater monitoring wells available onsite? \square Yes \boxtimes No
Do you plan to install ground water monitoring wells or lysimeters around the land application site? \Box Yes \boxtimes No
If yes, provide the proposed location of the monitoring wells or lysimeters on a site map.
Attachment: Click to enter text.

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

A. Soil map

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

Attachment: 7

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: A soils analysis has not been conducted.

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

Section 9. Effluent Monitoring Data (Instructions Page 71)

Is the facility in operation?

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

No

Yes 🗵

Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	pН	Chlorine Residual mg/l	Acres irrigated

lick to enter text.		

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.1: SURFACE LAND DISPOSAL OF EFFLUENT

The following is required for new and major amendment permit applications. Renewal and minor amendment permit applications may be asked for this worksheet on a case by case basis.

Section 1. Surface Disposal (Instructions Page 72)

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

A. Irrigation

Area under irrigation, in acres: Click to enter text.

Design application frequency:

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

Land grade (slope):

average percent (%): Click to enter text.

maximum percent (%): Click to enter text.

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

Design total nitrogen loading rate, in lbs N/acre/year: Click to enter text.

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

Method of application: Click to enter text.

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

Attachment: Click to enter text.

B. Evaporation ponds

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

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

Attachment: Click to enter text.

C. Evapotranspiration beds

Number of beds: Click to enter text.

Area of bed(s), in acres: <u>Click to enter text.</u>

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

Void ratio of soil in the beds: <u>Click to enter text.</u>

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: <u>Click to enter text.</u>
Design BOD ₅ loading rate, in lbs BOD ₅ /acre/day: <u>Click to enter text.</u>
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)
Section 2. Edwards Aquifer (Instructions Page 73) Is the facility subject to <i>30 TAC Chapter 213</i> , Edwards Aquifer Rules?
Is the facility subject to 30 TAC Chapter 213, Edwards Aquifer Rules?
Is the facility subject to 30 TAC Chapter 213, Edwards Aquifer Rules?
Is the facility subject to <i>30 TAC Chapter 213</i> , Edwards Aquifer Rules? ☐ Yes ☐ No
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?
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?
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?

DOMESTIC WASTEWATER PERMIT APPLICATION **WORKSHEET 3.2: SURFACE LAND DISPOSAL OF EFFLUENT**

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

NOTE: All applicants proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0. This worksheet applies to any subsurface disposal system that **does not meet** the definition of a subsurface area drip dispersal system as defined in 30 TAC Chapter 222, Subsurface Area Drip Dispersal System.

Section 1. Subsurface Application (Instructions Page 74)
Identify the type of system:
Conventional Gravity Drainfield, Beds, or Trenches (new systems must be less than 5,000 GPD)
□ Low Pressure Dosing
☐ Other, specify: <u>Click to enter text.</u>
Application area, in acres: Click to enter text.
Area of drainfield, in square feet: Click to enter text.
Application rate, in gal/square foot/day: Click to enter text.
Depth to groundwater, in feet: Click to enter text.
Area of trench, in square feet: Click to enter text.
Dosing duration per area, in hours: <u>Click to enter text.</u>
Number of beds: <u>Click to enter text.</u>
Dosing amount per area, in inches/day: Click to enter text.
Infiltration rate, in inches/hour: Click to enter text.
Storage volume, in gallons: <u>Click to enter text.</u>
Area of bed(s), in square feet: <u>Click to enter text.</u>
Soil Classification: <u>Click to enter text.</u>
Attach a separate engineering report with the information required in $30\ TAC\ S\ 309.20$, excluding the requirements of $S\ 309.20\ b(3)(A)$ and (B) design analysis which may be asked for on a case by case basis. Include a description of the schedule of dosing basin rotation.
Attachment: Click to enter text.
Section 2. Edwards Aquifer (Instructions Page 74)
Is the subsurface system over the Edwards Aquifer Recharge Zone as mapped by TCEQ?
□ Yes □ No
Is the subsurface system over the Edwards Aquifer Transition Zone as mapped by TCEQ?
□ Yes □ No
If yes to either question, the subsurface system may be prohibited by <i>30 TAC §213.8</i> . Please

call the Municipal Permits Team, at 512-239-4671, to schedule a pre-application meeting.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.3: SUBSURFACE AREA DRIP DISPERSAL (SADDS) LAND DISPOSAL OF EFFLUENT

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

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

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

Section 2. Subsurface Area Drip Dispersal System (Instructions Page

A.	Type of system
	□ Subsurface Drip Irrigation
	□ Surface Drip Irrigation
	□ Other, specify: <u>Click to enter text.</u>
B.	Irrigation operations
	Application area, in acres: Click to enter text.
	Infiltration Rate, in inches/hour: Click to enter text.
	Average slope of the application area, percent (%): Click to enter text.
	Maximum slope of the application area, percent (%): Click to enter text.
	Storage volume, in gallons: <u>Click to enter text.</u>
	Major soil series: Click to enter text.
	Depth to groundwater, in feet: Click to enter text.
C.	Application rate
	Is the facility located west of the boundary shown in <i>30 TAC § 222.83</i> 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 <i>30 TAC § 222.83</i> 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 <i>30 TAC §222.83</i> to calculate the maximum hydraulic application rate.
	Do you plan to submit an alternative method to calculate the hydraulic application rate for approval by the executive director?
	□ Yes □ No
	Hydraulic application rate, in gal/square foot/day: Click to enter text.
	Nitrogen application rate, in lbs/gal/day: Click to enter text.
D.	Dosing information
	Number of doses per day: <u>Click to enter text.</u>
	Dosing duration per area, in hours: Click to enter text.

Rest period between doses, in hours: Click to enter text.

Dosing amount per area, in inches/day: Click to enter text.

	Number of zones: Click to enter text.
	Does the proposed subsurface drip irrigation system use tree vegetative cover as a crop?
	□ Yes □ No
	If yes , provide a vegetation survey by a certified arborist. Please call the Water Quality Assessment Team at (512) 239-4671 to schedule a pre-application meeting.
	Attachment: Click to enter text.
Se	ction 3. Required Plans (Instructions Page 75)
A.	Recharge feature plan
	Attach a Recharge Feature Plan with all information required in 30 TAC §222.79.
	Attachment: Click to enter text.
B.	Soil evaluation
	Attach a Soil Evaluation with all information required in 30 TAC §222.73.
	Attachment: Click to enter text.
C.	Site preparation plan
	Attach a Site Preparation Plan with all information required in 30 TAC §222.75.
	Attachment: Click to enter text.
D.	Soil sampling/testing
	Attach soil sampling and testing that includes all information required in <i>30 TAC</i> §222.157.
	Attachment: Click to enter text.
C	
Se	ction 4. Floodway Designation (Instructions Page 76)
A.	Site location
	Is the existing/proposed land application site within a designated floodway?
	□ Yes □ No
B.	Flood map
	Attach either the FEMA flood map or alternate information used to determine the floodway.
	Attachment: Click to enter text.
C	
26	ction 5. Surface Waters in the State (Instructions Page 76)

S

A. Buffer Map

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

Attachment: Click to enter text.

Do you plan to request a buffer variance from water wells or waters in the state?
□ Yes □ No
If yes, then attach the additional information required in 30 TAC § 222.81(c).
Attachment: Click to enter text.
Section 6 Edwards Aquifor (Instructions Dags 76)
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 <i>30 TAC §213.8</i> . Please call the Municipal Permits Team at 512-239-4671 to schedule a pre-application meeting.

B. Buffer variance request

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: POLLUTANT ANALYSIS REQUIREMENTS

The following **is required** for facilities with a permitted or proposed flow of **1.0 MGD or greater**, facilities with an approved **pretreatment** program, or facilities classified as a **major** facility. See instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Toxic Pollutants (Instructions Page 78)

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

Grab □ Composite □

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

Table 4.0(1) - Toxics Analysis

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

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

Pollutant	AVG Effluent Conc. (μg/l)	MAX Effluent Conc. (μg/l)	Number of Samples	MAL (μg/l)
Endosulfan II (beta)				0.02
Endosulfan Sulfate				0.1
Endrin				0.02
Ethylbenzene				10
Fluoride				500
Guthion				0.1
Heptachlor				0.01
Heptachlor Epoxide				0.01
Hexachlorobenzene				5
Hexachlorobutadiene				10
Hexachlorocyclohexane (alpha)				0.05
Hexachlorocyclohexane (beta)				0.05
gamma-Hexachlorocyclohexane				0.05
(Lindane)				
Hexachlorocyclopentadiene				10
Hexachloroethane				20
Hexachlorophene				10
Lead				0.5
Malathion				0.1
Mercury				0.005
Methoxychlor				2
Methyl Ethyl Ketone				50
Mirex				0.02
Nickel				2
Nitrate-Nitrogen				100
Nitrobenzene				10
N-Nitrosodiethylamine				20
N-Nitroso-di-n-Butylamine				20
Nonylphenol				333
Parathion (ethyl)				0.1
Pentachlorobenzene				20
Pentachlorophenol				5
Phenanthrene				10

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

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

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

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

Section 2. Priority Pollutants

For 1	pollutants	identified	in	Tables	4.0(2)A-E,	indicate	type	of	sample.
-------	------------	------------	----	---------------	------------	----------	------	----	---------

Grab □ Composite □

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

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

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

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

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

Table 4.0(2)B - Volatile Compounds

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

Table 4.0(2)C - Acid Compounds

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

Table 4.0(2)D - Base/Neutral Compounds

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

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

Table 4.0(2)E - Pesticides

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

^{*} For PCBS, if all are non-detects, enter the highest non-detect preceded by a "<".

Section 3. Dioxin/Furan Compounds A. Indicate which of the following compounds from may be present in the influent from a contributing industrial user or significant industrial user. Check all that apply. 2,4,5-trichlorophenoxy acetic acid Common Name 2,4,5-T, CASRN 93-76-5 2-(2,4,5-trichlorophenoxy) propanoic acid Common Name Silvex or 2,4,5-TP, CASRN 93-72-1 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate Common Name Erbon, CASRN 136-25-4 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate Common Name Ronnel, CASRN 299-84-3 2,4,5-trichlorophenol Common Name TCP, CASRN 95-95-4 hexachlorophene Common Name HCP, CASRN 70-30-4 For each compound identified, provide a brief description of the conditions of its/their presence at the facility. Click to enter text.

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

□ Yes □ No

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

Click to enter text.			

C.	If any of the compounds in Subsection A ${f or}$ B are present, complete Table 4.0(2)F.
	For pollutants identified in Table 4.0(2)F, indicate the type of sample.

Grab □ Composite □

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

Table 4.0(2)F - Dioxin/Furan Compounds

Compound	Toxic Equivalenc y Factors	Wastewater Concentration (ppq)	Wastewater Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Equivalents (ppt)	MAL (ppq)
2,3,7,8 TCDD	1					10
1,2,3,7,8 PeCDD	0.5					50
2,3,7,8 HxCDDs	0.1					50
1,2,3,4,6,7,8 HpCDD	0.01					50
2,3,7,8 TCDF	0.1					10
1,2,3,7,8 PeCDF	0.05					50
2,3,4,7,8 PeCDF	0.5					50
2,3,7,8 HxCDFs	0.1					50
2,3,4,7,8 HpCDFs	0.01					50
OCDD	0.0003					100
OCDF	0.0003					100
PCB 77	0.0001					0.5
PCB 81	0.0003					0.5
PCB 126	0.1					0.5
PCB 169	0.03					0.5
Total						

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 5.0: TOXICITY TESTING REQUIREMENTS

The following **is required** for facilities with a current operating design flow of **1.0 MGD or greater**, with an EPA-approved **pretreatment** program (or those required to have one under 40 CFR Part 403), or are required to perform Whole Effluent Toxicity testing. See instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Required Tests (Instructions Page 88)

Indicate the number of 7-day chronic or 48-hour acute Whole Effluent Toxicity (WET) tests performed in the four and one-half years prior to submission of the application.

7-day Chronic: <u>Click to enter text.</u>
48-hour Acute: <u>Click to enter text.</u>

Section 2. Toxicity Reduction Evaluations (TREs)	
Has this facility completed a TRE in the past four and a half years? Or is the facility curperforming a TRE?	rently
□ Yes □ No	
If yes, describe the progress to date, if applicable, in identifying and confirming the to	xicant.
Click to enter text.	

Section 3. Summary of WET Tests

If the required biomonitoring test information has not been previously submitted via both the Discharge Monitoring Reports (DMRs) and the Table 1 (as found in the permit), provide a summary of the testing results for all valid and invalid tests performed over the past four and one-half years. Make additional copies of this table as needed.

Table 5.0(1) Summary of WET Tests

Test Date	Test Species	NOEC Survival	NOEC Sub-lethal

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

The following is required for all publicly owned treatment works.

Section 1. All POTWs (Instructions Page 89)

A. Industrial users (IUs)

B.

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.

0 ,
If there are no users, enter 0 (zero).
Categorical IUs:
Number of IUs: Click to enter text.
Average Daily Flows, in MGD: Click to enter text.
Significant IUs - non-categorical:
Number of IUs: Click to enter text.
Average Daily Flows, in MGD: Click to enter text.
Other IUs:
Number of IUs: Click to enter text.
Average Daily Flows, in MGD: <u>Click to enter text.</u>
Treatment plant interference
In the past three years, has your POTW experienced treatment plant interference (see instructions)?
□ Yes □ No
If yes, identify the dates, duration, description of interference, and probable cause(s) and possible source(s) of each interference event. Include the names of the IUs that may have caused the interference.
Click to enter text.

C.	Treatment plant pass through		
	In the past three years, has your POTW experienced pass through (see instructions)?		
	□ Yes □ No		
	If yes , identify the dates, duration, a description of the pollutants passing through the treatment plant, and probable cause(s) and possible source(s) of each pass through event. Include the names of the IUs that may have caused pass through.		
	Click to enter text.		
Б	Duratura at ways grown		
υ.	Pretreatment program Does your POTW have an approved 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.		
Se	ction 2. POTWs with Approved Programs or Those Required to		
	Develop a Program (Instructions Page 90)		
Α.	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.		

Cliate anto	n toyet					
Click to enter	rtext.					
R Non-substant	ial 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						
If yes, identify	all non-substantial mo	odifications th	at have not been	submitted to TCEQ,		
including the	purpose of the modific	ation.				
Click to enter	text.					
C Effluent nara	meters above the MAL					
_), list all parameters me		the MAI in the D	OTW's offluent		
	ring the last three year					
· ·	rameters Above the MAL			,		
Pollutant	Concentration	MAL	Units	Date		
ronutant	Concentration	WIAL	Omts	Date		
		1		1		
D. Industrial use	_					
	CIU, or other IU caused	or contribute	d to any problems	(excluding		
interferences	or pass throughs) at vo					
interferences Yes	or pass throughs) at yo \square No					

of the problems, and probable pollutants.

	Click to enter text.
Se	ction 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.

	see the instructions for definitions of process and non-process wastewater.			
	Process Wastewater:			
	Discharge, in gallons/day: Click to enter text.			
	Discharge Type: \square Continuous \square Batch \square Intermittent			
	Non-Process Wastewater:			
	Discharge, in gallons/day: Click to enter text.			
	Discharge Type: \square Continuous \square Batch \square Intermittent			
E.	Pretreatment standards			
	Is the SIU or CIU subject to technically based local limits as defined in the <i>i</i> nstructions?			
	□ Yes □ No			
	Is the SIU or CIU subject to categorical pretreatment standards found in $40\ CFR\ Parts\ 405-471$?			
	□ 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. <u>Click to enter text.</u>			
	Category: Click to enter text.			
	Subcategories: <u>Click to enter text.</u>			
	Category: Click to enter text.			
	Subcategories: <u>Click to enter text.</u>			
	Category: Click to enter text.			
	Subcategories: <u>Click to enter text.</u>			
	Category: <u>Click to enter text.</u>			
	Subcategories: <u>Click to enter text.</u>			
F.	Industrial user interruptions			
	Has the SIU or CIU caused or contributed to any problems (e.g., interferences, pass through, odors, corrosion, blockages) at your POTW in the past three years?			
	□ Yes □ No			
	If yes , identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants.			
	Click to enter text.			

WORKSHEET 7.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CLASS V INJECTION WELL INVENTORY/AUTHORIZATION FORM

Submit the completed form to:

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

For TCEQ Use Only	
Reg. No	
Date Received	
Date Authorized	

Section 1. General Information (Instructions Page 92)

1.	TCEQ Program	Area
----	--------------	------

Program Area (PST, VCP, IHW, etc.): Click to enter text.

Program ID: Click to enter text.

Contact Name: <u>Click to enter text.</u> Phone Number: <u>Click to enter text.</u>

2. Agent/Consultant Contact Information

Contact Name: Click to enter text.

Address: Click to enter text.

City, State, and Zip Code: Click to enter text.

Phone Number: Click to enter text.

3. Owner/Operator Contact Information

□ Owner □ Operator

Owner/Operator Name: Click to enter text.

Contact Name: Click to enter text.

Address: Click to enter text.

City, State, and Zip Code: Click to enter text.

Phone Number: Click to enter text.

4. Facility Contact Information

Facility Name: Click to enter text.

Address: Click to enter text.

City, State, and Zip Code: Click to enter text.

Location description (if no address is available): Click to enter text.

Facility Contact Person: Click to enter text.

Phone Number: Click to enter text.

5.	Latitude and Longitude, in degrees-minutes-seconds
	Latitude: Click to enter text.
	Longitude: Click to enter text.
	Method of determination (GPS, TOPO, etc.): Click to enter text.
	Attach topographic quadrangle map as attachment A.
6.	Well Information
	Type of Well Construction, select one:
	□ Vertical Injection
	□ Subsurface Fluid Distribution System
	□ Infiltration Gallery
	☐ Temporary Injection Points
	☐ Other, Specify: <u>Click to enter text.</u>
	Number of Injection Wells: <u>Click to enter text.</u>
7.	Purpose
	Detailed Description regarding purpose of Injection System:
	Click to enter text.
	Attach a Site Map as Attachment B (Attach the Approved Remediation Plan, if appropriate.)
8.	Water Well Driller/Installer
	Water Well Driller/Installer Name: Click to enter text.
	City, State, and Zip Code: Click to enter text.
	Phone Number: <u>Click to enter text.</u>
	License Number: <u>Click to enter text.</u>
Section	n 2. Proposed Down Hole Design
Attach a	a diagram signed and sealed by a licensed engineer as Attachment C.
Table 7.0	D(1) - Down Hole Design Table
F	

Name of String	Size	Setting Depth	Sacks Cement/Grout – Slurry Volume – Top of Cement	Hole Size	(lbs/ft) PVC/Steel
Casing					

Casing
Tubing
Screen

Section 3. Proposed Trench System, Subsurface Fluid Distribution System, or Infiltration Gallery

Attach a diagram signed and sealed by a licensed engineer as Attachment D.

System(s) Dimensions: <u>Click to enter text.</u> System(s) Construction: Click to enter text.

Section 4.	Site Hydrogeo	logical and In	jection Zone Data

- 1. Name of Contaminated Aquifer: Click to enter text.
- 2. Receiving Formation Name of Injection Zone: Click to enter text.
- **3.** Well/Trench Total Depth: Click to enter text.
- **4.** Surface Elevation: Click to enter text.
- **5.** Depth to Ground Water: <u>Click to enter text.</u>
- **6.** Injection Zone Depth: Click to enter text.
- 7. Injection Zone vertically isolated geologically? \square Yes \square No Impervious Strata between Injection Zone and nearest Underground Source of Drinking Water:

Name: Click to enter text.

Thickness: Click to enter text.

- **8.** Provide a list of contaminants and the levels (ppm) in contaminated aquifer Attach as Attachment E.
- **9.** Horizontal and Vertical extent of contamination and injection plume Attach as Attachment F.
- **10.** Formation (Injection Zone) Water Chemistry (Background levels) TDS, etc. Attach as Attachment G.
- **11.** Injection Fluid Chemistry in PPM at point of injection Attach as Attachment H.
- 12. Lowest Known Depth of Ground Water with < 10,000 PPM TDS: Click to enter text.
- 13. Maximum injection Rate/Volume/Pressure: Click to enter text.
- **14.** Water wells within 1/4 mile radius (attach map as Attachment I): <u>Click to enter text.</u>
- 15. Injection wells within 1/4 mile radius (attach map as Attachment J): <u>Click to enter text.</u>
- 16. Monitor wells within 1/4 mile radius (attach drillers logs and map as Attachment K): Click to enter text.
- **17.** Sampling frequency: Click to enter text.
- **18.** Known hazardous components in injection fluid: Click to enter text.

Section 5. Site History

- **1.** Type of Facility: <u>Click to enter text.</u>
- **2.** Contamination Dates: Click to enter text.
- 3. Original Contamination (VOCs, TPH, BTEX, etc.) and Concentrations (attach as Attachment L): <u>Click to enter text.</u>
- **4.** Previous Remediation (attach results of any previous remediation as attachment M): Click to enter text.

NOTE: Authorization Form should be completed in detail and authorization given by the TCEQ before construction, operation, and/or conversion can begin. Attach additional pages as necessary.

Class V Injection Well Designations

- 5A07 Heat Pump/AC return (IW used for groundwater to heat and/or cool buildings)
- 5A19 Industrial Cooling Water Return Flow (IW used to cool industrial process equipment)
- 5B22 Salt Water Intrusion Barrier (IW used to inject fluids to prevent the intrusion of salt water into an aquifer)
- 5D02 Storm Water Drainage (IW designed for the disposal of rain water)
- 5D04 Industrial Stormwater Drainage Wells (IW designed for the disposal of rain water associated with industrial facilities)
- 5F01 Agricultural Drainage (IW that receive agricultural runoff)
- 5R21 Aquifer Recharge (IW used to inject fluids to recharge an aquifer)
- 5S23 Subsidence Control Wells (IW used to control land subsidence caused by ground water withdrawal)
- 5W09 Untreated Sewage
- 5W10 Large Capacity Cesspools (Cesspools that are designed for 5,000 gpd or greater)
- 5W11 Large Capacity Septic systems (Septic systems designed for 5,000 gpd or greater)
- 5W12 WTTP disposal
- 5W20 Industrial Process Waste Disposal Wells
- 5W31 Septic System (Well Disposal method)
- 5W32 Septic System Drainfield Disposal
- 5X13 Mine Backfill (IW used to control subsidence, dispose of mining byproducts, and/or fill sections of a mine)
- 5X25 Experimental Wells (Pilot Test) (IW used to test new technologies or tracer dye studies)
- 5X26 Aguifer Remediation (IW used to clean up, treat, or prevent contamination of a USDW)
- 5X27 Other Wells
- 5X28 Motor Vehicle Waste Disposal Wells (IW used to dispose of waste from a motor vehicle site These are currently banned)
- 5X29 Abandoned Drinking Water Wells (waste disposal)



ATTACHMENTS

ADMINISTRATIVE REPORT 1.0

Attachment 1 Lease Agreement with Owner of Effluent Disposal Site

Section 9 E, Page 9 of 24

Attachment 2 USGS Quadrangle Maps

Section 13, Page 11 of 24

TECHNICAL REPORT 1.0

Attachment 3 Treatment Unit Dimensions

Section 2 B, Page 2 of 80

Attachment 4 Flow Diagram

Section 2 C, Page 2 of 80

Attachment 5 Facility Site Drawing

Section 3, Page 3 of 80

DOMESTIC WORKSHEET 3.0

Attachment 6 Annual Cropping Plan

Section 5, Page 38 of 80

Attachment 7 USDA Soil Survey Map

Section 7 a, Page 40 of 80



Attachment 1

Lease Agreement with Owner of Effluent Disposal Site

Lake Cliff on Lake Travis, L.P.

Section 9 E, Page 9 of 24

(Administrative Report 1.0)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



TRANSFER OF

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

PERMIT NO. WQ0014649001

FROM: South Central Water Company

TO: Arbor Way, Inc.

Ownership of the facilities covered by the above-referenced permit issued August 08, 2006, has changed. That part of the signature page pertaining to the name and mailing address of the permit holder is hereby changed so that the same shall hereinafter be and read as follows:

"Arbor Way, Inc. 1001 Fannin Street, Suite 1800 Houston, Texas 77002"

The transferee is financially responsible for the proper maintenance and operation of the facility so as to comply with the terms and conditions of the permit. The failure to operate the facility in accordance with the terms and conditions of the permit may be good cause for revocation of the permit.

This transfer is in accordance with 30 Texas Administrative Code Section 305.64.

This order is part of the permit and should be attached there to.

Issued Date: October 25, 2007

For The Commission





TEXAS COMMISSION ON ENVIRONMENTAL QUALITY P.O. Box 13087 Austin, Texas 78711-3087

This is a new permit.

PERMIT TO DISCHARGE WASTES

under provisions of Chapter 26 of the Texas Water Code

Permittee:

South Central Water Company P.O. Box 570177 Houston, Texas 77257

Nature of Business Producing Waste: Domestic wastewater treatment operation, SIC Code 4952

General Description and Location of Waste Disposal System:

Description: The Two Rivers Wastewater Treatment Facility consists of an activated sludge process plant using the complete mix mode. Treatment units include bar screens, aeration basins, final clarifiers, sludge digester and chlorine contact chamber. The facility includes 4 storage ponds with a total surface area of 4.5 acres and total capacity of 63.3 acre-feet for storage of treated effluent prior to irrigation. The permittee is authorized to dispose of treated domestic wastewater effluent at a daily average flow not to exceed 0.430 million gallons per day (MGD) via surface irrigation of 170 acres at a golf course. Application rates to the irrigated land shall not exceed 2.8 acre-feet per year per acre irrigated. The permittee will maintain turf grass and other ground cover on the disposal site.

Location: The wastewater treatment facility and disposal site are located approximately 1,200 feet northwest of the intersection of Haynie Flat Road and Travis Lakeside Drive in Travis County, Texas. (See Attachment A.)

Drainage Area: The disposal site is located in the drainage basin of the Colorado River in Segment No. 1404 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 on December 1, 2010.

ISSUED DATE: AUG 08 2006

For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Conditions of the Permit: No discharge of pollutants into water in the State is authorized.

A. <u>Effluent Limitations</u>

Character:

Treated Domestic Sewage Effluent

Volume:

Interim I Daily Average Flow - 0.038 MGD from the treatment system Interim II Daily Average Flow - 0.125 MGD from the treatment system Final Daily Average Flow - 0.430 MGD from the treatment system

Quality:

The following effluent limitations shall be required:

•	Effluent Concentrations			
	(Not to Exceed)			
	Daily	7-Day	Daily	Single
<u>Parameter</u>	<u>Average</u>	<u>Average</u>	Maximum	Grab
	mg/l	mg/l	mg/l	mg/l
Biochemical Oxygen Demand (5-day)	20	30	45	65
Total Suspended Solids	20	30	45	65

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.

The effluent shall be chlorinated in a chlorine contact chamber to a residual of 1.0 mg/l with a minimum detention time of 20 minutes. If the effluent is to be transferred to a holding pond or tank, re-chlorination prior to the effluent being delivered into the irrigation system will be required. A trace chlorine residual shall be maintained in the effluent at the point of irrigation application.

B. Monitoring Requirements:

<u>Parameter</u>	Monitoring Frequency	Sample Type
· · · · · · · · · · · · · · · · · · ·		
Flow	Five/week	Instantaneous
Biochemical Oxygen	One/week	Grab
Demand (5-day)		
Total Suspended Solids	One/week	Grab
pH	One/month	Grab
Chlorine Residual	Five/week	Grab

The monitoring shall be done after the final treatment unit and prior to storage of the treated effluent. If the effluent is land applied directly from the treatment system, monitoring shall be done after the final treatment unit and prior to land application. These records shall be maintained on a monthly basis and be available at the plant site for inspection by authorized representatives of the Commission for at least three years.

STANDARD PERMIT CONDITIONS

This permit is granted in accordance with the Texas Water Code and the rules and other Orders of the Commission and the laws of the State of Texas.

DEFINITIONS

All definitions in Section 26.001 of the Texas Water Code and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

- a. Daily average flow the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.
- b. Annual average flow the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with a 1 million gallons per day or greater permitted flow.
- c. Instantaneous flow the measured flow during the minimum time required to interpret the flow measuring device.

2. Concentration Measurements

- a. Daily average concentration the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.
 - i. For domestic wastewater treatment plants When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.
 - ii. For all other wastewater treatment plants When four samples are not available in a calender month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. ¹7-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 calender 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. 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

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.

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 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 maybe 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. 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.
- 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 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 μ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μ g/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 μ g/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 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 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 Land Application 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 149) 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 Registration, Review, and Reporting 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 only at a Texas Commission on Environmental Quality (TCEQ) authorized land application site or co-disposal landfill. The disposal of sludge 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 by the TCEQ. This provision does not authorize Distribution and Marketing of sludge. This provision does not authorize the permittee to land apply sludge on property owned, leased or under the direct control of the permittee.

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE LAND APPLICATION

A. General Requirements

- 1. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC Chapter 312 and all other applicable state and federal regulations in a manner which protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants which may be present in the sludge.
- 2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge 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 to assure compliance with these regulations.
- 3. 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 disposal practice.

B. Testing Requirements

1. Sewage sludge shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method, which receives the prior approval of the TCEQ for the contaminants listed in Table 1 of 40 CFR Section 261.24. Sewage sludge 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 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 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 Registration, Review, and Reporting Division and the Regional Director (MC Region 11) 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, Registration, Review, and Reporting 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 Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 1 of each year.

2. Sewage sludge shall not be applied to the land if the concentration of the pollutants exceed the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Section I.C.

TABLE 1

<u>Pollutant</u>		Ceiling Concentration (milligrams per kilogram)*
Arsenic		75
Cadmium		85
Chromium		3000
Copper		4300
Lead		840
Mercury		57
Molybdenum		75
Nickel		420
PCBs		49
Selenium		100
Zinc	•	7500
	* Dry weight basis	

3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following methods to ensure that the sludge meets either the Class A or Class B pathogen requirements.

a. Six alternatives are available to demonstrate compliance with Class A sewage sludge. The first 4 options require either the density of fecal coliform in the sewage sludge be less than 1000 Most Probable Number (MPN) per gram of total solids (dry weight basis), or the density of <u>Salmonella</u> 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. Below are the <u>additional</u> requirements necessary to meet the definition of a Class A sludge.

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 Section 312.82(a)(2)(A) for specific information.

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 degrees 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 percent.

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 Section 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 Section 312.82(a)(2)(C)(iv-vi) for specific information.

<u>Alternative 4</u> - 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.

<u>Alternative 5 (PFRP)</u> - Sewage sludge that is used or disposed of shall 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.

Alternative 6 (PFRP Equivalent) - Sewage sludge that is used or disposed of shall 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. Three alternatives are available to demonstrate compliance with Class B criteria for sewage sludge.

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).

<u>Alternative 2</u> - 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.

<u>Alternative 3</u> - 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.

<u>In addition</u>, the following site restrictions must be met if Class B sludge is land applied:

- i. Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge.
- ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for 4 months or longer prior to incorporation into the soil.
- iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains 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 sewage sludge.
- v. Animals shall not be allowed to graze on the land for 30 days after application of sewage sludge.
- vi. Turf grown on land where sewage sludge is applied shall not be harvested for 1 year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn.
- vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of sewage sludge.
- viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.
- ix. Land application of sludge shall be in accordance with the buffer zone requirements found in 30 TAC Section 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 percent.
- 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 degrees Celsius. Volatile solids must be reduced by less than 17 percent 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 a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20 degrees Celsius. Volatile solids must be reduced by less than 15 percent 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 degrees 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 degrees Celsius and the average temperature of the sewage sludge shall be higher than 45 degrees 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 percent 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 percent 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 with respect to pathogens, the sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.
- Alternative 10- i. Sewage sludge 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 sewage sludge that is incorporated into the soil is Class A with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

C. Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test - once during the term of this permit

PCBs - once during the term of this permit

All metal constituents and Fecal coliform or <u>Salmonella</u> sp. bacteria shall be monitored at the appropriate frequency shown below, pursuant to 30 TAC Section 312.46(a)(1):

Amount of sewage sludge (*) metric tons per 365-day period			Monitoring Frequency
0	to less than	290	Once/Year
290	to less than	1,500	Once/Quarter
1,500	to less than	15,000	Once/Two Months
15,000	or greater		Once/Month

(*) The amount of bulk sewage sludge applied to the land (dry weight basis).

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC Section 312.7.

SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE FOR APPLICATION TO THE LAND MEETING CLASS A or B 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 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

	Cumulative Pollutant Loading Rate
<u>Pollutant</u>	(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

	Monthly Average Concentration
<u>Pollutant</u>	(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 or Class B pathogen reduction requirements as defined above in Section I.B.3.

C. Management Practices

- 1. Bulk sewage sludge shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters in the State.
- 2. Bulk sewage sludge not meeting Class A requirements shall be land applied in a manner which complies with the Management Requirements in accordance with 30 TAC Section 312.44.
- 3. Bulk sewage sludge 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 sewage sludge sold or given away. The information sheet shall contain the following information:
 - a. The name and address of the person who prepared the sewage sludge that is sold or given away in a bag or other container for application to the land.
 - b. A statement that application of the sewage sludge 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 sewage sludge 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 sewage sludge is 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 sewage sludge is 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 sewage sludge 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 sewage sludge.
- 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 sewage sludge disposal practice.

E. Record keeping Requirements

The sludge 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 sewage sludge 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 <u>five years</u>. 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 Section 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 B sludges, 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 Section 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC Section 312.83(b) have been met for each site on which bulk sewage sludge is 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 sewage sludge or a sewage sludge 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 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 Section 312.47 for persons who land apply.

- 1. 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 Section 312.47(a)(4)(A)(ii) or 30 TAC Section 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.
- 2. The location, by street address, and specific latitude and longitude, of each site on which sludge is applied.
- 3. The number of acres in each site on which bulk sludge is applied.
- 4. The date and time sludge is applied to each site.
- 5. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.
- 6. 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 report annually to the TCEQ Regional Office (MC Region 11) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 1 of each year the following information:

- 1. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.
- 2. The frequency of monitoring listed in Section I.C. which applies to the permittee.
- 3. Toxicity Characteristic Leaching Procedure (TCLP) results.
- 4. Identity of hauler(s) and TCEQ transporter number.
- 5. PCB concentration in sludge in mg/kg.
- 6. Date(s) of disposal.
- 7. Owner of disposal site(s).
- 8. Texas Commission on Environmental Quality registration number, if applicable.
- 9. Amount of sludge disposal dry weight (lbs/acre) at each disposal site.
- 10. The concentration (mg/kg) in the sludge 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.
- 11. Level of pathogen reduction achieved (Class A or Class B).
- 12. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B sludge, include information on how site restrictions were met.
- 13. Vector attraction reduction alternative used as listed in Section I.B.4.
- 14. Annual sludge production in dry tons/year.

- 15. Amount of sludge land applied in dry tons/year.
- 16. The certification statement listed in either 30 TAC Section 312.47(a)(4)(A)(ii) or 30 TAC Section 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge treatment activities, shall be attached to the annual reporting form.
- 17. 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 sewage sludge is applied.
 - c. The date and time bulk sewage sludge is applied to each site.
 - d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk sewage sludge applied to each site.
 - e. The amount of sewage sludge (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 DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL

- A. The permittee shall handle and dispose of sewage sludge in accordance with 30 TAC Chapter 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 meets the requirements in 30 TAC Chapter 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- B. If the permittee generates sewage sludge and supplies that sewage sludge 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 disposal practice.
- D. Sewage sludge shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR Section 261.24. Sewage sludge 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 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 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 Registration, Review, and Reporting 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, Registration, Review, and Reporting 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 Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 1 of each year.

- E. Sewage sludge 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 report annually to the TCEQ Regional Office (MC Region 11) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division by September 1 of each year the following information:

- 1. Toxicity Characteristic Leaching Procedure (TCLP) results.
- 2. Annual sludge production in dry tons/year.
- 3. Amount of sludge disposed in a municipal solid waste landfill in dry tons/year.
- 4. Amount of sludge transported interstate in dry tons/year.
- 5. A certification that the sewage sludge meets the requirements of 30 TAC Chapter 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.
- 6. Identity of hauler(s) and transporter registration number.
- 7. Owner of disposal site(s).
- 8. Location of disposal site(s).
- 9. 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.

SPECIAL PROVISIONS:

- 1. This permit is granted subject to the policy of the Commission to encourage the development of areawide waste collection, treatment and disposal systems. The Commission reserves the right to amend this permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an areawide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such areawide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.
- 2. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.
 - This Category D facility must be operated by a chief operator or an operator holding a Category D license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift which does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.
- 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. Prior to construction of each phase of the treatment facilities the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary submittal letter in accordance with the requirements in 30 TAC Section 317.1. If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications and a final engineering design report which comply with 30 TAC Chapter 317, Design Criteria for Sewerage Systems. The permittee shall clearly show how the treatment system will meet the permitted effluent limitations required on Page 2 of the permit.
- 5. Prior to construction of the treatment facility, the permittee shall submit sufficient evidence of legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the permittee according to 30 TAC Section 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 Section 309.13(a) through (d). (See Attachment B.)
- 6. Monitoring requirements contained in the permit are suspended from the effective date of the permit until plant startup. The permittee shall provide written notice to the TCEQ Regional Office (MC Region 11) and the Applications Review and Processing Team (MC 148) of the Water Quality Division at least forty-five (45) days prior to plant startup or anticipated discharge, whichever comes first and prior to completion of each additional phase.

- 7. Application rates to the irrigated land shall not exceed 2.8 acre-feet per year per acre irrigated. 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.
- 8. Irrigation practices shall be designed and managed so as to prevent ponding of effluent or contamination of ground and surface waters and to prevent the occurrence of nuisance conditions in the area. The golf course ground cover shall be established and well maintained in the irrigation area throughout the year for wastewater and nutrient uptake by the crop and to prevent pathways for wastewater surfacing. Tailwater control facilities shall be provided as necessary to prevent the discharge of any wastewater from the irrigated land.
- 9. Wastewater shall not be applied for irrigation during rainfall events or when the ground is frozen or saturated.
- 10. 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.
- 11. Spray fixtures for the irrigation system shall be of such design that they cannot be operated by unauthorized personnel.
- 12. Irrigation with effluent shall be accomplished only when the area specified is not in use.
- 13. An annual analysis of a representative soil sample taken from the root zone of the irrigated site shall be made. Each soil boring shall be separated into three samples according to the following depth zones: 0 to 6 inches, 6 to 18 inches and 18 to 30 inches below the ground surface. Each zone shall be thoroughly mixed prior to being analyzed. Sampling procedures shall employ accepted techniques of soil science for obtaining representative analytical results. Analysis shall be performed for pH, total nitrogen, potassium, phosphorus and conductivity.
 - The permittee shall submit the results of the soil sample analyses to the TCEQ Regional Office (MC Region 11) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division during September of each year.
- 14. Holding ponds shall conform to the Texas Commission on Environmental Quality "Design Criteria for Sewerage Systems" requirements for stabilization ponds with regard to construction and levee design, and a minimum of 2 feet of freeboard shall be maintained.
- 15. Permanent transmission lines shall be installed from the holding pond to each tract of land to be irrigated utilizing effluent from that pond.
- 16. Facilities for the retention of treated or untreated wastewater shall be adequately lined to control seepage. The following methods of pond lining are acceptable.
 - a. In-situ clay soils or placed and compacted clay soils meeting the following requirements:

- 1) More than 30% passing a No. 200 mesh sieve
- 2) Liquid limit greater than 30%
- 3) Plasticity index greater than 15
- 4) A minimum thickness of 2 feet
- 5) Permeability equal to or less than $1x10^{-7}$ cm/sec (*)
- 6) Soil compaction will be 95% standard proctor at optimum moisture content (*)
 - (*) For new and/or modified ponds only.
- b. Membrane lining with a minimum thickness of 20 mils, and an underdrain leak detection system.
- c. An alternate method of pond lining may be utilized with prior approval from the Executive Director.

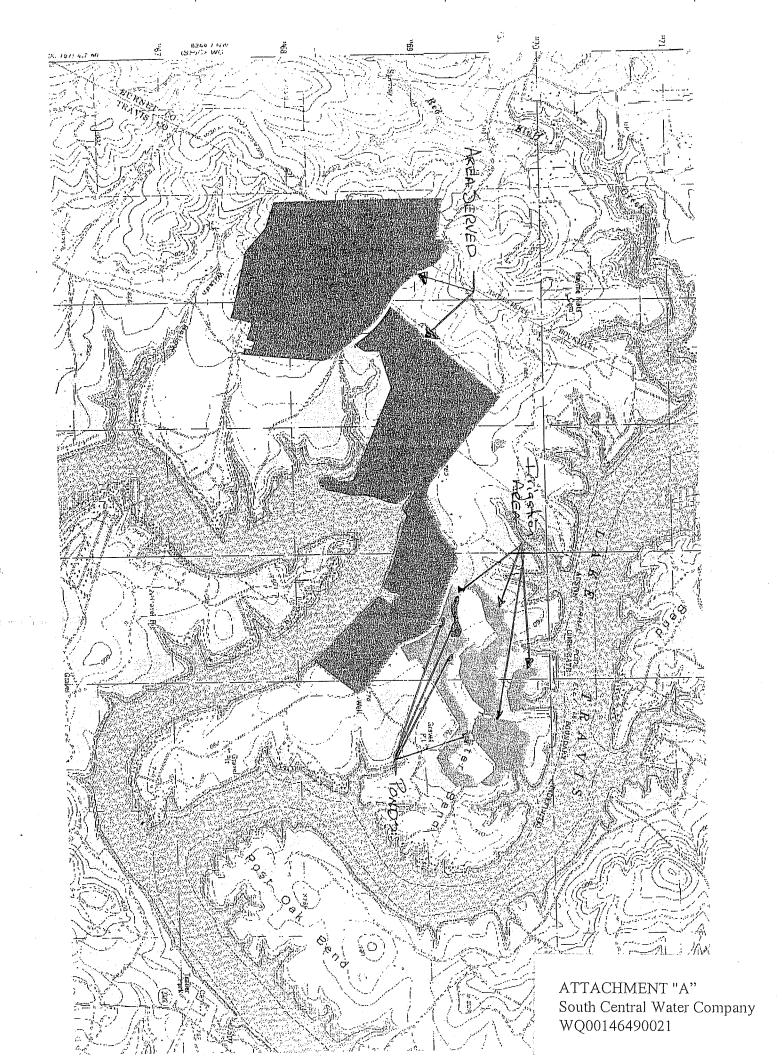
The permittee shall furnish certification by a Texas Licensed Professional Engineer that the completed pond lining meets the appropriate criteria above prior to utilization of the facilities. The certification shall be sent to the TCEQ Regional Office (MC Region 11) and Water Quality Compliance Monitoring Team (MC 224) of the Enforcement Division.

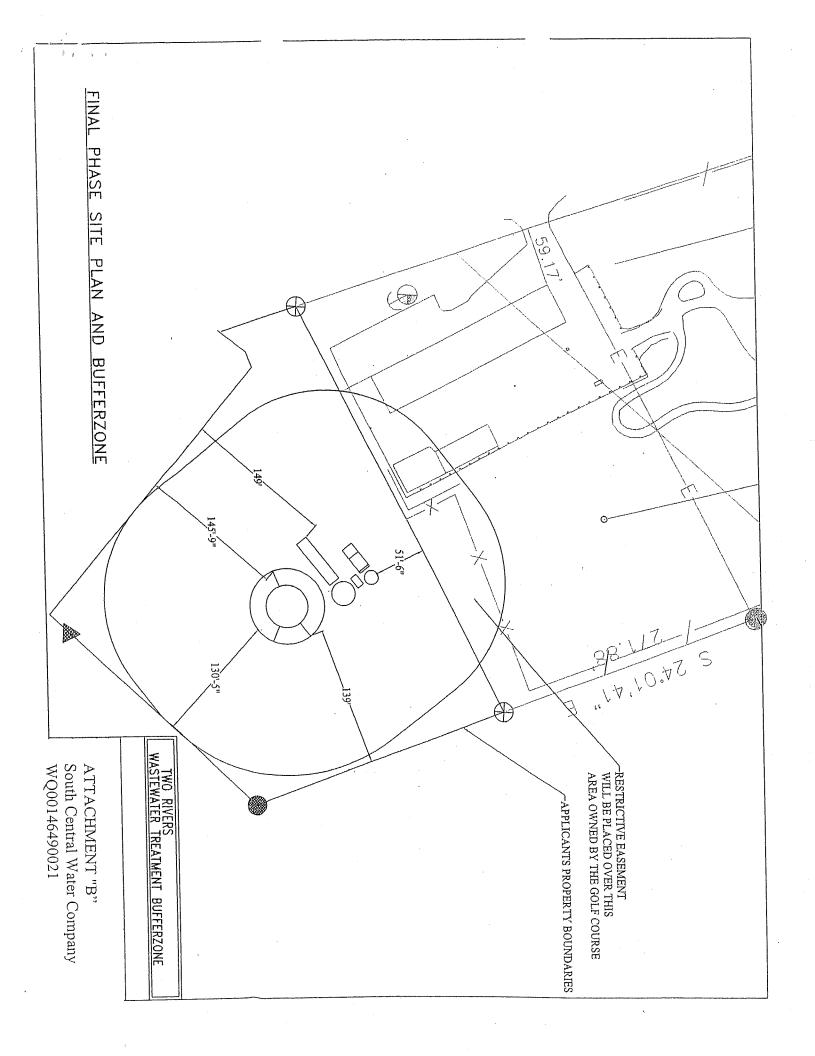
- 17. A vegetated buffer of 150 feet minimum shall be maintained around any water wells found on the golf course in accordance with §309.13 (c)(1).
- A vegetation buffer of 100 feet minimum shall be maintained around surface water bodies, watercourses, or Lake Travis. The 100 foot vegetation buffer will also exclude the application of wastewater.
- 19. Should the applicant substitute monitoring wells for a synthetic liner underdrain leak detection ystem, the applicant will submit a Monitoring Plan and obtain written approval prior to the storage of wastewater in the proposed effluent pond from the Water Quality Assessment (WQA) Team (MC-150). The Monitoring Plan will contain the following:
 - a). A base map showing the footprint of the effluent pond, location of, at a minimum, 3 monitor wells placed equidistantly around the perimeter of the pond, a north arrow, and a scale;
 - b). An engineering diagram of the monitoring wells that show the dimension (width and depth) of the concrete pad surrounding the monitoring well, total depth of the well, screening interval that will collect water from a leaking liner;
 - c). Observation schedule for checking the presence of water in the monitoring wells and;
 - d). Provisions for analyzing the water that collects in the monitoring well and reporting the results to the TCEQ.

Upon receipt of approval, or approval with modifications, of the Monitoring Plan by the Executive Director, the permittee shall implement the Monitoring Plan in accordance with all schedules contained within the approved plan.

If the applicant chooses to propose another method other than monitoring wells that will substitute for an under-drain leak detection system, the applicant will submit the engineering proposal to the Water Quality Division Professional Engineer (MC-148) for approval, or approval with modifications, before storage of wastewater in the proposed effluent pond commences.

- 20. The WQA geologist recommends that the applicant consider the transition for using an existing pond on a golf course to contain wastewater. The golf course pond/lake level is traditionally (and by photographs contained in the permit) maintained at maximum freeboard for aesthetic reasons and to enhance the golf course landscape combining "playability with hazards". The ponds purpose will change when wastewater is introduced and storage will take precedence over the aesthetic qualities of maintaining a constant maximum freeboard. If the freeboard is maintained, as presently shown in photographs, the possibility will exist that during extended periods of precipitation, when no irrigation can occur, wastewater may have the opportunity to over flow the ponds containment area and constitute a discharge. A careful management of the volume of wastewater contained in the pond must include provisions for extended wet weather storage. Photographs also show a rock/tiled drain entering the pond that adds stormwater runoff to the ponds capacity. The stormwater now diverted to the pond area will need to be re-routed so as not to compromise the ponds ability to contain all the generated wastewater.
- 21. The permittee shall provide facilities for the protection of its wastewater treatment facilities from a 100-year flood.





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FIRST AMENDMENT TO AGREEMENT FOR THE DEI AND USE OF TREATED EFFLUENT FOR PERMIT

This Agreement is entered into by and between LAKECLIFF ON LAKE TRAVIS, L.P. ("Club") and SOUTH CENTRAL WATER COMPANY, INC. ("SCWC").

The above referenced Club and SCWC have heretofore entered into an "AGREEMENT FOR THE DELIVERY AND USE OF TREATED WASTEWATER EFFLUENT FOR PERMITTED PURPOSES" dated June 29, 2005.

The Club and SCWC hereby agree to adopt certain additional provisions as follows:

- The June 29, 2005 agreement is affirmed, ratified, and incorporated 1) herein as Exhibit "A."
- 2) Attached hereto and made a part hereof is Exhibit "B," a legal description of approximately 176 acres upon which the Club's golf course is located. The Club hereby commits to take and use the effluent to irrigate the golf course located within the tract described in Exhibit "B."
- 3) The Club acknowledges that the Security State Bank and Trust, Fredericksburg, Texas is the holder of lien or liens upon the property described in Exhibit "B" and the Club will obtain the Consent and Joinder of the Bank to the Agreement and the First Amendment thereto. Said Consent and Joinder is attached hereto as Exhibit "C" and made a part hereof.
- All terms and conditions of the original agreement shall remain in 4) full force and effect.

EXECUTED this the 9 day of 3 - 2006.

LAKECLIFF ON LAKE TRAVIS, L.P.

STATE OF TEXAS

COUNTY OF TRAVIS

This instrument was acknowledged before me on the day of ROBERT DAY, General Partner of Lakecliff on Lake Travis. L.P.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 9 day of _____, 2006.

Notary Public-in and for the State of Texas

Formy Public, State of Texas
Commission Expires
10-10-2008

Executed this the	9 day of June 2006.
	SOUTH CENTRAL WATER COMPANY, INC.
	BY: Malcolm Bailey, President
STATE OF TEXAS	§ 8
COUNTY OF TRAVIS	
This instrument was 2006, by MALCOLM BAILEY, Pr	acknowledged before me on the Qh day of Ture, resident of South Central Water Company, Inc.
	Y HAND AND SEAL OF OFFICE this the 🖰 day of
	anh

Notary Public in and for the State of Texas



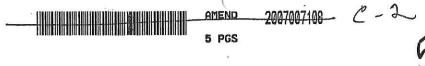
EXMIBIT 886

CONSENT OF LIENHOLDER

The undersigned, Security State Bank and Trust, Fredericksburg, Texas, being the owners and holders of an existing lien(s) upon and against the real property described in the foregoing First Amendment to Agreement for the Delivery and Use of Treated

Wastewater Effluent for Permitted Purposes	s, as such lienholder, do hereby consent to and
join in said Agreement.	
This consent and joinder shal	I not be construed or operate as a release of any
mortgage or liens owned and held by the un	dersigned, or any part thereof.
SIGNED this the9 day of	of <u>June</u> , 2006.
	SECURITY STATE BANK AND TRUST FREDERICKSBURG, TEXAS
	BY: Jan h
	Name: Joe David Sherro
	Title: 5. V.C
THE STATE OF TEXAS COUNTY OF GILLESPIE	8 8
appeared See David Share	rsigned authority, on this day personally of Security State Bank and Trust the person whose name is subscribed to the me that he executed the same for the purpose
GIVEN under my hand and seal this	the 9th day of June, 2006.
DIANA MITCHELL. Notary Public, State of Texas Ny Commission Expires 10-10-2008	Notary Public-State of Texas Printed Name of Notary: Diana Mitchell My Commission Expires: Oct.10,2008

61-6120076 BP



SECOND AMENDMENT TO AGREEMENT FOR THE DELIVERY AND USE OF TREATED EFFLUENT FOR PERMITTED PURPOSES

This Agreement is entered into by and between LAKECLIFF ON LAKE TRAVIS, L.P. ("Club") and SOUTH CENTRAL WATER COMPANY, INC. "SCWC").

The above referenced Club and SCWC have heretofore entered into an "AGREEMENT FOR THE DELIVERY AND USE OF TREATED WASTEWATER EFFLUENT FOR PERMITTED PURPOSES" dated June 29, 2005 and the 'FIRST AMENDMENT TO AGREEMENT FOR DELIVERY AND USE OF TREATED EFFLUENT FOR PERMITTED PURPOSES," dated June 9, 2006, hereinafter called "Prior Agreements," and said Prior Agreements are incorporated herein by reference.

The Club and SCWC hereby agree to adopt the following amendments and additional provisions:

- 1) The Club and SCWC agree that an additional treated effluent holding pond capacity will be needed by SCWC, and the Club hereby grants to SCWC an easement for the construction, installation, operation, repair, and maintenance of additional effluent holding pond or ponds capable of holding 23.3 acre feet of treated effluent. The easement granted herein shall be located within the approximate 70.896 acre tract described in the Prior Agreements and may utilize the existing effluent holding pond and adjacent sand trap area located near Haynie Flat Road to achieve the required holding capacity. Prior to constructing the holding pond, SCWC shall notify the Club of the exact dimensions of the pond and appurtenant access and maintenance berms, and SCWC and the Club agree to execute a revised easement for the holding point site and appurtenances.
- The Club acknowledges that the Security State Bank and Trust, Fredericksburg, Texas is the holder of lien or liens upon the 70.896 acres described in the Prior Agreements, and the Club will obtain



the Consent and Joinder of the Bank to the Agreement and the First Amendment thereto. Said Consent and Joinder is attached hereto as Exhibit "" and made a part hereof.

- The Grantee shall have the right to assign any and all of its rights 3) and interest herein and under the Prior Agreements.
- All other terms and conditions of the original agreement and the 4) First Amendment shall remain in full force and effect.

EXECUTED this the ______ day of ___

LAKECLIFF ON LAKE TRAVIS, L.P.

General Partner for

Lakecliff on Lake Travis, L.P.

STATE OF TEXAS

COUNTY OF TRAVIS

This instrument was acknowledged before me on the day of 200%, by ROBERT DAY, General Partner for Lakecliff on Lake Travis. L.P.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 5 day of _____, 2006.

VICKIE C. WILLIAMS Notary Public State of Texas November 30, 2007

Notary Public in and for

the State of Texas

	Executed this the	_day of <u>Jan</u> , 2006. 1
		SOUTH CENTRAL WATER COMPANY, INC.
		BY: Pulm Bailey, President
·		
·	STATE OF TEXAS	999
	COUNTY OF TRAVIS	
	This instrument was acknown 2006, by MALCOLM BAILEY, Presiden	owledged before me on the <u>o</u> day of <u>fant</u> , nt of South Central Water Company, Inc.
•	GIVEN UNDER MY HAN	ND AND SEAL OF OFFICE this the 5 day of
		Mist Allelians
	VICKIE C. WILLIAMS Notary Public State of Texas My Commission Expires November 30, 2007	Notary Public in and for the State of Texas

CONSENT OF LIENHOLDER

The undersigned, Security State Bank and Trust, Fredericksburg, Texas, being the owners and holders of an existing lien(s) upon and against the real property described in the foregoing "SECOND AMENDMENT TO AGREEMENT FOR THE DELIVERY AND USE OF TREATED EFFLUENT FOR PERMITTED PURPOSES," as such lienholder, do hereby consent to and join in said Easement.

This consent and joinder shall not be construed or operate as a release of said mortgage or liens owned and held by the undersigned, or any part thereof.

SIGNED this the 5th day of Jones SECURITY STATE BANK AND TRUST FREDERICKSBURG, TEXAS Name: Title:

THE STATE OF TEXAS COUNTY OF GILLESPIE

BEFORE ME, the undersigned authority, on this day personally Varid Sherrod of Security State Bank and Trust, Fredericksburg, Texas, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

GIVEN under my hand and scal this the __

Notary Public-State of Texas

Printed Name of Notary:

Му Со

State of Texas My Commission Expires November 30, 2007

SAMUD OTHER EASEMENTS WHAT BY WOOD MEND AGRIMN TO BLARK REFERN WORLD 4



AGREEMENT FOR THE DELIVERY AND USE OF TREATED WASTEWATER EFFLUENT FOR PERMITTED PURPOSES

This Agreement is entered into between LAKECLIFF ON LAKE TRAVIS, LP (Club), a Texas partnership whose principal place of business is in Burnet County, Texas, and SOUTH CENTRAL WATER COMPANY, INC. (SCWC), a Texas corporation whose principal place of business is in Harris County, Texas.

PURPOSE

The purpose of this Agreement is to establish a mutually acceptable arrangement that complies with applicable state and federal regulations herein SCWC, a state-licensed retail public sewer utility, can deliver treated wastewater effluent (effluent) to the Club for use as an irrigation media on those portions of Club's golf course at the Lakecliff Country Club in Travis County, Texas suitable for such uses under the rules of the Texas Commission on Environmental Quality (TCEQ).

2. TERM

- 2.1 This Agreement shall become effective on the date of signature indicated herein.
- 2.2 Delivery of effluent shall not commence until:
 - all necessary governmental permits for the wastewater treatment plant (WWTP) and other components of SCWC's sewer system that will generate the effluent have been received from the appropriate regulatory authorities;
 - the WWTP and all associated plant and sewage collection system have been constructed and placed into commercial operation in conformance with their permits;
 - the effluent disposal system, including all facilities necessary to transport the effluent to the Club for storage and/or irrigation have been constructed and tested; and
 - d) SCWC has developed a sufficient customer base to generate a sufficient quantity of effluent to Club without disrupting the proper operation of the WWTP and causing a violation of its water quality permit.
- 2.2 Once effluent delivery from the WWTP to the Club has begun, this Agreement shall be in affect and run concurrent with the terms and extensions of all wastewater discharge permits associated with this plant.



3. PRICE

- 3.1 Club initially shall pay SCWC \$0.00 per 1,000 gallons of effluent delivered.
- 3.2 The price may be re-negotiated by the parties commencing in January of odd numbered years during any term of the Agreement. If no agreement on a new price is reached after a party has requested re-negotiation, the price shall remained fixed for one (1) additional two (2) year term. If a party asks to re-negotiate the price on the odd numbered year following the two (2) years of automatic no-price change and no agreement on price change is reached for a second consecutive time, the price shall automatically escalate ten (10%) percent. The price shall escalate ten (10%) every in January of odd number year thereafter until the parties re-negotiate a new base price; at which time, this cycle shall start again.

4. DELIVERY OF EFFLUENT

- 4.1 SCWC shall deliver the effluent through a pipeline(s) owned and operated by SCWC that shall transport the effluent from the WWTP to a retention pond or lagoon located near or on the Club's golf course. The retention pond or lagoon shall be clay- or plastic-lined or otherwise meet the regulations of the TCEQ for effluent retention impoundments.
- 4.2 SCWC shall be responsible for maintaining and operating the effluent delivery lines to Club's retention pond.
- 4.3. Club shall be responsible for maintaining the retention pond and all facilities required thereafter (downstream) to deliver and disburse the effluent as an irrigation media over areas of the golf course (and any approved proximate areas). This shall include all irrigation system lines, controls, pumps, sprinkler heads, and other irrigation water supplies.
- 4.4 All facilities constructed by either party and all repairs made thereto shall be in conformance with applicable TCEQ rules.

5. CONTROL

5.1 Since the wastewater permittee is always responsible to the TCEQ of the proper management and disposal of the treated effluent in conformance with the permit, SCWC must retain the exclusive right to terminate the flow of effluent at any time to insure that it is not discharge at inappropriate times or places in violation of health and environmental laws. SCWC's licensed operators shall be empowered to order anyone operating a holding pond or irrigating system using effluent to cease and desist from any act that violates the TCEQ permit. This authority shall not extend to ordering the cessation of use of other sources of water not produced by SCWC's WWTP, unless those other water supplies have been commingled with SCWC effluent.

- 5.2 SCWC's effluent delivery system shall contain sufficient valves and controls that it can be closed at either end by SCWC employees or Contractors. Except during emergencies when necessary to prevent hazards to public health or safety or endangerment to public waters, the Club, its employees or contractors shall not have access to or the right to use such controls without the direct supervision of a licensed SCWC sewer operator being on-site at that time.
- 5.3 SCWC, its employees and contractors shall have an easement to enter and travel over and across the Club's property for the purpose of constructing, inspecting, maintaining, repairing, identifying and replacing any portion of the effluent transportation, retention and disbursal system on said property. SCWC's employees and contractors shall not interfere with or disturb portions of the irrigation system not owned by SCWC without prior notice to the Club unless delay would result in an immediate hazard to public health or safety or endangerment to state waters. In such emergency cases, SCWC's personnel shall take only such remedial actions as are necessary to fix the immediate problem and remove the threat(s).
- Club shall provide SCWC with exclusive recorded easements for all SCWC pipelines and other facilities on Club property necessary to construct and operate the facilities necessary to fulfill SCWC's obligations under this Agreement. The Club shall be responsible for obtaining, at its cost, all easements necessary off the Club's property to construct and maintain the necessary effluent pipeline(s) and appurtenances. All pipeline easements shall be no less than twenty (20) feet in width, measured off the centerline of the pipeline. All pipeline easements shall have an adjacent parallel twenty (20) foot construction easement for the period of initial construction and testing. Easements for all other facilities shall extend no less than twenty (20) feet beyond the outermost points of the physical plant in question in all directions. Ingress/egress to all facilities must be granted. These easements may terminate one (1) year after the facilities have been permanently removed from any type of public utility service under state or federal permit(s), license(s) or certificate(s). SCWC shall have the right to abandon any underground plant or facilities, including pipelines, in place without obligation to the Club, other landowner or third party if such abandonment is permitted by state or federal regulations governing sewer utilities.
- 5.5 SCWS' exclusive rights to use the easements to be provided hereunder shall also include the right to remove or trim trees, shrubs, plants or other encumbrances as may be necessary to maintain the integrity of SCWC's facilities, make repairs, perform inspections or tests or otherwise comply with TCEQ rules. SCWC shall have a duty to restore the easement to its preconstruction condition as reasonably as possible. No permanent structures may be built in or across any easement; however, roadways and drives shall be permitted so long as they are not wider than Texas Department of Transportation specifications for a Farm-to-Market road without improved shoulders. Wider drives or roadways may be permitted on a case-by-case basis after the submission of plans to SCWC and the accommodation of SCWC's need of access to the pipeline under such paving.

- 5.6 Once effluent is delivered to the Club's retention pond, it shall be Club's responsibility (as SCWC's agent under the water quality permit) to manage and control the effluent in a manner that complies with all provisions of SCWC's wastewater permit, the Texas Water Code, TCEQ rules and USEPA rules. The Club shall not (without limitation):
 - a) irrigate with effluent in places or under conditions that could reasonably result in the effluent coming into contact with humans;
 - b) irrigate during a rainfall event;
 - c) irrigate or release effluent any place where the effluent could run off into the waters of the state;
 - d) irrigate with effluent at a rate greater than that authorized in SCWC's permit; or
 - e) fail to use and record the data from any monitoring equipment ordered by the TCEQ in SCWC's wastewater permit or by rule or order.
- 5.7 If the Club violates any provision of §5.5 or other provision of SCWC's wastewater permit or TCEQ rule or order related to the maintenance or use of effluent, SCWC may terminate deliveries of effluent to the Club immediately. SCWC shall have the right to have all facilities capable of removing effluent from the retention pond and transporting it for irrigation use taken out of operation and locked under SCWC's control. In such cases, effluent deliveries and usage shall remain terminated until the offending condition has been adequately remedied. The Club shall be liable for all fines, penalties, clean up costs and other expenses arising from any such violation. SCWC shall be reimbursed for all reasonable expenses and costs it incurs in responding to or defending such violations within thirty (30) days of billing the Club for the same. The parties agree that they may use the same counsel and consultants to defend any enforcement action arising from such violation in the interest of keeping common costs low.

6. OTHER

- 6.1 This exclusive Agreement may not be canceled by SCWC or the Club their heirs, assigns, or successors in title or interest, by sale, gift, foreclosure, inheritance or otherwise, without the written consent of the other party.
- 6.2 The Club shall indemnify and save harmless SCWC and its agents and employees from all suits, actions, or claims of any character, type, or description brought or made on account of negligence or acts of omission or commission by the Club or its representatives, assigns or heirs occurring after the date of this agreement and relating in any way to water service to the effluent irrigation system. In the event a claim is made or a lawsuit is filed which would be subject to this indemnity, SCWC, its agents or employees, shall have the right to employ counsel, which counsel shall be satisfactory to the Club, and

the Club shall pay the reasonable and necessary attorney's fees incurred in defending such claim at the time fees are billed by the attorney.

- 6.3 SCWC shall indemnify and save harmless the Club and its agents and employees from all suits, actions, or claims of any character, type, or description brought or made on account of negligence or acts of omission or commission by SCWC or its representatives, assigns or heirs relating in any way to wastewater service to SCWC's certificated service area, the operation of the WWTP, or the delivery of effluent to the point of discharge at the retention pond. In the event a claim is made or a lawsuit is filed which would be subject to this indemnity, the Club, its agents or employees, shall have the right to employ counsel, which counsel shall be satisfactory to SCWC, and SCWC shall pay the reasonable and necessary attorney's fees incurred in defending such claim at the time fees are billed by the attorney.
- This Agreement is performable in Harris and Burnet Counties, Texas. All parties agree that if any party(ies) should default on any of the conditions and covenants hereunder or threaten to do so, or should it be necessary for any reason for either to hire or retain an attorney to represent them in connection with this Agreement, the party(ies) found to be responsible agrees to pay to the prevailing party(ies) a reasonable amount for costs and attorney's fees. Before the commencement of litigation, the parties agree to submit any dispute arising hereunder not resolved by mutual agreement to mediation before a neutral third-party mediator ("Mediator"). The Mediator shall be selected by mutual agreement of the parties or by court order absent such agreement. The parties agree that this agreement may be enforceable by specific performance as well as any other remedy available at law or in equity. Venue over any civil cause of action arising from this agreement shall lie in the courts of Harris County, Texas and shall be subject to and interpreted by the laws of the State of Texas. Venue over any administrative cause of action arising from this agreement shall lie in TCEQ and the courts of Travis County, Texas.
- 6.5 SCWC and the Club acknowledge receipt of a complete copy of this Agreement and further acknowledge that they have carefully examined all terms and conditions and fully understand it.
- 6.6 The official addresses of the parties for purposes of notices, correspondence or other matters arising herefrom shall be the following until written notice to the other parties of any change:

 Lakecliff on Lake Travis, LP

 The Club

Lakecliff on Lake Travis, LP Attn: Robert J. Day 111 Clubland Court Spicewood, Texas 78669

South Central Water Company Attn: Malcolm D. Bailey, President 5818 Beverly Hill, Suite 200 Houston, Texas 77057 **SCWC**

Any and all notices or other communications required or permitted by this Agreement or by law to be delivered to, served on or given to either party to this Agreement, by the other party to this Agreement, shall be in writing and shall be deemed properly delivered, given or served when personally delivered to either party, the Club or SCWC, to whom it is directed, or in lieu of personal service, when deposited in the United States mail, first-class postage prepaid, certified mail, return receipt requested, at the address for notices set forth in this Agreement. The Club or SCWC may change this address for the purposes of this Paragraph by giving written notice of the change to the other party in the manner provided in this Agreement.

- 6.7 This Agreement supersedes any and all other agreements, either oral or in writing, between the parties hereto with respect to the subject matter hereof, and no other agreement, statement or promise relating to the subject matter of this Agreement which is not contained herein shall be valid or binding,
- 6.8 This Agreement shall be binding on the heirs, executors, administrators, legal representatives, successors and permitted assigns of the respective parties.
- 6.9 This Agreement may be amended by the mutual agreement of the parties herein in a written instrument specifically referencing this Agreement.

ENTERED on the 29 day	of June 2005.
THE CLUB	SCWC
BY: Robert Day	BY: Malcolm D. Bailey, President
Post T Day Pagas	KJV, dre
General Partner of	M
Lukeliff on Loke	TRAVIS, L. F

AMES E. GAROI

REGISTERED PROFESSIONAL LAND SURVEYOR

Email: jgaron@austin.rr.com

924 Main Street Bastrop, Texas 78602 512-303-4185 512-321-2107 fax

July 17, 2002

TRACT ONE:

LEGAL DESCRIPTION: BEING A 70,896 ACRE TRACT OF LAND LYING IN AND SITUATED OUT OF THE JOHN EWERS SURVEY NO. 308, THE JOHN EWERS SURVEY NO. 410 AND THE JOHN MOAT SURVEY NO. 412, ALL IN TRAVIS COUNTY, TEXAS AND BEING

PORTIONS OF THAT CERTAIN 247.604 ACRE TRACT OF LAND AND 33,977 ACRE TRACT OF LAND CONVEYED TO LAKECLIFF ON LAKE TRAVIS L.P. BY DEED RECORDED IN DOCUMENT NO. 2000075155:

A PORTION OF THAT CERTAIN 5.86 ACRE TRACT OF LAND CONVEYED TO LAKE TRAVIS PROPERTIES, INC. BY DEED RECORDED IN VOLUME 12750. PAGE 1417 AND FORMERLY PLATTED AS LOT 1, BLOCK "C"; LAKECLIFF ON LAKE TRAVIS SECTION ONE BY PLAT RECORDED IN VOLUME 94, PAGE 116 OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS;

A PORTION OF THAT CERTAIN 14.575 ACRE TRACT OF LAND CONVEYED TO LAKECLIFF ON LAKE TRAVIS LP. BY DEED RECORDED IN DOCUMENT NO. 2000202389:

AND A PORTION OF THAT CERTAIN 5.002 ACRE TRACT OF LAND CONVEYED TO LAKECLIFF ON LAKE TRAVIS L.P. BY DEED RECORDED IN DOCUMENT NO. 2001013138:

ALL OF THE OFFICIAL DEED RECORDS OF TRAVIS COUNTY, TEXAS; SAID 70.896 ACRE TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS AND AS SURVEYED UNDER THE SUPERVISION OF JAMES E. GARON & ASSOCIATES IN JUNE, 2002:

BEGINNING at an iron rod set on the southerly right-of-way line of Kahala Sunset Drive, being Lot 43, LakeCliff on Lake Travis Section Eleven as recorded by plat in Document No. 200100315 of the plat records of Travis County, Texas for the northwesterly comer of Lot 23 of said subdivision;

THENCE South 15°22'23" West a distance of 118.16 feet to an iron rod set for the southwest comer of said Lot 23:

THENCE along the southerly line of Lots 23-42 of said subdivision the following eight (8) calls:

- 1. South 74°37'37" East a distance of 170.19 feet to an iron rod set for corner of Lots 23 and 24:
- 2. South 86°58'15" East a distance of 199.92 feet to an iron rod set for comer of Lots 24
- 3. North 80°46'55" East a distance of 77.31 feet to an iron rod set for corner of Lots 25 and 26;

- 4. North 75°5'36" East a distance of 76.61 feet to an iron rod set for comer of Lots 26 and 27;
- 5. North 69°22'47" East a distance of 76.96 feet to an iron rod set for comer of Lots 27 and 28;
- North 63*39'05" East a distance of 77.41 feet to an iron rod set for corner of Lots 28 and 29;
- 7. North 60"36"38" East a distance of 448.00 feet to an iron rod set for corner of Lots 35 and 36;
- North 58°38'00" East a distance of 585.56 feet to an iron rod set on the southerly line
 of Stableford Cove, being Lot 12, LakeCliff on Lake Travis Section Eight as recorded
 by plat in Document No. 200100316 of said plat records, for the most easterly corner
 of Lot 42:

THENCE along said line of Stableford Cove the following five (5) calls:

- 1. South 64°16'03" East a distance of 55.16 feet to an iron rod set for point of curvature of a curve to the left;
- a length of 274.13 feet along the arc of said curve to the left having a radius of 360.00 feet and a chord bearing South 87°47'02" East a distance of 267.56 feet to an iron rod set for point of tangency;
- North 70°24'05" East a distance of 63.09 feet to an iron rod set for point of curvature
 of a curve to the right;
- a length of 203.30 feet along the arc of a said curve to the right having a radius of 360.00 feet and a chord bearing North 86*34'47" East a distance of 200.61 feet to an iron rod set for point of tangency;
- 5. South 77°14'31" East a distance of 56.11 feet to an iron rod set for the northwest corner of Lot 1, LakeCliff on Lake Travis Section Nine as recorded by plat in Document No. 200100314 of said plat records;

THENCE South 33°48'16" West a distance of 131.62 feat to an rod set for the most westerly comer of said Lot 1;

THENCE South 36°28'01" East a distance of 519.00 feet to an iron rod set for the most southerly corner of Lots 3 and 4 of said subdivision:

THENCE South 89°39'26" East a distance of 114.56 feet to an iron rod set for angle point on the southerly line of said Lot 4;

THENCE North 59°42'41" East a distance of 207.74 feet to an iron rod set for angle point on the southwesterly line of Lot 5 of said subdivision;

THENCE North 36°25'01" East a distance of 128.63 feet to an iron rod set for the most easterly corner of Lots 5 and 6 of said subdivision;

THENCE North 20"38'33" East a distance of 377.94 feet to an iron rod set on the curving southeasterly r-o-w line of Stableford Cove for the northeasterly comer of Lot 7, Lakediff on Lake Travis Section Nine;

THENCE along said line of Stableford Cove the following four (4) calls:

- a length of 18.40 feet along the arc of a curve to the left having a radius of 880.00 feet and a chord bearing North 63"5"10" East a distance of 18.40 feet to an iron rod set for point of tangency;
- 2. North 62°29'14" East a distance of 90.55 feet to an iron rod set for point of curvature of a curve to the left.
- a length of 179.06 feet along the arc of said curve to the left having a radius of 330.00 feet and a chord bearing North 46"56"29" East a distance of 176.89 feet to an iron rod set for point of tangency;
- 4. North 31°23'43" East a distance of 17.08 feet to an iron rod set for the westerly corner of Lot 11, of said LakeCliff on Lake Travis Section Eight:

THENCE along said Lot 11, South 58°36'17" East a distance of 67.13 feet to an iron rod set for angle point and South 6°47'43" East a distance of 225.10 feet to an iron rod set for the most southerly corner of said Lot 11, common with an angle point of Lot 1A, Block "A", Replat of Lot 1, Block "A"; Travis Lakeside Phase One as recorded by plat in Document No. 200100318 of said plat records;

THENCE along said Lot 1A the following nine (9) calls:

- 1. South 7°41'16" West a distance of 391.64 feet to an iron rod set for angle point;
- 2. South 47°24'05" West a distance of 328.85 feet to an iron rod set for angle point.
- 3. South 60"1"39" West a distance of 554.55 feet to an iron rod set for corner.
- 4. North 53°53'00" West a distance of 376.96 feet to an iron rod set for corner.
- 5. South 25°0'58" West a distance of 10.19 feet to an iron rod set for corner.
- 6. North 52°1'30" West a distance of 670.31 feet to an iron rod set for comer.
- 7. South 58°47'40" West a distance of 1190.33 feet to an iron rod set for angle point;
- . 8. South 58°38'12" West a distance of 883,92 feet to an iron rod found for the most northerly corner of said 5.002 acre tract;
 - 9. South 24°1'41" East a distance of 271.88 feet to an iron rod set for comer:

THENCE South 59°34'59" West a distance of 452.50 feet to an iron rod set on the northeasterly line of Haynie Flat Road;

THENCE along said line of Haynie Flat Road the following nine (9) calls:

- 1. North 21°49'35" West a distance of 552.80 feet to a point of curvature of a curve to the left;
- a length of 415.97 feet along the arc of said curve to the left having a radius of 778.68 feet and a chord bearing North 33°9'08" West a distance of 411.04 feet to a point of compound curvature;
- 3. a length of 218.81 feet a curve to the left having a radius of 932.48 feet and a chord bearing North 56°26'30" West a distance of 218.32 feet to an endpoint;
- 4. North 64"25"35" West a distance of 182.76 feet to a point for corner.
- 5. North 25°34'27" East a distance of 5.22 feet to a point for comer,
- 6. North 64"25'35" West a distance of 56.48 feet to an angle point;
- 7. North 70°0'37" West a distance of 393.28 feet to an angle point.
- 8. North 69°10'15" West a distance of 195.53 feet to an angle point;
- 9. North 69°14'34" West a distance of 305.06 feet to an iron rod set for corner,

THENCE North 20°55'26" East a distance of 267.19 feet to an iron rod set for comer.

THENCE South 80"1948" East a distance of 50.67 feet to an iron rod set for corner.

THENCE North 9°4012" East a distance of 28.90 feet to an iron rod set for corner on the southerty r-o-w line of Gallery Drive and Lot 43, LakeCliff on Lake Travis Section Eleven;

THENCE along Gailery Drive and said Lot 43 the following three (3) calls:

- 1. South 80°19'48" East a distance of 535.50 feet to an iron rod set for point of curvature of a curve to the left;
- a length of 476.60 feet along the arc of said curve to the left having a radius of 818.20 feet and a chord bearing North 82*58*57" East a distance of 469.69 feet to an iron rod set for point of tangency;

3. North 66"17'43" East a distance of 481.07 feet to an iron rod set for point of curvature of a curve to the right;

THENCE a length of 39.43 feet along the arc of said curve to the right having a radius of 25.00 feet and a chord bearing South 68°31'08" East a distance of 35.47 feet to an iron rod set for point of tangency on the southwesterly r-o-w line of Kahala Sunset Drive;

THENCE along said line of Kahala Sunset Drive and Lot 43 the following three (3) calls:

- 1. South 23°19'55" East a distance of 63.13 feet to an iron rod set for point of curvature of a curve to the left;
- a length of 390.54 feet along the arc of said curve to the left having a radius of 436.18 feet and a chord bearing South 48"58"55" East a distance of 377.62 feet to an iron rod set for point of tangency;

3. South 74°37'37" East a distance of 258.83 feet

to the POINT OF BEGINNING and containing 70.898 acres of land, more or less, and as shown on map of survey prepared herewith.

Surveyed by:

lames E. Garon

Registered Professional Land Surveyor

C/jame/mydocuments/legals/travis/takediff/gctract1rev.doo

JAMES E. GARON

JAMES E. GARON

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JAMES E. GARON

REGISTERED PROFESSIONAL LAND SURVEYOR

Bmail: jgaron@austin.rr.com

924 Mein Street Bastrop, Texas 78602 512-303-4185 512-321-2107 fax

July 17, 2002

TRACT TWO:

LEGAL DESCRIPTION: BEING A 54.455 ACRE TRACT OF LAND LYING IN AND SITUATED OUT OF THE JOHN EWERS SURVEY NO. 308, THE JOHN EWERS SURVEY NO. 410 AND THE JOHN MOAT SURVEY NO. 412, ALL IN TRAVIS COUNTY, TEXAS AND BEING

PORTIONS OF THAT CERTAIN 247.604 ACRE TRACT OF LAND AND 33.977 ACRE TRACT OF LAND CONVEYED TO LAKECLIFF ON LAKE TRAVIS L.P. BY DEED RECORDED IN DOCUMENT NO. 2000075155;

A PORTION OF THAT CERTAIN 5.86 ACRE TRACT OF LAND CONVEYED TO LAKE TRAVIS PROPERTIES, INC. BY DEED RECORDED IN VOLUME 12750, PAGE 1417 AND FORMERLY PLATTED AS LOT 1, BLOCK "C"; LAKECLIFF ON LAKE TRAVIS SECTION ONE BY PLAT RECORDED IN VOLUME 94, PAGE 116 OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS;

AND A PORTION OF THAT CERTAIN 152.041 ACRE TRACT OF LAND CONVEYED TO LAKE TRAVIS PROPERTIES, INC. BY DEED RECORDED IN VOLUME 12130, PAGE 1704 AND FORMERLY PLATTED AS LOTS 2-7, BLOCK "C"; LAKECLIFF ON LAKE TRAVIS SECTION ONE BY PLAT RECORDED IN VOLUME 94, PAGE 116 OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS;

ALL OF THE OFFICIAL DEED RECORDS OF TRAVIS COUNTY, TEXAS; SAID 54.455 ACRE TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS AND AS SURVEYED UNDER THE SUPERVISION OF JAMES E. GARON & ASSOCIATES IN JUNE, 2002:

BEGINNING at an iron rod set on the northerty right-of-way line of Gallery Drive, being Lot 43, LakeCliff on Lake Travis Section Eleven as recorded by plat in Document No. 200100315 of the plat records of Travis County, Texas for the southwesterly comer of Lot 9, LakeCliff on Lake Travis Section Twelve as recorded by plat in Document No. 200100324 of said plat records:

THENCE along Gallery Drive the following three (3) calls:

- North 80°19'48" West a distance of 42.27 feet to an iron rod set for point of curvature
 of a curve to the right;
- a length of 48.52 feet along the arc of said curve to the right having a radius of 440.00 feet and a chord bearing North 77°10'16" West a distance of 48.49 feet to an iron rod set for point of tangency;
- 3. North 74°0'44" West a distance of 153,27 feet to an iron rod set for point of curvature of a curve to the right;

THENCE a length of 39.27 feet along the arc of said curve to the right having a radius of 25,00 feet and a chord bearing North 29°0'44" West a distance of 35.36 feet to an iron rod set

for point of tangency on the easterly r-o-w line of Cliff Point as dedicated by plat of LakeCliff on Lake Travis Section One:

THENCE along said line of Cliff Point the following three (4) calls:

- 1. North 15°59'16" East a distance of 147.25 feet;
- a length of 177.40 feet a curve to the right having a radius of 430.00 feet and with a chord bearing of North 27*48'24" East;
- 3. a length of 38.07 feat a curve to the right having a radius of 430.00 feet and with a chord bearing of North 42°9'43" East;
- 4. North 44°41'53" East a distance of 1017.26 feet:

THENCE South 48°27'31" East a distance of 122.58 feet to an iron rod set for angle point,

THENCE North 75°21'44" East a distance of 287.38 feet to an iron rod set for angle point,

THENCE North 39°6'27" East a distance of 379.01 feet to an iron rod set for the most westerly corner of Lot 1, LakeCliff on Lake Travis Section Thirteen as recorded by plat in Document No. 200100319 of said plat records;

THENCE South 48°46'22" East a distance of 244.08 feet to an iron rod set for the southerty corner of said Lot 1;

THENCE North 37°12'12" East a distance of 243.34 feet to an iron rod set on the southeasterly r-o-w line of Cliff Crossing for the most easterly comer of said Lot 1;

THENCE South 52°5'14" East a distance of 171.71 feet along said line of Cliff Crossing to an iron rod set for the most northerly comer of Lot 2, LakeCliff on Lake Travis Section Thirteen;

THENCE South 37°54'46" West a distance of 135.00 feet to an iron rod set for the westerty comer of said Lot 2;

THENCE South 52°5'14" East a distance of 240.00 feet to an iron rod set for the common corner of Lots 3 and 4 of said subdivision;

THENCE South 16°37'49" West a distance of 135.52 feet to an iron rod set for angle point.

THENCE South 51°9'56" East a distance of 421.12 feet along the southeasterly line of Lots 4 through 8 of said subdivision to an iron rod set for angle point;

THENCE North 66"33"17" East a distance of 170.21 feet to an iron rod set for angle point

THENCE North 35°40'53" East a distance of 159.80 feet to an iron rod set on the curving southerly r-o-w line of Cliff Crossing for the easterly corner of Lot 9, LakeCliff on Lake Travis Section Thirteen;

THENCE along said line of Cliff Crossing the following four (4) calls:

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 a length of 459.36 feet along the arc of a curve to the left having a radius of 830.00 feet and a chord bearing South 86°1'49" East a distance of 453.52 feet to an iron rod set for point of tangency;

2. North 78°6'53" East a distance of 412.72 feet to an iron rod set for point of curvature

of a curve to the right

 a length of 91.92 feet along the arc of said curve to the right having a radius of 300.00 feet and a chord bearing North 86°53'34" East a distance of 91.56 feet to an iron rod set for point of tangency;

4. South 84*19'45" East a distance of 50.00 feet to an iron rod set for point of curvature

of a curve to the night

THENCE a length of 39.27 feet along the arc of said curve to the right having a radius of 25.00 feet and a chord bearing South 39°19'45" East a distance of 35.36 feet to an iron rod set for point of tangency on the west r-o-w line of Kahala Sunset Drive;

THENCE along said r-o-w line, South 5°58'02" West a distance of 311.83 feet to an iron rod set for point of curvature of a curve to the right and a length of 1.48.54 feet along the arc of said curve to the right having a radius of 770.01 feet and a chord bearing South 11°29'41" West a distance of 148.31 feet to an iron rod set for the northeasterly comer of Lot 22, LakeCliff on Lake Travis Section Eleven;

THENCE North 67°45'48" West a distance of 115.00 feet to an iron rod set for the northwest corner of said Lot 22;

THENCE South 39°27'22" West a distance of 410.51 feet along the westerly line of Lots 16-22 of said subdivision to an iron rod set for the common westerly comer of Lots 15 and 16;

THENCE South 61°8'39" West a distance of 670.24 feet along the northwesterly line of Lots 5-15 of said subdivision to an iron rod set for the common comer of Lots 4 and 5;

THENCE South 77°41'11" West a distance of 167.68 feet to an iron rod set for angle point in the northerty line of Lot 2 of said subdivision;

THENCE North 74°44'23" West a distance of 288.44 feet to an iron rod set for the northwest corner of Lot 1, of said subdivision;

THENCE South 16°2'50" West a distance of 102.69 feet to an iron rod set on the northerty row line of Kahala Sunset Drive for the southwest comer of said Lot 1;

THENCE along said r-o-w line the following four (4) calls:

- North 74"37"37" West a distance of 97.15 feet to an iron rod set for the point of curvature of a curve to the right;
- a length of 336.82 feet along the arc of said curve to the right having a radius of 376.18 feet and a chord bearing North 48°58'56" West a distance of 325.68 feet to an iron rod set for point of tangency;
- 3. North 23°19'55" West a distance of 222.88 feet to an iron rod set for the point of curvature of a curve to the left;
- 4. a length of 39.95 feet along the arc of said curve to the left having a radius of 1146.96 feet and with a chord bearing of North 27*2'21" West a distance of 39.94 feet to an

iron rod set for the southerly comer of Lot 22, LakeCliff on Lake Travis Section Twelve;

THENCE North 64°26'28" East a distance of 277.25 feet to an iron rod set for the easterly corner of said Lot 22;

THENCE North 41°53'00" West a distance of 646.05 feet along the northeasterly line of Lots 19-22 of said subdivision to an iron rod set for the most northerly point of said Lot 19;

THENCE South 51°7'22" West a distance of 110.59 feet to an iron rod set for the common northerly corner of Lots 18 and 19 of said subdivision;

THENCE South 52°0'44" West a distance of 403.78 feet to an iron rod set for the common northerty comer of Lots 15 and 16 of said subdivision;

THENCE South 76°38'36" West a distance of 548,18 feet to an iron rod set for angle point in the northerly line of Lot 11;

THENCE South 58°6'51" West a distance of 286.93 feet to an iron rod set for angle point in the westerly line of Lot 10 of said subdivision;

THENCE South 11°3'59" West a distance of 307.41 feet to the POINT OF BEGINNING and containing 54.455 acres of land, more or less, and as shown on map of survey prepared herewith.

Surveyed by:

JamesÆ. Garon i

Registered Professional Land Surveyor

C/james/myllocuments/legals/travis/lakecilff/gctract2rev.doc

JAMES E. GARON

REGISTERED PROFESSIONAL LAND SURVEYOR

Bmail: jgeron@austin.cr.com

924 Main Street Bastrop, Texas 78602 512-303-4185 512-321-2107 fax

July 17, 2002

TRACT THREE:

LEGAL DESCRIPTION: BEING A 12.115 ACRE TRACT OF LAND LYING IN AND SITUATED OUT OF THE JOHN MOAT SURVEY NO. 412. ALL IN TRAVIS COUNTY, TEXAS AND BEING

A PORTION OF THAT CERTAIN 247.604 ACRE TRACT OF LAND CONVEYED TO LAKECLIFF ON LAKE TRAVIS L.P. BY DEED RECORDED IN DOCUMENT NO. 2000075155; A PORTION OF THAT CERTAIN 152.041 ACRE TRACT OF LAND CONVEYED TO LAKE TRAVIS PROPERTIES, INC. BY DEED RECORDED IN VOLUME 12130, PAGE 1704 AND FORMERLY PLATTED AS LOT 1, BLOCK "C"; LAKECLIFF ON LAKE TRAVIS SECTION ONE BY PLAT RECORDED IN VOLUME 94, PAGE 116 OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS; AND A PORTION OF THAT CERTAIN TRACT OF LAND CONVEYED TO LAKECLIFF ON LAKE TRAVIS L.P. BY DEED RECORDED IN DOCUMENT NO. 200167661 AND FORMERLY PLATTED AS LOT 1, BLOCK "F"; LAKECLIFF ON LAKE TRAVIS SECTION FOUR BY PLAT RECORDED IN VOLUME 98, PAGE 25 OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS:

ALL OF THE OFFICIAL DEED RECORDS OF TRAVIS COUNTY, TEXAS; SAID 12.115 ACRE TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS AND AS SURVEYED UNDER THE SUPERVISION OF JAMES E. GARON & ASSOCIATES IN JUNE, 2002:

BEGINNING at an iron rod set on the curving, easterly right-of-way line of Cliff Overlook for the northwesterly corner of Lot 10, LakeCliff on Lake Travis Section Thirteen as recorded by plat in Document No. 200100319 of said plat records;

THENCE along said right-of-way line the following four (4) calls:

 a length of 28.45 feet along the arc of a curve to the left having a radius of 346.26 feet and a chord bearing North 29°3'25" East a distance of 28.45 feet to an iron rod set for point of compound curvature;

2. a length of 48.37 feet along the arc of said compound curve to the left having a radius of 330.00 feet and a chord bearing

North 22°22'19" East a distance of 48.32 feet to an iron rod set for endpoint:

3. North 18"10'23" East a distance of 286.57 feet to an iron rod set for point of curvature of a curve to the left;

4. a length of 51.32 feet along the arc of said curve to the left having a radius of 330.00 feet and a chord bearing North 13*43'05" East a distance of 51.27 feet to an iron rod set for the southwest corner of Lot 15, LakeCliff on Lake Travis Section Thirteen;

THENCE South 77°11'25" East a distance of 114.35 feet to an iron rod set for the common corner of Lots 15 and 16 of said subdivision:

THENCE South 56°22'48" East a distance of 48.73 feet to an iron rod set for the common corner of Lots 16 and 17 of said subdivision;

THENCE South 35*18'11" East a distance of 123.43 feet to an iron rod set for the common corner of Lots 17 and 18 of said subdivision:

THENCE South 20°43'26" East a distance of 140.36 feet to an iron rod set for the southwesterly corner of Lot 18 of said subdivision:

THENCE South 89°23'09" East a distance of 66.77 feet to an iron rod set on the curving r-o-w line of Cliff Overlook for the southeasterly corner of Lot 18, LakeCliff on Lake Travis Section Thirteen:

THENCE a length of 59.31 feet along the arc of said curving r-o-w line to the left having a radius of 55.00 feet and a chord bearing South 30°16'37" East a distance of 56.47 feet to an iron rod set for endpoint;

THENCE South 65°51'13" East a distance of 59.72 feet to an iron rod set for angle point on the southerly line of Lot 43, LakeCliff on Lake Travis Section Five as recorded by plat in Volume 102, page 267 of said plat records;

THENCE continuing along said Lot 43 the following four (4) calls:

- 1. South 66°1'38" East a distance of 75.64 feet to an iron rod set for angle point;
- 2. South 85°36'41" East a distance of 184.23 feet to an iron rod set for angle point;
- North 73°27'24" East a distance of 180.97 feet to an iron rod set for angle point;

4. North 44°56'06" East a distance of 141.91 feet to an iron rod set for corner of Lot 43 and angle point of Lot 10, LakeCliff on Lake Travis Section Six as recorded by plat in Document No. 2000075155 of said plat records;

THENCE South 41°7'14" East a distance of 82,88 feet to an iron rod set for the common corner of Lots 9 and 10, LakeCliff on Lake Travis Section Six;

THENCE South 10"23"21" West a distance of 132.34 feet to an iron rod set for the southwest corner of Lot 9 of said subdivision;

THENCE North 89°35'45" East a distance of 98.36 feet to an iron rod set for the northwest corner of Lot 8 of said subdivision;

THENCE South 0°24'15" East a distance of 142.41 feet to an iron rod set for the common corner of Lots 7 and 8 of said subdivision;

THENCE South 2°22'40" East a distance of 89.05 feet to an iron rod set for angle point;

THENCE South 5°8'05" East a distance of 63.30 feet to an iron rod set for the common corner of Lots 5, 6 and 7 of said subdivision;

THENCE South 78°6'53" West a distance of 144.97 feet to an iron rod set for the northwest corner of Lot 5 of said subdivision;

THENCE South 11°53'07" East a distance of 170.00 feet to an iron rod set on the northerly r-o-w line of Cliff Crossing for the southwest corner of Lot 5 of said subdivision;

THENCE South 78°6'53" West a distance of 25.00 feet along said row line to an iron rod set for the southeast corner of Lot 4 of said subdivision;

THENCE North 11°53'07" West a distance of 170.00 feet to an iron rod set for the northeast corner of Lot 4 of said subdivision;

THENCE South 78°6'53" West a distance of 270.00 feet to an iron rod set for the common corner of Lots 2 and 3 of said subdivision;

THENCE North 86°49'32" West a distance of 122.63 feet to an iron rod se't for the common corner of Lots 1 and 2 of said subdivision;

THENCE North 53°12'34" West a distance of 97.78 feet to an iron rod set for the common corner of Lot 1, LakeCliff on Lake Travis Section Six and Lot 14, LakeCliff on Lake Travis Section Thirteen;

THENCE North 74°0'06" West a distance of 397.82 feet to an iron rod set for angle point on the north line of Lot 12, LakeCliff on Lake Travis Section Thirteen;

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THENCE North 31°59'53" West a distance of 152.22 feet to an iron rod set for the common corner of Lots 10 and 11 of said subdivision:

THENCE North 13°51'16" West a distance of 119.75 feet to an iron rod set for angle point on the north line of Lot 10 and North 80"48'59" West a distance of 100.69 feet to the POINT OF BEGINNING and containing 12.115 acres of land, more or less, and as shown on map of survey prepared herewith

Surveyed by:

James E.

Registered Professional Land Surveyor C/james/mydocuments/legals/travis/lakecliff/gctract4.doc

JAMES E. GARON

REGISTERED PROFESSIONAL LAND SURVEYOR

Email: jgsron@austin.rr.com

924 Main Street Bastrop, Texas 78602 512-303-4185 512-321-2107 fax

July 3, 2002

TRACT FOUR:

LEGAL DESCRIPTION: BEING A 39.335 ACRE TRACT OF LAND LYING IN AND SITUATED OUT OF THE JOHN MOAT SURVEY NO. 412, IN TRAVIS COUNTY, TEXAS AND BEING A PORTION OF THAT CERTAIN 247.604 ACRE TRACT OF LAND CONVEYED TO LAKECLIFF ON LAKE TRAVIS L.P. BY DEED RECORDED IN DOCUMENT NO. 2000075155 OF THE OFFICIAL DEED RECORDS OF TRAVIS COUNTY, TEXAS; SAID 39.335 ACRE TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS AND AS SURVEYED UNDER THE SUPERVISION OF JAMES E: GARON & ASSOCIATES IN JUNE, 2002:

BEGINNING at an iron rod set on the curving westerly right-of-way line of Stableford Cove, being Lot 12, LakeCliff on Lake Travis Section Eight as recorded by plat in Document No. 200100316 of the plat records of Travis County, Texas, for the southerly corner of Lot 1, LakeCliff on Lake Travis Section Eight;

THENCE along said line of Stableford Cove the following eight (8) calls:

1. a length of 107.77 feet along the arc of a curve to the left having a radius of 60.00 feet and a chord bearing South 64°2'20" East a distance of 93.86 feet to an iron rod set for point of reverse curvature;

 a length of 25.59 feet along the arc of said reverse curve to the right having a radius of 25.00 feet and a chord bearing South 86°10'30" East a distance of 24.49 feet to an iron rod

set for point of compound curvature;

3. a length of 86.86 feet along the arc of said compound curve to the right having a radius of 220.00 feet and a chord bearing South 45°32'31" East a distance of 86.30 feet to an iron rod set for endpoint:

4. South 34"13'51" East a distance of 112.87 feet to an iron rod

set for the point of curvature of a curve to the right;

5. a length of 49.12 feet along the arc of said curve to the right having a radius of 220.00 feet and a chord bearing South 27*50'05" East a distance of 49.02 feet to an iron rod set for endpoint;

6. South 21°26'18" East a distance of 68.66 feet to an iron rod

set for point of curvature of a curve to the right;

7. a length of 202.87 feet along the arc of said curve to the right having a radius of 220.00 feet and a chord bearing South 4*58'43" West a distance of 195.76 feet to an iron rod set for endpoint;

8. South 31°23'43" West a distance of 159.41 feet to an iron rod set for the most easterly corner of Lot 12, LakeCliff on Lake Travis Section Ten as recorded by plat in Document No.

200100313 of said plat records;

THENCE North 41°25'41" West a distance of 518.49 feet to an iron rod set for the common northerly corner of Lots 8 and 9, LakeCliff on Lake Travis Section Ten;

THENCE South 88°28'13" West a distance of 157.10 feet to an iron rod set for the common northerly corner of Lots 7 and 8, LakeCliff on Lake Travis Section Ten;

THENCE South 48°12'42" West a distance of 817.16 feet to an iron rod set on the curving, northerly line of Stableford Cove for the most westerly corner of Lot 1, LakeCliff on Lake Travis Section Ten:

THENCE along said line off Stableford Cove the following four (4) calls:

1. a length of 81.80 feet along the arc of a curve to the left having a radius of 420.00 feet and a chord bearing South 75*58'50" West a distance of 81.67 feet to an iron rod set for point of tangency;

2. South 70°23'17" West a distance of 63.09 feet to an iron rod

set for point of curvature of a curve to the right;

3. a length of 227.57 feet along the arc of said curve to the right having a radius of 299.84 feet and a chord bearing North 87*52'08" West a distance of 222.15 feet to an iron rod set for point of tangency;

4. North 64°14'22" West a distance of 303.13 feet to an iron rod

set for the point of curvature of a curve to the right;

THENCE a length of 38.53 feet along the arc of said curve to the right having a radius of 25.00 feet and a chord bearing North 20°4'59" West a distance of 34.83 feet to an iron rod set for point of reverse curvature on the east line of Kahala Sunset Drive;

THENCE along said line of Kahala Sunset Drive the following six (6) calls:

1. a length of 262.27 feet along the arc of said reverse curve to the left having a radius of 830.01 feet and a chord bearing North 15°1'13" East a distance of 261.18 feet to an iron rod set for point of tangency; 2. North 5"58'02" East a distance of 312.14 feet to an iron rod set for angle point;

3. North 5°40'15" East a distance of 160.00 feet to an iron rod

set for point of curvature of a curve to the right;

4. a length of 127.74 feet along the arc of said curve to the right having a radius of 324.70 feet and a chord bearing North 16.56'30" East a distance of 126.92 feet to an iron rod set for point of reverse curvature;

5. a length of 127.11 feet along the arc of said reverse curve to the left having a radius of 330.00 feet and a chord bearing North 10'37'51" East a distance of 126.33 feet to an iron rod

set for point of tangency; .

6. North 0°24'15" West a distance of 82.70 feet to an iron rod set for corner;

THENCE North 86°56'55" East a distance of 200.93 feet to an iron rod set for corner:

THENCE North 16°29'05" East a distance of 196.61 feet to an iron rod set for angle point;

THENCE North 46°52'53" East a distance of 153.87 feet to an iron rod set for angle point:

THENCE South 82°24'34" East a distance of 143.90 feet to an iron rod set for the southwest corner of Lot 5, LakeCliff on Lake Travis Section Seven as recorded by plat in Document No. 200100317 of said plat records:

THENCE along the south line of said LakeCliff on Lake Travis Section Seven the following five (5) calls:

1. South 65°40'38" East a distance of 133.00 feet to an iron rod set for angle point:

2. South 71°40'13" East a distance of 149.17 feet to an iron rod

set for angle point;

3. South 79°9'11" East a distance of 155.46 feet to an iron rod set for angle point:

4. South 86°20'14" East a distance of 134.03 feet to an iron rod

set for angle point:

5. South 89°58'36" East a distance of 160.85 feet to an iron rod set for the southeast corner of Lot 1, LakeCliff on Lake Travis Section Seven:

THENCE South 0°1'24" West a distance of 167.81 feet to a point for the southwest corner of Lot 29, LakeCliff on Lake Travis Section Six as recorded by plat in Document No. 200000343 of said plat records and northwest corner of Lot 1, LakeCliff on Lake Travis Section Eight;

THENCE South 14*48'06" East a distance of 371.06 feet to an iron rod set for the southwesterly corner of said Lot 1;

THENCE South 85°30'06" East a distance of 81.57 feet to the POINT OF BEGINNING and containing 39.335 acres of land, more or less, and as shown on map of survey prepared herewith.

Surveyed by:

Registered Professional Land Surveyor

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9 PGS

CATED EFFLUENT LINE EASEMENT

EXHIBIT D

THE STATE OF TEXAS
COUNTY OF TRAVIS

8

KNOW ALL MEN BY THESE PRESENTS:

THAT LAKECLIFF ON LAKE TRAVIS, L.P., a Texas limited partnership (hereinafter called "Grantor"), for Ten and No/100 Dollars (\$10.00) and other good and valuable consideration to Grantor in hand paid by SOUTH CENTRAL WATER COMPANY, the address of which is SCWC, c/o Paul A. Philbin & Assoc., P.C., 6363 Woodway Drive, Suite 725, Houston, Texas 77057 (hereinafter called "Grantee"), the receipt and adequacy of which are hereby acknowledged and confessed, and subject to the matters set forth below, has GRANTED, SOLD and CONVEYED, and by these presents does GRANT, SELL, and CONVEY, unto Grantee a non-exclusive easement (the "Easement") for the purpose of constructing, maintaining, operating, repairing and reconstructing a treated effluent line and related facilities, subject to the terms and provisions hereinafter set forth, under, across, and through those certain tract of land containing 70.896 acres of land (the "Easement Tract") and described more fully in Exhibit "A", attached hereto and incorporated herein by this reference for all purposes.

Prior to the initial construction of the treated effluent line, Grantee shall have the right to go over and across the land of Grantor within the Easement Tract for purposes of performing surveys and other such necessary pre-construction work; provided, however, that no excavation work, earth moving work, or other such work shall be undertaken by Grantee on any lands of Grantor other than the Easement except as hereinafter provided. The Grantor and Grantee have a separate agreement whereby the Grantor has agreed to accept treated effluent from the Grantee for the purpose of irrigating the golf course located within the Lakecliff on Lake Travis Subdivision containing approximately 176 acres. The treated effluent line will be constructed to transport treated effluent from the Grantee's Sewage

EXHIBIT Signal S

Treatment Facilities adjacent to the Easement Tract to a lake located on the Easement Tract. Grantee shall use his best efforts to locate the treated effluent line so as not to conflict with any of the Grantee's existing or proposed development. After the initial construction of the treated effluent line, Grantee, from time to time, shall have a right of ingress and egress over, along, and across the Easement Tract for purposes of maintaining, altering, and/or inspecting the treated effluent line or operating Grantee's treated effluent line and all associated equipment and appurtenances thereto. Except as otherwise specifically set forth in this paragraph, Grantee shall have no right to go or travel upon, over, or across any lands of Grantor except for the Easement Tract. Nothing contained herein shall grant or be construed as granting to Grantee the right to use the Easement Tract for any purpose other than for the purposes herein specified. Upon completion of the construction of the treated effluent line, Grantee agrees that he will execute a replacement easement which will restrict the easement to tract of land not wider than 30 feet.

It is expressly provided that Grantor reserves unto itself its heirs and assigns, all other rights in and to the Easement which do not unreasonably interfere with or prevent the use of the Easement herein granted and conveyed to Grantee. It is expressly agreed and provided that Grantee shall have the right to make reasonable use of the surface of the Easement Tract for the installation of surface facilities and equipment appurtenant to the treated effluent line. It is additionally provided that the use the this Easement shall not unreasonably interfere with any existing easements on the Easement Tract and that, if required, the Grantee will obtain any approval required.

The Easement hereby granted is non-exclusive, and Grantor, its successors, substitutes, and assigns, shall have the right from time to time to grant further easements over, across, through, and under the Easement Tract for any lawful purpose, provided that the holder of such easements does not unduly or unreasonably interfere with Easement rights herein granted.

Grantor acknowledges that the Security State Bank and Trust, Fredericksburg, Texas, has a lien or liens on the Easement Tract and that he will obtain their consent and joinder in this conveyance and said consent and joinder is attached hereto and made a part hereof as Exhibit "B".

and singular, the rights and appurtenances thereto anywise belonging unto the said Grantee, its successors and assigns forever; and Grantor does hereby bind Grantor and Grantor's heirs, executors, administrators, successors, and assigns to WARRANT AND FOREVER DEFEND, all and singular, the said Easement unto the said Grantee, and its respective successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, subject to all of the terms, conditions, provisions, and limitations herein above set forth and provided.

nerein above se	et forth and provided.	
	EXECUTED thisday of	of June, 2006.
٠.		LAKECLIFF ON LAKE TRAVIS, L.P.
		BY: ROBERT DAY, General Partner
STATE OF TE	EXAS	Ş
COUNTY OF		§
June L.P.	This instrument was acknown, 2006, by ROBERT DAY	owledged before me on the $\frac{q}{L}$ day of General Partner of Lakecliff on Lake Travis,
	CIVEN UNDER MV HAND	AND SEAT OF OFFICE this the

Courtsey Recording

CASH STAT

AFTER RECORDATION, RETURN TO:
PAUL A. PHILBIN & ASSOC.
6363 WOODWAY, SUITE 725
HOUSTON, TX 77057

2006.

DIANA MITCHELL

Notary Public, State of Texas

My Commission Expires

10–10–2008

Notary Public in and for

the State of Texas

BANDUL "A

IAMES E. GARON

REGISTERED PROFESSIONAL LAND SURVEYOR

Email: jgaron@austin.rr.com

924 Main Street Bastrop, Texas 78602 512-303-4185 512-321-2107 fax

July 17, 2002

TRACT ONE:

LEGAL DESCRIPTION: BEING A 70.896 ACRE TRACT OF LAND LYING IN AND SITUATED OUT OF THE JOHN EWERS SURVEY NO. 308, THE JOHN EWERS SURVEY NO. 410 AND THE JOHN MOAT SURVEY NO. 412, ALL IN TRAVIS COUNTY, TEXAS AND BEING

PORTIONS OF THAT CERTAIN 247.604 ACRE TRACT OF LAND AND 33.977 ACRE TRACT OF LAND CONVEYED TO LAKECLIFF ON LAKE TRAVIS L.P. BY DEED RECORDED IN DOCUMENT NO. 2000075155:

A PORTION OF THAT CERTAIN 5.86 ACRE TRACT OF LAND CONVEYED TO LAKE TRAVIS PROPERTIES, INC. BY DEED RECORDED IN VOLUME 12750, PAGE 1417 AND FORMERLY PLATTED AS LOT 1, BLOCK "C"; LAKECLIFF ON LAKE TRAVIS SECTION ONE BY PLAT RECORDED IN VOLUME 94, PAGE 116 OF THE PLAT RECORDS OF TRAVIS COUNTY, TEXAS;

A PORTION OF THAT CERTAIN 14.575 ACRE TRACT OF LAND CONVEYED TO LAKECLIFF ON LAKE TRAVIS LP. BY DEED RECORDED IN DOCUMENT NO. 2000202389;

AND A PORTION OF THAT CERTAIN 5.002 ACRE TRACT OF LAND CONVEYED TO LAKECLIFF ON LAKE TRAVIS L.P. BY DEED RECORDED IN DOCUMENT NO. 2001013138;

ALL OF THE OFFICIAL DEED RECORDS OF TRAVIS COUNTY, TEXAS; SAID 70.896 ACRE TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS AND AS SURVEYED UNDER THE SUPERVISION OF JAMES E. GARON & ASSOCIATES IN JUNE, 2002:

BEGINNING at an iron rod set on the southerly right-of-way line of Kahala Sunset Drive, being Lot 43, LakeCliff on Lake Travis Section Eleven as recorded by plat in Document No. 200100315 of the plat records of Travis County, Texas for the northwesterly comer of Lot 23 of said subdivision;

THENCE South 15°22'23" West a distance of 118.16 feet to an iron rod set for the southwest corner of said Lot 23;

THENCE along the southerly line of Lots 23-42 of said subdivision the following eight (8) calls:

- 1. South 74°37'37" East a distance of 170.19 feet to an iron rod set for comer of Lots 23 and 24;
- 2. South 86°58'15" East a distance of 199.92 feet to an iron rod set for corner of Lots 24 and 25;
- North 80°46'55" East a distance of 77.31 feet to an iron rod set for corner of Lots 25 and 26;



- North 75°5'36" East a distance of 76.61 feet to an iron rod set for comer of Lots 26 and 27;
- 5. North 69°22'47" East a distance of 76.96 feet to an iron rod set for comer of Lots 27 and 28;
- North 63°39'05" East a distance of 77.41 feet to an iron rod set for corner of Lots 28 and 29;
- North 60°36'38" East a distance of 448.00 feet to an iron rod set for corner of Lots 35 and 36;
- North 58°38'00" East a distance of 585.56 feet to an iron rod set on the southerly line
 of Stableford Cove, being Lot 12, LakeCliff on Lake Travis Section Eight as recorded
 by plat in Document No. 200100316 of said plat records, for the most easterly corner
 of Lot 42;

THENCE along said line of Stableford Cove the following five (5) calls:

- 1. South 64°16'03" East a distance of 55.16 feet to an iron rod set for point of curvature of a curve to the left;
- a length of 274.13 feet along the arc of said curve to the left having a radius of 360.00 feet and a chord bearing South 87°47'02" East a distance of 267.56 feet to an iron rod set for point of tangency;
- 3. North 70°24'05" East a distance of 63.09 feet to an iron rod set for point of curvature of a curve to the right;
- a length of 203.30 feet along the arc of a said curve to the right having a radius of 360.00 feet and a chord bearing North 86"34'47" East a distance of 200.61 feet to an iron rod set for point of tangency;
- 5. South 77°14'31" East a distance of 56.11 feet to an iron rod set for the northwest corner of Lot 1, LakeCliff on Lake Travis Section Nine as recorded by plat in Document No. 200100314 of said plat records:

THENCE South 33°48'16" West a distance of 131.62 feet to an rod set for the most westerly corner of said Lot 1;

THENCE South 36°28'01" East a distance of 519.00 feet to an iron rod set for the most southerly corner of Lots 3 and 4 of said subdivision;

THENCE South 89°39'26" East a distance of 114.56 feet to an iron rod set for angle point on the southerly line of said Lot 4;

THENCE North 59°42'41" East a distance of 207.74 feet to an iron rod set for angle point on the southwesterly line of Lot 5 of said subdivision;

THENCE North 36°25'01" East a distance of 128.63 feet to an iron rod set for the most easterly comer of Lots 5 and 6 of said subdivision;

THENCE North 20°38'33" East a distance of 377.94 feet to an iron rod set on the curving southeasterly r-o-w line of Stableford Cove for the northeasterly corner of Lot 7, Lakecliff on Lake Travis Section Nine;

THENCE along said line of Stableford Cove the following four (4) calls:

- a length of 18.40 feet along the arc of a curve to the left having a radius of 880.00 feet and a chord bearing North 63°5'10" East a distance of 18.40 feet to an iron rod set for point of tangency;
- 2. North 62°29°14° East a distance of 90.55 feet to an iron rod set for point of curvature of a curve to the left;
- a length of 179.08 feet along the arc of said curve to the left having a radius of 330.00 feet and a chord bearing North 46°56'29" East a distance of 176.89 feet to an iron rod set for point of tangency;
- 4. North 31°23'43" East a distance of 17.08 feet to an iron rod set for the westerly comer of Lot 11, of said LakeCliff on Lake Travis Section Eight;

THENCE along said Lot 11, South 58°36'17" East a distance of 67.13 feet to an iron rod set for angle point and South 6°47'43" East a distance of 225.10 feet to an iron rod set for the most southerly corner of said Lot 11, common with an angle point of Lot 1A, Block "A", Replat of Lot 1, Block "A"; Travis Lakeside Phase One as recorded by plat in Document No, 200100318 of said plat records;

THENCE along said Lot 1A the following nine (9) calls:

- 1. South 7°41'16" West a distance of 391.64 feet to an iron rod set for angle point;
- 2. South 47°24'05" West a distance of 328.85 feet to an iron rod set for angle point,
- 3. South 60°1'39" West a distance of 554.55 feet to an iron rod set for corner,
- 4. North 53°53'00" West a distance of 376.96 feet to an iron rod set for corner.
- 5. South 25°0'58" West a distance of 10.19 feet to an iron rod set for corner.
- 6. North 52°1'30" West a distance of 670.31 fact to an Iron rod set for corner,
- 7. South 58°47'40" West a distance of 1190.33 feet to an iron rod set for angle point;
- 8. South 58°38'12" West a distance of 883.92 feet to an iron rod found for the most northerly corner of said 5.002 acre tract:
- 9. South 24°1'41" East a distance of 271.88 feet to an iron rod set for corner,

THENCE South 59°34'59" West a distance of 452.50 feet to an iron rod set on the northeasterly line of Haynie Flat Road;

THENCE along said line of Haynie Flat Road the following nine (9) calls:

- 1. North 21°49'35" West a distance of 552.80 feet to a point of curvature of a curve to the left;
- a length of 415.97 feet along the arc of said curve to the left having a radius of 778.66 feet and a chord bearing North 33°9'08" West a distance of 411.04 feet to a point of compound curvature;
- 3. a length of 216.61 feet a curve to the left having a radius of 932.48 feet and a chord bearing North 56°26'30" West a distance of 216.32 feet to an endpoint;
- 4. North 64°25'35" West a distance of 182.76 feet to a point for corner,
- 5. North 25°34'27" East a distance of 5.22 feet to a point for comer,
- 6. North 64°25'35" West a distance of 56.48 feet to an angle point;
- 7. North 70°0'37" West a distance of 393,28 feet to an angle point;
- 8. North 69°10'15" West a distance of 195.53 feet to an angle point;
- 9. North 69°14'34" West a distance of 305.06 feet to an iron rod set for corner,

THENCE North 20°55'26" East a distance of 267.19 feet to an iron rod set for corner.

THENCE South 80°1948" East a distance of 50.67 feet to an iron rod set for corner;

THENCE North 9°4012" East a distance of 28.90 feet to an iron rod set for comer on the southerty r-o-w line of Gallery Drive and Lot 43, LakeCliff on Lake Travis Section Eleven;

THENCE along Gallery Drive and said Lot 43 the following three (3) calls:

South 80° 19'48" East a distance of 535.50 feet to an iron rod set for point of curvature
of a curve to the left,

a length of 476.60 feet along the arc of said curve to the left having a radius of 818.20 feet and a chord bearing North 82°58'57" East a distance of 469.89 feet to an iron rod set for point of tangency;

3. North 66"17'43" East a distance of 481.07 feet to an iron rod set for point of curvature

of a curve to the right,

THENCE a length of 39.43 feet along the arc of said curve to the right having a radius of 25.00 feet and a chord bearing South 68°31'06" East a distance of 35.47 feet to an iron rod set for point of tangency on the southwesterly r-o-w line of Kahala Sunset Drive;

THENCE along said line of Kahala Sunset Drive and Lot 43 the following three (3) calls:

1. South 23°19'55" East a distance of 63.13 feet to an iron rod set for point of curvature of a curve to the left;

 a length of 390.54 feet along the arc of said curve to the left having a radius of 436.18 feet and a chord bearing South 48°58'55" East a distance of 377.62 feet to an iron rod set for point of tangency;

3. South 74°37'37" East a distance of 258.83 feet to the POINT OF BEGINNING and containing 70.898 acres of land, more or less, and as shown on map of survey prepared herewith.

Surveyed by:

James E. Garon

Registered Professional Land Surveyor

C/james/mydocuments/legals/travis/lakediff/gctract1rev.doc



CONSENT OF LIENHOLDER

The undersigned, Security State Bank and Trust, Fredericksburg, Texas, being the owners and holders of an existing lien(s) upon and against the real property described in the foregoing Treated Effluent Line Easement, as such lienholder, do hereby consent to and join in said Easement.

join in said Easement.		
This consent and joinder shall not be construed or operate as a release of any		
mortgage or liens owned and held by the undersigned, or any part thereof.		
mortgage or liens owned and held by the undersigned, or any part thereof. SIGNED this the		
SECURITY STATE BANK AND TRUST FREDERICKSBURG, TEXAS BY:		
Name: Joe David Sterrer		
Title: 50. V.C.		
THE STATE OF TEXAS § COUNTY OF GILLESPIE §		
BEFORE ME, the undersigned authority, on this day personally appeared Toe Double Shared of Security State Bank and Trust, Fredericksburg, Texas, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and considerations therein expressed.		
GIVEN under my hand and seal this the 9th day of June, 2006.		
Notary Public-State of Texas Printed Name of Notary: Notary Public State of Texas Printed Name of Notary: My Commission Expires My Commission Expires: Oct 10-2008		

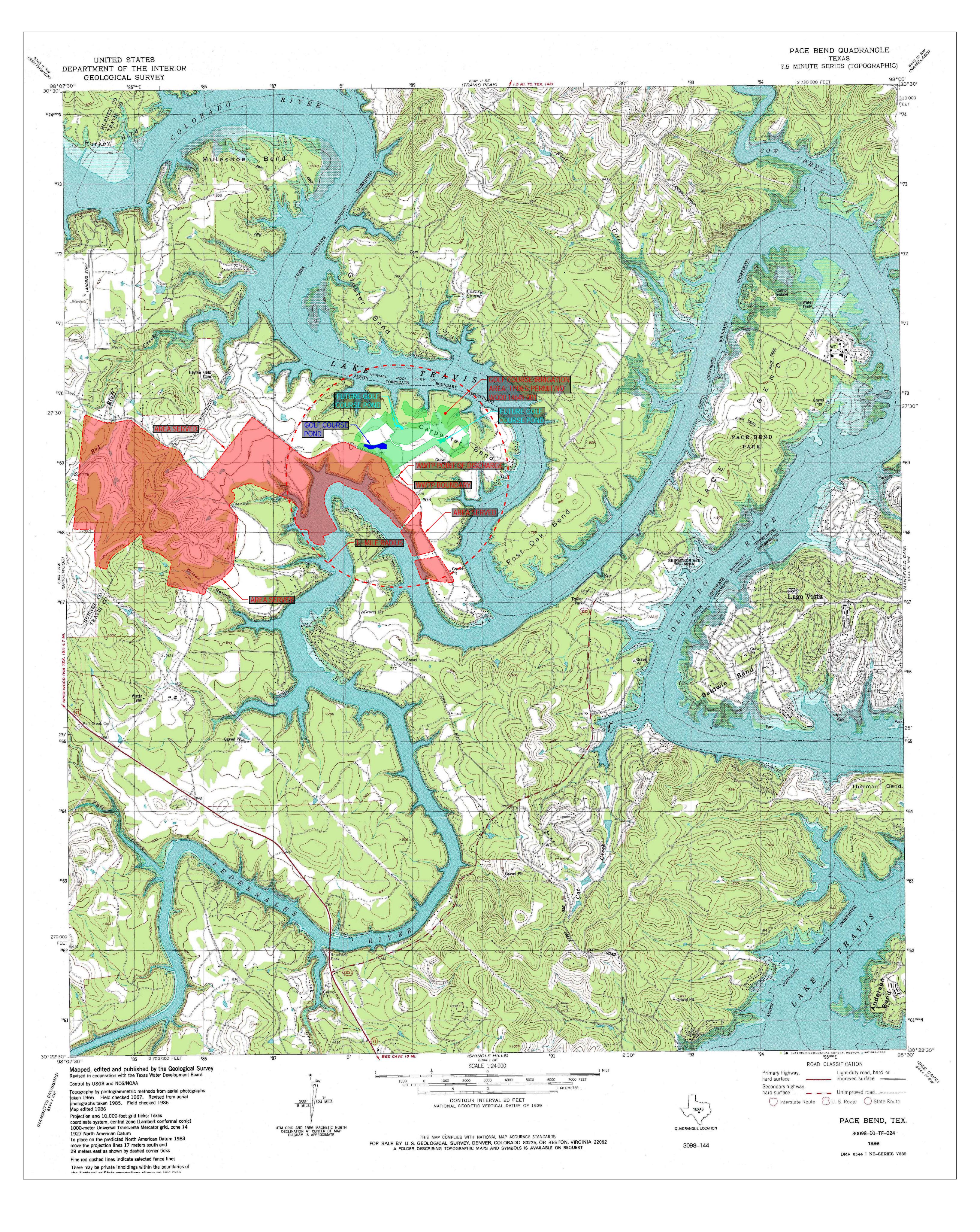


Attachment 2

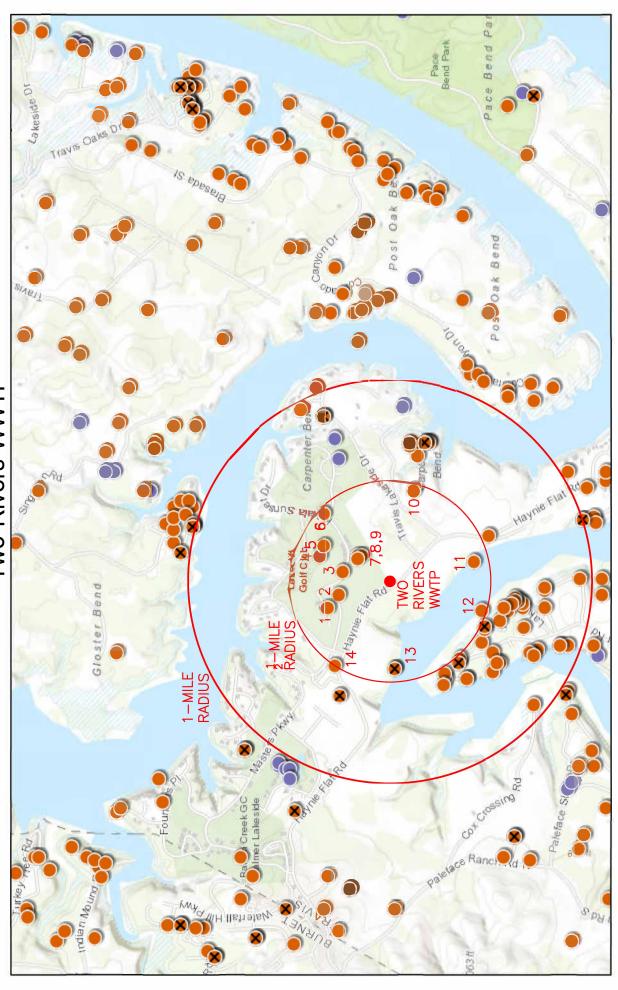
USGS Quadrangle Maps

Section 13, Page 11 of 24

(Administrative Report 1.0)



Two Rivers WWTP





Plugging Reports Well Reports

TWDB Groundwater



Sources: Esti, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri

November 5, 2024

The data in Water Data Interactive represents the best available information provided by the TWDB and third-party cooperators of the TWDB.

The TWDB provides information via this web site as a public service. Neither the State of Texas nor the TWDB assumes any legal liability or responsibility or makes any guarantees or warranties as to the accuracy, completeness or suitability of the information for any particular purpose. The TWDB systematically revises or removes data discovered to be incorrect. If you find inaccurate information or have questions; please contact WDI-Support@ twdb texas gov.

Owner Well #: Owner: No Data **Lakecliff Racquet Club**

Address: 25609 Kahala Sunset Ct Grid #: 57-40-5

Well Location:

Spicewood, TX 78669

Latitude: 30° 27' 19" N 25609 Kahala Sunset Ct

Spicewood, TX 78669 Longitude: 098° 04' 42" W

Well County: **Travis** Elevation: No Data

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 5/7/2020 Drilling End Date: 5/7/2020

Diameter (in.) Top Depth (ft.) Bottom Depth (ft.) Borehole: 8.5 0 246

Drilling Method: Air Rotary

Borehole Completion: 3/8 Pea Gravel 100-246

Annular Seal Data: No Data

> Seal Method: Pressure Distance to Property Line (ft.): 15

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 Sleeve Installed Surface Completion: Surface Completion by Driller

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: Jetted Yield: 60+ GPM Water Quality: Strata Depth (ft.) Water Type

107 - 226 Trinity - TDS 650

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Apex Drilling, Inc.

P.O. Box 867

Marble Falls, TX 78654

Driller Name: Andrew Jackson Johnson License Number: 54989

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 1 Top Soil 1 22 Ta Red LS 22 47 Tan LS 47 80 **Gray Tan LS** 80 107 **Gray Clay** 128 Red SS 107 128 159 Gravel 159 169 Red SS 169 226 Gravel 226 246 Tan Clay

Dla (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
4.5	Blank	New Plastic (PVC)	SDR17	2	166
4.5	Screen	New Plastic (PVC)	.035	166	226
4.5	Blank	New Plastic (PVC)	SDR17	226	246

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.

Owner: Lakecliff Country Club Owner Well #: 1

Address: 1700 Kahala Sunset Drive Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 1700 Kahala Sunset Drive

Latitude: 30° 27' 16" N

Spicewood, TX 78669 Longitude: 098° 04' 38" W

Well County: Travis Elevation: 809 ft. above sea level

Type of Work: New Well Proposed Use: Irrigation

Drilling Start Date: 2/29/2012 Drilling End Date: 3/13/2012

 Diameter (in.)
 Top Depth (ft.)
 Bottom Depth (ft.)

 Borehole:
 9.875
 0
 220

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 16 220 Gravel

Annular Seal Data:

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

15ptIn2hlpl2bns

Seal Method: Pos. Displacement Distance to Property Line (ft.): 200+

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: 153 ft. below land surface on 2012-03-06 Measurement Method: Unknown

Packers: Gravel Pack

Type of Pump: Submersible Pump Depth (ft.): 200

Well Tests: Pump Yield: 30 GPM

Water Quality: Strata Depth (ft.) Water Type

Water Quality: 160-220 Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	4	Topsoil
4	18	Brown Red Limestone
18	19	Yellow White Limestone
19	28	White Limestone
28	29	Yellow Limestone
29	39	Yellow White Limestone
39	40	Void
40	45	Brown Limestone
45	70	Gray Limestone
70	75	Brown Clay
75	83	Gray Limestone
83	86	Blue Clay
86	140	Sand Brown Limestone
140	155	Red Clay Sand
155	218	Red Sand Big Rock
218	240	Black Clay-Smith Wick

Dia. (in.) New/Used	Type	Setting From/To (ft.)			
6.9 New PVC-SDR 17IB +2'/106'					
6.9 New PVC-17 Slotted .035 160'/220'					

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Please include the report's Tracking Number on your written request.

Owner: Mark Sitterle Owner Well #: 1

Address: 2400 Cliff Point Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 2400 Cliff Point Latitude: 30° 27' 15" N

Spicewood, TX 78669 Longitude: 098° 04' 31" W

Well County: Travis Elevation: 535 ft. above sea level

Type of Work: New Well Proposed Use: Irrigation

Drilling Start Date: 9/17/2013 Drilling End Date: 9/23/2013

 Diameter (in.)
 Top Depth (ft.)
 Bottom Depth (ft.)

 Borehole:
 8
 0
 240

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 124 240 Gravel

Annular Seal Data:

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

1hlp5bns6TypH

Seal Method: **Pos. Displacement** Distance to Property Line (ft.): **35**

Sealed By: **Driller**Distance to Septic Field or other

concentrated contamination (ft.): 300+

Distance to Septic Tank (ft.): **No Data**Method of Verification: **Measured**

Surface Completion: Pitless Adapter Used

Water Level: 124 ft. below land surface on 2013-09-18 Measurement Method: Unknown

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 180

Well Tests: Jetted Yield: 15+ GPM

Strata Depth (ft.)	Water Type
160/230	Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Apprentice Name: Travis Haffelder

Comments: TDS 500

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	2	Topsoil
2	18	White Brown Yellow Limestone
18	20	Brown Limestone
20	30	Tan Brown Limestone
30	40	Gray Limestone wet
40	43	Brown Limestone
43	74	Gray Limestone
74	76	Brown Shale
76	85	Gray Limestone Shale
85	110	Red Sandstone Rock
110	140	Brown Limestone Rock
140	230	Brown Rock
230	240	Gravel Black Clay

Dia. (in.) New/Used	Type	Setting From/To (ft.)		
4.5 New PVC-SDR 17IB +2'/180'				
4.5 New PVC-17	Slotted	.035 180'/240'		

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Please include the report's Tracking Number on your written request.

Owner: Rod Sellers Owner Well #:

Address: **P.O. Box 890649** Grid #: **57-40-5**

Houston, TX 77289

Well Location: 25714 Cliff Circle Latitude: 30° 27' 21" N

Spicewood, TX 78669 Longitude: 098° 04' 26" W

Well County: Travis Elevation: 768 ft. above sea level

Type of Work: New Well Proposed Use: Irrigation

Drilling Start Date: 9/24/2013 Drilling End Date: 9/25/2013

 Diameter (in.)
 Top Depth (ft.)
 Bottom Depth (ft.)

 Borehole:
 8
 0
 220

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 100 220 Gravel

Annular Seal Data:

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

2hlpg5bnsl9TypH

Seal Method: **Pos. Displacement** Distance to Property Line (ft.): 5

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **250+**

Distance to Septic Tank (ft.): No Data

Method of Verification: Measured

Surface Completion: Pitless Adapter Used

Water Level: 144 ft. below land surface on 2013-09-26 Measurement Method: Unknown

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 180

Well Tests: Jetted Yield: 15+ GPM

Strata Depth (ft.)	Water Type
160/220	Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Apprentice Name: Travis Haffelder

Comments: TDS 500

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	22	White Limestone
22	45	Brown Limestone Sand Wet
45	95	Gray Limestone Shale
95	118	Red Sandstone Sand
118	160	Red Brown Sandstone
160	216	Brown Sandstone Rock
216	220	Gray Black Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Type	Setting From/To (ft.)			
4.5 New PVC-SDR 17IB +2'/160'					
4.5 New PVC-17	Slotted	.035 160'/220'			

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Please include the report's Tracking Number on your written request.

Owner: Bart Jones Owner Well #: 1

Address: 25630 Cliff Crossing Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 25630 Cliff Crossing

Latitude: 30° 27' 20" N

Spicewood, TX 78669 Longitude: 098° 04' 23" W

Well County: Travis Elevation: 731 ft. above sea level

Type of Work: New Well Proposed Use: Irrigation

Drilling Start Date: 2/21/2014 Drilling End Date: 2/24/2014

 Diameter (in.)
 Top Depth (ft.)
 Bottom Depth (ft.)

 Borehole:
 8.5
 0
 200

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 140 200 Gravel

Annular Seal Data:

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

10bns/7hlp/3tyH

Seal Method: **Pos. Displacement** Distance to Property Line (ft.): **20**

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **6**

Distance to Septic Tank (ft.): No Data

Method of Verification: Measured

Surface Completion: Unknown

Variance Number: 032-14

Water Level: 112 ft. below land surface on 2014-02-24 Measurement Method: Unknown

Packers: No Data

Type of Pump: No Data

Well Tests: Jetted Yield: 15-18 GPM

Strata Depth (ft.)	Water Type
140/200	Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Apprentice Name: Travis Haffelder

Comments: TDS 650

Variance 032-14

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	6	White Limestone Hard
6	7	Brown Limestone
7	15	Brown White Limestone Hard
15	17	Brown Sandstone
17	32	Gray Limestone
32	55	Gray Limestone
55	60	Gray Shale
60	62	Brown Sandstone
62	80	Gray Limestone
80	90	Red Sandstone Damp
90	92	Blue Shale Gravel
92	120	Red Sandstone
120	140	Gravel Red Sandstone
140	198	Gravel & Rock
198	200	Blue Shale Clay

Dia. (in.) New/Used	Type	Setting From/To (ft.)		
4.5 New PVC-SDI	R 17IB	+2'/140'		
4.5 PVC-17 Slotted .035 140'/200'				

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Please include the report's Tracking Number on your written request.

Owner: Stephan James Owner Well #: 1

Address: 3030 Cliff Overlook Grid #: 57-40-5

Well Location: 3030 Cliff Overlook Latitude: 30° 27' 20" N

Spicewood, TX 78669 Longitude: 098° 04' 13" W

Well County: Travis Elevation: 950 ft. above sea level

Type of Work: New Well Proposed Use: Irrigation

Drilling Start Date: 9/19/2013 Drilling End Date: 9/23/2013

Spicewood, TX 78669

 Diameter (in.)
 Top Depth (ft.)
 Bottom Depth (ft.)

 Borehole:
 8
 0
 200

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

Annular Seal Data:

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

2hpg5bnsl6TypH

Seal Method: **Pos. Displacement** Distance to Property Line (ft.): **9'**

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **200+**

Distance to Septic Tank (ft.): No Data

Method of Verification: Measured

Surface Completion: Pitless Adapter Used

Water Level: 125 ft. below land surface on 2013-09-24 Measurement Method: Unknown

Packers: 6MIL Poly 100'

Type of Pump: Submersible

Well Tests: Jetted Yield: 06 GPM

Strata Depth (ft.)	Water Type
160/195	Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Apprentice Name: Travis Haffelder

Comments: TDS 500

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	5	White Limestone
5	6	Brown Limestone
6	16	Brown White Limestone
16	50	Gray Limestone
50	55	Gray Shale
55	70	Gray Red Shale
70	78	Gray Limestone
78	90	Brown Red Sand
90	180	Red Sand Rock
180	195	Brown Sand Rock
195	200	Black Clay

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)
4.5 Nev	v PVC-SDF	R 17IB -	+2'/140'
4.5 New PVC-17 Slotted .035 140'/180'			
4.5 New PVC-SDR 17IB 180'/200'			

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Please include the report's Tracking Number on your written request.

Owner: Terry Neiman Owner Well #: No Data

Address: **PO Box 4007** Grid #: **57-40-5**

Horseshoe Bay, TX 78657

Well Location: 25264 Kahala Sunset Court Latitude: 30° 27' 11" N

Spicewood, TX 78669 Longitude: 098° 04' 27" W

Well County: Travis Elevation: 771 ft. above sea level

Type of Work: New Well Proposed Use: Irrigation

Drilling Start Date: 6/2/2014 Drilling End Date: 6/4/2014

 Diameter (in.)
 Top Depth (ft.)
 Bottom Depth (ft.)

 Borehole:
 8.75
 0
 240

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 154 240 Gravel

Annular Seal Data:

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

2 3/8hp12bs2ptl

Seal Method: **Pos. displacement** Distance to Property Line (ft.): **15**

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **N/A**

Variance Number: **064-14**Distance to Septic Tank (ft.): **No Data**

Method of Verification: Measured

Method of Verification. Measured

Surface Completion: Pitless Adapter Used

Water Level: 160 ft. below land surface on 2014-06-02 Measurement Method: Unknown

Packers: Gravel Pack

Type of Pump: Submersible Pump Depth (ft.): 200

Well Tests: Jetted Yield: 10-15 GPM

Water Quality: Strata Depth (ft.) Water Type

Water Quality: 140-240 Good TDS 470

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

PO Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Apprentice Name: Travis Haffelder Apprentice Number: 58603

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	3	Red tan sandstone
3	4	White limestone
4	10	Brown tan limestone sandstone
10	21	Red tan sand clay
21	24	White limestone
24	44	White brown sandstone
44	51	Brown sandstone
51	85	Gray limestone
85	90	Gray shale
90	95	Red gray shale
95	113	Gray sandstone
113	130	Red sandstone
130	230	Brown sandstone rock
230	240	Blue brown shale

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)
4.5 New	PVC-SDF	R 17IB +	⊦2 to 160
4.5 New PVC-17 Slotted .035 160 to 220			
4.5 New PVC-SDR 17IB 220 to 240			

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Please include the report's Tracking Number on your written request.

Owner Well #: Owner: **Bill Thomas**

Address: 25616 Kahala Sunset Ct. Grid #: 57-40-5

Spicewood, TX 78669

Latitude: 30° 27' 11" N Well Location: 25616 Kahala Sunset Ct.

> Spicewood, TX 78669 Longitude: 098° 04' 26" W

Well County: **Travis** Elevation: 793 ft. above sea level

Type of Work: **New Well** Proposed Use: Irrigation

Drilling Start Date: 9/25/2013 Drilling End Date: 9/27/2013

Diameter (in.) Top Depth (ft.) Bottom Depth (ft.) Borehole: 8 0 260

Drilling Method: Air Rotary

Borehole Completion: **Filter Packed**

Bottom Depth (ft.) Filter Material Size Top Depth (ft.) Filter Pack Intervals: 123 200 Gravel

Top Depth (ft.) Bottom Depth (ft.) Description (number of sacks & material) Annular Seal Data: 127 1hlpg5bnsl6TypH

Seal Method: Pos. Displacement Distance to Property Line (ft.): 6

Sealed By: Driller Distance to Septic Field or other

concentrated contamination (ft.): 150+

Distance to Septic Tank (ft.): No Data

Method of Verification: Measured

Surface Completion: **Pitless Adapter Used**

Water Level: 167 ft. below land surface on 2013-09-26 Measurement Method: Unknown

Packers: No Data

Type of Pump: **Submersible** Pump Depth (ft.): 200

Well Tests: Jetted Yield: 20+ GPM Water Quality: Strata Depth (ft.) Water Type

Cood

Cood

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Apprentice Name: Travis Haffelder

Comments: TDS 500

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

From (ft) To (ft)	Description
0-1/2 Topsoil	
1/2-6 Red Clay Sand	d
6-18 Red Sandston	e White Limestone
18-20 Brown Limes	tone
20-45 White Limest	one
45-47 Brown Sands	tone White Limestone
47-53 Brown Limes	tone
53-110 Gray Limest	one
110-135 Red Sands	tone
135-137 Brown San	dstone
137-200 Red Rock \$	Sandstone
200-250 Brown Lim	estone
250-260 Black Clay	

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)		
4.5 New PVC-SDR 17IB +2'/200'					
4.5 New PVC-17 Slotted .035 200'/260'					

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Please include the report's Tracking Number on your written request.

Owner: John & Sheryl Scott Owner Well #: 1

Address: 25617 Kahala Sunset Ct. Grid #: 57-40-5

Spicewood, TX 78669

Well Location: 25617 Kahala Sunset Ct

Spicewood, TX 78669

Latitude: 30° 27' 10" N

Longitude: 098° 04' 26" W

Well County: Travis Elevation: 793 ft. above sea level

Type of Work: New Well Proposed Use: Irrigation

Drilling Start Date: 9/18/2013 Drilling End Date: 9/23/2013

 Diameter (in.)
 Top Depth (ft.)
 Bottom Depth (ft.)

 Borehole:
 8
 0
 280

Drilling Method: Air Rotary

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 164 280 Gravel

Annular Seal Data:

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

1hlpg6bnsl6TypH

Seal Method: Pos. Displacement Distance to Property Line (ft.): 8

Sealed By: **Driller**Distance to Septic Field or other concentrated contamination (ft.): **300+**

Distance to Septic Tank (ft.): No Data

Method of Verification: Measured

Surface Completion: Pitless Adapter Used

Water Level: 163 ft. below land surface on 2013-09-18 Measurement Method: Unknown

Packers: No Data

Type of Pump: Submersible Pump Depth (ft.): 240

Well Tests: Jetted Yield: 15+ GPM

Strata Depth (ft.)	Water Type
230/275	Good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Whisenant & Lyle Water Services

P.O. Box 525

Dripping Springs, TX 78620

Driller Name: Martin Lingle License Number: 54813

Apprentice Name: Travis Haffelder

Comments: TDS 500

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Caliche
1	5	Red Sandstone
5	8	Brown Sandstone
8	10	Gray Brown Sandstone
10	12	Brown Red Limestone
12	18	Red Sandstone
18	20	Brown Limestone
20	21	Red Shale
21	23	Brown Limestone
23	30	Light Brown Red Sandstone
30	32	Yellow Limestone
32	50	White Limestone
50	55	Brown Red Sand
55	95	Gray Limestone
95	97	Brown Red Shale
97	115	Gray Limestone
115	117	Red Sandstone

Dia. (in.) New/Used	Туре	Setting From/To (ft.)		
4.5 New PVC-SDR 17IB +2'/240'				
4.5 New PVC-17 Slotted .035 240'/280'				

117	140	Brown Red Sandstone
140	145	Rock Red Sandstone
145	200	Red Sandstone
200	275	Brown Rock Sandstone
275	280	Gray & Black Clay

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Please include the report's Tracking Number on your written request.

Owner: Heiser Development c/oJason Mann Owner Well #: 1

Address: 901 S. Mopac, Bldg 2, Ste 505 Grid #: 57-40-5

Austin, TX 78746

Well Location: 2205 Haney Creek Dr.

Spicewood, TX 78669

Latitude: 30° 26' 56" N

Longitude: 098° 04' 06" W

Well County: Travis Elevation: 764 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 8/24/2011 Drilling End Date: 10/15/2011

 Diameter (in.)
 Top Depth (ft.)
 Bottom Depth (ft.)

 Borehole:
 7.875
 0
 200

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

Annular Seal Data:

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

2hlplg 15ptld

Seal Method: Pos. Displacement Distance to Property Line (ft.): 100+

Sealed By: Whisenant & Lyle Water Distance to Septic Field or other

Service

concentrated contamination (ft.): **No Data**

contrated contamination (iii). The Data

Distance to Septic Tank (ft.): No Data

Method of Verification: measured

Surface Completion: Surface Sleeve Installed

Water Level: 116 ft. below land surface on 2011-08-25 Measurement Method: Unknown

Packers: 6Mil poly 60

6Mil poly 100

6Mil poly-Shale packer 160

Type of Pump: Submersible Pump Depth (ft.): 160

Well Tests: Jetted Yield: 20+ GPM

Strata Depth (ft.)	Water Type
140/ 200	good

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which contained injurious constituents?:

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. 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

No

Top (ft.)	Bottom (ft.)	Description
0	1	Topsoil
1	18	White limestone
18	37	Brown sand limestone
37	70	Gray limestone sand
70	80	Gray shale
80	95	Gray clay
95	98	Gray limestone
98	140	Red sandstone
140	198	Gravel
198	200	Blue clay

4.5 New PVC-17 Slotted .035 140-200				
4.5 New PVC-SDR 17IB +2 / 140'				
Dia. (in.) New/Used	Туре	Setting From/To (ft.)		

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.

Owner Well #: Owner: No Data **STEVE HUGHES**

Address: 1251 LAKESHORE DR Grid #: 57-40-5

Latitude: 30° 26' 40" N Well Location: **1231 LAKESHORE DR**

SPICEWOOD, TX 78669 Longitude: 098° 04' 28" W

Well County: **Travis** Elevation: 853 ft. above sea level

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: 8/27/2007 Drilling End Date: 8/27/2007

Top Depth (ft.)

SPICEWOOD, TX 78669

Diameter (in.) Top Depth (ft.) Bottom Depth (ft.) Borehole: 10 0 140

Drilling Method: Air Rotary

Borehole Completion: **Open Hole**

Annular Seal Data: 0 2 2 2 100 16

Seal Method: PRESSURE CEMENTED

Bottom Depth (ft.)

Sealed By: Driller Distance to Septic Field or other

concentrated contamination (ft.): No Data

Distance to Septic Tank (ft.): No Data

Distance to Property Line (ft.): No Data

Description (number of sacks & material)

Method of Verification: NOT YET INSTALLED

Surface Completion: **Surface Sleeve Installed**

Water Level: 55 ft. below land surface on 2007-08-28 Measurement Method: Unknown

Packers: **NEOPRENE 100**

> **NEOPRENE 118 NEOPRENE 120**

Submersible Type of Pump: Pump Depth (ft.): 126

Well Tests: **Jetted** Yield: 80 GPM

Strata Depth (ft.)	Water Type
No Data	No Data

Chemical Analysis Made: Yes

Did the driller knowingly penetrate any strata which

contained injurious constituents?: No

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: BEE CAVE DRILLING INC

185 ANGELFIRE DR

DRIPPING SPRINGS, TX 78620

Driller Name: BOBBY ROBERTS License Number: 54416

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	1	TOPSOIL
1	2	SURFACE ROCK
2	14	BROWN GRAVEL
14	35	TAN LIMESTONE
35	70	BLUE SHALE
70	80	RED SHALE
80	115	RED CLAY
115	140	RED ROCK W/B 80 GPM TDS 660

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)	
4.5 NEW PLASTIC 0-120				
4.5 NEW SCREEN MFG 120-140 .050				

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Please include the report's Tracking Number on your written request.

Owner: LARRY EISENBERG Owner Well #: No Data

Address: 3004 SPARKLING BROOK LN Grid #: 57-40-5

AUSTIN, TX 78746

Well Location: 25204 SUNSET RIVER CR

SPICEWOOD, TX 78669 Longitude: 098° 04' 43" W

Well County: Travis Elevation: 800 ft. above sea level

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 4/12/2007 Drilling End Date: 4/12/2007

Top Depth (ft.)

 Diameter (in.)
 Top Depth (ft.)
 Bottom Depth (ft.)

 Borehole:
 10
 0
 12

8 12 170

Drilling Method: Air Rotary

Borehole Completion: Open Hole

Annular Seal Data: 0 2 2

2 105 9

Seal Method: PRESSURE CEMENTED Distance to Property Line (ft.): No Data

Bottom Depth (ft.)

Sealed By: **CESAR RAMOS**Distance to Septic Field or other concentrated contamination (ft.): **86**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: STEEL TAPE

Description (number of sacks & material)

Surface Completion: Surface Sleeve Installed

Water Level: 90 ft. below land surface on 2007-04-14 Measurement Method: Unknown

Packers: NEOPRENE 105

NEOPRENE 110 NEOPRENE 128 NEOPRENE 130

Type of Pump: Submersible Pump Depth (ft.): 160

Well Tests: Jetted Yield: 30 GPM

Water Quality:

No Data

Water Type

No Data

Chemical Analysis Made: Yes

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: BEE CAVE DRILLING

185 ANGELFIRE DR

DRIPPING SPRINGS, TX 78620

Driller Name: JIM BLAIR License Number: 54416

Apprentice Name: CESAR RAMOS Apprentice Number: 57534

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.) Bottom (ft.) Description 0 2 **TOPSOIL** 2 28 **TAN ROCK** 28 38 **GREY ROCK** 38 90 **BLUE SHALE** 90 115 **BLACK ROCK** 115 130 **RED CLAY RED ROCK W/B 30 GPM TDS** 130 170 690

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Туре	Setting From/To (ft.)		
4.5 NEW PLASTIC 0-130				
4.5 NEW SCREEN MFG. 130-170 .050				

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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STATE OF TEXAS PLUGGING REPORT for Tracking #147051

Owner: Holzapfel Owner Well #: No Data

Address: 26804 masters parkway Grid #: 57-40-4

spicewood, TX 78669

Well Location: 26804 masters parkway

Latitude: 30° 27' 01" N

spicewood, TX 78669 Longitude: 098° 05' 01" W

Well County: Travis Elevation: No Data

Well Type: Closed-Loop Geothermal

Drilling Information

Company: Sarris well Drilling Date Drilled: 5/23/2014

Driller: Anthony Sarris License Number: 58870

Well Report Tracking #369054

 Diameter (in.)
 Top Depth (ft.)
 Bottom Depth (ft.)

 Borehole:
 4.5
 0
 250

Plugging Information

Date Plugged: 5/23/2014 Plugger: Anthony Sarris

Plug Method: Unknown

Casing Left in Well: Plug(s) Placed in Well:

Description (number of sacks & material)

No Data Not Provided

Certification Data: The driller certified that the driller plugged this well (or the well was plugged under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the reports(s) being returned for completion and resubmittal.

Company Information: Sarris well Drilling

p o box

austin, TX 78760

Driller Name: Anthony Sarris License Number: 58870

Comments: drilled 5 new geothermal closed loop wells 0-250

STATE OF TEXAS WELL REPORT for Tracking #184974

Owner: Carl Jones Owner Well #:

Address: 2525 Bainbridge Street Grid #: 57-40-4

Odessa, TX 79762

Well Location: 24017 Haynie Flat Road Latitude: 30° 27' 17" N

Spicewood, TX 78669 Longitude: 098° 05' 00" W

Well County: Travis Elevation: No Data

Type of Work: New Well Proposed Use: Domestic

Drilling Start Date: 5/27/2009 Drilling End Date: 5/28/2009

 Diameter (in.)
 Top Depth (ft.)
 Bottom Depth (ft.)

 Borehole:
 8
 0
 205

Drilling Method: Air Rotary

Borehole Completion: Straight Wall

Annular Seal Data:

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

30

Seal Method: **Tremie** Distance to Property Line (ft.): **31**

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: 97 ft. below land surface on 2009-06-13 Measurement Method: Unknown

Packers: neophrene/burlap 125'

Type of Pump: Submersible Pump Depth (ft.): 100

Well Tests: Estimated Yield: 10 GPM

Water Quality: Strata Depth (ft.) Water Type

125'-205' Trinity

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: Associated Drilling Co.

PO Box 1060

Manchaca, TX 78652

Driller Name: Byron Benoit License Number: 1955

Apprentice Name: Frank Barnard Apprentice Number: 56366

Comments: No Data

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description	
0	1	topsoil	
1	125	tan lime	
125	205	broken red sandstone	

Dia. (in.) New/Used	Type	Setting From/To (ft.)	
4.5" New Plastic -2' to 205' sdr17			
slotted 125'-205'			

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



Treatment Unit Dimensions

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(Technical Report 1.0)

THOMAS RANCH 160,000 GPD (10/15 BOD/TSS EFFLUENT)

Data	Quantity	
Permitted Average Daily Flow	160,000 gpd 111 gpm 0.248 cfs	
Peak 2-hour Flow	640,000 gpd 444 gpm 0.990 cfs	
BOD5 Loading	325 mg/l	
Maximum Aeration Zone Loading	45 lbs of BOD5 / 1,000 cf	
Minimum Aerobic Digester Loading	20 cf/lbs of BOD5/day	
Minimum SRT for Digester	40 days @ 1.5 % Concentration	n
Maximum Clarifier Surface Loading	1,200 gpd/sf (@ peak flow)	
Minimum Clarifier Detention Time	1.8 hr (@ peak flow)	
Minimum Disinfection Basin Detention Time	20 min (@ peak flow)	
Air Supply (Aeration Zone)	1,800 scfm/day/lb of BOD5	
Air Supply (Aerobic Digester)	30 scfm/1,000 cf of volume	
Air Supply (Disinfection)	20 scfm/1,000 cf of volume	

Calculations of Requirements

BOD5 Loading	433.68 lbs/da	у
Unit Requirements	Quantity	
Aeration Zone Volume	9,637 cf	
Aerobic Digester Volume at Minimum Loading	8,674 cf	
Aerobic Digester Volume at Minimum SRT	5,204 cf	
Clarifier Surface Area	533 sf	
Clarifier Volume at Minimum Detention Time	6,417 cf	
Disinfection Volume	1,188 cf	
Air Supply Requirements	Quantity	
Aeration Process	509 scfm	Note: The process calculation is based on 10' of
Digester	161 scfm	submergence with a correction factor of 1.56 and
Disinfection	28 scfm	clean water transfer efficiency of 0.85% per foot of
Air Lift Pumps & Initial Mixing	100 scfm	submergence.
Total Air Required	798 scfm	_

Proposed Unit Features

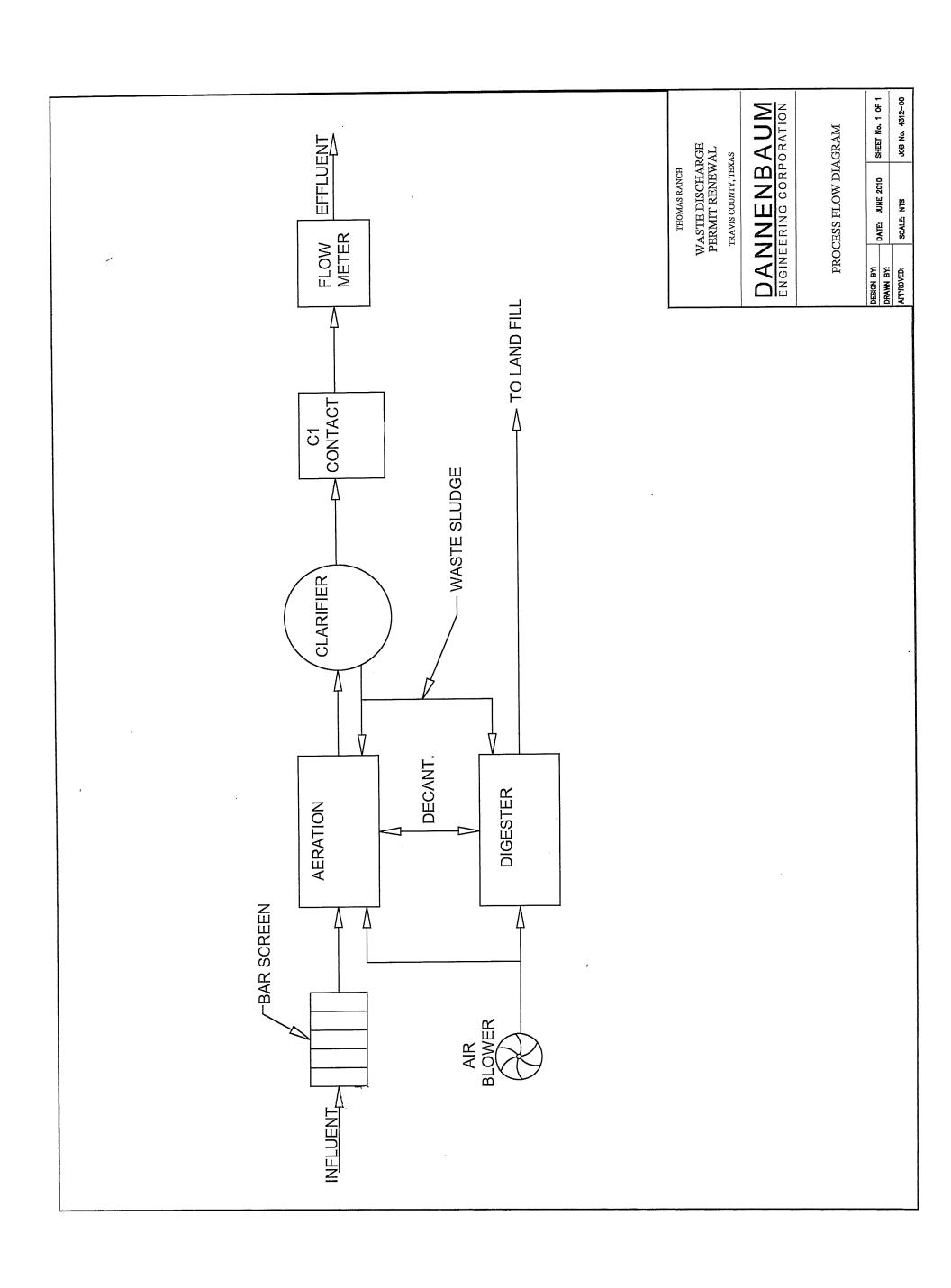
Proposed Units	Quantity	#Units	Length	Width	Height	SWD
Aeration Zone Volume	10,080 cf	2	40	12	12.17	10.50
Aerobic Digester Volume	5,362 cf	2	20	12	12.17	11.17
Clarifier Surface Area	707 sf	1		30	13.17	
Clarifier Volume	7,069 cf					10.00
Chlorine Contact Volume	1,408 cf	1	16	11	10.17	8.00
Blowers	400 scfm	3	20.0 hp			



Flow Diagram

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(Technical Report 1.0)

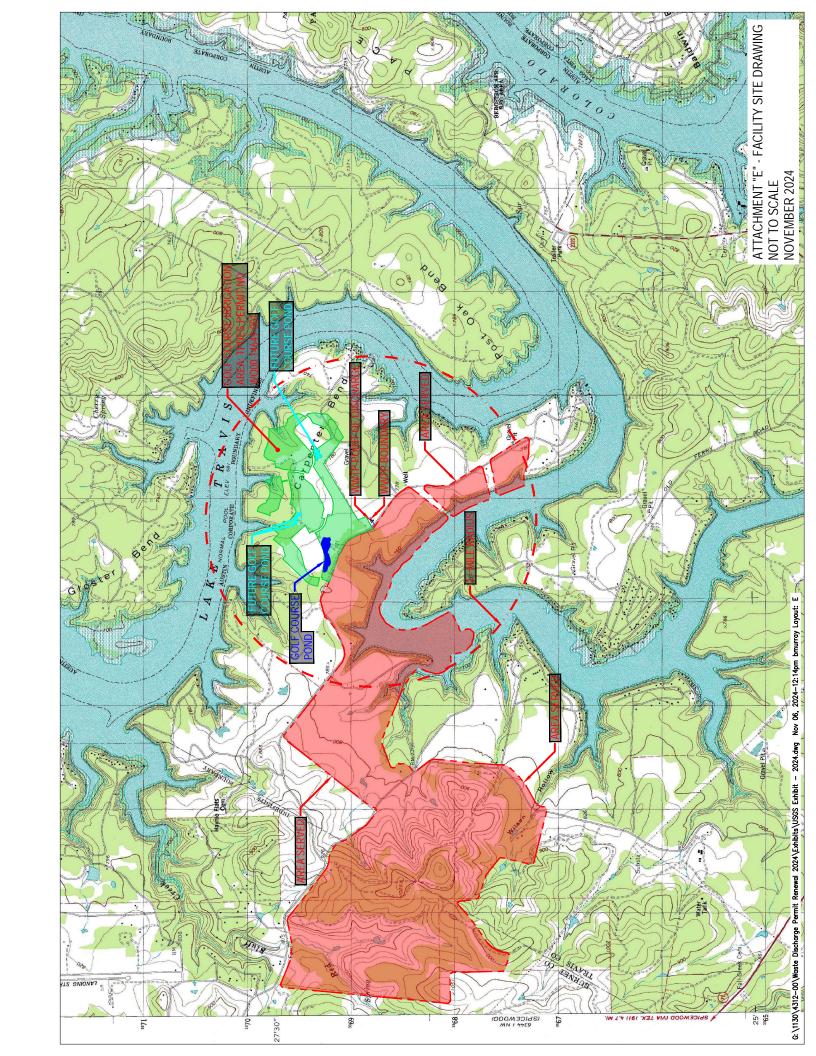




Facility Site Drawing

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(Technical Report 1.0)





Annual Cropping Plan

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(Worksheet 3.0)

<u>Annual Cropping Plan – Lake Cliff on Lake Travis Golf Course</u>

The golf course consists of approximately 177 +/- acres over 18 holes. There is A1 A4 bent grass, Bermuda Ultradwarf, and Zoysia on the greens, Bermuda and Zoysia on the tees, and Bermuda sport turf and Zoysia on the fairways. Grass for the golf course grows April to mid-November and does not grow when night temperatures fall below 70 degrees. Fertilizer is applied 3 to 4 times a year beginning when growing season starts and weed control is done by hand. Additional fertilizer is applied to the greens and tee boxes only when necessary to maintain the vitality of the grass. The greens are mowed daily at or near 0.25-inches and the fairways are mowed two to three times per week at or near 1-inch. The grasses remain the same year round. A soil map with areas to be irrigated is attached. Additional nitrogen is estimated to be required, see attached Nitrogen Balance.

NITROGEN BALANCE

Plant Ultimate Capacity = 320,000 gallons per day Area to be irrigated = 170 Acres

Two Rivers WWTP

320,000 gal/day (365 days/year) = 116,800,000 gallons per year

116,800,000 / 170 acres irrigated = 687,059 gallons per acre per year

687,059 gal/ac / 326,000 gal/ acre-feet = 2.11 acre-Feet / acre

2.11 x 81.6 lbs of Nitrogen/acre-feet = 172 lbs per acre per year

172 lbs per acre per year = 0.0039 lbs/square foot

Lake Cliff Golf Course

Greens:

Bermuda Ultradwarf 3-4 lbs/m Bent 2-3 lbs/m Zoysia 1 lbs/m

Tees:

Bermuda 3-4 lbs/m Zoysia 2 lbs /m

Fairways/Rough:

Bermuda 2-3 lbs/m Zoysia 1.5 lbs/m

M=1,000ft2



USDA Soil Survey Map

Section 7 a, Page 40 of 80

(Worksheet 3.0)

