Administrative Package Cover Page

This file contains the following documents:

1. Summary of application (in plain language)
   - English
   - Alternative Language (Spanish)
2. First Notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
   - English
   - Alternative Language (Spanish)
3. Application materials

Portada de Paquete Administrativo

Este archivo contiene los siguientes documentos:

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

Intersect proposes to operate a new wastewater treatment system at their new data center facility at the Pumpkin project site, which will be located near the intersection of Highway 152 and 21 Road, approximately 17 miles east of the City of Pampa, Gray County, TX. (ZIP #79065).

This application is for the new wastewater treatment system at the facility that will treat nearly 28,700 gallons/day of domestic wastewater.

Treated effluent from the facility are expected to contain concentrations of five-day carbonaceous biochemical demand ($CBOD_5$) and total suspended solids (TSS) lower than the effluent limitations provided in 30 TAC §309.1(b). Please see more details in the Domestic Technical Report, Section 7 Pollutant Analysis of Treated Effluent. Wastewater will be collected by Lift Stations located adjacent to the Data Centers and the Operations Building and will be pumped to a Packaged Biological Treatment System for treatment. The packaged biological treatment system will consist of an influent screen, flow equalization basin, aeration zone and a final clarifier with Return Activated Sludge (RAS) return and a sludge storage zone. The treated effluent will be sent to an on-site HDPE Lined evaporation pond. No discharge to any water body is planned. Septage Hauler to remove the biosolids on a weekly basis to the City of Pampa's Wastewater Treatment Plant by a registered hauler.

Intersect propone operar un nuevo sistema de tratamiento de aguas residuales en su nueva instalación de centro de datos en el sitio del proyecto Pumpkin, el cual estará ubicado cerca de la intersección de la Carretera 152 y el Camino 21, aproximadamente a 17 millas al este de la Ciudad de Pampa, Condado de Gray, TX (C.P. #79065).

Esta solicitud corresponde al nuevo sistema de tratamiento de aguas residuales de la instalación, que tratará aproximadamente 28,700 galones/día de aguas residuales domésticas.

Se espera que el efluente tratado de la instalación contenga concentraciones de demanda bioquímica de oxígeno carbonácea a cinco días (DBO5c) y de sólidos suspendidos totales (SST) inferiores a los límites de descarga establecidos en 30 TAC §309.1(b). Favor de consultar más detalles en el Informe Técnico Doméstico, Sección 7, Análisis de Contaminantes del Efluente Tratado.

Las aguas residuales serán recolectadas mediante estaciones de bombeo ubicadas junto a los Centros de Datos y el Edificio de Operaciones, y serán bombeadas hacia un Sistema Biológico de Tratamiento Empacado para su tratamiento. El sistema biológico empacado consistirá en una reja de influente, un tanque de igualación de caudal, una zona de aireación y un clarificador final con recirculación de Lodos Activados de Retorno (LAR) y una zona de almacenamiento de lodos.

El efluente tratado será enviado a una laguna de evaporación con revestimiento de HDPE ubicada en el sitio. No se contempla ninguna descarga a cuerpos de agua. Un transportista de lodos sépticos removerá los biosólidos semanalmente hacia la Planta de Tratamiento de Aguas Residuales de la Ciudad de Pampa, utilizando un transportista registrado.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

PROPOSED PERMIT NO. WQ0016867001

APPLICATION. IP Meitner DTC, LLC, 9450 Southwest Gemini Drive, PMB 68743, Beaverton, Oregon, 97008, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Land Application Permit (TLAP) No. WQ0016867001 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 28,700 gallons per day via evaporation. The domestic wastewater treatment facility and disposal area will be located approximately 2.0 miles north of the intersection of County Road 21 and Highway 152, approximately 17 miles east of the city of Pampa, in Gray County, Texas 79065. TCEQ received this application on October 1, 2025. The permit application will be available for viewing and copying at Lovett Memorial Library, 111 North Houston Street, Pampa, in Gray 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=-100.7186,35.5875&level=18

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

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

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

OPPORTUNITY FOR A CONTESTED CASE HEARING. After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a

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

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

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

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

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

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

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

Free, at 1-800-687-4040 or visit their website at www.tceq.texas.gov/goto/pep. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from IP Meitner DTC, LLC at the address stated above or by calling Mr. Jeff Watson, Water Resources Lead, IP Meitner DTC, LLC, at 503-489-7528.

Issuance Date: October 30, 2025

Comisión de Calidad Ambiental del Estado de Texas

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

PERMISO PROPUESTO NO. WQ0016867001

SOLICITUD. IP Meitner DTC, LLC, 9450 Southwest Gemini Drive, PMB 68743, Beaverton, Oregon, 97008, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para el propuesto Permiso No. WQ0016867001 de disposición de aguas residuales para autorizar la disposición de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de 28,700 galones por día mediante evaporación. La planta y el área de disposición estarán ubicados aproximadamente 2,0 millas al norte de la intersección de County Road 21 y la carretera 152, aproximadamente 17 millas al este de la ciudad de Pampa, en el Condado de Gray, Texas 79065. La TCEQ recibió esta solicitud el 1 de octubre de 2025. La solicitud para el permiso estará disponible para leerla y copiarla en Biblioteca Lovett Memorial, 111 North Houston Street, Pampa, en el Condado de Gray, 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=-100.718611,35.5875&level=18

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

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

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

una audiencia administrativa de lo contencioso.

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

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

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

La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. **Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.**

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

solicitudes en un condado especifico. Si desea que se agrega su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

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

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

También se puede obtener información adicional del IP Meitner DTC, LLC a la dirección indicada arriba o allamanda a Sr. Jeff Watson al 503-489-7528.

Fecha de emisión: 30 de octubre de 2025

Erwin Madrid

From: Saraf, Abhijeet <abhijeet.saraf@hdrinc.com>
Sent: Tuesday, October 28, 2025 7:13 AM
To: Erwin Madrid
Cc: Corbin, Ian
Subject: RE: Application for Proposed Permit No. WQ0016867001 - Notice of Deficiency Letter
Attachments: Notice of Deficiency Responses_20251028.pdf

Erwin,

Good morning,

Please see our responses to the Notice of Deficiencies for the Proposed Permit No. WQ0016867001. Please let us know if you need any other information from our end.

Thank you very much Erwin,

Abhijeet Saraf
Water/Wastewater EIT

HDR
1917 South 67th Street
D 402.392.6986 **M** 217.979.6333
Abhijeet.Saraf@hdrinc.com

hdrinc.com/follow-us

From: Erwin Madrid <Erwin.Madrid@tceq.texas.gov>
Sent: Friday, October 17, 2025 11:37 AM
To: Saraf, Abhijeet <abhijeet.saraf@hdrinc.com>
Cc: Corbin, Ian <ian.corbin@hdrinc.com>
Subject: Application for Proposed Permit No. WQ0016867001 - Notice of Deficiency Letter
Importance: High

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

Dear applicant,

The attached Notice of Deficiency letter sent on **October 17, 2025**, requests additional information needed to declare the application administratively complete. Please send the complete response to my attention by **October 31, 2025**.

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.

Registration is open for the 2025 Water Quality / Stormwater Seminar on Oct. 21, 2025.

Brooke T. Paup, *Chairwoman*
Catarina R. Gonzales, *Commissioner*
Tonya R. Miller, *Commissioner*
Kelly Keel, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 17, 2025

Mr. Abhijeet Saraf
Water/Wastewater EIT
HDR Engineering, Inc.
1917 South 67th Street
Omaha, Nebraska 68106

RE: Application for Proposed Permit No.: WQ0016867001
Applicant Name: IP Meitner DTC, LLC (CN606436541)
Site Name: IP Meitner DTC WWTP (RN112296629)
Type of Application: New

VIA EMAIL

Dear Mr. Saraf:

We have received the application for the above referenced permit, and it is currently under review. Your attention to the following item(s) are requested before we can declare the application administratively complete. Please submit responses to the following items via email.

1. Section 9.C Name of Project or Site: The facility name or regulated entity name cannot be listed as an "LLC". Please update the site name to something general, for example, "IP Meitner DTC WWTP" or something similar.
   Concur.
   The name of the project site is changed to "IP MEITNER DTC WWTP".
   Please see a copy of the pages with the changes to the Regulated Entity and Permitted Site name to "***IP MEITNER DTC WWTP***" in Attachment 1 to this response.

2. Section 9. D/E Owner of the land and effluent disposal site: The owner of the land and effluent disposal site is listed as "HH and CS, LLC" and the application included an Option Agreement for the Purchase and Sale of Real Estate. This can be accepted to declare the application administratively complete, however, the permit cannot be issued until the applicant fully owns the land and disposal site. If the sale does not occur, a long-term lease will need to be provided.

   Additionally, the Option Agreement that was provided was completely redacted. At a minimum, we need to see the names of the interested parties. Should you wish not to disclose the information, please provide a statement indicating the reason for not disclosing this information.

The redactions to the Purchase Record Agreement have been updated. Please see Attachment 2 of this response with the updated Purchase Record Agreement along with a statement explaining the remaining redactions.

3. Landowner Labels: Please provide the landowner list mailing labels in Word format using Avery 5160 template. Please refer to the application instructions for additional guidance.
   Please provide a written statement attesting to the understanding of this permit application condition.

   Concur.
   Please see the updated landowners list in AVERY 5160 template in Attachment 3 to this response.
   Per TCEQ-10053-inst, it is understood that AVERY Template involves organization of mailing labels in tables with 3 columns across, 10 columns down, for a total of 30 labels per page.

4. The following is a portion of the NORI which contains information relevant to your application. Please read it carefully and indicate if it contains any errors or omissions. The complete notice will be sent to you once the application is declared administratively complete.

   APPLICATION. IP Meitner DTC, LLC, 9450 Southwest Gemini Drive, PMB 68743, Beaverton, Oregon, 97008, has applied to the Texas Commission on Environmental Quality (TCEQ) for proposed Texas Land Application Permit (TLAP) No. WQ0016867001 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 28,700 gallons per day via evaporation. The domestic wastewater treatment facility and disposal area will be located approximately 2.0 miles north of the intersection of County Road 21 and Highway 152, approximately 17 miles east of the city of Pampa, in Gray County, Texas 79065. TCEQ received this application on October 1, 2025. The permit application will be available for viewing and copying at Lovett Memorial Library, 111 North Houston Street, Pampa, in Gray 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=-100.7186,35.5875&level=18

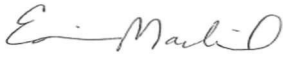
   Further information may also be obtained from IP Meitner DTC, LLC at the address stated above or by calling Mr. Jeff Watson, Water Recources Lead, IP Meitner DTC, LLC, at 503-489-7528.

   The following edit is suggested –
   There is a typographical error in the designation of Mr. Jeff Watson which should be spelled as "***Water Resources Lead***".

5. The application indicates that public notices in Spanish are required. After confirming the portion of the NORI above does not contain any errors or omissions, please use the attached template to translate the NORI into Spanish. Only the first and last paragraphs are unique to this application and require translation. Please provide the translated Spanish NORI in a Microsoft Word document.
   Please see the updated NORI in Spanish in Attachment 4 to this response.

Please submit the complete response, addressed to my attention by October 30, 2025. If you should have any questions, please do not hesitate to contact me by phone at (512) 239-2191 or by email at erwin.madrid@tceq.texas.gov.

Sincerely,



Erwin Madrid
Applications Review and Processing Team (MC148)
Water Quality Division
Texas Commission of Environmental Quality

em

Enclosure(s)

cc: Mr. Ian Corbin, P.E., Project Manager, HDR Engineering, Inc., 5815 Council Street NE, Suite B, Cedar Rapids, Iowa 52402

ATTACHMENT 1

UPDATES TO NAME OF THE
REGULATED ENTITY AND PERMITTED SITE

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

☐ Yes ☒ No

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

☐ Yes ☒ No

PAMPA INDEPENDENT SCHOOL DISTRICT (ISD) WAS CONTACTED VIA A TELEPHONE CALL DATED 09/17 FOR RESPONSES TO QUESTIONS 1, 2, 3 AND 4.

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

F. Summary of Application in Plain Language Template

Complete the F. Summary of Application in Plain Language Template (TCEQ Form 20972), also known as the plain language summary or PLS, and include as an attachment.

Attachment: See attachment 2.

G. Public Involvement Plan Form

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

Attachment: See attachment 3.

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

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

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

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

IP MEITNER DTC WWTP

C. Owner of treatment facility: IP MEITNER DTC, LLC

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

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

Prefix: N/A. Last Name, First Name: Chisum, Jeff

Title: N/A Credential: N/A.

Organization Name: HH and CS, LLC

Mailing Address: 12311 US HWY 60 City, State, Zip Code: Pampa, TX, 79065

Phone No.: (806) 662-6264 E-mail Address: jeff.2jrail@gmail.com

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

Attachment: See attachment 4.

WATER QUALITY PERMIT

PAYMENT SUBMITTAL FORM

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

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

Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

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

BY OVERNIGHT/EXPRESS MAIL

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

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

1. Check or Money Order Number: ePay Trace Number: 582EA000686368.
2. Check or Money Order Amount: N/A.
3. Date of Check or Money Order: N/A.
4. Name on Check or Money Order: N/A.
5. APPLICATION INFORMATION

   Name of Project or Site: IP MEITNER DTC WWTP.

   Physical Address of Project or Site: Section 142, Block M-2 BS&F624.24 AC ABST; The site is located nearly 2 miles north of the intersection of Highway 152 and 21 Road, approximately 17 miles east of the City of Pampa, TX.

   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

15. Mailing Address:	9450 SW Gemini Dr. PMB #68743							
	City	Beaverton	**State**	OR	**ZIP**	97008	**ZIP + 4**	

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	permitting@intersectpower.com

18. Telephone Number	**19. Extension or Code**	**20. Fax Number** *(if applicable)*
(503) 489-7528	N/A	N/A

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.)*

IP MEITNER DTC WWTP

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	Section 142, Block M-2 BS&F624.24 AC ABST							
	City	Pampa	**State**	Texas	**ZIP**	79065	**ZIP + 4**	
24. County	Gray							

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

25. Description to Physical Location:	The site is located nearly 2 miles North of the intersection of Highway 152 and 21 Road, approximately 17 miles east of the City of Pampa, TX.

26. Nearest City	**State**	**Nearest ZIP Code**
Pampa	TX	79065

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

27. Latitude (N) In Decimal:			**28. Longitude (W) In Decimal:**		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
35	35	14.90	100	43	07.57

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
7374		518210	

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

This entity will serve as a Data Center.

ATTACHMENT 2

UPDATED PURCHASE RECORD AGREEMENT WITH STATEMENT EXPLAINING THE REMAINING REDACTIONS

Docusign Envelope ID: 4F64A530-69DC-46BD-BDB6-96ECC543E17A

Intersect Power

intersectpower.com

October 27, 2025

Sent via email to: Erwin.Madrid@tceq.texas.gov

Texas Commission on Environmental Quality
Applications Review and Processing Team | Mail Code 145
P.O. Box 13087
Austin, TX 78711-3087

RE: IP Meitner DTC, LLC Application for Domestic Wastewater Permit

Dear Mr. Madrid:

We appreciate the opportunity to work with the TCEQ to submit a proposal for IP Meitner DTC, LLC's ("Meitner DTC" or "we") proposed privately-owned wastewater facility ("TLAP Permit Application"). After our initial submittal we received notification that the TLAP Permit Application was found deficient because of redactions to the Option Agreement for Purchase and Sale of Real Property ("Attachment 4"). Specifically, TCEQ requested that we uncover - at a minimum - names of the interested parties throughout Attachment 4.

We have updated our redactions to Attachment 4 to increase visibility on that document to show the party names throughout, their addresses, and signature blocks. We have maintained redactions over some information related to purchase price, some confidential information, and actual signatures to protect those signatures from potential exposure to the public, given that this application will be publicly available for viewing.

Thank you again for the opportunity to submit the TLAP Permit Application. We hope this letter serves to help TCEQ's review team have more complete insight into the documentation provided.

Sincerely,

Simon Ross
Chief Commercial Officer
IP Meitner DTC, LLC

ATTACHMENT 4

PURCHASE RECORD AGREEMENT

REFERENCE: DOMESTIC ADMINISTRATIVE REPORT - PAGE 7

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OPTION AGREEMENT FOR THE PURCHASE AND SALE OF REAL PROPERTY

GRAY COUNTY, TEXAS

THIS OPTION AGREEMENT FOR THE PURCHASE AND SALE OF REAL PROPERTY (this "**Agreement**") is made and entered into as of the date of the last signature hereto (the "**Effective Date**"), by and between HH and CS, LLC, a Texas limited liability company ("**Seller**"), and IP Land Holdings, LLC, a Delaware limited liability company ("**Purchaser**").

RECITALS

A. Seller is the owner of certain real property in Gray County, in the state of Texas, containing approximately 624.24 acres of land as more particularly described on **Exhibit A** attached hereto and incorporated herein (the "**Land**"), less any land that will be reserved by Seller being up to but no more than five (5) acres of land.

B. As used in this Agreement, the term the "**Property**" shall mean, collectively: (a) the Land, together with all of Seller's right, title and interest in all rights, easements, rights-of-way and other interests appurtenant thereto including, but not limited to, any streets or other public ways adjacent to such Land and any development rights, all permits, approvals, and entitlements, and water rights owned by, or leased to, Seller; and (b) all improvements located on such Land, if any (all such improvements, but not including the Irrigation Pivots, being collectively referred to herein as the "**Improvements**").

C. Seller desires to grant to Purchaser an option to purchase the Property on the terms set forth herein.

NOW THEREFORE, in consideration of the mutual promises and agreements set forth herein, and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Seller and Purchaser hereby agree as follows:

1. Grant of Option to Purchase. Seller hereby grants to Purchaser an exclusive and irrevocable option (the "**Option**") to purchase from Seller and, if Purchaser exercises the Option, agrees to sell to Purchaser all of the Property, subject to and upon the terms, covenants and conditions set forth herein.

2. Option Term.

(a) Term. The term of the Option shall commence on the Effective Date and shall expire eighteen (18) months thereafter (the "**Option Term**"). If Purchaser does not exercise the Option, or terminate this Agreement prior to the expiration of the Option Term, Purchaser shall be deemed to have terminated this Agreement, and at the request of either party, the other party shall execute a writing confirming such termination.

(b) Purchaser's Right to Terminate. Notwithstanding anything in this Agreement to the contrary, Purchaser shall have the right to terminate this Agreement at any time prior to the end of the Option Term in its sole and absolute discretion and for any or for no reason whatsoever. Upon such termination, the Option Consideration (defined below), to the extent paid

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by Purchaser to Seller, shall be retained by Seller (subject to the terms of Section 9), and neither party shall have any further rights or obligations hereunder except as otherwise specified in this Agreement.

3. Option Consideration.

(a) Signing Consideration. [redacted] (collectively, the "Signing Option Consideration"). The Signing Option Consideration shall be non-refundable except as provided in Section 9 (or as elsewhere expressly provided in this Agreement). The parties acknowledge and agree that the Signing Option Consideration is adequate consideration paid by Purchaser to Seller for entering into this Agreement and the right and ability of Purchaser to commence its due diligence of the Property and evaluate the transaction contemplated by this Agreement.

(b) Option Payments. On or before the respective payment dates set forth below, Purchaser shall pay and release to Seller the additional sums set forth below (collectively, with the Signing Option Consideration, the "**Option Consideration**"), all in the form of immediately available funds.

[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

(c) Account Information. All payments made by Purchaser under this Section 3 shall be made by wire transfer to the following bank account at Seller's financial institution:

Bank Name: [redacted]
Bank Address: [redacted]
Bank Phone: [redacted]
Routing #: [redacted]
Account #: [redacted]
Account Name: [redacted]

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Seller expressly authorizes and approves the payment direction to the Seller as forth above. Payment shall be deemed made and paid upon issuance of a wire transfer confirmation number for the transfer of such funds to Seller's account from Purchaser's financial institution.

(d) Termination for Failure to Pay. If Purchaser fails to make a payment of Option Consideration within thirty (30) days of its respective payment date, Seller may terminate this Agreement if such payment is not made within ten (10) days' after written notice to Purchaser; provided, however, if Seller accepts any Option Consideration payment made after its respective payment date, this Agreement shall continue in full force and effect and Seller hereby waives any claims it may have due to such Option Consideration payment having been made past its respective payment date. If this Agreement is terminated as set forth above, or is otherwise terminated as provided herein, Purchaser shall have no further obligation to pay any Option Consideration that has not been paid to Seller as of the date of such termination.

4. Exercise of Option. The Option may be exercised upon Purchaser's written notice to Seller of its election to exercise the Option ("**Option Notice**") at any time during the Option Term. Such Option Notice shall be deemed timely if it is transmitted by facsimile, delivered or mailed, certified mail, return receipt requested, or via a nationally recognized overnight delivery service within the Option Term. In the event that Purchaser timely exercises the Option, Seller shall sell to Purchaser and Purchaser shall buy from Seller the Property, on the terms and conditions established in this Agreement. If Purchaser fails to exercise the Option on or before the last day of the Option Term, the Option shall be null and void and of no further force or effect. The Option Notice shall include a legal description of the Property that Purchaser intends to purchase, and the Purchase Price shall be paid at the Closing based on the acreage included in the Property described in the Option Notice.

5. Purchase Price.

(a) The "**Purchase Price**" for the Property shall be: [redacted] per acre of the Property described in the Option Notice;

(b) The Purchase Price shall be paid at the closing of the sale of the Property to Purchaser (the "**Closing**") plus or minus prorations and other adjustments hereunder.

6. Due Diligence. Purchaser shall have the right to access the Property and to commence due diligence with respect to the Property immediately following the Effective Date, and the due diligence period ("**Due Diligence Period**") shall expire at 5:00 p.m. Pacific Standard Time on the last day of the Option Term. Within fifteen (15) days after the Effective Date, Seller shall deliver to Purchaser or make available to Purchaser and its employees, representatives, counsel and consultants' access to agreements, reports and materials relating to the Property in Seller's possession or control, including, without limitation, all of the items set forth in Section 7 below (collectively, the "**Due Diligence Items**").

7. Diligence Period Conditions.

The following shall be conditions precedent to Purchaser's obligation to purchase the Property (the "**Diligence Period Conditions**"):

(a) Purchaser's review and approval of written documentation satisfactory to

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Purchaser, confirming that Seller possesses the full power and authority to sell the Property to Purchaser on the terms and conditions set forth herein and that the individuals executing this Agreement on behalf of Seller have the legal power, right and actual authority to bind Seller. Seller shall deliver such written documentation to Purchaser within fifteen (15) days after the Effective Date.

(b) Purchaser's review and approval of the Due Diligence Items, including, but not limited to, any and all tenant leases (including oil, gas or mineral rights), if any, and all amendments thereto (collectively, the "**Leases**"); all contracts pertaining to the use and operation of the Property, if any (collectively, the "**Service Contracts**"); permits and entitlements; any materials or reports concerning the physical condition of the Property; any records of the use of Hazardous Materials (defined below) on the Property; and such other documents and information reasonably requested by Purchaser, including, but not limited to, any existing Phase I and/or II Environmental Site Assessment, geotechnical studies, biological studies, cultural resource studies, wetland studies, drainage studies and/or plans, improvement plans, building plans, traffic studies, water supply assessment studies, and crop planting and harvesting schedules, if any. All Leases and Service Contracts shall be terminated by Seller at its sole cost and expense effective prior to the Closing. During the Option Term, Seller agrees not to grant any leases, easements, or other rights or interests in and to the Property without Purchaser's written consent, which may be withheld in Purchaser's sole discretion, including, without limitation, any oil, gas or other mineral leases unless the lessee agrees to waive and release on behalf of itself and its successors and assigns, of all rights of ingress and egress to enter upon the surface of the Property, and the area located between the surface and 500 feet beneath the surface of the Property for purposes of exploring for, developing, drilling, producing, transporting, or any other purposes incident to the development or production of the oil, gas or other minerals.

(c) Purchaser's review and approval of the condition of title to the Property. Purchaser shall obtain a current preliminary title report or a commitment for title insurance with respect to all of the Land, issued by First American Title Insurance Company (the "**Title Company**"), accompanied by copies of all documents referred to in the report or commitment (collectively, the "**Preliminary Report**"). Seller shall deliver to Purchaser at Seller's sole cost and expense, within fifteen (15) days after the Effective Date, the following:

(i) copies of all existing and proposed easements, covenants, restrictions, agreements or other documents which affect title to the Property that are actually known by Seller and are not recorded (and, within fifteen (15) days after Purchaser's delivery to Seller of a copy of the Preliminary Report, any such documents that are actually known by Seller that may be recorded, but that are not disclosed by the Preliminary Report) (collectively, "**Undisclosed Encumbrances**"), including, but not limited to, any existing above ground or below ground irrigation pipes, water wells, pumps, gas lines, and electrical service lines serving the Property (and if no such documents exist, a written explanation of or map showing the existence of any such items); and

(ii) the most recent survey of the Property, if available. Purchaser shall have the right, at its cost and expense, to obtain a new survey of the Property and/or an update of any survey provided by Seller. Any surveys provided by Seller, together with any new or updated survey obtained by Purchaser, are collectively referred to herein as the "**Survey**".

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Purchaser shall have until thirty (30) business days prior to the end of the Due Diligence Period to notify Seller in writing of any objections (the "**Title Objections**") with respect to the Preliminary Report, Undisclosed Encumbrances and the Survey based on its review thereof. Seller shall have ten (10) business days after receipt of the Title Objections to notify Purchaser in writing that Seller (a) will cause, or (b) elects not to cause, any or all Title Objections disclosed therein to be removed or otherwise cured prior to Closing. Seller's failure to notify Purchaser within such ten (10) business day period as to any Title Objections shall be deemed an election by Seller not to remove or otherwise cure such Title Objections. If Seller notifies or is deemed to have notified Purchaser that Seller will not remove or otherwise cure any or all of the Title Objections, Purchaser shall have until the end of the Due Diligence Period to (i) terminate this Agreement, or (ii) waive such Title Objections (failure of Purchaser to provide Seller notice of either (i) or (ii) above shall be deemed a waiver by Purchaser of such Title Objections). Notwithstanding the foregoing, Seller shall in any event be obligated to cure (and cause to either be removed from record or endorsed over, subject to Purchaser's approval thereof) any and all of the following matters: (x) mortgage liens, deed of trust liens, judgment liens or any other monetary lien against the Property, (y) mechanics' liens against the Property, and (z) delinquent liens for real estate taxes and assessments. Purchaser shall have the right, but not the obligation, to pay off any liens against the Property and credit such payments against the Purchase Price, as applicable. The Closing Date (as defined below) shall be extended as necessary to accommodate the time periods set forth in this Section. Within ten (10) days after receipt of a written request made from time to time by Purchaser, Seller shall execute and deliver to Purchaser any owner's affidavit reasonably requested by any title company or attorney reviewing title to the Property.

(d) Purchaser's review and approval in its sole and absolute discretion of all aspects of the Property, including, without limitation, all of the Due Diligence Items, and the results of Purchaser's examinations, inspections, testing, and or investigations of the Property and the Due Diligence Items (collectively, "**Purchaser's Due Diligence Investigations**"). Purchaser's Due Diligence Investigations may include an examination for the presence or absence of Hazardous Materials (as defined below) on, under or in the Property including, without limitation, the review and approval of any Phase I or Phase II environmental report, geotechnical study, biological study, cultural resource study, wetland study, drainage study and/or plans, improvement plans, building plans, traffic study, water supply assessment study, and crop planting and harvesting schedule which Purchaser may obtain, at its cost, during the Due Diligence Period. In the event Purchaser wishes to conduct a Phase II environmental audit report, at Purchaser's sole cost and expense, Seller agrees to such testing on the Property.

(e) Purchaser's review and approval in its sole and absolute discretion that the Property and Purchaser's proposed development thereof complies with all applicable zoning, subdivision, land use, redevelopment, energy, environmental, building and other governmental requirements applicable to the use, maintenance, and occupancy of the Property.

8. Conditions to Closing.

The following conditions are precedent to Purchaser's obligation to acquire the Property and to deliver the balance of the Purchase Price (the "**Conditions Precedent**"). If any Conditions Precedent are not satisfied as determined by Purchaser in Purchaser's reasonable discretion (except as otherwise provided), Purchaser may elect by written notice to Seller to terminate this Agreement, and except as set forth in Section 9(b), Seller shall retain all Option Consideration as liquidated damages and as its sole and exclusive remedy pursuant to Section 9(c) below. Upon

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such termination, neither party shall have any further rights or obligations hereunder except as otherwise specified in this Agreement.

(a) This Agreement shall not have terminated pursuant to any other provision hereof, including, without limitation, pursuant to Sections 2 or 9.

(b) The physical condition of the Property shall be substantially the same on the day of Closing as on the Effective Date, except for damages caused by Purchaser; and, as of the day of the Closing, there shall be no litigation or administrative agency or other governmental proceeding of any kind whatsoever, pending or threatened, which after the Closing could or would materially adversely affect the value of the Property or Purchaser's ability to develop the Property for its intended use, and no proceedings shall be pending or threatened which could or would cause the re-designation or other modification of the zoning classification of the Property or any portion thereof, which after the Closing would materially adversely affect the value of the Property or the ability of Purchaser to develop the Property in the manner contemplated by Purchaser.

(c) All Leases and Service Contracts shall be terminated effective on or before the Closing, and Seller shall deliver exclusive possession of the Property to Purchaser and shall convey good and marketable fee simple title to the Property to Purchaser by good and sufficient general warranty deed in the form of **Exhibit B** attached hereto (the "**Deed**") free and clear of all liens and encumbrances and subject to no exceptions other than the following: (i) non-delinquent real property taxes and all assessments and unpaid installments thereof which are not delinquent, (ii) any other lien, encumbrance, easement or other exception or matter voluntarily imposed or consented to by Purchaser in writing prior to or as of the Closing, and (iii) all exceptions to title contained or disclosed in the Preliminary Report and Survey other than Title Objections identified and not thereafter waived by Purchaser. The legal description attached to the Deed shall be updated to reflect the legal description provided by the Title Company.

(d) The Title Company shall be irrevocably and unconditionally committed to issue to Purchaser, an extended coverage Owner's policy of title insurance covering the Property, in the full amount of the Purchase Price, subject only to those encumbrances previously approved by Purchaser and containing such endorsements as Purchaser may reasonably request.

(e) All of Seller's representations and warranties contained herein shall be true and correct on the Closing Date.

(f) Seller has delivered into escrow all deliverables required in accordance with Section 10(b) below.

(g) Seller is not otherwise in default of this Agreement.

9. Remedies.

(a) If Purchaser is in default under this Agreement, and Purchaser has failed to cure such default within thirty (30) days after Purchaser's receipt of Seller's notice of Purchaser's default, Seller shall retain all Option Consideration previously paid by Purchaser as its sole and exclusive remedy in accordance with Section 9(c) below, and Seller and Purchaser shall be excused from further performance hereunder.

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(b) In the event the sale of the Property is not consummated because of a default by Seller of one or more of the Conditions Precedent contained in Sections 8(b) (only to the extent caused by Seller's acts or omissions and without the prior approval of Purchaser), 8(c), 8(d) (only to the extent caused by Seller's acts or omissions), 8(e), 8(f) and 8(g) under this Agreement (each a "**Seller Default**"), and Seller has failed to cure such Seller Default within thirty (30) days after Seller's receipt of Purchaser's notice of a Seller Default, Purchaser may elect to do any one of the following: (1) waive the Seller Default and proceed to the Closing; (2) terminate this Agreement by delivery of written notice of termination to Seller, whereupon Seller shall immediately return to Purchaser any Option Consideration previously paid by Purchaser, and neither party shall have any further rights or obligations hereunder except to the extent otherwise specified in this Agreement and except with respect to any other remedy afforded to Purchaser by law or in equity; or (3) continue this Agreement and bring an action for specific performance hereof. In addition, Purchaser may have any and all other rights and remedies that may be afforded at law or in equity.

(c) **LIQUIDATED DAMAGES. IN THE EVENT OF A DEFAULT BY SELLER OR PURCHASER UNDER THIS AGREEMENT, AND SELLER IS READY, WILLING AND ABLE TO CONSUMMATE THE SALE CONTEMPLATED HEREIN, AND SELLER IS NOT IN DEFAULT UNDER THIS AGREEMENT, PURCHASER AND SELLER HEREBY AGREE THAT THE OPTION CONSIDERATION (TO THE EXTENT PAID TO SELLER, OR RETURNED TO PURCHASER) SHALL BE RETAINED OR RETURNED AS LIQUIDATED DAMAGES AND NOT AS A PENALTY. THE PARTIES HEREBY ACKNOWLEDGE AND AGREE THAT THE PARTY'S ACTUAL DAMAGES, IN THE EVENT OF A DEFAULT HEREUNDER, WOULD BE EXTREMELY DIFFICULT OR IMPRACTICABLE TO DETERMINE. THEREFORE, BY PLACING THEIR INITIALS BELOW, THE PARTIES ACKNOWLEDGE THAT THE AMOUNT OF THE OPTION CONSIDERATION (TO THE EXTENT PAID TO SELLER OR RETURNED TO PURCHASER) HAS BEEN AGREED UPON, AFTER NEGOTIATION AND TAKING INTO CONSIDERATION ALL CIRCUMSTANCES EXISTING AS OF THE AGREEMENT DATE, AS THE PARTIES' REASONABLE ESTIMATE OF DAMAGES AS WELL AS THE RELATIONSHIP OF THE SUM TO THE RANGE OF HARM THAT COULD BE ANTICIPATED AND SUCH SUM SHALL BE PAID TO AND RETAINED BY SELLER, OR RETURNED TO PURCHASER, AS SUCH PARTY'S SOLE AND EXCLUSIVE REMEDY, AT LAW OR IN EQUITY, IN THE EVENT OF A DEFAULT UNDER THIS AGREEMENT (EXCEPT THE FOREGOING SHALL NOT PRECLUDE PURCHASER FROM AN ACTION FOR SPECIFIC PERFORMANCE OF THIS AGREEMENT). IN PLACING THEIR INITIALS BELOW, EACH PARTY SPECIFICALLY CONFIRMS THE ACCURACY OF THE STATEMENTS MADE ABOVE AND THE FACT THAT EACH PARTY WAS REPRESENTED BY COUNSEL WHO EXPLAINED THE CONSEQUENCES OF THIS LIQUIDATED DAMAGES PROVISION AT THE TIME THIS AGREEMENT WAS MADE.**

SELLER INITIALS: [redacted]

PURCHASER INITIALS: [redacted]

10. Closing and Escrow.

(a) The parties shall conduct an escrow Closing pursuant to this Section 10 on a date that is the earlier of (i) fifteen (15) days after the end of the Option Term (if Purchaser timely

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delivers the Option Notice), or (ii) no less than fifteen (15) days and no more than sixty (60) days after Purchaser timely delivers the Option Notice (with such date being agreed to by the parties hereto), or on such other date as Purchaser and Seller may agree in writing in their sole and absolute discretion (the "**Closing Date**"). Such date and time may not be extended without the prior written approval of both Seller and Purchaser. In the event the Closing does not occur on or before the Closing Date, the Title Company, serving as escrow agent for such escrow Closing, shall, unless it is notified by both parties to the contrary within five (5) days after the Closing Date, return to the respective party any items previously delivered by such party to the Title Company. Any such return shall not, however, relieve either party of any liability it may have for its wrongful failure to close.

(b) At or before the Closing, Seller shall deliver to the Title Company (for delivery to Purchaser upon the Closing) the following:

(i) a duly executed and acknowledged Deed in the form attached hereto as **Exhibit B**;

(ii) a duly executed bill of sale agreement transferring title to all of Seller's interest in any personal property located on the Property as of Closing in a form reasonably acceptable to Seller and Purchaser (the "**Bill of Sale**") (provided, however, that neither the delivery by Seller, nor the acceptance by Purchaser, of this Bill of Sale obviates Seller's obligation to deliver the Property free and clear of all personal property at Closing;

(iii) evidence that all Service Contracts and Leases have been terminated;

(iv) a certificate, dated as of the date of Closing certifying that the representations and warranties set forth in Section 11 are true and correct as of the Closing Date;

(v) a certificate of non-foreign status in accordance with the requirements of Internal Revenue Code Section 1445; and

(vi) any other closing documents reasonably requested by the Title Company or Purchaser, including an owner's affidavit in a form reasonably requested by the Title Company. Purchaser may, in its sole and exclusive discretion, waive compliance on Seller's part under any of the foregoing items by an instrument in writing.

(c) At or before the Closing, Purchaser shall deliver to the Title Company (for delivery to Seller upon the Closing) the following:

(i) the balance of the Purchase Price in cash or other immediately available funds, subject to prorations and adjustments as set forth herein;

(ii) any customary and/or reasonable closing documents requested by the Title Company. Seller may, in its sole and exclusive discretion, waive compliance on Purchaser's part under any of the foregoing items by an instrument in writing;

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(iii) $[redacted] existing Irrigation Pivots on the Property as of the Effective Date (as described in Section 14(m) below); and

[redacted]

Purchaser shall determine, in its reasonable discretion and using the calculation above, Crop Damages for the Property and provide such calculation to Seller. If Seller believes that the Price, Yield or Amount of Damaged Acres is incorrect, Seller may submit records and documentation ("**Seller's Records**") that Seller believes accurately reflect the Amount of Damaged Acres and Yield. For purposes of the foregoing, "Seller's Records" shall include, but not be limited to, warehouse/elevator receipts, applications for crop insurance and scale tickets from grain cart or yield monitors on combines, receipts showing price paid for the same crops in the most recent year and previous year if available. The parties shall try in good faith to agree to the extent of damage and acreage affected. If the parties cannot agree, they shall have the area measured and extent of damage assessed by an impartial party such as a crop insurance adjuster or extension agent, at Purchaser's sole cost and expense. Purchaser shall remit payment for any Crop Damage to Seller within 30 days following Purchaser's receipt of the results of the impartial party's calculation.

(d) The following are to be apportioned as of the Closing Date as follows, with Purchaser being deemed to be the owner of the Property during the entire day on which the Closing takes place and being entitled to receive all income of the Property, and being obligated to pay all expenses of the Property, with respect to such day:

(i) Utility Charges. Seller shall be responsible for the cost of all utilities used, if any, prior to the Closing Date.

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(ii) Other Apportionments; Closing Costs. Property taxes shall be apportioned as of the Closing Date based on the latest available tax bill. Seller and Purchaser shall each pay one-half (1/2) of any escrow fee charged by the Title Company. Seller shall be responsible to pay for all transfer taxes, documentary transfer taxes and sale taxes arising out of the sale of the Property to Purchaser. Seller will pay the entire premium for a standard coverage owner's policy of title insurance in the amount of the Purchase Price and the premium for any endorsements required to cure any title objections of Purchaser which Seller has agreed to cure through the issuance of endorsements. Purchaser will pay the additional premium necessary to obtain an extended coverage title insurance policy and the cost of any endorsements to such title insurance policy requested by Purchaser. All other costs and charges of the escrow for the sale not otherwise provided for in this Section 10(d)(ii) or elsewhere in this Agreement shall be allocated in accordance with the applicable closing customs for the county in which the Property is located, as determined by the Title Company. If any of the aforesaid pro-rations cannot be calculated accurately as of the Closing Date, then they shall be calculated as soon after the Closing as feasible. Either party owing the other party a sum of money based on such subsequent proration(s) shall promptly pay said sum to the other party. If Seller's use or change in use of the Property before the Closing results in the assessment of additional taxes, penalties, or interest ("**Assessments**") for periods before the Closing, the Assessments will be the obligation of Seller. If the sale to Purchaser or Purchaser's use of the Property after Closing results in additional Assessments for periods before the Closing, the Assessments will be the obligation of Purchaser.

(iii) Survival. The provisions of this Section 10(d) shall survive the Closing for twenty-four (24) months.

11. Representations and Warranties of Seller. Seller hereby represents and warrants to Purchaser as follows:

(a) Seller has not, and as of the Closing, Seller shall not have (i) made a general assignment for the benefit of creditors, (ii) filed any voluntary petition in bankruptcy or suffered the filing of any involuntary petition by Seller's creditors, (iii) suffered the appointment of a receiver to take possession of all, or substantially all, of Seller's assets, which remains pending as of such time, (iv) suffered the attachment or other judicial seizure of all, or substantially all, of Seller's assets, which remains pending as of such time, (v) admitted in writing its inability to pay its debts as they come due, or (vi) made an offer of settlement, extension or composition to its creditors generally.

(b) Seller is not, and as of the Closing shall not be, a "foreign person" as defined in Section 1445 of the Internal Revenue Code of 1986, as amended (the "Code") and any related regulations.

(c) Seller possesses the full power and authority to sell the Property to Purchaser on the terms and conditions set forth herein and the individuals executing this Agreement on behalf of Seller have the legal power, right and actual authority to bind Seller. This Agreement (i) has been duly authorized, executed and delivered by Seller, and (ii) does not, and as of the Closing shall not, violate any provision of any agreement or judicial order to which Seller is a party or to which Seller or the Property is subject.

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(d) There is no litigation pending or, to Seller's knowledge, threatened with respect to the Property or the transactions contemplated hereby or that would impair Seller's ability to perform under this Agreement.

(e) To Seller's actual knowledge, there are no violations of any applicable environmental, zoning or land use law, or any other applicable local, state or federal law or regulation relating to the Property, including, without limitation, the Americans with Disabilities Act of 1990 and Seller is not aware of any proposed or pending changes in zoning or proposed relocation, reconfiguration or other change with respect to any street or road affecting the Property, if any.

(f) There are no condemnation proceedings pending or, to Seller's knowledge, threatened that would result in the taking of any portion of the Property. Seller has not received any written notice of any special assessment proceedings affecting the Property that are not disclosed on the Preliminary Report.

(g) The parties comprising Seller under this Agreement are the sole owners of the Property and Seller holds good and marketable fee simple title to the Property according to laws of the State where the Property is located.

(h) The Land constitutes a separate legal parcel (or separate legal parcels) in accordance with all applicable laws.

(i) Seller has not granted any option or right of first refusal or first opportunity to any party (except Seller) to acquire any fee or ground leasehold interest in any portion of the Property.

(j) To Seller's actual knowledge, Hazardous Materials have not at any time been generated, used, or stored on, or transported to or from, or released or disposed of on the Property in violation of environmental laws and restrictions, and Seller has not used Hazardous Materials on the Property for purposes other than (i) as necessary to operate and maintain the Property, and (ii) in substantial compliance with applicable environmental laws and restrictions. To Seller's actual knowledge, there are not now and never have been any underground storage tanks located on or under the Property and there is no asbestos contained in, forming part of, or contaminating any part of the Property. For the purposes hereof, "**Hazardous Materials**" shall mean (i) any petroleum or petroleum distillates and products, flammable explosives, radioactive materials, asbestos in any form, urea formaldehyde foam insulation, transformers or other equipment that contain dielectric fluid containing polychlorinated biphenyls in any concentrations, and radon gas; (ii) any chemicals, materials, substances or wastes which are now or hereafter become defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "extremely hazardous wastes," "restricted hazardous wastes," "toxic substances," "toxic pollutants," or words of similar import, under any environmental laws and restrictions; and (iii) any other chemical, material, substance, or waste, exposure to which is now or hereafter prohibited, limited or regulated by any governmental or regulatory authority.

All representations and warranties made by Seller herein or made in writing pursuant to this Agreement shall be deemed to be material, shall be deemed remade as of the Closing and shall survive the execution and delivery of this Agreement and the Closing for a period of twelve (12) months.

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12. Access; Indemnity; Possession.

(a) Access. Commencing on the Effective Date and through the Closing Date or the earlier termination of this Agreement, Seller shall, and shall cause Seller's tenants, if any, to afford authorized representatives of Purchaser reasonable access to the Property after at least 24 hours notice for purposes of satisfying Purchaser with respect to the representations, warranties and covenants of Seller contained herein and with respect to satisfaction of any Diligence Period Condition or any Condition Precedent, including, without limitation, to conduct Purchaser's Due Diligence Investigations, measurement of meteorological characteristics of the Property, conducting of geotechnical tests and borings and performing a Phase I or Phase II environmental site assessment of the soils, waters and improvements on the Property. All installations, tests or inspections shall be at Purchaser's expense, and Purchaser shall indemnify and hold Seller harmless from and against any and all costs, claims or damages incurred or suffered by Seller arising from the performance of such tests or inspections; provided this indemnity shall not apply to conditions existing at the Property that are merely discovered by Purchaser or to any negligent or willful act or omission of Seller, its employees, representatives, or agents. During the Option Term, at Purchaser's option and with prior notice to Seller, Seller shall (and shall cause Seller's tenants, if any, to) allow Purchaser access to the Property for purposes of controlling the formation of wetlands or wildlife habitat. Purchaser shall repair the damage caused by Purchaser's entry onto and/or inspections of the Property; provided, however, the foregoing shall not require Purchaser to repair or remediate any conditions that are merely discovered by Purchaser. The foregoing indemnity shall survive the Closing, or in the event that the Closing does not occur, the termination of this Agreement, in each case, for twelve (12) months.

(b) Seller's Continued Use of Property. During the Option Term, subject to Purchaser's rights set forth in this Agreement, Seller may continue to use or lease the Property. All existing Leases shall be terminated by Seller at its sole cost and expense effective prior to the Closing and Seller shall deliver possession of the Property free and clear of any interests or rights of tenants, licensees, or other occupants in possession. Seller shall (and shall cause Seller's tenants, if any, to) remove all personal property, motor homes, junk, trash, sheds, and similar property from the Property on or before the date that is seven (7) days prior to the Closing Date; provided, however, if Seller fails to remove such property from the Property by such date, and Purchaser chooses to proceed with the Closing, Seller hereby grants all right title and interest in such property to Purchaser, and Purchaser shall have the right to cause the removal of such property prior to or after the Closing Date. Following the Effective Date, Seller shall not renew any existing Lease or enter into any new lease for all or any part of the Property unless the lease grants Seller the right to terminate the lease within thirty (30) days of notice, and unless Purchaser provides its written consent, not to be unreasonably withheld. Seller shall not agree to or allow any other lien, encumbrance, easement or other exception or matter to affect the Property, title thereto or the Survey (collectively, "**New Matter**"), without the prior written consent of Purchaser, which consent shall not be unreasonably withheld, conditioned, or delayed; provided, however, that if such New Matter would remain in effect after Closing, such consent may be withheld in Purchaser's sole and absolute discretion.

13. Seller Covenants.

(a) At the time of the Closing, Seller shall cause to be paid in full all obligations under any outstanding written or oral contracts made by Seller for any improvements to the Property, and Seller shall cause to be discharged all mechanics' and materialmen's liens arising

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from any labor or materials furnished to the Property prior to the time of the Closing.

(b) Between the Effective Date and the Closing, to the extent Seller has any knowledge thereof, Seller shall promptly notify Purchaser of the following items relating to the Property: (i) any condemnation, environmental, zoning or other land-use regulation proceedings; (ii) any notices of violations of any laws; (iii) any litigation relating to the Property or that arises out of the ownership of the Property or affects Seller's ability to perform under this Agreement; and (iv) the termination, modification or default under any Leases or Service Contracts.

(c) Seller shall deliver to Purchaser copies of any bills for real estate taxes and copies of any notices pertaining to real estate taxes or assessments applicable to the Property that are received by Seller after the Effective Date, even if received after Closing. Without limiting Seller's obligation to timely pay all real property taxes and assessments, with respect to any taxes that are delinquent as of the Effective Date or at any future date that Option Consideration is payable to Purchaser, Purchaser shall have the right (but not the obligation) to set off and withhold out of the first Option Payment, any subsequent Option Payments or the Purchase Price balance paid at Closing, the amounts necessary to bring said delinquent real property taxes and assessments current. Purchaser may pay the delinquent amounts directly to the assessing entity on behalf of Seller. The obligations set forth in this Section 13(c) shall survive the Closing.

(d) Seller shall remove the Property from the market, if listed, and shall not market the Property for sale during the term of this Agreement.

(e) Seller acknowledges that Purchaser's interest in the Property is for purposes of developing solar energy projects, and that Purchaser would not otherwise enter into this Agreement and agree to pay the Option Consideration to Seller. Accordingly, Seller agrees that Purchaser shall have the right, at Purchaser's expense, to apply for, change and/or obtain zoning changes, general plan amendments, tax classifications, property tax exemptions, subdivision and/or lot line adjustment approvals (collectively, "**Approvals**") affecting the Property consistent with Purchaser's intended use of the Property, provided that Purchaser shall not finalize any Approval without Seller's prior consent if such Approval would be binding on Seller or the Property prior to the Closing. Notwithstanding the foregoing, Purchaser may, without Seller's prior consent, apply for and obtain approval for any land use entitlement, planning approval, permit, or conditional use permit (collectively, "**Permits**") in connection with Purchaser's intended use of the Property. Seller shall cooperate with Purchaser in Purchaser's efforts to obtain such Approvals and Permits by executing such documents and taking such actions as are reasonably necessary to obtain such Approvals and Permits. Seller agrees that it shall not contest, challenge or publicly or privately dispute, verbally or in writing, Purchaser's efforts to obtain any such Approvals and Permits.

14. Miscellaneous.

(a) Binding on Successors. This Agreement shall be binding not only upon the parties but also upon their respective heirs, executors, personal representatives, assigns, and other successors in interest. Notwithstanding anything to the contrary herein, Purchaser shall have the right to assign this Agreement without the consent of Seller. Any assignment of this Agreement by Purchaser shall not relieve Purchaser of the duty to perform the terms, covenants, and obligations imposed upon Purchaser by the terms of the Agreement, unless Purchaser is released of such duty by written instrument executed by Seller prior to the effective date of the Assignment.

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(b) Notices. Any notice, consent or approval required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been given upon (i) hand delivery, (ii) one (1) business day after being deposited with FedEx or another reliable overnight courier service, with receipt acknowledgment requested, (iii) upon receipt if transmitted by facsimile telecopy, with a copy sent on the same day by one of the other permitted methods of delivery, or (iii) upon receipt or refused delivery deposited in the United States mail, registered or certified mail, postage prepaid, return receipt required, and addressed as follows:

IF TO SELLER:

HH and CS, LLC,
a Texas limited liability company
P.O. Box 576
Pampa, TX 79066
Attention: Jeff Chisum
Email: jeff.2jrail@gmail.com
Phone: (806) 662-6264

IF TO PURCHASER:

IP Land Holdings, LLC
c/o Intersect Power
9450 SW Gemini Drive PMB 68743
Beaverton, OR 97008-7105
E-mail: realestatenotices@intersectpower.com
Attention: Real Estate Legal

or such other address as either party may from time to time specify in writing to the other.

(c) Brokers and Finders. Neither party has had any contact or dealings regarding the Property, or any communication in connection with the subject matter of this transaction, through any real estate broker or other person who can claim a right to a commission or finder's fee in connection with the sale contemplated herein, except for T. Christian Ogden ("**Purchaser's Broker**"), who shall be paid by Purchaser pursuant to a separate agreement between Purchaser and Purchaser's Broker. In the event that any broker or finder makes a claim for a commission or finder's fee based upon any contact, dealings or communication, the party whose conduct is the basis for the broker or finder making its claim shall indemnify, defend and hold harmless the other party against and from any commission, fee, liability, damage, cost and expense, including, without limitation, attorneys' fees, arising out of or resulting from any such claim. The provisions of this Section 14(c) shall survive the Closing, or in the event that the Closing does not occur, the termination of this Agreement, in each case, for twelve (12) months.

(d) Recording and Subordination. The parties shall not record this Agreement, but concurrent with the execution hereof, Seller and Purchaser shall execute a memorandum of this Agreement in the form attached hereto as **Exhibit C**, which Purchaser may record in the real property records of the county in which the Property is located (the "**Memorandum**"). Within ten

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(10) days after receipt of a written request made from time to time by Purchaser, Seller shall obtain from the holder of any mortgage or deed of trust liens or any other monetary lien encumbering the Property a reasonable subordination agreement whereby the holder of such lien agrees that its lien is subordinate to Purchaser's option.

(e) Amendments. Except as otherwise provided herein, this Agreement may be amended or modified only by a written instrument executed by Seller and Purchaser.

(f) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state where the Property is located.

(g) Merger of Prior Agreements. This Agreement and the exhibits and schedules hereto, constitutes the entire agreement between the parties and supersedes all prior agreements and understandings between the parties relating to the subject matter hereof.

(h) Time of the Essence. Time is of the essence of this Agreement; provided, however, should the date for payment or performance required under this Agreement fall on a non-business day (i.e., Saturday, Sunday, or any other day on which national banks in Texas are not open for business), then the date required for payment or performance under this Agreement shall be extended to the first business day following the non-business day on which such payment or performance was required.

(i) Severability. If any provision of this Agreement, or the application thereof to any person, place, or circumstance, shall be held by a court of competent jurisdiction to be invalid, unenforceable or void, the remainder of this Agreement and such provisions as applied to other persons, places and circumstances shall remain in full force and effect.

(j) Confidentiality. Seller agrees to maintain in confidence, and not to disclose to any third party, the information contained in this Agreement or pertaining to the sale contemplated hereby; provided, however, that Seller, its agents and representatives may disclose such information and data (a) to its accountants, attorneys, and other advisors in connection with the transactions contemplated by this Agreement (collectively "**Representatives**") to the extent that such Representatives reasonably need to know such information and data in order to assist, and perform services on behalf of, Seller, but Seller shall remain responsible for its Representatives' compliance with the confidentiality provisions of this Agreement; (b) to the extent required by any applicable statute, law, regulation, governmental authority or court order; and (c) in connection with any litigation that may arise between the parties in connection with the transactions contemplated by this Agreement. The provisions of this Section 14(j) shall survive the Closing, or in the event that the Closing does not occur, the termination of this Agreement. Notwithstanding the provisions of this Section 14(j), the recording of the memorandum of this Agreement as contemplated by Section 14(d) is expressly permitted.

(k) Attorneys' Fees.

[redacted]

(ii) The prevailing party in any action or proceeding for the enforcement, protection, or establishment of any right or remedy under this Agreement or

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for the interpretation of this Agreement shall be entitled to recover its reasonable attorneys' fees and costs in connection with such action or proceeding from the non-prevailing party.

(l) Counterparts and Execution. This Agreement may be executed in counterparts, each of which shall be deemed an original and which together shall constitute one and the same agreement. The parties hereby acknowledge and agree that facsimile signatures or signatures transmitted by electronic mail in so-called "pdf" format shall be legal and binding and shall have the same full force and effect as if an original of this Agreement had been delivered. Seller and Purchaser (i) intend to be bound by the signatures on any document sent by facsimile or electronic mail, (ii) are aware that the other party will rely on such signatures, and (iii) hereby waive any defenses to the enforcement of the terms of this Agreement based on the foregoing forms of signatures.

[SIGNATURE PAGES FOLLOW]

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date written below.

SELLER:

HH and CS, LLC, a Texas limited liability company

[redacted]

Print Name: Sheridan J. Harnly

Its: Managing Member

Date signed: 6·13·2024

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date written below.

PURCHASER:

IP Land Holdings, LLC,
a Delaware limited liability company

[redacted]

Simon Ross
Print name: _____

Chief Commercial Officer
Its: _____

June 14, 2024
Date signed: _____

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EXHIBIT A

LEGAL DESCRIPTION OF LAND

Parcel 1

Section 142, Block M-2, BS&F Survey, Gray County, Texas,

SAVE AND EXCEPT the following described land:

Beginning at an Iron rod the Northwest corner of said section 142;

Thence 89 degrees 52 feet E along the North line of said section 142, 156.0 Feet to a point;

Thence South Parallel to the West line of said Section 142, 30 feet to an iron rod set in the South right-of-way line of a graded public road for the beginning corner of this tract;

Thence 89 degrees 52 feet E 30 feet South and parallel to North line of said Section 142, 190.0 Feet to an iron rod;

Thence S 40 degrees 50 feet W, 105.0 feet to an iron rod;

Thence S 89 degrees 52 feet W Parallel to the North line of said section 142, 145.0 feet to an iron rod;

Thence South parallel to the west line of said Section 142, 135.75 feet to an iron rod;

Thence 89 Degrees 52 feet W parallel to the North line of said Section 142, 1457.30 feet to an iron rod set in the East right-of-way line of a public graded road;

Thence North 40.0 feet East of and parallel to the West line of said Section 142, 270.0 feet to an iron rod;

Thence N 89 degrees 52 feet E parallel to the North line of said Section 142, 116 feet to an iron rod;

Thence North parallel to the West line of said Section 142, 108.0 feet to the place of beginning and containing 14.52 acres, more or less.

Parcel 1 contains 624.24 acres
Parcel 1 Tax ID No: 111508551321421050000

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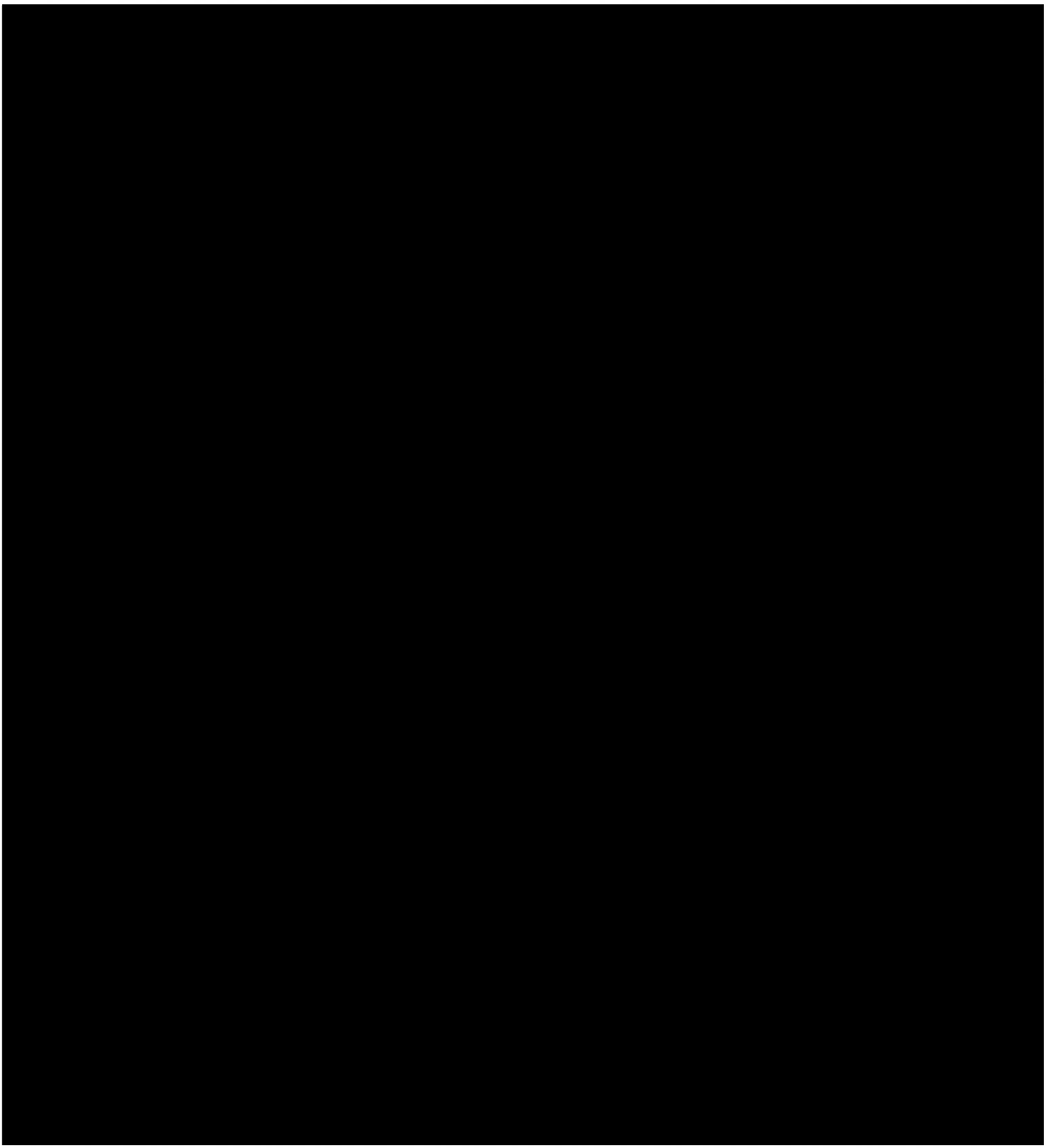
EXHIBIT B



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[SIGNATURE PAGES FOLLOW]

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EXHIBIT A TO GRANT DEED

LEGAL DESCRIPTION OF LAND

Section 142, Block M-2, BS&F Survey, Gray County, Texas,

SAVE AND EXCEPT the following described land:

Beginning at an Iron rod the Northwest corner of said section 142;

Thence 89 degrees 52 feet E along the North line of said section 142, 156.0 Feet to a point;

Thence South Parallel to the West line of said Section 142, 30 feet to an iron rod set in the South right-of-way line of a graded public road for the beginning corner of this tract;

Thence 89 degrees 52 feet E 30 feet South and parallel to North line of said Section 142, 190.0 Feet to an iron rod;

Thence S 40 degrees 50 feet W, 105.0 feet to an iron rod;

Thence S 89 degrees 52 feet W Parallel to the North line of said section 142, 145.0 feet to an iron rod;

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Thence 89 Degrees 52 feet W parallel to the North line of said Section 142, 1457.30 feet to an iron rod set in the East right-of-way line of a public graded road;

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Thence North parallel to the West line of said Section 142, 108.0 feet to the place of beginning and containing 14.52 acres, more or less.

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AND SAVE AND EXCEPT the following described land:

Five acres, more or less, depicted below, to be amended by a metes and bounds description upon recording:

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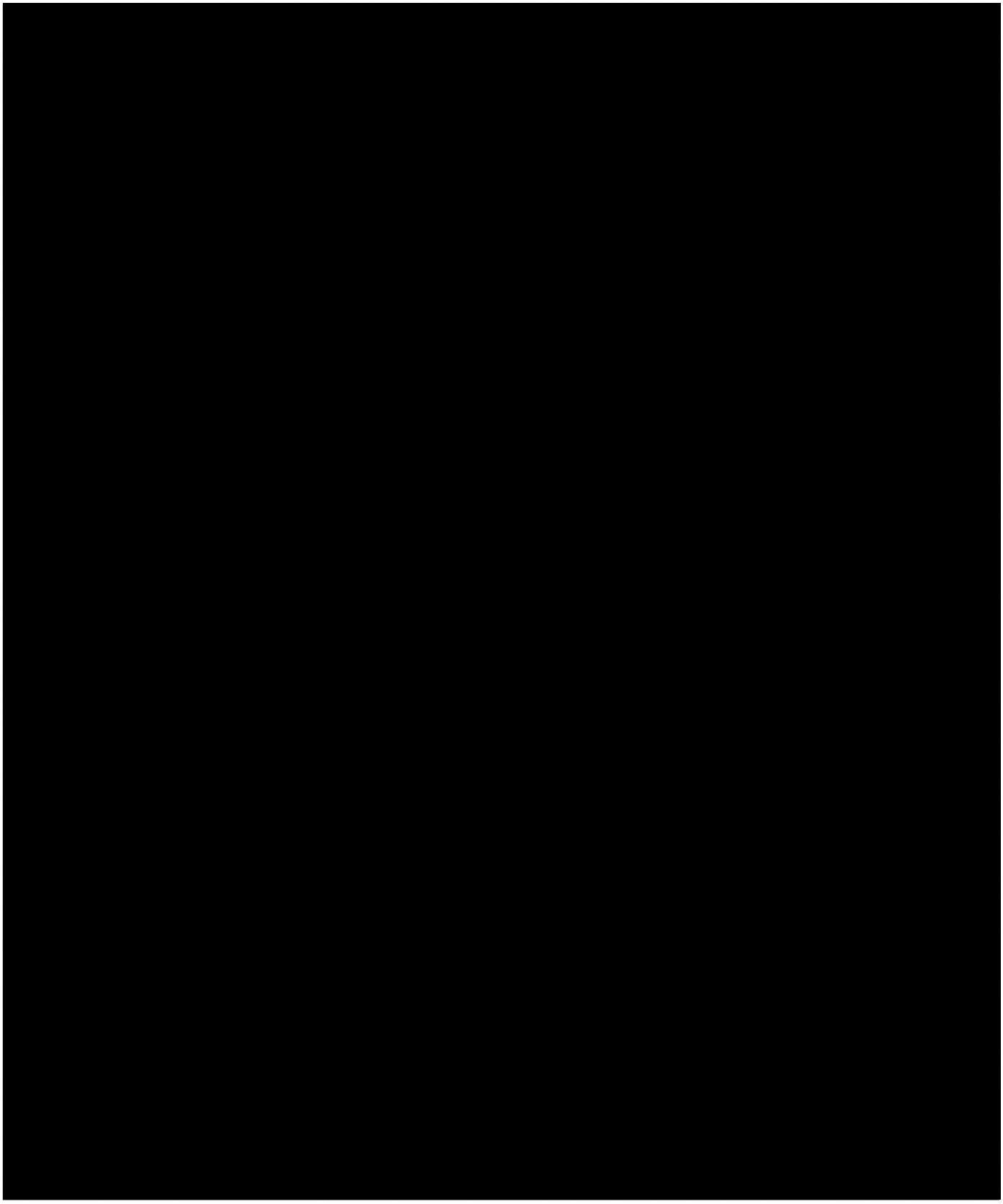
EXHIBIT C



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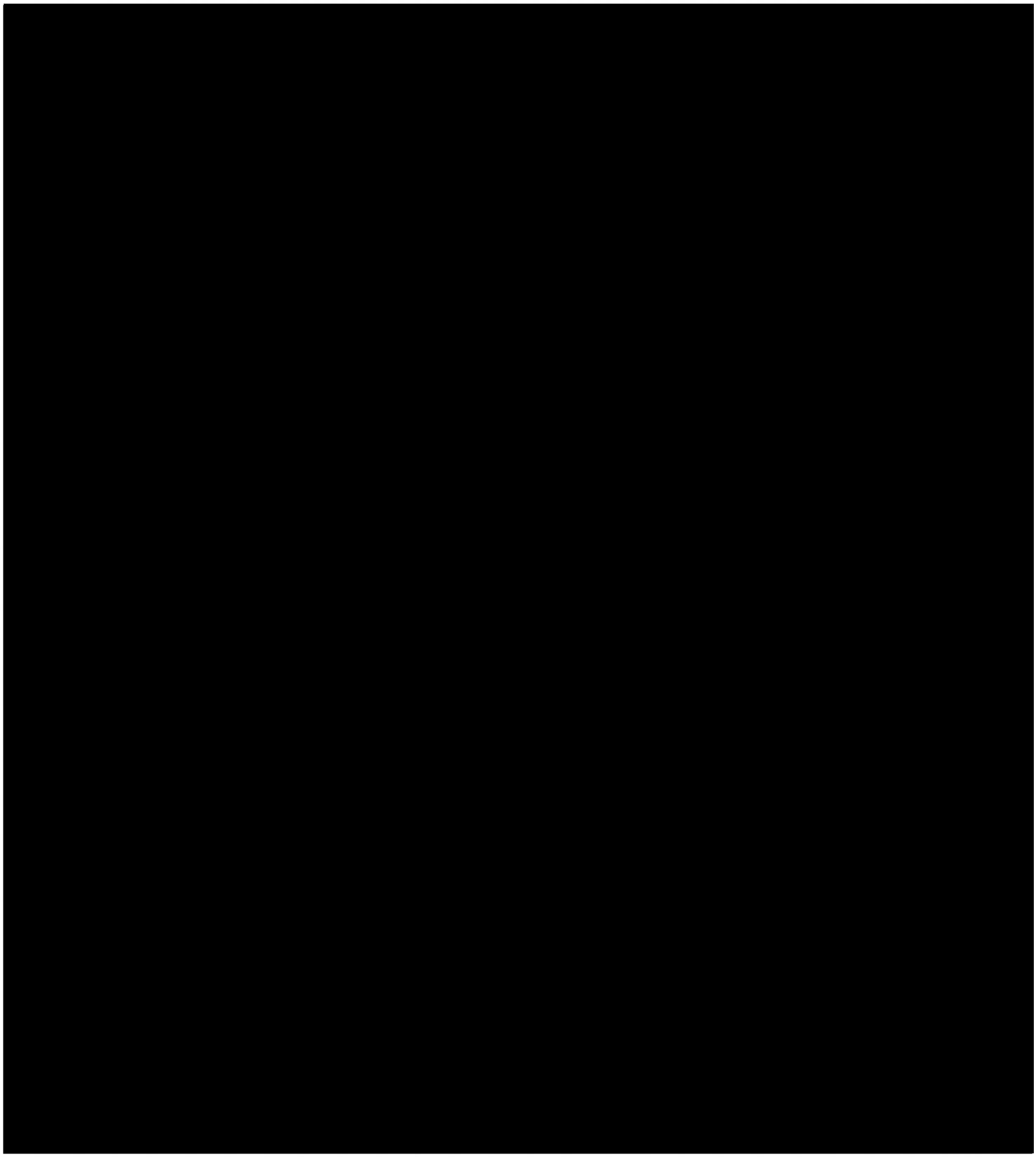

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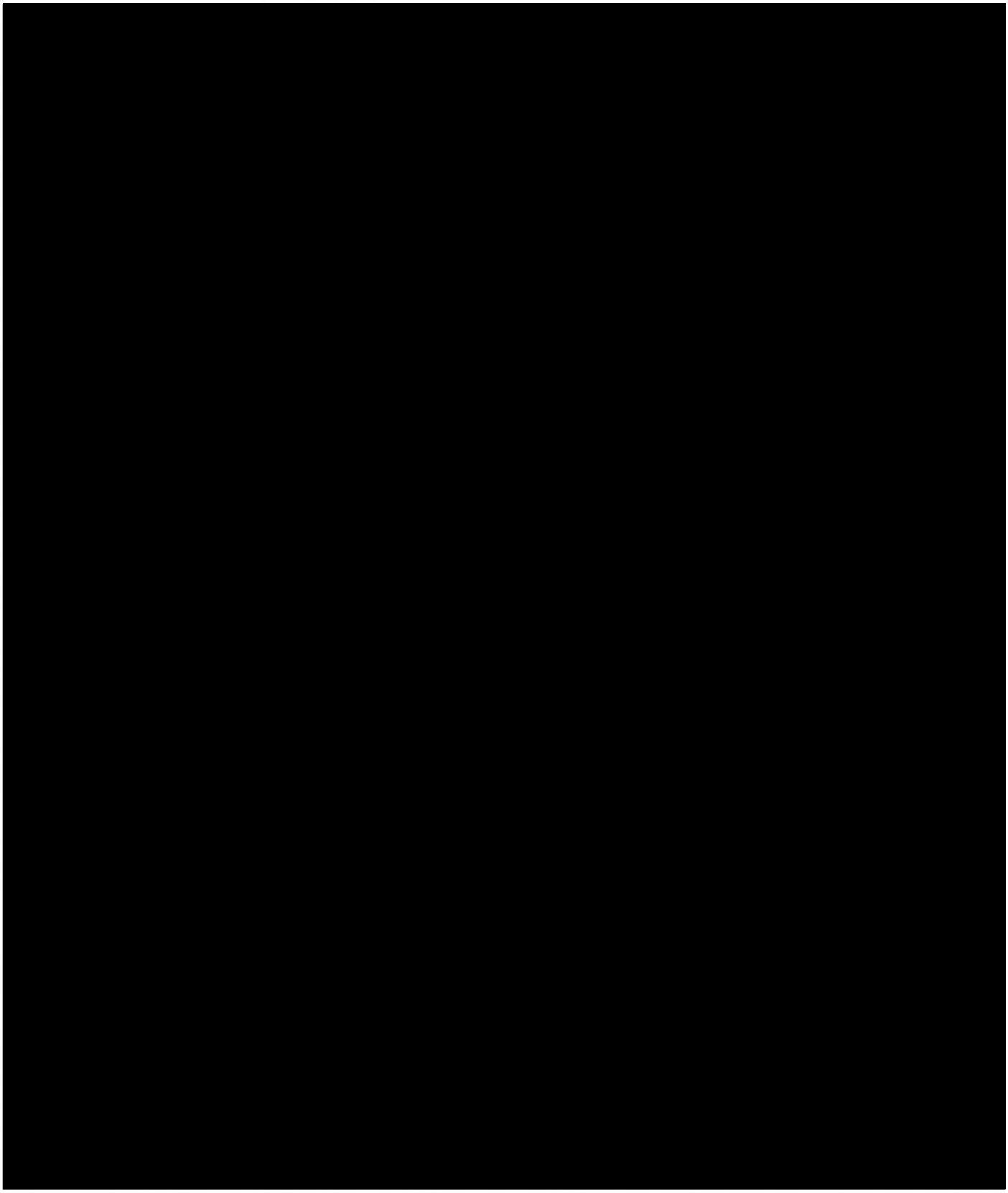

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EXHIBIT A TO MEMORANDUM OF OPTION AGREEMENT

LEGAL DESCRIPTION OF LAND

Parcel 1

Section 142, Block M-2, BS&F Survey, Gray County, Texas,

SAVE AND EXCEPT the following described land:

Beginning at an Iron rod the Northwest corner of said section 142;

Thence 89 degrees 52 feet E along the North line of said section 142, 156.0 Feet to a point;

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Thence 89 degrees 52 feet E 30 feet South and parallel to North line of said Section 142, 190.0 Feet to an iron rod;

Thence S 40 degrees 50 feet W, 105.0 feet to an iron rod;

Thence S 89 degrees 52 feet W Parallel to the North line of said section 142, 145.0 feet to an iron rod;

Thence South parallel to the west line of said Section 142, 135.75 feet to an iron rod;

Thence 89 Degrees 52 feet W parallel to the North line of said Section 142, 1457.30 feet to an iron rod set in the East right-of-way line of a public graded road;

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Thence North parallel to the West line of said Section 142, 108.0 feet to the place of beginning and containing 14.52 acres, more or less.

Parcel 1 contains 624.24 acres
Parcel 1 Tax ID No: 111508551321421050000

ATTACHMENT 3

UPDATED LANDOWNERS' LIST IN AVERY 5160 TEMPLATE.

CROSS-REFERENCED LANDOWNER'S LIST

DAVID M BOWERS
8487 RABBIT LN
PAMPA, TX 79065

STEPHEN P &
SHERMAN SMITH
12810 COUNTY ROAD D
PAMPA, TX 79065

HARVEY LLOYD FAM
LTM PART
4919 CROSS CREEK LN
LEAGUE CITY, TX 77573

PHILPOTT LAND
PARTNERS
149 ELIZABETH ROAD
SAN ANTONIO, TX 78209

SHARON REESE
NIEBUHR
11351 STRAIT LN
DALLAS, TX 75229

LEWIS & RITA ANN
HOLLAND FAMILY LLC-
SERIES WIND
9909 DIGBY LANE
AMARILLO, TX 79119

DALEY FAMILY TRUST
169 INWOOD TRAIL
MADISON, AL 35758

HELMS BRANDON &
TEISHA
1300 HAMILTON
PAMPA, TX 79065

ATTACHMENT 4

TRANSLATED SPANISH NORI

Comisión de Calidad Ambiental del Estado de Texas

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

PERMISO PROPUESTO NO. WQ00

SOLICITUD. *IP Meitner DTC, LLC, 9450 Southwest Gemini Drive, PMB 68743, Beaverton, Oregon, 97008*, ha solicitado a la Comisión de Calidad Ambiental del Estado de Texas (TCEQ) para el propuesto Permiso No. WQ0016867001 de disposición de aguas residuales para autorizar la disposición de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de *28,700* galones por día mediante *evaporación*. La planta y el área de disposición estarán ubicados *aproximadamente 2,0 millas al norte de la intersección de County Road 21 y la carretera 152, aproximadamente 17 millas al este de la ciudad de Pampa,* en el Condado de *Gray*, Texas *79065*. La TCEQ recibió esta solicitud el *1 de octubre de 2025*. La solicitud para el permiso estará disponible para leerla y copiarla en *Biblioteca Lovett Memorial, 111 North Houston Street, Pampa, en el Condado de Gray, 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=-100.7186,35.5875&level=18

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

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

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

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

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

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

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

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

La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. **Si se concede una audiencia, el tema de la audiencia estará**

limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.

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

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

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

También se puede obtener información adicional del *IP Meitner DTC, LLC* a la dirección indicada arriba o llamando a *Sr. Jeff Watson* al *503-489-7528*.

Fecha de emisión: *[Date notice issued]*

TCEQ TLAP PERMIT APPLICATION

Intersect Water/Wastewater Design

Pampa, TX

September 25, 2025

Prepared By:

HDR Engineering, Inc.
1917 S 67th Street
Omaha, NE 68106
P: 4023926986

-

List of Forms

Form TCEQ-10053: Domestic Wastewater Permit Application Administrative Report

Form TCEQ-10054: Domestic Wastewater Permit Application Technical Report

List of Attachments

Attachment 1: Core Data Form (Domestic Administrative Report – Page 4)

Attachment 2: Summary of Application in Plain Language Form (Domestic Administrative Report – Page 7)

Attachment 3: Public Involvement Plan Form (Domestic Administrative Report – Page 7)

Attachment 4: Purchase Record Agreement (Domestic Administrative Report – Page 7)

Attachment 5: Full-Size USGS Topographic Map (Domestic Administrative Report – Page 10)

Attachment 6: Affected Landowners Map (Domestic Administrative Report – Page 12)

Attachment 7: Cross-Referenced Landowners List (Domestic Administrative Report – Page 12)

Attachment 8: Original Photographs (Domestic Administrative Report – Page 13)

Attachment 9: Buffer Zone Map (Domestic Administrative Report – Page 13)

Attachment 10: Process Flow Diagram (Domestic Technical Report 1.0 – Page 2)

Attachment 11: Site Layout Drawing (Domestic Technical Report 1.0 – Page 3)

Attachment 12: Design Calculations (Domestic Technical Report 1.1 – Page 22)

Attachment 13: Wind Rose Diagram (Domestic Technical Report 1.1 – Page 23)

Attachment 14: Sludge Management Plan (Domestic Technical Report 1.1 – Page 24)

Attachment 15: Existing Well Logs (Worksheet 3.0 Land Disposal of Effluent – Page 34)

Attachment 16: Soil Map (Worksheet 3.0 Land Disposal of Effluent – Page 34)

Attachment 17: Evaporation Pond Calculations (Worksheet 3.1 Surface Land Disposal of Effluent – Page 37)

Attachment 18: Public Involvement Plan Supplemental Information (Public Involvement Plan Form (Attachment 3) – Page 4)

Attachment 19: Wastewater Treatment Odor Mitigation Memo (Domestic Administrative Report - 13)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: IP MEITNER DTC, LLC

PERMIT NUMBER (If new, leave blank): WQ00Click to enter text.

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

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

For TCEQ Use Only

Segment Number _____County _____
Expiration Date _____Region_____
Permit Number _____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

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

Section 1. Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) $150.00 ☐

Payment Information:

Mailed — Check/Money Order Number: N/A

Check/Money Order Amount: **N/A**

Name Printed on Check: **N/A**

EPAY — Voucher Number: ePay Trace Number: [redacted]

Copy of Payment Voucher enclosed? Yes ☒

Section 2. Type of Application (Instructions Page 26)

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

☐ Publicly Owned Domestic Wastewater

☒ Privately-Owned Domestic Wastewater

☐ Conventional Water Treatment

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

☐ Active ☒ Inactive

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

- ☐ TPDES Permit
- ☒ TLAP
- ☐ TPDES Permit with TLAP component
- ☐ Subsurface Area Drip Dispersal System (SADDS)

d. Check the box next to the appropriate application type

- ☒ New
- ☐ Major Amendment *with* Renewal
- ☐ Major Amendment *without* Renewal
- ☐ Renewal without changes
- ☐ Minor Amendment *with* Renewal
- ☐ Minor Amendment *without* Renewal
- ☐ Minor Modification of permit

e. For amendments or modifications, describe the proposed changes: N/A.

f. **For existing permits:**

Permit Number: WQ00 N/A.

EPA I.D. (TPDES only): TX N/A.

Expiration Date: N/A.

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

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

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

IP MEITNER DTC, LLC.

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

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

CN: N/A.

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

Prefix: N/A. Last Name, First Name: Ross, Simon

Title: Chief Commercial Officer. Credential: N/A.

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

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

N/A.

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

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

CN: N/A.

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

Prefix: N/A. Last Name, First Name: N/A.

Title: N/A. Credential: N/A.

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

C. Core Data Form

Complete the Core Data Form for each customer and include as an attachment. If the customer type selected on the Core Data Form is **Individual**, complete **Attachment 1** of Administrative Report 1.0. See attachment 1.

Section 4. Application Contact Information (Instructions Page 27)

This is the person(s) TCEQ will contact if additional information is needed about this application. Provide a contact for administrative questions and technical questions.

A. Prefix: N/A. Last Name, First Name: Saraf, Abhijeet

Title: Water/Wastewater EIT Credential: N/A

Organization Name: HDR Engineering, Inc.

Mailing Address: 1917 S 67th Street City, State, Zip Code: Omaha, NE, 68106

Phone No.: (402) 392-6986 E-mail Address: Abhijeet.Saraf@hdrinc.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

B. Prefix: N/A Last Name, First Name: Corbin, Ian

Title: Project Manager Credential: PE

Organization Name: HDR Engineering, Inc.

Mailing Address: 5815 Council Street NE, Suite B City, State, Zip Code: Cedar Rapids, IA, 52402

Phone No.: 3194236335 E-mail Address: Ian.Corbin@hdrinc.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

Section 5. Permit Contact Information (Instructions Page 27)

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

A. Prefix: N/A Last Name, First Name: Watson, Jeff

Title: Water Resources Lead Credential: N/A

Organization Name: IP MEITNER DTC, LLC

Mailing Address: 9450 SW Gemini Dr. PMB #68743 City, State, Zip Code: Beaverton, OR 97008

Phone No.: (503) 489-7528 E-mail Address: permitting@intersectpower.com

B. Prefix: **N/A** Last Name, First Name: **N/A**

Title: **N/A** Credential: **N/A**

Organization Name: **N/A**

Mailing Address: **N/A** City, State, Zip Code: **N/A**

Phone No.: **N/A** E-mail Address: **N/A**

Section 6. Billing Contact Information (Instructions Page 27)

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

Prefix: N/A Last Name, First Name: Watson, Jeff

Title: Water Resources Lead Credential: N/A

Organization Name: IP MEITNER DTC, LLC

Mailing Address: 9450 SW Gemini Dr. PMB #68743 City, State, Zip Code: Beaverton, OR 97008

Phone No.: (503) 489-7528 E-mail Address: permitting@intersectpower.com

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

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

Prefix: N/A Last Name, First Name: Watson, Jeff

Title: Water Resources Lead Credential: N/A

Organization Name: IP MEITNER DTC, LLC

Mailing Address: 9450 SW Gemini Dr. PMB #68743 City, State, Zip Code: Beaverton, OR 97008

Phone No.: (503) 489-7528 E-mail Address: permitting@intersectpower.com

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: N/A Last Name, First Name: Watson, Jeff

Title: Water Resources Lead Credential: N/A

Organization Name: IP MEITNER DTC, LLC

Mailing Address: 9450 SW Gemini Dr. PMB #68743 City, State, Zip Code: Beaverton, OR 97008

Phone No.: (503) 489-7528 E-mail Address: permitting@intersectpower.com

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

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

☒ E-mail Address

☐ Fax

☐ Regular Mail

C. Contact permit to be listed in the Notices

Prefix: N/A Last Name, First Name: Watson, Jeff

Title: Water Resources Lead Credential: N/A

Organization Name: IP MEITNER DTC, LLC

Mailing Address: 9450 SW Gemini Dr. PMB #68743 City, State, Zip Code: Beaverton, OR 97008

Phone No.: (503) 489-7528 E-mail Address: permitting@intersectpower.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: Lovett Memorial Library

Location within the building: Public Notice Posting

Physical Address of Building: 111 N Houston St

City: Pampa County: Gray

Contact (Last Name, First Name): Guy, Misty;

Phone No.: (806) 669-5780 Ext.: **N/A**

E. Bilingual Notice Requirements

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

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

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

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

   ☒ Yes ☐ No

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

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

   ☒ Yes ☐ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

PAMPA INDEPENDENT SCHOOL DISTRICT (ISD) WAS CONTACTED VIA A TELEPHONE CALL DATED 09/17 FOR RESPONSES TO QUESTIONS 1, 2, 3 AND 4.

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

F. Summary of Application in Plain Language Template

Complete the F. Summary of Application in Plain Language Template (TCEQ Form 20972), also known as the plain language summary or PLS, and include as an attachment.

Attachment: See attachment 2.

G. Public Involvement Plan Form

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

Attachment: See attachment 3.

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

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

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

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

IP MEITNER DTC, LLC

C. Owner of treatment facility: IP MEITNER DTC, LLC

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

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

Prefix: N/A. Last Name, First Name: Chisum, Jeff

Title: N/A Credential: N/A.

Organization Name: HH and CS, LLC

Mailing Address: 12311 US HWY 60 City, State, Zip Code: Pampa, TX, 79065

Phone No.: (806) 662-6264 E-mail Address: jeff.2jrail@gmail.com

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

Attachment: See attachment 4.

E. Owner of effluent disposal site:

Prefix: N/A. Last Name, First Name: Chisum, Jeff

Title: N/A Credential: N/A.

Organization Name: HH and CS, LLC

Mailing Address: 12311 US HWY 60 City, State, Zip Code: Pampa, TX, 79065

Phone No.: (806) 662-6264 E-mail Address: jeff.2jrail@gmail.com

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

Attachment: See attachment 4.

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

Prefix: N/A. Last Name, First Name: N/A.

Title: N/A. Credential: N/A.

Organization Name: N/A

Mailing Address: N/A. City, State, Zip Code: N/A.

Phone No.: N/A. E-mail Address: N/A.

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: N/A.

Section 10. TPDES Discharge Information (Instructions Page 31)

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

☐ Yes ☐ No

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

N/A. This application is for the authorization of a new Privately-Owned Domestic Wastewater Facility seeking a TLAP permit.

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

☐ Yes ☐ No

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

N/A. This application is for the authorization of a new Privately-Owned Domestic Wastewater Facility seeking a TLAP permit.

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

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

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

☐ Yes ☐ No

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

☐ Authorization granted ☐ Authorization pending

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

Attachment: N/A.

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: N/A.

Section 11. TLAP Disposal Information (Instructions Page 32)

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

☐ Yes ☒ No

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

N/A. This is a new permit application. The wastewater will be treated by a Packaged Biological Treatment System and the treated effluent will be discharged to an Evaporation Pond located within the project boundary.

B. City nearest the disposal site: City of Pampa

C. County in which the disposal site is located: Gray County

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

A Gravity pipe of length of nearly 300 ft will discharge the treated effluent from the Packaged Biological Treatment System to the Evaporation Pond located within the project boundary.

E. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: The Evaporation Pond is designed to contain all precipitation falling on it. However, the nearest watercourse is possibly land drainage to nearby playa lakes that eventually flow into the Cantonment Creek which further discharges to the North Fork Red River.

Section 12. Miscellaneous Information (Instructions Page 32)

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

☐ Yes ☒ No

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

☐ Yes ☐ No ☒ Not Applicable

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

Septage Hauler to remove the biosolids on a weekly basis Off-Site to the City of Pampa's Wastewater Treatment Plant by a registered hauler; Transporter: REEDS SEPTIC PUMPING, TCEQ Sludge Transporter Reg. No. RN105356174, hauling Liquid sludge. Receiving facility: City of Pampa Liquid Waste Processing Facility, RN101608974; WQ0010358002.

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: N/A.

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If **yes**, provide the following information:

Account number: **N/A.**

Amount past due: **N/A.**

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If **yes**, please provide the following information:

Enforcement order number: **N/A.**

Amount past due: **N/A.**

Section 13. Attachments (Instructions Page 33)

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

☒ See attachment 4. 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.

☒ See attachment 5. Original full-size USGS Topographic Map with the following information:

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

☐ Attachment 1 for Individuals as co-applicants

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

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: Click to enter text.

Applicant: IP MEITNER DTC, 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): Simon Ross

Signatory title: Chief Commercial Officer

Signature: _____ Date: 9/30/2025

(Use blue ink)

Subscribed and Sworn to before me by the said Simon Ross

on this 30 day of September, 2025.

My commission expires on the 23 day of February, 2025.

_____

Notary Public *[SEAL]*

_____

County, Texas

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of San Francisco

Subscribed and sworn to (or affirmed) before me on this 30 day of September, 20 25, by Simon Ross

_____,

proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

B. LUSTER
NOTARY PUBLIC - CALIFORNIA
COMMISSION # 2511694
ALAMEDA COUNTY
My Comm. Exp. February 23, 2029

(Seal)

Signature _____

Clear Form | Print Form

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 36)

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

☒ See attachment 6. The applicant's property boundaries

☒ The facility site boundaries within the applicant's property boundaries

☐ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone

☒ The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)

☐ The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream

☐ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge

☐ The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides

☒ The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property

☒ The property boundaries of all landowners surrounding the effluent disposal site

☐ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located

☐ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located

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

C. ☒ See attachment 7. Indicate by a check mark that the landowners list has also been provided as mailing labels in electronic format (Avery 5160).

D. Provide the source of the landowners' names and mailing addresses: Gray County Appraisal District (https://esearch.graycad.org/); ReportAllUSA.com.

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

☐ Yes ☒ No

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

N/A. This project is not associated with any permanent school land.

Section 2. Original Photographs (Instructions Page 38)

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

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

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

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

☒ See attachment 8. A plot plan or map showing the location and direction of each photograph

Section 3. Buffer Zone Map (Instructions Page 38)

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

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

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

☒See attachment 9. Ownership

☐ Restrictive easement

☐ Nuisance odor control See Attachment 19 for Wastewater Treatment Odor Mitigation Memo for additional discussion addressing nuisance odor concerns at the project.

☐ Variance

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

☒ Yes ☐ No

DOMESTIC WASTEWATER PERMIT APPLICATION

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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

Attachment: N/A.

WATER QUALITY PERMIT

PAYMENT SUBMITTAL FORM

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

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

Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

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

BY OVERNIGHT/EXPRESS MAIL

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

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

1. Check or Money Order Number: ePay Trace Number: 582EA000686368.
2. Check or Money Order Amount: N/A.
3. Date of Check or Money Order: N/A.
4. Name on Check or Money Order: N/A.
5. APPLICATION INFORMATION

   Name of Project or Site: IP MEITNER DTC.

   Physical Address of Project or Site: Section 142, Block M-2 BS&F624.24 AC ABST; The site is located nearly 2 miles north of the intersection of Highway 152 and 21 Road, approximately 17 miles east of the City of Pampa, TX.

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

Staple Check or Money Order in This Space

ATTACHMENT 1

INDIVIDUAL INFORMATION

Section 1. Individual Information (Instructions Page 41)

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

Prefix (Mr., Ms., Miss): N/A.

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

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

Date of Birth: Click to enter text.

Mailing Address: Click to enter text.

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

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

E-mail Address: Click to enter text.

CN: Click to enter text.

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

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

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

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

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

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

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

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

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

Things to Know:

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

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

Electronic Application Submittal ☒ Yes
(See application submittal requirements on page 23 of the instructions.)

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

Summary of Application (in Plain Language) ☒ Yes

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

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

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

Section 1. Permitted or Proposed Flows (Instructions Page 42)

A. Existing/Interim I Phase

Design Flow (MGD): N/A

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

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

B. Interim II Phase

Design Flow (MGD): N/A

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

Estimated construction start date: Click to enter text.

Estimated waste disposal start date: Click to enter text.

C. Final Phase

Design Flow (MGD): 0.0287

2-Hr Peak Flow (MGD): 0.043

Estimated construction start date: October 2026

Estimated waste disposal start date: April 2027

D. Current Operating Phase

Provide the startup date of the facility: N/A

Section 2. Treatment Process (Instructions Page 42)

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 project involves construction of a new data center facility and the associated wastewater treatment system. The facility will consist of 3 Data Center units and a HUB unit. The municipal wastewater from the restrooms in these units and from the operations building at the facility will be collected in lift stations located adjacent to these structures and then pumped to a packaged biological treatment system for secondary treatment. The packaged system will consist of influent screens, an equalization basin, an aeration zone, a clarification zone with Return Activated Sludge (RAS) return and a sludge holding zone. The treated effluent will be discharged to an on-site HDPE lined evaporation pond using a gravity pipe and the collected biological solids will be removed by a septage hauler. A secondary holding tank will be provided to hold the wastewater contents for 5 days in contingency conditions when the packaged system in non-functional/undergoing repair. A wastewater collection system and the wastewater treatment will be constructed at one time. No discharge to any water body is planned.

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)
Influent Lift Stations	3	6ft DIA x 18 ft D
Packaged Biological Treatment System	1	100ft L x 16ft W x 14ft D
Evaporation Pond	1	1220ft L x 375ft W x 10ft D (Surface Area = 10.5 Acres)
Secondary Holding Tank	1	43ft DIA x 15 ft D

C. Process Flow Diagram

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

Attachment: See attachment 10.

Section 3. Site Information and Drawing (Instructions Page 43)

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

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

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

- Latitude: 35° 35' 14.90" N
- Longitude: 100° 43' 07.57" W

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

- The boundaries of the treatment facility;
- The boundaries of the area served by the treatment facility;

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

Attachment: See attachment 11.
Provide the name **and** a description of the area served by the treatment facility.

The Project Pumpkin Wastewater Treatment system will be designed to serve three (3) data center buildings, one (1) administrative "HUB" building, and one (1) water/wastewater operations building as shown on the site diagram provided in attachment 11.

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

Collection System Information

Collection System Name	Owner Name	Owner Type	Population Served
N/A		Choose an item.	
		Choose an item.	
		Choose an item.	
		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 44)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

N/A. This application is for the authorization of a new Privately-Owned Domestic Wastewater Facility seeking a TLAP permit. This is not a permit renewal.

Section 5. Closure Plans (Instructions Page 44)

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

☐ Yes ☒ No

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

☐ Yes ☒ No

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

N/A. This application is for the authorization of a new Privately-Owned Domestic Wastewater Facility seeking a TLAP permit.

Section 6. Permit Specific Requirements (Instructions Page 44)

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

A. Summary transmittal

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

☐ Yes ☒ No

If yes, provide the date(s) of approval for each phase: N/A.

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

N/A. This application is for the authorization of a new Privately-Owned Domestic Wastewater Facility seeking a TLAP permit. No plans or specifications have been previously submitted.

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.

N/A.

C. Other actions required by the current permit

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

☐ Yes ☒ No

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

N/A. This application is for the authorization of a new Privately-Owned Domestic Wastewater Facility seeking a TLAP permit. The "Other Requirements or Special Provisions" section is not applicable.

D. Grit and grease treatment

1. *Acceptance of grit and grease waste*

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

☐ Yes ☒ No

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

2. *Grit and grease processing*

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

N/A. This application is for the authorization of a new Privately-Owned Domestic Wastewater Facility seeking a TLAP permit.

3. *Grit disposal*

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

☐ Yes ☐ No

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

Describe the method of grit disposal.

N/A. This application is for the authorization of a new Privately-Owned Domestic Wastewater Facility seeking a TLAP permit.

4. ***Grease and decanted liquid disposal***

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

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

N/A. This application is for the authorization of a new Privately-Owned Domestic Wastewater Facility seeking a TLAP permit.

E. Stormwater management

1. ***Applicability***

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

☐ Yes ☒ No

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

☐ Yes ☒ No

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

2. ***MSGP coverage***

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

☐ Yes ☐ No

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

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

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

☐ Yes ☐ No

3. ***Conditional exclusion***

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

☐ Yes ☐ No

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

N/A.

4. ***Existing coverage in individual permit***

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

☐ Yes ☐ No

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

N/A.

5. ***Zero stormwater discharge***

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

☐ Yes ☐ No

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

N/A.

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

6. ***Request for coverage in individual permit***

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

☐ Yes ☐ No

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

N/A.

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

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

If yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions.
N/A. The project is not located in within Lake Houston Watershed.

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

1. *Acceptance of sludge from other WWTPs*

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

☐ Yes ☒ No

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

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

N/A. This facility will not receive other wastes received including sludge from other WWTPs or septic waste.

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.

N/A. This facility will not receive other wastes received including sludge from other WWTPs or septic waste.

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

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

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

☐ Yes ☒ No

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

N/A. This facility will not receive other wastes received including sludge from other WWTPs or septic waste.

Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 49)

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 N/A.

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

*TPDES permits only
†TLAP permits only

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

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

Section 8. Facility Operator (Instructions Page 49)

Facility Operator Name: TBD.

Facility Operator's License Classification and Level: TBD.

Facility Operator's License Number: TBD.

Section 9. Sludge and Biosolids Management and Disposal (Instructions Page 50)

A. WWTP's Sewage Sludge or Biosolids Management Facility Type

Check all that apply. See instructions for guidance

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

B. WWTP's Sewage Sludge or Biosolids Treatment Process

Check all that apply. See instructions for guidance.

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

☒ Other Treatment Process:

C. Sewage Sludge or Biosolids Management

Provide information on the *intended* sewage sludge or biosolids management practice. Do not enter every management practice that you want authorized in the permit, as the permit will authorize all sewage sludge or 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
Removal by septage hauler	Off-site Third-Party Handler or Preparer	Bulk	~0.05 metric tons/day	N/A: Removal by septage hauler	N/A: Removal by septage hauler

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): TCEQ Registered Sludge Hauler to remove the biosolids on a weekly basis and transport to the City of Pampa's Wastewater Treatment Plant.

D. Disposal site

Disposal site name: City of Pampa Liquid Waste Processing Facility.

TCEQ permit or registration number: RN101608974; WQ0010358002

County where disposal site is located: Gray

E. Transportation method

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

Name of the hauler: REEDS SEPTIC PUMPING

Hauler registration number: RN105356174

Sludge is transported as a:

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

Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 52)

A. Beneficial use authorization

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

☐ Yes ☐ No

B. Sludge processing authorization

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

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

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

☐ Yes ☐ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

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

A. Location information

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

- Original General Highway (County) Map:

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

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

  Attachment: Click to enter text.
- Site map:

  Attachment: Click to enter text.

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

☐ Overlap a designated 100-year frequency flood plain

☐ Soils with flooding classification

☐ Overlap an unstable area

☐ Wetlands

☐ Located less than 60 meters from a fault

☐ None of the above

Attachment: Click to enter text.

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

N/A. The proposed wastewater treatment facility will not be utilizing sewage sludge lagoons.

B. Temporary storage information

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

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

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

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

Phosphorus, mg/kg: Click to enter text.

Potassium, mg/kg: Click to enter text.

pH, standard units: Click to enter text.

Ammonia Nitrogen mg/kg: Click to enter text.

Arsenic: Click to enter text.

Cadmium: Click to enter text.

Chromium: Click to enter text.

Copper: Click to enter text.

Lead: Click to enter text.

Mercury: Click to enter text.

Molybdenum: Click to enter text.

Nickel: Click to enter text.

Selenium: Click to enter text.

Zinc: Click to enter text.

Total PCBs: Click to enter text.

Provide the following information:

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

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

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

C. Liner information

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

☐ Yes ☐ No

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

N/A. The proposed wastewater treatment facility will not be utilizing sewage sludge lagoons.

D. Site development plan

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

N/A. The proposed wastewater treatment facility will not be utilizing sewage sludge lagoons.

Attach the following documents to the application.

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

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

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

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

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

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

  Attachment: Click to enter text.

E. Groundwater monitoring

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

☐ Yes ☐ No

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

Attachment: Click to enter text.

Section 12. Authorizations/Compliance/Enforcement (Instructions Page 54)

A. Additional authorizations

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

☐ Yes ☒ No

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

N/A. The proposed wastewater treatment facility will not require additional authorizations.

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

☐ Yes ☒ No

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

☐ Yes ☒ No

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

N/A. This application is for the authorization of a new Privately-Owned Domestic Wastewater Facility seeking a TLAP permit. There is no enforcement status associated with the Permittee.

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

A. RCRA hazardous wastes

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

☐ Yes ☒ No

B. Remediation activity wastewater

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

☐ Yes ☒ No

C. Details about wastes received

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

Attachment: N/A.

Section 14. Laboratory Accreditation (Instructions Page 55)

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

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

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

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

CERTIFICATION:

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

Printed Name:

Title:

Applicant Note: This application is for the authorization of a new Privately-Owned Domestic Wastewater Facility. No laboratory tests are provided with this application, but if laboratory tests are required, applicant certifies that all future laboratory tests pertaining to the application will meet the requirements of 30 TAC Chapter 25.

Signature: _____

Date: 9/30/2025

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 56)

A. Justification of permit need

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

The new Wastewater Treatment Plant will be designed to provide the treatment for domestic waste from the Data Center site and capable of treating 28,700 GPD of wastewater flows. The anticipated start of construction is October 2026.
Due to the cost associated with connecting to the nearest wastewater interconnection, associated costs and anticipated start of construction (October 2026), on-site treatment and effluent is the only economically viable option.
- **Regionalization is not feasible for this project.** The nearest practicable interconnection is more than 15 miles away. A desktop survey and mapping of permitted domestic wastewater facilities within and beyond the required 3-mile screening radius identified no WWTPs within three miles of the proposed site. The nearest practicable facility is more than 15 miles from the site, which would require a new long-distance force main and at least one intermediate pump station to convey flows.
- **Outside the City of Pampa's CCN** (Certificate of Convenience and Necessity) **by more than 10 miles.** The project site is more than 10 miles outside the City of Pampa's sewer CNN. Because the site lies well outside the city's certificated service area, regionalization would require (i) CCN expansion or a wholesale service arrangement, and (ii) significant off-site infrastructure and easement acquisition. The anticipated start of construction is October 2026. There are no municipal wastewater treatment plants located within a reasonable distance of the project site and hence, on-site treatment and effluent disposal with evaporation pond is an economically feasible treatment option. The sludge will be hauled offsite by a licensed hauler to City of Pampa's Liquid Waste Processing Facility.

B. Regionalization of facilities

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

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

1. *Municipally incorporated areas*

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

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

☐ Yes ☒ No ☐ Not Applicable

If yes, within the city limits of: N/A.

If yes, attach correspondence from the city.

Attachment: N/A.

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

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

Attachment: N/A.

2. ***Utility CCN areas***

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

☐ Yes ☒ No

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

Attachment: N/A.

3. ***Nearby WWTPs or collection systems***

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

☐ Yes ☒ No

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

Attachment: N/A.

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

Attachment: N/A.

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

Attachment: N/A.

Section 2. Proposed Organic Loading (Instructions Page 58)

Is this facility in operation?

☐ Yes ☒ No

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

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

A. Current organic loading

Facility Design Flow (flow being requested in application): N/A.

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

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

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

N/A. The proposed facility is not in operation.

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	Data Center - 0.0287 MGD	133 - 400 mg/L. (Per Table 3-18 titled "Typical composition of untreated domestic wastewater" in MetCalf & Eddy, 5th Edition (2014))
TOTAL FLOW from all sources	0.0287 MGD	
AVERAGE BOD_5 from all sources		133 - 400 mg/L. (Per Table 3-18 titled "Typical composition of untreated domestic wastewater" in MetCalf & Eddy, 5th Edition (2014))

Section 3. Proposed Effluent Quality and Disinfection (Instructions

Page 58)

A. Existing/Interim I Phase Design Effluent Quality

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

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

Ammonia Nitrogen, mg/l: Click to enter text.

Total Phosphorus, mg/l: Click to enter text.

Dissolved Oxygen, mg/l: Click to enter text.

Other: Click to enter text.

B. Interim II Phase Design Effluent Quality

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

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

Ammonia Nitrogen, mg/l: Click to enter text.

Total Phosphorus, mg/l: Click to enter text.

Dissolved Oxygen, mg/l: Click to enter text.

Other: Click to enter text.

C. Final Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: 30

Total Suspended Solids, mg/l: 30

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: mg/l after 30 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: N/A

Section 4. Design Calculations (Instructions Page 58)

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

Attachment: See attachment 12.

Section 5. Facility Site (Instructions Page 59)

A. 100-year floodplain

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

☒ Yes ☐ No

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

"N/A. The proposed facility is located above the 100-year frequency flood level.

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

FEMA Flood Map Service Center. https://msc.fema.gov/portal/search?AddressQuery=Pampa

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: N/A.

If no, provide the approximate date you anticipate submitting your application to the Corps: N/A.

B. Wind rose

Attach a wind rose: See attachment 13.

Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 59)

A. Beneficial use authorization

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

☐ Yes ☒ No

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

B. Sludge processing authorization

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

☐ Sludge Composting

☐ Marketing and Distribution of sludge

☐ Sludge Surface Disposal or Sludge Monofill

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

Section 7. Sewage Sludge Solids Management Plan (Instructions Page 60)

Attach a solids management plan to the application.

Attachment: See attachment 14. TCEQ Registered Sludge Hauler to remove the biosolids on a weekly basis and transport to the City of Pampa's Wastewater Treatment Plant, RN101608974; WQ0010358002.

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.

WORKSHEET NOT APPLICABLE.

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 63)

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: N/A.

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 63)

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: N/A.

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).

N/A.

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).

N/A.

WORKSHEET NOT APPLICABLE.

Section 3. Classified Segments (Instructions Page 63)

Is the discharge directly into (or within 300 feet of) a classified segment?

☐ Yes ☐ No

If yes, this Worksheet is complete.

If no, complete Sections 4 and 5 of this Worksheet.

Section 4. Description of Immediate Receiving Waters (Instructions Page 63)

Name of the immediate receiving waters: **N/A.**

A. Receiving water type

Identify the appropriate description of the receiving waters.

☐ Stream

☐ Freshwater Swamp or Marsh

☐ Lake or Pond

Surface area, in acres: Click to enter text.

Average depth of the entire water body, in feet: Click to enter text.

Average depth of water body within a 500-foot radius of discharge point, in feet: Click to enter text.

☐ Man-made Channel or Ditch

☐ Open Bay

☐ Tidal Stream, Bayou, or Marsh

☐ Other, specify: Click to enter text.

B. Flow characteristics

If a stream, man-made channel or ditch was checked above, provide the following. For existing discharges, check one of the following that best characterizes the area *upstream* of the discharge. For new discharges, characterize the area *downstream* of the discharge (check one).

☐ Intermittent - dry for at least one week during most years

☐ Intermittent with Perennial Pools - enduring pools with sufficient habitat to maintain significant aquatic life uses

☐ Perennial - normally flowing

Check the method used to characterize the area upstream (or downstream for new dischargers).

☐ USGS flow records

☐ Historical observation by adjacent landowners

☐ Personal observation

☐ Other, specify: Click to enter text.

WORKSHEET NOT APPLICABLE.

C. Downstream perennial confluences

List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point.

N/A.

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.

N/A.

E. Normal dry weather characteristics

Provide general observations of the water body during normal dry weather conditions.

N/A.

Date and time of observation: Click to enter text.

Was the water body influenced by stormwater runoff during observations?

☐ Yes ☐ No

Section 5. General Characteristics of the Waterbody (Instructions Page 65)

A. Upstream influences

Is the immediate receiving water upstream of the discharge or proposed discharge site influenced by any of the following? Check all that apply.

☐ Oil field activities
☐ Urban runoff
☐ Upstream discharges
☐ Agricultural runoff
☐ Septic tanks
☐ Other(s), specify: Click to enter text.

WORKSHEET NOT APPLICABLE.

B. Waterbody uses

Observed or evidences of the following uses. Check all that apply.

- ☐ Livestock watering
- ☐ Irrigation withdrawal
- ☐ Fishing
- ☐ Domestic water supply
- ☐ Park activities
- ☐ Contact recreation
- ☐ Non-contact recreation
- ☐ Navigation
- ☐ Industrial water supply
- ☐ 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

WORKSHEET NOT APPLICABLE.

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 65)

Date of study: **N/A.** Time of study: **N/A.**

Stream name: **N/A.**

Location: **N/A.**

Type of stream upstream of existing discharge or downstream of proposed discharge (check one).

☐ Perennial ☐ Intermittent with perennial pools

Section 2. Data Collection (Instructions Page 65)

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.

N/A.

WORKSHEET NOT APPLICABLE.

Stream transects

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

Table 2.1(1) - Stream Transect Records

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

Section 3. Summarize Measurements (Instructions Page 65)

Streambed slope of entire reach, from USGS map in feet/feet: N/A.

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

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

Number of lateral transects made: Click to enter text.

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

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

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

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

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

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

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

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.0: LAND DISPOSAL OF EFFLUENT

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

Section 1. Type of Disposal System (Instructions Page 67)

Identify the method of land disposal:

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

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

For existing authorizations, provide Registration Number: N/A.

Section 2. Land Application Site(s) (Instructions Page 67)

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
N/A.			

Section 3. Storage and Evaporation Lagoons/Ponds (Instructions Page 67)

Table 3.0(2) – Storage and Evaporation Ponds

Pond Number	Surface Area (acres)	Storage Volume (acre-feet)	Dimensions	Liner Type
1	10.5	105 acre-feet	1220ft L x 375 ft W x 10ft D	60-MIL HDPE Primary and Secondary Dual Liner System

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

Attachment: To be provided at a later stage.

Section 4. Flood and Runoff Protection (Instructions Page 67)

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

☐ Yes ☒ No

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

N/A. The proposed facility is above the 100-year frequency flood level.

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

FEMA Flood Map Service Center
https://msc.fema.gov/portal/search?AddressQuery=Pampa%20TX%20

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

The Evaporation Pond will be equipped with a dual 60-MIL HDPE Liner system along with a leak detection system which will prevent any infiltration of effluent into the groundwater. The Earthwork grading and the elevated berms at the Evaporation Lagoons will be designed to contain all precipitation falling into the Evaporation Pond and prevent any run-offs and evaporate all precipitation falling within its covered surface area.

Section 5. Annual Cropping Plan (Instructions Page 67)

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**: N/A.

- 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 68)

Attach a USGS map with the following information shown and labeled. If not applicable, provide a detailed explanation indicating why. **Attachment**: See Buffer Zone Map attachment with the Administrative Report.

- 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
0527101	Industrial	Indeterminate	Cased	Meets Buffer Zone Requirements
0527102	Groundwater Monitoring	N	Cased	Not a Production Well
0527103	Irrigation	Indeterminate	Cased.	Meets Buffer Zone Requirements
0527104	Irrigation	Indeterminate	Cased.	Meets Buffer Zone Requirements

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
0527105	Domestic	Indeterminate	Cased	Meets Buffer Zone Requirements
0527106	Indeterminate	Indeterminate	Indeterminate	Meets Buffer Zone Requirements
0527201	Irrigation	Indeterminate	Indeterminate	Meets Buffer Zone Requirements
0527202	Irrigation	Indeterminate	Indeterminate	Meets Buffer Zone Requirements
441102	Domestic	Indeterminate	Indeterminate	Meets Buffer Zone Requirements
494732	Stock	Indeterminate	Indeterminate	Meets Buffer Zone Requirements
621790	Irrigation	Indeterminate	Indeterminate	Meets Buffer Zone Requirements

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

Attachment: See attachment 15 for well logs for the existing wells.

Section 7. Groundwater Quality (Instructions Page 68)

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: The Evaporation Pond will be provided with a 60-Mil HDPE dual-liner system along with leak detection within the lagoons. This provision will eliminate any contact between the liquid in the evaporation lagoons and the groundwater.

Are groundwater monitoring wells available onsite? ☒ Yes ☒ No

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

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

Attachment: N/A.

Section 8. Soil Map and Soil Analyses (Instructions Page 69)

A. Soil map

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

Attachment: See attachment 16.

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: The Evaporation Pond will be provided with a 60-Mil HDPE dual-liner system along with leak detection within the lagoons. This provision will eliminate any contact between the liquid in the evaporation lagoons and the groundwater.

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
N/A.				

Section 9. Effluent Monitoring Data (Instructions Page 70)

Is the facility in operation?

☐ Yes ☒ No

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

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

Table 3.0(5) – Effluent Monitoring Data

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

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

Provide a discussion of all persistent excursions above the permitted limits and any corrective actions taken.

N/A.

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 71)

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

A. Irrigation

Area under irrigation, in acres: N/A.

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: 28,700.

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

Attachment: See attachment 17.

C. Evapotranspiration beds

Number of beds: N/A.

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

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

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

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

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

Attachment: Click to enter text.

D. Overland flow

Area used for application, in acres: N/A.

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

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

Slope length, in feet: Click to enter text.

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

Design application frequency:

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

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

Attachment: Click to enter text.

Section 2. Edwards Aquifer (Instructions Page 72)

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

☐ Yes ☒ No

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

☐ Yes ☐ No

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

Attachment: N/A. The facility is not subject to Edward Aquifer Rules.

WORKSHEET NOT APPLICABLE.

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 73)

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: N/A.

Application area, in acres: **N/A.**

Area of drainfield, in square feet: Click to enter text.

Application rate, in gal/square foot/day: Click to enter text.

Depth to groundwater, in feet: Click to enter text.

Area of trench, in square feet: Click to enter text.

Dosing duration per area, in hours: Click to enter text.

Number of beds: Click to enter text.

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

Infiltration rate, in inches/hour: Click to enter text.

Storage volume, in gallons: Click to enter text.

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

Soil Classification: Click to enter text.

Attach a separate engineering report with the information required in *30 TAC § 309.20,* excluding the requirements of § 309.20 b(3)(A) and (B) design analysis which may be asked for on a case by case basis. Include a description of the schedule of dosing basin rotation.

Attachment: Click to enter text.

Section 2. Edwards Aquifer (Instructions Page 73)

Is the subsurface system over the Edwards Aquifer Recharge Zone as mapped by TCEQ?

☐ Yes ☒ No

Is the subsurface system over the Edwards Aquifer Transition Zone as mapped by TCEQ?

☐ Yes ☐ No

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

WORKSHEET NOT APPLICABLE.

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

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

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

Section 1. Administrative Information (Instructions Page 74)

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

B. **N/A.** 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.

N/A.

C. Owner of the subsurface area drip dispersal system: **N/A.**

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.

N/A.

E. Owner of the land where the subsurface area drip dispersal system is located: N/A.

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.

N/A.

Section 2. Subsurface Area Drip Dispersal System (Instructions Page

WORKSHEET NOT APPLICABLE.

74)

A. Type of system

☐ Subsurface Drip Irrigation

☐ Surface Drip Irrigation

☐ Other, specify: N/A.

B. Irrigation operations

Application area, in acres: **N/A.**

Infiltration Rate, in inches/hour: Click to enter text.

Average slope of the application area, percent (%): Click to enter text.

Maximum slope of the application area, percent (%): Click to enter text.

Storage volume, in gallons: Click to enter text.

Major soil series: Click to enter text.

Depth to groundwater, in feet: Click to enter text.

C. Application rate

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

Hydraulic application rate, in gal/square foot/day: N/A.

Nitrogen application rate, in lbs/gal/day: N/A.

D. Dosing information

Number of doses per day: N/A.

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.

WORKSHEET NOT APPLICABLE.

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

☐ Yes ☐ No

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

Attachment: N/A.

Section 3. Required Plans (Instructions Page 74)

A. Recharge feature plan

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

Attachment: N/A.

B. Soil evaluation

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

Attachment: N/A.

C. Site preparation plan

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

Attachment: N/A.

D. Soil sampling/testing

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

Attachment: N/A.

Section 4. Floodway Designation (Instructions Page 75)

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: N/A.

Section 5. Surface Waters in the State (Instructions Page 75)

A. Buffer Map

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

Attachment: N/A.

B. Buffer variance request

WORKSHEET NOT APPLICABLE.

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: N/A.

Section 6. Edwards Aquifer (Instructions Page 75)

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

WORKSHEET NOT APPLICABLE.

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 76)

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

Grab ☐ Composite ☐

Date and time sample(s) collected: N/A.

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

WORKSHEET NOT APPLICABLE.

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Chlorodibromomethane				10
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

WORKSHEET NOT APPLICABLE.

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Endosulfan I (alpha)				0.01
Endosulfan II (beta)				0.02
Endosulfan Sulfate				0.1
Endrin				0.02
Epichlorohydrin				---
Ethylbenzene				10
Ethylene Glycol				---
Fluoride				500
Guthion				0.1
Heptachlor				0.01
Heptachlor Epoxide				0.01
Hexachlorobenzene				5
Hexachlorobutadiene				10
Hexachlorocyclohexane (alpha)				0.05
Hexachlorocyclohexane (beta)				0.05
gamma-Hexachlorocyclohexane (Lindane)				0.05
Hexachlorocyclopentadiene				10
Hexachloroethane				20
Hexachlorophene				10
4,4'-Isopropylidenediphenol				1
Lead				0.5
Malathion				0.1
Mercury				0.005
Methoxychlor				2
Methyl Ethyl Ketone				50
Methyl tert-butyl ether				---
Mirex				0.02
Nickel				2
Nitrate-Nitrogen				100
Nitrobenzene				10
N-Nitrosodiethylamine				20
N-Nitroso-di-n-Butylamine				20

WORKSHEET NOT APPLICABLE.

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Nonylphenol				333
Parathion (ethyl)				0.1
Pentachlorobenzene				20
Pentachlorophenol				5
Phenanthrene				10
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.

WORKSHEET NOT APPLICABLE.

Section 2. Priority Pollutants

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

Grab ☐ Composite ☐

Date and time sample(s) collected: N/A.

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

WORKSHEET NOT APPLICABLE.

Table 4.0(2)B – Volatile Compounds

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

WORKSHEET NOT APPLICABLE.

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

WORKSHEET NOT APPLICABLE.

Table 4.0(2)D – Base/Neutral Compounds

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

WORKSHEET NOT APPLICABLE.

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

WORKSHEET NOT APPLICABLE.

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 "<".

WORKSHEET NOT APPLICABLE.

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.

N/A.

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

☐ Yes ☐ No

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

N/A.

WORKSHEET NOT APPLICABLE.

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

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

Grab ☐ Composite ☐

Date and time sample(s) collected: **N/A.**

Table 4.0(2)F – Dioxin/Furan Compounds

Compound	Toxic Equivalency 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						

WORKSHEET NOT APPLICABLE.

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 Page 86 of the instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Required Tests

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: N/A.

48-hour Acute: N/A.

Section 2. Toxicity Reduction Evaluations (TREs)

Has this facility completed a TRE in the past four and a half years? Or is the facility currently performing a TRE?

☐ Yes ☐ No

If yes, describe the progress to date, if applicable, in identifying and confirming the toxicant.

N/A.

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
N/A.			

WORKSHEET NOT APPLICABLE.

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 87)

A. Industrial users (IUs)

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

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

Categorical IUs:

Number of IUs: N/A.

Average Daily Flows, in MGD: N/A.

Significant IUs - non-categorical:

Number of IUs: N/A.

Average Daily Flows, in MGD: N/A.

Other IUs:

Number of IUs: N/A.

Average Daily Flows, in MGD: N/A.

B. Treatment plant interference

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

☐ Yes ☐ No

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

N/A.

WORKSHEET NOT APPLICABLE.

C. Treatment plant pass through

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

☐ Yes ☐ No

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

N/A.

D. Pretreatment program

Does your POTW have an approved pretreatment program?

☐ Yes ☒ No

If yes, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

☐ Yes ☒ No

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

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

Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 87)

A. Substantial modifications

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

☐ Yes ☐ No

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

N/A.

B. Non-substantial modifications

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

☐ Yes ☐ No

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

N/A.

C. Effluent parameters above the MAL

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

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date

D. Industrial user interruptions

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

☐ Yes ☐ No

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

N/A.

WORKSHEET NOT APPLICABLE.

Section 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 88)

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).

N/A.

C. Product and service information

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

N/A.

D. Flow rate information

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

Process Wastewater:

Discharge, in gallons/day: N/A.

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

Discharge, in gallons/day: N/A.

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

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

☐ Yes ☐ No

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

☐ Yes ☐ No

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

Category: Subcategories: Click to enter text.

Click or tap here to enter text. Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

F. Industrial user interruptions

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

☐ Yes ☐ No

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

N/A.

WORKSHEET NOT APPLICABLE.

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 90)

1. TCEQ Program Area

Program Area (PST, VCP, IHW, etc.): N/A.

Program ID: Click to enter text.

Contact Name: Click to enter text.

Phone Number: Click to enter text.

2. Agent/Consultant Contact Information

Contact Name: N/A.

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: N/A.

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: N/A.

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.

WORKSHEET NOT APPLICABLE.

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

Latitude: N/A.

Longitude: N/A.

Method of determination (GPS, TOPO, etc.): Click to enter text.

Attach topographic quadrangle map as attachment A.

6. **Well Information**

Type of Well Construction, select one:

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

Number of Injection Wells: Click to enter text.

7. **Purpose**

Detailed Description regarding purpose of Injection System:

N/A.

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

8. **Water Well Driller/Installer**

Water Well Driller/Installer Name: N/A.

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

Phone Number: Click to enter text.

License Number: Click to enter text.

Section 2. Proposed Down Hole Design

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

Table 7.0(1) – Down Hole Design Table

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

WORKSHEET NOT APPLICABLE.

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

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

System(s) Dimensions: N/A.

System(s) Construction: N/A.

Section 4. Site Hydrogeological and Injection Zone Data

1. Name of Contaminated Aquifer: N/A.
2. Receiving Formation Name of Injection Zone: Click to enter text.
3. Well/Trench Total Depth: Click to enter text.
4. Surface Elevation: Click to enter text.
5. Depth to Ground Water: Click to enter text.
6. Injection Zone Depth: Click to enter text.
7. Injection Zone vertically isolated geologically? ☐ Yes ☐ No

   Impervious Strata between Injection Zone and nearest Underground Source of Drinking Water:

   Name: Click to enter text.

   Thickness: Click to enter text.
8. Provide a list of contaminants and the levels (ppm) in contaminated aquifer

   Attach as Attachment E.
9. Horizontal and Vertical extent of contamination and injection plume

   Attach as Attachment F.
10. Formation (Injection Zone) Water Chemistry (Background levels) TDS, etc.

    Attach as Attachment G.
11. Injection Fluid Chemistry in PPM at point of injection

    Attach as Attachment H.
12. Lowest Known Depth of Ground Water with < 10,000 PPM TDS: Click to enter text.
13. Maximum injection Rate/Volume/Pressure: Click to enter text.
14. Water wells within 1/4 mile radius (attach map as Attachment I): Click to enter text.
15. Injection wells within 1/4 mile radius (attach map as Attachment J): Click to enter text.
16. Monitor wells within 1/4 mile radius (attach drillers logs and map as Attachment K): Click to enter text.
17. Sampling frequency: Click to enter text.
18. Known hazardous components in injection fluid: Click to enter text.

WORKSHEET NOT APPLICABLE.

Section 5. Site History

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

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

Class V Injection Well Designations

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

ATTACHMENT 1
CORE DATA FORM
REFERENCE: DOMESTIC ADMINISTRATIVE REPORT - PAGE 4

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission *(If other is checked please describe in space provided.)*		
☒ New Permit, Registration or Authorization *(Core Data Form should be submitted with the program application.)*		
☐ Renewal *(Core Data Form should be submitted with the renewal form)*		☐ Other
2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	**3. Regulated Entity Reference Number** *(if issued)*
N/A - New customer		N/A - New entity

SECTION II: Customer Information

4. General Customer Information	**5. Effective Date for Customer Information Updates** (mm/dd/yyyy)	8/29/2025
☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership ☐Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)		
The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).		
6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)*	*If new Customer, enter previous Customer below:*	
IP MEITNER DTC, LLC		

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*
0806174957	32101669292	39-3796328	

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

12. Number of Employees	**13. Independently Owned and Operated?**
☐ 0-20 ☐ 21-100 ☐ 101-250 ☒ 251-500 ☐ 501 and higher	☒ **Yes** ☐ **No**

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

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

15. Mailing Address:	9450 SW Gemini Dr. PMB #68743							
	City	Beaverton	**State**	OR	**ZIP**	97008	**ZIP + 4**	

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	permitting@intersectpower.com

18. Telephone Number	**19. Extension or Code**	**20. Fax Number** *(if applicable)*
(503) 489-7528	N/A	N/A

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.)*

IP MEITNER DTC

23. Street Address of the Regulated Entity:	Section 142, Block M-2 BS&F624.24 AC ABST							
(No PO Boxes)	**City**	Pampa	**State**	Texas	**ZIP**	79065	**ZIP + 4**	
24. County	Gray							

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

25. Description to Physical Location:	The site is located nearly 2 miles North of the intersection of Highway 152 and 21 Road, approximately 17 miles east of the City of Pampa, TX.

26. Nearest City	**State**	**Nearest ZIP Code**
Pampa	TX	79065

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

27. Latitude (N) In Decimal:			**28. Longitude (W) In Decimal:**		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
35	35	14.90	100	43	07.57

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
7374		518210	

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

This entity will serve as a Data Center.

34. Mailing Address:	9450 SW Gemini Dr. PMB #68743							
	City	Beaverton	**State**	OR	**ZIP**	97008	**ZIP + 4**	
35. E-Mail Address:	permitting@intersectpower.com							
36. Telephone Number		**37. Extension or Code**		**38. Fax Number** *(if applicable)*				
(503) 489-7528				N/A				

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

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

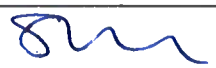
SECTION IV: Preparer Information

40. Name:	Abhijeet Saraf	**41. Title:**	Water/Wastewater EIT

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(402) 392-6986		( ) -	Abhijeet.Saraf@hdrinc.com

SECTION V: Authorized Signature

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

Company:	IP MEITNER DTC, LLC	**Job Title:**	Chief Commercial Officer
Name *(In Print):*	Simon Ross	**Phone:**	415-971-0130
Signature:		**Date:**	9/12/2025

ATTACHMENT 2
SUMMARY OF APPLICATION IN PLAIN LANGUAGE FORM
REFERENCE: DOMESTIC ADMINISTRATIVE REPORT - PAGE 7

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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

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

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

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

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

Intersect proposes to operate a new wastewater treatment system at their new data center facility at the Pumpkin project site, which will be located near the intersection of Highway 152 and 21 Road, approximately 17 miles east of the City of Pampa, Gray County, TX. (ZIP #79065).

This application is for the new wastewater treatment system at the facility that will treat nearly 28,700 gallons/day of domestic wastewater.

Treated effluent from the facility are expected to contain concentrations of five-day carbonaceous biochemical demand ($CBOD_5$) and total suspended solids (TSS) lower than the effluent limitations provided in 30 TAC §309.1(b). Please see more details in the Domestic Technical Report, Section 7 Pollutant Analysis of Treated Effluent. Wastewater will be collected by Lift Stations located adjacent to the Data Centers and the Operations Building and will be pumped to a Packaged Biological Treatment System for treatment. The packaged biological treatment system will consist of an influent screen, flow equalization basin, aeration zone and a final clarifier with Return Activated Sludge (RAS) return and a sludge storage zone. The treated effluent will be sent to an on-site HDPE Lined evaporation pond. No discharge to any water body is planned. Septage Hauler to remove the biosolids on a weekly basis to the City of Pampa's Wastewater Treatment Plant by a registered hauler.

Intersect propone operar un nuevo sistema de tratamiento de aguas residuales en su nueva instalación de centro de datos en el sitio del proyecto Pumpkin, el cual estará ubicado cerca de la intersección de la Carretera 152 y el Camino 21, aproximadamente a 17 millas al este de la Ciudad de Pampa, Condado de Gray, TX (C.P. #79065).

Esta solicitud corresponde al nuevo sistema de tratamiento de aguas residuales de la instalación, que tratará aproximadamente 28,700 galones/día de aguas residuales domésticas.

Se espera que el efluente tratado de la instalación contenga concentraciones de demanda bioquímica de oxígeno carbonácea a cinco días (DBO5c) y de sólidos suspendidos totales (SST) inferiores a los límites de descarga establecidos en 30 TAC §309.1(b). Favor de consultar más detalles en el Informe Técnico Doméstico, Sección 7, Análisis de Contaminantes del Efluente Tratado.

Las aguas residuales serán recolectadas mediante estaciones de bombeo ubicadas junto a los Centros de Datos y el Edificio de Operaciones, y serán bombeadas hacia un Sistema Biológico de Tratamiento Empacado para su tratamiento. El sistema biológico empacado consistirá en una reja de influente, un tanque de igualación de caudal, una zona de aireación y un clarificador final con recirculación de Lodos Activados de Retorno (LAR) y una zona de almacenamiento de lodos.

El efluente tratado será enviado a una laguna de evaporación con revestimiento de HDPE ubicada en el sitio. No se contempla ninguna descarga a cuerpos de agua. Un transportista de lodos sépticos removerá los biosólidos semanalmente hacia la Planta de Tratamiento de Aguas Residuales de la Ciudad de Pampa, utilizando un transportista registrado.

ATTACHMENT 3
PUBLIC INVOLVEMENT PLAN FORM
REFERENCE: DOMESTIC ADMINISTRATIVE REPORT - PAGE 7

Texas Commission on Environmental Quality

Public Involvement Plan Form for Permit and Registration Applications

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

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

Section 1. Preliminary Screening

☒ New Permit or Registration Application

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

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

Section 2. Secondary Screening

☒ Requires public notice,

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

☒ Located within any of the following geographical locations:

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

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

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

Section 3. Application Information

Type of Application (check all that apply):

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

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

Water Quality

☐ Texas Pollutant Discharge Elimination System (TPDES)

☒ Texas Land Application Permit (TLAP)

☐ State Only Concentrated Animal Feeding Operation (CAFO)

☐ Water Treatment Plant Residuals Disposal Permit

☐ Class B Biosolids Land Application Permit

☐ Domestic Septage Land Application Registration

Water Rights New Permit

☐ New Appropriation of Water

☐ New or existing reservoir

Amendment to an Existing Water Right

☐ Add a New Appropriation of Water

☐ Add a New or Existing Reservoir

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

Section 4. Plain Language Summary

Provide a brief description of planned activities.

Please see the Summary of Application in Plain Language form attached with this permit application package.

Section 5. Community and Demographic Information

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

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

Pampa

(City)

Gray

(County)

MDA/MD Code: N/A; State Code: 48; County Code: 179; Tract Code: 9501.00; MSA/MD Name: N/A (outside of MSA); State Name: TEXAS; County Name: GRAY

(Census Tract)

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

☐ City ☒ County ☐ Census Tract

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

36.1

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

$30,893. Source: https://data.census.gov/table/ACSST5Y2023.S1902?q=Gray+County,+Texas+per+capita+income

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

Percent of Minority Population = 31.1% of Total County Population
American Indian/Alaska Native Population = 0.9% of Total County Population
Asian = 0.6% of Total County Population

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

Indo-European Languages = 0.2% of Total Households
Asian and Pacific Islander Languages = 0.4% of Total Households
Other Languages = 0.2% of Total Households

(e) Languages commonly spoken in area by percentage

English Only = 79.3% of Total Households
Spanish = 19.9% of Total Households

(f) Community and/or Stakeholder Groups

Data not available in Census

(g) Historic public interest or involvement

Data not available in Census

Section 6. Planned Public Outreach Activities

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

☒ Yes ☐ No

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

☒ Yes ☐ No

If Yes, please describe.

See Attachment 18

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

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

☒ Yes ☐ No

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

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

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

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

☒ Yes ☐ No

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

☒ Yes ☐ No

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

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

Section 7. Voluntary Submittal

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

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

☐ Yes ☐ No

What types of notice will be provided?

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

ATTACHMENT 4

PURCHASE RECORD AGREEMENT

REFERENCE: DOMESTIC ADMINISTRATIVE REPORT - PAGE 7

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OPTION AGREEMENT FOR THE PURCHASE AND SALE OF REAL PROPERTY

GRAY COUNTY, TEXAS

THIS OPTION AGREEMENT FOR THE PURCHASE AND SALE OF REAL PROPERTY (this "**Agreement**") is made and entered into as of the date of the last signature hereto (the "**Effective Date**"), by and between [redacted] and [redacted], a Texas limited liability company ("**Seller**"), and [redacted], a Delaware limited liability company ("**Purchaser**").

RECITALS

A. Seller is the owner of certain real property in Gray County, in the state of Texas, containing approximately 624.24 acres of land as more particularly described on **Exhibit A** attached hereto and incorporated herein (the "**Land**"), less any land that will be reserved by Seller being up to but no more than five (5) acres of land.

B. As used in this Agreement, the term the "**Property**" shall mean, collectively: (a) the Land, together with all of Seller's right, title and interest in all rights, easements, rights-of-way and other interests appurtenant thereto including, but not limited to, any streets or other public ways adjacent to such Land and any development rights, all permits, approvals, and entitlements, and water rights owned by, or leased to, Seller; and (b) all improvements located on such Land, if any (all such improvements, but not including the Irrigation Pivots, being collectively referred to herein as the "**Improvements**").

C. Seller desires to grant to Purchaser an option to purchase the Property on the terms set forth herein.

NOW THEREFORE, in consideration of the mutual promises and agreements set forth herein, and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Seller and Purchaser hereby agree as follows:

1. Grant of Option to Purchase. Seller hereby grants to Purchaser an exclusive and irrevocable option (the "**Option**") to purchase from Seller and, if Purchaser exercises the Option, agrees to sell to Purchaser all of the Property, subject to and upon the terms, covenants and conditions set forth herein.

2. Option Term.

(a) Term. The term of the Option shall commence on the Effective Date and shall expire eighteen (18) months thereafter (the "**Option Term**"). If Purchaser does not exercise the Option, or terminate this Agreement prior to the expiration of the Option Term, Purchaser shall be deemed to have terminated this Agreement, and at the request of either party, the other party shall execute a writing confirming such termination.

(b) Purchaser's Right to Terminate. Notwithstanding anything in this Agreement to the contrary, Purchaser shall have the right to terminate this Agreement at any time prior to the end of the Option Term in its sole and absolute discretion and for any or for no reason whatsoever. Upon such termination, the Option Consideration (defined below), to the extent paid

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by Purchaser to Seller, shall be retained by Seller (subject to the terms of Section 9), and neither party shall have any further rights or obligations hereunder except as otherwise specified in this Agreement.

3. Option Consideration.

(a) Signing Consideration. [redacted] (collectively, the "Signing Option Consideration"). The Signing Option Consideration shall be non-refundable except as provided in Section 9 (or as elsewhere expressly provided in this Agreement). The parties acknowledge and agree that the Signing Option Consideration is adequate consideration paid by Purchaser to Seller for entering into this Agreement and the right and ability of Purchaser to commence its due diligence of the Property and evaluate the transaction contemplated by this Agreement.

(b) Option Payments. On or before the respective payment dates set forth below, Purchaser shall pay and release to Seller the additional sums set forth below (collectively, with the Signing Option Consideration, the "**Option Consideration**"), all in the form of immediately available funds.

[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

(c) Account Information. All payments made by Purchaser under this Section 3 shall be made by wire transfer to the following bank account at Seller's financial institution:

Bank Name: [redacted]
Bank Address: [redacted]
Bank Phone: [redacted]
Routing #: [redacted]
Account #: [redacted]
Account Name: [redacted]

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Seller expressly authorizes and approves the payment direction to the Seller as forth above. Payment shall be deemed made and paid upon issuance of a wire transfer confirmation number for the transfer of such funds to Seller's account from Purchaser's financial institution.

(d) Termination for Failure to Pay. If Purchaser fails to make a payment of Option Consideration within thirty (30) days of its respective payment date, Seller may terminate this Agreement if such payment is not made within ten (10) days' after written notice to Purchaser; provided, however, if Seller accepts any Option Consideration payment made after its respective payment date, this Agreement shall continue in full force and effect and Seller hereby waives any claims it may have due to such Option Consideration payment having been made past its respective payment date. If this Agreement is terminated as set forth above, or is otherwise terminated as provided herein, Purchaser shall have no further obligation to pay any Option Consideration that has not been paid to Seller as of the date of such termination.

4. Exercise of Option. The Option may be exercised upon Purchaser's written notice to Seller of its election to exercise the Option ("**Option Notice**") at any time during the Option Term. Such Option Notice shall be deemed timely if it is transmitted by facsimile, delivered or mailed, certified mail, return receipt requested, or via a nationally recognized overnight delivery service within the Option Term. In the event that Purchaser timely exercises the Option, Seller shall sell to Purchaser and Purchaser shall buy from Seller the Property, on the terms and conditions established in this Agreement. If Purchaser fails to exercise the Option on or before the last day of the Option Term, the Option shall be null and void and of no further force or effect. The Option Notice shall include a legal description of the Property that Purchaser intends to purchase, and the Purchase Price shall be paid at the Closing based on the acreage included in the Property described in the Option Notice.

5. Purchase Price.

(a) The "**Purchase Price**" for the Property shall be: [redacted] per acre of the Property described in the Option Notice;

(b) The Purchase Price shall be paid at the closing of the sale of the Property to Purchaser (the "**Closing**") plus or minus prorations and other adjustments hereunder.

6. Due Diligence. Purchaser shall have the right to access the Property and to commence due diligence with respect to the Property immediately following the Effective Date, and the due diligence period ("**Due Diligence Period**") shall expire at 5:00 p.m. Pacific Standard Time on the last day of the Option Term. Within fifteen (15) days after the Effective Date, Seller shall deliver to Purchaser or make available to Purchaser and its employees, representatives, counsel and consultants' access to agreements, reports and materials relating to the Property in Seller's possession or control, including, without limitation, all of the items set forth in Section 7 below (collectively, the "**Due Diligence Items**").

7. Diligence Period Conditions.

The following shall be conditions precedent to Purchaser's obligation to purchase the Property (the "**Diligence Period Conditions**"):

(a) Purchaser's review and approval of written documentation satisfactory to

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Purchaser, confirming that Seller possesses the full power and authority to sell the Property to Purchaser on the terms and conditions set forth herein and that the individuals executing this Agreement on behalf of Seller have the legal power, right and actual authority to bind Seller. Seller shall deliver such written documentation to Purchaser within fifteen (15) days after the Effective Date.

(b) Purchaser's review and approval of the Due Diligence Items, including, but not limited to, any and all tenant leases (including oil, gas or mineral rights), if any, and all amendments thereto (collectively, the "**Leases**"); all contracts pertaining to the use and operation of the Property, if any (collectively, the "**Service Contracts**"); permits and entitlements; any materials or reports concerning the physical condition of the Property; any records of the use of Hazardous Materials (defined below) on the Property; and such other documents and information reasonably requested by Purchaser, including, but not limited to, any existing Phase I and/or II Environmental Site Assessment, geotechnical studies, biological studies, cultural resource studies, wetland studies, drainage studies and/or plans, improvement plans, building plans, traffic studies, water supply assessment studies, and crop planting and harvesting schedules, if any. All Leases and Service Contracts shall be terminated by Seller at its sole cost and expense effective prior to the Closing. During the Option Term, Seller agrees not to grant any leases, easements, or other rights or interests in and to the Property without Purchaser's written consent, which may be withheld in Purchaser's sole discretion, including, without limitation, any oil, gas or other mineral leases unless the lessee agrees to waive and release on behalf of itself and its successors and assigns, of all rights of ingress and egress to enter upon the surface of the Property, and the area located between the surface and 500 feet beneath the surface of the Property for purposes of exploring for, developing, drilling, producing, transporting, or any other purposes incident to the development or production of the oil, gas or other minerals.

(c) Purchaser's review and approval of the condition of title to the Property. Purchaser shall obtain a current preliminary title report or a commitment for title insurance with respect to all of the Land, issued by First American Title Insurance Company (the "**Title Company**"), accompanied by copies of all documents referred to in the report or commitment (collectively, the "**Preliminary Report**"). Seller shall deliver to Purchaser at Seller's sole cost and expense, within fifteen (15) days after the Effective Date, the following:

(i) copies of all existing and proposed easements, covenants, restrictions, agreements or other documents which affect title to the Property that are actually known by Seller and are not recorded (and, within fifteen (15) days after Purchaser's delivery to Seller of a copy of the Preliminary Report, any such documents that are actually known by Seller that may be recorded, but that are not disclosed by the Preliminary Report) (collectively, "**Undisclosed Encumbrances**"), including, but not limited to, any existing above ground or below ground irrigation pipes, water wells, pumps, gas lines, and electrical service lines serving the Property (and if no such documents exist, a written explanation of or map showing the existence of any such items); and

(ii) the most recent survey of the Property, if available. Purchaser shall have the right, at its cost and expense, to obtain a new survey of the Property and/or an update of any survey provided by Seller. Any surveys provided by Seller, together with any new or updated survey obtained by Purchaser, are collectively referred to herein as the "**Survey**".

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Purchaser shall have until thirty (30) business days prior to the end of the Due Diligence Period to notify Seller in writing of any objections (the "**Title Objections**") with respect to the Preliminary Report, Undisclosed Encumbrances and the Survey based on its review thereof. Seller shall have ten (10) business days after receipt of the Title Objections to notify Purchaser in writing that Seller (a) will cause, or (b) elects not to cause, any or all Title Objections disclosed therein to be removed or otherwise cured prior to Closing. Seller's failure to notify Purchaser within such ten (10) business day period as to any Title Objections shall be deemed an election by Seller not to remove or otherwise cure such Title Objections. If Seller notifies or is deemed to have notified Purchaser that Seller will not remove or otherwise cure any or all of the Title Objections, Purchaser shall have until the end of the Due Diligence Period to (i) terminate this Agreement, or (ii) waive such Title Objections (failure of Purchaser to provide Seller notice of either (i) or (ii) above shall be deemed a waiver by Purchaser of such Title Objections). Notwithstanding the foregoing, Seller shall in any event be obligated to cure (and cause to either be removed from record or endorsed over, subject to Purchaser's approval thereof) any and all of the following matters: (x) mortgage liens, deed of trust liens, judgment liens or any other monetary lien against the Property, (y) mechanics' liens against the Property, and (z) delinquent liens for real estate taxes and assessments. Purchaser shall have the right, but not the obligation, to pay off any liens against the Property and credit such payments against the Purchase Price, as applicable. The Closing Date (as defined below) shall be extended as necessary to accommodate the time periods set forth in this Section. Within ten (10) days after receipt of a written request made from time to time by Purchaser, Seller shall execute and deliver to Purchaser any owner's affidavit reasonably requested by any title company or attorney reviewing title to the Property.

(d) Purchaser's review and approval in its sole and absolute discretion of all aspects of the Property, including, without limitation, all of the Due Diligence Items, and the results of Purchaser's examinations, inspections, testing, and or investigations of the Property and the Due Diligence Items (collectively, "**Purchaser's Due Diligence Investigations**"). Purchaser's Due Diligence Investigations may include an examination for the presence or absence of Hazardous Materials (as defined below) on, under or in the Property including, without limitation, the review and approval of any Phase I or Phase II environmental report, geotechnical study, biological study, cultural resource study, wetland study, drainage study and/or plans, improvement plans, building plans, traffic study, water supply assessment study, and crop planting and harvesting schedule which Purchaser may obtain, at its cost, during the Due Diligence Period. In the event Purchaser wishes to conduct a Phase II environmental audit report, at Purchaser's sole cost and expense, Seller agrees to such testing on the Property.

(e) Purchaser's review and approval in its sole and absolute discretion that the Property and Purchaser's proposed development thereof complies with all applicable zoning, subdivision, land use, redevelopment, energy, environmental, building and other governmental requirements applicable to the use, maintenance, and occupancy of the Property.

8. Conditions to Closing.

The following conditions are precedent to Purchaser's obligation to acquire the Property and to deliver the balance of the Purchase Price (the "**Conditions Precedent**"). If any Conditions Precedent are not satisfied as determined by Purchaser in Purchaser's reasonable discretion (except as otherwise provided), Purchaser may elect by written notice to Seller to terminate this Agreement, and except as set forth in Section 9(b), Seller shall retain all Option Consideration as liquidated damages and as its sole and exclusive remedy pursuant to Section 9(c) below. Upon

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such termination, neither party shall have any further rights or obligations hereunder except as otherwise specified in this Agreement.

(a) This Agreement shall not have terminated pursuant to any other provision hereof, including, without limitation, pursuant to Sections 2 or 9.

(b) The physical condition of the Property shall be substantially the same on the day of Closing as on the Effective Date, except for damages caused by Purchaser; and, as of the day of the Closing, there shall be no litigation or administrative agency or other governmental proceeding of any kind whatsoever, pending or threatened, which after the Closing could or would materially adversely affect the value of the Property or Purchaser's ability to develop the Property for its intended use, and no proceedings shall be pending or threatened which could or would cause the re-designation or other modification of the zoning classification of the Property or any portion thereof, which after the Closing would materially adversely affect the value of the Property or the ability of Purchaser to develop the Property in the manner contemplated by Purchaser.

(c) All Leases and Service Contracts shall be terminated effective on or before the Closing, and Seller shall deliver exclusive possession of the Property to Purchaser and shall convey good and marketable fee simple title to the Property to Purchaser by good and sufficient general warranty deed in the form of **Exhibit B** attached hereto (the "**Deed**") free and clear of all liens and encumbrances and subject to no exceptions other than the following: (i) non-delinquent real property taxes and all assessments and unpaid installments thereof which are not delinquent, (ii) any other lien, encumbrance, easement or other exception or matter voluntarily imposed or consented to by Purchaser in writing prior to or as of the Closing, and (iii) all exceptions to title contained or disclosed in the Preliminary Report and Survey other than Title Objections identified and not thereafter waived by Purchaser. The legal description attached to the Deed shall be updated to reflect the legal description provided by the Title Company.

(d) The Title Company shall be irrevocably and unconditionally committed to issue to Purchaser, an extended coverage Owner's policy of title insurance covering the Property, in the full amount of the Purchase Price, subject only to those encumbrances previously approved by Purchaser and containing such endorsements as Purchaser may reasonably request.

(e) All of Seller's representations and warranties contained herein shall be true and correct on the Closing Date.

(f) Seller has delivered into escrow all deliverables required in accordance with Section 10(b) below.

(g) Seller is not otherwise in default of this Agreement.

9. Remedies.

(a) If Purchaser is in default under this Agreement, and Purchaser has failed to cure such default within thirty (30) days after Purchaser's receipt of Seller's notice of Purchaser's default, Seller shall retain all Option Consideration previously paid by Purchaser as its sole and exclusive remedy in accordance with Section 9(c) below, and Seller and Purchaser shall be excused from further performance hereunder.

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(b) In the event the sale of the Property is not consummated because of a default by Seller of one or more of the Conditions Precedent contained in Sections 8(b) (only to the extent caused by Seller's acts or omissions and without the prior approval of Purchaser), 8(c), 8(d) (only to the extent caused by Seller's acts or omissions), 8(e), 8(f) and 8(g) under this Agreement (each a "**Seller Default**"), and Seller has failed to cure such Seller Default within thirty (30) days after Seller's receipt of Purchaser's notice of a Seller Default, Purchaser may elect to do any one of the following: (1) waive the Seller Default and proceed to the Closing; (2) terminate this Agreement by delivery of written notice of termination to Seller, whereupon Seller shall immediately return to Purchaser any Option Consideration previously paid by Purchaser, and neither party shall have any further rights or obligations hereunder except to the extent otherwise specified in this Agreement and except with respect to any other remedy afforded to Purchaser by law or in equity; or (3) continue this Agreement and bring an action for specific performance hereof. In addition, Purchaser may have any and all other rights and remedies that may be afforded at law or in equity.

(c) **LIQUIDATED DAMAGES. IN THE EVENT OF A DEFAULT BY SELLER OR PURCHASER UNDER THIS AGREEMENT, AND SELLER IS READY, WILLING AND ABLE TO CONSUMMATE THE SALE CONTEMPLATED HEREIN, AND SELLER IS NOT IN DEFAULT UNDER THIS AGREEMENT, PURCHASER AND SELLER HEREBY AGREE THAT THE OPTION CONSIDERATION (TO THE EXTENT PAID TO SELLER, OR RETURNED TO PURCHASER) SHALL BE RETAINED OR RETURNED AS LIQUIDATED DAMAGES AND NOT AS A PENALTY. THE PARTIES HEREBY ACKNOWLEDGE AND AGREE THAT THE PARTY'S ACTUAL DAMAGES, IN THE EVENT OF A DEFAULT HEREUNDER, WOULD BE EXTREMELY DIFFICULT OR IMPRACTICABLE TO DETERMINE. THEREFORE, BY PLACING THEIR INITIALS BELOW, THE PARTIES ACKNOWLEDGE THAT THE AMOUNT OF THE OPTION CONSIDERATION (TO THE EXTENT PAID TO SELLER OR RETURNED TO PURCHASER) HAS BEEN AGREED UPON, AFTER NEGOTIATION AND TAKING INTO CONSIDERATION ALL CIRCUMSTANCES EXISTING AS OF THE AGREEMENT DATE, AS THE PARTIES' REASONABLE ESTIMATE OF DAMAGES AS WELL AS THE RELATIONSHIP OF THE SUM TO THE RANGE OF HARM THAT COULD BE ANTICIPATED AND SUCH SUM SHALL BE PAID TO AND RETAINED BY SELLER, OR RETURNED TO PURCHASER, AS SUCH PARTY'S SOLE AND EXCLUSIVE REMEDY, AT LAW OR IN EQUITY, IN THE EVENT OF A DEFAULT UNDER THIS AGREEMENT (EXCEPT THE FOREGOING SHALL NOT PRECLUDE PURCHASER FROM AN ACTION FOR SPECIFIC PERFORMANCE OF THIS AGREEMENT). IN PLACING THEIR INITIALS BELOW, EACH PARTY SPECIFICALLY CONFIRMS THE ACCURACY OF THE STATEMENTS MADE ABOVE AND THE FACT THAT EACH PARTY WAS REPRESENTED BY COUNSEL WHO EXPLAINED THE CONSEQUENCES OF THIS LIQUIDATED DAMAGES PROVISION AT THE TIME THIS AGREEMENT WAS MADE.**

SELLER INITIALS: [redacted]

PURCHASER INITIALS: [redacted]

10. Closing and Escrow.

(a) The parties shall conduct an escrow Closing pursuant to this Section 10 on a date that is the earlier of (i) fifteen (15) days after the end of the Option Term (if Purchaser timely

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delivers the Option Notice), or (ii) no less than fifteen (15) days and no more than sixty (60) days after Purchaser timely delivers the Option Notice (with such date being agreed to by the parties hereto), or on such other date as Purchaser and Seller may agree in writing in their sole and absolute discretion (the "**Closing Date**"). Such date and time may not be extended without the prior written approval of both Seller and Purchaser. In the event the Closing does not occur on or before the Closing Date, the Title Company, serving as escrow agent for such escrow Closing, shall, unless it is notified by both parties to the contrary within five (5) days after the Closing Date, return to the respective party any items previously delivered by such party to the Title Company. Any such return shall not, however, relieve either party of any liability it may have for its wrongful failure to close.

(b) At or before the Closing, Seller shall deliver to the Title Company (for delivery to Purchaser upon the Closing) the following:

(i) a duly executed and acknowledged Deed in the form attached hereto as **Exhibit B**;

(ii) a duly executed bill of sale agreement transferring title to all of Seller's interest in any personal property located on the Property as of Closing in a form reasonably acceptable to Seller and Purchaser (the "**Bill of Sale**") (provided, however, that neither the delivery by Seller, nor the acceptance by Purchaser, of this Bill of Sale obviates Seller's obligation to deliver the Property free and clear of all personal property at Closing;

(iii) evidence that all Service Contracts and Leases have been terminated;

(iv) a certificate, dated as of the date of Closing certifying that the representations and warranties set forth in Section 11 are true and correct as of the Closing Date;

(v) a certificate of non-foreign status in accordance with the requirements of Internal Revenue Code Section 1445; and

(vi) any other closing documents reasonably requested by the Title Company or Purchaser, including an owner's affidavit in a form reasonably requested by the Title Company. Purchaser may, in its sole and exclusive discretion, waive compliance on Seller's part under any of the foregoing items by an instrument in writing.

(c) At or before the Closing, Purchaser shall deliver to the Title Company (for delivery to Seller upon the Closing) the following:

(i) the balance of the Purchase Price in cash or other immediately available funds, subject to prorations and adjustments as set forth herein;

(ii) any customary and/or reasonable closing documents requested by the Title Company. Seller may, in its sole and exclusive discretion, waive compliance on Purchaser's part under any of the foregoing items by an instrument in writing;

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(iii) $[redacted] existing Irrigation Pivots on the Property as of the Effective Date (as described in Section 14(m) below); and

[redacted]

Purchaser shall determine, in its reasonable discretion and using the calculation above, Crop Damages for the Property and provide such calculation to Seller. If Seller believes that the Price, Yield or Amount of Damaged Acres is incorrect, Seller may submit records and documentation ("**Seller's Records**") that Seller believes accurately reflect the Amount of Damaged Acres and Yield. For purposes of the foregoing, "Seller's Records" shall include, but not be limited to, warehouse/elevator receipts, applications for crop insurance and scale tickets from grain cart or yield monitors on combines, receipts showing price paid for the same crops in the most recent year and previous year if available. The parties shall try in good faith to agree to the extent of damage and acreage affected. If the parties cannot agree, they shall have the area measured and extent of damage assessed by an impartial party such as a crop insurance adjuster or extension agent, at Purchaser's sole cost and expense. Purchaser shall remit payment for any Crop Damage to Seller within 30 days following Purchaser's receipt of the results of the impartial party's calculation.

(d) The following are to be apportioned as of the Closing Date as follows, with Purchaser being deemed to be the owner of the Property during the entire day on which the Closing takes place and being entitled to receive all income of the Property, and being obligated to pay all expenses of the Property, with respect to such day:

(i) Utility Charges. Seller shall be responsible for the cost of all utilities used, if any, prior to the Closing Date.

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(ii) Other Apportionments; Closing Costs. Property taxes shall be apportioned as of the Closing Date based on the latest available tax bill. Seller and Purchaser shall each pay one-half (1/2) of any escrow fee charged by the Title Company. Seller shall be responsible to pay for all transfer taxes, documentary transfer taxes and sale taxes arising out of the sale of the Property to Purchaser. Seller will pay the entire premium for a standard coverage owner's policy of title insurance in the amount of the Purchase Price and the premium for any endorsements required to cure any title objections of Purchaser which Seller has agreed to cure through the issuance of endorsements. Purchaser will pay the additional premium necessary to obtain an extended coverage title insurance policy and the cost of any endorsements to such title insurance policy requested by Purchaser. All other costs and charges of the escrow for the sale not otherwise provided for in this Section 10(d)(ii) or elsewhere in this Agreement shall be allocated in accordance with the applicable closing customs for the county in which the Property is located, as determined by the Title Company. If any of the aforesaid pro-rations cannot be calculated accurately as of the Closing Date, then they shall be calculated as soon after the Closing as feasible. Either party owing the other party a sum of money based on such subsequent proration(s) shall promptly pay said sum to the other party. If Seller's use or change in use of the Property before the Closing results in the assessment of additional taxes, penalties, or interest ("**Assessments**") for periods before the Closing, the Assessments will be the obligation of Seller. If the sale to Purchaser or Purchaser's use of the Property after Closing results in additional Assessments for periods before the Closing, the Assessments will be the obligation of Purchaser.

(iii) Survival. The provisions of this Section 10(d) shall survive the Closing for twenty-four (24) months.

11. Representations and Warranties of Seller. Seller hereby represents and warrants to Purchaser as follows:

(a) Seller has not, and as of the Closing, Seller shall not have (i) made a general assignment for the benefit of creditors, (ii) filed any voluntary petition in bankruptcy or suffered the filing of any involuntary petition by Seller's creditors, (iii) suffered the appointment of a receiver to take possession of all, or substantially all, of Seller's assets, which remains pending as of such time, (iv) suffered the attachment or other judicial seizure of all, or substantially all, of Seller's assets, which remains pending as of such time, (v) admitted in writing its inability to pay its debts as they come due, or (vi) made an offer of settlement, extension or composition to its creditors generally.

(b) Seller is not, and as of the Closing shall not be, a "foreign person" as defined in Section 1445 of the Internal Revenue Code of 1986, as amended (the "Code") and any related regulations.

(c) Seller possesses the full power and authority to sell the Property to Purchaser on the terms and conditions set forth herein and the individuals executing this Agreement on behalf of Seller have the legal power, right and actual authority to bind Seller. This Agreement (i) has been duly authorized, executed and delivered by Seller, and (ii) does not, and as of the Closing shall not, violate any provision of any agreement or judicial order to which Seller is a party or to which Seller or the Property is subject.

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(d) There is no litigation pending or, to Seller's knowledge, threatened with respect to the Property or the transactions contemplated hereby or that would impair Seller's ability to perform under this Agreement.

(e) To Seller's actual knowledge, there are no violations of any applicable environmental, zoning or land use law, or any other applicable local, state or federal law or regulation relating to the Property, including, without limitation, the Americans with Disabilities Act of 1990 and Seller is not aware of any proposed or pending changes in zoning or proposed relocation, reconfiguration or other change with respect to any street or road affecting the Property, if any.

(f) There are no condemnation proceedings pending or, to Seller's knowledge, threatened that would result in the taking of any portion of the Property. Seller has not received any written notice of any special assessment proceedings affecting the Property that are not disclosed on the Preliminary Report.

(g) The parties comprising Seller under this Agreement are the sole owners of the Property and Seller holds good and marketable fee simple title to the Property according to laws of the State where the Property is located.

(h) The Land constitutes a separate legal parcel (or separate legal parcels) in accordance with all applicable laws.

(i) Seller has not granted any option or right of first refusal or first opportunity to any party (except Seller) to acquire any fee or ground leasehold interest in any portion of the Property.

(j) To Seller's actual knowledge, Hazardous Materials have not at any time been generated, used, or stored on, or transported to or from, or released or disposed of on the Property in violation of environmental laws and restrictions, and Seller has not used Hazardous Materials on the Property for purposes other than (i) as necessary to operate and maintain the Property, and (ii) in substantial compliance with applicable environmental laws and restrictions. To Seller's actual knowledge, there are not now and never have been any underground storage tanks located on or under the Property and there is no asbestos contained in, forming part of, or contaminating any part of the Property. For the purposes hereof, "**Hazardous Materials**" shall mean (i) any petroleum or petroleum distillates and products, flammable explosives, radioactive materials, asbestos in any form, urea formaldehyde foam insulation, transformers or other equipment that contain dielectric fluid containing polychlorinated biphenyls in any concentrations, and radon gas; (ii) any chemicals, materials, substances or wastes which are now or hereafter become defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "extremely hazardous wastes," "restricted hazardous wastes," "toxic substances," "toxic pollutants," or words of similar import, under any environmental laws and restrictions; and (iii) any other chemical, material, substance, or waste, exposure to which is now or hereafter prohibited, limited or regulated by any governmental or regulatory authority.

All representations and warranties made by Seller herein or made in writing pursuant to this Agreement shall be deemed to be material, shall be deemed remade as of the Closing and shall survive the execution and delivery of this Agreement and the Closing for a period of twelve (12) months.

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12. Access; Indemnity; Possession.

(a) Access. Commencing on the Effective Date and through the Closing Date or the earlier termination of this Agreement, Seller shall, and shall cause Seller's tenants, if any, to afford authorized representatives of Purchaser reasonable access to the Property after at least 24 hours notice for purposes of satisfying Purchaser with respect to the representations, warranties and covenants of Seller contained herein and with respect to satisfaction of any Diligence Period Condition or any Condition Precedent, including, without limitation, to conduct Purchaser's Due Diligence Investigations, measurement of meteorological characteristics of the Property, conducting of geotechnical tests and borings and performing a Phase I or Phase II environmental site assessment of the soils, waters and improvements on the Property. All installations, tests or inspections shall be at Purchaser's expense, and Purchaser shall indemnify and hold Seller harmless from and against any and all costs, claims or damages incurred or suffered by Seller arising from the performance of such tests or inspections; provided this indemnity shall not apply to conditions existing at the Property that are merely discovered by Purchaser or to any negligent or willful act or omission of Seller, its employees, representatives, or agents. During the Option Term, at Purchaser's option and with prior notice to Seller, Seller shall (and shall cause Seller's tenants, if any, to) allow Purchaser access to the Property for purposes of controlling the formation of wetlands or wildlife habitat. Purchaser shall repair the damage caused by Purchaser's entry onto and/or inspections of the Property; provided, however, the foregoing shall not require Purchaser to repair or remediate any conditions that are merely discovered by Purchaser. The foregoing indemnity shall survive the Closing, or in the event that the Closing does not occur, the termination of this Agreement, in each case, for twelve (12) months.

(b) Seller's Continued Use of Property. During the Option Term, subject to Purchaser's rights set forth in this Agreement, Seller may continue to use or lease the Property. All existing Leases shall be terminated by Seller at its sole cost and expense effective prior to the Closing and Seller shall deliver possession of the Property free and clear of any interests or rights of tenants, licensees, or other occupants in possession. Seller shall (and shall cause Seller's tenants, if any, to) remove all personal property, motor homes, junk, trash, sheds, and similar property from the Property on or before the date that is seven (7) days prior to the Closing Date; provided, however, if Seller fails to remove such property from the Property by such date, and Purchaser chooses to proceed with the Closing, Seller hereby grants all right title and interest in such property to Purchaser, and Purchaser shall have the right to cause the removal of such property prior to or after the Closing Date. Following the Effective Date, Seller shall not renew any existing Lease or enter into any new lease for all or any part of the Property unless the lease grants Seller the right to terminate the lease within thirty (30) days of notice, and unless Purchaser provides its written consent, not to be unreasonably withheld. Seller shall not agree to or allow any other lien, encumbrance, easement or other exception or matter to affect the Property, title thereto or the Survey (collectively, "**New Matter**"), without the prior written consent of Purchaser, which consent shall not be unreasonably withheld, conditioned, or delayed; provided, however, that if such New Matter would remain in effect after Closing, such consent may be withheld in Purchaser's sole and absolute discretion.

13. Seller Covenants.

(a) At the time of the Closing, Seller shall cause to be paid in full all obligations under any outstanding written or oral contracts made by Seller for any improvements to the Property, and Seller shall cause to be discharged all mechanics' and materialmen's liens arising

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from any labor or materials furnished to the Property prior to the time of the Closing.

(b) Between the Effective Date and the Closing, to the extent Seller has any knowledge thereof, Seller shall promptly notify Purchaser of the following items relating to the Property: (i) any condemnation, environmental, zoning or other land-use regulation proceedings; (ii) any notices of violations of any laws; (iii) any litigation relating to the Property or that arises out of the ownership of the Property or affects Seller's ability to perform under this Agreement; and (iv) the termination, modification or default under any Leases or Service Contracts.

(c) Seller shall deliver to Purchaser copies of any bills for real estate taxes and copies of any notices pertaining to real estate taxes or assessments applicable to the Property that are received by Seller after the Effective Date, even if received after Closing. Without limiting Seller's obligation to timely pay all real property taxes and assessments, with respect to any taxes that are delinquent as of the Effective Date or at any future date that Option Consideration is payable to Purchaser, Purchaser shall have the right (but not the obligation) to set off and withhold out of the first Option Payment, any subsequent Option Payments or the Purchase Price balance paid at Closing, the amounts necessary to bring said delinquent real property taxes and assessments current. Purchaser may pay the delinquent amounts directly to the assessing entity on behalf of Seller. The obligations set forth in this Section 13(c) shall survive the Closing.

(d) Seller shall remove the Property from the market, if listed, and shall not market the Property for sale during the term of this Agreement.

(e) Seller acknowledges that Purchaser's interest in the Property is for purposes of developing solar energy projects, and that Purchaser would not otherwise enter into this Agreement and agree to pay the Option Consideration to Seller. Accordingly, Seller agrees that Purchaser shall have the right, at Purchaser's expense, to apply for, change and/or obtain zoning changes, general plan amendments, tax classifications, property tax exemptions, subdivision and/or lot line adjustment approvals (collectively, "**Approvals**") affecting the Property consistent with Purchaser's intended use of the Property, provided that Purchaser shall not finalize any Approval without Seller's prior consent if such Approval would be binding on Seller or the Property prior to the Closing. Notwithstanding the foregoing, Purchaser may, without Seller's prior consent, apply for and obtain approval for any land use entitlement, planning approval, permit, or conditional use permit (collectively, "**Permits**") in connection with Purchaser's intended use of the Property. Seller shall cooperate with Purchaser in Purchaser's efforts to obtain such Approvals and Permits by executing such documents and taking such actions as are reasonably necessary to obtain such Approvals and Permits. Seller agrees that it shall not contest, challenge or publicly or privately dispute, verbally or in writing, Purchaser's efforts to obtain any such Approvals and Permits.

14. Miscellaneous.

(a) Binding on Successors. This Agreement shall be binding not only upon the parties but also upon their respective heirs, executors, personal representatives, assigns, and other successors in interest. Notwithstanding anything to the contrary herein, Purchaser shall have the right to assign this Agreement without the consent of Seller. Any assignment of this Agreement by Purchaser shall not relieve Purchaser of the duty to perform the terms, covenants, and obligations imposed upon Purchaser by the terms of the Agreement, unless Purchaser is released of such duty by written instrument executed by Seller prior to the effective date of the Assignment.

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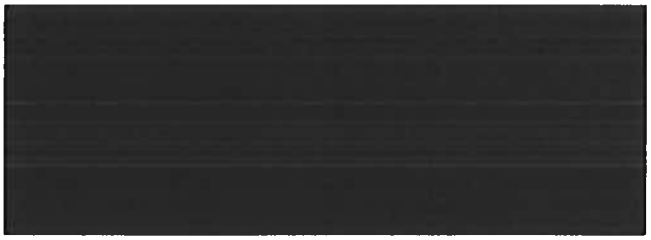
(b) Notices. Any notice, consent or approval required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been given upon (i) hand delivery, (ii) one (1) business day after being deposited with FedEx or another reliable overnight courier service, with receipt acknowledgment requested, (iii) upon receipt if transmitted by facsimile telecopy, with a copy sent on the same day by one of the other permitted methods of delivery, or (iii) upon receipt or refused delivery deposited in the United States mail, registered or certified mail, postage prepaid, return receipt required, and addressed as follows:

IF TO SELLER:

IF TO PURCHASER:



or such other address as either party may from time to time specify in writing to the other.

(c) Brokers and Finders. Neither party has had any contact or dealings regarding the Property, or any communication in connection with the subject matter of this transaction, through any real estate broker or other person who can claim a right to a commission or finder's fee in connection with the sale contemplated herein, except for T. Christian Ogden ("**Purchaser's Broker**"), who shall be paid by Purchaser pursuant to a separate agreement between Purchaser and Purchaser's Broker. In the event that any broker or finder makes a claim for a commission or finder's fee based upon any contact, dealings or communication, the party whose conduct is the basis for the broker or finder making its claim shall indemnify, defend and hold harmless the other party against and from any commission, fee, liability, damage, cost and expense, including, without limitation, attorneys' fees, arising out of or resulting from any such claim. The provisions of this Section 14(c) shall survive the Closing, or in the event that the Closing does not occur, the termination of this Agreement, in each case, for twelve (12) months.

(d) Recording and Subordination. The parties shall not record this Agreement, but concurrent with the execution hereof, Seller and Purchaser shall execute a memorandum of this Agreement in the form attached hereto as **Exhibit C**, which Purchaser may record in the real property records of the county in which the Property is located (the "**Memorandum**"). Within ten

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(10) days after receipt of a written request made from time to time by Purchaser, Seller shall obtain from the holder of any mortgage or deed of trust liens or any other monetary lien encumbering the Property a reasonable subordination agreement whereby the holder of such lien agrees that its lien is subordinate to Purchaser's option.

(e) Amendments. Except as otherwise provided herein, this Agreement may be amended or modified only by a written instrument executed by Seller and Purchaser.

(f) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state where the Property is located.

(g) Merger of Prior Agreements. This Agreement and the exhibits and schedules hereto, constitutes the entire agreement between the parties and supersedes all prior agreements and understandings between the parties relating to the subject matter hereof.

(h) Time of the Essence. Time is of the essence of this Agreement; provided, however, should the date for payment or performance required under this Agreement fall on a non-business day (i.e., Saturday, Sunday, or any other day on which national banks in Texas are not open for business), then the date required for payment or performance under this Agreement shall be extended to the first business day following the non-business day on which such payment or performance was required.

(i) Severability. If any provision of this Agreement, or the application thereof to any person, place, or circumstance, shall be held by a court of competent jurisdiction to be invalid, unenforceable or void, the remainder of this Agreement and such provisions as applied to other persons, places and circumstances shall remain in full force and effect.

(j) Confidentiality. Seller agrees to maintain in confidence, and not to disclose to any third party, the information contained in this Agreement or pertaining to the sale contemplated hereby; provided, however, that Seller, its agents and representatives may disclose such information and data (a) to its accountants, attorneys, and other advisors in connection with the transactions contemplated by this Agreement (collectively "**Representatives**") to the extent that such Representatives reasonably need to know such information and data in order to assist, and perform services on behalf of, Seller, but Seller shall remain responsible for its Representatives' compliance with the confidentiality provisions of this Agreement; (b) to the extent required by any applicable statute, law, regulation, governmental authority or court order; and (c) in connection with any litigation that may arise between the parties in connection with the transactions contemplated by this Agreement. The provisions of this Section 14(j) shall survive the Closing, or in the event that the Closing does not occur, the termination of this Agreement. Notwithstanding the provisions of this Section 14(j), the recording of the memorandum of this Agreement as contemplated by Section 14(d) is expressly permitted.

(k) Attorneys' Fees.

[redacted]

(ii) The prevailing party in any action or proceeding for the enforcement, protection, or establishment of any right or remedy under this Agreement or

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for the interpretation of this Agreement shall be entitled to recover its reasonable attorneys' fees and costs in connection with such action or proceeding from the non-prevailing party.

(l) Counterparts and Execution. This Agreement may be executed in counterparts, each of which shall be deemed an original and which together shall constitute one and the same agreement. The parties hereby acknowledge and agree that facsimile signatures or signatures transmitted by electronic mail in so-called "pdf" format shall be legal and binding and shall have the same full force and effect as if an original of this Agreement had been delivered. Seller and Purchaser (i) intend to be bound by the signatures on any document sent by facsimile or electronic mail, (ii) are aware that the other party will rely on such signatures, and (iii) hereby waive any defenses to the enforcement of the terms of this Agreement based on the foregoing forms of signatures.

[SIGNATURE PAGES FOLLOW]

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date written below.

SELLER:

[redacted]

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date written below.

PURCHASER:

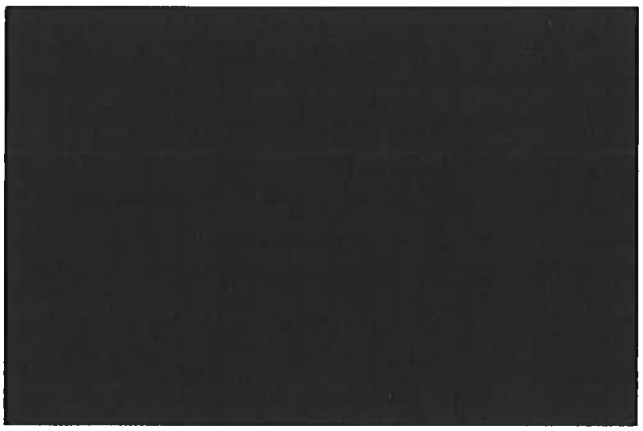

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EXHIBIT A

LEGAL DESCRIPTION OF LAND

Parcel 1

Section 142, Block M-2, BS&F Survey, Gray County, Texas,

SAVE AND EXCEPT the following described land:

Beginning at an Iron rod the Northwest corner of said section 142;

Thence 89 degrees 52 feet E along the North line of said section 142, 156.0 Feet to a point;

Thence South Parallel to the West line of said Section 142, 30 feet to an iron rod set in the South right-of-way line of a graded public road for the beginning corner of this tract;

Thence 89 degrees 52 feet E 30 feet South and parallel to North line of said Section 142, 190.0 Feet to an iron rod;

Thence S 40 degrees 50 feet W, 105.0 feet to an iron rod;

Thence S 89 degrees 52 feet W Parallel to the North line of said section 142, 145.0 feet to an iron rod;

Thence South parallel to the west line of said Section 142, 135.75 feet to an iron rod;

Thence 89 Degrees 52 feet W parallel to the North line of said Section 142, 1457.30 feet to an iron rod set in the East right-of-way line of a public graded road;

Thence North 40.0 feet East of and parallel to the West line of said Section 142, 270.0 feet to an iron rod;

Thence N 89 degrees 52 feet E parallel to the North line of said Section 142, 116 feet to an iron rod;

Thence North parallel to the West line of said Section 142, 108.0 feet to the place of beginning and containing 14.52 acres, more or less.

Parcel 1 contains 624.24 acres
Parcel 1 Tax ID No: 111508551321421050000

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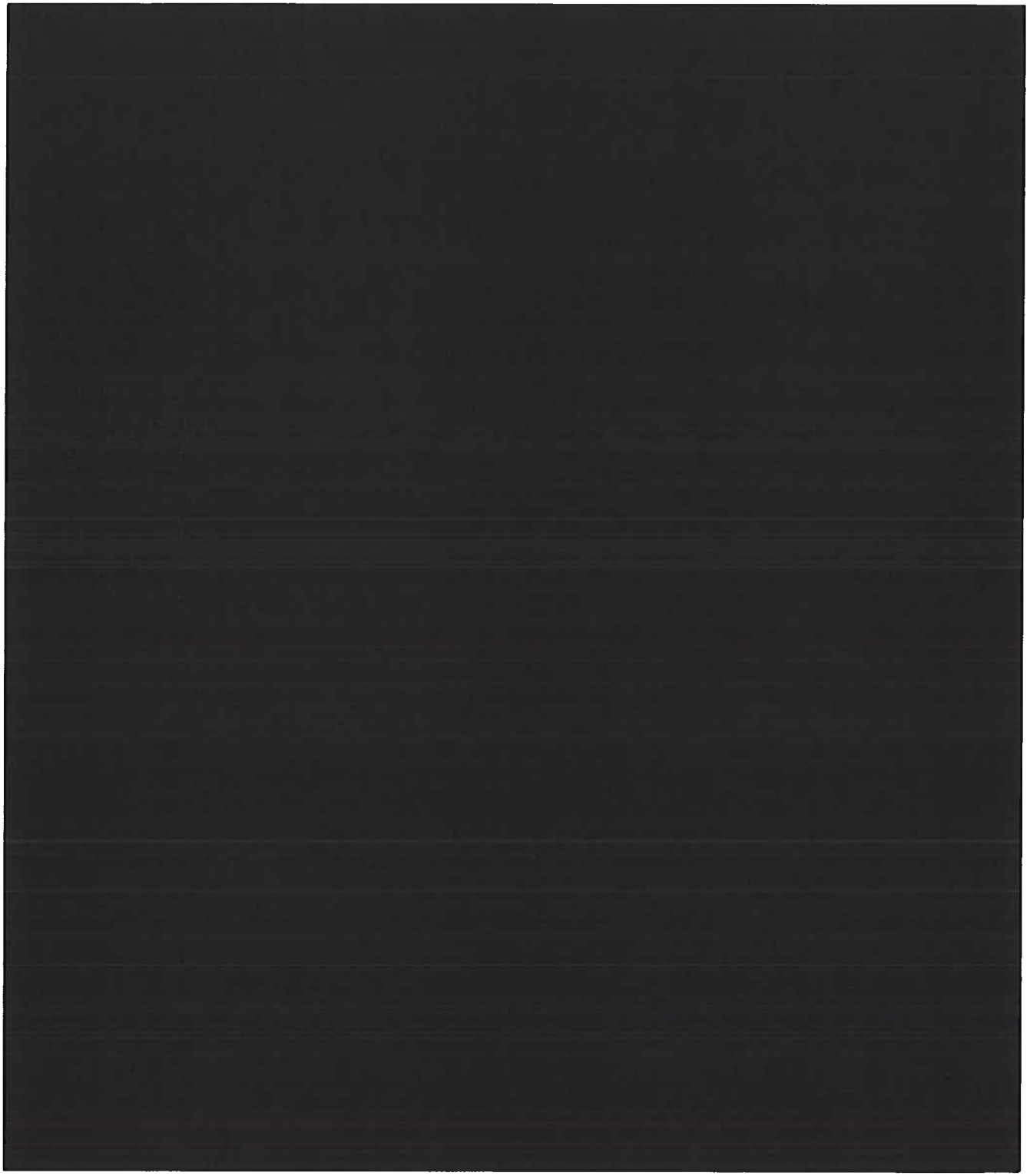
DO NOT EXECUTE – EXHIBIT ONLY

EXHIBIT B

FORM OF GENERAL WARRANTY DEED



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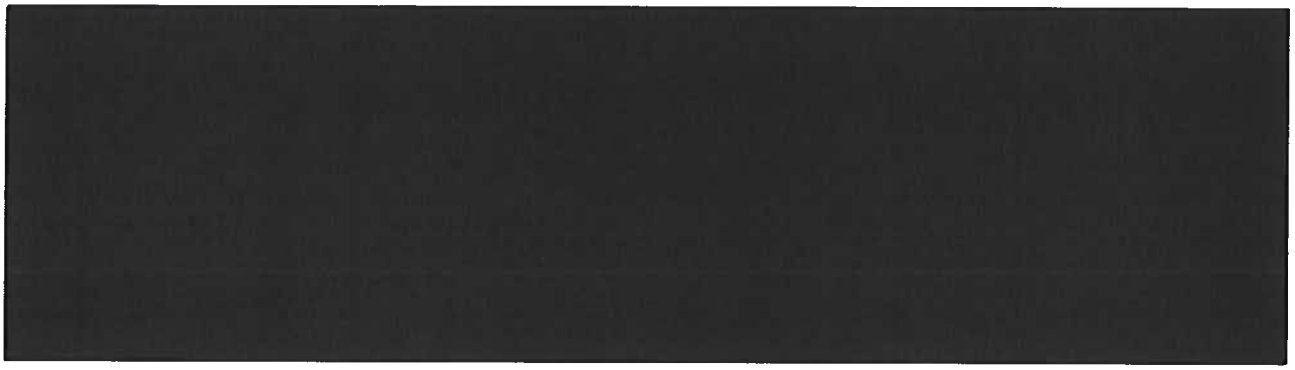

[SIGNATURE PAGES FOLLOW]

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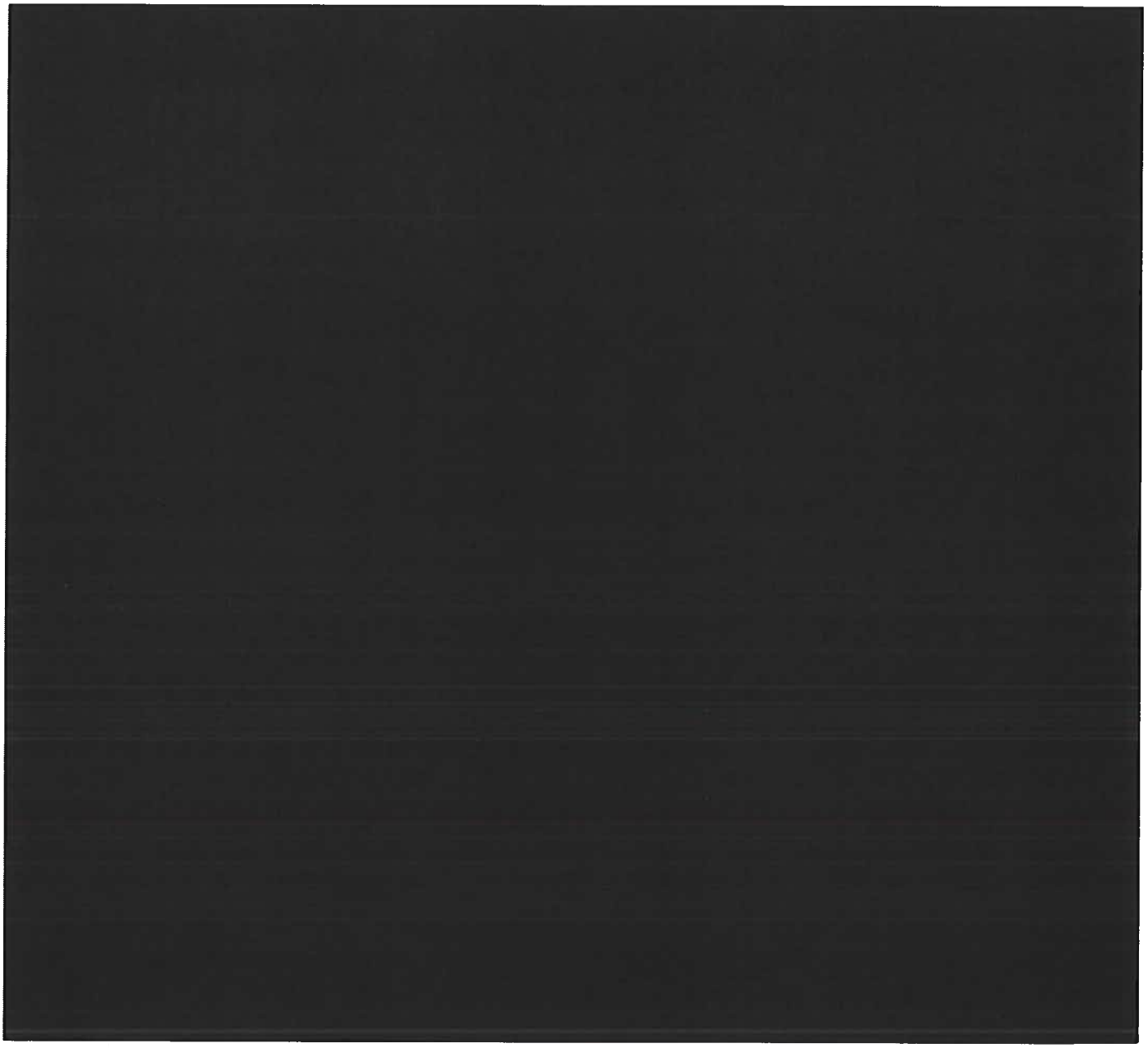

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EXHIBIT A TO GRANT DEED

LEGAL DESCRIPTION OF LAND

Section 142, Block M-2, BS&F Survey, Gray County, Texas,

SAVE AND EXCEPT the following described land:

Beginning at an Iron rod the Northwest corner of said section 142;

Thence 89 degrees 52 feet E along the North line of said section 142, 156.0 Feet to a point;

Thence South Parallel to the West line of said Section 142, 30 feet to an iron rod set in the South right-of-way line of a graded public road for the beginning corner of this tract;

Thence 89 degrees 52 feet E 30 feet South and parallel to North line of said Section 142, 190.0 Feet to an iron rod;

Thence S 40 degrees 50 feet W, 105.0 feet to an iron rod;

Thence S 89 degrees 52 feet W Parallel to the North line of said section 142, 145.0 feet to an iron rod;

Thence South parallel to the west line of said Section 142, 135.75 feet to an iron rod;

Thence 89 Degrees 52 feet W parallel to the North line of said Section 142, 1457.30 feet to an iron rod set in the East right-of-way line of a public graded road;

Thence North 40.0 feet East of and parallel to the West line of said Section 142, 270.0 feet to an iron rod;

Thence N 89 degrees 52 feet E parallel to the North line of said Section 142, 116 feet to an iron rod;

Thence North parallel to the West line of said Section 142, 108.0 feet to the place of beginning and containing 14.52 acres, more or less.

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AND SAVE AND EXCEPT the following described land:

Five acres, more or less, depicted below, to be amended by a metes and bounds description upon recording:

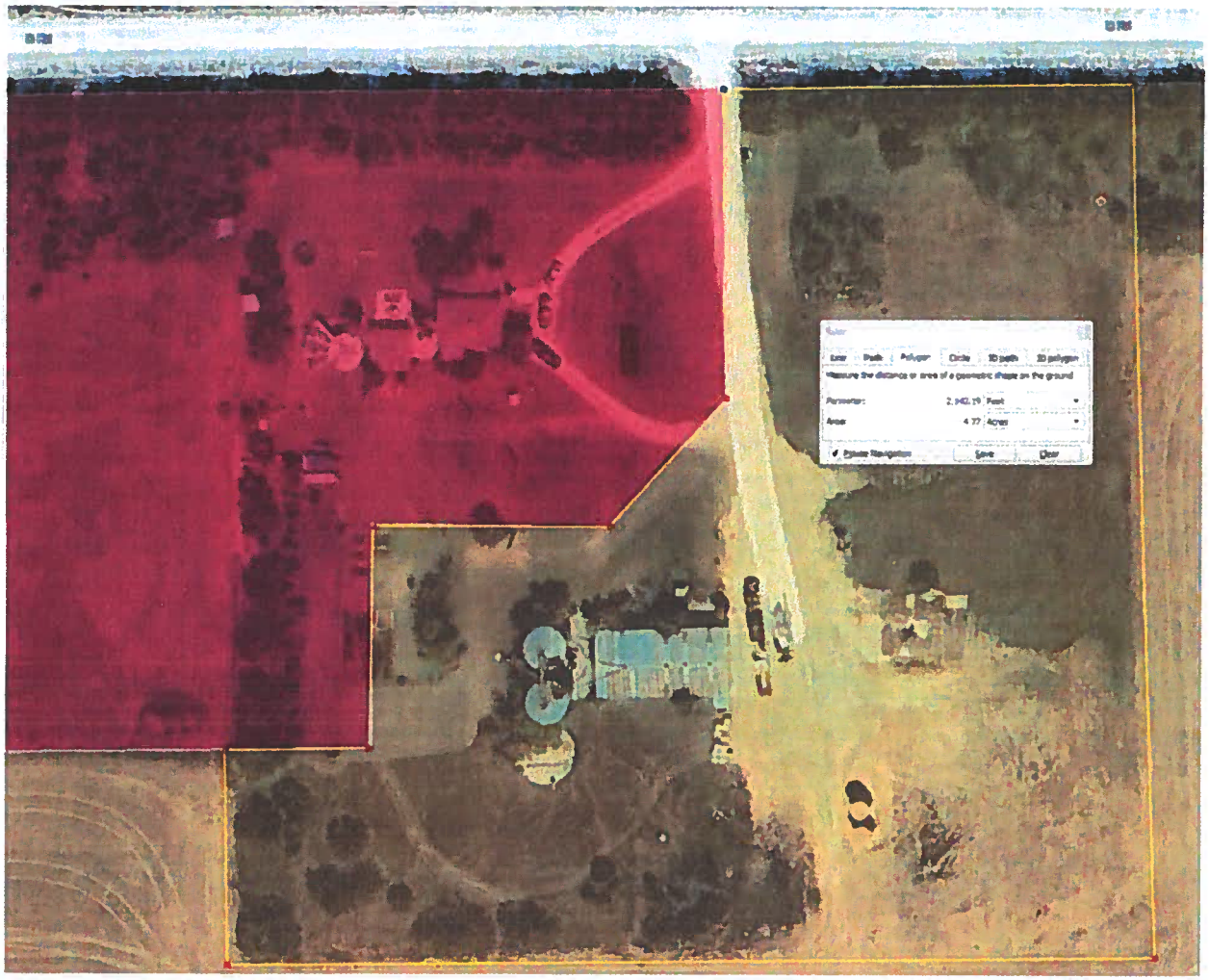

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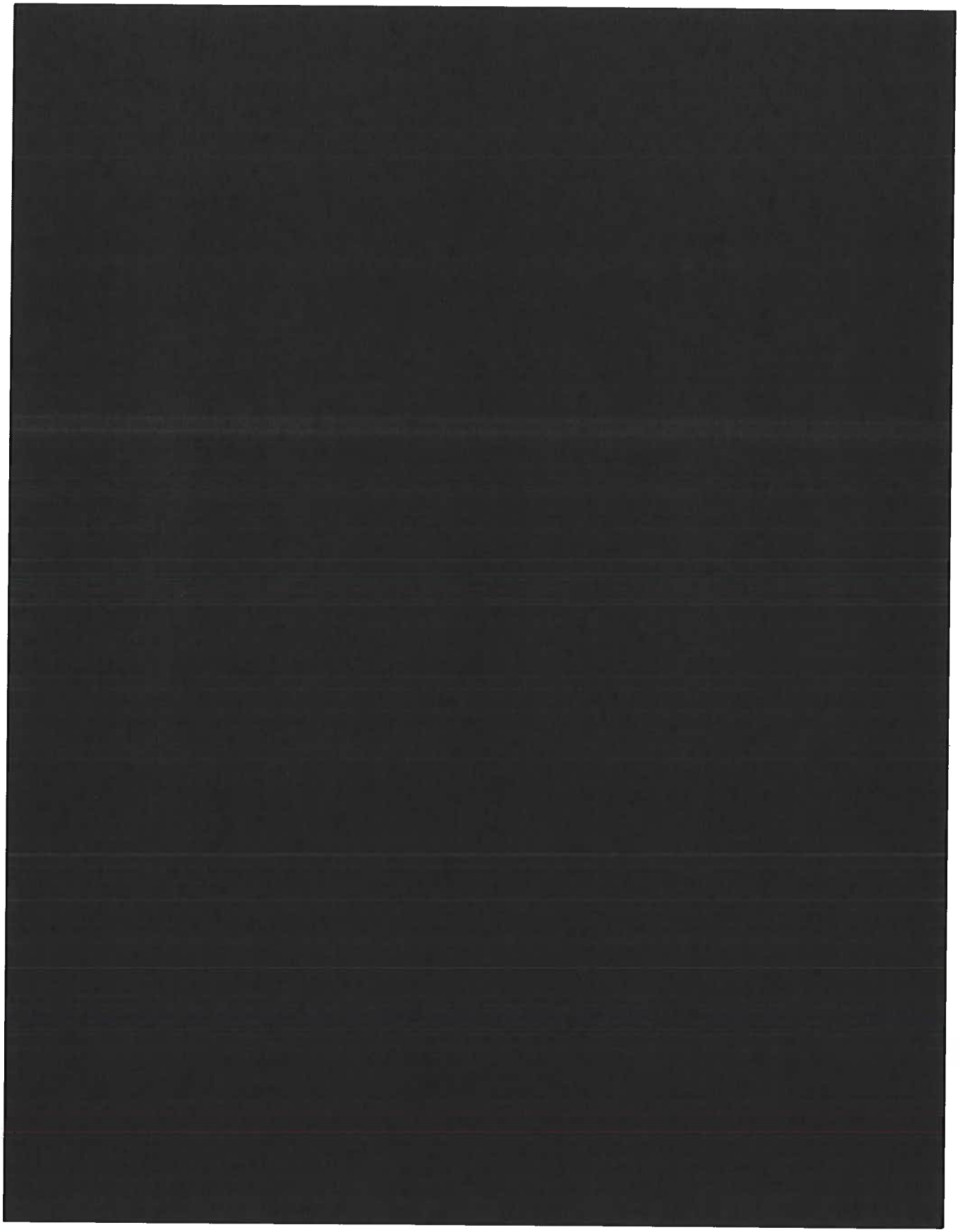
EXHIBIT C



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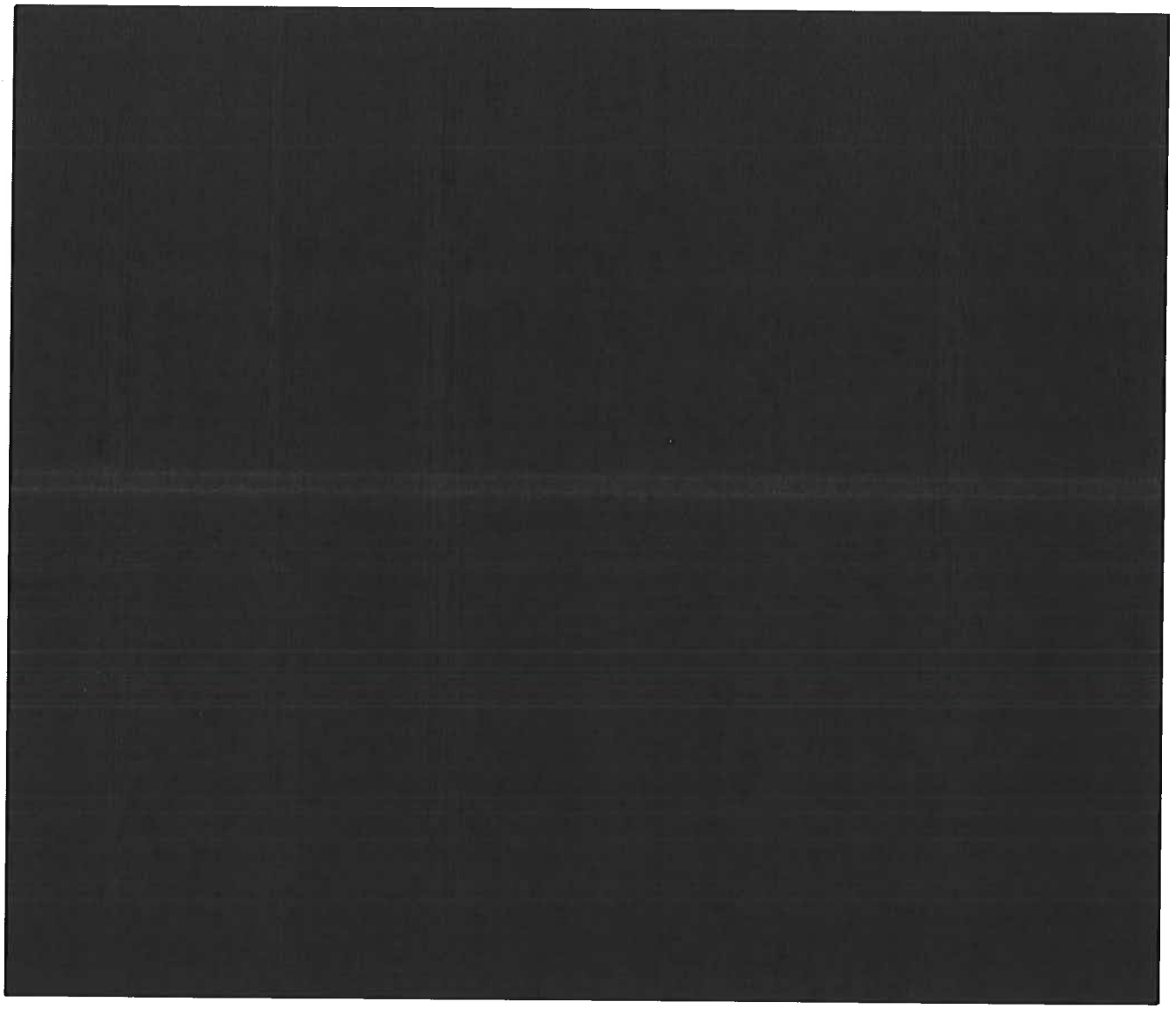

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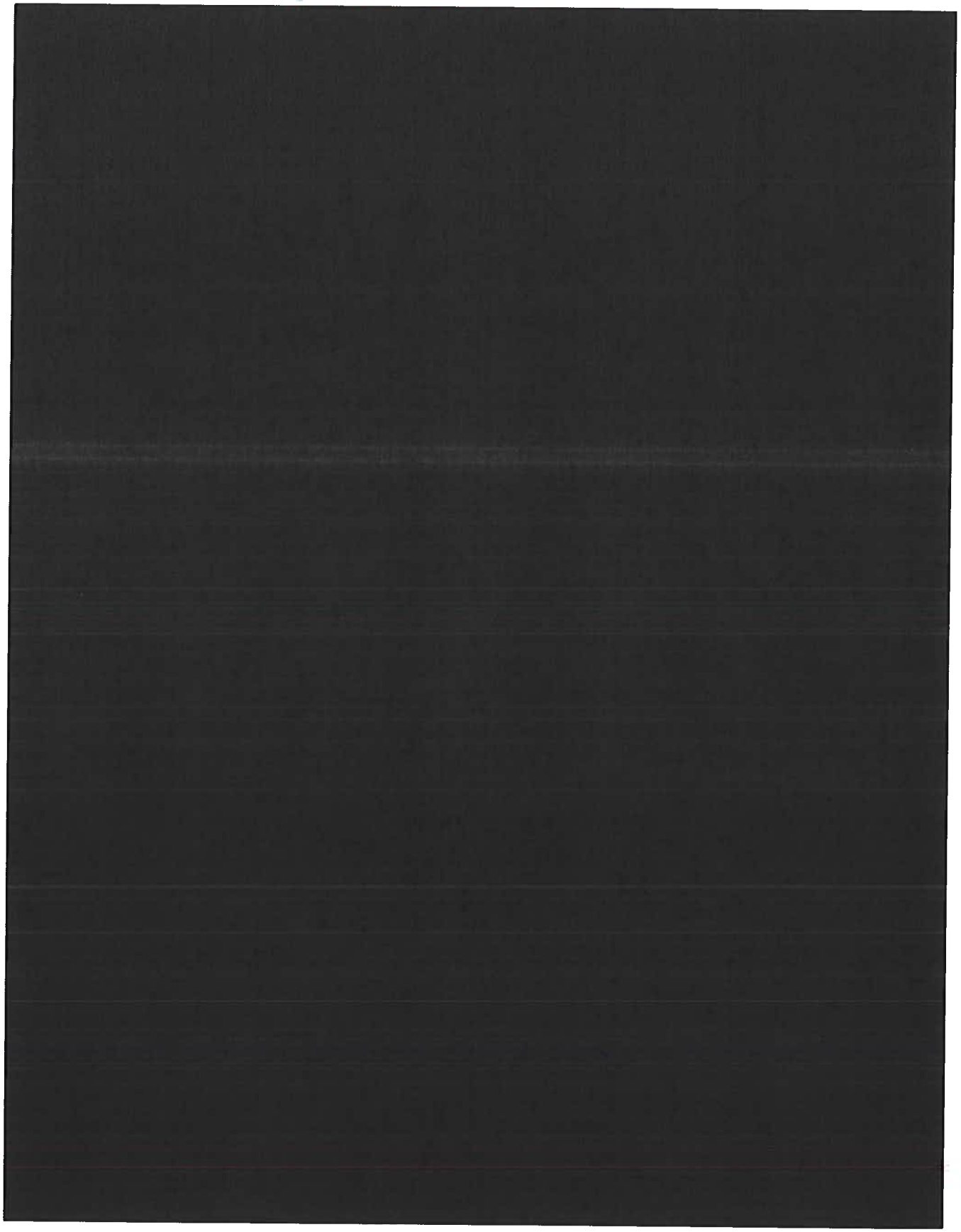

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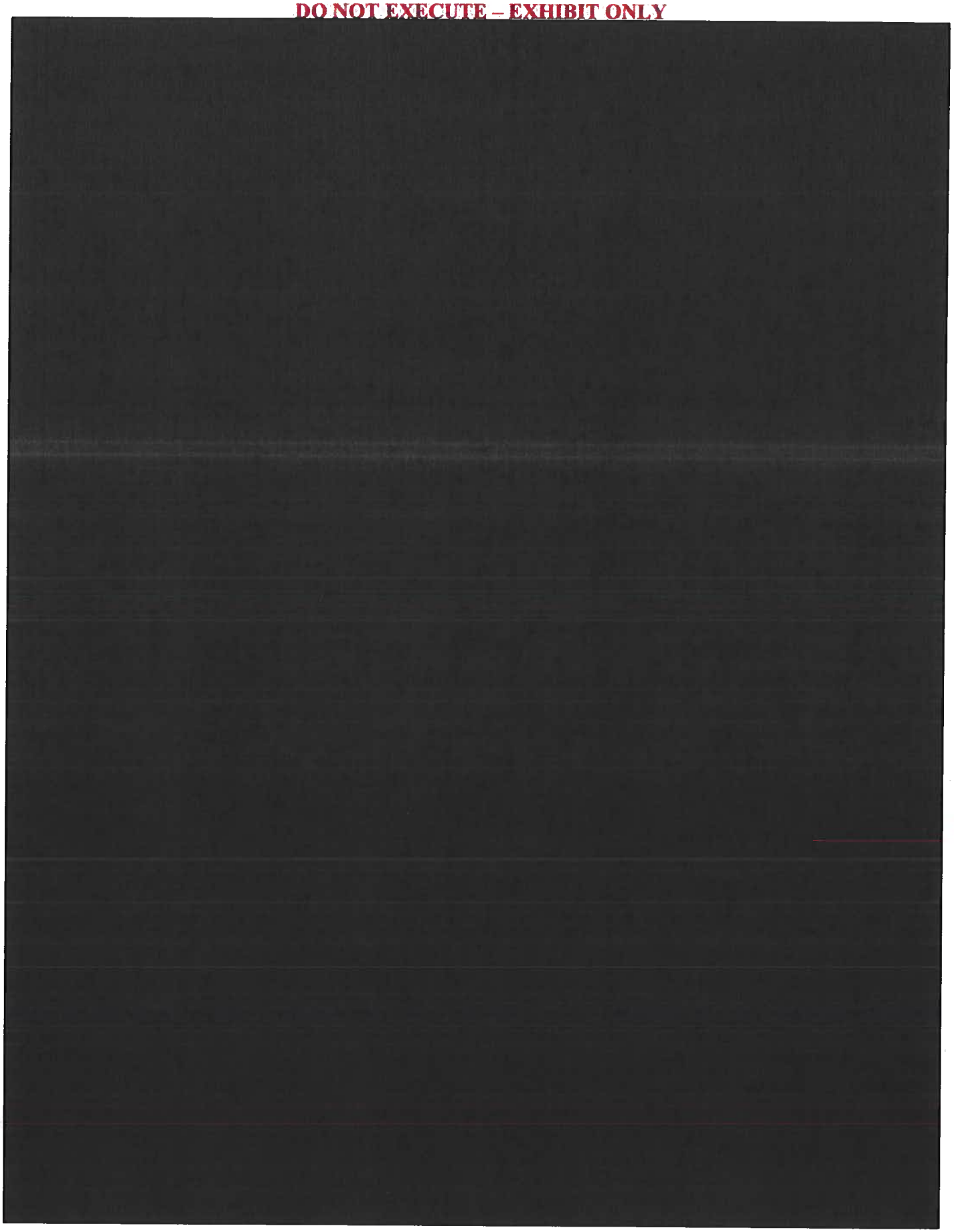

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EXHIBIT A TO MEMORANDUM OF OPTION AGREEMENT

LEGAL DESCRIPTION OF LAND

Parcel 1

Section 142, Block M-2, BS&F Survey, Gray County, Texas,

SAVE AND EXCEPT the following described land:

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Thence 89 degrees 52 feet E 30 feet South and parallel to North line of said Section 142, 190.0 Feet to an iron rod;

Thence S 40 degrees 50 feet W, 105.0 feet to an iron rod;

Thence S 89 degrees 52 feet W Parallel to the North line of said section 142, 145.0 feet to an iron rod;

Thence South parallel to the west line of said Section 142, 135.75 feet to an iron rod;

Thence 89 Degrees 52 feet W parallel to the North line of said Section 142, 1457.30 feet to an iron rod set in the East right-of-way line of a public graded road;

Thence North 40.0 feet East of and parallel to the West line of said Section 142, 270.0 feet to an iron rod;

Thence N 89 degrees 52 feet E parallel to the North line of said Section 142, 116 feet to an iron rod;

Thence North parallel to the West line of said Section 142, 108.0 feet to the place of beginning and containing 14.52 acres, more or less.

Parcel 1 contains 624.24 acres
Parcel 1 Tax ID No: 11150855132142105000O

ATTACHMENT 5

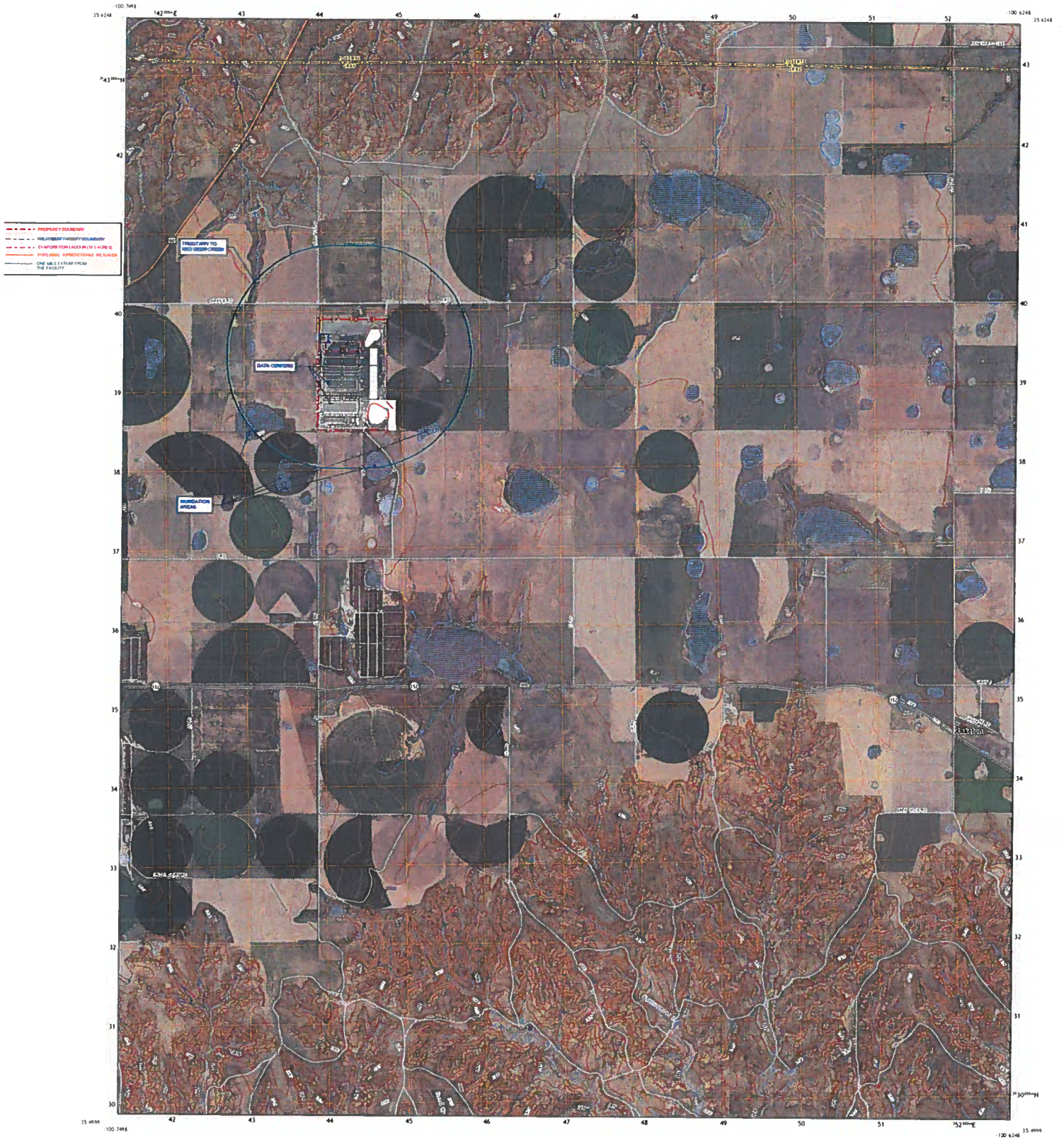
FULL-SIZE USGS TOPOGRAPHIC MAP

REFERENCE: DOMESTIC ADMINISTRATIVE REPORT - PAGE 10

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

The National Map OnDemand Topo

7.5-MINUTE TOPO QUADRANGLE
TEXAS - CUSTOM EXTENT
7.5-MINUTE TOPO



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and 1 000 meter grid: UNIVERSAL TRANSVERSE MERCATOR, ZONE 14S
Data is provided by The National Map (TNM), is the best available at the time of map generation, and includes data content from supporting sources of Elevation, Hydrography, Geographic Names, Boundaries, Transportation, Structures, Land Cover, and Orthoimagery. Refer to associated Federal Geographic Data Committee (FGDC) metadata for additional source data information.

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands. Temporal changes may have occurred since these data were collected and some data may no longer represent actual surface conditions.

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

UTM GRID AND 2024 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

KILOMETERS
METERS
MILES
FEET

CONTOUR INTERVAL 5 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988
CONTOUR SMOOTHNESS = Medium

TEXAS
QUADRANGLE LOCATION

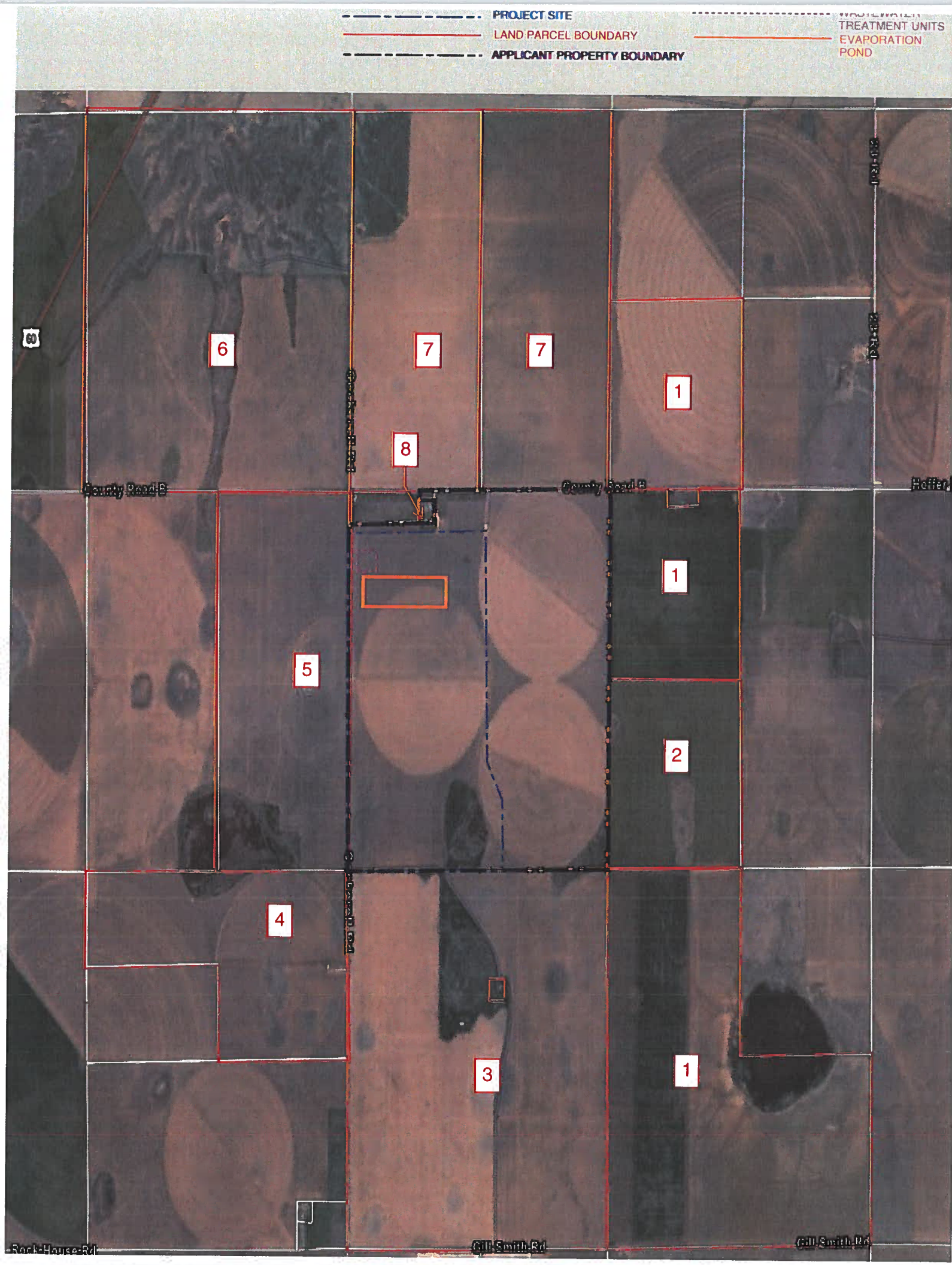
ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

7.5-MINUTE TOPO, TX
2025

ATTACHMENT 6

AFFECTED LANDOWNERS MAP

REFERENCE: DOMESTIC ADMINISTRATIVE REPORT - PAGE 12


PROJECT SITE
LAND PARCEL BOUNDARY
APPLICANT PROPERTY BOUNDARY
WASTEWATER TREATMENT UNITS
EVAPORATION POND
6
7
7
8
1
1
2
5
4
3
1
County Road B
County Road B
Gill Smith Rd
Gill Smith Rd
Rock House Rd

ATTACHMENT 7
CROSS-REFERENCED LANDOWNERS LIST
REFERENCE: DOMESTIC ADMINISTRATIVE REPORT - PAGE 12

CROSS-REFERENCED LANDOWNER'S LIST

Contact Information for Adjacent Landowners:
(See the Adjacent Landowner's Map for Land Parcels associated with the following serial numbers).

1) DAVID M BOWERS
   8487 RABBIT LN
   PAMPA, TX 79065

2) STEPHEN P & SHERMAN SMITH
   12810 COUNTY ROAD D
   PAMPA, TX 79065

3) HARVEY LLOYD FAM LTM PART
   4919 CROSS CREEK LN
   LEAGUE CITY, TX, 77573

4) PHILPOTT LAND PARTNERS
   149 ELIZABETH ROAD
   SAN ANTONIO, TX 78209

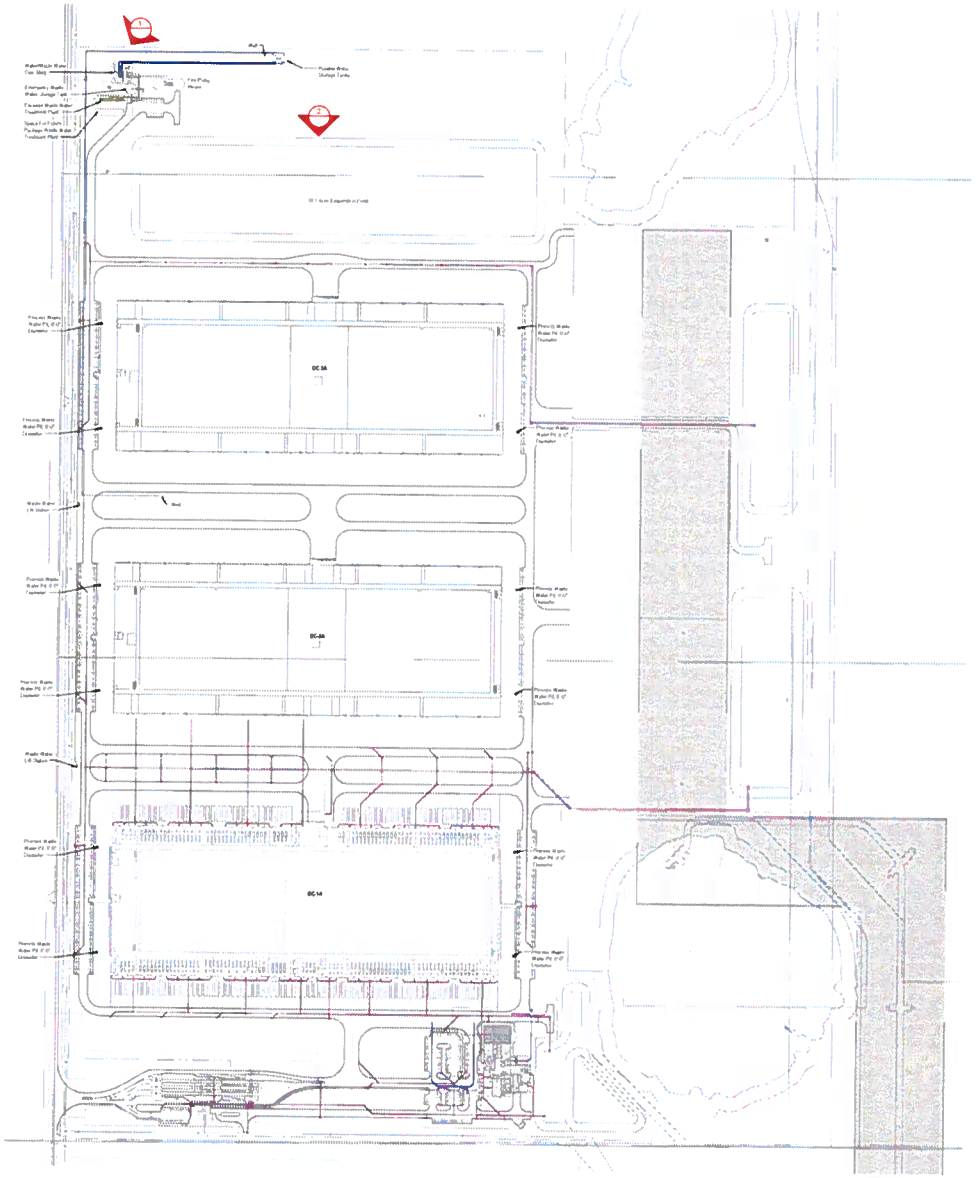
5) SHARON REESE NIEBUHR
   11351 STRAIT LN
   DALLAS, TX 75229

6) LEWIS & RITA ANN HOLLAND FAMILY LLC-SERIES WIND
   9909 DIGBY LANE
   AMARILLO, TX 79119

7) DALEY FAMILY TRUST
   169 INWOOD TRAIL
   MADISON, AL 35758

8) HELMS BRANDON & TEISHA
   1300 HAMILTON
   PAMPA, TX 79065

ATTACHMENT 8
ORIGINAL PHOTOGRAPHS
REFERENCE: DOMESTIC ADMINISTRATIVE REPORT - PAGE 13



1 PIPING-SITE PLAN

PHOTO 1 - LOCATION OF WATER/WASTEWATER OPERATIONS BUILDING

PHOTO 2 - LOCATION OF EVAPORATION POND

HDR Architecture, Inc
1601 Utica Ave South, Suite 600
Saint Louis Park, MN 55416
Tel 763 591 5400

Intersect Power

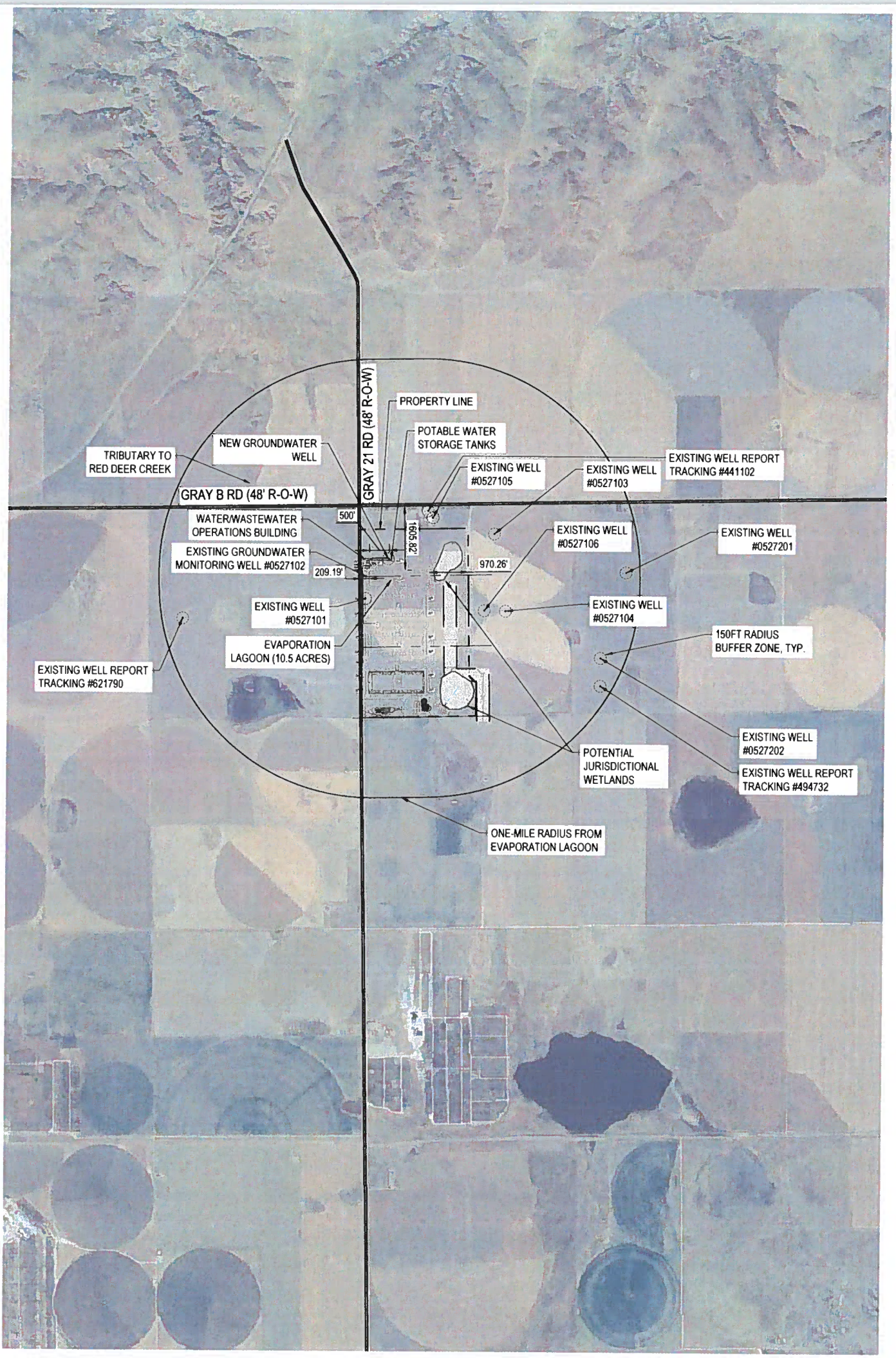
Intersect Power
Pumpkin W-WW

PRELIMINARY

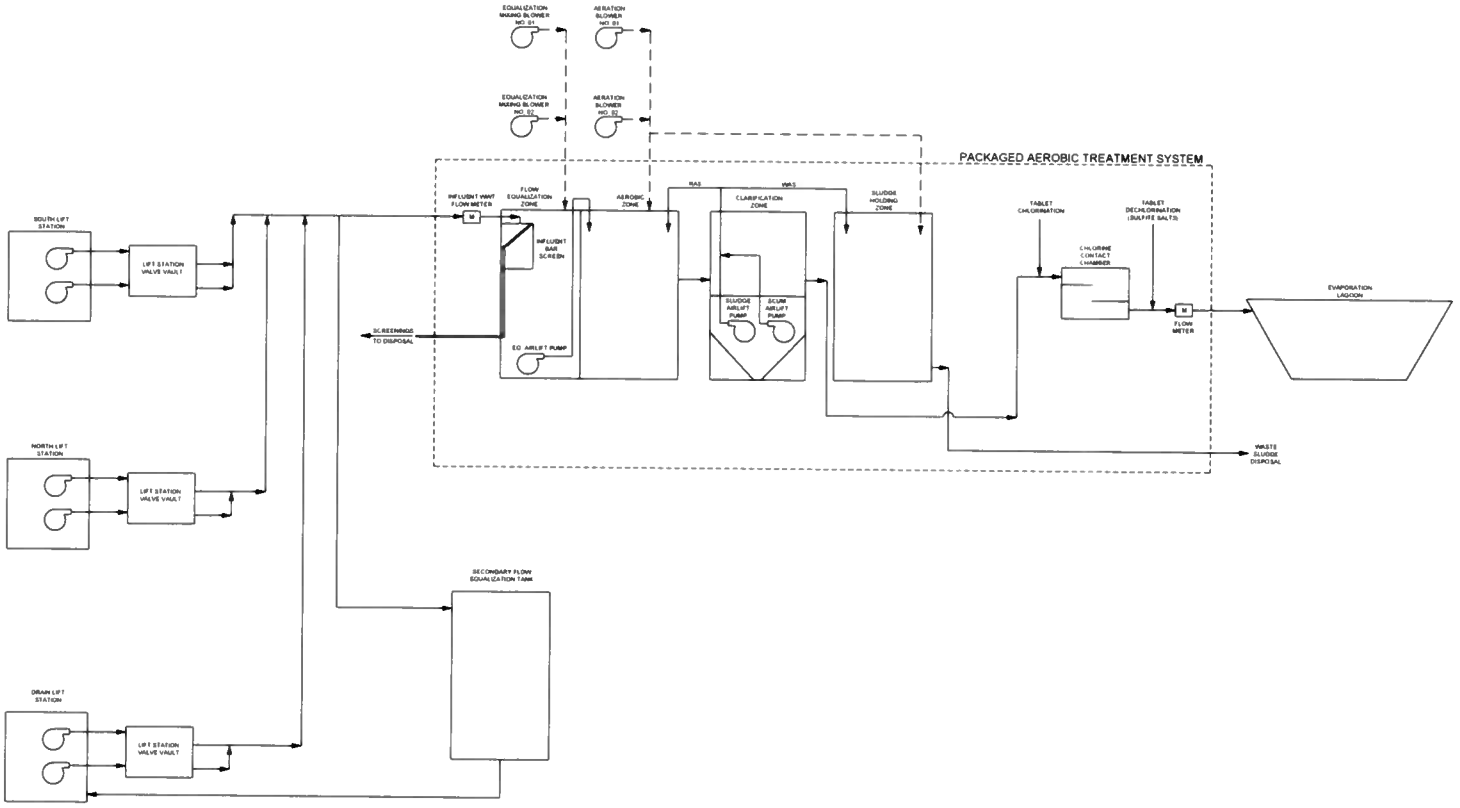
OVERALL SITE
PROCESS PIPING PLAN

01D100

ATTACHMENT 9
BUFFER ZONE MAP
REFERENCE: DOMESTIC ADMINISTRATIVE REPORT - PAGE 13


GRAY 21 RD (48' R-O-W)
PROPERTY LINE
POTABLE WATER STORAGE TANKS
NEW GROUNDWATER WELL
TRIBUTARY TO RED DEER CREEK
GRAY B RD (48' R-O-W)
EXISTING WELL #0527105
EXISTING WELL #0527103
EXISTING WELL REPORT TRACKING #441102
500'
1605.28'
WATER/WASTEWATER OPERATIONS BUILDING
EXISTING GROUNDWATER MONITORING WELL #0527102
209.19'
970.26'
EXISTING WELL #0527106
EXISTING WELL #0527201
EXISTING WELL #0527101
EXISTING WELL #0527104
EVAPORATION LAGOON (10.5 ACRES)
150FT RADIUS BUFFER ZONE, TYP.
EXISTING WELL REPORT TRACKING #621790
EXISTING WELL #0527202
POTENTIAL JURISDICTIONAL WETLANDS
EXISTING WELL REPORT TRACKING #494732
ONE-MILE RADIUS FROM EVAPORATION LAGOON

ATTACHMENT 10
PROCESS FLOW DIAGRAM
REFERENCE: DOMESTIC TECHNICAL REPORT 1.0 - PAGE 2



DATE TIME STAMP

FILE PATH

HDR, INC.
1917 SOUTH 67th STREET
OMAHA, NE 68106
(402) 399-1000
TEXAS FIRM # F-754

This Sheet is Included for Informational Purposes Only

TRADE SECRETS

CONFIDENTIAL CLIENT
NOT FOR CONSTRUCTION

REVISIONS			DRAWN: MCH
NO.	BY	DESCRIPTION	APPROVED: EB

PUMPKIN W/WW
PROJECT TYPE
PROJECT ADDRESS
PROJ. NO. 10423239

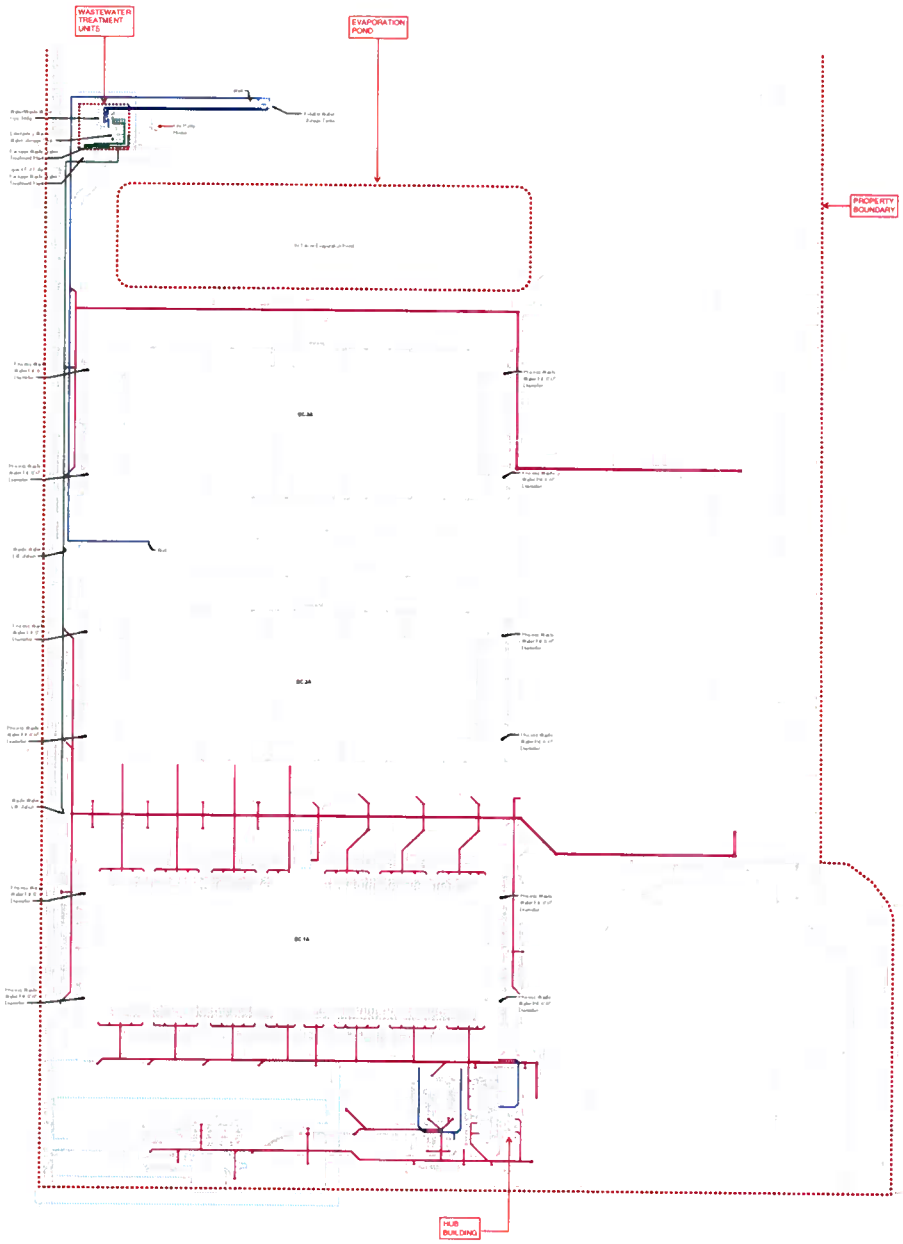
PROCESS FLOW DIAGRAM - WASTEWATER TREATMENT SYSTEM

SCALE: NOT TO SCALE

SHEET NUMBER:
00-D-602

XXX-XXXXXXXXX
PHASE: 30% DETAILED DESIGN

ATTACHMENT 11
SITE LAYOUT DRAWING
REFERENCE: DOMESTIC TECHNICAL REPORT 1.0 - PAGE 3



1 PIPING-SITE PLAN

HDR Architecture, Inc.
1601 Utica Ave. South, Suite 600
Saint Louis Park, MN 55416
Tel 763.591.5400

Intersect Power

Intersect Power
Pumpkin W-WW

MARK	DATE	DESCRIPTION

PRELIMINARY

OVERALL SITE
PROCESS PIPING PLAN

01D100

ATTACHMENT 12
DESIGN CALCULATIONS
REFERENCE: DOMESTIC TECHNICAL REPORT 1.1 - PAGE 22

DESIGN CALCULATIONS

Influent Quality Characteristics - The raw sewage characteristics used for design purposes are as follows:

Parameter	Concentration
BOD5	400 mg/L
TSS	385 mg/L

The facility process and hydraulic design for this facility are as follows:

Design Calculations

Flow	**Gallons Per Day**	**Gallons Per Minute**
Average Daily Flow (Q_{avg})	28,700	20
Peak 2-Hour Flow (Q_{pk})		30

Loading	**Pounds Per Day**
BOD_5	96
TSS	92

Process Design - The treatment facility will be designed to produce an effluent quality in compliance with the proposed permitted parameters of:

$CBOD_5$ = 30 mg/L; TSS = 30 mg/L;

In order to achieve the required removal efficiencies, the packaged treatment system which runs as an activated sludge process will be operated. The packaged treatment system will include an automatic screen, a flow equalization zone, an aeration zone and a sludge holding zone followed by a clarifier unit. The liquid temperature is expected to be 15°C. The anticipated ranges of MLSS and RAS are 4,000 mg/L and 11,000 mg/L respectively.

Treatment Units

Aeration Basin

Aeration Basin	TCEQ Requires	Actual Provided
Organic loading rate (lbs/day/1000 ft^3)	25 (Max)	25
Total aeration volume (ft^3)		3,850
Freeboard (in)	18	18

Clarifier

Clarifier	TCEQ Requires	Actual Provided
Inlet Velocity through Stilling Well	0.15 (Max)	0.08
Surface loading rate (Q_{pk}) (gallons/day/ ft^2)	1200 (Max)	453
Detention time (Q_{pk}) (hr)	1.8 (Min)	3.2
Side-water depth (ft)	8 (Min)	8
Maximum weir loading (Q_{pk}) (gallons/day/ft)	20,000 (Max)	1,250
Freeboard (in)	12	18

Air Requirements

Aeration Basin

Aeration Basin	TCEQ Requires	Actual Provided
Aeration requirements (SCF/day/lb BOD_5)	3,200	4,500
Oxygen required (lb O_2/lb BOD_5)	2.2	2.2
Oxygen required (lb/day)	212	212
Air provided (SCFM)	220	300

Sludge Holding Zone

Sludge Holding Zone	TCEQ Requires	Actual Provided
Aeration requirements (SCFM/1,000CF)	20	30
Air Flow Rate (SCFM)	16	24

The expected wet sludge production at the packaged treatment plant is nearly 1,046 gallons/day or 96 lbs dry sludge/day.

Disinfection

An in-line automatic tablet chlorinator with Calcium Hypochlorite tablets will be used upstream of the chlorine contact chamber to provide chlorination to the wastewater effluent discharging to the evaporation pond.

Tablet Chlorination	**TCEQ Requires**	**Actual Provided**
Chlorine Concentration (mg/L)	8	15
Average Flow (MGD)		0.0287
Chlorine Tablets Required/Day (0.5 pounds each)		12

An automatic tablet dechlorinator with Sodium Bisulfite tablets will be used for dechlorination with Sodium Sulfite tablets to the wastewater effluent discharging to the evaporation pond.

Tablet Dechlorination	**TCEQ Requires**	**Actual Provided**
Sodium Bisulfite Required (lbs/lbs Chlorine)	1.465	2
Average Flow (MGD)		0.0287
Sodium Bisulfite Tablets Required/Day (0.5 pounds each)		2

Facility design features

A. Emergency Power Requirements

In accordance with *30 TAC § 217.36*, the treatment facility must incorporate an on-site automatically starting generator capable of continuously operating all critical wastewater treatment system units. The fuel tank must be sized for a run time greater than the longest power outage in the power records. This generator will provide sufficient power for the following units:

1. 1 - Packaged Treatment System including influent screen, solids handling pumps, transfer pumps, scraper and skimming mechanisms in clarifier
2. 3 - Blowers, one (1) each for Aeration Zone, Equalization Zone and Sludge Handling Zone within the Packaged Treatment System.
3. Chlorination system
4. Lighting Panels and Control Equipment

Additionally, a provision for portable generators will be made for influent lift stations pumping raw domestic wastewater into the packaged treatment system.

B. Alarm Features

The facility will be equipped with a Supervisory Control and Data Acquisition (SCADA) system to monitor the operation of all critical treatment units. The control room will include a computer with graphic display of the treatment units that will indicate status and alarm conditions. The computer system will include an autodialer to alert facility personnel of the following conditions:

1. Power Outage
2. Influent Lift Station(s) Wet Well High High Levels.
3. Influent Lift Station(s) Pump Seal Failure and High Temperature.
4. Packaged Treatment System Alarms:
    a. Influent Screen Failure
    b. Equalization Zone Transfer Pump Failure
    c. Clarifier Skimming Mechanism Failure
    d. Clarifier Sludge Scraper Mechanism Failure
5. Equalization Blower Failure
6. Sludge Holding Zone Blower Failure
7. Aeration Zone Blower Failure

The autodialer will store prerecorded messages concerning each alarm condition and the procedure to be followed and will call up different phone numbers until the alarm condition is acknowledged.

C. Design Features for Reliability And Operating Flexibility

1. Influent lift stations: The influent lift stations will include two submersible pumps sized to meet peak flow pumping capacity with the largest unit out of service. Level switches will automatically start and stop the pumps based on influent flows and rising and falling wet well levels. High High wet well level will result in an alarm condition.
2. Packaged Treatment System: A swing blower will be provided for back-up aeration to the flow equalization, sludge holding zone and aeration zone within the packaged treatment system.

D. Overflow prevention

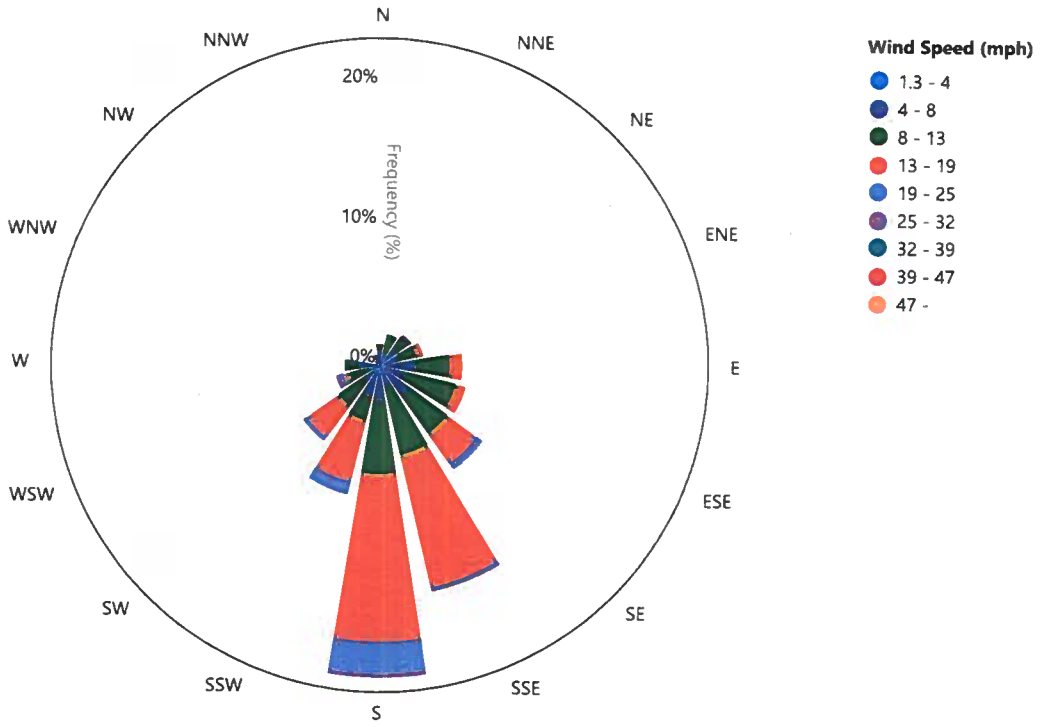
The following design features will be used to prevent the overflow of wastewater from treatment units.

1. The influent lift station will be designed with the capacity to pump peak flow with the largest single pump out of service.
2. The facility hydraulic design, including piping, channels, weirs, troughs and other features, will be sized to allow the 2-hour peak flow to pass through the facility without exceeding minimum freeboard requirements with any single treatment unit out of service.

ATTACHMENT 13
WIND ROSE DIAGRAM
REFERENCE: DOMESTIC TECHNICAL REPORT 1.1 - PAGE 23

BORGER HUTCHINSON COUNTY AP (TX) Wind Rose

August 01, 2025 - August 26, 2025
Sub-Interval: August 1 - August 25, 0 - 24



Click and drag to zoom

ATTACHMENT 14
SLUDGE MANAGEMENT PLAN
REFERENCE: DOMESTIC TECHNICAL REPORT 1.1 - PAGE 24

Sludge Management Plan

Influent Design Flow = 0.0287 mgd

Influent BOD Concentration = 400 mg/L

Sludge Holding Zone Volume: 6,250 gallons

Aeration Basin MLSS: 4,000 mg/L

Sludge Production

Solids Generated	100% flow	75% flow	50% flow	25% flow
Pounds Influent BOD_5	96	72	48	24
Pounds of dry sludge produced*	96	72	48	24
Pounds of wet sludge produced	8,727	6,545	4,363	2,182
Gallons of wet sludge produced	1,046	785	523	262

***Assuming 1.00 pounds of digested dry sludge produced per pound of influent BOD_5 at average temperatures and 1.1% solids concentration in the sludge holding zone.**

Waste Activated Sludge (WAS) will be collected from the sludge and scum pumps at the clarifier unit and sent to the sludge holding zone.

Table EX5(2) - Sludge Removal Schedule

Removal Schedule (days)	100% flow	75% flow	50% flow	25% flow
Days between Sludge Removal	7	10	14	30

WAS will be regularly removed from the sludge holding zone by a septage hauler and hauled to the City of Pampa's Wastewater Treatment Plant.

ATTACHMENT 15
EXISTING WELL LOGS
REFERENCE: WORKSHEET 3.0 LAND DISPOSAL OF EFFLUENT - PAGE 34

WELL #527101

Potter Map

05-29-101

HIST

9-185—July 19?
Revised

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

WELL SCHEDULE

Date June 8, 1957 Field No. 1

Record by RTL-ATL Office No C-9

Source of data Owner

1. *Location:* State Texas County Gray

Map

¼ NW ¼ sec. 142 T M-2 N/S R BS&F E/W

2. *Owner:* John Harnly Address Miami, Texas

Tenant Address

Driller Texas Pump Co. Address Floydada, Tex.

3. *Topography* Rolling

4. *Elevation* ft. above/below

5. *Type:* Dug, drilled, driven, bored, jetted 6 1955

6. *Depth:* Rept. 480 ft. Meas. ft.

7. *Casing:* Diam. 14 in., to in., Type

Depth 463 ft., Finish Perf. 365-463

8. *Chief Aquifer* fine sand with ... and clay stringers From ft. to ft.

Others

9. *Water level* 344.77 ft. rept. meas. June 8 1957 above/below MP

Airline hole pump base which is 1.0 ft. above/below surface

10. *Pump:* Type T Capacity 6" G. M.

Power: Kind N. G. Horsepower 115

11. *Yield:* Flow G. M., Pump 450 G. M., Meas., Rept. Est.

Drawdown ft. after hours pumping G. M.

12. *Use:* Dom., Stock, PS., RR., Ind., Irr., Obs. Not used

Adequacy, permanence Irr. 100 acres row crops

13. *Quality* Temp °F.

Taste, odor, color Sample Yes/No

Unfit for

14. *Remarks:* (Log, Analyses, etc.) Owner rpt. RB at 562' in 2 test holes N and S Pump set 429'

Samples obtained from Test ... N.

(over)

Abnd

- Well drilled 920 ft. ll. encountered red beds at 562. well was a failure and was filled.
- A+m Gas made analysis of nearby well.
- Expects sufficient @ 450 gpm.

C-30

This well replaced by well (Dist. ID.) 223. Casing Left in well, but well filled in or obstructed @ abt 895 feet.

9-185—July 19
Revised

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

05 Well

WELL SCHEDULE

Date June 8, 1957 Field No. 1

Record by RTL-ATL Office No.

Source of data Owner

1. *Location:* State Texas County Gray

Map

¼ ¼ sec. 142 T M-2 N/S R BS&F E/W

2. *Owner:* John Hamly Address Miami, Texas

Tenant Address

Driller Texas Pump Co. Address Floydada, Tex.

3. *Topography* Rolling

4. *Elevation* ft. above/below

5. *Type:* Dug, drilled, driven, bored, jetted 6 1955

6. *Depth:* Rept. 480 ft. Meas. ft.

7. *Casing:* Diam. 14 in., to in., Type

Depth 463 ft., Finish Perf. 365-463

8. *Chief Aquifer* From ft. to ft.

Others

9. *Water level* 344.77 ft. rept. meas. June 8 1957 above/below MP

Airline hole pump base which is 1.0 ft. above/below surface

10. *Pump:* Type T Capacity 6" G. M.

Power: Kind N. G. Horsepower 115

11. *Yield:* Flow G. M., Pump 450 G. M., Meas., Rept, Est.

Drawdown ft. after hours pumping G. M.

12. *Use:* Dom., Stock, PS., RR., Ind., Irr., Obs.

Adequacy, permanence Irr. 100 acres row crops

13. *Quality* Temp °F.

Taste, odor, color Sample Yes/No

Unfit for

14. *Remarks:* (Log, Analyses, etc.) Owner rpt. PS at 562' in 2 test holes K and S Pump set at

---

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Water Resources Branch

05-27-101 Hist

Water Level Measurements Field No.

Owner Office No.

Tenant County

Location Type of well

Measuring Point

Height of Meas. Point above land-surface datum

Date	Depth to water below meas. point	Alt. M.P. above L.S.D.	Depth to water below L.S.D.	Meas. by	Remarks (pumping, M.P. changed, etc.)
2-1-[illegible]					
1-2-[illegible]					
1-2[illegible]					

FORM 9-148

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

C-9

New well 200' N

05-27-101
Report Page No.

WATER RESOURCES DIVISION

GROUND WATER BRANCH

COUNTY Gray

Historical RLB 3/8/62

STATE Texas

WATER LEVELS AND ARTESIAN PRESSURES IN OBSERVATION WELLS

777, P +10'

I. J H. Harnly. Lat. 35°35', long 100°43'

Elevation - 3107.5 by Altimeter

Highest water level _____ 19____; lowest _____ 19____

Records available _____ Water level IN FEET BELOW LAND SURFACE DATUM

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1958							
Jan. 15	344.10						
1959							
Feb. 24	343.05						
1960							
Feb. 1	343.63						
1961							
Jan. 3	342.25						

H.C.T

05-27-101

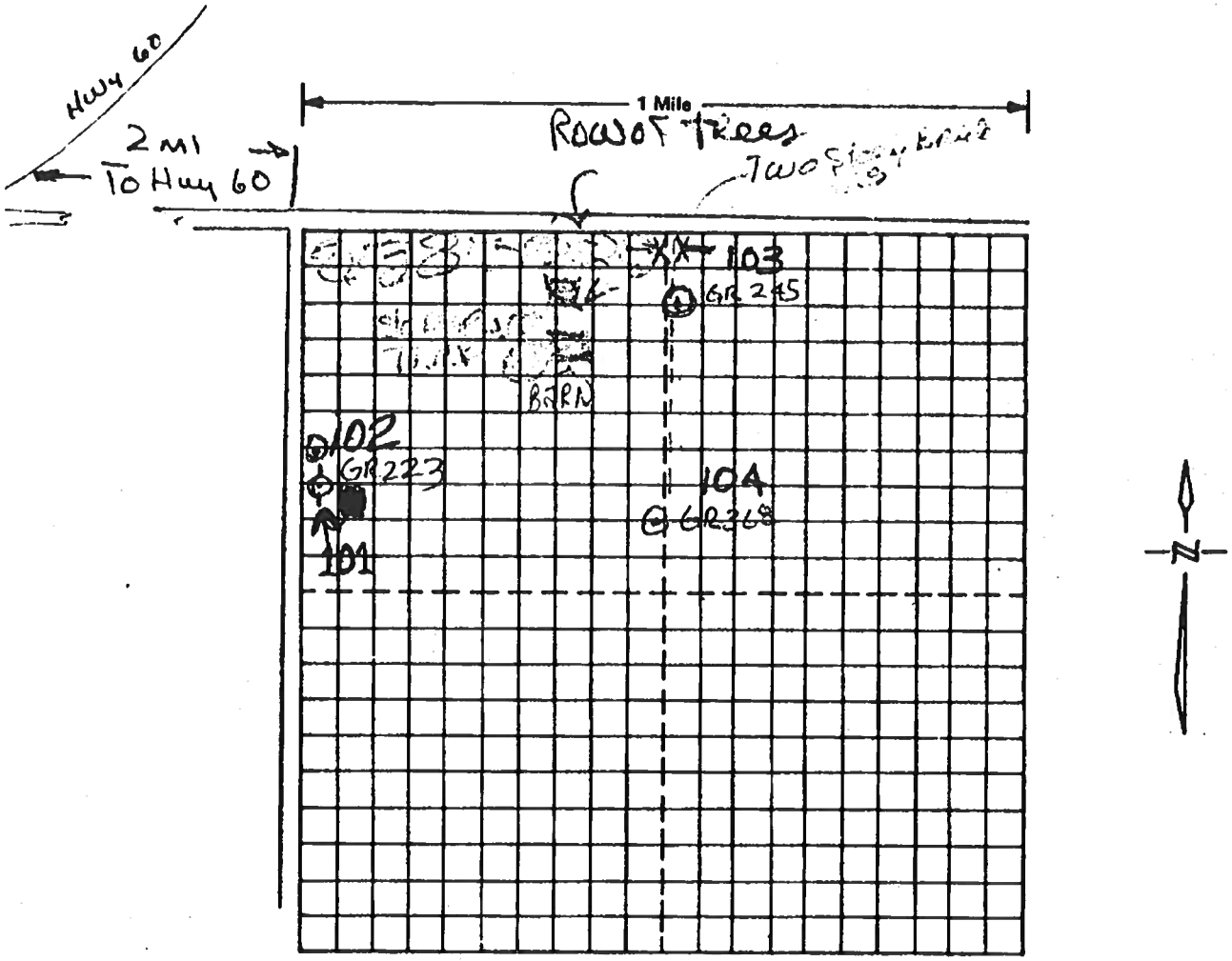
GPO 845230

3

WATER WELL LOCATION SKETCH

TEXAS WATER DEVELOPMENT BOARD
GROUND WATER DATA & PROTECTION

Section 142 in Block M-2 BS&F
Gray County
2½-minute Quadrangle _____ In
7½-minute Quadrangle 27
Sketch by J. Eddy Date 3-7-72



KS 05-27-1
Well No.

TWDBE-WD-4
7 copies

WELL #527102

TEXAS WATER DEVELOPMENT BOARD

WELL SCHEDULE

Aquifer _____ Field No. GR 223 State Well No. KS05-27-102

Owner's Well No. _____ County Gray

1. Location: SW 1/4, NW 1/4 Sec. 142, Block M-2 Survey BS&F

2. Owner: John H. Hjerly Address: Miami, TX

Tenant: _____ Address: _____

Driller: W Layne Jones Address: _____

3. Elevation of LSD is 3108 ft. above msl, determined by Topo

4. Drilled: June 28 19 60; Dug, Cable Tool, Rotary,

5. Depth: Rept. 550 ft. Meas. _____ ft.

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

7. Pump: Mfgr. US Pumps Type T

No. Stages _____, Bowls Diam. _____ in., Setting 450 ft.

Column Diam. 6 in., Length Tailpipe _____ ft.

8. Motor: Fuel NG Make & Model Chy V8 HP.

9. Yield: Flow _____ gpm, Pump 600 gpm, Meas., Rept., Est.

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

Static Level 345 ft. Pumping Level 437 ft. Drawdown 92 ft.

Production 600 gpm Specific Capacity _____ gpm/ft.

11. Water Level: 349.56 ft. rept. meas. 1-3 19 61 above below Louise EDGE PH which is 1.5 ft. above below surface.

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

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

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

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

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

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

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

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

14. Other data available as circled: Driller's Log, Radioactivity Log, Electric Log,

Formation Samples, Pumping Test, _____

15. Record by: J. Eddy Date 3-7 19 72

Source of Data OBS DK OLD SCH

16. Remarks: _____

Obs. Well

CASING & BLANK PIPE

Cemented From _____ ft. to _____ ft.

Diam. (in.)	Type	Setting, ft. from	to
14	Steel	0	550

WELL SCREEN

Screen Openings

Diam. (in.)	Type	Setting, ft. from	to
14	Slotted	390	550

TWDBE-GW-49 (Sketch)

KS05-27-102

GW 1

TEXAS WATER DEVELOPMENT BOARD

WELL SCHEDULE

Aquifer ? Field No. 1A State Well No. KS-05-27-102

Owner's Well No. County GRAY

1. Location: SW 1/4 NW 1/4 Sec. 142, Block M-2 Survey

2. Owner: JOHN H. VARNLY Address: MIAMI

Tenant: Address:

Driller: WAYNE JONES Address: WHITE DEER

3. Elevation of is ft. above msl, determined by

4. Drilled: JUNE 19 60; Dug, Cable Tool, Rotary,

5. Depth: Rept. 550 ft. Meas. ft.

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

7. Pump: Mfgr U.S. - AMARILLO EGGHEAD Type T

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

Column Diam. in., Length Tailpipe ft.

8. Motor: Fuel NG Make & Model PHRYSLER IND HP V-8

9. Yield: Flow gpm, Pump 450 gpm, Meas., Rept., Est.

10. Performance Test: Date Length of Test Made by

Static Level ft. Pumping Level ft. Drawdown 104 ft. / 1 Hr.

Production gpm Specific Capacity gpm/ft.

11. Water Level: 344.56 ft. rept. meas. 1-3 1966 above/below LOWER EDGE PORT HOLE which is 1.5 ft. above/below surface.

ft. rept. meas. 19 above/below which is ft. above/below surface.

ft. rept. meas. 19 above/below which is ft. above/below surface.

ft. rept. meas. 19 above/below which is ft. above/below surface.

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

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

Temp. °F, Date sampled for analysis Laboratory

Temp. °F, Date sampled for analysis Laboratory

Temp. °F, Date sampled for analysis Laboratory

14. Other data available as circled: Driller's Log, Radioactivity Log, Electric Log, Formation Samples, Pumping Test,

15. Record by: CHARLES E. FERGUSON Date 9-15 1966

Source of Date ATL 4-26-61

16. Remarks:

QUESTION THIS LOC. NO WELL THERE

CASING & BLANK PIPE

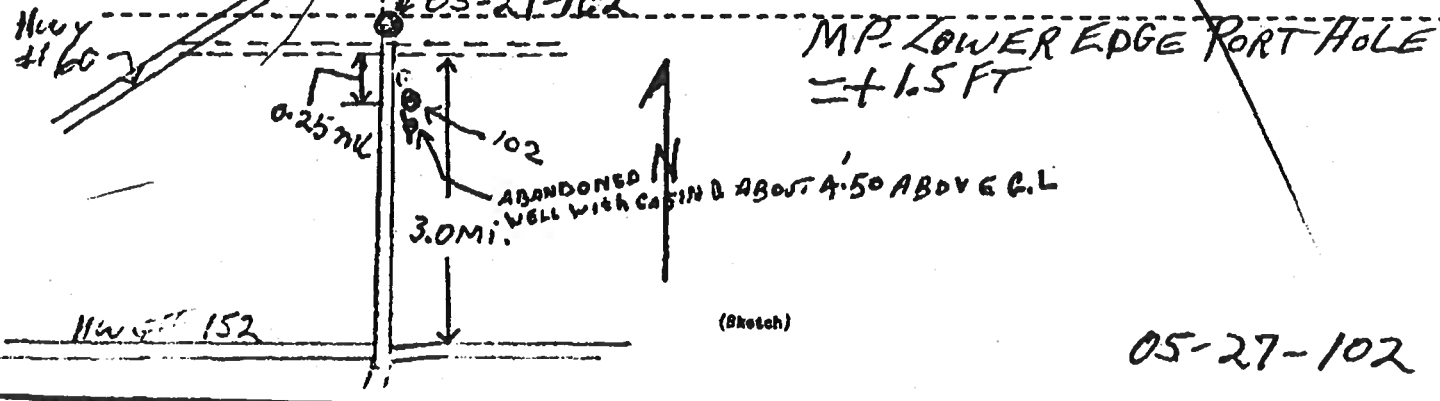
Cemented From ft. to ft.

Diam. (in.)	Type	Setting, ft. From	to
14			

WELL SCREEN

Screen Openings

Diam. (in.)	Type	Setting, ft. From	to
14	SLOTTED	390	550



05-27-102

9-185—July 1
Revised

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

WELL SCHEDULE

GR. 223

Date 4-26, 1961 Field No.

Record by ATL Office No. C-30

Source of data PWD

1. *Location:* State Texas County Gray
   Map 13 mi ENE Pampa
   SW ¼ NW ¼ sec. 1 & 2 T 5N M. 2 N/S R E/W
2. *Owner:* John H. Harnly Address Rt. 1, Miami, Tex
   Tenant Address
   Driller Wayne Jones Address White Deer Tex
3. *Topography* Flat
4. *Elevation* ft. above/below
5. *Type:* Dug, drilled, driven, bored, jetted 6 1960
6. *Depth:* Rept. 550 ft. Meas. ft.
7. *Casing:* Diam. 14 in., to in., Type
   Depth 550 ft., Finish Slotted 390-550
8. *Chief Aquifer* From ft. to ft.
   Others
9. *Water level* 344.56 ft. rept. meas. 1-3 1961 above/below Lower
   Edge port hole which is 1.5 ft. above/below surface
10. *Pump:* Type T Capacity 6 G. M.
    Power: Kind NG Horsepower 15?
11. *Yield:* Flow G. M., Pump ??? G. M., Meas., Rept. Est.
    Drawdown 10?? ft. after 1 hours pumping ??? G. M.
12. *Use:* Dom., Stock, PS., RR., Ind., Irr., Obs.
    Adequacy, permanence
13. *Quality* Temp °F.
    Taste, odor, color Prelim. 2nd Sample Yes/No
    Unfit for complete 8-7-61
14. *Remarks:* (Log, Analyses, etc.)
    Rb562 in old well location. PL 447' pumping 450 gpm - PL 437 pumping 450 gpm 7-??-??
    PL 446 4-26-61 yield unknown
    (over)

8-7-61 meas. [illegible] 1/31
feet below land surface
RPM 1550
yield estimated 1550 gpm

7-10-63 1550? RPM
D/L - 323.0'

Typewrite (Black ribbon) or Print Plainly
(soft pencil or black ink)
Do not use ball point pen

Texas Department of Health Laboratories
1100 West 49th Street
Austin, Texas 78756

TDWR ONLY
Organization No. 410 Lab No. S. R
Work No. 6040 AUG 2 5 1981

CHEMICAL WATER ANALYSIS REPORT

Send report to:

Data Collection and Evaluation Section
Texas Department of Water Resources
P.O. Box 13087
Austin, Texas 78711

County 090 GRAY
State Well No. 05-27-102
Well No.
Date Collected 07-22-81

Location SW ¼ NW ¼ Section 142 Blk M-2 Survey BS&F Sample No. By R. BOWERS
Source (type of well) T NS G Owner JOHN HARNLY 2704 ASPEN
Date Drilled 1960 Depth 550 ft. WBF OGALLALA PAMPA, TEX 79065
Producing intervals Dally Water level 356.80 7/16/81 ft. Sample depth ft.
Sampled after pumping Several hrs. Yield GPM meas. est. Temperature °F °C
Point of collection Well Appearance clear turbid colored other
Use ERR Remarks

(FOR LABORATORY USE ONLY)

CHEMICAL ANALYSIS

Laboratory N CEI-16977
Date Received JUL 27 1981
KEY PUNCHED
Date Reported AUG 20 '81

		MG/L	ME/L
Silica	00955	29	
Calcium	00915	76	3.81
Magnesium	00925	32	2.67
Sodium	00929	104	4.52
	Total		11.18
☐ Potassium	00937	7.	0.18
[3] ☐ Manganese	01055	.	%Na
☐ Boron	01022	.	SAR
[3] ☐ Total Iron	01045	.	RSC
☐ (other)		MG/L	
Specific Conductance (micromhos/cm³)	00095	924	
Diluted Conductance (micromhos/cm³)		16 x 80 = 1280	

		MG/L	ME/L
Carbonate	00445	0	
Bicarbonate (128)	00440	261	4.28
Sulfate	00945	176	3.67
Chloride	00940	120	3.38
Fluoride	00951	0.7	0.04
Nitrate	71850	7.3	0.12
pH	00403	8.0	Total 11.48
[1] Dissolved Solids (residue at 180°C)	70300		720
Phenolphthalein Alkalinity as $CaCO_3$	00415		0
Total Alkalinity as $CaCO_3$ (4.28)	00410		214
Total Hardness as $CaCO_3$ (6.48)	00900		324
[2] Nitrogen Cycle			
Ammonia - N	00610		
Nitrite - N	00615		
Nitrate - N	00620		
Organic Nitrogen	00605		

RECEIVED
SEP 30 1982
CRITE...

☐ " items will be analyzed if checked.

[1] The bicarbonate reported in this analysis can be converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure used in the computation of dissolved solids.
[2] Nitrogen cycle requires separate sample.
[3] Total Iron and Manganese require separate sample.

Analyst Checked By

TDWR-0148 (Rev. 1-8-80)

Typewrite (Black ribbon) or Print Plainly
(soft pencil or black ink)
Do not use ball point pen

Texas State Department of Health Laboratories
1100 West 49th Street
Austin, Texas 78756

TWDB USE ONLY
Program No. 6025
Proj. No. _____

CHEMICAL WATER ANALYSIS REPORT

Send report to:

Ground Water Data and Protection Division
Texas Water Development Board
P.O. Box 13087
Austin, Texas 78711

County 45 ORAY
State Well No. 05-29-102
Well No. C-30
Date Collected 08-20-75
By G.Couch

Location SW/4 NW/4 Sect. 142, BLK M-2, Miami, Ty
Source (type of well) T-NB Owner John Hornly
Date Drilled 6-60 Depth 550 (R) ft. WBF 09a1
Producing intervals 390-550 Water level 343 ft (1961)
Sampled after pumping Several hrs. Yield 450 (R) GPM meas. est. Temperature 66 °F °C
Point of collection Faucet 12' from well Appearance ☑ clear ☐ turbid ☐ colored ☐ other
Use Ind Remarks

(FOR LABORATORY USE ONLY)

Laboratory No. 297868

CHEMICAL ANALYSIS

Date Received AUG 29 1975 Date Reported OCT. 29. 1975

	MG/L	ME/L
Silica	28	
Calcium	82	4.09
Magnesium	27	2.19
Sodium	98	4.26
Total		10.54
☐ Potassium		
☐ Manganese		
☐ Boron		
3/ ☐ Total Iron		
☐ (other) _____		

%Na _____
SAR _____
RSC _____

	MG/L	ME/L
Carbonate 129	0	
Bicarbonate	262	4.30
Sulfate	151	3.14
Chloride	117	3.30
Fluoride	0.7	
Nitrate	7.0	0.11
pH	7.3	Total 10.85
1/ Dissolved Solids (sum in MG/L)		640
Phenolphthalein Alkalinity as $CaCO_3$		0
Total Alkalinity as $CaCO_3$	4.30	215
Total Hardness as $CaCO_3$	6.28	314

Specific Conductance (micromhos/cm3) 1004
Diluted Conductance (micromhos/cm3) 8 x 150 = 1200

2/ Nitrogen Cycle

Ammonia - N	
Nitrite - N	
Nitrate - N	
Organic Nitrogen	

"☐" items will be analyzed if checked.

1/ The bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.
2/ Nitrogen cycle requires separate sample.
3/ Total Iron requires separate sample.

TWDBS-SI-27

Analyst _____ Checked By _____

TWDBE-GW ONLY

Program No. 7421

Proj. No.

CHEMICAL WATER ANALYSIS REPORT

Typewrite (Black ribbon) or Print Plainly
(soft pencil or black ink)
Do not use ball point pen

Texas State Department of Health Laboratories
1100 West 49th Street
Austin 5, Texas

Send report to:

Ground Water Division
Texas Water Development Board
P. O. Box 12386
Austin, Texas 78711

County GRAY

State Well No. 05 - 27 - 102

Well No.

Date Collected 7-13-70

By

Location SW¼, NW¼, SEC. 142, BLOCK M-2

Source (type of well) IRR. Owner JOHN H. HARNLY, MEAMF

Date Drilled JUNE 60 Depth 560 ft. WBW

Producing intervals Water level ft.

Sampled after pumping CONT. hrs. Yield GPM Meas. est. Temperature °F °C

Point of collection DISCHARGE PIPE FROM Appearance (clear) - turbid - colored

Use IRR Remarks THIS IS AN GAS. WELL

FOR LABORATORY USE ONLY

CHEMICAL ANALYSIS

Laboratory No. 163198 Date Received JUL 20 1970 Date Reported AUG 5 1970

	MG/L	ME/L		MG/L	ME/L
Silica	29		Carbonate		0
Calcium	71	3.54	Bicarbonate	262	4.30
Magnesium	33	2.68	Sulfate	160	3.33
Sodium	109	4.74	Chloride	116	3.28
	Total	10.96	Fluoride	0.8	
☐ Potassium			Nitrate	5	
☐ Manganese		%Na	pH 7.2	Total	10.91
☐ Boron		SAR	1/ Dissolved Solids (sum)		650
☐ Total Iron		RSC	Phenolphthalein Alkalinity as C CO_3		0
☐ (other)			Total Alkalinity as C CO_3	(4.30)	215
Specific Conductance (micromhos/cm3)		1014	Total Hardness as C CO_3	(6.22)	311
Diluted Conductance (micromhos/cm3)		8 x 150			

"☐" items will be analyzed if checked. 1200

Total Iron requires separate sample.

AUG - 5 1970

Analyst

Checked by

1/ The bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the carbonate figure is used in the computation of this sum.

TWDBE-GW-50

05-27-102

FORM NO. 354R-LW

Original – District Office Copy

District File No. GR-223
FOR USE OF DISTRICT OFFICE ONLY

Panhandle Underground Water Conservation District No. 3

REGISTRATION and LOG OF WELL

INSTRUCTIONS: Fill out in quadruplicate. Submit all copies to District Office for registration. (PLEASE TYPE OR PRINT)

FOR USE OF DISTRICT
Field Well No. GR 223
Date Received 6-22-60
Size of Pump 6" Maximum in Yield 560 GPM

1. Well Owner John H. Harnly Address Route Miama, Texas
2. Well located 3 miles N, ____ miles S, 13 miles E, ____ miles W of the town of Pampa
3. County Gray Labor ____ League ____ Homestead ____
4. NW1/4 ~~SW1/4 NE1/4 SE1/4~~ (CIRCLE ONE) Section 42 Block M-2 Survey BS&F
5. ACTUAL LOCATION OF THIS WELL IS ____ measured yards from N or S line of this tract of land.
____ measured yards from E or W line of this tract of land.

DRILLER'S LOG OF WELL

Method of Drilling: ROTARY

FROM (FEET)	TO (FEET)	DESCRIPTION OF FORMATION MATERIAL	FROM (FEET)	TO (FEET)	DESCRIPTION OF FORMATION MATERIAL
320	343	FINE SAND			
343	374	FINE SAND			
374	406	SAND AND GRAVEL AND CLAY STRINGERS			
406	450	SANDY YELLOW CLAY AND WHITE SHALE			
450	501	SANDY CLAY AND 5% GRAVEL			
501	550	FINE SAND AND CLAY STREAKES			5108 406 2702

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

Driller Wayne Jones Address White Deer, Texas Date Drilled June 28 1960

DESCRIPTION OF WELL

6. Casing: ~~new~~, used, ~~gas line~~, or ~~shop~~ made. Diameter 14 in. Total length 550 ft.
7. Casing perforations: from 550 ft. to 390 ft. Size 1/16 Number per foot 8
8. Pump Column: Size 6 in. Total length 450 ft. Suction pipe: Size 6 in. Length 80 ft.
9. Pump bowls: Size 10in. Number of stages 11 Pump discharge pipe: Size 6 in.
10. Depth to water level 345 ft. Pump discharge 600 GPM. Pumping level: 437 ft.
11. Power Unit: ~~Electrical~~ Natural Gas ~~Butane~~, Other ____ Horsepower 130

Signature Wayne Jones OWNER OR AGENT owner TITLE Box 246 White Deer, Texas ADDRESS

Final Completion of Well — Date July 25 1960

PAMPA PRINT SHOP, PAMPA, TEXAS

Rec 5-1

FORM NO. 358 AWP

Triplicate—County Committeemen

District File No. Gr-228 (FOR USE OF DISTRICT OFFICE ONLY)

FIELD WELL NO. 228

DATE APPLICATION FILLED OUT 6-22-60

DATE APPROVED BY COUNTY COMMITTEE

SIZE OF PUMP 6" MAXIMUM YIELD 600 GPM

Panhandle Underground Water Conservation District No. 3

Application For Water Well Permit

INSTRUCTIONS: Fill out in quadruplet. Submit all copies to County Committee for approval. (PLEASE TYPE OR PRINT)

I, John L. Hamby (NAME OF LANDOWNER) Rt. Higgs, Texas (LANDOWNER'S ADDRESS)

hereby make application to PANHANDLE UNDERGROUND WATER CONSERVATION DISTRICT NO. 3 for a permit to drill the hereinafter described water well at the location indicated:

1. County Gray

2. NW1/4, ~~NE1/4, SW1/4, SE1/4~~ of Sec. 148 Blk. B-2 Survey BAT (MARK OUT ONES THAT DO NOT APPLY)

3. Labor _____ League _____

4. Proposed Use (~~Domestic~~ Irrigation) (MARK OUT ONES THAT DO NOT APPLY)

5. Drilling to start about June, 19 60

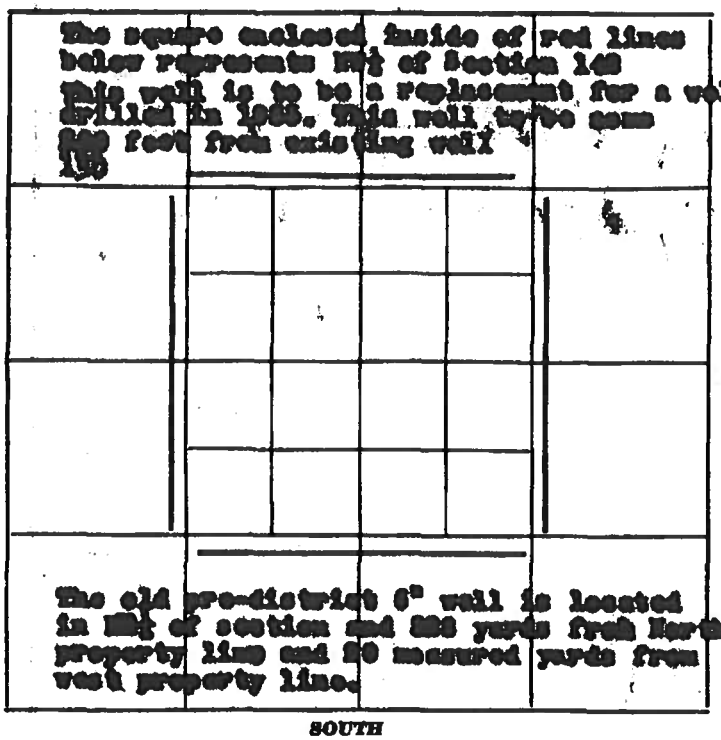
This well to be located: 3 miles N or ~~S~~ and 1/2 miles E or ~~W~~ of the town of Pampa (MARK OUT ONE THAT DOES NOT APPLY)

Permit good for 120 days only from date of approval.

MARK DOT INSIDE CIRCLE ◎ within Red Square for proposed well location. (Red square indicates 1 quarter section or 1 labor)

MARK X, showing 3 closest wells and/or applications

NORTH



WEST

EAST

SOUTH

Please Make Sure Your Measurements Are Correct—They Will Be Checked for Accuracy

Location of Proposed Well as submitted by applicant is _____ measured yards from (N ~~S~~) and _____ measured yards from (E ~~W~~) property line, quarter section line, or labor line. (MARK OUT ONE THAT DOES NOT APPLY)

Number the three adjacent wells, and/or applications, on the plat as 1, 2 and 3, to correspond with the following:

Well 1 2400 measured yards from proposed well.
Owned by George Philpot
Address Pampa, Texas

Well 2 2640 measured yards from proposed well.
Owned by Clyde Garrath
Address Pampa, Texas

Well 3 _____ measured yards from proposed well.
Owned by _____
Address _____

SCALE FOR ABOVE PLAT

1 1/2 inches	600 yards	Minimum for 10-inch well
1 1/10 inches	440 yards	Minimum for 8-inch well
3/4 inch	300 yards	Minimum for 6-inch well
5/8 inch	250 yards	Minimum for 5-inch well
1/2 inch	200 yards	Minimum for 3 or 4-inch well

COMMENTS: _____

I agree that this well will be drilled within ten (10) yards of the location specified and not elsewhere, and that I will furnish my County Committee the completed well registration and log immediately upon completion of this well and prior to the production of water. I hereby certify that I have read the foregoing statements, and that all data therein contained are true and correct to the best of my knowledge and belief.

This notice given by: _____ (SIGNATURE (OWNER OR AGENT)) Owner (TITLE) Rt. Higgs, Texas (ADDRESS)

This permit approved subject to the rules for spacing from existing wells and/or prior permits.

1. _____ 2. _____ 3. _____

Check here ( ) when well is located on the County map.

05-27-102

FORM 9-148

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

05-27-102

C-30

located 200' N of 1

Report Page No. _____

WATER RESOURCES DIVISION

GROUND WATER BRANCH

COUNTY Gray

STATE _____

1a Replaces #1, C-9

WATER LEVELS IN OBSERVATION WELLS

John H. Harnly.

Highest water level _____ 19____; lowest _____ 19____

Records available _____ Water level _____

Date	Water level	Date	Water level	Date	Water level	Date	Water level
1961							
Jan. 3	343.06						
1962							
Jan. 16	343.56						

0527102

GPO 855703

3

WATER WELL LOCATION SKETCH

TEXAS WATER DEVELOPMENT BOARD

GROUND WATER DATA & PROTECTION

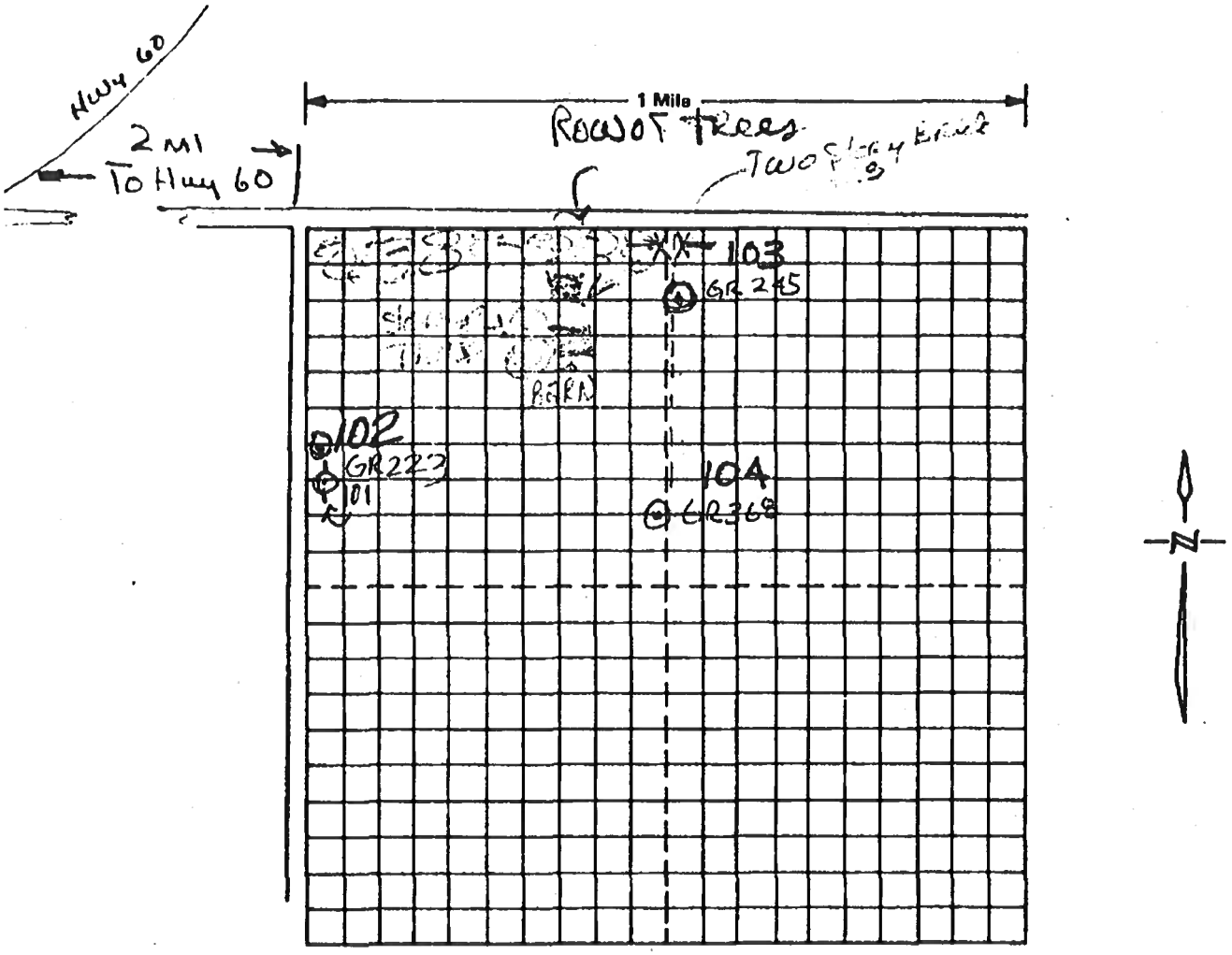
Section 142 in Block M-2 RS&F

Gray County

2½-minute Quadrangle _____ in

7½-minute Quadrangle 27

Sketch by J.E.Hy Date 3-7-72



KS 05-27-1
Well No.

TWDBE-WD-4

T Corsin

WELL #527103

TEXAS WATER DEVELOPMENT BOARD

WELL SCHEDULE

Aquifer _____ Field No. GR 245 State Well No. KS05 27 103

Owner's Well No. _____ County GRAY

1. Location NW 1/4, NE 1/4 Sec. 42, Block M-2 Survey B&F

2. Owner: John Harmly Address: Miami TX

Tenant: _____ Address: _____

Driller: PANHANDLE IRR INC Address: PANHANDLE TX

3. Elevation of LSD is 3104 ft. above msl, determined by Topo

4. Drilled: 6 19 63; Dug, Cable Tool, Rotary

5. Depth: Rept. 600 ft. Meas. _____ ft.

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

7. Pump: Mfgr. LAYNE-BOWLER Type T

No. Stages 10, Bowls Diam. 10 in., Setting 490 ft.

Column Diam. 6 in., Length Tailpipe _____ ft.

8. Motor: Fuel NG Make & Model CAT V8 HP. _____

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

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

Static Level _____ ft. Pumping Level _____ ft. Drawdown _____ ft.

Production _____ gpm Specific Capacity _____ gpm/ft.

CASING & BLANK PIPE

Cemented From _____ ft. to _____ ft.

Diam. (in.)	Type	Setting, ft. from	to
16	Steel	0	600

11. Water Level: _____ ft. rept. meas. _____ 19__ above below _____ which is _____ ft. above below surface.

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

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

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

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

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

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

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

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

14. Other data available as circled: Driller's Log Radioactivity Log, Electric Log,

Formation Samples, Pumping Test, _____

15. Record by: J. Eddy Date 3-7 19 72

Source of Data ODE DC

WELL SCREEN

Screen Openings 3/16

Diam. (in.)	Type	Setting, ft. from	to
16	Perf	348	600

16. Remarks: _____

KS05-27-103

TWDBE-GW-49

(Sketch)

:LW

te – File Copy

District File No. HR 245
FOR USE OF DISTRICT OFFICE ONL

FOR USE OF DISTRICT
Field Well No. HR 245
Date Received 8-9-63
Size of Pump 6" Maximum in Yield 1000 GPM

Panhandle Underground Water Conservation District No. 3

REGISTRATION and LOG OF WELL

INSTRUCTIONS: Fill out in quadruplicate. Submit all copies to District Office for registration. (PLEASE TYPE OR PRINT)

1. Well Owner John Haraly Address Pampa, Tex.
2. Well located ____ miles N, 7 miles S, ____ miles E, 5 miles W of the town of Miami, Tex.
3. County Gray Labor ____ League ____ Homestead ____
4. NW1/4 (NE1/4) SW1/4 SE1/4 Section 142 Block M-2 Survey B&B&E
5. ACTUAL LOCATION OF THIS WELL IS { 183 measured yards from N or ~~W~~ line of this tract of land. / 814 measured yards from E or ~~S~~ line of this tract of land.

DRILLER'S LOG OF WELL

Method of Drilling: ____

FROM (FEET)	TO (FEET)	DESCRIPTION OF FORMATION MATERIAL	FROM (FEET)	TO (FEET)	DESCRIPTION OF FORMATION MATERIAL
0	14	Surface	576	580	Coarse Sand
14	47	Caliche	580	582	Clay Red
47	80	Dry Sand	582	586	Coarse Sand
80	341	Sand Rock Ledges	586	600	Red Bed
341	365	Sand Clay Streaks			
365	431	Sand Rock Ledges			
431	477	Fine Sand			
477	531	Med. Sand			
531	547	Sand Clay Streaks			
547	576	Clay			

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

Driller Panhandle Irrigation, Inc. Address Box 187 Date Drilled ____ 195__

DESCRIPTION OF WELL

6. Casing: new, used, gas line, or shop made. Diameter 16 in. Total length 600' ft.
7. Casing perforations: from 348 ft. to 600 ft. Size 3/16 Number per foot 14 rows
8. Pump Column: Size 8 in. Total length 440 ft. Suction pipe: Size 8 in. Length 10 ft.
9. Pump bowls: Size 10 Number of stages 10 Pump discharge pipe: Size 6 in.
10. Depth to water level ? ft. Pump discharge ? GPM. Pumping level: 8 ft.
11. Power Unit: Electrical, (Natural Gas) Butane, Other ____ Horsepower ____

Signature ____
OWNER OR AGENT TITLE ADDRESS

Final Completion of Well — Date ____, 19__.

PAMPA PRINT SHOP, PAMPA, TEXAS

FORM NO. 355 AWP

To Duplicate County Committeemen District File No. GR 245
FOR USE OF DISTRICT OFFICE ONLY

Panhandle Underground Water Conservation District No. 3

Application For Water Well Permit

INSTRUCTIONS: Fill out in quadruplet. Submit all copies to County Committee for approval. (PLEASE TYPE OR PRINT)

FIELD WELL NO. GR 245
DATE APPLICATION FILLED OUT 6-17-63
DATE APPROVED BY COUNTY COMMITTEE 6-18-63
SIZE OF PUMP 6" MAXIMUM YIELD 600 GPM

I, John H. Hardy, Route 2, Miami, Texas
NAME OF LANDOWNER — LANDOWNER'S ADDRESS

hereby make application to PANHANDLE UNDERGROUND WATER CONSERVATION DISTRICT NO. 3 for a permit to drill the hereinafter described water well at the location indicated:

1. County Gray

2. [redacted], NE1/4, [redacted] of Sec. 342 Blk. M-2
MARK OUT ONES THAT DO NOT APPLY
Survey [redacted]

3. Labor _____ League _____

4. Proposed Use ([redacted]-Irrigation)
MARK OUT ONES THAT DO NOT APPLY

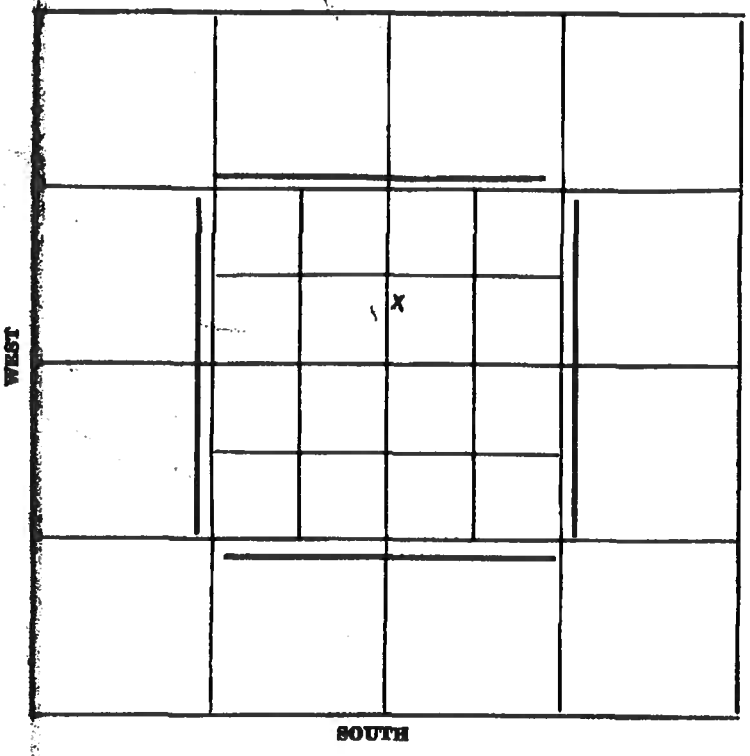
5. Drilling to start about _____, 19____

This well to be located: 7 miles N or S and 5 miles E or W of the town of Miami, Texas
MARK OUT ONE THAT DOES NOT APPLY

Permit good for 120 days only from date of approval.

MARK DOT INSIDE CIRCLE ◎ within Red Square for proposed well location. (Red square indicates 1 quarter section or 1 labor)

MARK X, showing 3 closest wells and/or applications



Please Make Sure Your Measurements Are Correct— They Will Be Checked for Accuracy

Location of Proposed Well as submitted by applicant is 183 measured yards from (N S) and 614 measured yards from (E W) property line, quarter section line, or labor line.
MARK OUT THAT DOES NOT APPLY

Number the three adjacent wells, and/or applications, on the plat as 1, 2 and 3, to correspond with the following:

Well 1 _____ measured yards from proposed well.
Owned by _____
Address _____

Well 2 _____ measured yards from proposed well.
Owned by _____
Address _____

Well 3 _____ measured yards from proposed well.
Owned by _____
Address _____

SCALE FOR ABOVE PLAT

1 1/2 inches ____ 600 yards ____ Minimum for 10-inch well
1 1/10 inches ____ 440 yards ____ Minimum for 8-inch well
3/4 inch ____ 300 yards ____ Minimum for 6-inch well
5/8 inch ____ 250 yards ____ Minimum for 5-inch well
1/2 inch ____ 200 yards ____ Minimum for 3 or 4-inch well

COMMENTS: _____

I agree that this well will be drilled within ten (10) yards of the location specified and not elsewhere, and that I will furnish my County Committee the completed well registration and log immediately upon completion of this well and prior to the production of water. I hereby certify that I have read the foregoing statements, and that all data therein contained are true and correct to the best of my knowledge and belief.

This notice given by: _____
SIGNATURE (OWNER OR AGENT) — TITLE — ADDRESS

This permit approved subject to the rules for spacing from existing wells and/or prior permits.

1. John H Hardy, 2. R C Durrett 3. _____

Check here ( ) when well is located on the County map.

3

WATER WELL LOCATION SKETCH

TEXAS WATER DEVELOPMENT BOARD

GROUND WATER DATA & PROTECTION

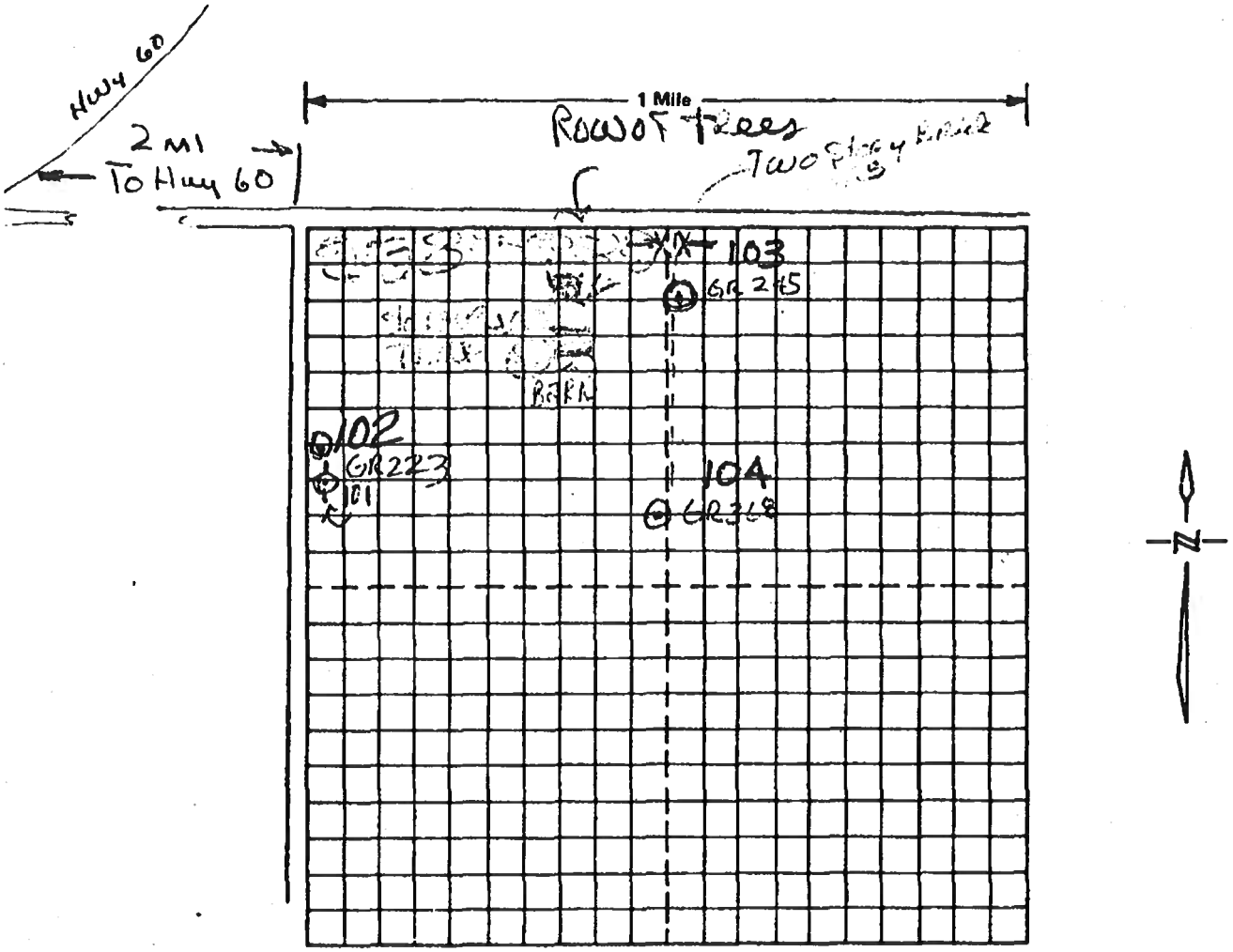
Section 142 in Block M-7 RS&F

Gray County

2½-minute Quadrangle _____ in

7½-minute Quadrangle 27

Sketch by J. Eddy Date 3-7-72



KS 05-27-1
Well No.

TWDBE-WD-4

7 Copies

WELL #527104

TEXAS WATER DEVELOPMENT BOARD

WELL SCHEDULE

Aquifer _____ Field No. GR 368 State Well No. KS 0527-104

Owner's Well No. _____ County Gray

1. Location SE 1/4, NW 1/4 Sec. 142 Block M12 Survey BS&F

2. Owner: John Hardy Address: Miami, TX

Tenant: _____ Address: _____

Driller: Panhandle Irr Address: Panhandle

3. Elevation of LSD is 3198 ft. above msl, determined by Topo

4. Drilled: 4-11 19 68; Dug, Cable Tool, Rotary,

5. Depth: Rept. 599 ft. Meas. _____ ft.

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

7. Pump: Mfgr. Layne Bowler Type T

No. Stages 12, Bowls Diam. 10 in., Setting 470 ft.

Column Diam. 8 in., Length Tailpipe _____ ft.

8. Motor: Fuel NG Make & Model Ford 428 V8 HP.

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

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

Static Level 347 ft. Pumping Level 410 ft. Drawdown 63 ft.

Production 1000 gpm Specific Capacity _____ gpm/ft.

11. Water Level: 347 ft. rept. meas. 4 1968 above below _____ which is _____ ft. above below surface.

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

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

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

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

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

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

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

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

14. Other data available as circled: Driller's Log, Radioactivity Log, Electric Log,

Formation Samples, Pumping Test, _____

15. Record by: J. Eddy Date 3-7 1972

Source of Data Obs DL

16. Remarks: _____

CASING & BLANK PIPE

Cemented From _____ ft. to _____ ft.

Diam. (in.)	Type	Setting, ft. from	to
16	Steel	0	575

WELL SCREEN

Screen Openings #3

Diam. (in.)	Type	Setting, ft. from	to
16	Perf	355	575

KS05-27-104

TWDBE-GW-49

(Sketch)

FORM NO. 354R-LW

District File No. GR-368

FOR USE OF DISTRICT OFFICE ONLY

05-7-194

FOR USE OF DISTRICT

Field Well No. GR-368

Date Received 7-15-68

Size of Pump 8" Maximum in Yield 1000 GPM

Duplicate — File Copy

Panhandle Underground Water Conservation District No. 3

REGISTRATION and LOG OF WELL

INSTRUCTIONS: Fill out in quadruplicate. Submit all copies to District Office for registration. (PLEASE TYPE OR PRINT)

1. Well Owner John Hensley Address Miami Route, Miami, Texas 79059

2. Well located 3 miles N, _____ miles S, 13 miles E, _____ miles W of the town of Pampa, Texas

3. County Gray Labor _____ League _____ Homestead _____

4. NW1/4 (CIRCLE ONE) Section 148 Block M2 Survey BBAY

5. ACTUAL LOCATION OF THIS WELL IS 534 measured yards from N or S line of this tract of land.
890 measured yards from E or W line of this tract of land.

DRILLER'S LOG OF WELL

Method of Drilling: Rotary

FROM (FEET)	TO (FEET)	DESCRIPTION OF FORMATION MATERIAL	FROM (FEET)	TO (FEET)	DESCRIPTION OF FORMATION MATERIAL
0	6	Top Soil	355	375	Med. Sand
6	100	Caliche & Clay	375	396	Fine Sand
100	140	Fine Sand	396	416	Fine Sand & Sandrock
140	172	Fine Sand & Clay	416	447	Fine Sand
172	205	Fine Sand & Sandy Clay	447	477	Fine Sand & Little Rock
205	235	Clay & Fine Sand	477	508	Fine Sand
235	264	Fine Sand	508	538	Fine Sand, Clay Streaks
264	294	Fine Sand & Clay	538	560	Fine Sandrock & Clay Streaks
294	325	Med. Sand	560	569	Coarse Sand
325	355	Fine Sand	569	599	Red Bed
355	375				

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

Driller Panhandle Irrigation, Inc. Address Panhandle, Texas Date Drilled 4-11-68 195__

DESCRIPTION OF WELL

6. Casing: new, used, gas line, or shop made. Diameter 16 in. Total length 575 ft.

7. Casing perforations: from 325 ft. to 575 ft. Size 42 Number per foot 16

8. Pump Column: Size 8 in. Total length 470 ft. Suction pipe: Size 10 in. Length _____ ft.

9. Pump bowls: Size 10HH Number of stages 12 Pump discharge pipe: Size 8 in.

10. Depth to water level 347 ft. Pump discharge 1000 GPM. Pumping level: 410 ft.

11. Power Unit: Electrical, Natural Gas, Butane, Other _____ Horsepower _____

Signature _____
OWNER OR AGENT TITLE ADDRESS

Final Completion of Well — Date _____, 19__.

FUGATE PRINTING—PAMPA

_____
MANAGER

FORM NO. 355 AWP

Triplicate – County Committeemen

Panhandle Ground Water Conservation District No. 3 Io. 3

Application For Water Well Permit

INSTRUCTIONS: Fill out in quadruplet. Submit all copies to County Committee for approval. (PLEASE TYPE OR PRINT)

WELL NO. 33-3[illegible]

DATE APPLICATION FILLED OUT 9-21-60

DATE APPROVED 9-27-60

SIZE OF PUMP 8" MAXIMUM YIELD 1000 GPM

I, John H. Barnly (NAME OF LANDOWNER) Miami Route, Miami, Texas (LANDOWNER'S ADDRESS)

hereby make application to PANHANDLE UNDERGROUND WATER CONSERVATION DISTRICT NO. 3 for a permit to drill the hereinafter described water well at the location indicated;

1. County Gray

2. NW1/4, ~~NE1/4, SW1/4, SE1/4~~ of Sec. 142 Blk. M-2 (MARK OUT ONES THAT DO NOT APPLY)

Survey B S & F

3. Driller Panhandle Irrigation, Panhandle, Texas

4. Proposed Use (~~Domestic, Industrial~~ Irrigation) (~~Test Hole, Stratograph, Domestic~~)

5. Drilling to start about _____, 19____

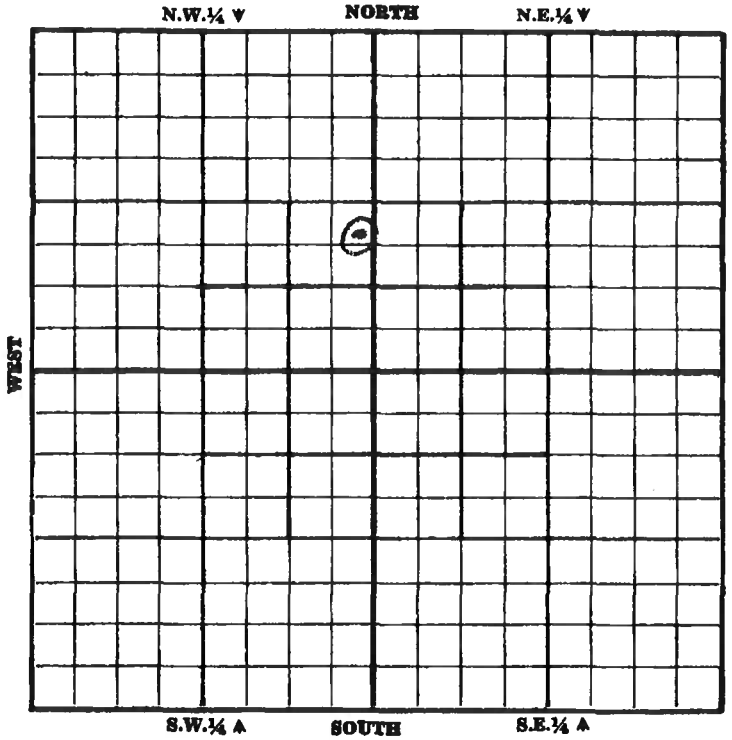
This well to be located: 3 miles N or ~~S~~ and 13 miles ~~E~~ or W of the (MARK OUT ONE THAT DOES NOT APPLY)

town of Pampa, Texas

Permit good for 120 days only from date of approval.

MARK DOT INSIDE CIRCLE ◎ within **Red Square** for proposed well location. (Red square indicates 1 section)

MARK X, showing 3 closest wells and/or applications



(Small square indicates 110 yards)

SCALE FOR ABOVE PLAT

SIZE OF PUMP (INSIDE DIAMETER OF COLUMN PIPE)	MINIMUM DISTANCE (BETWEEN WELLS EQUIPPED WITH PUMPS OF THE SAME SIZE)
4 inch or smaller pump	220 yards
5 inch	330 yards
6 inch	330 yards
8 inch	440 yards
10 inch or larger	660 yards

FOR WELLS OF UNLIKE SIZE ADD THE IN DISTANCES AND DIVIDE BY 2

EXAMPLE: 6" 330 / 8" 440 YARDS / 2)770(385 YARDS REQUIRED DISTANCE BETWEEN 6" AND 8"

Please Make Sure Your Measurements Are Correct— They Will Be Checked for Accuracy

Location of Proposed Well as submitted by applicant is 534 **measured yards from (N ~~S~~)** (MARK OUT ONE) **and** 330 **measured yards from (~~E~~ W)** (MARK OUT ONE THAT DOES NOT APPLY) **property line, or section line.**

Number the three adjacent wells, and/or applications, on the plat as 1, 2 and 3, to correspond with the following:

Well 1 460 measured yards from proposed well.
Owned by self
Address Miami, Texas

Well 2 _____ measured yards from proposed well.
Owned by _____
Address _____

Well 3 _____ measured yards from proposed well.
Owned by _____
Address _____

COMMENTS: _____

I agree that this well will be drilled within ten (10) yards of the location specified and not elsewhere, and that I will furnish my County Committee the completed well registration and log immediately upon completion of this well and prior to the production of water. I hereby certify that I have read the foregoing statements, and that all data therein contained are true and correct to the best of my knowledge and belief.

This notice given by: Bennie Rood (Panhandle Irrig.) called this in
(SIGNATURE (OWNER OR AGENT)) (TITLE) (ADDRESS)

This permit approved subject to the rules for spacing from existing wells and/or prior permits.

1. _____ Board Member
2. [signature] Board Member
3. _____ Board Member

Check here ( ) when well is located on the County map.

[signature]
District Manager

3

WATER WELL LOCATION SKETCH

TEXAS WATER DEVELOPMENT BOARD

GROUND WATER DATA & PROTECTION

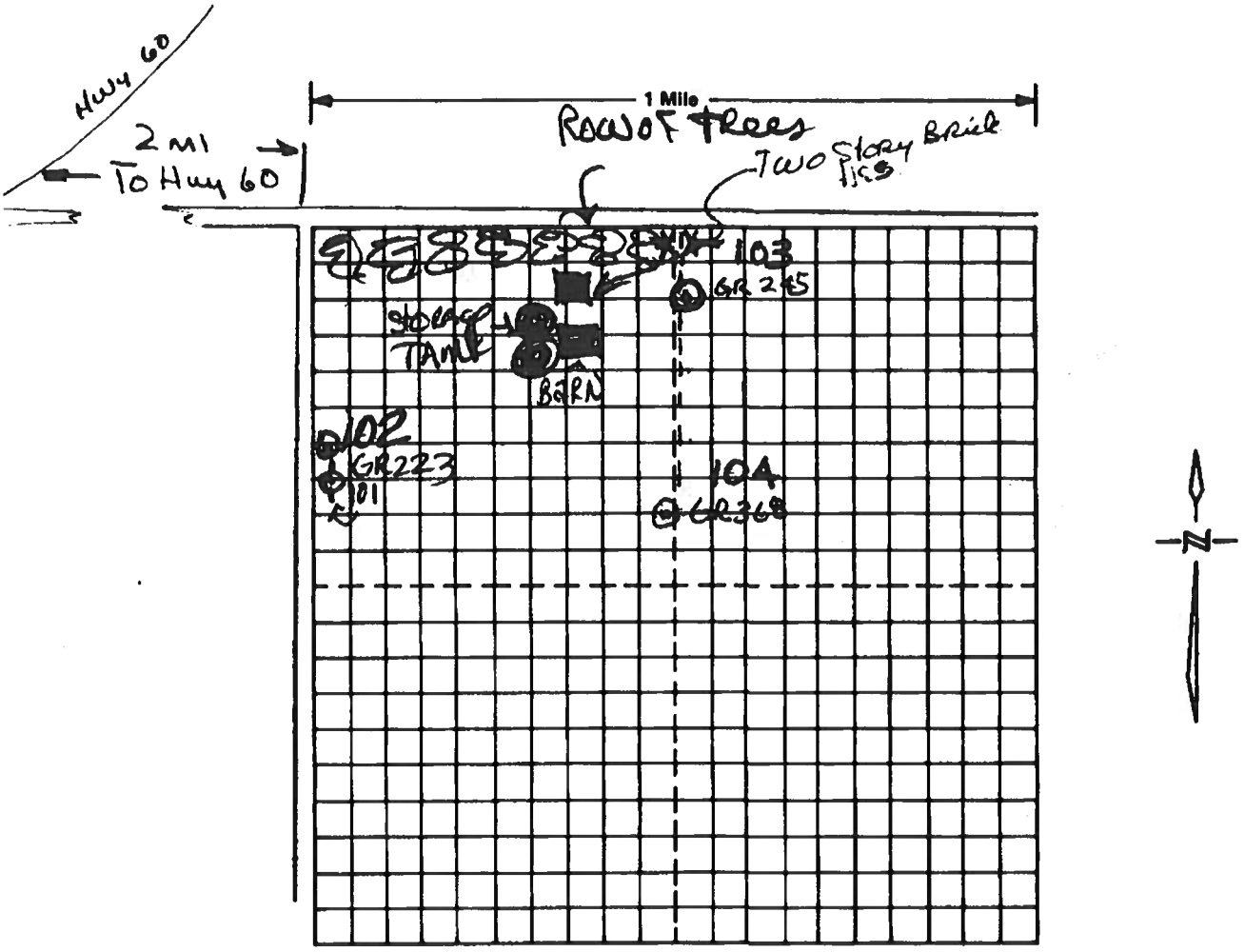
Section 142 in Block M-2 RS&F

Gray County

2½-minute Quadrangle _____ in

7½-minute Quadrangle 27

Sketch by J. Eddy Date 3-7-72



KS 05-27-1
Well No.

TWDBE-WD-4

7 Copies

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

State of Texas

WATER WELL REPORT

For TWDB use only
Well No. [illegible]
Located on map
Received:

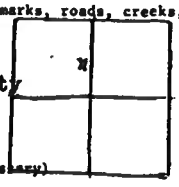
1) OWNER:
Person having well drilled John Hornley (Name) Address Miami, Texas (Street or RFD) (City) (State)

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

2) LOCATION OF WELL:
County Gray, 13 miles in Northeast (N.E., S.W., etc.) direction from Pampa (Town)

Locate by sketch map showing landmarks, roads, creeks, hiway number, etc.*

554 yds. from North & 830 yds. from West property line



(Use reverse side if necessary)

or

Give legal location with distances and directions from adjacent sections or survey lines.

Labor _____ League _____
Block M-2 Survey BS&E
Abstract No. _____
(NW¼ of Section 142

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

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

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

6) WELL LOG:
Diameter of hole 30" in. Depth drilled 599 ft. Depth of completed well 575 ft. Date drilled 4-11-68
All measurements made from 1 ft. above ground level.

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

(Use reverse side if necessary)

9) Casing:
Type: Old | New | Steel | Plastic | Other
Cemented from _____ ft. to _____ ft.

Diameter (inches)	Setting From (ft.)	To (ft.)	Gage
16"	355	575	¼

10) SCREEN:
Type (NONE)
Perforated | Slotted

Diameter (inches)	Setting From (ft.)	To (ft.)	Slot Size

7) COMPLETION (Check):
Straight wall | Gravel packed | Other
Under reamed | Open Hole

8) WATER LEVEL:
Static level 347 ft. below land surface Date 4-11-68
Artesian pressure _____ lbs. per square inch Date _____
Depth to pump bowls, cylinder, jet, etc., 470 ft.
below land surface.

11) WELL TESTS:
Was a pump test made? Yes | No If yes, by whom? ~~Panhandle Irrigation Inc.~~
Yield: 1000 gpm with 410 ft. drawdown after 24 hrs.
Bailer test _____ gpm with _____ ft. drawdown after _____ hrs.
Artesian flow _____ gpm
Temperature of water _____

12) WATER QUALITY:
Was a chemical analysis made? Yes | No
Did any strata contain undesirable water? Yes | No
Type of water? _____ depth of strata _____

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

NAME Bennie Hood (Type or Print) Water Well Drillers Registration No. 347

ADDRESS Box 187 (Street or RFD) Panhandle, (City) Texas (State)

(Signed) B H Hood (cc) (Water Well Driller) Panhandle Irrigation Inc. (Company Name)

Please attach electric log, chemical analysis, and other pertinent information, if available. KS 05-27-104

*Additional instructions on reverse side.

TWDBE-GW-53

2)LOCATION OF WELL:

The sketch showing the well location must be as accurate as possible, showing landmarks, in sufficient detail so that the well may be plotted on a General Highway Map of the county in which the well is located.

Reference points from which distances are measured and directions given should be of a permanent nature (e.g. highway intersections, center of towns, river and creek bridges, railroad crossings). The distance and direction from the nearest town should always be indicated.

When giving a legal description include a sketch showing location of the well within the described area. e.g. survey abstract.

Information furnished in Section 2) of the TWDBE-GW-53 is very important. Unless the well can be accurately located on a map the value of the other data contained in the Report is greatly reduced.

0-6	Top Soil
6-100	Caliche & Clay
100-140	Fine Sand
140-172	Fine Sand & Clay
172-203	Fine Sand & Sandy Clay
203-233	Clay & Fine Sand
233-264	Fine Sand
264-294	Fine Sand & Clay
294-325	Med. Sand
325-355	Fine Sand
355-375	Med. Sand
375-386	Fine Sand
386-416	Fine Sand & Sand Rock
416-447	Fine Sand
447-477	Fine Sand & Little Rock
477-508	Fine Sand
508-538	Fine Sand, Clay Streaks
538-560	Fine Sandrock & Clay Streaks
560-569	Coarse Sand
569-599	Red Bed

KS 05-27-104

RECEIVED
AUG 21 1980
TEXAS WATER

WELL #527105

Texas Water Development Board
Well Schedule

State Well No. 05 27 105 Previous Well No. GQ-E20 County Gray 179

River Basin Red 02 Zone 1 Lat. 35 35 29 Long. 100 43 08 Source of Coord. 1

Owner's Well No. _____ Location ____ 1/4, ____ 1.4, Section 142, Block M-2, Survey BS&F

Owner H. Harnley Driller

Address _____ Tenant/Oper. _____

Date Drilled ____ Depth ____ Source of Depth Datum ____ Altitude 3105 Source of Alt. Datum M

Aquifer Ogallala 121OGLL Well Type W User ____

Well Construction: Const. Method ____ Casing Material ____

Completion ____ Screen Material ____

Lift Data: Pump Mfr. ____ Type ____ S No. Stages ____

Bowls Diam. ____ in. Setting ____ ft. Column Diam. ____ in.

Motor Mfr. ____ Fuel or Power ____ E Horsepower ____

Yield: Flow ____ GPM Pump ____ GPM Meas.,Rept.,Est. - ____ Date ____

Performance Test: Date ____ Length of Test ____ Production ____ GPM

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

Quality (Remarks ____

Water Use: Primary house H Secondary ____ Tertiary ____

Other Data Available: Water Level N Water Quality Y Logs ____ Other Data ____

Water Levels: Date ____ Meas. ____ Date ____ Meas. ____ Date ____ Meas. ____

Casing or Blank Pipe (C)
Well Screen or Slotted Zone (S)
Open Hole (O)
Cemented from ___ to ___

	Diam. (in.)	From	To
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

Recorded By Panhandle Date Record Collected or Updated ____ 1991

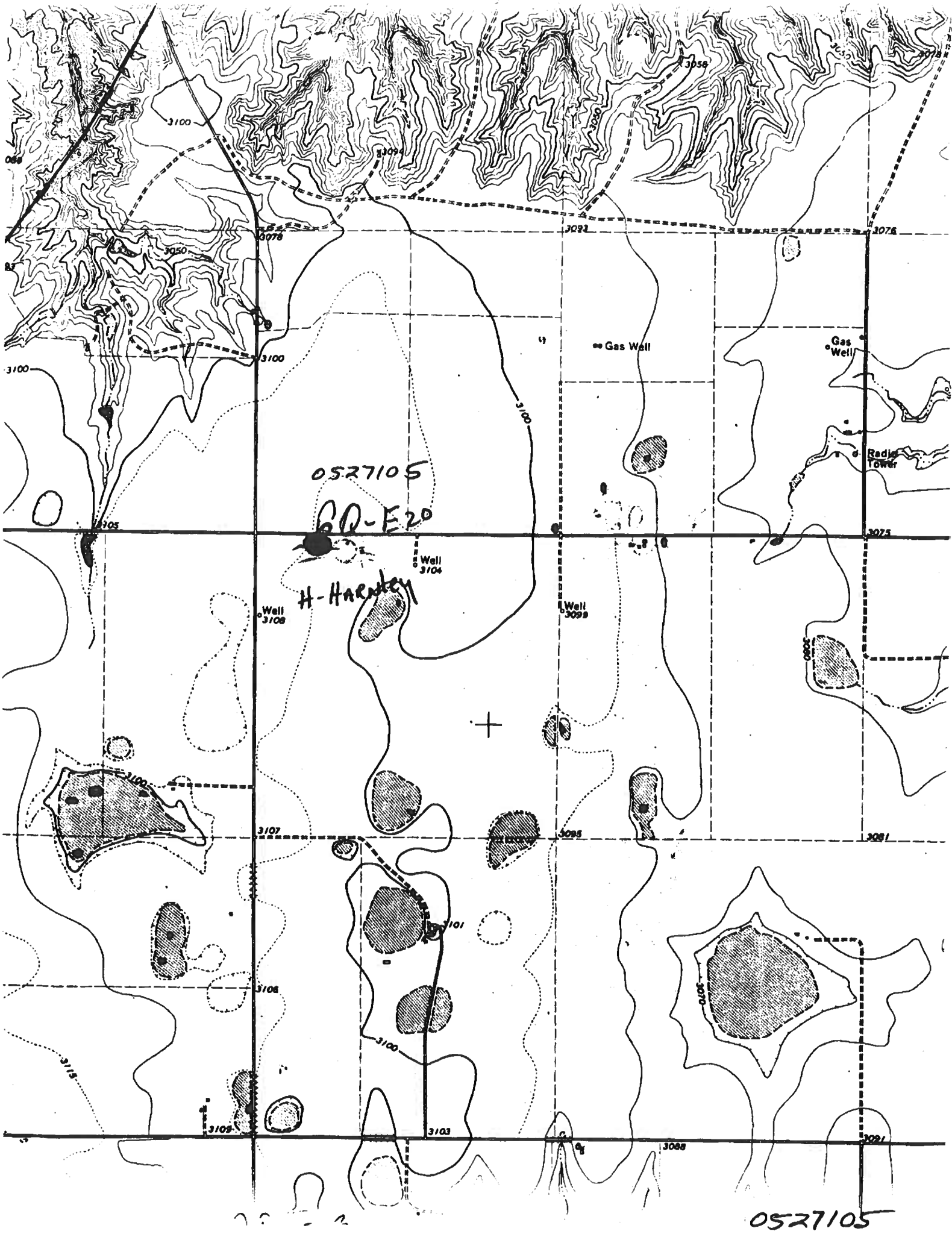
(20 max) Reporting Agency 05

Remarks

Aquifer Ogallala

Well No. 05-27-105

93-0384
2/9/93


3100
3094
3092
3078
3050
3100
Gas Well
Gas Well
Radio Tower
3100
3105
3075
Well 3104
Well 3108
Well 3099
3080
3107
3095
3081
3101
3108
3100
3115
3109
3103
3088
3070
3091
0527105
GQ-E20
H-Harnden
0527105

Water Quality Field Data

SWN: 05-27-105
County: Gray
Aquifer(s): Ogallala

Name: Mr & Mrs KING
Address: RR 1 BOX 34
Miami 79059
owner's well #

Sample No. YP-1996-2603
Date: 7/17/96
By: YPerez

Bottle1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6	Bottle 7	Total SUB-Samples
500 ml Anions	1 liter Cations	250 ml Nitrate	1 liter Radioactivity				
	2 ml HNO (Nitric)	0.5 ml H SO (Sulfuric)	2 ml HNO (Nitric)				All filtered unless otherwise stipulated

Water Level ~~LSD~~ Remark ~~
Temperature (00010) 18.9 c
Specific Conductance (00094) 1212 umhos/cm
pH (00400) 7.09
Eh (00090) -4.4 mv.
Phenol ALK (82244) ~~ mg/l
Total ALK (39086) 236.0 mg/l
Carbonate (00452) ~~ meq/l ~~ mg/l
Bicarbonate (00453) 4.72 meq/l 288.00 mg/l
Total Cations(+)
Total Anions (-)
Total Hardness (00900) 445
Dissolved Solids 700

Time in 08:50
Time out 09:35 Sample time 09:30
Weather clear/windy well use domestic
Outside Temp 28° C
Sampling point faucet after P.T.

Starting pH 7.21
11.8 ml. of 0.02N to
50 ml. of Sample
Ending pH 4.52

Time:	09:10	09:15	09:20	09:25		
pH:	7.11	7.12	7.10	7.09		
Temp:	19.2	19.0	18.9	18.9		
Eh:				-4.4		
Cond.	1220	1213	1212	1212		

other notes:

ml.	pH	ml.	pH	ml.	pH
1ml	6.90	11ml	5.04		
2ml	6.68	11.8	4.52		
3ml	6.52				
4ml	6.35				
5ml	6.19				
6ml	6.05				
7ml	5.89				
8ml	5.74				
9ml	5.59				
10ml	5.39				

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ENVIRONMENTAL LABORATORY SERVICES
FINAL ANALYSIS REPORT

LAB ID: 9700351 SAMPLE DESCRIPTION: Groundwater
FACILITY: TWDB SAMPLE DATE: 07/17/96
ACCT NO: PHIL NORDSTROM SAMPLE TIME: 0930
TX WATER DEV. BOARD

DATE RECEIVED: 07/22/96
ORIGINAL DATE REPORTED: 09/13/96

LOCATION ID: 05-27-105

PARAMETER	RESULTS	UNITS	STORET #	PQL in WATER	DATE ANALYZED
Alkalinity, Phenol.	<1	mg/L	00415	1	07/29/96
Alkalinity, Total	185	mg/L	00410	1	07/29/96
Bromide	0.20	mg/L	71870	0.05	07/22/96
Chloride	126.7	mg/L	00941	0.5	07/22/96
Fluoride	0.47	mg/L	00950	0.05	07/22/96
Nit.,Nitrate/Nitrite	1.829	mg/L	00630	0.010	07/22/96
Nitrogen, Kjeldahl	0.048	mg/L	00623	0.010	08/02/96
Nitrogen, ammonia	<0.010	mg/L	00608	0.010	07/22/96
Silica	31.56	mg/L	00955	0.01	07/24/96
Sulfate	191.9	mg/L	00946	0.5	07/22/96
Aluminum, Dis. ICPMS	3.9	ug/L	01106	1.0	08/06/96
Antimony, Dis. ICPMS	<1.0	ug/L	01095	1.0	08/06/96
Arsenic, Diss. ICPMS	<1.0	ug/L	01000	1.0	08/06/96
Barium, Diss. ICPMS	33.8	ug/L	01005	1.0	08/06/96
Beryllium, Dis ICPMS	<1.0	ug/L	01010	1.0	08/06/96
Boron, Diss. ICPMS	141.9	ug/L	01020	1.0	08/06/96
Calcium, Dissolved	95.63	mg/L	00915	0.50	07/30/96
Cobalt, Diss. ICPMS	<1.0	ug/L	01035	1.0	08/06/96
Copper, Diss. ICPMS	<1.0	ug/L	01040	1.0	08/06/96
Iron, Diss. ICPMS	20.0	ug/L	01046	4.0	07/30/96
Lead, Diss. ICPMS	2.4	ug/L	01049	1.0	08/06/96
Lithium, Diss. ICPMS	44.5	ug/L	01130	1.0	08/06/96
Magnesium, Dissolved	49.82	mg/L	00925	0.05	07/30/96
Manganese, Dis ICPMS	3.3	ug/L	01056	1.0	08/06/96
Molybdenum Dis ICPMS	2.1	ug/L	01060	1.0	08/06/96
Nickel, Diss. ICPMS	3.8	ug/L	01065	1.0	08/06/96
Potassium, Dissolved	7.40	mg/L	00935	1.00	07/30/96
Selenium, Dis. ICPMS	<5.0	ug/L	01145	4.0	08/06/96

BUCK HENDERSON
LABORATORY MANAGER

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P.O. Box 220 • Austin, TX 78767-0220 • (512) 473-3200 • (512) 473-3298 FAX

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ENVIRONMENTAL LABORATORY SERVICES
FINAL ANALYSIS REPORT

LAB ID: 9700351
FACILITY: TWDB
ACCT NO: PHIL NORDSTROM
TX WATER DEV. BOARD

SAMPLE DESCRIPTION: Groundwater
SAMPLE DATE: 07/17/96
SAMPLE TIME: 0930

DATE RECEIVED: 07/22/96
ORIGINAL DATE REPORTED: 09/13/96

LOCATION ID: 05-27-105

PARAMETER	RESULTS	UNITS	STORET #	PQL in WATER	DATE ANALYZED
Sodium, Dissolved	74.62	mg/L	00930	0.10	07/30/96
Strontium, Dis ICPMS	1864.0	ug/L	01080	1.0	07/30/96
Thallium, Diss ICPMS	<1.0	ug/L	01057	1.0	08/06/96
Vanadium, Diss ICPMS	6.9	ug/L	01085	1.0	08/06/96
Zinc, Diss. ICPMS	981.2	ug/L	01090	1.0	08/06/96

COMMENTS: Strontium and Iron analyzed by ICP.

Roland Garcia for
BUCK HENDERSON
LABORATORY MANAGER

QA Approved

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P.O. Box 220 • Austin, TX 78767-0220 • (512) 473-3200 • (512) 473-3298 FAX

FORM NO. 354R-LW

Original – District Office Copy

Panhandle Ground Water Conservation District No. 3

REGISTRATION and LOG OF WELL

INSTRUCTIONS: Fill out in quadruplicate. Submit all copies to District Office for registration. (PLEASE TYPE OR PRINT)

FOR USE OF DISTRICT
Well No. HR-85 Domestic
Date Received 10-14-74
Size of Pump 1¼ Maximum Yield _____ GPM

1. Well Owner John Harnly Address Rt. 1, Miami, Texas
2. Well located 3 miles N, _____ miles S, 12 miles E, _____ miles W of the town of Pampa
3. County Gray
4. NW1/4 ~~NE1/4 SW1/4 SE1/4~~ Section 142 Block M-2 Survey BS&F
   (MARK OUT ONES THAT DO NOT APPLY)
5. ACTUAL LOCATION OF THIS WELL IS 5-27-105
   - ~~75~~ measured yards from ~~N~~ or S property line or section line
   - ~~500~~ measured yards from ~~E~~ or W property line or section line

DRILLER'S LOG OF WELL

Method of Drilling: Rotary

FROM (FEET)	TO (FEET)	DESCRIPTION OF FORMATION MATERIAL	FROM (FEET)	TO (FEET)	DESCRIPTION OF FORMATION MATERIAL
0	4	top soil	324	355	cemented sand & gravel
4	40	caliche	355	385	med. sand, some gravel
40	80	caliche, sand, & clay	385	416	med. sand w/ thin clay streaks
80	140	sandy clay	416	446	med. sand & white rock w/ clay stks.
140	172	sand	446	480	med. sand w/ clay streaks
172	202	sandy clay & caliche			
202	233	sandy clay w/ white rock			
233	263	coarse sand w/ clay streaks			
263	294	coarse sand & gravel			
294	324	sand & gravel w/ cemented & clay streaks			

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

Driller ~~Panhandle Irrigation, Inc.~~ Address Box 187 Panhandle, Tex Date Drilled 8-8- 19 74

DESCRIPTION OF WELL

6. Casing: new, used, gas line, or shop made. Diameter 6 5/8 in. Total length 483-3 ft.
7. Casing perforations: from 438-3 ft. to 483-3 ft. Size _____ Number per foot _____
8. Pump Column: Size 1¼ in. Total length 435 ft. Suction pipe: Size 1¼ in. Length 0 ft.
9. Pump bowls: Size 5 & 6 Number of stages _____ Pump discharge pipe: Size _____ in.
10. Depth to water level _____ ft. Pump discharge _____ GPM. Pumping level: _____ ft.
11. Power Unit: Electrical, Natural Gas, Butane, Other _____ Horsepower _____

Signature B. G. Hood, Sup. Barbara Caffee Pres. Box 187 Panhandle, Texas
(OWNER OR AGENT) (TITLE) (ADDRESS)

Final Completion of Well — Date 8-29-, 19 74

MANAGER

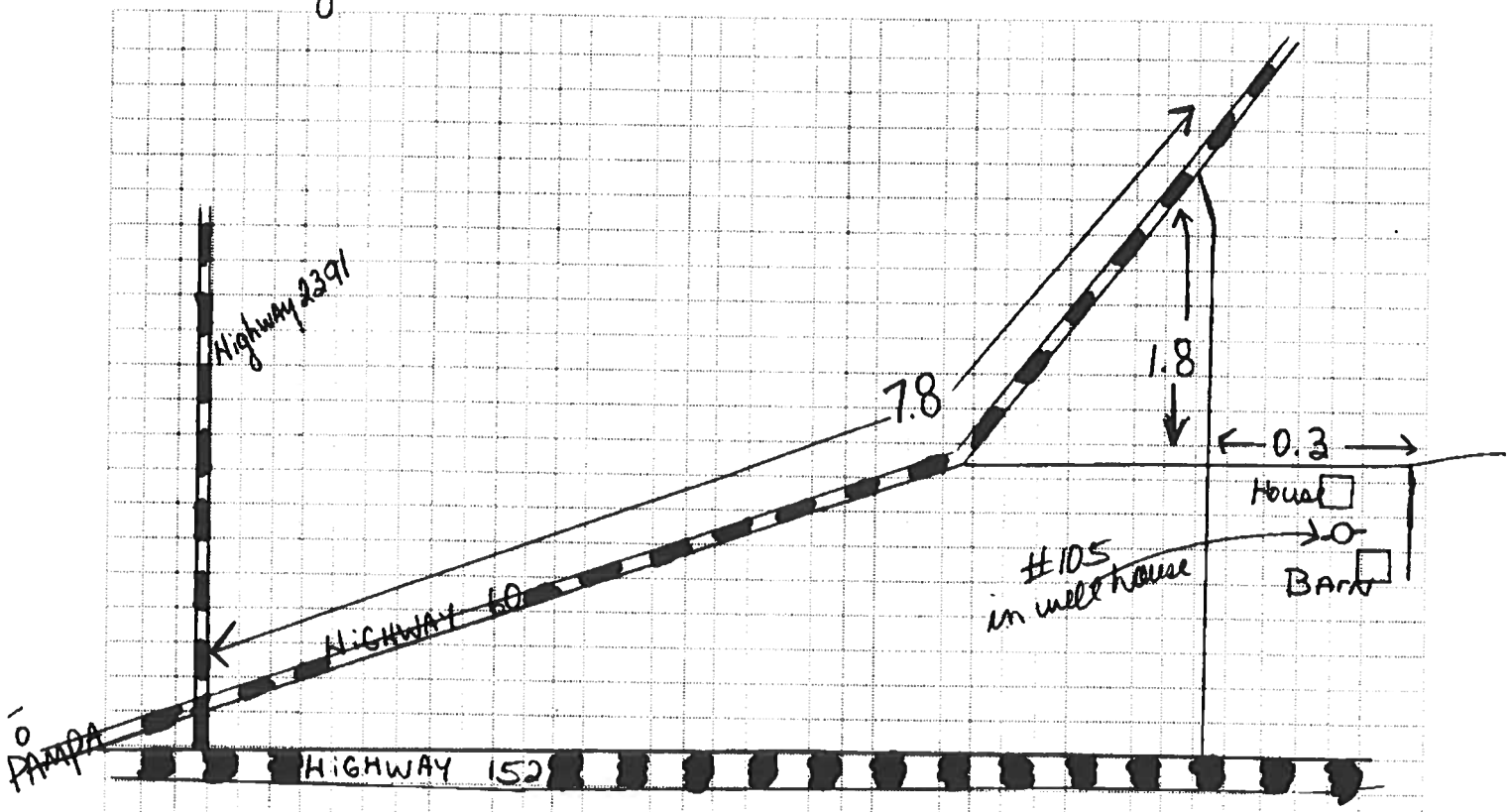
05-27-105

Texas Water Development Board

By V Pierce Date 7/24/96 Division Hydrologic Monitoring

Chkd. _____ Date _____ Well Number 05-27-105

County Gray



95-0817

05-27-105
Well Number

TWDB Water Quality Field Data Sheet

Newly Inventoried Well ____

State Well Number: 0527105
County: Grady
County Code: 179
Aquifer Code: 121CGLL
Aquifer Id: 21

Name: PGCD
Address: ____
Phone Number: 806 883 2501
Attention: ____
Well Name or #: ____

Sample ID Number: 2529
Date: 11 Aug 04
Sampler(s): A Province

CIRCLE EACH SAMPLE FRACTION COLLECTED:				
1	2	3	4	5
500ml (filtered) **Anions / Total Alk.** Ice	500ml (filtered) **Cations** Nitric (HNO3)	250ml (filtered) **Nitrate** Ice + H2SO4	40 ml (unfiltered) **Atrazine** Ice and in dark	1 L (unfiltered) **Alpha & Beta** Nitric (HNO3)
Proper Cation and Nitrate preservation requires adding enough of the correct acid to each sample fraction to bring the pH below 2.0				

Calibration Verification Readings		
pH	7 =	7.0
	4 or 10 =	4.09
SLP =	7.38 =	7.38
Conductivity	500 =	505
	1000 =	
	2000 =	
	5000 =	

Time In: 1120
Time Out: 1155

W. L. depth from LSD (ft.): na
W.L. remark: na
M.P. = na

Pumping Since: na
Sampling Point: na

Well Use: Domestic
Lift: na
Power: na

FIELD G.P.S. readings
Latitude: 35 • 35 • 30.1 " 35 35.516' 35.35193....
Longitude: 100 • 43 • 02.4 " 100 43.040' -100.7173....

Casing Type: na
Casing Size: na "

Sample Time: 1145
Filter pressure: hand pump / line

Field Alkalinity Titration:

7.41	Start pH
4.57	End pH
50.0	mL Sample Size
0	mL Acid added for Phenol (> 8.3)
11.1	mL Acid added for Total (to pH 4.5)

Items below calculated from: mL acid added x 20 = Alkalinity
Phenol Alkalinity (82244): 222 mg/L
Total Alkalinity (39086): 222 mg/L

Items Below Calculated Later From Results:
Dissolved Solids (mg/L): 538
Hardness (as CaCO3): 349
Balanced: yes

Water Quality Stabilization Parameters Table (at least 3 readings at five minute intervals)

Time:	1131	1136	1141				
pH:	7.25	7.38	7.39				
Celsius Temp. (00010)	23.4	23.8	22.9				
Conductivity (uS/cm):	913	911	908				

Notes: Replaces 527153

Data Entered By Sampler Into Database: yes / no

LCRA Environmental Laboratory Services

Date: *31-Aug-04*

CLIENT: Texas Water Development Board
Client Sample ID: 05-27-105
Lab Order: 0408321 **File No:** 32486
Project: TWDB FY04
Collection Date: 8/11/2004 11:45:00 AM
Lab ID: 0408321-006
Matrix: GROUNDWATER

Analyses	Storet	Result	Qual	PQL	Units	DF	Batch ID	Date Analyzed
ICP METALS DISSOLVED			**E200.7**					Analyst: **TH**
Calcium		74.4		0.20	mg/L	1	28511	8/23/2004 7:57:08 PM
Magnesium		39.2		0.20	mg/L	1	28511	8/23/2004 7:57:08 PM
Potassium		7.40		0.20	mg/L	1	28511	8/23/2004 7:57:08 PM
Sodium		47.3		0.71	mg/L	1	28511	8/23/2004 7:57:08 PM
ICP METALS DISSOLVED			**E200.7**					Analyst: **TH**
Boron		158		51	µg/L	1	28512	8/23/2004 7:57:08 PM
Iron		ND		51	µg/L	1	28512	8/23/2004 7:57:08 PM
Strontium		1530		20	µg/L	1	28512	8/23/2004 7:57:08 PM
ICPMS DISSOLVED METALS			**E200.8**					Analyst: **SW**
Aluminum		ND		4.08	µg/L	1	28537	8/23/2004
Antimony		ND		1.02	µg/L	1	28537	8/23/2004
Arsenic		ND		2.04	µg/L	1	28537	8/23/2004
Barium		27.0		1.02	µg/L	1	28537	8/23/2004
Beryllium		ND		1.02	µg/L	1	28537	8/23/2004
Cadmium		ND		1.02	µg/L	1	28537	8/23/2004
Chromium		3.37		1.02	µg/L	1	28537	8/23/2004
Cobalt		ND		1.02	µg/L	1	28537	8/23/2004
Copper		ND		1.02	µg/L	1	28537	8/23/2004
Lead		ND		1.02	µg/L	1	28537	8/23/2004
Lithium		41.6		2.04	µg/L	1	28537	8/23/2004
Manganese		2.74		1.02	µg/L	1	28537	8/23/2004
Molybdenum		2.03		1.02	µg/L	1	28537	8/23/2004
Nickel		3.64		1.02	µg/L	1	28537	8/23/2004
Selenium		ND		4.08	µg/L	1	28537	8/23/2004
Thallium		ND		1.02	µg/L	1	28537	8/23/2004
Vanadium		6.79		1.02	µg/L	1	28537	8/23/2004
Zinc		369		20.4	µg/L	5	28643	8/27/2004
CATION/ANION BALANCES			**CALCULATION**					Analyst: **WM**
Cation/Anion Balance		Balanced		0	Date	1	28630	8/27/2004
ANIONS BY ION CHROMATOGRAPHY, DISSOLVE			**E300**					Analyst: **WM**
Bromide Dissolved		0.15		0.10	mg/L	5	28555	8/24/2004 9:09:00 PM
Chloride Dissolved		65.5		5.00	mg/L	5	28555	8/24/2004 9:09:00 PM
Fluoride Dissolved		0.66		0.05	mg/L	5	28555	8/24/2004 9:09:00 PM
Sulfate Dissolved		143		5.00	mg/L	5	28555	8/24/2004 9:09:00 PM
ALKALINITY			**M2320 B**					Analyst: **WR**
Alkalinity, Phenolphthalein		ND		0	mg/L CaCO3	1	28529	8/24/2004
Alkalinity, Total (As CaCO3)		198		2	mg/L CaCO3	1	28529	8/24/2004

Qualifiers:

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

LCRA Environmental Laboratory Services

Date: *31-Aug-04*

CLIENT:	Texas Water Development Board	**Client Sample ID:**	05-27-105
Lab Order:	0408321 **File No:** 32486		
Project:	TWDB FY04	**Collection Date:**	8/11/2004 11:45:00 AM
Lab ID:	0408321-006	**Matrix:**	GROUNDWATER

Analyses	Storet	Result	Qual	PQL	Units	DF	Batch ID	Date Analyzed
NITRATE AND NITRITE			**E353.2**					Analyst: **LW**
Nitrogen, Nitrate & Nitrite		1.86		0.02	mg/L	1	28574	8/26/2004
SILICA			**E370.1**					Analyst: **WM**
Silica, Dissolved (as SiO2)		31.7		0.50	mg/L	1	28523	8/24/2004

Qualifiers:

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

WELL #527106

Texas Water Development Board
Well Schedule

State Well No. 05 27 106 Previous Well No. _____ County Gray 179

River Basin _____ 01 Zone 3 Lat. 35 35 13 Long. 100 42 48 Accuracy of Coord. 1

Owner's Well No. _____ Location _____ 1/4. _____ 1/4. Section _____, Block _____, Survey _____

Owner Hornly Driller _____

Address _____ Tenant/Oper. _____

Date Drilled _____ Depth _____ Source of Depth Datum _____ Altitude 310 Source of Alt. Datum m

Aquifer _____ 121 06LL Well Type W User _____

Aquifer ID 121 _____

Well Construction: Const. Method _____ Casing Material _____ Completion _____ Screen Material _____

Casing or Blank Pipe (C)
Well Screen or Slotted Zone (S)
Open Hole (O)
Cemented from ___ to ___

	Diam. (in.)	Setting (feet) From	To
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

Lift Data: Pump Mfr. _____ Type _____ Setting _____

Motor Mfr. _____ Power _____ Horsepower _____

Yield: Flow _____ GPM Pump _____ GPM Meas.Rept.Est. _____ Date _____

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

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

Water Use: Primary _____ Secondary _____ Tertiary _____

Quality (Remarks) _____

Other Data Available: Water Level N Water Quality N Logs _____ Other Data _____

Water Levels: Date _____ Meas. _____ Date _____ Meas. _____ Date _____ Meas. _____

Recorded By D.R. Jones Date Record Collected or Updated 06 14 2010 (20 max) Reporting Agency 05

Remarks _____

Aquifer _____

Well No. 527106

WELL #527201

Texas Water Development Board

Texas Water Development Board (TWDB)
Groundwater Database (GWDB)
Well Information Report for State Well Number 05-27-201

groundwater division

GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	0527201	**Well Type**	Withdrawal of Water
County	Gray	**Well Use**	Irrigation
River Basin	Red	**Water Level Observation**	None
Groundwater Management Area	1	**Water Quality Available**	No
Regional Water Planning Area	A - Panhandle	**Pump**	Turbine
Groundwater Conservation District	Panhandle GCD	**Pump Depth** (feet below land surface)	
Latitude (decimal degrees)	35.588889	**Power Type**	Natural-Gas Engine
Latitude (degrees minutes seconds)	35° 35' 20" N	**Annular Seal Method**	
Longitude (decimal degrees)	-100.704167	**Surface Completion**	
Longitude (degrees minutes seconds)	100° 42' 15" W	**Owner**	G.M. Walls
Coordinate Source	+/- 1 Second	**Driller**	Panhandle Irr. Inc
Aquifer Code	121OGLL - Ogallala Formation	**Other Data Available**	Drillers Log
Aquifer	Ogallala	**Well Report Tracking Number**	
Aquifer Pick Method		**Plugging Report Tracking Number**	
Land Surface Elevation (feet above sea level)	3099	**U.S. Geological Survey Site Number**	
Land Surface Elevation Method	Interpolated From Topo Map	**Texas Commission on Environmental Quality Source Id**	
Well Depth (feet below land surface)	603	**Groundwater Conservation District Well Number**	
Well Depth Source	Driller's Log	**Owner Well Number**	
Drilling Start Date		**Other Well Number**	
Drilling End Date	8/0/1963	**Previous State Well Number**	
Drilling Method	Mud (Hydraulic) Rotary	**Reporting Agency**	
Borehole Completion		**Created Date**	
		Last Update Date	

Remarks

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
16	Blank	Steel			0	353
16	Screen	Plastic (PVC)			353	603

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements

No Data Available

Texas Water Development Board

Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 05-27-201

groundwater division

Water Quality Analysis - No Data Available

GWDB DISCLAIMER: Except where noted, all of the information provided in the Texas Water Development Board (TWDB) Groundwater Database (https://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp) is believed to be accurate and reliable; however, the TWDB assumes no responsibility for any errors appearing in rules or otherwise. Further, TWDB assumes no responsibility for the use of the information provided. PLEASE NOTE that users of these data are responsible for checking the accuracy, completeness, currency and/or suitability of all information themselves. TWDB makes no guarantees or warranties as to the accuracy, completeness, currency, or suitability of the information provided via the Groundwater Database (GWDB). TWDB specifically disclaims any and all liability for any claims or damages that may result from providing GWDB data or the information it contains. For additional information or answers to questions concerning the TWDB GWDB, contact the Groundwater Data Team at GroundwaterData@twdb.texas.gov.

WELL #527202

Texas Water Development Board

Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 05-27-202

groundwater division

GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	0527202	**Well Type**	Withdrawal of Water
County	Gray	**Well Use**	Irrigation
River Basin	Canadian	**Water Level Observation**	None
Groundwater Management Area	1	**Water Quality Available**	No
Regional Water Planning Area	A - Panhandle	**Pump**	Turbine
Groundwater Conservation District	Panhandle GCD	**Pump Depth** (feet below land surface)	
Latitude (decimal degrees)	35.584722	**Power Type**	Natural-Gas Engine
Latitude (degrees minutes seconds)	35° 35' 05" N	**Annular Seal Method**	
Longitude (decimal degrees)	-100.704167	**Surface Completion**	
Longitude (degrees minutes seconds)	100° 42' 15" W	**Owner**	G.M. Walls
Coordinate Source	+/- 1 Second	**Driller**	Panhandle Irr.Inc
Aquifer Code	121OGLL - Ogallala Formation	**Other Data Available**	Drillers Log
Aquifer	Ogallala	**Well Report Tracking Number**	
Aquifer Pick Method		**Plugging Report Tracking Number**	
Land Surface Elevation (feet above sea level)	3097	**U.S. Geological Survey Site Number**	
Land Surface Elevation Method	Digital Elevation Model -DEM	**Texas Commission on Environmental Quality Source Id**	
Well Depth (feet below land surface)		**Groundwater Conservation District Well Number**	
Well Depth Source		**Owner Well Number**	
Drilling Start Date		**Other Well Number**	
Drilling End Date	3/0/1967	**Previous State Well Number**	
Drilling Method		**Reporting Agency**	
Borehole Completion		**Created Date**	
		Last Update Date	

Remarks

Casing - No Data

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

Water Level Measurements

No Data Available

Texas Water Development Board

Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 05-27-202

groundwater division

Water Quality Analysis - No Data Available

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WELL #441102

STATE OF TEXAS WELL REPORT for Tracking #441102

Owner:	**Clifford Haak**	Owner Well #:	**No Data**
Address:	**C/O JR Well Service Pampa , TX 76065**	Grid #:	**05-27-1**
Well Location:	**Gray B & Gray 21 Pampa, TX 79065**	Latitude:	**35° 35' 30.54" N**
		Longitude:	**100° 43' 01.68" W**
Well County:	**Gray**	Elevation:	**3113 ft. above sea level**
Type of Work:	**New Well**	Proposed Use:	**Domestic**

Drilling Start Date: **1/4/2017** Drilling End Date: **1/4/2017**

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**9**	**0**	**580**

Drilling Method: **Mud (Hydraulic) Rotary**

Borehole Completion: **Filter Packed**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Filter Material*	*Size*
Filter Pack Intervals:	**20**	**580**	**Gravel**	**#1 Fine KS**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Description (number of sacks & material)*
Annular Seal Data:	**0**	**20**	**Cement 5 Bags/Sacks**

Seal Method: **Hand Mixed**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used** **Surface Completion by Driller**

Water Level: **370 ft.** below land surface on **2017-01-04** Measurement Method: **Electric Line**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Bailer** **Yield: 20 GPM**

	Strata Depth (ft.)	Water Type
Water Quality:	**370 - 580**	**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: **3T Drilling, Inc.**

10870 Cluck Road
Dumas, TX 79029

Driller Name: **Ray Teeter**

License Number: **58514**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	60	Brown clay & medium sand
60	80	Red clay & soft medium sand
80	100	Brown clay & caliche
100	120	Brown clay
120	140	Fine sand with clay strips
140	180	Caliche, tan clay with sand strips
180	200	Tan clay
200	220	Tan clay with shale pieces
220	280	Fine sand
280	340	Fine to medium sand
340	360	Medium sand with gravel strips
360	420	Tan clay & fine sand
420	480	Fine sand with clay strips
480	540	Clay & fine sand
540	560	Clay with minor sand
560	580	Clay

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Riser	New Steel	0.258	2	3
5	Blank	New Plastic (PVC)		3	510
5	Perforated or Slotted	New Plastic (PVC)	0.050	510	570
5	Blank	New Plastic (PVC)		570	580

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

WELL #494732

STATE OF TEXAS WELL REPORT for Tracking #494732

Owner:	**Steve Smith**	Owner Well #:	**No Data**
Address:	**12810 CR D Pampa, TX 79065**	Grid #:	**05-27-2**
Well Location:	**Hwy 60 & Rd B, East 2.75 mi., South 0.60 mi. Pampa, TX 79065**	Latitude:	**35° 35' 01.92" N**
		Longitude:	**100° 42' 15.54" W**
Well County:	**Gray**	Elevation:	**3103 ft. above sea level**
Type of Work:	**New Well**	Proposed Use:	**Stock**

Drilling Start Date: **10/22/2018** Drilling End Date: **10/22/2018**

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**9**	**0**	**560**

Drilling Method: **Mud (Hydraulic) Rotary**

Borehole Completion: **Filter Packed**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Filter Material*	*Size*
Filter Pack Intervals:	**20**	**560**	**Gravel**	**#1 Fine KS**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Description (number of sacks & material)*
Annular Seal Data:	**0**	**20**	**Cement 5 Bags/Sacks**

Seal Method: **Hand Mixed**

Sealed By: **Driller**

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

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Pitless Adapter Used** **Surface Completion by Driller**

Water Level: **361 ft.** below land surface on **2018-10-22** Measurement Method: **Electric Line**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **Bailer** **Yield: 20 GPM**

	Strata Depth (ft.)	Water Type
Water Quality:	361 - 560	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: **3T Drilling, Inc.**

10870 Cluck Road
Dumas, TX 79029

Driller Name: **Ray Teeter** License Number: **58514**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	20	Topsoil
20	160	Sand & soft clay
160	260	Sand with clay strips
260	280	Clean sand
280	400	Sand, sandstone & clay
400	440	Clean sand
440	520	Clay, sand and sandstone
520	550	Clean sand
550	560	Red clay

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Riser	New Steel	0.258	2	3
5	Blank	New Plastic (PVC)		3	490
5	Perforated or Slotted	New Plastic (PVC)	0.050	490	550
5	Blank	New Plastic (PVC)		550	560

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

WELL #621790

STATE OF TEXAS WELL REPORT for Tracking #621790

Owner:	**Teresa McKelvey**	Owner Well #:	**1 IRR**
Address:	**3410 E FM 41 Lubbock, TX 79423**	Grid #:	**05-27-1**
Well Location:	**Section 151 Block M2 BS&F Pampa, TX**	Latitude:	**35° 35' 05.86" N**
		Longitude:	**100° 44' 14.79" W**
Well County:	**Gray**	Elevation:	**3116 ft. above sea level**
Number of Wells Drilled:	**2**		
Type of Work:	**New Well**	Proposed Use:	**Irrigation**

Drilling Start Date: **7/28/2022** Drilling End Date: **7/29/2022**

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**24**	**0**	**583**

Drilling Method: **Reverse Circulation**

Borehole Completion: **Filter Packed**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Filter Material*	*Size*
Filter Pack Intervals:	**15**	**583**	**Gravel**	**Huber 50F/50C**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Description (number of sacks & material)*
Annular Seal Data:	**0**	**15**	**Concrete 6.5 Yards**

Seal Method: **Hand Mixed**

Sealed By: **Driller**

Distance to Property Line (ft.): **870**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

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

Method of Verification: **No Data**

Surface Completion: **Surface Slab Installed** **Surface Completion by Driller**

Water Level: **No Data**

Packers: **No Data**

Type of Pump: **Turbine**

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: **Lichtie Pump Service**

801 FRONT ST
Groom, TX 79039

Driller Name: **Matt Lichtie** License Number: **59419**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	5	Top Soil
5	110	Brown and Red Clay w/ Caliche Strips
110	340	Fine and Medium Sand w/ Clay Strips
340	380	Fine Sand w/ Brown Clay Strips
380	420	Fine Sand w/ Clay Strips
420	460	Fine Sand w/ Clay Strips
460	480	Fine Sand w Clay Strips
480	540	Fine Sand w/ Clay Strips
540	550	Fine to Medium Sand
550	570	Brown Clay w/ Fine Sand Strips
570	583	Red Clay

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
16	Blank	New Steel	.250	0	372
16	Perforated or Slotted	New Steel	.250 0.1	372	573
16	Blank	New Steel	.250	573	583

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

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

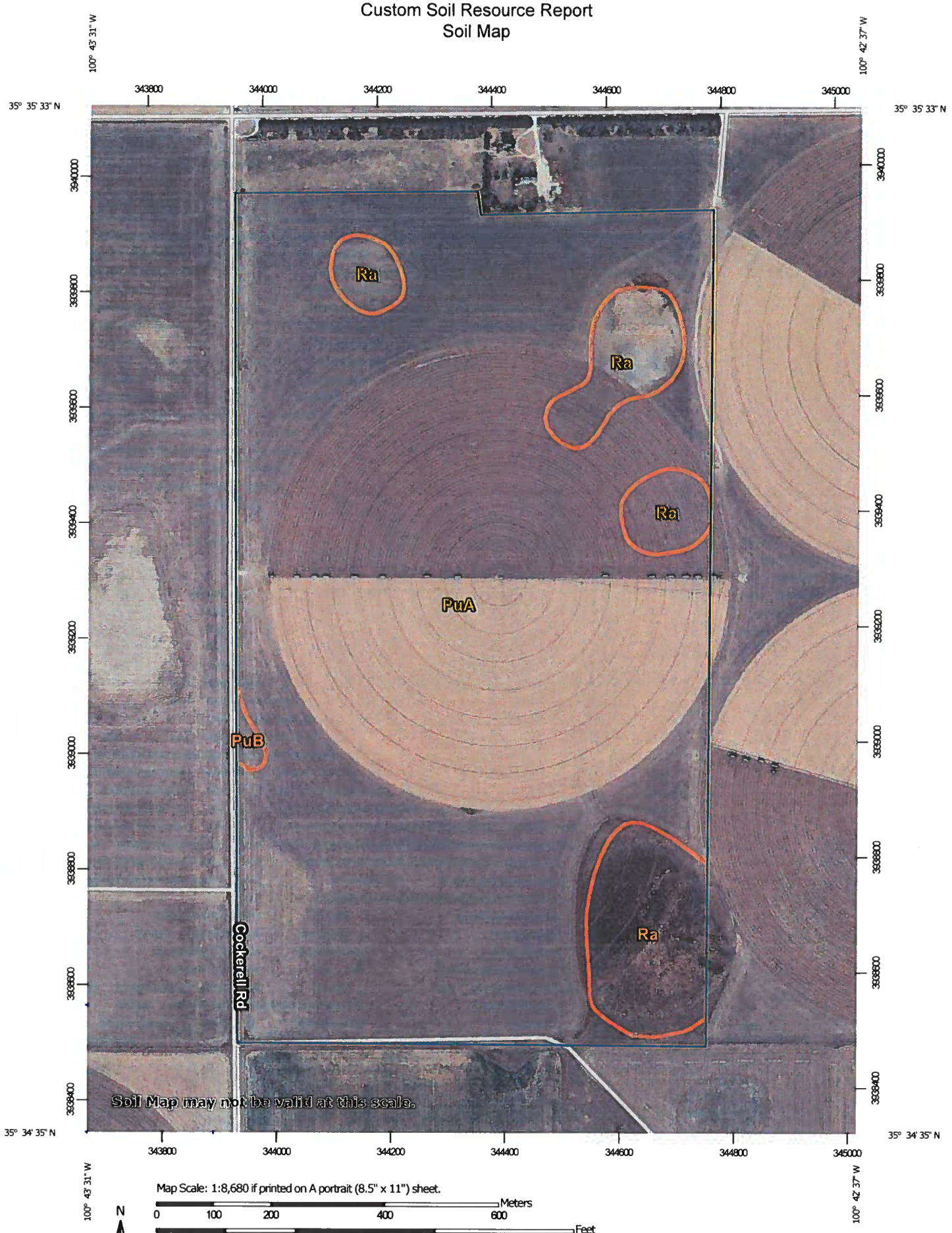
Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

ATTACHMENT 16
SOIL MAP
REFERENCE: WORKSHEET 3.0 LAND DISPOSAL OF EFFLUENT - PAGE 34

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:8,680 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 400 800 1600 2400

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

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

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

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Gray County, Texas
Survey Area Data: Version 21, Aug 30, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 23, 2021—Dec 5, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PuA	Pullman clay loam, 0 to 1 percent slopes	265.2	88.5%
PuB	Pullman clay loam, 1 to 3 percent slopes	1.0	0.3%
Ra	Randall clay, 0 to 1 percent slopes, occasionally ponded	33.4	11.2%
Totals for Area of Interest		**299.6**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Gray County, Texas

PuA—Pullman clay loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: f5ry
Elevation: 2,800 to 5,000 feet
Mean annual precipitation: 17 to 21 inches
Mean annual air temperature: 55 to 63 degrees F
Frost-free period: 180 to 220 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Pullman and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pullman

Setting

Landform: Plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey eolian deposits

Typical profile

Ap - 0 to 5 inches: clay loam
Bt - 5 to 33 inches: silty clay loam
Btk1 - 33 to 52 inches: clay loam
Btk2 - 52 to 80 inches: clay

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 60 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 3.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: C
Ecological site: R077CY022TX - Deep Hardland 16-21" PZ
Hydric soil rating: No

Minor Components

Pantex

Percent of map unit: 4 percent
Landform: Plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077CY022TX - Deep Hardland 16-21" PZ
Hydric soil rating: No

Olton

Percent of map unit: 4 percent
Landform: Plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077CY022TX - Deep Hardland 16-21" PZ
Hydric soil rating: No

Estacado

Percent of map unit: 2 percent
Landform: Plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077CY022TX - Deep Hardland 16-21" PZ
Hydric soil rating: No

PuB—Pullman clay loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: f5rz
Elevation: 2,800 to 5,000 feet
Mean annual precipitation: 17 to 21 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 185 to 220 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Pullman and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pullman

Setting

Landform: Playa slopes, plains
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, convex

Across-slope shape: Linear
Parent material: Clayey eolian deposits

Typical profile

Ap - 0 to 4 inches: clay loam
Bt - 4 to 32 inches: silty clay loam
Btk1 - 32 to 51 inches: clay loam
Btk2 - 51 to 80 inches: clay

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 60 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 3.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: C
Ecological site: R077CY022TX - Deep Hardland 16-21" PZ
Hydric soil rating: No

Minor Components

Olton

Percent of map unit: 4 percent
Landform: Plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077CY022TX - Deep Hardland 16-21" PZ
Hydric soil rating: No

Estacado

Percent of map unit: 4 percent
Landform: Plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077CY022TX - Deep Hardland 16-21" PZ
Hydric soil rating: No

Pep

Percent of map unit: 2 percent
Landform: Playa slopes, plains
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, convex
Across-slope shape: Linear

Ecological site: R077CY028TX - Limy Upland 16-21" PZ
Hydric soil rating: No

Ra—Randall clay, 0 to 1 percent slopes, occasionally ponded

Map Unit Setting

National map unit symbol: 2r5hm
Elevation: 2,400 to 5,300 feet
Mean annual precipitation: 17 to 21 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 185 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Randall and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Randall

Setting

Landform: Playa floors
Landform position (three-dimensional): Dip
Microfeatures of landform position: Circular gilgai
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Clayey lacustrine deposits of quaternary age

Typical profile

A - 0 to 12 inches: clay
Bss1 - 12 to 37 inches: clay
Bss2 - 37 to 80 inches: clay

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Calcium carbonate, maximum content: 12 percent
Maximum salinity: Nonsaline (0.0 to 1.5 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: D

Ecological site: R077CY027TX - Playa 16-21" PZ
Hydric soil rating: Yes

Minor Components

Mclean, occasionally ponded
Percent of map unit: 10 percent
Landform: Playa floors
Landform position (three-dimensional): Dip
Microfeatures of landform position: Circular gilgai
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R077CY027TX - Playa 16-21" PZ
Hydric soil rating: No

Unnamed
Percent of map unit: 5 percent
Landform: Playa floors
Landform position (three-dimensional): Dip
Microfeatures of landform position: Circular gilgai
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: No

Lockney
Percent of map unit: 5 percent
Landform: Playa steps
Landform position (three-dimensional): Tread, dip
Microfeatures of landform position: Circular gilgai
Down-slope shape: Concave
Across-slope shape: Convex
Ecological site: R077CY022TX - Deep Hardland 16-21" PZ
Hydric soil rating: No

ATTACHMENT 17
EVAPORATION POND CALCULATIONS
REFERENCE: WORKSHEET 3.1 SURFACE LAND DISPOSAL OF EFFLUENT - PAGE 37

Evaporation Lagoon Design Calculation - 25-year CRITICAL
IP Pumpkin - Gray County, TX

Input Values in red

Bottom width of lagoon (Wo)	315	ft
Bottom Length of lagoon (Lo)	1160	ft
Lagoon width at initial water depth	327	ft
Lagoon Length at initial water depth	1172	
Surface Area at Top of lagoon Dike (AT)	457,500	ft^2
Surface Area at bottom of lagoon (Ao)	365,400	ft^2
Water surface area at max. water depth (A2)	438,504	ft^2
Water surface area at the initial water depth	383,244	ft^2
Interior Dike Slope	3	to 1
Minimum Water Depth	0	ft
Maximum Water Depth	8	ft
Lagoon Freeboard	2	ft
Total Depth of lagoon	10	ft
Initial depth of water	2	ft
Initial Lagoon Volume	733,093	ft^3

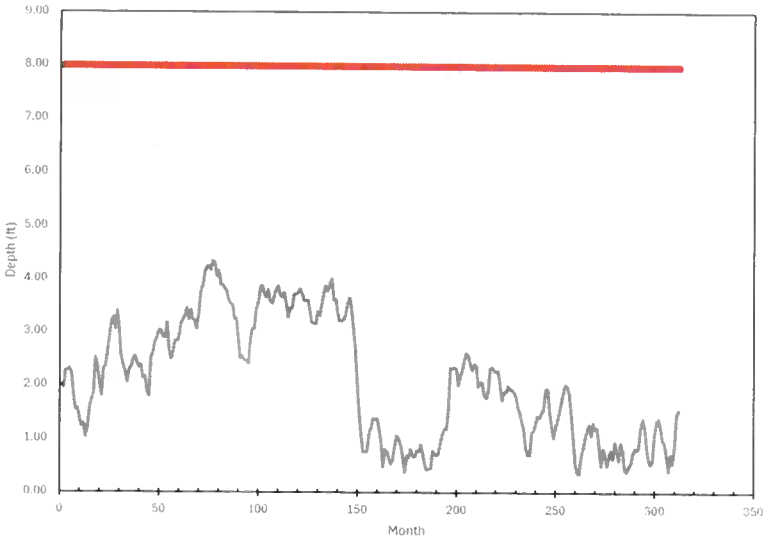
Volume = H/6 {A_o+4*A1+Ai}
Ao =(Lo*Wo)
A1= {Lo+(slope *H)}*{Wo+(slope *H)}

Net Volume Change = Q +Vprec-Vevap

A_T = Surface area at top of the lagoon
Ai = Surface area at the water depth
Ve = Monthly Evaporation volume
Vp = Monthly Precipitation volume
A1 = Water Surface Area at Average Water Depth
Ao = Water Surface Area at Bottom of lagoon
H = Lagoon Water Depth

	Bottom	Max WS	Top Berm	
Surface Area	365,400	438,504	457,500	ft^2
	8.39	10.07	10.50	acre
Length	315	363	375	ft
Width	1,160	1,208	1,220	ft
Lagoon Volume	0	3,020,908	3,807,795	ft^3
Lagoon Volume	0	22,597,902	28,484,211	gal

Production	28,700	gal/day
Water Usage	365	Days/year
Flow	10,475,500	Gal/Yr
Salinity Evap. Correction	1.00000	



Equations Reference:	1	2	3	4	5	6	7	8	9	10	11	12	13.00	14	15
Month	**Month**	**No. Days per month**	**Gal per day**	**Monthly Flow (Q) (cf)**	**Pure Water Pan Evap. (in/month)**	**Salinity Monthly Evap. (in)**	**Monthly Precip. (in)**	**Monthly Evaporation (ft)**	**Monthly Precipitation (ft)**	**Starting Volume (ft3)**	**Starting Depth (ft)**	**Net Volume Inflow (Q + Precip - Evap) (ft3)**	**End Volume (ft3)**	**Ending Depth (ft)**	**Volume Less than Maximum WS**	**Max WS**
1	Jan-1999	31	28,700	118,936	5.39	5.39	1.89	0.45	0.158	733,093	1.99	7,969	741,062	2.01	Yes	8.00
2	Feb-1999	28	28,700	107,426	4.06	4.06	0.06	0.34	0.005	741,062	2.01	-19,334	721,728	1.95	Yes	8.00
3	Mar-1999	31	28,700	118,936	2.85	2.85	2.70	0.24	0.225	721,728	1.95	114,153	835,881	2.26	Yes	8.00
4	Apr-1999	30	28,700	115,099	8.11	8.11	4.65	0.68	0.388	835,881	2.26	4,675	840,556	2.27	Yes	8.00
5	May-1999	31	28,700	118,936	7.14	7.14	3.81	0.60	0.318	840,556	2.27	12,611	853,167	2.31	Yes	8.00
6	June-1999	30	28,700	115,099	7.36	7.36	2.72	0.61	0.227	853,167	2.31	-32,810	820,356	2.22	Yes	8.00
7	July-1999	31	28,700	118,936	9.36	9.36	0.80	0.78	0.067	820,356	2.22	-151,243	669,113	1.81	Yes	8.00
8	Aug-1999	31	28,700	118,936	8.67	8.67	1.64	0.72	0.137	669,113	1.81	-101,484	567,629	1.54	Yes	8.00
9	Sept-1999	30	28,700	115,099	5.98	5.98	2.71	0.50	0.226	567,629	1.54	12,474	580,102	1.57	Yes	8.00
10	Oct-1999	31	28,700	118,936	6.23	6.23	0.12	0.52	0.010	580,102	1.57	-71,911	508,192	1.38	Yes	8.00
11	Nov-1999	30	28,700	115,099	5.43	5.43	0.00	0.45	0.000	508,192	1.38	-53,942	454,249	1.23	Yes	8.00
12	Dec-1999	31	28,700	118,936	4.54	4.54	1.44	0.38	0.120	454,249	1.23	22,314	476,564	1.29	Yes	8.00
13	Jan-2000	31	28,700	118,936	7.10	7.10	0.22	0.59	0.018	476,564	1.29	-94,173	382,391	1.04	Yes	8.00
14	Feb-2000	28	28,700	107,426	2.19	2.19	0.53	0.18	0.044	382,391	1.04	55,773	438,164	1.19	Yes	8.00
15	Mar-2000	31	28,700	118,936	3.90	3.90	4.75	0.33	0.396	438,164	1.19	145,612	583,776	1.58	Yes	8.00
16	Apr-2000	30	28,700	115,099	4.37	4.37	2.43	0.36	0.203	583,776	1.58	53,997	637,773	1.73	Yes	8.00
17	May-2000	31	28,700	118,936	4.51	4.51	2.11	0.38	0.176	637,773	1.73	43,131	680,904	1.84	Yes	8.00
18	June-2000	30	28,700	115,099	5.30	5.30	9.47	0.44	0.789	680,904	1.84	248,840	929,744	2.51	Yes	8.00
19	July-2000	31	28,700	118,936	6.46	6.46	1.04	0.54	0.087	929,744	2.51	-54,366	875,378	2.37	Yes	8.00
20	Aug-2000	31	28,700	118,936	7.22	7.22	0.18	0.60	0.015	875,378	2.37	-104,741	770,637	2.09	Yes	8.00
21	Sept-2000	30	28,700	115,099	7.04	7.04	0.03	0.59	0.003	770,637	2.09	-106,157	664,480	1.80	Yes	8.00
22	Oct-2000	31	28,700	118,936	3.50	3.50	5.58	0.29	0.465	664,480	1.80	185,318	849,798	2.30	Yes	8.00
23	Nov-2000	30	28,700	115,099	3.80	3.80	0.79	0.32	0.066	849,798	2.30	18,879	868,677	2.35	Yes	8.00
24	Dec-2000	31	28,700	118,936	2.18	2.18	1.20	0.18	0.100	868,677	2.35	87,446	956,123	2.58	Yes	8.00
25	Jan-2001	31	28,700	118,936	1.13	1.13	1.01	0.09	0.084	956,123	2.58	115,053	1,071,176	2.89	Yes	8.00
26	Feb-2001	28	28,700	107,426	1.71	1.71	1.41	0.14	0.118	1,071,176	2.89	97,651	1,168,827	3.15	Yes	8.00
27	Mar-2001	31	28,700	118,936	3.30	3.30	1.13	0.28	0.094	1,168,827	3.15	48,065	1,216,892	3.28	Yes	8.00
28	Apr-2001	30	28,700	115,099	6.93	6.93	0.65	0.58	0.054	1,216,892	3.28	-89,006	1,127,886	3.04	Yes	8.00
29	May-2001	31	28,700	118,936	5.85	5.85	6.33	0.49	0.528	1,127,886	3.04	134,656	1,262,542	3.40	Yes	8.00
30	June-2001	30	28,700	115,099	8.47	8.47	0.84	0.71	0.070	1,262,542	3.40	-132,939	1,129,603	3.05	Yes	8.00
31	July-2001	31	28,700	118,936	10.52	10.52	0.74	0.88	0.062	1,129,603	3.05	-195,095	934,507	2.53	Yes	8.00
32	Aug-2001	31	28,700	118,936	8.06	8.06	2.38	0.67	0.198	934,507	2.53	-62,679	871,828	2.36	Yes	8.00
33	Sept-2001	30	28,700	115,099	6.63	6.63	1.49	0.55	0.124	871,828	2.36	-48,787	823,041	2.23	Yes	8.00
34	Oct-2001	31	28,700	118,936	5.92	5.92	0.07	0.49	0.006	823,041	2.23	-66,757	756,284	2.05	Yes	8.00
35	Nov-2001	30	28,700	115,099	3.75	3.75	2.68	0.31	0.223	756,284	2.05	80,959	837,243	2.27	Yes	8.00
36	Dec-2001	31	28,700	118,936	3.13	3.13	0.15	0.26	0.013	837,243	2.27	23,719	860,962	2.33	Yes	8.00
37	Jan-2002	31	28,700	118,936	2.88	2.88	1.13	0.24	0.094	860,962	2.33	62,810	923,772	2.50	Yes	8.00

Month	Month	No. Days per month	Gal per day	Monthly Flow (Q) (cf)	Pure Water Pan Evap. (in/month)	Salinity Monthly Evap. (in)	Monthly Precip. (in)	Monthly Evaporation (ft)	Monthly Precipitation (ft)	Starting Volume (ft3)	Starting Depth (ft)	Net Volume Inflow (Q + Precip - Evap) (ft3)	End Volume (ft3)	Ending Depth (ft)	Volume Less than Maximum WS	Max WS
38	Feb-2002	28	28,700	107,426	3.28	3.28	0.41	0.27	0.034	923,772	2.50	15,207	938,979	2.54	Yes	8.00
39	Mar-2002	31	28,700	118,936	5.39	5.39	0.12	0.45	0.010	938,979	2.54	-49,767	889,211	2.40	Yes	8.00
40	Apr-2002	30	28,700	115,099	5.95	5.95	1.47	0.50	0.123	889,211	2.40	-28,046	861,166	2.33	Yes	8.00
41	May-2002	31	28,700	118,936	5.09	5.09	1.87	0.42	0.156	861,166	2.33	15,954	877,120	2.37	Yes	8.00
42	June-2002	30	28,700	115,099	8.77	8.77	2.16	0.73	0.180	877,120	2.37	-95,064	782,056	2.12	Yes	8.00
43	July-2002	31	28,700	118,936	7.36	7.36	4.25	0.61	0.354	782,056	2.12	19,938	801,994	2.17	Yes	8.00
44	Aug-2002	31	28,700	118,936	9.05	9.05	1.74	0.75	0.145	801,994	2.17	-112,117	689,877	1.87	Yes	8.00
45	Sept-2002	30	28,700	115,099	6.79	6.79	2.17	0.57	0.181	689,877	1.87	-30,653	659,224	1.79	Yes	8.00
46	Oct-2002	31	28,700	118,936	3.38	3.38	8.30	0.28	0.692	659,224	1.79	276,804	936,028	2.53	Yes	8.00
47	Nov-2002	30	28,700	115,099	3.15	3.15	0.37	0.26	0.031	936,028	2.53	25,709	961,738	2.60	Yes	8.00
48	Dec-2002	31	28,700	118,936	2.94	2.94	1.45	0.25	0.121	961,738	2.60	70,824	1,032,561	2.79	Yes	8.00
49	Jan-2003	31	28,700	118,936	2.37	2.37	0.00	0.20	0.000	1,032,561	2.79	42,195	1,074,756	2.90	Yes	8.00
50	Feb-2003	28	28,700	107,426	2.18	2.18	0.33	0.18	0.028	1,074,756	2.90	47,313	1,122,070	3.03	Yes	8.00
51	Mar-2003	31	28,700	118,936	4.51	4.51	0.62	0.38	0.052	1,122,070	3.03	-7,346	1,114,724	3.01	Yes	8.00
52	Apr-2003	30	28,700	115,099	5.73	5.73	0.98	0.48	0.082	1,114,724	3.01	-38,778	1,075,945	2.90	Yes	8.00
53	May-2003	31	28,700	118,936	5.91	5.91	2.00	0.49	0.167	1,075,945	2.90	-7,612	1,068,333	2.88	Yes	8.00
54	June-2003	30	28,700	115,099	6.08	6.08	5.84	0.51	0.487	1,068,333	2.88	107,281	1,175,614	3.17	Yes	8.00
55	July-2003	31	28,700	118,936	9.95	9.95	0.49	0.83	0.041	1,175,614	3.17	-185,887	989,728	2.67	Yes	8.00
56	Aug-2003	31	28,700	118,936	8.48	8.48	2.49	0.71	0.208	989,728	2.67	-73,130	916,597	2.48	Yes	8.00
57	Sept-2003	30	28,700	115,099	5.51	5.51	3.25	0.46	0.271	916,597	2.48	42,430	959,027	2.59	Yes	8.00
58	Oct-2003	31	28,700	118,936	2.06	2.06	1.06	0.17	0.088	959,027	2.59	86,623	1,045,651	2.82	Yes	8.00
59	Nov-2003	30	28,700	115,099	4.02	4.02	0.38	0.34	0.032	1,045,651	2.82	-2,546	1,043,105	2.82	Yes	8.00
60	Dec-2003	31	28,700	118,936	2.99	2.99	0.20	0.25	0.017	1,043,105	2.82	28,616	1,071,721	2.89	Yes	8.00
61	Jan-2004	31	28,700	118,936	2.27	2.27	1.29	0.19	0.108	1,071,721	2.89	87,048	1,158,769	3.13	Yes	8.00
62	Feb-2004	28	28,700	107,426	3.59	3.59	1.44	0.30	0.120	1,158,769	3.13	37,225	1,195,994	3.23	Yes	8.00
63	Mar-2004	31	28,700	118,936	5.14	5.14	2.38	0.43	0.198	1,195,994	3.23	28,734	1,224,728	3.30	Yes	8.00
64	Apr-2004	30	28,700	115,099	4.50	4.50	2.61	0.38	0.218	1,224,728	3.30	53,116	1,277,844	3.44	Yes	8.00
65	May-2004	31	28,700	118,936	6.17	6.17	0.00	0.51	0.000	1,277,844	3.44	-82,386	1,195,458	3.22	Yes	8.00
66	June-2004	30	28,700	115,099	6.62	6.62	5.29	0.55	0.441	1,195,458	3.22	71,522	1,266,980	3.41	Yes	8.00
67	July-2004	31	28,700	118,936	7.44	7.44	1.53	0.62	0.128	1,266,980	3.41	-73,857	1,193,123	3.22	Yes	8.00
68	Aug-2004	31	28,700	118,936	7.11	7.11	3.33	0.59	0.278	1,193,123	3.22	-4,345	1,188,778	3.21	Yes	8.00
69	Sept-2004	30	28,700	115,099	6.93	6.93	1.61	0.58	0.134	1,188,778	3.21	-57,845	1,130,932	3.05	Yes	8.00
70	Oct-2004	31	28,700	118,936	3.36	3.36	3.31	0.28	0.276	1,130,932	3.05	117,300	1,248,232	3.36	Yes	8.00
71	Nov-2004	30	28,700	115,099	2.90	2.90	3.93	0.24	0.328	1,248,232	3.36	149,112	1,397,345	3.76	Yes	8.00
72	Dec-2004	31	28,700	118,936	2.84	2.84	0.26	0.24	0.022	1,397,345	3.76	33,542	1,430,887	3.85	Yes	8.00
73	Jan-2005	31	28,700	118,936	2.63	2.63	1.88	0.22	0.157	1,430,887	3.85	93,975	1,524,862	4.10	Yes	8.00
74	Feb-2005	28	28,700	107,426	2.18	2.18	0.62	0.18	0.052	1,524,862	4.10	55,295	1,580,157	4.24	Yes	8.00
75	Mar-2005	31	28,700	118,936	4.73	4.73	1.16	0.39	0.097	1,580,157	4.24	-310	1,579,847	4.24	Yes	8.00
76	Apr-2005	30	28,700	115,099	5.30	5.30	0.89	0.44	0.074	1,579,847	4.24	-31,970	1,547,877	4.16	Yes	8.00
77	May-2005	31	28,700	118,936	4.57	4.57	2.90	0.38	0.242	1,547,877	4.16	63,052	1,610,929	4.33	Yes	8.00
78	June-2005	30	28,700	115,099	7.74	7.74	4.10	0.65	0.342	1,610,929	4.33	-6,707	1,604,222	4.31	Yes	8.00
79	July-2005	31	28,700	118,936	8.76	8.76	2.08	0.73	0.173	1,604,222	4.31	-103,226	1,500,996	4.04	Yes	8.00
80	Aug-2005	31	28,700	118,936	6.75	6.75	4.44	0.56	0.370	1,500,996	4.04	41,952	1,542,948	4.15	Yes	8.00
81	Sept-2005	30	28,700	115,099	7.26	7.26	0.80	0.61	0.067	1,542,948	4.15	-99,059	1,443,889	3.88	Yes	8.00
82	Oct-2005	31	28,700	118,936	4.60	4.60	1.07	0.38	0.089	1,443,889	3.88	1,992	1,445,880	3.89	Yes	8.00
83	Nov-2005	30	28,700	115,099	4.63	4.63	0.19	0.39	0.016	1,445,880	3.89	-31,756	1,414,124	3.81	Yes	8.00
84	Dec-2005	31	28,700	118,936	4.00	4.00	0.13	0.33	0.011	1,414,124	3.81	-8,979	1,405,145	3.78	Yes	8.00
85	Jan-2006	31	28,700	118,936	5.88	5.88	0.22	0.49	0.018	1,405,145	3.78	-67,371	1,337,774	3.60	Yes	8.00
86	Feb-2006	28	28,700	107,426	4.19	4.19	0.01	0.35	0.001	1,337,774	3.60	-30,006	1,307,768	3.52	Yes	8.00
87	Mar-2006	31	28,700	118,936	5.62	5.62	1.73	0.47	0.144	1,307,768	3.52	-8,785	1,298,983	3.50	Yes	8.00
88	Apr-2006	30	28,700	115,099	6.66	6.66	0.19	0.56	0.016	1,298,983	3.50	-96,206	1,202,777	3.24	Yes	8.00
89	May-2006	31	28,700	118,936	7.25	7.25	3.70	0.60	0.308	1,202,777	3.24	3,049	1,205,826	3.25	Yes	8.00
90	June-2006	30	28,700	115,099	9.48	9.48	1.61	0.79	0.134	1,205,826	3.25	-139,733	1,066,092	2.88	Yes	8.00
91	July-2006	31	28,700	118,936	9.83	9.83	1.65	0.82	0.138	1,066,092	2.88	-143,475	922,618	2.49	Yes	8.00
92	Aug-2006	31	28,700	118,936	8.18	8.18	4.96	0.68	0.413	922,618	2.49	15,567	938,185	2.54	Yes	8.00
93	Sept-2006	30	28,700	115,099	5.87	5.87	1.39	0.49	0.116	938,185	2.54	-28,516	909,669	2.46	Yes	8.00
94	Oct-2006	31	28,700	118,936	5.79	5.79	2.12	0.48	0.177	909,669	2.46	1,314	910,983	2.46	Yes	8.00
95	Nov-2006	30	28,700	115,099	4.90	4.90	0.43	0.41	0.036	910,983	2.46	-27,927	883,056	2.39	Yes	8.00
96	Dec-2006	31	28,700	118,936	2.19	2.19	4.03	0.18	0.336	883,056	2.39	178,446	1,061,502	2.87	Yes	8.00
97	Jan-2007	31	28,700	118,936	2.37	2.37	0.90	0.20	0.075	1,061,502	2.87	71,171	1,132,673	3.06	Yes	8.00
98	Feb-2007	28	28,700	107,426	3.70	3.70	0.28	0.31	0.023	1,132,673	3.06	-3,778	1,128,895	3.05	Yes	8.00
99	Mar-2007	31	28,700	118,936	3.92	3.92	4.66	0.33	0.388	1,128,895	3.05	143,188	1,272,082	3.43	Yes	8.00
100	Apr-2007	30	28,700	115,099	4.52	4.52	2.10	0.38	0.175	1,272,082	3.43	35,588	1,307,671	3.52	Yes	8.00
101	May-2007	31	28,700	118,936	4.00	4.00	4.12	0.33	0.343	1,307,671	3.52	122,907	1,430,577	3.85	Yes	8.00
102	June-2007	30	28,700	115,099	5.18	5.18	1.88	0.43	0.157	1,430,577	3.85	5,800	1,436,377	3.86	Yes	8.00
103	July-2007	31	28,700	118,936	7.19	7.19	1.73	0.60	0.144	1,436,377	3.86	-61,201	1,375,176	3.70	Yes	8.00
104	Aug-2007	31	28,700	118,936	8.03	8.03	3.71	0.67	0.309	1,375,176	3.70	-23,361	1,351,814	3.64	Yes	8.00
105	Sept-2007	30	28,700	115,099	6.15	6.15	4.37	0.51	0.364	1,351,814	3.64	56,252	1,408,066	3.79	Yes	8.00
106	Oct-2007	31	28,700	118,936	7.04	7.04	0.88	0.59	0.073	1,408,066	3.79	-83,689	1,324,377	3.57	Yes	8.00
107	Nov-2007	30	28,700	115,099	4.13	4.13	0.06	0.34	0.005	1,324,377	3.57	-18,655	1,305,722	3.52	Yes	8.00
108	Dec-2007	31	28,700	118,936	3.76	3.76	1.90	0.31	0.158	1,305,722	3.52	57,627	1,363,349	3.67	Yes	8.00
109	Jan-2008	31	28,700	118,936	2.15	2.15	0.05	0.18	0.004	1,363,349	3.67	49,509	1,412,858	3.80	Yes	8.00
110	Feb-2008	28	28,700	107,426	3.44	3.44	0.83	0.29	0.069	1,412,858	3.80	20,960	1,433,818	3.86	Yes	8.00

Month	Month	No. Days per month	Gal per day	Monthly Flow (Q) (cf)	Pure Water Pan Evap. (in/month)	Salinity Monthly Evap. (in)	Monthly Precip. (in)	Monthly Evaporation (ft)	Monthly Precipitation (ft)	Starting Volume (ft3)	Starting Depth (ft)	Net Volume Inflow (Q + Precip - Evap) (ft3)	End Volume (ft3)	Ending Depth (ft)	Volume Less than Maximum WS	Max WS
111	Mar-2008	31	28,700	118,936	5.72	5.72	0.33	0.48	0.028	1,433,818	3.86	-58,933	1,374,885	3.70	Yes	8.00
112	Apr-2008	30	28,700	115,099	5.72	5.72	1.66	0.48	0.138	1,374,885	3.70	-18,726	1,356,159	3.65	Yes	8.00
113	May-2008	31	28,700	118,936	6.02	6.02	3.36	0.50	0.280	1,356,159	3.65	31,136	1,387,295	3.73	Yes	8.00
114	June-2008	30	28,700	115,099	9.97	9.97	4.25	0.83	0.354	1,387,295	3.73	-72,966	1,314,329	3.54	Yes	8.00
115	July-2008	31	28,700	118,936	8.71	8.71	1.98	0.73	0.165	1,314,329	3.54	-100,912	1,213,417	3.27	Yes	8.00
116	Aug-2008	31	28,700	118,936	7.40	7.40	5.75	0.62	0.479	1,213,417	3.27	64,836	1,278,253	3.44	Yes	8.00
117	Sept-2008	30	28,700	115,099	5.57	5.57	1.89	0.46	0.158	1,278,253	3.44	-5,560	1,272,694	3.43	Yes	8.00
118	Oct-2008	31	28,700	118,936	4.60	4.60	4.19	0.38	0.349	1,272,694	3.43	105,412	1,378,106	3.71	Yes	8.00
119	Nov-2008	30	28,700	115,099	3.71	3.71	0.15	0.31	0.013	1,378,106	3.71	-2,380	1,375,726	3.70	Yes	8.00
120	Dec-2008	31	28,700	118,936	3.46	3.46	0.13	0.29	0.011	1,375,726	3.70	9,021	1,384,748	3.73	Yes	8.00
121	Jan-2009	31	28,700	118,936	2.80	2.80	0.04	0.23	0.003	1,384,748	3.73	27,689	1,412,437	3.80	Yes	8.00
122	Feb-2009	28	28,700	107,426	4.66	4.66	0.38	0.39	0.032	1,412,437	3.80	-33,910	1,378,526	3.71	Yes	8.00
123	Mar-2009	31	28,700	118,936	5.79	5.79	0.68	0.48	0.057	1,378,526	3.71	-49,190	1,329,337	3.58	Yes	8.00
124	Apr-2009	30	28,700	115,099	6.30	6.30	2.63	0.53	0.219	1,329,337	3.58	-5,621	1,323,716	3.57	Yes	8.00
125	May-2009	31	28,700	118,936	5.67	5.67	2.47	0.47	0.206	1,323,716	3.57	13,603	1,337,319	3.60	Yes	8.00
126	June-2009	30	28,700	115,099	8.17	8.17	2.39	0.68	0.199	1,337,319	3.60	-74,327	1,262,993	3.40	Yes	8.00
127	July-2009	31	28,700	118,936	9.44	9.44	3.10	0.79	0.258	1,262,993	3.40	-87,693	1,175,300	3.17	Yes	8.00
128	Aug-2009	31	28,700	118,936	8.62	8.62	4.85	0.72	0.404	1,175,300	3.17	-3,877	1,171,423	3.16	Yes	8.00
129	Sept-2009	30	28,700	115,099	5.15	5.15	1.54	0.43	0.128	1,171,423	3.16	-2,501	1,168,922	3.15	Yes	8.00
130	Oct-2009	31	28,700	118,936	3.84	3.84	2.64	0.32	0.220	1,168,922	3.15	79,672	1,248,594	3.37	Yes	8.00
131	Nov-2009	30	28,700	115,099	4.38	4.38	0.10	0.37	0.008	1,248,594	3.37	-24,844	1,223,750	3.30	Yes	8.00
132	Dec-2009	31	28,700	118,936	1.54	1.54	0.16	0.13	0.013	1,223,750	3.30	73,637	1,297,387	3.50	Yes	8.00
133	Jan-2010	31	28,700	118,936	1.96	1.96	0.95	0.16	0.079	1,297,387	3.50	85,606	1,382,993	3.72	Yes	8.00
134	Feb-2010	28	28,700	107,426	3.05	3.05	1.32	0.25	0.110	1,382,993	3.72	50,126	1,433,119	3.86	Yes	8.00
135	Mar-2010	31	28,700	118,936	5.62	5.62	0.98	0.47	0.082	1,433,119	3.86	-34,394	1,398,725	3.76	Yes	8.00
136	Apr-2010	30	28,700	115,099	6.53	6.53	4.47	0.54	0.373	1,398,725	3.76	46,854	1,445,580	3.89	Yes	8.00
137	May-2010	31	28,700	118,936	6.13	6.13	3.68	0.51	0.307	1,445,580	3.89	37,585	1,483,164	3.99	Yes	8.00
138	June-2010	30	28,700	115,099	9.09	9.09	1.06	0.76	0.088	1,483,164	3.99	-149,341	1,333,823	3.59	Yes	8.00
139	July-2010	31	28,700	118,936	7.50	7.50	4.07	0.63	0.339	1,333,823	3.59	6,033	1,339,855	3.61	Yes	8.00
140	Aug-2010	31	28,700	118,936	8.35	8.35	1.48	0.70	0.123	1,339,855	3.61	-105,797	1,234,059	3.33	Yes	8.00
141	Sept-2010	30	28,700	115,099	6.72	6.72	1.74	0.56	0.145	1,234,059	3.33	-47,356	1,186,703	3.20	Yes	8.00
142	Oct-2010	31	28,700	118,936	5.77	5.77	2.10	0.48	0.175	1,186,703	3.20	-730	1,185,973	3.20	Yes	8.00
143	Nov-2010	30	28,700	115,099	4.95	4.95	1.79	0.41	0.149	1,185,973	3.20	11,968	1,197,941	3.23	Yes	8.00
144	Dec-2010	31	28,700	118,936	2.68	2.68	0.22	0.22	0.018	1,197,941	3.23	38,483	1,236,423	3.33	Yes	8.00
145	Jan-2011	31	28,700	118,936	1.60	1.60	0.13	0.13	0.011	1,236,423	3.33	70,660	1,307,083	3.52	Yes	8.00
146	Feb-2011	28	28,700	107,426	2.34	2.34	0.40	0.20	0.033	1,307,083	3.52	43,495	1,350,578	3.64	Yes	8.00
147	Mar-2011	31	28,700	118,936	6.38	6.38	0.24	0.53	0.020	1,350,578	3.64	-82,335	1,268,243	3.42	Yes	8.00
148	Apr-2011	30	28,700	115,099	7.68	7.68	0.20	0.64	0.017	1,268,243	3.42	-128,232	1,140,011	3.08	Yes	8.00
149	May-2011	31	28,700	118,936	8.42	8.42	0.43	0.70	0.036	1,140,011	3.08	-138,700	1,001,311	2.71	Yes	8.00
150	June-2011	30	28,700	115,099	12.35	12.35	0.29	1.03	0.024	1,001,311	2.71	-267,353	733,958	1.99	Yes	8.00
151	July-2011	31	28,700	118,936	11.36	11.36	1.05	0.95	0.088	733,958	1.99	-203,635	530,323	1.44	Yes	8.00
152	Aug-2011	31	28,700	118,936	10.03	10.03	1.57	0.84	0.131	530,323	1.44	-143,239	387,084	1.05	Yes	8.00
153	Sept-2011	30	28,700	115,099	8.07	8.07	0.81	0.67	0.068	387,084	1.05	-108,328	278,756	0.76	Yes	8.00
154	Oct-2011	31	28,700	118,936	5.77	5.77	2.06	0.48	0.172	278,756	0.76	4,733	283,489	0.77	Yes	8.00
155	Nov-2011	30	28,700	115,099	4.30	4.30	0.64	0.36	0.053	283,489	0.77	2,408	285,897	0.77	Yes	8.00
156	Dec-2011	31	28,700	118,936	1.78	1.78	1.97	0.15	0.164	285,897	0.77	124,831	410,728	1.11	Yes	8.00
157	Jan-2012	31	28,700	118,936	3.15	3.15	0.37	0.26	0.031	410,728	1.11	32,495	443,223	1.20	Yes	8.00
158	Feb-2012	28	28,700	107,426	2.74	2.74	1.53	0.23	0.128	443,223	1.20	69,604	512,828	1.39	Yes	8.00
159	Mar-2012	31	28,700	118,936	6.31	6.31	2.17	0.53	0.181	512,828	1.39	-10,316	502,512	1.36	Yes	8.00
160	Apr-2012	30	28,700	115,099	5.78	5.78	2.27	0.48	0.189	502,512	1.36	5,464	507,976	1.38	Yes	8.00
161	May-2012	31	28,700	118,936	7.03	7.03	0.96	0.59	0.080	507,976	1.38	-69,804	438,172	1.19	Yes	8.00
162	June-2012	30	28,700	115,099	9.01	9.01	2.46	0.75	0.205	438,172	1.19	-87,448	350,724	0.95	Yes	8.00
163	July-2012	31	28,700	118,936	10.21	10.21	0.77	0.85	0.064	350,724	0.95	-169,627	181,097	0.49	Yes	8.00
164	Aug-2012	31	28,700	118,936	9.16	9.16	2.12	0.76	0.177	181,097	0.49	118,936	300,033	0.81	Yes	8.00
165	Sept-2012	30	28,700	115,099	7.11	7.11	2.81	0.59	0.234	300,033	0.81	-17,265	282,767	0.77	Yes	8.00
166	Oct-2012	31	28,700	118,936	5.72	5.72	0.27	0.48	0.023	282,767	0.77	-48,264	234,503	0.64	Yes	8.00
167	Nov-2012	30	28,700	115,099	5.19	5.19	0.21	0.43	0.018	234,503	0.64	-37,350	197,153	0.53	Yes	8.00
168	Dec-2012	31	28,700	118,936	2.88	2.88	0.44	0.24	0.037	197,153	0.53	44,061	241,214	0.65	Yes	8.00
169	Jan-2013	31	28,700	118,936	2.17	2.17	1.11	0.18	0.093	241,214	0.65	86,220	327,434	0.89	Yes	8.00
170	Feb-2013	28	28,700	107,426	3.47	3.47	2.14	0.29	0.178	327,434	0.89	66,170	393,604	1.07	Yes	8.00
171	Mar-2013	31	28,700	118,936	5.37	5.37	0.74	0.45	0.062	393,604	1.07	-24,376	369,228	1.00	Yes	8.00
172	Apr-2013	30	28,700	115,099	5.53	5.53	0.37	0.46	0.031	369,228	1.00	-44,197	325,031	0.88	Yes	8.00
173	May-2013	31	28,700	118,936	7.50	7.50	1.10	0.63	0.092	325,031	0.88	-77,551	247,480	0.67	Yes	8.00
174	June-2013	30	28,700	115,099	9.76	9.76	2.46	0.81	0.205	247,480	0.67	-107,509	139,971	0.38	Yes	8.00
175	July-2013	31	28,700	118,936	9.19	9.19	3.25	0.77	0.271	139,971	0.38	118,936	258,907	0.70	Yes	8.00
176	Aug-2013	31	28,700	118,936	8.54	8.54	4.14	0.71	0.345	258,907	0.70	-16,116	242,791	0.66	Yes	8.00
177	Sept-2013	30	28,700	115,099	7.21	7.21	5.37	0.60	0.448	242,791	0.66	58,391	301,182	0.82	Yes	8.00
178	Oct-2013	31	28,700	118,936	5.80	5.80	0.28	0.48	0.023	301,182	0.82	-50,616	250,566	0.68	Yes	8.00
179	Nov-2013	30	28,700	115,099	4.07	4.07	0.40	0.34	0.033	250,566	0.68	2,345	252,911	0.69	Yes	8.00
180	Dec-2013	31	28,700	118,936	2.77	2.77	0.15	0.23	0.013	252,911	0.69	38,247	291,158	0.79	Yes	8.00
181	Jan-2014	31	28,700	118,936	4.18	4.18	0.05	0.35	0.004	291,158	0.79	-8,165	282,993	0.77	Yes	8.00
182	Feb-2014	28	28,700	107,426	2.19	2.19	0.25	0.18	0.021	282,993	0.77	47,492	330,485	0.90	Yes	8.00
183	Mar-2014	31	28,700	118,936	5.92	5.92	0.18	0.49	0.015	330,485	0.90	-57,628	272,857	0.74	Yes	8.00

Month	Month	No. Days per month	Gal per day	Monthly Flow (Q) (cf)	Pure Water Pan Evap. (in/month)	Salinity Monthly Evap. (in)	Monthly Precip. (in)	Monthly Evaporation (ft)	Monthly Precipitation (ft)	Starting Volume (ft3)	Starting Depth (ft)	Net Volume Inflow (Q + Precip - Evap) (ft3)	End Volume (ft3)	Ending Depth (ft)	Volume Less than Maximum WS	Max WS
184	Apr-2014	30	28,700	115,099	6.87	6.87	0.68	0.57	0.057	272,857	0.74	-74,391	198,466	0.54	Yes	8.00
185	May-2014	31	28,700	118,936	7.28	7.28	2.15	0.61	0.179	198,466	0.54	-37,689	160,777	0.43	Yes	8.00
186	June-2014	30	28,700	115,099	8.18	8.18	4.49	0.68	0.374	160,777	0.43	2,412	163,189	0.44	Yes	8.00
187	July-2014	31	28,700	118,936	8.65	8.65	4.93	0.72	0.411	163,189	0.44	5,305	168,494	0.46	Yes	8.00
188	Aug-2014	31	28,700	118,936	9.03	9.03	1.71	0.75	0.143	168,494	0.46	118,936	287,430	0.78	Yes	8.00
189	Sept-2014	30	28,700	115,099	6.36	6.36	2.02	0.53	0.168	287,430	0.78	-18,368	269,062	0.73	Yes	8.00
190	Oct-2014	31	28,700	118,936	5.76	5.76	1.59	0.48	0.133	269,062	0.73	-9,211	259,851	0.70	Yes	8.00
191	Nov-2014	30	28,700	115,099	3.98	3.98	0.81	0.33	0.068	259,851	0.70	17,566	277,416	0.75	Yes	8.00
192	Dec-2014	31	28,700	118,936	2.04	2.04	0.23	0.17	0.019	277,416	0.75	63,032	340,448	0.92	Yes	8.00
193	Jan-2015	31	28,700	118,936	2.46	2.46	0.90	0.21	0.075	340,448	0.92	70,522	410,970	1.11	Yes	8.00
194	Feb-2015	28	28,700	107,426	2.86	2.86	0.46	0.24	0.038	410,970	1.11	32,729	443,700	1.20	Yes	8.00
195	Mar-2015	31	28,700	118,936	4.30	4.30	0.32	0.36	0.027	443,700	1.20	-4,788	438,911	1.19	Yes	8.00
196	Apr-2015	30	28,700	115,099	5.82	5.82	6.76	0.49	0.563	438,911	1.19	144,600	583,512	1.58	Yes	8.00
197	May-2015	31	28,700	118,936	5.24	5.24	10.21	0.44	0.851	583,512	1.58	277,626	861,137	2.33	Yes	8.00
198	June-2015	30	28,700	115,099	7.55	7.55	3.68	0.63	0.307	861,137	2.33	-8,497	852,640	2.31	Yes	8.00
199	July-2015	31	28,700	118,936	8.45	8.45	4.95	0.70	0.413	852,640	2.31	7,130	859,770	2.33	Yes	8.00
200	Aug-2015	31	28,700	118,936	7.78	7.78	3.88	0.65	0.323	859,770	2.33	-5,618	854,152	2.31	Yes	8.00
201	Sept-2015	30	28,700	115,099	8.16	8.16	0.87	0.68	0.073	854,152	2.31	-116,084	738,068	2.00	Yes	8.00
202	Oct-2015	31	28,700	118,936	5.14	5.14	3.72	0.43	0.310	738,068	2.00	73,713	811,781	2.20	Yes	8.00
203	Nov-2015	30	28,700	115,099	4.37	4.37	1.85	0.36	0.154	811,781	2.20	34,656	846,436	2.29	Yes	8.00
204	Dec-2015	31	28,700	118,936	3.40	3.40	1.86	0.28	0.155	846,436	2.29	69,568	916,005	2.48	Yes	8.00
205	Jan-2016	31	28,700	118,936	2.62	2.62	0.31	0.22	0.026	916,005	2.48	44,676	960,681	2.60	Yes	8.00
206	Feb-2016	28	28,700	107,426	4.06	4.06	0.27	0.34	0.023	960,681	2.60	-14,412	946,269	2.56	Yes	8.00
207	Mar-2016	31	28,700	118,936	5.94	5.94	0.34	0.50	0.028	946,269	2.56	-60,289	885,980	2.40	Yes	8.00
208	Apr-2016	30	28,700	115,099	7.61	7.61	2.61	0.63	0.218	885,980	2.40	-44,511	841,469	2.28	Yes	8.00
209	May-2016	31	28,700	118,936	5.75	5.75	3.44	0.48	0.287	841,469	2.28	45,023	886,492	2.40	Yes	8.00
210	June-2016	30	28,700	115,099	7.88	7.88	3.87	0.66	0.323	886,492	2.40	-13,148	873,344	2.36	Yes	8.00
211	July-2016	31	28,700	118,936	10.52	10.52	2.23	0.88	0.186	873,344	2.36	-143,712	729,631	1.98	Yes	8.00
212	Aug-2016	31	28,700	118,936	7.99	7.99	5.16	0.67	0.430	729,631	1.98	29,105	758,737	2.05	Yes	8.00
213	Sept-2016	30	28,700	115,099	5.70	5.70	2.18	0.48	0.182	758,737	2.05	3,340	762,076	2.06	Yes	8.00
214	Oct-2016	31	28,700	118,936	6.61	6.61	0.15	0.55	0.013	762,076	2.06	-85,058	677,019	1.83	Yes	8.00
215	Nov-2016	30	28,700	115,099	4.67	4.67	0.30	0.39	0.025	677,019	1.83	-22,701	654,318	1.77	Yes	8.00
216	Dec-2016	31	28,700	118,936	3.20	3.20	0.75	0.27	0.063	654,318	1.77	41,497	695,815	1.88	Yes	8.00
217	Jan-2017	31	28,700	118,936	1.70	1.70	2.73	0.14	0.228	695,815	1.88	151,800	847,615	2.29	Yes	8.00
218	Feb-2017	28	28,700	107,426	3.66	3.66	0.87	0.31	0.073	847,615	2.29	18,217	865,832	2.34	Yes	8.00
219	Mar-2017	31	28,700	118,936	6.53	6.53	2.08	0.54	0.173	865,832	2.34	-23,050	842,782	2.28	Yes	8.00
220	Apr-2017	30	28,700	115,099	5.96	5.96	2.02	0.50	0.168	842,782	2.28	-10,585	832,197	2.25	Yes	8.00
221	May-2017	31	28,700	118,936	6.20	6.20	2.67	0.52	0.223	832,197	2.25	6,331	838,528	2.27	Yes	8.00
222	June-2017	30	28,700	115,099	8.40	8.40	1.92	0.70	0.160	838,528	2.27	-90,494	748,034	2.03	Yes	8.00
223	July-2017	31	28,700	118,936	10.39	10.39	2.97	0.87	0.248	748,034	2.03	-114,763	633,270	1.72	Yes	8.00
224	Aug-2017	31	28,700	118,936	6.13	6.13	4.30	0.51	0.358	633,270	1.72	61,094	694,364	1.88	Yes	8.00
225	Sept-2017	30	28,700	115,099	6.46	6.46	2.93	0.54	0.244	694,364	1.88	3,471	697,835	1.89	Yes	8.00
226	Oct-2017	31	28,700	118,936	5.05	5.05	2.62	0.42	0.218	697,835	1.89	41,911	739,746	2.00	Yes	8.00
227	Nov-2017	30	28,700	115,099	4.60	4.60	0.08	0.38	0.007	739,746	2.00	-27,971	711,775	1.93	Yes	8.00
228	Dec-2017	31	28,700	118,936	3.89	3.89	0.01	0.32	0.001	711,775	1.93	-3,818	707,957	1.92	Yes	8.00
229	Jan-2018	31	28,700	118,936	4.10	4.10	0.00	0.34	0.000	707,957	1.92	-10,687	697,270	1.89	Yes	8.00
230	Feb-2018	28	28,700	107,426	4.82	4.82	0.28	0.40	0.023	697,270	1.89	-35,904	661,366	1.79	Yes	8.00
231	Mar-2018	31	28,700	118,936	6.58	6.58	0.36	0.55	0.030	661,366	1.79	-76,319	585,047	1.59	Yes	8.00
232	Apr-2018	30	28,700	115,099	5.80	5.80	0.98	0.48	0.082	585,047	1.59	-35,884	549,163	1.49	Yes	8.00
233	May-2018	31	28,700	118,936	7.99	7.99	2.33	0.67	0.194	549,163	1.49	-57,644	491,519	1.33	Yes	8.00
234	June-2018	30	28,700	115,099	9.59	9.59	4.25	0.80	0.354	491,519	1.33	-50,982	440,537	1.19	Yes	8.00
235	July-2018	31	28,700	118,936	9.75	9.75	1.80	0.81	0.150	440,537	1.19	-126,197	314,340	0.85	Yes	8.00
236	Aug-2018	31	28,700	118,936	8.76	8.76	3.16	0.73	0.263	314,340	0.85	-53,156	261,184	0.71	Yes	8.00
237	Sept-2018	30	28,700	115,099	5.88	5.88	2.28	0.49	0.190	261,184	0.71	4,389	265,573	0.72	Yes	8.00
238	Oct-2018	31	28,700	118,936	3.97	3.97	4.93	0.33	0.411	265,573	0.72	148,736	414,309	1.12	Yes	8.00
239	Nov-2018	30	28,700	115,099	3.56	3.56	0.27	0.30	0.023	414,309	1.12	12,874	427,183	1.16	Yes	8.00
240	Dec-2018	31	28,700	118,936	2.92	2.92	0.64	0.24	0.053	427,183	1.16	47,872	475,055	1.29	Yes	8.00
241	Jan-2019	31	28,700	118,936	2.43	2.43	0.35	0.20	0.029	475,055	1.29	53,889	528,945	1.43	Yes	8.00
242	Feb-2019	28	28,700	107,426	3.95	3.95	0.20	0.33	0.017	528,945	1.43	-9,845	519,099	1.41	Yes	8.00
243	Mar-2019	31	28,700	118,936	4.94	4.94	2.26	0.41	0.188	519,099	1.41	34,986	554,086	1.50	Yes	8.00
244	Apr-2019	30	28,700	115,099	4.56	4.56	1.67	0.38	0.139	554,086	1.50	24,421	578,507	1.57	Yes	8.00
245	May-2019	31	28,700	118,936	4.69	4.69	5.31	0.39	0.443	578,507	1.57	138,561	717,067	1.94	Yes	8.00
246	June-2019	30	28,700	115,099	7.23	7.23	3.46	0.60	0.288	717,067	1.94	-4,231	712,836	1.93	Yes	8.00
247	July-2019	31	28,700	118,936	10.32	10.32	1.56	0.86	0.130	712,836	1.93	-155,597	557,240	1.51	Yes	8.00
248	Aug-2019	31	28,700	118,936	9.54	9.54	2.79	0.80	0.233	557,240	1.51	-91,299	465,941	1.26	Yes	8.00
249	Sept-2019	30	28,700	115,099	7.68	7.68	1.27	0.64	0.106	465,941	1.26	-83,499	382,442	1.04	Yes	8.00
250	Oct-2019	31	28,700	118,936	5.55	5.55	3.79	0.46	0.316	382,442	1.04	64,184	446,626	1.21	Yes	8.00
251	Nov-2019	30	28,700	115,099	2.67	2.67	0.85	0.22	0.071	446,626	1.21	58,265	504,891	1.37	Yes	8.00
252	Dec-2019	31	28,700	118,936	3.23	3.23	1.31	0.27	0.109	504,891	1.37	58,750	563,641	1.53	Yes	8.00
253	Jan-2020	31	28,700	118,936	2.33	2.33	0.69	0.19	0.058	563,641	1.53	67,307	630,948	1.71	Yes	8.00
254	Feb-2020	28	28,700	107,426	2.17	2.17	0.87	0.18	0.073	630,948	1.71	66,297	697,245	1.89	Yes	8.00
255	Mar-2020	31	28,700	118,936	4.63	4.63	2.37	0.39	0.198	697,245	1.89	47,266	744,511	2.02	Yes	8.00
256	Apr-2020	30	28,700	115,099	4.48	4.48	0.44	0.37	0.037	744,511	2.02	-12,959	731,553	1.98	Yes	8.00

Month	Month	No. Days per month	Gal per day	Monthly Flow (Q) (cf)	Pure Water Pan Evap. (in/month)	Salinity Monthly Evap. (in)	Monthly Precip. (in)	Monthly Evaporation (ft)	Monthly Precipitation (ft)	Starting Volume (ft3)	Starting Depth (ft)	Net Volume Inflow (Q + Precip - Evap) (ft3)	End Volume (ft3)	Ending Depth (ft)	Volume Less than Maximum WS	Max WS
257	May-2020	31	28,700	118,936	6.75	6.75	1.57	0.56	0.131	731,553	1.98	-44,715	686,838	1.86	Yes	8.00
258	June-2020	30	28,700	115,099	10.80	10.80	1.85	0.90	0.154	686,838	1.86	-164,788	522,050	1.42	Yes	8.00
259	July-2020	31	28,700	118,936	11.00	11.00	1.97	0.92	0.164	522,050	1.42	-160,435	361,615	0.98	Yes	8.00
260	Aug-2020	31	28,700	118,936	10.78	10.78	1.63	0.90	0.136	361,615	0.98	-161,100	200,515	0.54	Yes	8.00
261	Sept-2020	30	28,700	115,099	7.01	7.01	1.33	0.58	0.111	200,515	0.54	-58,108	142,407	0.38	Yes	8.00
262	Oct-2020	31	28,700	118,936	6.04	6.04	1.77	0.50	0.148	142,407	0.38	-11,149	131,258	0.35	Yes	8.00
263	Nov-2020	30	28,700	115,099	4.81	4.81	0.58	0.40	0.048	131,258	0.35	115,099	246,357	0.67	Yes	8.00
264	Dec-2020	31	28,700	118,936	2.37	2.37	0.65	0.20	0.054	246,357	0.67	65,901	312,258	0.85	Yes	8.00
265	Jan-2021	31	28,700	118,936	2.33	2.33	0.61	0.19	0.051	312,258	0.85	65,671	377,930	1.02	Yes	8.00
266	Feb-2021	28	28,700	107,426	2.29	2.29	0.41	0.19	0.034	377,930	1.02	48,983	426,913	1.16	Yes	8.00
267	Mar-2021	31	28,700	118,936	5.03	5.03	2.69	0.42	0.224	426,913	1.16	46,020	472,933	1.28	Yes	8.00
268	Apr-2021	30	28,700	115,099	6.62	6.62	0.21	0.55	0.018	472,933	1.28	-83,594	389,339	1.06	Yes	8.00
269	May-2021	31	28,700	118,936	5.72	5.72	4.90	0.48	0.408	389,339	1.06	93,366	482,705	1.31	Yes	8.00
270	June-2021	30	28,700	115,099	8.59	8.59	3.35	0.72	0.279	482,705	1.31	-47,833	434,872	1.18	Yes	8.00
271	July-2021	31	28,700	118,936	7.45	7.45	3.94	0.62	0.328	434,872	1.18	9,770	444,642	1.21	Yes	8.00
272	Aug-2021	31	28,700	118,936	9.92	9.92	2.45	0.83	0.204	444,642	1.21	-111,728	332,914	0.90	Yes	8.00
273	Sept-2021	30	28,700	115,099	8.96	8.96	0.45	0.75	0.038	332,914	0.90	-145,224	187,690	0.51	Yes	8.00
274	Oct-2021	31	28,700	118,936	7.64	7.64	1.46	0.64	0.122	187,690	0.51	118,936	306,626	0.83	Yes	8.00
275	Nov-2021	30	28,700	115,099	4.95	4.95	0.05	0.41	0.004	306,626	0.83	-35,626	271,000	0.73	Yes	8.00
276	Dec-2021	31	28,700	118,936	6.71	6.71	0.05	0.56	0.004	271,000	0.73	-84,697	186,303	0.50	Yes	8.00
277	Jan-2022	31	28,700	118,936	2.04	2.04	0.12	0.17	0.010	186,303	0.50	59,990	246,293	0.67	Yes	8.00
278	Feb-2022	28	28,700	107,426	2.35	2.35	0.43	0.20	0.036	246,293	0.67	48,238	294,531	0.80	Yes	8.00
279	Mar-2022	31	28,700	118,936	6.97	6.97	1.21	0.58	0.101	294,531	0.80	-57,817	236,714	0.64	Yes	8.00
280	Apr-2022	30	28,700	115,099	8.65	8.65	0.25	0.72	0.021	236,714	0.64	115,099	351,813	0.95	Yes	8.00
281	May-2022	31	28,700	118,936	9.17	9.17	3.23	0.76	0.269	351,813	0.95	-63,912	287,901	0.78	Yes	8.00
282	June-2022	30	28,700	115,099	10.54	10.54	4.77	0.88	0.398	287,901	0.78	-61,833	226,068	0.61	Yes	8.00
283	July-2022	31	28,700	118,936	11.61	11.61	1.68	0.97	0.140	226,068	0.61	118,936	345,004	0.94	Yes	8.00
284	Aug-2022	31	28,700	118,936	8.94	8.94	3.16	0.75	0.263	345,004	0.94	-58,987	286,018	0.78	Yes	8.00
285	Sept-2022	30	28,700	115,099	8.42	8.42	0.34	0.70	0.028	286,018	0.78	-131,533	154,485	0.42	Yes	8.00
286	Oct-2022	31	28,700	118,936	6.14	6.14	1.97	0.51	0.164	154,485	0.42	-8,256	146,229	0.39	Yes	8.00
287	Nov-2022	30	28,700	115,099	3.46	3.46	0.76	0.29	0.063	146,229	0.39	32,565	178,794	0.48	Yes	8.00
288	Dec-2022	31	28,700	118,936	3.61	3.61	0.47	0.30	0.039	178,794	0.48	22,836	201,630	0.55	Yes	8.00
289	Jan-2023	31	28,700	118,936	2.75	2.75	1.25	0.23	0.104	201,630	0.55	72,795	274,426	0.74	Yes	8.00
290	Feb-2023	28	28,700	107,426	2.77	2.77	0.42	0.23	0.035	274,426	0.74	34,931	309,356	0.84	Yes	8.00
291	Mar-2023	31	28,700	118,936	4.48	4.48	0.16	0.37	0.013	309,356	0.84	-14,140	295,216	0.80	Yes	8.00
292	Apr-2023	30	28,700	115,099	4.42	4.42	1.42	0.37	0.118	295,216	0.80	22,530	317,746	0.86	Yes	8.00
293	May-2023	31	28,700	118,936	5.61	5.61	5.93	0.47	0.494	317,746	0.86	128,888	446,634	1.21	Yes	8.00
294	June-2023	30	28,700	115,099	6.16	6.16	4.49	0.51	0.374	446,634	1.21	62,924	509,558	1.38	Yes	8.00
295	July-2023	31	28,700	118,936	9.44	9.44	3.65	0.79	0.304	509,558	1.38	-61,184	448,374	1.22	Yes	8.00
296	Aug-2023	31	28,700	118,936	9.65	9.65	1.41	0.80	0.118	448,374	1.22	-135,200	313,175	0.85	Yes	8.00
297	Sept-2023	30	28,700	115,099	8.40	8.40	1.88	0.70	0.157	313,175	0.85	-84,879	228,295	0.62	Yes	8.00
298	Oct-2023	31	28,700	118,936	5.60	5.60	0.68	0.47	0.057	228,295	0.62	-31,641	196,655	0.53	Yes	8.00
299	Nov-2023	30	28,700	115,099	3.26	3.26	0.32	0.27	0.027	196,655	0.53	24,968	221,623	0.60	Yes	8.00
300	Dec-2023	31	28,700	118,936	2.27	2.27	4.08	0.19	0.340	221,623	0.60	175,055	396,678	1.08	Yes	8.00
301	Jan-2024	31	28,700	118,936	1.94	1.94	1.08	0.16	0.090	396,678	1.08	92,112	488,790	1.33	Yes	8.00
302	Feb-2024	28	28,700	107,426	3.31	3.31	0.59	0.28	0.049	488,790	1.33	22,386	511,175	1.39	Yes	8.00
303	Mar-2024	31	28,700	118,936	6.17	6.17	0.32	0.51	0.027	511,175	1.39	-63,094	448,082	1.22	Yes	8.00
304	Apr-2024	30	28,700	115,099	7.85	7.85	1.44	0.65	0.120	448,082	1.22	-83,309	364,773	0.99	Yes	8.00
305	May-2024	31	28,700	118,936	6.81	6.81	2.20	0.57	0.183	364,773	0.99	-23,484	341,289	0.93	Yes	8.00
306	June-2024	30	28,700	115,099	8.52	8.52	2.35	0.71	0.196	341,289	0.93	-74,646	266,643	0.72	Yes	8.00
307	July-2024	31	28,700	118,936	10.48	10.48	2.70	0.87	0.225	266,643	0.72	-118,367	148,277	0.40	Yes	8.00
308	Aug-2024	31	28,700	118,936	9.03	9.03	2.04	0.75	0.170	148,277	0.40	118,936	267,212	0.72	Yes	8.00
309	Sept-2024	30	28,700	115,099	7.77	7.77	1.95	0.65	0.163	267,212	0.72	-63,108	204,105	0.55	Yes	8.00

Evaporation Lagoon Design Calculation - 50-year AVERAGE

IP Pumpkin - Gray County, TX

DO NOT CHANGE GREEN VALUES, SEE 50YRAVE TAB

Bottom width of lagoon (Wo)	315	ft
Bottom Length of lagoon (Lo)	1160	ft
Lagoon width at initial water depth	327	ft
Lagoon Length at initial water depth	1172	
Surface Area at Top of lagoon Dike (AT)	457,500	ft^2
Surface Area at bottom of lagoon (Ao)	365,400	ft^2
Water surface area at max. water depth (A2)	438,504	ft^2
Water surface area at the initial water depth	383,244	ft^2
Interior Dike Slope	3	to 1
Minimum Water Depth	0	ft
Maximum Water Depth	8	ft
Lagoon Freeboard	2	ft
Total Depth of lagoon	10	ft
Initial depth of water	2	ft
Initial Lagoon Volume	733,093	ft^3

Volume = H/6 {A_o+4*A1+Ai}

Ao ={Lo*Wo)

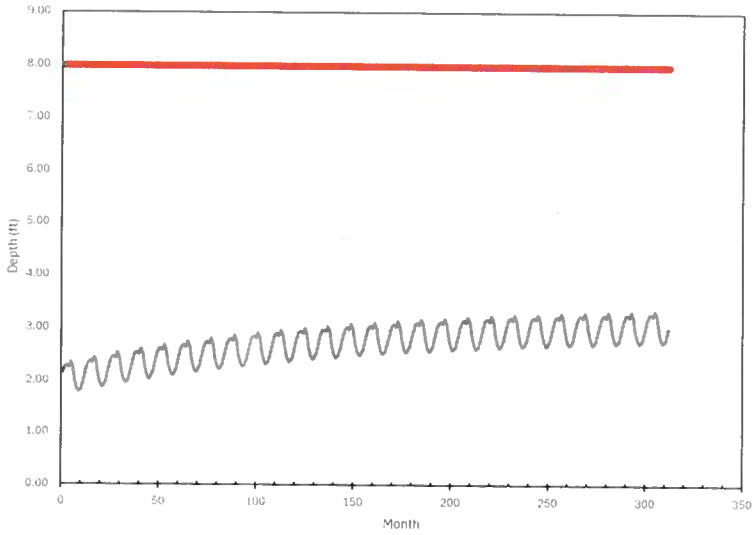
A1= {Lo+(slope *H)}*{Wo+(slope *H)}

Net Volume Change = Q +Vprec-Vevap

A_T = Surface area at top of the lagoon
Ai = Surface area at the water depth
Ve = Monthly Evaporation volume
Vp = Monthly Precipitation volume
A1 = Water Surface Area at Average Water Depth
Ao = Water Surface Area at Bottom of lagoon
H = Lagoon Water Depth

	Bottom	Max WS	Top Berm	
Surface Area	365,400	438,504	457,500	ft^2
	8.39	10.07	10.50	acre
Length	315	363	375	ft
Width	1,160	1,208	1,220	ft
Lagoon Volume	0	3,020,908	3,807,795	ft^3
Lagoon Volume	0	22,597,902	28,484,211	gal

Production	28,700	gal/day
Water Usage	365	Days/year
Flow	10,475,500	Gal/Yr
Salinity Evap. Correction	1.00000	



Equations Reference:	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13.00*	*14*	*15*
Month	**Month**	**No. Days per month**	**Gal per day**	**Monthly Flow (Q) (cf)**	**Pure Water Pan Evap. (in/month)**	**Salinity Monthly Evap. (in)**	**Monthly Precip. (in)**	**Monthly Evaporation (ft)**	**Monthly Precipitation (ft)**	**Starting Volume (ft3)**	**Starting Depth (ft)**	**Net Volume Inflow (Q + Precip - Evap) (ft3)**	**End Volume (ft3)**	**Ending Depth (ft)**	**Volume Less than Maximum WS**	**Max WS**
1	Jan-1999	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	733,093	1.99	60,132	793,225	2.15	Yes	8.00
2	Feb-1999	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	793,225	2.15	41,970	835,195	2.26	Yes	8.00
3	Mar-1999	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	835,195	2.26	9,995	845,189	2.29	Yes	8.00
4	Apr-1999	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	845,189	2.29	-14,600	830,589	2.25	Yes	8.00
5	May-1999	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	830,589	2.25	41,588	872,177	2.36	Yes	8.00
6	June-1999	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	872,177	2.36	-34,801	837,376	2.27	Yes	8.00
7	July-1999	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	837,376	2.27	-98,784	738,592	2.00	Yes	8.00
8	Aug-1999	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	738,592	2.00	-55,849	682,743	1.85	Yes	8.00
9	Sept-1999	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	682,743	1.85	-24,127	658,617	1.78	Yes	8.00
10	Oct-1999	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	658,617	1.78	13,596	672,213	1.82	Yes	8.00
11	Nov-1999	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	672,213	1.82	35,868	708,081	1.92	Yes	8.00
12	Dec-1999	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	708,081	1.92	60,496	768,577	2.08	Yes	8.00
13	Jan-2000	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	768,577	2.08	60,007	828,584	2.24	Yes	8.00
14	Feb-2000	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	828,584	2.24	41,832	870,416	2.35	Yes	8.00
15	Mar-2000	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	870,416	2.35	9,764	880,180	2.38	Yes	8.00
16	Apr-2000	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	880,180	2.38	-14,875	865,306	2.34	Yes	8.00
17	May-2000	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	865,306	2.34	41,425	906,731	2.45	Yes	8.00
18	June-2000	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	906,731	2.45	-35,118	871,613	2.36	Yes	8.00
19	July-2000	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	871,613	2.36	-99,246	772,366	2.09	Yes	8.00
20	Aug-2000	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	772,366	2.09	-56,221	716,145	1.94	Yes	8.00
21	Sept-2000	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	716,145	1.94	-24,423	691,722	1.87	Yes	8.00
22	Oct-2000	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	691,722	1.87	13,372	705,094	1.91	Yes	8.00
23	Nov-2000	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	705,094	1.91	35,700	740,794	2.01	Yes	8.00
24	Dec-2000	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	740,794	2.01	60,372	801,166	2.17	Yes	8.00
25	Jan-2001	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	801,166	2.17	59,882	861,049	2.33	Yes	8.00
26	Feb-2001	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	861,049	2.33	41,693	902,742	2.44	Yes	8.00
27	Mar-2001	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	902,742	2.44	9,534	912,276	2.47	Yes	8.00
28	Apr-2001	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	912,276	2.47	-15,149	897,127	2.43	Yes	8.00
29	May-2001	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	897,127	2.43	41,262	938,388	2.54	Yes	8.00
30	June-2001	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	938,388	2.54	-35,435	902,953	2.44	Yes	8.00
31	July-2001	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	902,953	2.44	-99,657	803,296	2.17	Yes	8.00
32	Aug-2001	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	803,296	2.17	-56,552	746,744	2.02	Yes	8.00
33	Sept-2001	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	746,744	2.02	-24,687	722,057	1.96	Yes	8.00
34	Oct-2001	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	722,057	1.96	13,147	735,204	1.99	Yes	8.00
35	Nov-2001	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	735,204	1.99	35,550	770,754	2.09	Yes	8.00
36	Dec-2001	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	770,754	2.09	60,262	831,016	2.25	Yes	8.00
37	Jan-2002	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	831,016	2.25	59,772	890,788	2.41	Yes	8.00
38	Feb-2002	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	890,788	2.41	41,570	932,358	2.52	Yes	8.00
39	Mar-2002	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	932,358	2.52	9,329	941,687	2.55	Yes	8.00

Month	Month	No. Days per month	Gal per day	Monthly Flow (Q) (cf)	Pure Water Pan Evap. (in/month)	Salinity Monthly Evap. (in)	Monthly Precip. (in)	Monthly Evaporation (ft)	Monthly Precipitation (ft)	Starting Volume (ft3)	Starting Depth (ft)	Net Volume Inflow (Q + Precip - Evap) (ft3)	End Volume (ft3)	Ending Depth (ft)	Volume Less than Maximum WS	Max WS
40	Apr-2002	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	941,687	2.55	-15,393	926,293	2.50	Yes	8.00
41	May-2002	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	926,293	2.50	41,134	967,428	2.61	Yes	8.00
42	June-2002	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	967,428	2.61	-35,682	931,746	2.52	Yes	8.00
43	July-2002	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	931,746	2.52	-100,069	831,677	2.25	Yes	8.00
44	Aug-2002	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	831,677	2.25	-56,883	774,794	2.10	Yes	8.00
45	Sept-2002	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	774,794	2.10	-24,951	749,843	2.03	Yes	8.00
46	Oct-2002	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	749,843	2.03	12,972	762,815	2.07	Yes	8.00
47	Nov-2002	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	762,815	2.07	35,400	798,216	2.16	Yes	8.00
48	Dec-2002	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	798,216	2.16	60,166	858,381	2.32	Yes	8.00
49	Jan-2003	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	858,381	2.32	59,674	918,056	2.48	Yes	8.00
50	Feb-2003	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	918,056	2.48	41,462	959,518	2.59	Yes	8.00
51	Mar-2003	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	959,518	2.59	9,150	968,667	2.62	Yes	8.00
52	Apr-2003	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	968,667	2.62	-15,607	953,060	2.58	Yes	8.00
53	May-2003	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	953,060	2.58	40,989	994,049	2.69	Yes	8.00
54	June-2003	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	994,049	2.69	-35,964	958,085	2.59	Yes	8.00
55	July-2003	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	958,085	2.59	-100,429	857,656	2.32	Yes	8.00
56	Aug-2003	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	857,656	2.32	-57,173	800,483	2.17	Yes	8.00
57	Sept-2003	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	800,483	2.17	-25,182	775,301	2.10	Yes	8.00
58	Oct-2003	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	775,301	2.10	12,798	788,099	2.13	Yes	8.00
59	Nov-2003	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	788,099	2.13	35,288	823,387	2.23	Yes	8.00
60	Dec-2003	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	823,387	2.23	60,069	883,456	2.39	Yes	8.00
61	Jan-2004	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	883,456	2.39	59,577	943,033	2.55	Yes	8.00
62	Feb-2004	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	943,033	2.55	41,354	984,387	2.66	Yes	8.00
63	Mar-2004	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	984,387	2.66	8,970	993,357	2.68	Yes	8.00
64	Apr-2004	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	993,357	2.68	-15,790	977,567	2.64	Yes	8.00
65	May-2004	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	977,567	2.64	40,880	1,018,446	2.75	Yes	8.00
66	June-2004	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,018,446	2.75	-36,176	982,270	2.65	Yes	8.00
67	July-2004	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	982,270	2.65	-100,738	881,533	2.38	Yes	8.00
68	Aug-2004	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	881,533	2.38	-57,422	824,111	2.23	Yes	8.00
69	Sept-2004	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	824,111	2.23	-25,380	798,731	2.16	Yes	8.00
70	Oct-2004	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	798,731	2.16	12,648	811,378	2.20	Yes	8.00
71	Nov-2004	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	811,378	2.20	35,157	846,535	2.29	Yes	8.00
72	Dec-2004	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	846,535	2.29	59,986	906,521	2.45	Yes	8.00
73	Jan-2005	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	906,521	2.45	59,494	966,015	2.61	Yes	8.00
74	Feb-2005	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	966,015	2.61	41,262	1,007,277	2.72	Yes	8.00
75	Mar-2005	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,007,277	2.72	8,816	1,016,093	2.74	Yes	8.00
76	Apr-2005	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,016,093	2.74	-15,974	1,000,119	2.70	Yes	8.00
77	May-2005	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,000,119	2.70	40,771	1,040,890	2.81	Yes	8.00
78	June-2005	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,040,890	2.81	-36,388	1,004,502	2.71	Yes	8.00
79	July-2005	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,004,502	2.71	-101,047	903,455	2.44	Yes	8.00
80	Aug-2005	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	903,455	2.44	-57,670	845,784	2.29	Yes	8.00
81	Sept-2005	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	845,784	2.29	-25,579	820,206	2.22	Yes	8.00
82	Oct-2005	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	820,206	2.22	12,498	832,704	2.25	Yes	8.00
83	Nov-2005	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	832,704	2.25	35,063	867,766	2.35	Yes	8.00
84	Dec-2005	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	867,766	2.35	59,903	927,670	2.51	Yes	8.00
85	Jan-2006	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	927,670	2.51	59,411	987,080	2.67	Yes	8.00
86	Feb-2006	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	987,080	2.67	41,169	1,028,249	2.78	Yes	8.00
87	Mar-2006	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,028,249	2.78	8,662	1,036,911	2.80	Yes	8.00
88	Apr-2006	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,036,911	2.80	-16,157	1,020,754	2.76	Yes	8.00
89	May-2006	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,020,754	2.76	40,661	1,061,415	2.87	Yes	8.00
90	June-2006	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,061,415	2.87	-36,600	1,024,815	2.77	Yes	8.00
91	July-2006	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,024,815	2.77	-101,356	923,459	2.50	Yes	8.00
92	Aug-2006	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	923,459	2.50	-57,919	865,540	2.34	Yes	8.00
93	Sept-2006	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	865,540	2.34	-25,744	839,796	2.27	Yes	8.00
94	Oct-2006	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	839,796	2.27	12,373	852,169	2.31	Yes	8.00
95	Nov-2006	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	852,169	2.31	34,950	887,119	2.40	Yes	8.00
96	Dec-2006	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	887,119	2.40	59,834	946,953	2.56	Yes	8.00
97	Jan-2007	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	946,953	2.56	59,341	1,006,295	2.72	Yes	8.00
98	Feb-2007	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,006,295	2.72	41,092	1,047,386	2.83	Yes	8.00
99	Mar-2007	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,047,386	2.83	8,533	1,055,920	2.85	Yes	8.00
100	Apr-2007	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,055,920	2.85	-16,310	1,039,610	2.81	Yes	8.00
101	May-2007	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,039,610	2.81	40,570	1,080,180	2.92	Yes	8.00
102	June-2007	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,080,180	2.92	-36,777	1,043,403	2.82	Yes	8.00
103	July-2007	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,043,403	2.82	-101,614	941,789	2.55	Yes	8.00
104	Aug-2007	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	941,789	2.55	-58,127	883,663	2.39	Yes	8.00
105	Sept-2007	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	883,663	2.39	-25,909	857,753	2.32	Yes	8.00
106	Oct-2007	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	857,753	2.32	12,248	870,001	2.35	Yes	8.00
107	Nov-2007	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	870,001	2.35	34,875	904,876	2.45	Yes	8.00
108	Dec-2007	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	904,876	2.45	59,765	964,641	2.61	Yes	8.00
109	Jan-2008	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	964,641	2.61	59,272	1,023,913	2.77	Yes	8.00
110	Feb-2008	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,023,913	2.77	41,015	1,064,927	2.88	Yes	8.00
111	Mar-2008	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,064,927	2.88	8,405	1,073,332	2.90	Yes	8.00
112	Apr-2008	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,073,332	2.90	-16,463	1,056,869	2.85	Yes	8.00
113	May-2008	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,056,869	2.85	40,497	1,097,367	2.96	Yes	8.00

Month	Month	No. Days per month	Gal per day	Monthly Flow (Q) (cf)	Pure Water Pan Evap. (in/month)	Salinity Monthly Evap. (in)	Monthly Precip. (in)	Monthly Evaporation (ft)	Monthly Precipitation (ft)	Starting Volume (ft3)	Starting Depth (ft)	Net Volume Inflow (Q + Precip - Evap) (ft3)	End Volume (ft3)	Ending Depth (ft)	Volume Less than Maximum WS	Max WS
114	June-2008	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,097,367	2.96	-36,918	1,060,448	2.86	Yes	8.00
115	July-2008	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,060,448	2.86	-101,820	958,628	2.59	Yes	8.00
116	Aug-2008	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	958,628	2.59	-58,293	900,336	2.43	Yes	8.00
117	Sept-2008	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	900,336	2.43	-26,042	874,294	2.36	Yes	8.00
118	Oct-2008	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	874,294	2.36	12,148	886,441	2.40	Yes	8.00
119	Nov-2008	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	886,441	2.40	34,781	921,222	2.49	Yes	8.00
120	Dec-2008	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	921,222	2.49	59,710	980,932	2.65	Yes	8.00
121	Jan-2009	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	980,932	2.65	59,216	1,040,148	2.81	Yes	8.00
122	Feb-2009	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,040,148	2.81	40,953	1,081,101	2.92	Yes	8.00
123	Mar-2009	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,081,101	2.92	8,302	1,089,403	2.94	Yes	8.00
124	Apr-2009	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,089,403	2.94	-16,586	1,072,818	2.90	Yes	8.00
125	May-2009	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,072,818	2.90	40,406	1,113,224	3.00	Yes	8.00
126	June-2009	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,113,224	3.00	-37,060	1,076,164	2.91	Yes	8.00
127	July-2009	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,076,164	2.91	-102,078	974,086	2.63	Yes	8.00
128	Aug-2009	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	974,086	2.63	-58,459	915,627	2.48	Yes	8.00
129	Sept-2009	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	915,627	2.48	-26,207	889,420	2.41	Yes	8.00
130	Oct-2009	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	889,420	2.41	12,022	901,442	2.44	Yes	8.00
131	Nov-2009	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	901,442	2.44	34,706	936,148	2.53	Yes	8.00
132	Dec-2009	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	936,148	2.53	59,654	995,803	2.69	Yes	8.00
133	Jan-2010	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	995,803	2.69	59,160	1,054,963	2.85	Yes	8.00
134	Feb-2010	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,054,963	2.85	40,891	1,095,854	2.96	Yes	8.00
135	Mar-2010	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,095,854	2.96	8,199	1,104,054	2.98	Yes	8.00
136	Apr-2010	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,104,054	2.98	-16,708	1,087,345	2.94	Yes	8.00
137	May-2010	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,087,345	2.94	40,333	1,127,679	3.04	Yes	8.00
138	June-2010	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,127,679	3.04	-37,201	1,090,477	2.94	Yes	8.00
139	July-2010	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,090,477	2.94	-102,233	988,244	2.67	Yes	8.00
140	Aug-2010	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	988,244	2.67	-58,625	929,619	2.51	Yes	8.00
141	Sept-2010	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	929,619	2.51	-26,306	903,313	2.44	Yes	8.00
142	Oct-2010	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	903,313	2.44	11,947	915,260	2.47	Yes	8.00
143	Nov-2010	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	915,260	2.47	34,649	949,910	2.57	Yes	8.00
144	Dec-2010	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	949,910	2.57	59,599	1,009,509	2.73	Yes	8.00
145	Jan-2011	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	1,009,509	2.73	59,105	1,068,613	2.89	Yes	8.00
146	Feb-2011	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,068,613	2.89	40,829	1,109,443	2.99	Yes	8.00
147	Mar-2011	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,109,443	2.99	8,122	1,117,565	3.02	Yes	8.00
148	Apr-2011	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,117,565	3.02	-16,831	1,100,734	2.97	Yes	8.00
149	May-2011	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,100,734	2.97	40,278	1,141,013	3.08	Yes	8.00
150	June-2011	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,141,013	3.08	-37,343	1,103,670	2.98	Yes	8.00
151	July-2011	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,103,670	2.98	-102,439	1,001,230	2.70	Yes	8.00
152	Aug-2011	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	1,001,230	2.70	-58,750	942,481	2.55	Yes	8.00
153	Sept-2011	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	942,481	2.55	-26,439	916,042	2.48	Yes	8.00
154	Oct-2011	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	916,042	2.48	11,847	927,889	2.51	Yes	8.00
155	Nov-2011	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	927,889	2.51	34,574	962,463	2.60	Yes	8.00
156	Dec-2011	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	962,463	2.60	59,558	1,022,021	2.76	Yes	8.00
157	Jan-2012	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	1,022,021	2.76	59,063	1,081,084	2.92	Yes	8.00
158	Feb-2012	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,081,084	2.92	40,783	1,121,867	3.03	Yes	8.00
159	Mar-2012	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,121,867	3.03	8,019	1,129,886	3.05	Yes	8.00
160	Apr-2012	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,129,886	3.05	-16,923	1,112,963	3.00	Yes	8.00
161	May-2012	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,112,963	3.00	40,224	1,153,187	3.11	Yes	8.00
162	June-2012	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,153,187	3.11	-37,449	1,115,738	3.01	Yes	8.00
163	July-2012	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,115,738	3.01	-102,594	1,013,143	2.74	Yes	8.00
164	Aug-2012	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	1,013,143	2.74	-58,916	954,228	2.58	Yes	8.00
165	Sept-2012	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	954,228	2.58	-26,538	927,689	2.51	Yes	8.00
166	Oct-2012	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	927,689	2.51	11,772	939,461	2.54	Yes	8.00
167	Nov-2012	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	939,461	2.54	34,518	973,979	2.63	Yes	8.00
168	Dec-2012	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	973,979	2.63	59,516	1,033,495	2.79	Yes	8.00
169	Jan-2013	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	1,033,495	2.79	59,021	1,092,516	2.95	Yes	8.00
170	Feb-2013	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,092,516	2.95	40,737	1,133,253	3.06	Yes	8.00
171	Mar-2013	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,133,253	3.06	7,942	1,141,195	3.08	Yes	8.00
172	Apr-2013	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,141,195	3.08	-17,015	1,124,180	3.03	Yes	8.00
173	May-2013	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,124,180	3.03	40,169	1,164,349	3.14	Yes	8.00
174	June-2013	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,164,349	3.14	-37,555	1,126,794	3.04	Yes	8.00
175	July-2013	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,126,794	3.04	-102,749	1,024,044	2.77	Yes	8.00
176	Aug-2013	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	1,024,044	2.77	-59,040	965,004	2.61	Yes	8.00
177	Sept-2013	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	965,004	2.61	-26,638	938,366	2.54	Yes	8.00
178	Oct-2013	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	938,366	2.54	11,697	950,063	2.57	Yes	8.00
179	Nov-2013	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	950,063	2.57	34,461	984,524	2.66	Yes	8.00
180	Dec-2013	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	984,524	2.66	59,475	1,043,999	2.82	Yes	8.00
181	Jan-2014	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	1,043,999	2.82	58,979	1,102,978	2.98	Yes	8.00
182	Feb-2014	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,102,978	2.98	40,690	1,143,668	3.09	Yes	8.00
183	Mar-2014	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,143,668	3.09	7,865	1,151,533	3.11	Yes	8.00
184	Apr-2014	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,151,533	3.11	-17,107	1,134,426	3.06	Yes	8.00
185	May-2014	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,134,426	3.06	40,114	1,174,540	3.17	Yes	8.00
186	June-2014	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,174,540	3.17	-37,662	1,136,879	3.07	Yes	8.00
187	July-2014	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,136,879	3.07	-102,904	1,033,975	2.79	Yes	8.00

Month	Month	No. Days per month	Gal per day	Monthly Flow (Q) (cf)	Pure Water Pan Evap. (in/month)	Salinity Monthly Evap. (in)	Monthly Precip. (in)	Monthly Evaporation (ft)	Monthly Precipitation (ft)	Starting Volume (ft3)	Starting Depth (ft)	Net Volume Inflow (Q + Precip - Evap) (ft3)	End Volume (ft3)	Ending Depth (ft)	Volume Less than Maximum WS	Max WS
188	Aug-2014	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	1,033,975	2.79	-59,124	974,851	2.63	Yes	8.00
189	Sept-2014	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	974,851	2.63	-26,704	948,147	2.56	Yes	8.00
190	Oct-2014	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	948,147	2.56	11,647	959,793	2.59	Yes	8.00
191	Nov-2014	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	959,793	2.59	34,424	994,217	2.69	Yes	8.00
192	Dec-2014	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	994,217	2.69	59,433	1,053,650	2.85	Yes	8.00
193	Jan-2015	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	1,053,650	2.85	58,938	1,112,588	3.00	Yes	8.00
194	Feb-2015	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,112,588	3.00	40,659	1,153,247	3.11	Yes	8.00
195	Mar-2015	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,153,247	3.11	7,813	1,161,060	3.13	Yes	8.00
196	Apr-2015	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,161,060	3.13	-17,168	1,143,892	3.09	Yes	8.00
197	May-2015	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,143,892	3.09	40,059	1,183,952	3.19	Yes	8.00
198	June-2015	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,183,952	3.19	-37,733	1,146,219	3.09	Yes	8.00
199	July-2015	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,146,219	3.09	-103,008	1,043,211	2.82	Yes	8.00
200	Aug-2015	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	1,043,211	2.82	-59,248	983,963	2.66	Yes	8.00
201	Sept-2015	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	983,963	2.66	-26,803	957,160	2.59	Yes	8.00
202	Oct-2015	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	957,160	2.59	11,571	968,731	2.62	Yes	8.00
203	Nov-2015	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	968,731	2.62	34,367	1,003,098	2.71	Yes	8.00
204	Dec-2015	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	1,003,098	2.71	59,405	1,062,503	2.87	Yes	8.00
205	Jan-2016	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	1,062,503	2.87	58,910	1,121,413	3.03	Yes	8.00
206	Feb-2016	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,121,413	3.03	40,613	1,162,026	3.13	Yes	8.00
207	Mar-2016	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,162,026	3.13	7,762	1,169,788	3.16	Yes	8.00
208	Apr-2016	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,169,788	3.16	-17,260	1,152,528	3.11	Yes	8.00
209	May-2016	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,152,528	3.11	40,023	1,192,551	3.22	Yes	8.00
210	June-2016	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,192,551	3.22	-37,839	1,154,712	3.12	Yes	8.00
211	July-2016	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,154,712	3.12	-103,163	1,051,549	2.84	Yes	8.00
212	Aug-2016	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	1,051,549	2.84	-59,332	992,217	2.68	Yes	8.00
213	Sept-2016	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	992,217	2.68	-26,870	965,348	2.61	Yes	8.00
214	Oct-2016	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	965,348	2.61	11,521	976,869	2.64	Yes	8.00
215	Nov-2016	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	976,869	2.64	34,329	1,011,198	2.73	Yes	8.00
216	Dec-2016	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	1,011,198	2.73	59,378	1,070,576	2.89	Yes	8.00
217	Jan-2017	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	1,070,576	2.89	58,882	1,129,458	3.05	Yes	8.00
218	Feb-2017	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,129,458	3.05	40,582	1,170,040	3.16	Yes	8.00
219	Mar-2017	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,170,040	3.16	7,684	1,177,724	3.18	Yes	8.00
220	Apr-2017	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,177,724	3.18	-17,321	1,160,403	3.13	Yes	8.00
221	May-2017	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,160,403	3.13	39,986	1,200,389	3.24	Yes	8.00
222	June-2017	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,200,389	3.24	-37,910	1,162,479	3.14	Yes	8.00
223	July-2017	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,162,479	3.14	-103,266	1,059,213	2.86	Yes	8.00
224	Aug-2017	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	1,059,213	2.86	-59,415	999,799	2.70	Yes	8.00
225	Sept-2017	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	999,799	2.70	-26,936	972,863	2.63	Yes	8.00
226	Oct-2017	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	972,863	2.63	11,471	984,334	2.66	Yes	8.00
227	Nov-2017	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	984,334	2.66	34,292	1,018,625	2.75	Yes	8.00
228	Dec-2017	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	1,018,625	2.75	59,350	1,077,975	2.91	Yes	8.00
229	Jan-2018	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	1,077,975	2.91	58,854	1,136,829	3.07	Yes	8.00
230	Feb-2018	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,136,829	3.07	40,551	1,177,380	3.18	Yes	8.00
231	Mar-2018	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,177,380	3.18	7,633	1,185,013	3.20	Yes	8.00
232	Apr-2018	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,185,013	3.20	-17,383	1,167,630	3.15	Yes	8.00
233	May-2018	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,167,630	3.15	39,950	1,207,580	3.26	Yes	8.00
234	June-2018	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,207,580	3.26	-37,981	1,169,599	3.15	Yes	8.00
235	July-2018	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,169,599	3.15	-103,318	1,066,282	2.88	Yes	8.00
236	Aug-2018	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	1,066,282	2.88	-59,498	1,006,784	2.72	Yes	8.00
237	Sept-2018	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	1,006,784	2.72	-27,002	979,781	2.65	Yes	8.00
238	Oct-2018	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	979,781	2.65	11,421	991,202	2.68	Yes	8.00
239	Nov-2018	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	991,202	2.68	34,254	1,025,456	2.77	Yes	8.00
240	Dec-2018	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	1,025,456	2.77	59,322	1,084,778	2.93	Yes	8.00
241	Jan-2019	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	1,084,778	2.93	58,826	1,143,605	3.09	Yes	8.00
242	Feb-2019	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,143,605	3.09	40,520	1,184,124	3.19	Yes	8.00
243	Mar-2019	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,184,124	3.19	7,607	1,191,732	3.21	Yes	8.00
244	Apr-2019	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,191,732	3.21	-17,413	1,174,318	3.17	Yes	8.00
245	May-2019	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,174,318	3.17	39,913	1,214,232	3.27	Yes	8.00
246	June-2019	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,214,232	3.27	-38,016	1,176,215	3.17	Yes	8.00
247	July-2019	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,176,215	3.17	-103,421	1,072,794	2.90	Yes	8.00
248	Aug-2019	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	1,072,794	2.90	-59,581	1,013,213	2.74	Yes	8.00
249	Sept-2019	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	1,013,213	2.74	-27,069	986,144	2.66	Yes	8.00
250	Oct-2019	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	986,144	2.66	11,396	997,540	2.70	Yes	8.00
251	Nov-2019	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	997,540	2.70	34,216	1,031,757	2.79	Yes	8.00
252	Dec-2019	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	1,031,757	2.79	59,294	1,091,051	2.95	Yes	8.00
253	Jan-2020	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	1,091,051	2.95	58,798	1,149,849	3.10	Yes	8.00
254	Feb-2020	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,149,849	3.10	40,504	1,190,354	3.21	Yes	8.00
255	Mar-2020	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,190,354	3.21	7,556	1,197,909	3.23	Yes	8.00
256	Apr-2020	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,197,909	3.23	-17,475	1,180,435	3.18	Yes	8.00
257	May-2020	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,180,435	3.18	39,895	1,220,329	3.29	Yes	8.00
258	June-2020	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,220,329	3.29	-38,087	1,182,242	3.19	Yes	8.00
259	July-2020	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,182,242	3.19	-103,525	1,078,718	2.91	Yes	8.00
260	Aug-2020	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	1,078,718	2.91	-59,623	1,019,095	2.75	Yes	8.00
261	Sept-2020	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	1,019,095	2.75	-27,102	991,993	2.68	Yes	8.00

Month	Month	No. Days per month	Gal per day	Monthly Flow (Q) (cf)	Pure Water Pan Evap. (in/month)	Salinity Monthly Evap. (in)	Monthly Precip. (in)	Monthly Evaporation (ft)	Monthly Precipitation (ft)	Starting Volume (ft3)	Starting Depth (ft)	Net Volume Inflow (Q + Precip - Evap) (ft3)	End Volume (ft3)	Ending Depth (ft)	Volume Less than Maximum WS	Max WS
262	Oct-2020	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	991,993	2.68	11,346	1,003,339	2.71	Yes	8.00
263	Nov-2020	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	1,003,339	2.71	34,198	1,037,536	2.80	Yes	8.00
264	Dec-2020	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	1,037,536	2.80	59,281	1,096,817	2.96	Yes	8.00
265	Jan-2021	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	1,096,817	2.96	58,784	1,155,601	3.12	Yes	8.00
266	Feb-2021	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,155,601	3.12	40,473	1,196,075	3.23	Yes	8.00
267	Mar-2021	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,196,075	3.23	7,504	1,203,579	3.25	Yes	8.00
268	Apr-2021	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,203,579	3.25	-17,536	1,186,043	3.20	Yes	8.00
269	May-2021	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,186,043	3.20	39,858	1,225,901	3.30	Yes	8.00
270	June-2021	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,225,901	3.30	-38,122	1,187,778	3.20	Yes	8.00
271	July-2021	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,187,778	3.20	-103,576	1,084,202	2.93	Yes	8.00
272	Aug-2021	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	1,084,202	2.93	-59,706	1,024,496	2.77	Yes	8.00
273	Sept-2021	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	1,024,496	2.77	-27,168	997,328	2.69	Yes	8.00
274	Oct-2021	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	997,328	2.69	11,320	1,008,648	2.72	Yes	8.00
275	Nov-2021	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	1,008,648	2.72	34,179	1,042,827	2.82	Yes	8.00
276	Dec-2021	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	1,042,827	2.82	59,253	1,102,080	2.97	Yes	8.00
277	Jan-2022	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	1,102,080	2.97	58,770	1,160,850	3.13	Yes	8.00
278	Feb-2022	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,160,850	3.13	40,458	1,201,308	3.24	Yes	8.00
279	Mar-2022	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,201,308	3.24	7,478	1,208,786	3.26	Yes	8.00
280	Apr-2022	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,208,786	3.26	-17,567	1,191,220	3.21	Yes	8.00
281	May-2022	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,191,220	3.21	39,840	1,231,060	3.32	Yes	8.00
282	June-2022	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,231,060	3.32	-38,193	1,192,866	3.22	Yes	8.00
283	July-2022	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,192,866	3.22	-103,680	1,089,187	2.94	Yes	8.00
284	Aug-2022	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	1,089,187	2.94	-59,748	1,029,439	2.78	Yes	8.00
285	Sept-2022	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	1,029,439	2.78	-27,201	1,002,237	2.71	Yes	8.00
286	Oct-2022	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	1,002,237	2.71	11,270	1,013,508	2.74	Yes	8.00
287	Nov-2022	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	1,013,508	2.74	34,141	1,047,649	2.83	Yes	8.00
288	Dec-2022	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	1,047,649	2.83	59,239	1,106,888	2.99	Yes	8.00
289	Jan-2023	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	1,106,888	2.99	58,742	1,165,630	3.14	Yes	8.00
290	Feb-2023	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,165,630	3.14	40,442	1,206,073	3.25	Yes	8.00
291	Mar-2023	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,206,073	3.25	7,452	1,213,525	3.27	Yes	8.00
292	Apr-2023	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,213,525	3.27	-17,597	1,195,928	3.22	Yes	8.00
293	May-2023	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,195,928	3.22	39,822	1,235,750	3.33	Yes	8.00
294	June-2023	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,235,750	3.33	-38,229	1,197,521	3.23	Yes	8.00
295	July-2023	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,197,521	3.23	-103,732	1,093,789	2.95	Yes	8.00
296	Aug-2023	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	1,093,789	2.95	-59,789	1,034,000	2.79	Yes	8.00
297	Sept-2023	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	1,034,000	2.79	-27,235	1,006,765	2.72	Yes	8.00
298	Oct-2023	31	28,700	118,936	5.37	5.37	2.03	0.45	0.169	1,006,765	2.72	11,245	1,018,010	2.75	Yes	8.00
299	Nov-2023	30	28,700	115,099	3.71	3.71	1.21	0.31	0.101	1,018,010	2.75	34,122	1,052,133	2.84	Yes	8.00
300	Dec-2023	31	28,700	118,936	2.85	2.85	1.01	0.24	0.084	1,052,133	2.84	59,225	1,111,358	3.00	Yes	8.00
301	Jan-2024	31	28,700	118,936	2.66	2.66	0.81	0.22	0.068	1,111,358	3.00	58,729	1,170,086	3.16	Yes	8.00
302	Feb-2024	28	28,700	107,426	3.03	3.03	0.98	0.25	0.081	1,170,086	3.16	40,411	1,210,498	3.26	Yes	8.00
303	Mar-2024	31	28,700	118,936	5.05	5.05	1.64	0.42	0.136	1,210,498	3.26	7,427	1,217,924	3.28	Yes	8.00
304	Apr-2024	30	28,700	115,099	6.09	6.09	2.02	0.51	0.168	1,217,924	3.28	-17,628	1,200,296	3.24	Yes	8.00
305	May-2024	31	28,700	118,936	6.06	6.06	3.64	0.50	0.303	1,200,296	3.24	39,785	1,240,081	3.34	Yes	8.00
306	June-2024	30	28,700	115,099	8.11	8.11	3.41	0.68	0.284	1,240,081	3.34	-38,264	1,201,817	3.24	Yes	8.00
307	July-2024	31	28,700	118,936	9.34	9.34	2.47	0.78	0.206	1,201,817	3.24	-103,783	1,098,034	2.96	Yes	8.00
308	Aug-2024	31	28,700	118,936	8.25	8.25	2.71	0.69	0.226	1,098,034	2.96	-59,831	1,038,203	2.80	Yes	8.00
309	Sept-2024	30	28,700	115,099	6.67	6.67	2.25	0.56	0.188	1,038,203	2.80	-27,268	1,010,935	2.73	Yes	8.00

ATTACHMENT 18
PUBLIC INVOLVEMENT PLAN
SUPPLEMENTAL INFORMATION

REFERENCE: PUBLIC INVOLVEMENT PLAN FORM
(ATTACHMENT 3) - PAGE 4

Attachment 18 - Public Involvement Plan Supplemental Information

Community Engagement

Since late 2022, Intersect has maintained ongoing communication with residents and landowners near the project site, supported by the establishment of a local office in downtown Pampa, TX. As part of these efforts, we have taken the initiative to provide proactive courtesy notifications to adjacent and nearby landowners regarding County tax abatement hearings, ensuring they are aware of and able to participate in the public process. In addition, outreach has included numerous meetings with landowners, in-person discussions with community members, and timely responses to email and phone inquiries.

Local Support

Intersect has demonstrated strong local support in Gray and Roberts Counties by committing over $700,000 to nonprofits, first responders, schools, and community groups. Major contributions include $100,000 to the Pampa Youth & Community Center for renovation, $100,000 to the Pampa Chamber of Commerce Wildfire Relief Fundraising Effort, and $75,000 to support local first responders. Additional investments have supported the Panhandle Community Services, Pampa Chamber of Commerce programs, The Well Summer Programming, the Pampa Salvation Army, Children's Shopping Tour, and the Gray County Buyers Association.

Ongoing Commitment

Intersect will continue to maintain communication with residents and stakeholders throughout project development, construction, and long-term operations of the Meitner Project. In addition to TCEQ's public participation requirements, we will be notifying all nearby owners of the TLAP permit submittal, addressing any questions and providing information on how to participate in the process. The Intersect community engagement can be contacted at **community@intersectpower.com** or **1.888.556.4009**.

ATTACHMENT 19
WASTEWATER TREATMENT ODOR MITIGATION MEMO
REFERENCE: DOMESTIC ADMINISTRATIVE REPORT - PAGE 13

Memorandum

Date: September 26, 2025

Project: Intersect Power – Pumpkin

To: Project Pumpkin Client Team

From: S. Brown & I. Corbin

Subject: Wastewater Treatment Odor Mitigation, rev. 1

1 Objective & Purpose

Domestic wastewater is associated with unpleasant odors and, therefore, methods for odor collection, treatment, and mitigation have been incorporated into the IP Pumpkin site wastewater treatment process. Each step in the wastewater management process has been designed to diminish site exposure to unpleasant vapors. In some cases, additional measures could be taken towards odor control; these would add cost. This memorandum includes discussion of the odors associated with domestic wastewater and the mitigation strategies designed into each step of the wastewater treatment process.

The purpose of this memorandum is to address concerns regarding potential odors from the wastewater treatment system raised by the IP Pumpkin client team.

2 Sources of Odor in Domestic Wastewater

The primary odors associated with domestic wastewater arise from two sources:

- Breakdown of organic matter, and
- Hydrogen sulfide (H_2S) formation under reducing conditions.

These conditions are found in raw, untreated wastewater – especially when it is left towards uncontrolled anaerobic conditions. Given the low oxygen levels associated with untreated wastewater, septic conditions can occur, creating conditions for foul-smelling gases to occur. Properly designed domestic wastewater treatment processes remove both impurities in the water and prevent the formation of sulfide containing gas.

3 Odor Control Measures in Each Step of the Wastewater Treatment Process

Decomposition is often associated with sulfide containing gases because breakdown is occurring under reducing conditions, rather than in an oxygenated environment. Therefore, the worst odors would be expected in the wastewater treatment headworks – the lift stations and screens.

3.1 Process Headworks

3.1.1 Lift Stations

The lift stations are each designed as an enclosed manhole with a hatch. By enclosing the lift stations, foul odors should be contained. Each lift station is equipped with a vent to atmosphere, and these vents are designed to be equipped with activated carbon for passive odor control. The activated carbon will need to be changed periodically by wastewater operations staff.

3.1.2 *Screening*

Domestic wastewater will be pumped to a package wastewater treatment system, where the first step will be fine screening to remove solids over 6 millimeters size. Enclosed screens with a washer and dewatering system will facilitate removal of coarse solids entering the package treatment system into a bagging system and dumpster for offsite disposal, decreasing the quantity of offending odors. Following screening will be an aerobic treatment activated sludge process.

3.2 *Wastewater Holding Tank*

The greatest risk for potential odors to emanate from the wastewater treatment process is the wastewater holding tank. This tank is included in the process for emergency wastewater storage. Normally planned to be empty, the wastewater holding tank is sized to hold up to five days of Day N wastewater (146,500-gallon capacity). Since this tank is meant for emergency holding only, the current design is for an open-top tank with no engineering controls for odor. The tank should be washed out thoroughly after use. Additional odor mitigation strategies could be considered for this tank, at additional cost.

3.3 *Package Plant*

The package plant is designed for a type of aerobic treatment process referred to as an activated sludge process. The wastewater will be treated within this system by hydraulic equalization, aeration, clarification, and disinfection.

3.3.1 *Equalization*

The equalization chamber of the package treatment system serves to balance fluctuations in hydraulic flow. The zone is aerated using coarse bubble diffusion for mixing, and to provide the oxygen needed for aerobic conditions. Since conditions are aerobic rather than anaerobic, gases associated with septic conditions (such as those containing sulfide) are not generated – preventing odor generation. The feed to this chamber is below the liquid level, which also helps to reduce odors that may evolve from the system.

3.3.2 *Aeration*

The bulk of the wastewater treatment occurs in the extended aeration zone. Within this process, coarse bubble diffusion is used to add oxygen to wastewater. The dissolved oxygen (DO) level with the aeration chamber is maintained above 2.0 mg/L. Therefore, microbial breakdown of these organics will occur under aerobic conditions – preventing formation of the sulfide containing gases associated with anaerobic breakdown. As the process continues, waste is broken down to a design target level of less than 30 mg/L 5-day biological oxygen demand (BOD_5). With this substantially decreased loading, the amount of organic breakdown – and the resulting odors that would be generated thereby – is reduced. Once the wastewater is fully treated, organic matter will have broken down and sulfur compounds will be oxidized to sulfate, mitigating odors.

3.3.3 *Clarification*

As the waste is broken down, organic compounds are used by microbes for cellular metabolism and population growth. Solids thus produced by microbial growth – and remaining suspended solids – are settled within the clarifier. Solids are recycled to the front of the process as return activated sludge (RAS), to maintain appropriate levels of microbial population in the bioreactor. A purge stream of solids is removed from the system as waste activated sludge (WAS). These purged solids do contain organic matter that could be broken down and potentially cause odors if that were to occur under the wrong conditions. To keep the system healthy and to prevent these solids from breaking down under septic conditions onsite, the WAS is separated from the treated water.

3.3.4 *Sludge Holding Zone*

The current design is for the WAS solids to be pumped to an aerated sludge holding zone within the package treatment system and removed by a septage hauler for offsite disposal. By removing these solids, solids with unpleasant odors are removed along with the risk of generating new foul-smelling gases from them.

3.3.5 *Disinfection*

One common and known method of odor control in wastewater is chemical disinfection. The current system design for the IP Pumpkin site includes chemical disinfection by contacting the clarified, treated water with calcium hypochlorite tablets. This step in the wastewater treatment process will help to sanitize the water and decrease the risk of odors forming later from certain microbial activity.

3.4 *Evaporation Pond*

The treated water will gravity flow to a 10.1-acre (at max water level) evaporation pond, where it will be evaporated, entering the atmosphere to achieve zero liquid discharge of the site's domestic wastewater. The treated water flowing to the evaporation pond should already be largely odor-free, since the solids have been removed and the organic loading has been significantly lowered through the wastewater treatment process. Therefore, the evaporation pond would be expected to have negligible odors associated with it.

3.4.1 *Pond Characteristics*

The pond is quite large (approximately 10 acres) and open to the atmosphere. Odors are perceived as a function of concentration. By nature of the pond's size and the design of the environs, any odors that could be generated by the pond would be expected to quickly diffuse in the ambient air and dissipate. The pond is shallow, with a high surface – to – volume ratio. Oxygen from the environment would dissolve at the water's surface, creating an aerobic layer. The remaining organic impurities within the water would be broken down aerobically.

3.4.2 *Algal Growth*

A concern was raised about the growth of algae leading to odor in the pond. Algae growth is related to the presence of nitrogen and phosphorus. Wastewater treatment systems can remove nitrogen and phosphorus, and the proposed system does remove some by cell uptake for growth of the microbes. Enhanced nutrient removal is also possible. Enhanced nutrient removal would add equipment such as recycle pumps and tankage for anoxic zones and tertiary phosphorus removal. Additionally, a significant increase of sludge production would result through chemical precipitation of phosphorus. There would be ongoing costs associated with the addition of chemicals such as alum. Even if nutrient removal was implemented, this would not guarantee the prevention of algae as nutrients may enter through external means.

3.4.3 *Outside Pond Influences*

Nutrient loading to the pond often occurs when organic matter falls into the pond by such sources as leaves and grass clippings. Fertilizer runoff may also add to the nutrient loading. However, the evaporation pond is planned to be in an area without green landscaping or farming. Therefore, these potential sources of organic loading and nutrient addition are of minimal risk with respect to odor generation.

4 Key Takeaways

While raw domestic wastewater is commonly associated with unpleasant odors, care has been taken by the design team to reduce, eliminate, or mitigate these were possible. Key points of odor mitigation for the IP Pumpkin site wastewater treatment process include:

- Odor containment and mitigation at lift stations by enclosure and activated carbon treatment of vent exhaust,
- Odor containment of screening equipment by enclosure and screened solids bagging,
- Aeration mixing of the packaged plant equalization zone,
- Maintaining dissolved oxygen at a minimum of 2.0 mg/L in the aeration zone, and further solids removal within the final clarifier; and
- Disinfection of final effluent prior to pond discharge.