



Administrative Package Cover Page

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1. Summary of application (in plain language)
 - English
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 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

ENGLISH LANGUAGE TEMPLATE FOR CAFO PERMIT APPLICATIONS

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by the TCEQ Public Participation Plan and Language Access Plan. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

- 1) Applicant's Name: Sherwyn Dallas and Angela Browning Wood
- 2) Enter [Customer Number](#): CN601313950; CN605783968
- 3) Name of facility: Sherwyn Wood Dairy
- 4) Enter [Regulated Entity Number](#): RN102586807
- 5) Provide your permit Number: WQ0004843000
- 6) Facility Business: The facility confines 990 head of cattle in which 990 are milking. The facility has sixteen (16) land management units (LMUs) with the following acreages: LMU #1 - 10, LMU #2 - 33, LMU #3 - 53, LMU #4 - 21, LMU #5 - 26, LMU #5A - 25, LMU #6 - 59, LMU #7 - 104, LMU #8 - 42, LMU #9 - 61, LMU #10 - 21, LMU #11 - 9, LMU #12 - 12, LMU #13 - 16, LMU #14 - 15 and LMU #15 - 5 acres. One (1) retention control structures (RCSs), one concrete slurry pit and one earthen settling basin. The required capacities are: RCS #1 - 18.86 ac-ft. There are eight (8) onsite wells. The facility is located in the North Bosque River in Segment No. 1226 of the Brazos River Basin.
- 7) Facility Location: The facility is located on the South side of FM 913 approximately 2.5 miles south of intersection of FM 913 and US Hwy 67; said intersection is located approximately 7 miles south of the intersection of US Hwy 281 and US Hwy 67, in Erath County, Texas.
- 8) Application Type: Individual Permit Renewal
- 9) Description of your request: Sherwyn Wood is submitting a renewal application with the following changes, reconfigure the drainage area, remove proposed northeast slurry pit/turnaround, rename south slurry pit to "Concrete Slurry Pad," addition of a new shop building and addition of a manure storage/compost area.
- 10) Potential pollutant sources at the facility include (list the pollutant sources): Manure, manure stockpiles, wastewater, sludge, slurry, compost, feed & bedding, silage stockpiles, dead animals, dust, lubricants, parlor chemicals, pesticides and fuel storage tanks.
- 11) The following best management practices will be implemented at the site to manage pollutants from the listed pollutant sources (describe the best management practices that are used): stormwater is stored in the lagoon (RCS) until land applied through irrigation and manure and sludge are stockpiled in the drainage area of the RCS until land applied or hauled offsite for beneficial use. Manure and sludge generated by the CAFO will be retained and used in an appropriate and beneficial manner in accordance with a certified site-specific nutrient management plan. Wastewater will be contained in the RCS properly designed ((25-year frequency 10-day duration (25 year/10 day), constructed, operated and maintained according to the provision of the permit. Maintain 100-foot buffer for all irrigation wells or 150-

foot for all supply wells. Dust – control speed and regular pen maintenance.
Fertilizers – store under roof and handle according to specified label directions.
Fuel Tanks – provide secondary containment and prevent overfills/spills. Dead
animals – dispose by a third-party rendering service, buried on-site or compost on-
site. Collected within 24 hours of death and disposed within three days.

12) Unless otherwise limited, manure, sludge, or wastewater will not be discharged from a land management unit (LMU) or a retention control structure (RCS) into or adjacent to water in the state from a CAFO except resulting from any of the following conditions:

- 1) a discharge of manure, sludge, or wastewater that the permittee cannot reasonably prevent or control resulting from a catastrophic condition other than a rainfall event;
- 2) overflow of manure, sludge, or wastewater from a RCS resulting from a chronic/catastrophic rainfall event; or
- 3) a chronic/catastrophic rainfall discharge from a LMU that occurs because the permittee takes measures to de-water the RCS if the RCS is in danger of imminent overflow.

SPANISH

El siguiente resumen se proporciona para esta solicitud pendiente de permiso de calidad del agua que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo exige el Plan de Participación Pública y el Plan de Acceso Lingüístico de la TCEQ. La información provista en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación federal exigible de la solicitud del permiso.

1) Nombre del solicitante: Sherwyn Dallas and Angela Browning Wood

2) Ingrese el número de cliente: CN601313950; CN605783968

3) Nombre de la instalación: Sherwyn Wood Dairy

4) Ingresar Número de Entidad Regulada: RN102586807

5) Proporcione su número de permiso: WQ0004843000

6) Instalación Comercial: La instalación encierra 990 cabezas de ganado vacuno de las cuales 990 están ordeñando. La instalación tiene dieciséis (16) unidades de administración de tierras (LMU) con las siguientes superficies: LMU #1 - 10, LMU #2 - 33, LMU #3 - 53, LMU #4 - 21, LMU #5 - 26, LMU #5A - 25, LMU #6 - 59, LMU #7 - 104, LMU #8 - 42, LMU #9 - 61, LMU #10 - 21, LMU #11 - 9, LMU #12 - 12, LMU #13 - 16, LMU #14 - 15 y LMU #15 - 5 acres. Una (1) estructura de control de retención (RCS), un pozo de lodos de concreto y un estanque de sedimentación de tierra. Las capacidades requeridas son: RCS #1 - 18.86 ac-ft. Hay ocho (8) pozos en el sitio. La instalación está ubicada en el Río Bosque Norte en el Segmento No. 1226 de la Cuenca del Río Brazos.

7) Ubicación de la instalación: La instalación está ubicada en el lado sur de FM 913, aproximadamente a 2.5 millas al sur de la intersección de FM 913 y US Hwy 67; dicha intersección está ubicada aproximadamente a 7 millas al sur de la intersección de la US Hwy 281 y la US Hwy 67, en el condado de Erath, Texas..

8) Tipo de Solicitud: Renovación de Permiso Individual

9) Descripción de su solicitud: Sherwyn Wood Dairy está presentando una solicitud de renovación con los siguientes cambios: reconfigurar el área de drenaje, eliminar el pozo de lodo/reestructuración propuesto en el noreste, cambiar el nombre del pozo de lodo sur a "Concrete Slurry Pad", agregar un nuevo edificio de taller y agregar un área de almacenamiento de estiércol/compost.

10) Las posibles fuentes de contaminantes en la instalación incluyen (enumere las fuentes de contaminantes): Estiércol, reservas de estiércol, aguas residuales, lodos, purines, compost, piensos y camas, reservas de ensilaje, animales muertos, polvo, lubricantes, químicos de salón, pesticidas y tanques de almacenamiento de combustible.

11) Las siguientes mejores prácticas de manejo se implementarán en el sitio para manejar los contaminantes de las fuentes de contaminantes enumeradas (describa las

mejores prácticas de manejo que se utilizan): las aguas pluviales se almacenan en la laguna (RCS) hasta que se aplican a la tierra mediante riego y estiércol y lodo se almacenan en el área de drenaje del RCS hasta que se aplican a la tierra o se transportan fuera del sitio para un uso beneficioso. El estiércol y los lodos generados por CAFO se conservarán y utilizarán de manera apropiada y beneficiosa de acuerdo con un plan certificado de manejo de nutrientes específico del sitio. Las aguas residuales estarán contenidas en el RCS adecuadamente diseñado ((frecuencia de 25 años y duración de 10 días (25 años/10 días), construido, operado y mantenido de acuerdo con lo dispuesto en el permiso. Mantener una zona de amortiguamiento de 100 pies para todos los pozos de riego o 150 pies para todos los pozos de suministro. Polvo - velocidad de control y mantenimiento regular del corral. Fertilizantes - almacénelos bajo techo y manipúlelos de acuerdo con las instrucciones especificadas en la etiqueta. Tanques de combustible - proporcionan contención secundaria y evitan sobrellenos/derrames. Animales muertos - elimínelos a través de un servicio de procesamiento de terceros o entierre en el sitio. Recolectado dentro de las 24 horas posteriores a la muerte y eliminado dentro de los tres días.

12) A menos que se limite de otro modo, el estiércol, los lodos o las aguas residuales no se descargarán desde una unidad de administración de tierra (LMU) o una estructura de control de retención (RCS) hacia el agua en el estado o junto a ella desde una CAFO, excepto que resulte de cualquiera de las siguientes condiciones:

1) una descarga de estiércol, lodo o aguas residuales que el tenedor del permiso no puede prevenir o controlar razonablemente como resultado de una condición catastrófica que no sea un evento de lluvia;

2) desbordamiento de estiércol, lodo o aguas residuales de un RCS como resultado de un evento de lluvia crónica/catastrófica; o

3) una descarga de lluvia crónica/catastrófica de una LMU que ocurre porque el tenedor del permiso toma medidas para vaciar el RCS si el RCS está en peligro de desbordamiento inminente.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



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

PERMIT NO. WQ0004843000

APPLICATION. Sherwyn Dallas Wood and Angela Browning Wood, 757 County Road 229, Stephenville, Texas 76401, have applied to the Texas Commission on Environmental Quality (TCEQ) to renew Wastewater Permit No. WQ0004843000 (EPA I.D. No. TX0129976) for a Concentrated Animal Feeding Operation (CAFO) to authorize the operation of a 990 head count dairy cattle facility. The facility is located on the south side of Farm-to-Market Road 913, approximately 2.5 miles south of the intersection of Farm-to-Market Road 913 and U.S. Highway 67, near the city of Stephenville, in Erath County, Texas 76401. TCEQ received this application on August 22, 2025. The permit application will be available for viewing and copying at Erath County Courthouse, Erath County Extension Office, 100 West Washington Street, Room 206, Stephenville, in Erath 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/cafo-applications>.

This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.091388,32.147222&level=18>

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

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

El aviso de idioma alternativo en español está disponible en

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

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

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ will hold a public meeting if the Executive Director determines that there is a significant degree of public

interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

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

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

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

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

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

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

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

Further information may also be obtained from Sherwyn Dallas Wood and Angela Browning Wood at the address stated above or by calling Mr. Sherwyn Wood at 254-965-5142.

Issuance Date: September 10, 2025

Comisión de Calidad Ambiental del Estado de Texas



AVISO DE RECEPCIÓN DE LA SOLICITUD Y LA INTENCIÓN DE OBTENER CALIDAD DEL AGUA PERMISO RENOVACION

PERMISO NO. WQ0004843000

SOLICITUD. Sherwyn Dallas Wood y Angela Browning Wood, 757 County Road 229, Stephenville, Texas 76401, han solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) una renovación de Permiso No. WQ0004843000 (EPA I.D. No. TX0129976) para una Operación Concentrada de Alimentación Animal (CAFO) para autorizar la operación de una instalación de ganado lechero con 990 cabezas de ganado. La instalación está ubicada en el lado sur de Farm-to-Market Road 913, aproximadamente a 2.5 millas al sur de la intersección de Farm-to-Market Road 913 y U.S. Highway 67, cerca de la ciudad de Stephenville, en el Condado de Erath, Texas 76401. La TCEQ recibió esta solicitud el 22 de agosto de 2025. La solicitud de permiso estará disponible para ver y copiar en el Palacio de Justicia del Condado de Erath, Oficina de Extensión del Condado de Erath, 100 West Washington Street, Sala 206, Stephenville, en el Condado de Erath, Texas antes de la fecha de publicación de este aviso en el periódico. La solicitud, incluidas las actualizaciones y los avisos asociados, están disponibles electrónicamente en la siguiente página web:

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

Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.091388,32.147222&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/cafo-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 de el solicitante

indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado específico. Si desea que se agregue su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

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 DE LA TCEQ. 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 de Sherwyn Dallas Wood y Angela Browning Wood a la dirección indicada arriba o llamando al Sr. Sherwyn Wood al 254-965-5142.

Fecha de emisión: 10 de septiembre de 2025

Leah Whallon

From: Jourdan Mullin <jmullin@enviroag.com>
Sent: Thursday, September 4, 2025 10:13 AM
To: Leah Whallon; Corey Mullin
Subject: RE: Application to Renew Permit No. WQ0004348000; Sherwyn Wood Dairy
Attachments: Sherwyn Wood Dairy PLS ENGLISH SPANISH.docx; Sherwyn Dallas Wood Spanish wq cafo.docx; Sherwyn Wood, Carey Lease 2025.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Good Thursday Morning Leah,

Attached is the land lease agreement for Mr. Sherwyn Wood and Mr. David Carey, the Spanish PLS and the Spanish NORI. Please let me know if you have any questions.

Respectfully,

Jourdan Mullin

Enviro-Ag Engineering, Inc.
9855 FM 847
Dublin, TX 76446

254/965-3500 – Work
806/679-5570 - Mobile

From: Leah Whallon <Leah.Whallon@Tceq.Texas.Gov>
Sent: Tuesday, September 02, 2025 2:35 PM
To: Corey Mullin <cmullin@enviroag.com>
Cc: Jourdan Mullin <jmullin@enviroag.com>
Subject: Application to Renew Permit No. WQ0004348000; Sherwyn Wood Dairy

CAUTION: This email originated from outside of Enviro-Ag Engineering. Do not click links or open attachments unless you have verified the sender and know the content is safe.

Good Afternoon,

Please see the attached Notice of Deficiency letter dated September 2, 2025, requesting additional information needed to declare the application administratively complete. Please send the complete response by September 16, 2025.

Please let me know if you have any questions.

Thank you,



Leah Whallon

Texas Commission on Environmental Quality

Water Quality Division

512-239-0084

leah.whallon@tceq.texas.gov

How is our customer service? Fill out our online customer satisfaction survey at
www.tceq.texas.gov/customersurvey

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Land Lease Agreement

Lessor: David Ralph Carey
1343 CR 230
Hico, TX 76457

Lessee: Sherwyn & Angela Wood
757 County Road 229
Stephenville, TX 76401

Subject Property Legal Description & Address:
84 acres out of:
Acres 191.000, A0644 Reed John N;
Situs Address: 1343 CR 230 Erath County, TX;
(Geo ID R.0644.00105.00.0)
Total of 84 Leased Acres.

Term: 5 year renewable lease. Two years must be given by either party to terminate lease.

Price: Undisclosed

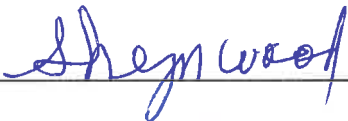
Lessee further agrees to leave property in as good or better condition, to abide by any and all state and federal laws, work with Lessee for other possible income opportunities. Lessee will indemnify Lessor of any and all liability due to farming activities.

The above terms have been reviewed and are in mutual agreement between both the lessee and the lessor on this date: 9-3-25.

Lessor: _____



Lessee: _____



Lessee: _____

SPANISH

El siguiente resumen se proporciona para esta solicitud pendiente de permiso de calidad del agua que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo exige el Plan de Participación Pública y el Plan de Acceso Lingüístico de la TCEQ. La información provista en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación federal exigible de la solicitud del permiso.

1) Nombre del solicitante: Sherwyn Dallas and Angela Browning Wood

2) Ingrese el número de cliente: CN601313950; CN605783968

3) Nombre de la instalación: Sherwyn Wood Dairy

4) Ingresar Número de Entidad Regulada: RN102586807

5) Proporcione su número de permiso: WQ0004843000

6) Instalación Comercial: La instalación encierra 990 cabezas de ganado vacuno de las cuales 990 están ordeñando. La instalación tiene dieciséis (16) unidades de administración de tierras (LMU) con las siguientes superficies: LMU #1 - 10, LMU #2 - 33, LMU #3 - 53, LMU #4 - 21, LMU #5 - 26, LMU #5A - 25, LMU #6 - 59, LMU #7 - 104, LMU #8 - 42, LMU #9 - 61, LMU #10 - 21, LMU #11 - 9, LMU #12 - 12, LMU #13 - 16, LMU #14 - 15 y LMU #15 - 5 acres. Una (1) estructura de control de retención (RCS), un pozo de lodos de concreto y un estanque de sedimentación de tierra. Las capacidades requeridas son: RCS #1 - 18.86 ac-ft. Hay ocho (8) pozos en el sitio. La instalación está ubicada en el Río Bosque Norte en el Segmento No. 1226 de la Cuenca del Río Brazos.

7) Ubicación de la instalación: La instalación está ubicada en el lado sur de FM 913, aproximadamente a 2.5 millas al sur de la intersección de FM 913 y US Hwy 67; dicha intersección está ubicada aproximadamente a 7 millas al sur de la intersección de la US Hwy 281 y la US Hwy 67, en el condado de Erath, Texas..

8) Tipo de Solicitud: Renovación de Permiso Individual

9) Descripción de su solicitud: Sherwyn Wood Dairy está presentando una solicitud de renovación con los siguientes cambios: reconfigurar el área de drenaje, eliminar el pozo de lodo/reestructuración propuesto en el noreste, cambiar el nombre del pozo de lodo sur a "Concrete Slurry Pad", agregar un nuevo edificio de taller y agregar un área de almacenamiento de estiércol/compost.

10) Las posibles fuentes de contaminantes en la instalación incluyen (enumere las fuentes de contaminantes): Estiércol, reservas de estiércol, aguas residuales, lodos, purines, compost, piensos y camas, reservas de ensilaje, animales muertos, polvo, lubricantes, químicos de salón, pesticidas y tanques de almacenamiento de combustible.

11) Las siguientes mejores prácticas de manejo se implementarán en el sitio para manejar los contaminantes de las fuentes de contaminantes enumeradas (describa las

mejores prácticas de manejo que se utilizan): las aguas pluviales se almacenan en la laguna (RCS) hasta que se aplican a la tierra mediante riego y estiércol y lodo se almacenan en el área de drenaje del RCS hasta que se aplican a la tierra o se transportan fuera del sitio para un uso beneficioso. El estiércol y los lodos generados por CAFO se conservarán y utilizarán de manera apropiada y beneficiosa de acuerdo con un plan certificado de manejo de nutrientes específico del sitio. Las aguas residuales estarán contenidas en el RCS adecuadamente diseñado ((frecuencia de 25 años y duración de 10 días (25 años/10 días), construido, operado y mantenido de acuerdo con lo dispuesto en el permiso. Mantener una zona de amortiguamiento de 100 pies para todos los pozos de riego o 150 pies para todos los pozos de suministro. Polvo - velocidad de control y mantenimiento regular del corral. Fertilizantes - almacénelos bajo techo y manipúlelos de acuerdo con las instrucciones especificadas en la etiqueta. Tanques de combustible - proporcionan contención secundaria y evitan sobrellenos/derrames. Animales muertos - elimínelos a través de un servicio de procesamiento de terceros o entierre en el sitio. Recolectado dentro de las 24 horas posteriores a la muerte y eliminado dentro de los tres días.

12) A menos que se limite de otro modo, el estiércol, los lodos o las aguas residuales no se descargarán desde una unidad de administración de tierra (LMU) o una estructura de control de retención (RCS) hacia el agua en el estado o junto a ella desde una CAFO, excepto que resulte de cualquiera de las siguientes condiciones:

1) una descarga de estiércol, lodo o aguas residuales que el tenedor del permiso no puede prevenir o controlar razonablemente como resultado de una condición catastrófica que no sea un evento de lluvia;

2) desbordamiento de estiércol, lodo o aguas residuales de un RCS como resultado de un evento de lluvia crónica/catastrófica; o

3) una descarga de lluvia crónica/catastrófica de una LMU que ocurre porque el tenedor del permiso toma medidas para vaciar el RCS si el RCS está en peligro de desbordamiento inminente.

Comisión de Calidad Ambiental del Estado de Texas



AVISO DE RECEPCIÓN DE LA SOLICITUD Y LA INTENCIÓN DE OBTENER CALIDAD DEL AGUA PERMISO RENOVACION

PERMISO NO. WQ0004843000

SOLICITUD. Sherwyn Dallas Wood y Angela Browning Wood, 757 County Road 229, Stephenville, Texas 76401, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) una renovación de Permiso No. WQ0004843000 (EPA I.D. No. TX0129976) para una Operación Concentrada de Alimentación Animal (CAFO) para autorizar la operación de una instalación de ganado lechero con 990 cabezas de ganado. La instalación está ubicada en el lado sur de Farm-to-Market Road 913, aproximadamente a 2.5 millas al sur de la intersección de Farm-to-Market Road 913 y U.S. Highway 67, cerca de la ciudad de Stephenville, en el Condado de Erath, Texas 76401. La TCEQ recibió esta solicitud el 22 de agosto de 2025. La solicitud de permiso estará disponible para ver y copiar en el Palacio de Justicia del Condado de Erath, Oficina de Extensión del Condado de Erath, 100 West Washington Street, Sala 206, Stephenville, en el Condado de Erath, Texas antes de la fecha de publicación de este aviso en el periódico. La solicitud, incluidas las actualizaciones y los avisos asociados, están disponibles electrónicamente en la siguiente página web: <https://www.tceq.texas.gov/permitting/wastewater/pending-permits/cafo-applications>. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud. <https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.091388,32.147222&level=18>

Include the following non-italicized sentence if the facility is located in the Coastal Management Program boundary and is an application for a major amendment which will increase the pollutant loads to coastal waters or would result in relocation of an outfall to a critical areas, or a renewal with such a major amendment. 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. If the application is for amendment that does not meet the above description, do not include the sentence: El Director Ejecutivo de la TCEQ ha revisado esta medida para ver si está de acuerdo con los objetivos y las regulaciones del Programa de Administración Costero de Texas (CMP) de acuerdo con las regulaciones del Consejo Coordinador de la Costa (CCC) y ha determinado que la acción es conforme con las metas y regulaciones pertinentes del CMP.

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

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

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

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

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

que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.

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

CONTACTOS E INFORMACIÓN DE LA TCEQ. 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 de Sherwyn Dallas Wood y Angela Browning Wood a la dirección indicada arriba o llamando al Sr. Sherwyn Wood al 254-965-5142.

Fecha de emisión _____ *[Date notice issued]*



Corporate Office:
3404 Airway Blvd.
Amarillo TX 79118

Central Texas:
9855 FM 847
Dublin TX 76446

New Mexico:
203 East Main Street
Artesia NM 88210

August 20, 2025

TCEQ
Registration, Review and Reporting Division
Permits Administration Review Section
Water Quality Applications Team, MC-148
PO Box 13087
Austin, TX 78711-3087

Re: Sherwyn Wood Dairy – Permit No. WQ#4843
Erath County, Texas.

Dear Administrative Review Section,

Enclosed please find the Renewal application for the above-mentioned facility. The \$315 application fee was paid electronically, and the voucher is attached. Should you have any questions please do not hesitate to contact me.

Respectfully Submitted,

Jourdan Mullin

Enviro-Ag Engineering, Inc.

Cc: TCEQ Region 4, Stephenville
Shwewyn Wood Dairy
EAE file

30 TAC 321, SUBCHAPTER B APPLICATION, POLLUTION PREVENTION PLAN & CNMP

Sherwyn Wood Dairy
Renewal

Prepared For:

Sherwyn and Angela Wood
757 County Road 229
Stephenville, TX 76401

August 7, 2025

Prepared By:





TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

ELECTRONIC WAIVER REQUEST FOR A CONCENTRATED ANIMAL FEEDING OPERATION (CAFO)

A Large CAFO, as defined in the CAFO rules at 30 TAC 321.32(14)(A), must request a waiver from e-reporting requirements codified in 40 Code of Federal Regulations §127.15 OR be required to submit CAFO annual reports electronically.

Are you requesting a waiver from e-reporting requirements?

☒ Yes, Indicate the type of waiver below.

☒ Temporary Waiver

☐ Permanent Waiver (available to facilities and entities owned or operated by members of religious communities that choose not to use certain modern technologies (e.g., computers, electricity))

☐ No, you must submit your application electronically through TCEQ ePermits system (STEERS) at <https://www3.tceq.texas.gov/steers/index.cfm>. Check [How to Apply through STEERS](#).

If an electronic waiver request is granted, the Applicant(s) seeking authorization, or an authorized permittee(s) may continue to submit CAFO annual reports to TCEQ in a paper format.

Note:

- An approved waiver is not transferrable.
- Each Owner or Operator must request his own waiver.
- Temporary waiver will not extend beyond five years. However, permittees may re-apply for a new temporary waiver, if needed.

State Only CAFOs are exempt from this requirement.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

INDIVIDUAL PERMIT APPLICATION FOR A CONCENTRATED ANIMAL FEEDING OPERATION (CAFO)

If you have questions about completing this form, please contact the Applications Review and Processing Team at 512-239-4671.

SECTION 1. APPLICATION FEE

Minor Amendment - \$150.00

Renewal - \$315.00

New or Major Amendment - \$350.00

Mailed

Check/Money Order Number:

Check/Money Order Amount:

Name Printed on Check:

EPAY

Voucher Number: 780199 & 780200

Copy of Payment Voucher enclosed?

Yes ☐

SECTION 2. TYPE OF APPLICATION

A. Coverage: State Only ☐ TPDES ☒

B. Media Type: Water Quality ☒ Air and Water Quality ☐

C. Application Type: New ☐ Major Amendment ☐

Renewal ☒ Minor Amendment ☐

D. For amendments, describe the proposed changes: Reconfigure the drainage area, remove proposed northeast slurry pit/turnaround, rename south slurry pit to “Concrete Slurry Pad,” addition of a new shop building and addition of a manure storage/compost area.

E. For existing permits:

What is the permit number? WQ0004843000

What is the EPA I.D. Number? TX 0129976

SECTION 3. FACILITY OWNER (APPLICANT) INFORMATION

A. What is the legal name of the facility owner?

Sherwyn Dallas Wood and Angela Browning Wood

B. If the applicant is an existing TCEQ customer, provide the Customer Number (CN) issued to

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

Transaction Information

Voucher Number: 780199
Trace Number: 582EA000681857
Date: 08/20/2025 11:44 AM
Payment Method: CC - Authorization 000003139G
Voucher Amount: \$300.00
Fee Type: CAFO PERMIT - RENEWAL
ePay Actor: JOURDAN MULLIN
Actor Email: jmullin@enviroag.com
IP: 156.146.244.233

Payment Contact Information

Name: JOURDAN MULLIN
Company: ENVIRO-AG ENGINEERING
Address: 3404 AIRWAY BLVD, AMARILLO, TX 79118
Phone: 806-679-5570

Site Information

Site Name: SHERWYN WOOD DAIRY
Site Location: 757 CR 229 STEPHENVILLE TX 76401

Customer Information

Customer Name: SHERWYN WOOD
Customer Address: 757CR 229, STEPHENVILLE, TX 76401

Other Information

Program Area ID: 4843

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

Transaction Information

Voucher Number: 780200
Trace Number: 582EA000681857
Date: 08/20/2025 11:44 AM
Payment Method: CC - Authorization 000003139G
Voucher Amount: \$15.00
Fee Type: 30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE
ePay Actor: JOURDAN MULLIN
Actor Email: jmullin@enviroag.com
IP: 156.146.244.233

Payment Contact Information

Name: JOURDAN MULLIN
Company: ENVIRO-AG ENGINEERING
Address: 3404 AIRWAY BLVD, AMARILLO, TX 79118
Phone: 806-679-5570

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this entity? CN 601313950; CN605783968

C. What is the contact information for the owner?

Mailing Address: 757 County Road 229

City, State and Zip Code: Stephenville, TX 76401

Phone Number: 254/965-5142 Fax Number: n/a

E-mail Address: sherwynwood@gmail.com

D. Indicate the type of customer:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Individual | <input type="checkbox"/> Federal Government |
| <input type="checkbox"/> Limited Partnership | <input type="checkbox"/> County Government |
| <input type="checkbox"/> General Partnership | <input type="checkbox"/> State Government |
| <input type="checkbox"/> Trust | <input type="checkbox"/> City Government |
| <input type="checkbox"/> Sole Proprietorship (D.B.A.) | <input type="checkbox"/> Other Government |
| <input type="checkbox"/> Corporation | <input type="checkbox"/> Other, specify: <u>Click here to enter text.</u> |
| <input type="checkbox"/> Estate | |

E. If the customer type is individual, complete Attachment 1.

F. Is this customer an independent entity?

- ☒ Yes ☐ No government, subsidiary, or part of a larger corporation

G. Number of employees:

- ☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 or higher

H. For Corporations and Limited Partnerships:

What is the Tax Identification Number issued by the State Comptroller: Click here to enter text.

What is the Charter Filing Number issued by the Texas Secretary of State: Click here to enter text.

SECTION 4. CO-APPLICANT INFORMATION

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

A. What is the legal name of the co-applicant?

Click here to enter text.

B. If the applicant is an existing TCEQ customer, provide the Customer Number (CN) issued to this entity? CN Click here to enter text.

C. What is the contact information for the co-applicant?

Mailing Address: Click here to enter text.

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

Phone Number: Fax Number: [Click here to enter text.](#)

E-mail Address: [Click here to enter text.](#)

D. Indicate the type of customer:

- | | |
|---|--|
| <input type="checkbox"/> Individual | <input type="checkbox"/> Federal Government |
| <input type="checkbox"/> Limited Partnership | <input type="checkbox"/> County Government |
| <input type="checkbox"/> General Partnership | <input type="checkbox"/> State Government |
| <input type="checkbox"/> Trust | <input type="checkbox"/> City Government |
| <input type="checkbox"/> Sole Proprietorship (D.B.A.) | <input type="checkbox"/> Other Government |
| <input type="checkbox"/> Corporation | <input type="checkbox"/> Other, specify: Click here to enter text. |
| <input type="checkbox"/> Estate | |

E. If the customer type is individual, complete Attachment 1.

F. Is this customer an independent entity?

- ☐ Yes ☐ No government, subsidiary, or part of a larger corporation

G. Number of employees:

- ☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 or higher

H. For Corporations and Limited Partnerships:

What is the Tax Identification Number issued by the State Comptroller: [Click here to enter text.](#)

What is the Charter Filing Number issued by the Texas Secretary of State: [Click here to enter text.](#)

SECTION 5. APPLICATION CONTACT INFORMATION

This is the person TCEQ will contact if additional information is needed about this application.

Prefix (Mr., Ms., Miss): Mr.

Application Contact First and Last Name: Corey Mullin

Title: Consultant Credentials: [Click here to enter text.](#)

Company Name: Enviro-Ag Engineering, Inc.

Mailing Address: 9855 FM 847

City, State and Zip Code: Dublin, TX 76446

Phone Number: 254/965-3500 Fax Number: 254/965-8000

E-mail Address: cmullin@enviroag.com

SECTION 6. PERMIT CONTACT INFORMATION

Provide two names of individuals that TCEQ can contact during the term of the permit.

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

Permit Contact First and Last Name: Corey Mullin

Title: Consultant Credentials: Click here to enter text.

Company Name: Enviro-Ag Engineering, Inc.

Mailing Address: 9855 FM 847

City, State and Zip Code: Dublin, TX 76446

Phone Number: 254/965-3500 Fax Number: 254/965-8000 E-mail Address:
cmullin@enviroag.com

B. Prefix (Mr., Ms., Miss): Mr.

Permit Contact First and Last Name: Sherwyn Wood

Title: Owner Credentials: Click here to enter text.

Company Name: Sherwyn Wood Dairy

Mailing Address: 757 County Road 229

City, State and Zip Code: Stephenville, TX 76401

Phone Number: 254/965-5142 Fax Number: n/a E-mail Address: sherwynwood@gmail.com

SECTION 7. ANNUAL BILLING CONTACT INFORMATION

Please identify the individual for receiving the annual fee invoices.

Is the billing contact and contact information the same as the Owner or the Co-Applicant identified in Section 3) or Section 4) above?

☒ Yes, specify which applicant on the line below and go to Section 8)

Owner, Sherwyn and Angela Wood

☐ No, complete this section

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

First and Last Name: Click here to enter text.

Title: Click here to enter text. Credentials: Click here to enter text.

Company Name: Click here to enter text.

Mailing Address: Click here to enter text.

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

Phone Number: Click here to enter text. Fax Number: Click here to enter text. E-mail
Address: Click here to enter text.

SECTION 8. LANDOWNER INFORMATION

A. Landowner where the production area is or will be located

Landowner Name: Sherwyn and Angela Wood

B. Landowner of the land management units (LMUs)

Landowner Name: Sherwyn and Angela Wood, John and Margie Lewis, David Ralph Carey

SECTION 9. PUBLIC NOTICE INFORMATION

A. Individual responsible for publishing the notices in the newspaper

Prefix (Mr., Ms., Miss): Mrs. First and Last Name: Jourdan Mullin

Title: Consultant Credentials: Click here to enter text.

Company Name: Enviro-Ag Engineering, Inc.

Mailing Address: 9855 FM 847

City, State and Zip Code: Dublin, TX 76446

Phone Number: 254/965-3500 Fax Number: 254/965-8000 E-mail Address:

jmullin@enviroag.com

B. Method for receiving the notice package for the Notice of Receipt and Intent

☒ E-mail: jmullin@enviroag.com

☐ Fax Number: Click here to enter text.

☒ Regular Mail:

Mailing Address: 9855 FM 847

City, State and Zip Code: Dublin, TX 76446

C. Contact person to be listed in the notice

Prefix (Mr., Ms., Miss): Mr.

First and Last Name: Sherwyn Wood

Title: Owner Credentials: Click here to enter text.

Company Name: Sherwyn Wood Dairy

Phone Number: 254/965-5142

D. Public viewing location

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

Public Building Name: Erath County Extension Office-Erath County Courthouse

Physical Address of Building: 100 Washington St. Room 206

City: Stephenville County: Erath

Phone Number: 254/965-1460

E. Bilingual Notice Requirement

For new, major amendment, and renewal applications. This information can be obtained by contacting the bilingual/ESL coordinator at the nearest elementary or middle school.

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

Yes ☒ No ☐

(If No, alternative language notice publication is not required; skip to Section 10. Regulated Entity (Site) Information.)

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

Yes ☒ No ☐

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

Yes ☒ No ☐

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

Yes ☒ No ☐

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

6. Complete the [CAFO Plain Language Summary Template](#) (English) for CAFO Permit Applications for a new, renewal, major or minor amendment and submit with this application.

If a bilingual education program is required by the Texas Education Code at the nearest elementary or middle school to the facility or proposed facility, also complete the [CAFO Plain Language Summary Template](#) (Spanish) or provide a translated copy of the completed English plain language summary in the appropriate alternative language if different from Spanish.

F. Public Involvement Plan Form

Complete and attach one Public Involvement Plan (PIP) Form (TCEQ Form 20960) for each application for a new permit or major amendment to a permit.

SECTION 10. REGULATED ENTITY (SITE) INFORMATION

- A. Site Name as known by the local community: Sherwyn Wood Dairy

- B. If this is an existing permitted site, provide the Regulated Entity Number (RN) issued to this site? RN 102586807

- C. Site Address/Location:

If the site has a physical address such as 12100 Park 35 Circle, Austin, TX 78753, complete Item 1.

If the site does not have a physical address, provide a location description in Item 2.

Example: located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1.

ENGLISH LANGUAGE TEMPLATE FOR CAFO PERMIT APPLICATIONS

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by the TCEQ Public Participation Plan and Language Access Plan. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

- 1) Applicant's Name: Sherwyn Dallas and Angela Browning Wood
- 2) Enter [Customer Number](#): CN601313950; CN605783968
- 3) Name of facility: Sherwyn Wood Dairy
- 4) Enter [Regulated Entity Number](#): RN102586807
- 5) Provide your permit Number: WQ0004843000
- 6) Facility Business: The facility confines 990 head of cattle in which 990 are milking. The facility has sixteen (16) land management units (LMUs) with the following acreages: LMU #1 - 10, LMU #2 - 33, LMU #3 - 53, LMU #4 - 21, LMU #5 - 26, LMU #5A - 25, LMU #6 - 59, LMU #7 - 104, LMU #8 - 42, LMU #9 - 61, LMU #10 - 21, LMU #11 - 9, LMU #12 - 12, LMU #13 - 16, LMU #14 - 15 and LMU #15 - 5 acres. One (1) retention control structures (RCSs), one concrete slurry pit and one earthen settling basin. The required capacities are: RCS #1 - 18.86 ac-ft. There are eight (8) onsite wells. The facility is located in the North Bosque River in Segment No. 1226 of the Brazos River Basin.
- 7) Facility Location: The facility is located on the South side of FM 913 approximately 2.5 miles south of intersection of FM 913 and US Hwy 67; said intersection is located approximately 7 miles south of the intersection of US Hwy 281 and US Hwy 67, in Erath County, Texas.
- 8) Application Type: Individual Permit Renewal
- 9) Description of your request: Sherwyn Wood is submitting a renewal application with the following changes, reconfigure the drainage area, remove proposed northeast slurry pit/turnaround, rename south slurry pit to "Concrete Slurry Pad," addition of a new shop building and addition of a manure storage/compost area.
- 10) Potential pollutant sources at the facility include (list the pollutant sources): Manure, manure stockpiles, wastewater, sludge, slurry, compost, feed & bedding, silage stockpiles, dead animals, dust, lubricants, parlor chemicals, pesticides and fuel storage tanks.
- 11) The following best management practices will be implemented at the site to manage pollutants from the listed pollutant sources (describe the best management practices that are used): stormwater is stored in the lagoon (RCS) until land applied through irrigation and manure and sludge are stockpiled in the drainage area of the RCS until land applied or hauled offsite for beneficial use. Manure and sludge generated by the CAFO will be retained and used in an appropriate and beneficial manner in accordance with a certified site-specific nutrient management plan. Wastewater will be contained in the RCS properly designed ((25-year frequency 10-day duration (25 year/10 day), constructed, operated and maintained according to the provision of the permit. Maintain 100-foot buffer for all irrigation wells or 150-

foot for all supply wells. Dust – control speed and regular pen maintenance.
Fertilizers – store under roof and handle according to specified label directions.
Fuel Tanks – provide secondary containment and prevent overfills/spills. Dead
animals – dispose by a third-party rendering service, buried on-site or compost on-
site. Collected within 24 hours of death and disposed within three days.

12) Unless otherwise limited, manure, sludge, or wastewater will not be discharged from a land management unit (LMU) or a retention control structure (RCS) into or adjacent to water in the state from a CAFO except resulting from any of the following conditions:

- 1) a discharge of manure, sludge, or wastewater that the permittee cannot reasonably prevent or control resulting from a catastrophic condition other than a rainfall event;
- 2) overflow of manure, sludge, or wastewater from a RCS resulting from a chronic/catastrophic rainfall event; or
- 3) a chronic/catastrophic rainfall discharge from a LMU that occurs because the permittee takes measures to de-water the RCS if the RCS is in danger of imminent overflow.

Item 1: Physical Address of Project or Site:

Street Number and Name: 757 County Road 229

City, State and Zip Code: Stephenville, TX 76401

Item 2: Site Location Description:

Location description: Click here to enter text.

City where the site is located or, if not in a city, what is the nearest city: Click here to enter text.

Zip Code where the site is located: Click here to enter text.

D. County or counties if more than 1: Erath

E. Latitude: 32 08' 50" Longitude: 98 05' 29"

F. Animal Type:

☒ Dairy-0241

☐ Beef Cattle- 0211

☐ Swine-0213

☐ Broiler-0251

☐ Laying Hens-0252

☐ Sheep/Goats-0214

☐ Auction-5154

☐ Other, specify: Click here to enter text.

G. Existing Maximum Number of Animals: 990

Proposed Maximum Number of Animals: 990

H. What is the total LMU acreage? 512

SECTION 11. MISCELLANEOUS INFORMATION

A. Did any person who was formerly employed by the TCEQ represent your company and get paid for service regarding this application? Yes ☐ No ☒

If yes, provide the name(s) of the former TCEQ employee(s): Click here to enter text.

B. Is the facility located on Indian Country Lands? Yes ☐ No ☒

If yes, do not submit this application. You must obtain authorization through EPA Region 6.

C. Is the production area located within the protection zone of a sole source drinking water supply? Yes ☐ No ☒

D. Is any permanent school fund land affected by this application? Yes ☐ No ☒

If yes, provide the location and foreseeable impacts and effects this application has on the land(s). Click here to enter text.

E. Delinquent Fees and Penalties:

Do you owe fees to the TCEQ? Yes ☐ No ☒

Do you owe any penalties to the TCEQ? Yes ☐ No ☒

If you answered yes to either of the above questions, provide the amount owed, the type of fee or penalty, and an identifying number.

[Click here to enter text.](#)

SECTION 12. AFFECTED LANDOWNER INFORMATION

This section must be completed if the application type is new or major amendment. If the application type is renewal or minor amendment, skip to Section 13.

- A. Landowner map. Attach a landowner map or drawing, with scale, that includes the following. Each landowner should be designated by a letter or number on both the list and the map.
- The applicant's property boundaries, including onsite and offsite LMUs; and
 - The property boundaries of all landowners within 500 feet of the applicant's property.
- B. Landowner list. Attach a separate list of the landowners' names and mailing addresses. The list must be cross-referenced to the landowners map.
- C. Landowner list media. Indicate the format of the landowners list.
- ☐ Read/Writeable CD
 - ☐ 4 sets of mailing labels
- D. Landowner data source. Provide the source of the landowners' names and mailing addresses.

[Click here to enter text.](#)

SECTION 13. ATTACHMENTS

A. All applications

- Supplemental Permit Information Form, if required by instructions on that form
- Current copy of tax records or deed showing ownership of the land
- Lease agreement, if LMUs are not owned by the applicant or co-applicant

B. New, Major amendment, or Renewal

- Completed Technical Information Packet (TCEQ-00760).

C. New and Major amendment

- Public Involvement Plan Form (TCEQ-20960)

D. Minor Amendment

Attach the following items if applicable:

- Current vicinity map, site map, runoff control map, and LMU map
- RCS design calculations
- Nutrient Management Plan or Land application rate calculations
- Other technical documents affected by the proposed amendment

SIGNATURE PAGE

If co-applicants are required, each co-applicant must submit an original, separate signature page.

Permit Number: WQ0004843000

Applicant: Sherwyn Dallas Wood

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.

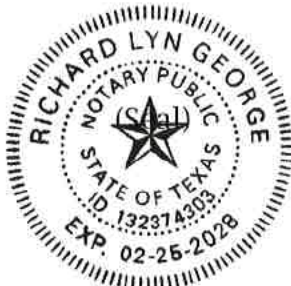
Signatory Name: Sherwyn Dallas Wood

Title: Owner

Signature: Sherwyn Dallas Wood Date: 8-20-2025

SUBSCRIBED AND SWORN to before me by the said Sherwyn Dallas Wood on
this 20th day of August, 20 25

My commission expires on the 25th day of February, 20 28



[Signature]

Notary Public

Erath

County, Texas

- Nutrient Management Plan or Land application rate calculations
- Other technical documents affected by the proposed amendment

SIGNATURE PAGE

If co-applicants are required, each co-applicant must submit an original, separate signature page.

Permit Number: WQ0004843000

Applicant: Angela Browning Wood

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: Angela Browning Wood

Title: Owner

Signature: Angela Browning Wood Date: 8-20-25

SUBSCRIBED AND SWORN to before me by the said Angela Browning Wood on

this 20th day of August, 20 25

My commission expires on the 25th day of February, 20 28



[Signature]

Notary Public

Erath

County, Texas

Attachment 1 Individual Information

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

Prefix (Mr., Ms., Miss): Mr.

Full Legal Name, including middle name: Sherwyn Dallas Wood

Driver's License or State Identification Number: [REDACTED]

State that Issued the License or Identification Number: Texas

Date of Birth: [REDACTED]

Mailing Address: 757 County Road 229

City, State and Zip Code: Stephenville, TX 76401

Phone Number: 254/965-5142 Fax Number: n/a

E-mail Address: sherwynwood@gmail.com

For TCEQ Use Only

Customer Number _____

Regulated Entity Number _____

Permit Number _____

Attachment 1
Individual Information

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

Prefix (Mr., Ms., Miss): Mrs.

Full Legal Name, including middle name: Angela Browning Wood

Driver's License or State Identification Number: XXXXXXXXXX

State that Issued the License or Identification Number: Texas

Date of Birth: XXXXXXXXXX

Mailing Address: 757 County Road 229

City, State and Zip Code: Stephenville, TX 76401

Phone Number: 254/965-5142 Fax Number: n/a

E-mail Address: sherwynwood@gmail.com

For TCEQ Use Only

Customer Number _____

Regulated Entity Number _____

Permit Number _____

CASH LEASE OF FARM LAND, BUILDINGS AND EQUIPMENT

THIS LEASE is entered into this 12 day of August, 20 25.

Between Terry Lewis, landlord, of 5593 FM 913
(Address)
and Sherwyn Wood, tenant, of 757 CR 229
(Address)

1. The landlord hereby leases to the tenant, to use for agricultural purposes, the following-described property, located in Erath County, State of Texas, and commonly known as Lewis Property

and consisting of 75+40 acres, more or less, all rights thereto except as specified below:

a. The landlord reserves the right to use the following land and buildings:

House and Barns and 5 acres

2. The landlord reserves the right of himself, his agents, his employees, or his assigns to enter the farm at any reasonable time for purposes of (a) of consultation with the tenant; (b) of making repairs, improvements, and inspections; (c) of developing mineral resources; and (d) after notice of termination of the lease is given, none of which is to interfere with the tenant in carrying out regular farm operations.

3. The landlord does not convey to the tenant the right to lease or sublet any part of the land or buildings or to assign the lease to any person or persons whomsoever.

4. If the landlord should sell or otherwise transfer title to the land and buildings, he will do so subject to the provisions of this lease.

5. The terms of this lease shall be binding upon the heirs, executors, administrators, and successors of both the landlords and tenant in like manner as upon the original parties. However, in event the lease is for more than one year, the heirs or successors of the tenant shall have the option to give written notice of termination effective at the end of the lease year in which the death occurs.

6. The landlord warrants that he has the right to lease the land and buildings, and will defend the tenant's possession against any and all persons whomsoever.

7. To improve the land, conserve its resources, and maintain it in a high state of cultivation, the two parties agree as follows:

a. The tenant will maintain the land during his tenancy in as good condition as at the beginning, normal wear and depreciation and damages from causes beyond tenant's control excepted.

b. The tenant will operate the land in an efficient and husbandlike way.

c. The tenant will not, without oral consent of the landlord, cut live trees for sale or personal use.

d. The landlord reserves the right to prevent the production of any crop on any or all land where the production of such crop would clearly damage the land due to excessive erosion or other causes.

e. The tenant will use fertilization practices which will prevent depletion of the essential plant food elements in the soil.

8. The tenant will maintain the buildings and equipment during his tenancy in as good condition as at the beginning, normal wear and depreciation beyond tenant's control excepted.

9. The tenant agrees to pay to the landlord as cash rent the amount of \$
per year and such payment will be made as follows:

The first of May of every year with a 30 day
grace period

10. The term of this lease shall be 5 years(s) from May 1, 2025,
to May 1, 2030, and this lease shall continue in effect from year to year
thereafter until written notice of termination is given by either party to the other at
least 3 months before expiration of this lease or any renewal.

11. The tenant agrees that he or his agent will possess the land and facilities continuously during the term of the lease.

12. The tenant agrees to surrender possession of the land, buildings and equipment peaceably at the termination of the lease.

13. A request for general review of the lease may be at least _____ days prior to the final date for giving notice to terminate this lease. Amendments and alterations to this lease shall be made in writing.

14. This lease shall not give rise to a partnership relationship, and neither party shall have the authority to obligate the other without written consent, except as specifically provided in this lease.

15. Each party agrees that the other party shall in no way be responsible for the debts of, or liabilities for accidents or damages caused by the other party.

16. Willful neglect, failure, or refusal by either party to carry out any substantial provision of this lease shall give the other party the benefits of any proceedings provided by law.

17. Any differences between the parties as to their several rights and obligations under this lease that are not settled by mutual agreement after thorough discussion, shall be submitted for arbitration to a committee of three disinterested persons, one selected by each party hereto and the third by the two thus selected, and the committee's decision shall be accepted by both parties.

Additional agreements:

Tenant will have first option to buy
if landlord decides to sale

IN WITNESS WHEREOF, the parties have signed this lease on the 13 day of August, 2013.

Jerry Lewis
(Landlord)

Shenwood
(Tenant)

I Sherwyn WOOD HAVE DAVID CAREY
PLACE LEASED 2025

X David Carey

X Sherwood

7/10/25, 10:08 AM

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Property Details

Account

Property ID: R000052854

Geographic ID: R.0644,00105.00.0

Type: Real

Zoning:

Property Use:

Condo:

Location

Situs Address: 1343 CR230

Map ID: 1B-16-3

Mapsc0:

Legal Description: Acres 191.000, A0644 REED JOHN N;

Abstract/Subdivision: /

Owner

Name: CAREY DAVID RALPH

Agent:

Mailing Address: 1343 CR230
HICO, TX 76457

% Ownership: 100.00%

Exemptions: For privacy reasons not all exemptions are shown online.

Property Values

Improvement Homesite Value: \$0 (+)

Improvement Non-Homesite Value: \$0 (+)

Land Homesite Value: \$0 (+)

Land Non-Homesite Value: \$0 (+)

Agricultural Market Valuation: \$1,528,000 (+)

Market Value: \$1,528,000 (=)

Agricultural Value Loss: \$1,506,760 (-)

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Appraised Value: \$1,528,000 (=)

HS Cap Loss: \$0 (-)

CB Cap Loss: \$0 (-)

Assessed Value: \$21,240

Ag Use Value: \$21,240

Information provided for research purposes only. Legal descriptions and acreage amounts are for Appraisal District use only and should be verified prior to using for legal purpose and or documents. Please contact the Appraisal District to verify all information for accuracy.

Property Taxing Jurisdiction

Owner: CAREY DAVID RALPH %Ownership: 100.00%

Entity	Description	Market Value	Taxable Value
072	ERATH COUNTY	\$1,528,000	\$21,240
903	STEPHENVILLE ISD	\$1,528,000	\$21,240
MTD	MIDDLE TRINITY WATER	\$1,528,000	\$21,240
RER	ERATH ROAD & BRIDGE	\$1,528,000	\$21,240

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Property Land

Type	Description	Acreage	Sqft	Eff Front	Eff Depth	Market Value	Prod. Value
SAE		191.00	8,319,960.00	0.00	0.00	\$1,528,000	\$21,238

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Property Roll Value History

Year	Improvements	Land Market	Ag Valuation	Appraised	HS Cap Loss	Assessed
2025	\$0	\$1,528,000	\$21,240	\$1,528,000	\$0	\$21,240
2024	\$0	\$1,489,800	\$22,000	\$1,489,800	\$0	\$22,000
2023	\$0	\$1,719,000	\$17,700	\$1,719,000	\$0	\$17,700
2022	\$0	\$1,337,000	\$20,610	\$1,337,000	\$0	\$20,610
2021	\$0	\$897,700	\$23,670	\$897,700	\$0	\$23,670
2020	\$0	\$940,400	\$24,340	\$840,400	\$0	\$24,340
2019	\$0	\$764,000	\$24,600	\$764,000	\$0	\$24,600
2018	\$0	\$676,880	\$24,550	\$676,880	\$0	\$24,550
2017	\$0	\$546,530	\$26,550	\$546,530	\$0	\$26,550
2016	\$0	\$473,480	\$27,350	\$473,480	\$0	\$27,350
2015	\$0	\$473,480	\$29,740	\$473,480	\$0	\$29,740

Property Deed History

Deed Date	Type	Description	Grantor	Grantee	Volumes	Page	Number
6/3/2010			CAREY SUZANNE	CAREY DAVID RALPH			2010-03152
1/1/1968			COOK GLEN	CAREY SUZANNE	773	423	

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4/4

Property Details

Account

Property ID: R000052617 Geographic ID: R.0057,00294.00.0
Type: Real Zoning:
Property Use: Condo:

Location

Situs Address: 5593 FM913
Map ID: 18-16-3 Mapsco:
Legal Description: Acres 75.000, A0057 BABCOCK D W;

Abstract/Subdivision: /

Owner

Name: LEWIS JOHN P & MARGIE ANN
Agent:
Mailing Address: 5593 FM913

STEPHENVILLE, TX 76401-7368

% Ownership: 100.00%

Exemptions: For privacy reasons not all exemptions are shown online.

Property Values

Improvement Homesite Value: \$0 (+)
Improvement Non-Homesite Value: \$0 (+)
Land Homesite Value: \$0 (+)
Land Non-Homesite Value: \$0 (+)
Agricultural Market Valuation: \$600,000 (+)

Market Value: \$600,000 (=)
Agricultural Value Loss: \$593,100 (-)

Appraised Value: \$600,000 (=)
HS Cap Loss: \$0 (-)
CB Cap Loss: \$0 (-)

Assessed Value: \$6,900
Ag Use Value: \$6,900

Information provided for research purposes only. Legal descriptions and acreage amounts are for Appraisal District use only and should be verified prior to using for legal purpose and or documents. Please contact the Appraisal District to verify all information for accuracy.

Property Taxing Jurisdiction

Owner: LEWIS JOHN P & MARGIE ANN %Ownership: 100.00%

Entity	Description	Market Value	Taxable Value
072	ERATH COUNTY	\$600,000	\$6,900
903	STEPHENVILLE ISD	\$600,000	\$6,900
MTD	MIDDLE TRINITY WATER	\$600,000	\$6,900
RER	ERATH ROAD & BRIDGE	\$600,000	\$6,900

Property Land

Type	Description	Acreage	Sqft	Eff Front	Eff Depth	Market Value	Prod. Value
SAE		75.00	3,267,000.00	0.00	0.00	\$600,000	\$6,900

Property Roll Value History

Year	Improvements	Land Market	Ag Valuation	Appraised	HS Cap Loss	Assessed
2025	\$0	\$600,000	\$6,900	\$600,000	\$0	\$6,900
2024	\$0	\$585,000	\$7,200	\$585,000	\$0	\$7,200
2023	\$0	\$675,000	\$6,450	\$675,000	\$0	\$6,450
2022	\$0	\$525,000	\$7,650	\$525,000	\$0	\$7,650
2021	\$0	\$352,500	\$8,850	\$352,500	\$0	\$8,850
2020	\$0	\$330,000	\$8,180	\$330,000	\$0	\$8,180
2019	\$0	\$300,000	\$8,780	\$300,000	\$0	\$8,780
2018	\$0	\$281,500	\$8,700	\$281,500	\$0	\$8,700
2017	\$0	\$232,800	\$8,100	\$232,800	\$0	\$8,100
2016	\$0	\$200,900	\$8,030	\$200,900	\$0	\$8,030
2015	\$0	\$200,900	\$8,030	\$200,900	\$0	\$8,030

Property Deed History

Deed Date	Type	Description	Grantor	Grantee	Volume	Page	Number
4/28/1989	KA		FEARS LUDIE BELL & KIRBY	LEWIS JOHN P & MARGIE ANN	770	113	

Property Details

Account			
Property ID:	R000015599	Geographic ID:	R.0057,00192.00.0
Type:	Real	Zoning:	
Property Use:		Condo:	
Location			
Situs Address:	5662 FM913		
Map ID:	18-16-3	Mapscs:	
Legal Description:	Acres 181.660, A0057 BABCOCK D W; DAIRY		
Abstract/Subdivision:			
Owner			
Name:	WOOD SHERWYN D & ANGELA		
Agent:			
Mailing Address:	757 CR229 STEPHENVILLE, TX 76401-7350		
% Ownership:	100.00%		
Exemptions:	For privacy reasons not all exemptions are shown online.		

Property Values

Improvement Homesite Value:	\$3,750 (+)
Improvement Non-Homesite Value:	\$173,380 (+)
Land Homesite Value:	\$0 (+)
Land Non-Homesite Value:	\$0 (+)
Agricultural Market Valuation:	\$908,300 (+)
Market Value:	\$1,085,430 (=)
Agricultural Value Loss:	\$879,230 (-)

Appraised Value:	\$1,085,430 (=)
HS Cap Loss:	\$0 (-)
CB Cap Loss:	\$0 (-)

Assessed Value:	\$206,200
Ag Use Value:	\$29,070

Information provided for research purposes only. Legal descriptions and acreage amounts are for Appraisal District use only and should be verified prior to using for legal purpose and or documents. Please contact the Appraisal District to verify all information for accuracy.

Property Taxing Jurisdiction

Owner: WOOD SHERWYN D & ANGELA %Ownership: 100.00%

Entity	Description	Market Value	Taxable Value
072	ERATH COUNTY	\$1,085,430	\$206,200
903	STEPHENVILLE ISD	\$1,085,430	\$206,200
MTD	MIDDLE TRINITY WATER	\$1,085,430	\$206,200
RER	ERATH ROAD & BRIDGE	\$1,085,430	\$206,200

Property Improvement - Building

Type: DB State Code: D2 Value: \$25,062			
Type	Description	Year Built	SQFT
DB	DAIRY BARN		968.00
BARN	BARN		912.00
SHED	SHED	2008	468.00
SHED	SHED	2008	2,925.00
CHP	HOLD PEN COVERED	2015	1,728.00
AS	ANIMALSHADE	2016	880.00
Type: CB State Code: D2 Value: \$44,745			
Type	Description	Year Built	SQFT
CB	COMMODITY BARN		4,800.00
AS	ANIMALSHADE	2001	2,800.00
AS	ANIMALSHADE	2001	2,800.00
MT	MILK TANK		1.00
FSB	FREE STALL BARN	2021	14,580.00
SHED	SHED	2021	1,500.00
Type: FSB State Code: D2 Value: \$76,900			
Type	Description	Year Built	SQFT
FSB	FREE STALL BARN	2003	33,280.00
FSL	LOCKED FEED STANCHION	2003	320.00
SHED	SHED	2009	468.00
Type: STG State Code: D2 Value: \$26,587			
Type	Description	Year Built	SQFT
STG	STRG BUILDING	2015	192.00
AS	ANIMALSHADE	2015	432.00
AS	ANIMALSHADE	2015	120.00
AS	ANIMALSHADE	2015	60.00
BARN	BARN	2015	644.00

SC	SCALES	2015	1.00
SHOP	SHOP	2021	2,500.00
SHED	SHED	2021	1,000.00

Type: AS Value: \$3,835

Type	Description	Year Built	SQFT
AS	ANIMALSHADE	2018	880.00
AS	ANIMALSHADE	2018	680.00
SHED	SHED	2018	468.00
AS	ANIMALSHADE	2018	1,280.00

Property Land

Type	Description	Acreage	Sqft	Eff Front	Eff Depth	Market Value	Prod. Value
SAE		181.65	7,913,110.00	0.00	0.00	\$908,300	\$29,073

Property Roll Value History

Year	Improvements	Land Market	Ag Valuation	Appraised	HS Cap Loss	Assessed
2025	\$177,130	\$908,300	\$29,070	\$1,085,430	\$0	\$208,200
2024	\$177,130	\$908,300	\$29,300	\$1,085,430	\$0	\$208,430
2023	\$163,350	\$908,300	\$24,810	\$1,071,650	\$0	\$188,160
2022	\$163,350	\$908,300	\$27,860	\$1,071,650	\$0	\$191,210
2021	\$112,000	\$726,640	\$30,600	\$838,640	\$0	\$142,600
2020	\$112,000	\$708,470	\$31,790	\$820,470	\$0	\$143,790
2019	\$90,380	\$708,470	\$31,730	\$798,850	\$0	\$122,110
2018	\$88,550	\$668,810	\$31,700	\$755,360	\$9	\$120,250
2017	\$77,810	\$545,850	\$34,240	\$623,660	\$9	\$112,050
2016	\$77,500	\$470,080	\$34,990	\$547,580	\$9	\$112,490
2015	\$73,220	\$470,080	\$37,510	\$543,300	\$9	\$110,730

Property Deed History

Deed Date	Type	Description	Grantor	Grantee	Volume	Page	Number
11/8/1956			CARTER CLYDE & CLEO & GUY HUCKABEE	WOOD GARVIN & OLIVE	360		40
9/11/2001			WOOD GARVIN D	WOOD SHERWYN D & ANGELA	1049		577
9/11/2001			WOOD GARVIN D ET AL	WOOD SHERWYN D & ANGELA	1049		563

Property Details

Account

Property ID:

R000015595

Geographic ID: R.0057,00181.00.0

Type:

Real

Zoning:

Property Use:

Condo:

Location

Situs Address:

757 CR229

Map ID:

18-16-3

Mapsc0:

Legal Description:

Acres 139.000, A0057 BABCOCK D W; HOUSE & SHEDS

Abstract/Subdivision:

Owner

Name:

WOOD SHERWYN D & ANGELA

Agent:

Mailing Address:

757 CR229
STEPHENVILLE, TX 76401-7350

% Ownership:

100.00%

Exemptions:

For privacy reasons not all exemptions are shown online.

Property Values	
Improvement Homesite Value:	\$143,980 (+)
Improvement Non-Homesite Value:	\$40,990 (+)
Land Homesite Value:	\$5,000 (+)
Land Non-Homesite Value:	\$0 (+)
Agricultural Market Valuation:	\$690,000 (+)
Market Value:	\$879,950 (=)
Agricultural Value Loss:	\$673,920 (-)

Appraised Value:	\$879,950 (=)
HS Cap Loss:	\$20,095 (-)
CB Cap Loss:	\$0 (-)
Assessed Value:	\$185,935
Ag Use Value:	\$16,080
Information provided for research purposes only. Legal descriptions and acreage amounts are for Appraisal District use only and should be verified prior to using for legal purpose and or documents. Please contact the Appraisal District to verify all information for accuracy.	

Property Taxing Jurisdiction			
Owner: WOOD SHERWYN D & ANGELA %Ownership: 100.00%			
Entity	Description	Market Value	Taxable Value
072	ERATH COUNTY	\$879,950	\$173,935
903	STEPHENVILLE ISD	\$879,950	\$75,935
MTD	MIDDLE TRINITY WATER	\$879,950	\$185,935
RER	ERATH ROAD & BRIDGE	\$879,950	\$173,935

Property Improvement - Building			
Type: MA State Code: E Value: \$143,957			
Type	Description	Year Built	SQFT
MA	MAIN AREA		1,969.00
P	COVERPORCH		108.00
P	COVERPORCH		30.00
P	COVERPORCH		30.00
WH	WELLHOUSE		36.00
DG2F	2CAR FRAME GARAGE DET	2005	704.00
SHED	SHED	2005	792.00
UTIL1	UTILITIES 1		1.00
Type: WARE State Code: D2 Value: \$34,391			
Type	Description	Year Built	SQFT
WARE	WAREHOUSE		990.00
AS	ANIMALSHADE		800.00
ST	STALLS	2005	1,088.00
ASHE	SHED ATTACHED	2005	375.00
STG	STRG BUILDING	2005	187.00
Type: BARN State Code: D2 Value: \$6,598			
Type	Description	Year Built	SQFT
BARN	BARN	2009	960.00
AS	ANIMALSHADE	2009	400.00
AS	ANIMALSHADE	2012	880.00
AS	ANIMALSHADE	2021	1,800.00

Property Land						
Type	Description	Acreage	Sqft	Eff Front	Eff Depth	Market Value Prod. Value
SAE		138.00	6,011,280.00	0.00	0.00	\$690,000 \$16,076
SAE		1.00	43,560.00	0.00	0.00	\$5,000 \$0

Property Roll Value History

Year	Improvements	Land Market	Ag Valuation	Appraised	HS Cap Loss	Assessed
2025	\$184,950	\$695,000	\$16,060	\$879,950	\$20,095	\$185,935
2024	\$184,950	\$695,000	\$16,630	\$879,950	\$31,810	\$169,480
2023	\$143,520	\$730,000	\$13,040	\$873,520	\$47,270	\$149,290
2022	\$120,750	\$715,000	\$15,120	\$835,750	\$19,180	\$141,690
2021	\$91,830	\$568,000	\$17,320	\$659,830	\$0	\$125,150
2020	\$91,830	\$554,200	\$18,290	\$648,030	\$1,520	\$124,600
2019	\$76,170	\$554,200	\$18,230	\$630,370	\$0	\$110,400
2018	\$69,080	\$517,000	\$18,220	\$586,080	\$0	\$103,300
2017	\$66,540	\$424,000	\$20,360	\$490,540	\$0	\$102,900
2016	\$66,540	\$366,000	\$21,140	\$432,540	\$0	\$102,680
2015	\$66,540	\$366,000	\$23,350	\$432,540	\$0	\$104,890

Property Deed History

Deed Date	Type	Description	Grantor	Grantee	Volume	Page	Number
2/15/1995			WOOD RHONDA & ANGELA	OPEN SPACE DAIRY	882	878	
3/24/2005			WOOD SHERWYN D & ANGELA	WOOD SHERWYN D & ANGELA	1215	709	
5/1/1922			CAREY T M ET UX	CAREY FRED	169	326	
9/9/1982			CAREY KENNETH VAUGHAN & REX LYNN	OPEN SPACE DAIRY	608	497	
2/15/1995			OPEN SPACE DAIRY	WOOD SHERWYN D & ANGELA	882	880	
2/17/1995			OPEN SPACE DAIRY	WOOD SHERWYN D & ANGELA	882	1042	

Property Details

Account		
Property ID:	R000067915	Geographic ID: R.0057.00215.00.0
Type:	Real	Zoning:
Property Use:		Condo:
Location		
Situs Address:	5662 FM913	
Map ID:	18-16-3	Mapsc0:
Legal Description:	Acres 80.160, A0057 BABCOCK D W;	
Abstract/Subdivision:		
Owner		
Name:	WOOD SHERWYN D & ANGELA	
Agent:		
Mailing Address:	757 CR229 STEPHENVILLE, TX 76401-7350	
% Ownership:	100.00%	
Exemptions:	For privacy reasons not all exemptions are shown online.	

Property Values

Improvement Homesite Value:	\$0 (+)
Improvement Non-Homesite Value:	\$0 (+)
Land Homesite Value:	\$0 (+)
Land Non-Homesite Value:	\$0 (+)
Agricultural Market Valuation:	\$400,800 (+)
Market Value:	\$400,800 (=)
Agricultural Value Loss:	\$391,500 (-)

Appraised Value:	\$400,800 (=)
HS Cap Loss:	\$0 (-)
CB Cap Loss:	\$0 (-)

Assessed Value:	\$9,300
Ag Use Value:	\$9,300

Information provided for research purposes only. Legal descriptions and acreage amounts are for Appraisal District use only and should be verified prior to using for legal purpose and or documents. Please contact the Appraisal District to verify all information for accuracy.

Property Taxing Jurisdiction

Owner: WOOD SHERWYN D & ANGELA %Ownership: 100.00%

Entity	Description	Market Value	Taxable Value
072	ERATH COUNTY	\$400,800	\$9,300
903	STEPHENVILLE ISD	\$400,800	\$9,300
MTD	MIDDLE TRINITY WATER	\$400,800	\$9,300
RER	ERATH ROAD & BRIDGE	\$400,800	\$9,300

Property Land

Type	Description	Acreage	Sqft	Eff Front	Eff Depth	Market Value	Prod. Value
SAE		80.16	3,491,770.00	0.00	0.00	\$400,800	\$9,299

Property Roll Value History

Year	Improvements	Land Market	Ag Valuation	Appraised	HS Cap Loss	Assessed
2025	\$0	\$400,800	\$9,300	\$400,800	\$0	\$9,300
2024	\$0	\$400,800	\$9,620	\$400,800	\$0	\$9,620
2023	\$0	\$400,800	\$7,560	\$400,800	\$0	\$7,560
2022	\$0	\$400,800	\$8,770	\$400,800	\$0	\$8,770
2021	\$0	\$320,640	\$10,050	\$320,640	\$0	\$10,050
2020	\$0	\$312,620	\$10,590	\$312,620	\$0	\$10,590
2019	\$0	\$312,620	\$10,560	\$312,620	\$0	\$10,560
2018	\$0	\$284,160	\$10,560	\$284,160	\$0	\$10,560
2017	\$0	\$228,770	\$11,780	\$228,770	\$0	\$11,780
2016	\$0	\$196,350	\$12,220	\$196,350	\$0	\$12,220
2015	\$0	\$196,350	\$11,560	\$196,350	\$0	\$11,560

Property Deed History

Deed Date	Type	Description	Grantor	Grantee	Volume	Page	Number
4/5/2001			NOLAND GLENDA	WOOD SHERWYN D & ANGELA	1032	1060	

Property Details

Account

Property ID: R000075189 Geographic ID: R.0057.00216.00.0

Type: Real Zoning:

Property Use: Condo:

Location

Situation Address: FM913 (OFF)

Map ID: 18-16-3 Mapsco:

Legal Description: Acres 54.070, A0057 BABCOCK D W;

Abstract/Subdivision:

Owner

Name: WOOD SHERWYN D & ANGELA

Agent:

Mailing Address: 757 CR229
STEPHENVILLE, TX 76401-7350

% Ownership: 100.00%

Exemptions: For privacy reasons not all exemptions are shown online.

Property Values

Improvement Homesite Value: \$0 (+)

Improvement Non-Homesite Value: \$0 (+)

Land Homesite Value: \$0 (+)

Land Non-Homesite Value: \$0 (+)

Agricultural Market Valuation: \$270,350 (+)

Market Value: \$270,350 (=)

Agricultural Value Loss: \$263,970 (-)

Appraised Value: \$270,350 (=)

HS Cap Loss: \$0 (-)

CB Cap Loss: \$0 (-)

Assessed Value: \$6,380

Ag Use Value: \$6,380

Information provided for research purposes only. Legal descriptions and acreage amounts are for Appraisal District use only and should be verified prior to using for legal purpose and or documents. Please contact the Appraisal District to verify all information for accuracy.

Property Taxing Jurisdiction

Owner: WOOD SHERWYN D & ANGELA %Ownership: 100.00%

Entity	Description	Market Value	Taxable Value
072	ERATH COUNTY	\$270,350	\$6,380
903	STEPHENVILLE ISD	\$270,350	\$6,380
MTD	MIDDLE TRINITY WATER	\$270,350	\$6,380
RER	ERATH ROAD & BRIDGE	\$270,350	\$6,380

Property Land

Type	Description	Acreage	Sqft	Eff Front	Eff Depth	Market Value	Prod. Value
SAE		54.07	2,355,289.00	0.00	0.00	\$270,350	\$6,380

Property Roll Value History

Year	Improvements	Land Market	Ag Valuation	Appraised	HS Cap Loss	Assessed
2025	\$0	\$270,350	\$6,380	\$270,350	\$0	\$6,380
2024	\$0	\$270,350	\$6,600	\$270,350	\$0	\$6,600
2023	\$0	\$270,350	\$5,140	\$270,350	\$0	\$5,140
2022	\$0	\$270,350	\$5,950	\$270,350	\$0	\$5,950
2021	\$0	\$216,280	\$6,810	\$216,280	\$0	\$6,810
2020	\$0	\$210,870	\$7,250	\$210,870	\$0	\$7,250
2019	\$0	\$210,870	\$7,190	\$210,870	\$0	\$7,190
2018	\$0	\$189,250	\$7,190	\$189,250	\$0	\$7,190
2017	\$0	\$151,400	\$8,110	\$151,400	\$0	\$8,110
2016	\$0	\$129,770	\$8,440	\$129,770	\$0	\$8,440
2015	\$0	\$129,770	\$8,920	\$129,770	\$0	\$8,920

Property Deed History

Deed Date	Type	Description	Grantor	Grantee	Volume	Page	Number
1/23/2014			CARPENTER KATHIE	WOOD SHERWYN D & ANGELA			2014-00448

TCEQ USE ONLY

Application type: <input type="checkbox"/> Renewal	<input type="checkbox"/> Major Amendment	<input type="checkbox"/> Minor Amendment	<input type="checkbox"/> New
County: _____	Admin Complete Date: _____		
Agency Receiving SPIF: <input type="checkbox"/> Texas Historical Commission	<input type="checkbox"/> U.S. Fish and Wildlife		
<input type="checkbox"/> Texas Parks and Wildlife	<input type="checkbox"/> Army Corps of Engineers		

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

This form is required for all TPDES applications

1. Applicant: Sherwyn and Angela Wood
2. Permit Number: WQ0004843000 EPA ID Number: TX0129976
3. Address of the project (location description that includes street/highway, city/vicinity, and county). The facility is located on the south side of FM 913 approximately 2.5 miles south of intersection of FM 913 and US HWY 67; said intersection is located approximately 7 miles south of the intersection of US HWY 281 and US Hwy 67 in Erath County, Texas.
4. Provide the name, address, telephone and fax number of an individual that can be contacted to answer specific questions about the property.
First and Last Name: Corey Mullin
Company Name: Enviro-Ag Engineering, Inc.
Mailing Address: 9855 FM 847
City, State, and Zip Code: Dublin, TX 76446
Phone Number: 254/965-3500 Fax Number: 254/965-8000
5. County where the facility is located: Erath
6. If the property is publicly owned and the owner is different than the permittee/applicant, please identify the owner. n/a
7. Identify the name of the water body (receiving waters) and TCEQ segment number that will receive the discharge. North Bosque River in Segment No. 1226 of the Brazos River Basin
8. Provide a 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. (This map is required in addition to the map in the administrative report.)
9. Provide photographs of any structures 50 years or older on the property.
10. Does your project involve any of the following? Select all that apply.
 - ☐ Proposed access roads, utility lines, and construction easements
 - ☐ Visual effects that could damage or detract from a historic property's integrity
 - ☐ Vibration effects during construction or as a result of project design
 - ☐ Additional phases of development that are planned for the future
 - ☐ Sealing of caves, fractures, sinkholes, or other karst features
 - ☐ Disturbance of vegetation or wetlands
11. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves or other karst features): No proposed construction

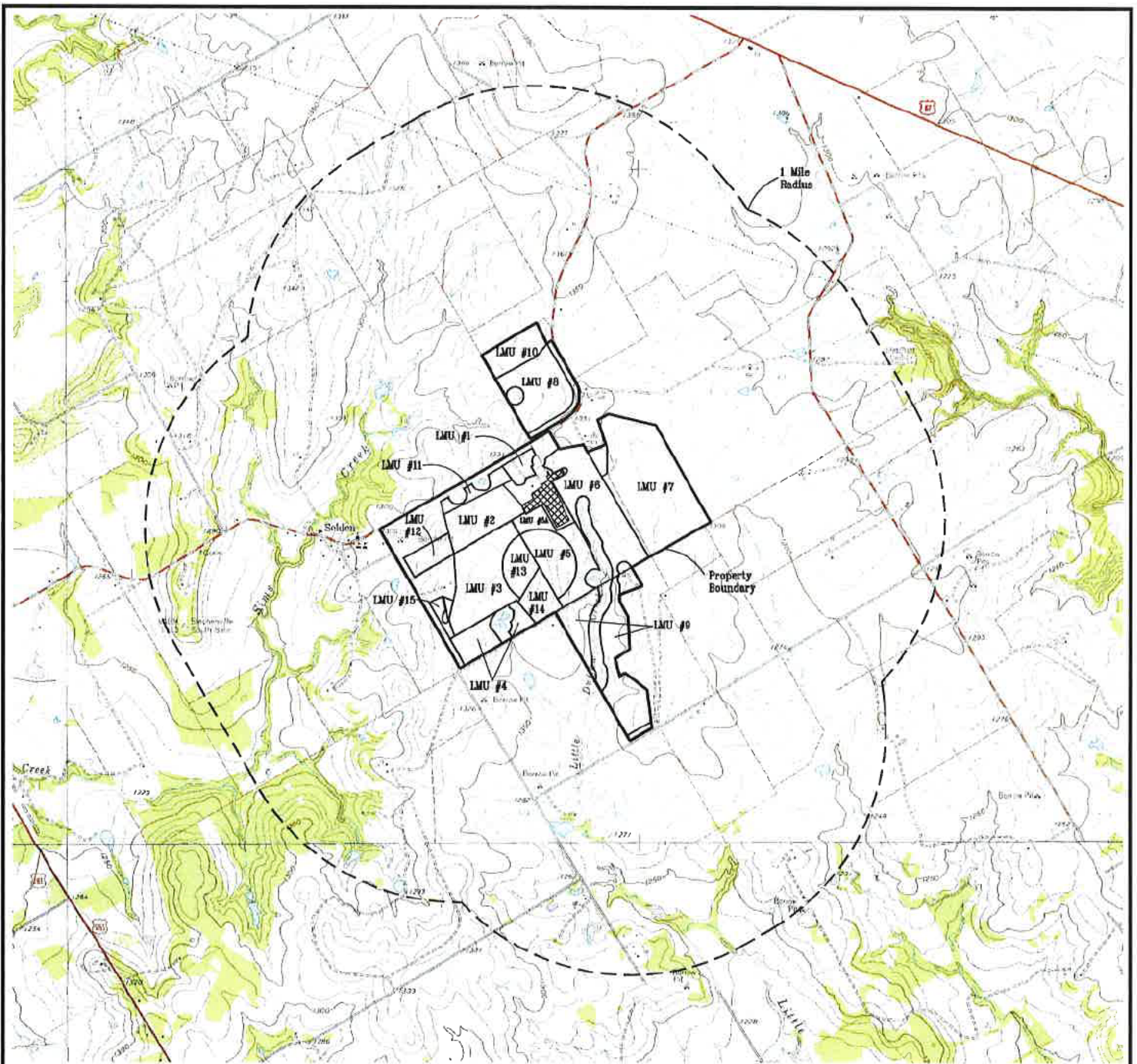
12. Describe existing disturbances, vegetation & land use (plowing, other ground disturbances):
The LMUs at the facility are planted in coastal Bermuda grass, small grains and sorghum.
Normal farming practices will be utilized to maintain these crops.

The following applies to New TPDES and Major Amendment to TPDES Permits:

13. List construction dates of any buildings or structures on the property: n/a
14. Provide a brief history of the property, and name of the architect/builder, if known: n/a

The following applies to New, Amended and Renewal TPDES applications:

15. List each Retention Control Structure and its required capacity (Acre Feet). RCS #1 - 18.65
16. Provide the location and number of acres where wastewater and manure are land applied:
The applicant has 512 on-site acres for waste and wastewater application. See attached
Figure 1.3 for exact locations of LMUs.
17. List the maximum number of head to be permitted. 990



Revised 3/4/2020

LEGEND:



Denotes Production Area



SCALE AS SHOWN

Source: USDA-NRCS. Geospatial Data Gateway. Available at:
<http://datagateway.nrcs.usda.gov/>. Digital Raster Graphic
 County Mosaic by NRCS - Accessed December 2013.

• Refer to Figures 1.3 & 1.4 for overall facility maps.

Sherwyn Wood Dairy
 Stephenville Texas
 Erath County

SPIF Map



Enviro-Ag Engineering, Inc.
 ENGINEERING CONSULTANTS
 3404 Airway Blvd.
 AMARILLO, TEXAS 79118
 TEL (806) 353-6123 FAX (806) 353-4132



TECHNICAL INFORMATION PACKET FOR CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFOs)

Submit this Form with your Individual Permit Application (TCEQ – 000728)

Name of Site: Sherwyn Wood Dairy

TCEQ Permit Number, if assigned: WQ000 4843000

Date Prepared: August 2025

SECTION 1. POLLUTANT SOURCES MANAGEMENT

For each potential pollutant source listed in the table below, provide the management practices utilized or enter "Not Applicable". Management practices should address the collection, storage and final disposition of each potential pollutant source. You may attach your list.

Table 1: Potential Pollutant Sources and Best Management Practices

Potential Pollutant Source	Best Management Practices
Manure and Manure Stockpiles	See Attached BMPs
Wastewater	See Attached BMPs
Sludge	See Attached BMPs
Compost	See Attached BMPs
Feed and Bedding	See Attached BMPs
Silage stockpiles	See Attached BMPs
Dead animals	See Attached BMPs
Dust	See Attached BMPs
Lubricants	See Attached BMPs
Pesticides	See Attached BMPs
Bulk cleaning chemicals	N/A
Inorganic fertilizers	N/A
Fuel storage tanks	See Attached BMPs
Other, specify: <u>Parlor Chemicals</u>	See Attached BMPs

SECTION 2. RETENTION CONTROL STRUCTURE DESIGN

A. Design Summary

- 1) Design Standards, Characteristic, and Values Sources Used
 - ☐ Natural Resource Conservation Service
 - ☒ American Society of Agricultural and Biological Engineers
 - ☒ Other; specify: Midwest Plan Services

I. POLLUTANT SOURCES AND MANAGEMENT

B. For each potential pollutant source, provide the management practices utilized.

Note: A Best Management Practice, as defined in 30 TAC §321.32(7), is the schedule of activities, prohibitions of practices, maintenance procedures, and other management and conservation practices to prevent or reduce the pollution of water in the state. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge, land application, or drainage from raw material storage. The following practices should be updated in the on-site PPP as changes to facility operating procedures occur. Employee training should be provided upon development & implementation of any BMP.

Potential Pollutant Sources:

Potential Best Management Practices (BMPs)

Manure, Sludge, Stockpiles, Slurry, Bedding, Feed Waste & Compost	Temporary (< 30 days) & Permanent Storage (>30 days) Store in drainage area of the RCS - OR - If not located within drainage area, berm area to contain runoff. Annually sample manure/manure stockpiles/compost/slurry for nutrient concentrations. Manure, Sludge, Slurry and/or Compost -Land application on-site or to third-party fields. Regular pen maintenance (scrapping & drainage)
Dust - Vehicle Traffic	Control speeds around the facility. Reduce travel on unpaved facility roads, or manage dust by sprinkling road with water and/or a suppressant on an as needed basis. Utilize paving products and/or gravel to manage dust on facility roads.
Dust - Feed Handling/Processing	Utilize dust abatement measures for feed handling equipment, Utilize choke feeding when handling feed ingredients & Utilize feed ingredients, such as moisture or other additives, to manage dust.
Feedstuff/Silage Stockpiles	Contain leachate in an earthen berm or in the RCS Minimize feed spoilage & utilize plastic covers or roofed areas for storage when applicable.
Lubricants/Pesticides/Herbicides/Parlor Chemicals	Store under roof Handle and dispose according to label directions
Fuel Tanks	Provide secondary containment Prevent overfills/spills
Wastewater	Store in RCS Land application according to NUP/NMP Land application will not occur during periods of saturation or frozen conditions (except in the event of imminent overflow) Annually sample for nutrient concentrations Maintain liner and capacity certifications Maintain adequate capacity as determined by the pond marker schematic
Dead Animals	Disposed by a third-party rendering service or composted on-site Collected within 24 hours of death and disposed within three days of death

- 2) Total Number of Animals:
In Open Lots: 990 In Buildings: 990
- 3) Animal Housing Location, hours/day:
Open Lots: 21 Buildings: 3
- 4) Average Liveweight, pounds per head: 1,400lbs
- 5) Volatile Solids Removed by Separator System: 50%
- 6) Volatile Solids Loading Rate, lbs/day/1000 ft³: N/A
- 7) Spilled Drinking Water, gallons/day: Included in cleanup
- 8) Water for Cleanup, gallons/day: 15,840 gal/day
- 9) Water for Manure Removal, gallons/day: Included in cleanup
- 10) Recycled Wastewater, gallons/day: 0 (vacuum)

B. Wastewater Runoff

- 1) Design Rainfall Amount, inches: 12.10
- 2) Design Rainfall Event:
 - ☐ 25-year, 24 hour
 - ☐ Soil Plant Air and Water (SPA-W) Field and Pond Hydrology Model
 - ☒ 25-year, 10 day
 - ☐ Other; specify: Click here to enter text.

C. Retention Control Structure(s) (RCS) Volume Allocations

Table 2. RCS Volume Allocations (Acre-Feet)

RCS Name	Design Rainfall Event Runoff	Process Generated Wastewater	Minimum Treatment Volume	Sludge Accumulation	Water Balance	Required Capacity	Actual Capacity
1	10.34	1.46	0.00	4.19	2.67	18.65*	28.47
						*Rounded Figure	

Indicate which RCSs are in-series: none

D. RCS Liner or Lack of Hydrologic Connection Certification

Table 3: RCS Hydrologic Connection

RCS Name	Construction Date	Type of Hydrologic Connection Certification
RCS #1	2010	Liner Cert., Norman Mullin, P.E., 2010
Settling Basin	2007	Liner Cert., Norman Mullin, P.E., 2007

E. Playa Lakes

Are any playa lakes used for RCSs? Yes ☐ No ☒

SECTION 3. MANURE, SLUDGE, AND WASTEWATER HANDLING

A. Manure:

- 1) Use or Disposal Method:
 - ☒ Land Application to LMUs
 - ☒ Transfer to other persons
 - ☒ Third Party Fields
 - ☐ Other; specify: [Click here to enter text.](#)
- 2) Land Application Location:
 - ☒ Onsite ☒ Offsite ☐ Not Applicable
- 3) Composting Location:
 - ☒ Onsite ☐ Offsite ☐ Not Applicable

B. Sludge:

- 1) Use or Disposal Method:
 - ☒ Land Application to LMUs
 - ☒ Transfer to other persons
 - ☒ Third Party Fields
 - ☐ Other; specify: [Click here to enter text.](#)
- 2) Land Application Location:
 - ☒ Onsite ☒ Offsite ☐ Not Applicable

C. Wastewater:

- 1) Use or Disposal Method:
- ☒ Land Application to LMUs
 - ☐ Total Evaporation
 - ☐ Third Party Fields
 - ☐ Other; specify: [Click here to enter text.](#)
- 2) Land Application Location:
- ☒ Onsite ☒ Offsite ☐ Not Applicable

D. Land Application Summary from the Nutrient Management Plan

For each Land Management Unit (LMU), provide the name, acre, crops/yield goals and application rates on Table 4 below. Add rows if needed or attach additional pages.

Table 4: Land Management Unit Summary from the Current NMP

LMU Name	Acre	Crop(s) and Yield Goal(s)	Application Rate (Ac-ft/Ac/Year OR Tons/Ac/Year)
1	10	Coastal Graze 1AU/1ac; SG Mod Graze M	25.4 tons/ac/yr
2	33	Coastal Graze 1AU/1ac; SG Mod Graze H	23.4 tons/ac/yr
3	53	Coastal Graze 1AU/1ac; SG Mod Graze M	25.4 tons/ac/yr
4	21	Coastal Graze 1AU/1ac; SG Mod Graze H	23.4 tons/ac/yr
5	26	Coastal Graze 1AU/1ac; SG Mod Graze M	0.558 ac-ft/ac/yr
5A	25	Coastal Graze 1AU/1ac; SG Mod Graze H	8.1 tons/ac/yr
6	59	Silage-Sorg 7-10T; SG Green Chop 6-7T	18.7 tons/ac/yr
7	104	Silage-Corn 16-20T; SG Silage 5-7T	18.7 tons/ac/yr
8	42	Silage-Corn 16-20T; SG Silage 5-7T	18.7 tons/ac/yr
9	61	Silage-Corn 16-20T; SG Silage 5-7T	24.3 tons/ac/yr

LMU Name	Acre	Crop(s) and Yield Goal(s)	Application Rate (Ac-ft/Ac/Year OR Tons/Ac/Year)
10	21	Coastal GC (30% DM) 9-11T; SG GC 6-7T M	24.3 tons/ac/yr
11	9	Coastal Graze 1AU/1ac; SG Mod Graze M	24.3 tons/ac/yr
12	12	Coastal Graze 1AU/1ac; SG Mod Graze H	7.7 tons/ac/yr
13	16	Coastal Graze 1AU/1ac; SG Mod Graze M	0.558 ac-ft/ac/yr
14	15	Coastal Graze 1AU/1ac; SG Mod Graze H	22.3 tons/ac/yr
15	5	Coastal Graze 1AU/1ac; SG Mod Graze M	24.3 tons/ac/yr

- 1) Wastewater production, ac-in/year: 440.52 ac-in/yr (Table 2.3, Col. 4)
- 2) Estimated Wastewater application, ac-in/year: 192.72 ac-in/yr (Table 2.3, Col. 10)
- 3) Manure production, tons/year: 3,614 tons/yr (Table 2.1)
- 4) Estimated manure application, tons/year: 3,614 tons/yr (NMP)
- 5) Estimated manure transferred to other persons, tons/year: 0

E. Floodplain Information

- 1) Is any part of the production area within a 100-year floodplain? Yes ☐ No ☒

If YES, describe management practices to protect the sites. [Click here to enter text.](#)

- 2) Is land application or temporary storage of manure in a 100-year floodplain or near a water course? Yes ☒ No ☐

If YES, describe management practices. Vegetative buffers shall be maintained between all waters of the state and any waste/wastewater application.

F. Soil Limitations

Table 5: Soil Limiting Characteristics and Best Management Practices

Soil Types	Limiting Characteristics	Best Management Practices
BdC	Depth to Bedrock Slow Water Movement	<ul style="list-style-type: none"> - Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP). -Land Application will be based upon the AWC (refer to NMP) of the soil and will not exceed agronomic rates for nutrients. - No land application to inundated soils.
HoB, DeB	Slow Water Movement	<ul style="list-style-type: none"> - Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP). - No land application to inundated soils.
Ma	Depth to Bedrock Droughty	<ul style="list-style-type: none"> - Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP). -Land Application will be based upon the AWC (refer to NMP) of the soil and will not exceed agronomic rates for nutrients. - No land application to inundated soils.
PcB, PcC	Droughty Depth to Bedrock Slow Water Movement	<ul style="list-style-type: none"> - Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP). -Land Application will be based upon the AWC (refer to NMP) of the soil and will not exceed agronomic rates for nutrients. - No land application to inundated soils.
Pd	Droughty Depth to Bedrock Slow Water Movement Large Stones on the Surface	<ul style="list-style-type: none"> - Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP). -Land Application will be based upon the AWC (refer to NMP) of the soil and will not exceed agronomic rates for nutrients. - No land application to inundated soils.

G. Well Protection

Table 6: Water Well Status and Protective Measures

Well ID Number	Well Type	Producing or Non-Producing	Open, Cased, or Capped	Protective Measures
1	Domestic	Producing	Cased	Maintain 150-ft Buffer
2	Domestic	Producing	Cased	Maintain 150-ft Buffer
3	Domestic	Producing	Cased	Maintain 150-ft Buffer
4	Domestic	Producing	Cased	See Attached Approved Well Buffer Exception
5	Domestic	Producing	Cased	See Attached Approved Well Buffer Exception
6	Domestic	Producing	Cased	Maintain 150-ft Buffer
7	Domestic	Producing	Cased	See Attached Approved Well Buffer Exception
8	Domestic	Producing	Cased	Maintain 150-ft Buffer

SECTION 4. AIR AUTHORIZATION SUMMARY

A. Type of Air Authorization

- ☐ Air Standard Permit in 30 TAC § 321.43
- ☒ Permit By Rule in 30 TAC Chapter 106 Subchapter F
- ☐ Individual Air Quality Permit

If Air Standard Permit is selected, then complete Sections B and C below.

B. Indicate the AFO Status and Buffer Option.

- ☐ Operation started after August 19, 1998:
 - ☐ ½ mile buffer*
 - ☐ ¼ mile buffer* and an odor control plan
- ☐ Operation started on or before August 19, 1998:
 - ☐ ¼ mile buffer*
 - ☐ odor control plan

*A written letter of consent from an affected landowner may be used in lieu of meeting the buffer distances specified.

C. Odor Receptors

Identify the number of occupied residences or business structures, schools (including associated recreational areas), places of worship, or public parks located within the following distances from permanent odor sources as defined in 30 TAC §321.32(43):

- 0 - ¼ mile: [Click here to enter text.](#)
- ¼ - ½ mile: [Click here to enter text.](#)
- ½ - 1 mile: [Click here to enter text.](#)

SECTION 5. ATTACHMENTS

A. Maps

- 1) Site Map
- 2) Land Management Unit Map
- 3) Vicinity Map
- 4) Original United States Geological Survey 7.5 Minute Quadrangle Map
- 5) 100 Year Floodplain Map (if applicable)
- 6) Runoff Control Map
- 7) Natural Resource Conservation Service (NRCS) Soil Survey Map

B. Professional Certifications

- 1) Recharge Feature Certification Statement and Supporting Documents
- 2) RCS Design Calculations (Water Nutr, Animal Waste Management (AWM), or equivalent)
- 3) RCS As-Built Capacity Certifications (if constructed)
- 4) RCS Hydrologic Connection Certifications (if constructed)

C. Land Application

- 1) Nutrient Management Plan
- 2) Nutrient Utilization Plan. If the NUP is already approved, include the approval letter.
- 3) Copy of Annual Soil Sampling Analyses (used for the NMP that was submitted with the application)

- 4) Copy of Annual Manure and Wastewater Analyses (used for the NMP that was submitted with the application)

D. Air Standard Permit Documentation (if required)

- 1) Area Land Use Map,
- 2) Odor Control Plan, if applicable
- 3) Written Consent Letters, if applicable

E. Groundwater Monitoring (if required)

- 1) Groundwater Monitoring Plan
- 2) Groundwater Monitoring Analyses

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1.0 FACILITY MAPS

1.1 Vicinity Map

Figure 1.1, Vicinity Map, is a general highway map generated in AutoCAD using Secondary roads data from geospatial Data Gateway at <http://datagateway.nrcs.usda.gov/> (retrieved 2020). The location of the facility is depicted on the map.

1.2 USGS Quadrangle Map

Figure 1.2, entitled 7.5-Minute USGS Map is a seamless, high-quality copy of the 7.5-minute USGS quadrangle map (Johnsville, TX, quadrangle) that shows the boundaries of land owned, operated, or controlled by Sherwyn Wood Dairy and used as part of the concentrated animal feeding operation; and all springs, lakes, or ponds located on-site and within 1 mile of the property boundary.

1.3 Site Map

Figure 1.3, Site Map, is a scaled drawing of the entire property to be permitted showing the locations of the following information:


- Pens/Open Lots
- Barns
- Retention Control Structures
- Land Management Units
- Buffer zones
- Wells
- Freshwater Ponds
- Caliche Pit
- Berms/Diversions
- Milking Parlor
- Manure/Compost Storage Areas
- Silage Storage

1.4 Runoff Control Map

Figure 1.4 is a scaled drawing of the production area showing the pens, barns, wells, RCSs, calf hutch area, silage storage area, permanent manure storage and compost areas, drainage area boundaries and flow directions.



Legend

- ★ Town
-  Sherwyn Wood Dairy
- Erath County Roads



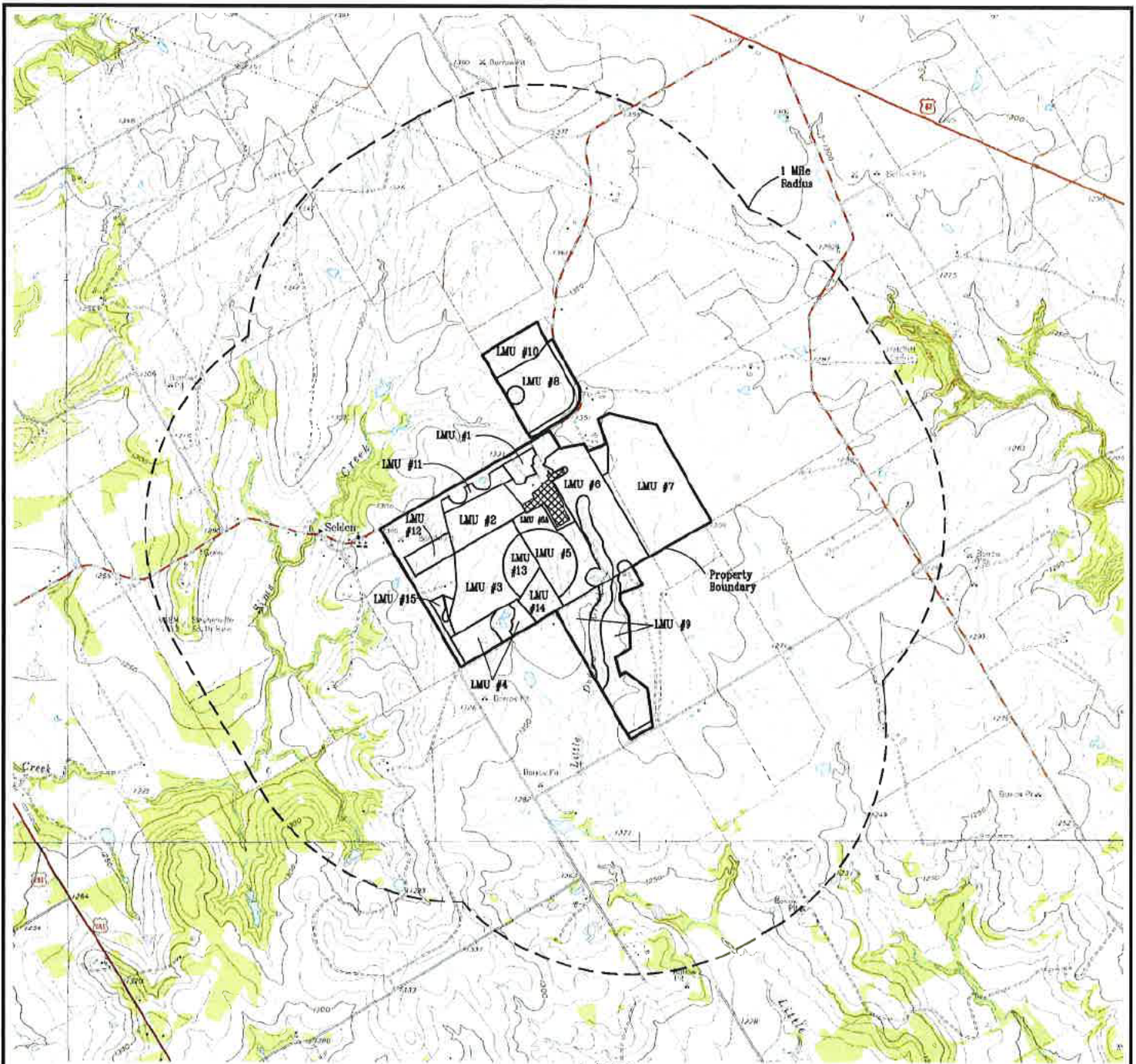
0 0.5 1 2 3 4 Miles

Sherwyn Wood Dairy
Stephenville, TX
Erath County

Vicinity Map
Figure 1.1
Page 2



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Amarillo, Texas 79118
806-353-6123; FAX 806-353-4132



Revised 3/4/2020

LEGEND:



Denotes Production Area



SCALE AS SHOWN

Source: USDA-NRCS. Geospatial Data Gateway. Available at:
<http://datagateway.nrcs.usda.gov/>. Digital Raster Graphic
 County Mosaic by NRCS - Accessed December 2013.

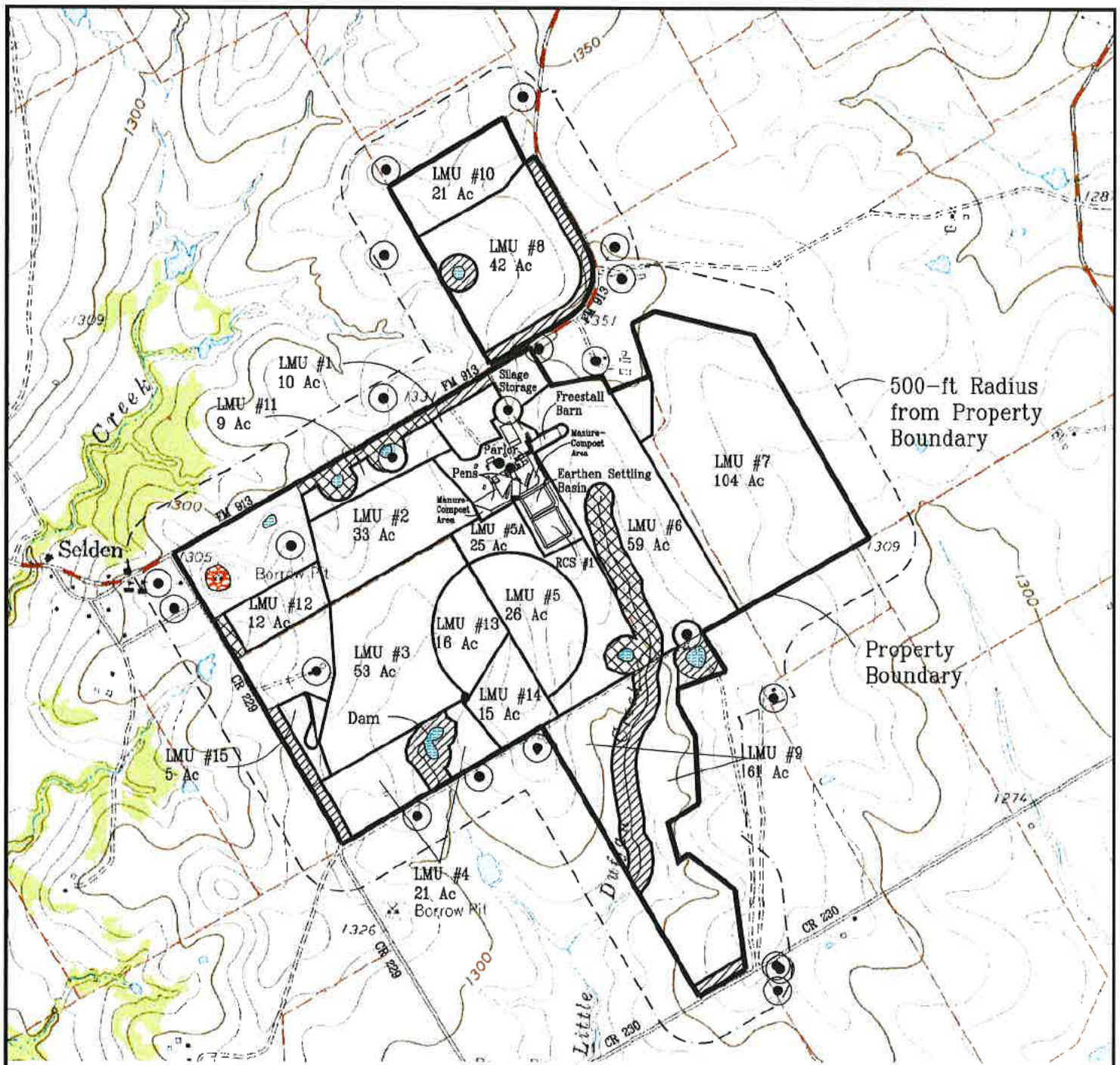
• Refer to Figures 1.3 & 1.4 for overall facility maps.

Sherwyn Wood Dairy
 Stephenville Texas
 Erath County

USGS 7.5-Minute Quadrangle Map
 Figure 1.2
 Page 3



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Map Revised 7/18/2025

LEGEND:

- Denotes Water Well
- ⊙ Denotes Well w/150-ft Buffer
- ▨ Denotes 130-ft Buffer
- ▩ Denotes 138-ft Buffer
- ▧ Denotes Fresh Water Pond
- ▦ Denotes Caliche Pit



SCALE AS SHOWN

Source: USDA-NRCS. Geospatial Data Gateway. Available at: <http://datagateway.nrcs.usda.gov/>. Digital Raster Graphic County Mosaic by NRCS - Accessed December 2013.

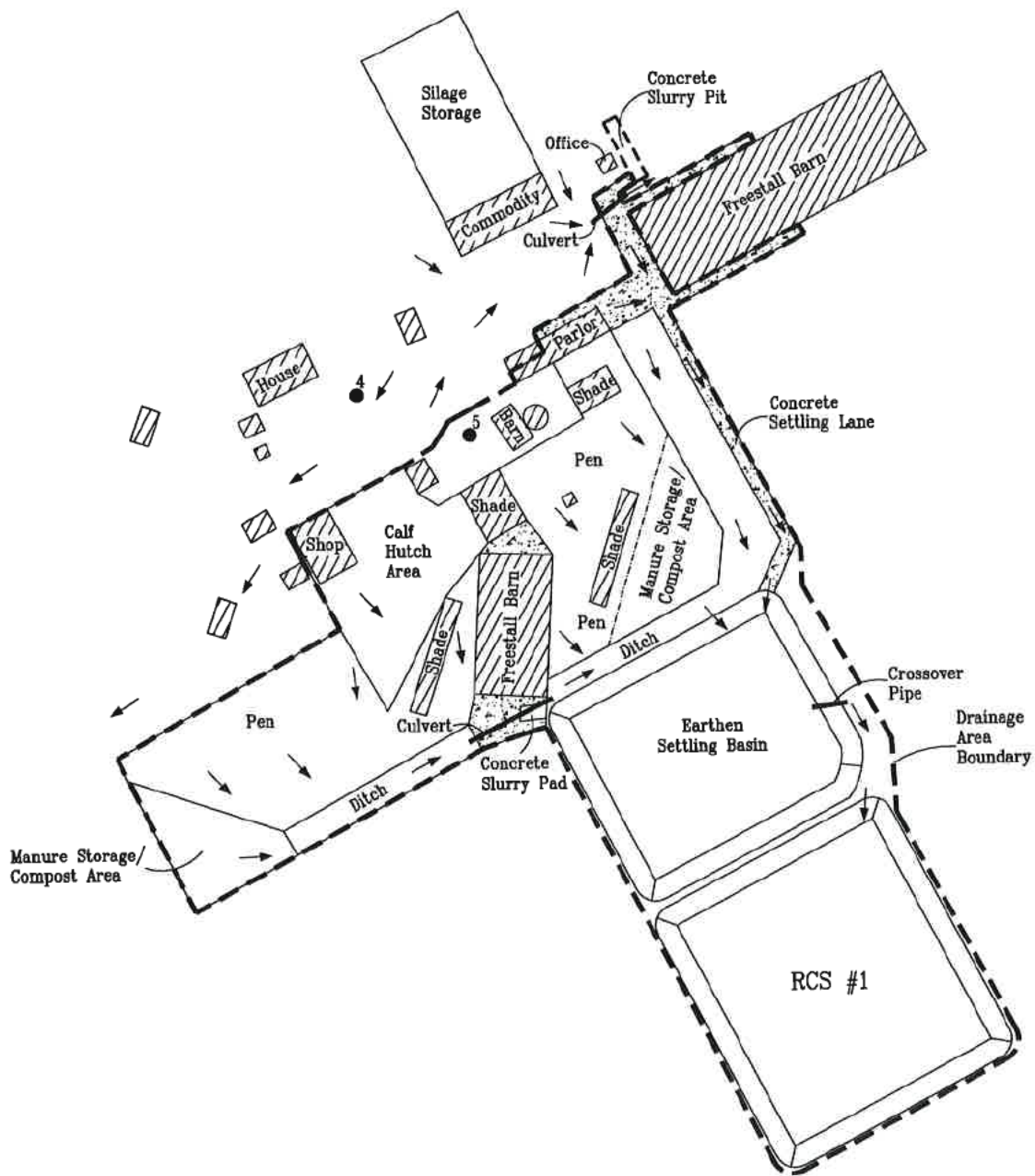
• Refer to Figure 1.4 for a detailed production area map.

Sherwyn Wood Dairy
Stephenville, Texas
Erath County

Site Map
Figure 1.3
Page 4



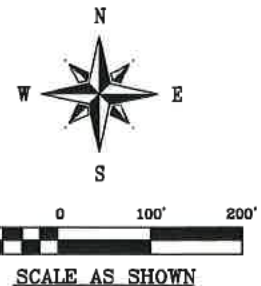
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Map Revised 7/17/2025

LEGEND:

- Denotes Well
- Denotes Ditches and/or Berms
- ▨ Denotes Barns/Roofed Areas
- ▩ Denotes Concreted Areas



Note: Drainage is depicted by arrows shown on maps. The drainage will be directed to the RCSs via ditches, berms or underground pipe.

• Refer to Figure 1.3 for an overall facility map.

Sherwyn Wood Dairy
Stephenville, Texas
Erath County

Runoff Control Map
Figure 1.4
Page 5



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2.0 CALCULATIONS & SPECIFICATIONS

2.1 Facility Overview

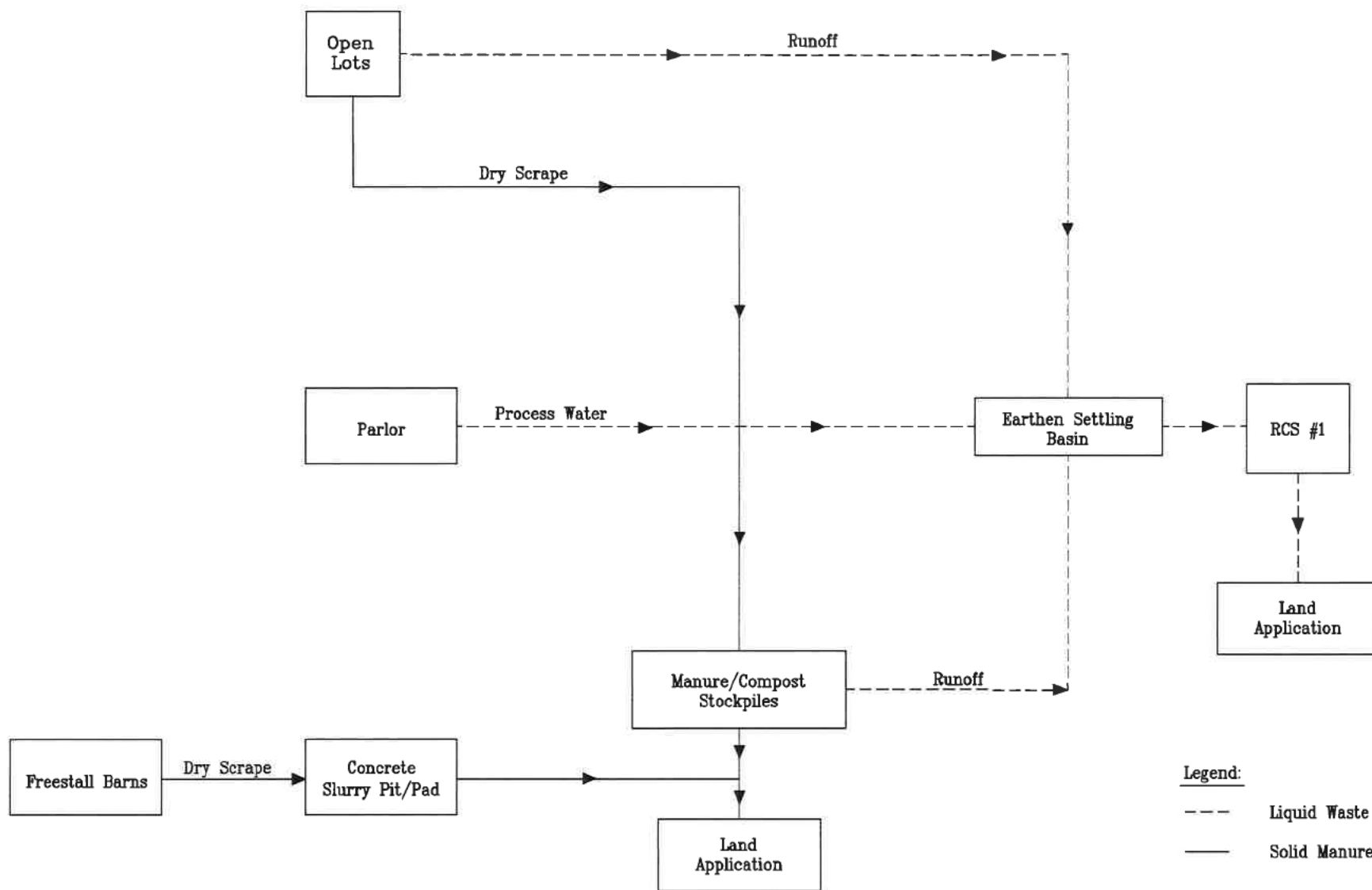
The existing facility consists of pens, freestall barns, a milking parlor, one earthen settling basin, one concrete slurry pit and one retention control structures to confine 990 head, of which 990 head are milking.

This amended application is to reconfigure the drainage area, remove proposed northeast slurry pit/turnaround, rename south slurry pit to "Concrete Slurry Pad," added new shop building and addition of a manure storage/compost area. The existing manure and/or wastewater storage structures have been certified as meeting TCEQ requirements for soil liner. Figure 2.1, Manure & Wastewater Flow Chart, shows the waste handling procedures and storage practices at the facility.

2.2 Manure Production

Table 2.1, As-Excreted Manure Characteristics Existing Dairy Facility, is included as a summary of the annual manure and nutrient production for the facility. The totals in Table 2.1 represent as-excreted manure and nutrient values for the maximum head count shown in the application.

Note: This data is intended for planning and design purposes and is not to be used for whole-farm nutrient mass balance calculations.



**ESTIMATED MANURE PRODUCTION
for a DAIRY FACILITY**

Table 2.1

ENVIRO-AG ENGINEERING, INC.

NAME OF CAFO: Sherwyn Wood Dairy
LOCATION: Erath County
DATE: August-25

MANURE PRODUCTION CRITERIA (a)			
FACILITY TOTAL	Milkers in Parlor	Milkers in Dry Lots/Freestall*	Total
1. Maximum Number of Animals Confined (head):	990	990	990
2. Confinement period, hrs/hd/day	3.0	21.0	24
3. Percent of time in Confinement	13%	88%	100%
4. Total Manure Production, lbs/day	18,563	129,938	148,500
5. Total Solids Production, lbs/day	2,475	17,325	19,800
6. Manure Production, tons/year	452	3,162	3,614
7. Volatile Solids Production, lbs/day	2,104	14,726	16,830
8. Total Nitrogen Production, lbs/day	123	858	980
9. Total Phosphorus, P ₂ O ₅ lbs/day (b)	48	337	385
10. Total Potassium, K ₂ O lbs/day (b)	34	239	273

NOTES:

- * - Freestall Barns are vacuumed/scraped for manure removal.
- (a) - Manure and nutrient production values are taken from American Society of Agricultural and Biological Engineers Data: (ASABE D384.2 MAR05_R2010) Manure Production and Characteristics, Table 1.b - Section 3. Production values given in terms of lb/day-animal (wet-basis).
- (b) - The ASAE Manure Production and Characteristics Tables give P and K in the elemental forms. Convert to P₂O₅ by multiplying by 2.29 and to K₂O by multiplying by 1.2.

2.3 Process-Generated Wastewater Volume

The primary source of process-generated wastewater is wash water from the milking parlor operations, which is directed into a concrete settling lane then into the earthen settling basin and then into RCS #1. The freestall barns are vacuumed for manure removal. All open lot pens are dry scraped for manure removal. The volume of process wastewater (including wet manure from the milking parlor) generated daily is estimated to be 16 gallons per head (based on data from Sherwyn Wood Dairy). The design storage volume in RCS #1 for process-generated wastewater is 30 days and is calculated in Table 2.2.

2.4 25-Year, 10-Day Rainfall Storage Volume

In accordance with 30 TAC §321.42(c)(1), RCS #1 is designed to maintain a margin of safety to contain the runoff and direct precipitation from the 25-year, 10-day storm event for this location, which is 12.10 inches of rainfall. Drainage area runoff volumes are calculated using the SCS method with curve numbers (CN) selected based on soil type and land use. The pen area runoff and compost area were calculated using a CN of 90, the pond area was calculated using a CN of 100, and the adjacent areas were calculated a CN of 85. Roofed/concrete areas were calculated using a CN of 100. Run-on from areas outside the control facility is directed away from the RCS. Table 2.2 shows the calculated storage volume required for the rainfall runoff from a 25-year, 10-day storm.

2.5 Sludge Accumulation Volume

Sludge accumulation from the milking parlor wash water was calculated using a rate of 0.073 cubic feet of sludge per pound total solids (from USDA-NRCS Agricultural Waste Management Handbook) and a sludge storage period of 5 years. Parlor waste/wastewater is directed to an earthen settling basin, with an estimated collection/removal efficiency of 50% (Midwest Plan Services) to reduce the amount of solids entering the RCSs, thereby reducing the demand for sludge storage. The required sludge accumulation volume calculations are shown in Table 2.2

2.6 Water Balance Model

Table 2.3, Water Balance Model, estimates the inflows and withdrawals from RCS #1 including runoff, direct rainfall, process-generated wastewater, evaporation, and irrigation withdrawal based on crop demand in accordance with 30 TAC §321.38(e)(7)(C). Actual pond withdrawal amounts will vary with changing weather conditions. An additional volume is included in the RCS to provide flexibility in managing RCS levels.

2.7 RCS Management Plan

A RCS Management Plan was developed by a licensed Texas professional engineer and has been implemented to incorporate the margin of safety, as specified in 30 TAC

§321.42(g). The plan includes the elements specified in §321.42(g)(1)-(6), and a copy is maintained in the onsite PPP.

REQUIRED STORAGE VOLUMES FOR RUNOFF RETENTION CONTROL STRUCTURE

Table 2.2
ENVIRO-AG ENGINEERING, INC.

NAME OF CAFO: Sherwyn Wood Dairy
LOCATION: Erath County
DATE: August-25

RUNOFF and STORAGE REQUIREMENT PROCESS GENERATED WASTE/WASTEWATER

Parlor Wash Water (n)	(gal/head/day)	16
No. of Head in Parlor		990
Volume of Process Water	(gal/day)	15,840
Design Storage Period	(days)	30
Process Water Volume:	(ac-ft)	1.46

RAINFALL VOLUME

Drainage Area Characteristics:	CN	(acres)
Pen Area:	90	3.14
Adjacent Areas:	85	1.32
Roof/Concrete Area:	100	1.39
RCS/SB Surface Areas	100	4.93
Total Drainage Area		10.78
25-year, 10-day rainfall:	(inches)	12.10
Runoff Volume Determination (b)	(inches)	(ac-ft)
Pen Area	10.86	2.84
Adjacent Areas:	10.21	1.12
Roof Area	12.10	1.40
RCS/SB Surface Areas:	12.10	4.97
Rainfall Volume:	(ac-ft)	10.34

SLUDGE VOLUME

Manure Produced in Parlor	(lb/day)	2,475
Settling Basin Efficiency (%) (c)		50%
Adjusted Dry Manure Production	(lb/day)	1,238
Sludge Accumulation Rate (d)	(cu ft/lb)	0.073
Sludge Accumulation Period	(years)	5
Sludge Volume from Parlor:	(ac-ft)	3.78
Percent Solids Content of Runoff	(percent)	1.50%
Mean Annual Runoff:	(inches)	14.63
Contributing Drainage Area:	(acres)	4.46
Sediment Storage Period	(years)	5
Runoff Sludge Volume (e):	(ac-ft)	0.41

TOTAL RCS VOLUME REQUIRED

Process Water Volume:	(ac-ft)	1.46
Total Sludge Volume:	(ac-ft)	4.19
Rainfall Volume:	(ac-ft)	10.34
Additional from Water Balance:	(ac-ft)	2.67

Total Required RCS #1 Volume:	(ac-ft)	18.65
-------------------------------	---------	-------

NOTES:

- (a) Based on site-specific data from Sherwyn Wood Dairy
(b) Using SCS method
Where:
 $S = (1000/CN) - 10$
 $Q = ((1 - 0.2S)^2)/(1 + 0.8S)$
 $S = \text{Potential maximum retention after runoff begins(in)}$
 $Q = \text{Runoff(in)}$
 $I = 25\text{-year, 10-Day rainfall (in)}$
 $CN = \text{Curve Number from SCS 210-VI-TR-55.}$
(c) Midwest Plan Service, 1983, Revised 1987 (Waste Management, page 702.11)
(d) Sludge accumulation rate taken from Table 1, ASABE Standards (ASABE EP 403.4 Feb 2011).
(e) USDA Agricultural Field Waste Handbook, Kansas, Part 651.1082, Suggested procedures for sediment volume estimation

NOTE: Calculations were performed in Microsoft Excel using floating point arithmetic in order to maintain the accuracy of the data. Any inconsistencies in rounding of the displayed values are not to be construed as errors in the calculation. For more information, please refer to <http://support.microsoft.com/kb/42980>



WATER BALANCE MODEL IRRIGATION AND EVAPORATION for RCS #1

Table 2.3
ENVIRO-AG ENGINEERING, INC.

NAME:	Sherwyn Wood Dairy	HYDROLOGIC CHARACTERISTICS	Pen Area (acres):	3.14	IRRIGATION CELL VOLUME SUMMARY DATA	10.34
LOCATION:	Erath County	Adjacent Area (acres):	1.32		Process Generated Wastewater Volume (ac-ft):	1.46
DATE:	August-25	Paved/Roof Area (acres):	1.39		Sludge Accumulation Volume (ac-ft):	4.19
		Total RCS/SB Surface Area (acres):	4.93		Additional Volume (ac-ft):	2.67
		Total Irrigated Area (acres)(12):	84	84	Total Required Capacity (ac-ft):	18.65
		Cropping scheme:	Coastal	Winter Wheat		
		Effective Evaporation Surface Area (acres):	4.19			

MONTH	RCS INFLOW CALCULATIONS				HYDRAULIC CROP DEMAND CALCULATIONS				RCS STORAGE SUMMARY			
	(1) (inches)	(2) (inches)	(3) (ac-ft)	(4) (ac-ft)	(5) (inches)	(6) (inches)	(7) (inches)	(8) (ac-ft)	(9) (ac-ft)	(10) (ac-ft)	(11) (ac-ft)	(12) (ac-ft)
JAN	1.55	0.23	0.06	1.31	1.55	2.10	2.74	8.34	2.37	0.83	start value -->	4.19
FEB	1.89	0.39	0.14	1.36	1.86	2.46	3.11	8.72	2.70	0.94	1.56	4.19
MAR	2.16	0.54	0.23	1.51	2.10	4.06	4.97	13.75	4.27	1.49	1.53	4.19
APR	2.89	1.00	0.53	1.46	2.65	4.98	5.74	16.32	5.19	1.81	1.32	4.19
MAY	4.35	2.10	1.37	1.51	3.52	5.75	5.33	15.49	5.24	1.83	1.49	4.19
JUN	3.23	1.24	0.71	1.46	2.88	6.82	3.22	2.41	7.01	2.45	2.67	4.19
JUL	2.12	0.52	0.21	1.51	2.06	7.66	0.00	39.18	8.23	2.78	1.11	4.19
AUG	2.24	0.59	0.26	1.51	2.16	7.56	0.00	37.79	7.75	2.70	0.00	4.19
SEP	3.03	1.11	0.61	1.46	2.76	5.78	0.00	21.15	5.97	2.08	0.17	4.19
OCT	3.20	1.22	0.69	1.51	2.86	4.29	2.15	10.03	4.91	1.71	1.34	4.19
NOV	1.90	0.40	0.15	1.46	1.87	2.81	1.70	6.56	3.32	1.16	1.87	4.19
DEC	1.62	0.26	0.07	1.51	1.62	2.34	2.33	5.00	2.47	0.86	1.42	4.19
TOTALS	30.20	9.59	5.84	17.74	27.88	56.49	31.29	200.39	59.41	20.66	16.06	

NOTES:

- (1) AVERAGE PRECIPITATION - Average precipitation taken from the Texas Water Development Board, Erath County, Quad #509, retrieved August 5, 2025.
- (2) RUNOFF PENS AND ADJACENT AREA - Runoff from pens, adjacent areas calculated using SCS Curve Number Method adjusted from 1 to 30-day Curve Number (Pen CN-77, Adj CN-67), (Ref. NRCS Animal Waste Management Software Help File- Program Documentation for Runoff).
- (3) INFLOW - Inflow is calculated from process generated wastewater, Table 2.2.
- (4) TOTAL INFLOW - Total inflow is calculated as that volume of rainfall that falls on the RCS and process water that enters the RCS.
- (5) RAINFALL ON IRRIGATED AREA - Effective monthly rainfall on the irrigated area calculated using SCS Curve Number Method adjusted from 1 to 30-day Curve Number (Pen CN-77, Adj CN-67), (Ref. NRCS Animal Waste Management Software Help File- Program Documentation for Runoff).
- (6) CONSUMPTIVE USE values from Borrelli, et al., 1998, Mean Crop Consumptive Use and Free-Water Evaporation for Texas, Dept. of Civil Engineering, Texas Tech University, Lubbock, Texas, Tables 16 and 25.
- (7) NET CROP DEMAND - Net Crop Demand = ((Consumptive Use(6) - Effective Rainfall(5)) / 12) x Irrigated Area.
- (8) MONTHLY LAKE SURFACE EVAPORATION - Average monthly lake surface evaporation taken from the Texas Water Development Board, Erath County, Quad #509, retrieved August 5, 2025.
- (9) NET POND EVAPORATION - Net Evaporation from the water surface is taken as (Monthly Lake Surface Evap(12) x RCS Surface Area).
- (10) ACTUAL WITHDRAWAL - Actual Withdrawal from the irrigation cell not to exceed Net Crop Demand. (No consideration given for nutrient demand of crop)
- (11) STORAGE AT END OF MONTH - Storage volume in the irrigation cell at the end of the month. The storage calculated in this column should not encroach in the volume reserved for the 25-year, 10-day rainfall event.
- (12) Irrigated acres include LULUs 2, 5 and 5A.

NOTE: Calculations were performed in Microsoft Excel using floating point arithmetic in order to maintain the accuracy of the data. Any inconsistencies in rounding of the displayed values are not to be construed as errors in the calculation. For more information, please refer to <http://support.microsoft.com/kb/42980>



3.0 FACILITY INFORMATION

3.1 Required Certifications

RCS #1 and the earthen settling basin have been certified by a licensed Texas professional engineer as meeting the liner requirements of the TCEQ. Existing liner and capacity certifications are attached.

3.2 100-Year Flood Plain Evaluation

The location for this facility is overlain on a FEMA 100-year flood plain map (Figure 3.1). The production area and LMUs are not located within a 100-year flood plain.



**Sherwyn Wood Dairy
Erath County, Texas
RCS #1 Capacity Certification**

The survey capacity performed on May 18, 2010 by Enviro-Ag Engineering, Inc. for retention control structure (RCS) #1 with two vertical feet of dry freeboard is calculated as:

RCS #1 Capacity: 28.47 ac-ft
RCS #1 Surface Area: 4.93 surface acres @ High Water Level

Prepared by:



Norman Mullin, P.E. # 66107
Enviro-Ag Engineering, Inc.
TBPE Firm # 2507

(Supporting Documentation Attached)



**Sherwyn Wood Dairy
Erath County, Texas
RCS #1 Liner Certification**

Seven 3-inch Shelby tube core samples were collected from RCS #1 to document the clay liner meets the requirements of the TCEQ for soil liner. The sample locations were backfilled with bentonite clay chips for sealing. The liner thickness was documented to be a minimum of 18 inches.

The hydraulic conductivity of the clay liner is documented as follows:

• RCS #1-1 (Lab #1701)	1.3×10^{-8} cm/sec
• RCS #1-2 (Lab #1702)	1.2×10^{-8} cm/sec
• RCS #1-3 (Lab #1703)	1.2×10^{-8} cm/sec
• RCS #1-4 (Lab #1704)	1.4×10^{-8} cm/sec
• RCS #1-5 (Lab #1705)	7.7×10^{-8} cm/sec
• RCS #1-6 (Lab #1706)	2.3×10^{-8} cm/sec
• RCS #1-7 (Lab #1707)	3.0×10^{-8} cm/sec

The clay liner present in RCS #1 is determined to be in accordance with TCEQ specific discharge requirements of 1.1×10^{-6} cm/sec. The observed hydraulic conductivity from RCS #1 is considered protective of ground and surface water resources.

Supporting moisture and density laboratory results indicate the embankment and liners were installed at 95% maximum dry density and within the moisture range of minus 1% to plus 3% of optimum moisture content (see attached moisture/density test results). The liner present in RCS #1 is determined to be constructed in accordance with TCEQ requirements for soil liners

I certify that RCS #1 at Sherwyn Wood Dairy meets the construction requirements of NRCS Practice Codes 313 (Waste Storage Ponds), 378 (Pond Embankment) and 521D (Pond Sealing or Lining, Compacted Clay Treatment). Erosion protection and emergency spillway are in place and the staff gauge is installed and calibrated.

Prepared by:

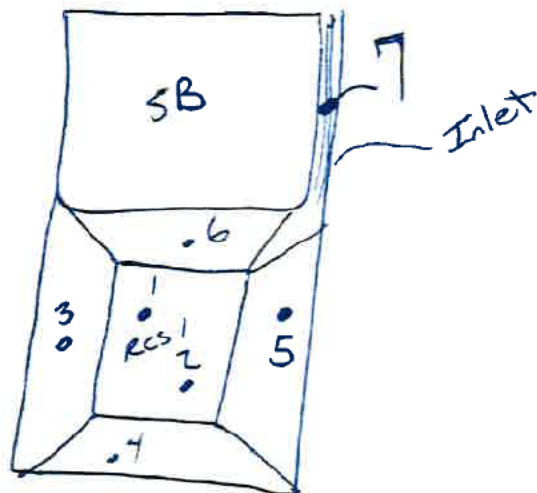

Norman Mullin, P.E. # 66107
Enviro-Ag Engineering, Inc.
TBPE Firm # 2507

10/18/2010

(Supporting Documentation Attached)

TRIAXIAL PERMEABILITY CHAIN of CUSTODY

7 North



STRUCTURE

PERM
REPORT
I.D.

LAB
LOG

RES#1-1

1701

11 - 2

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1705
1704

14 - 5

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1705

11-6

7

1705
1706

11 ~ 7

7

$$\begin{array}{r} 1720 \\ 1752 \end{array}$$

Facility Name:

Sterwyn Wood RCS 1

Project Engineer:

Norm

Sampled by:

Loes

Date Sampled:

5/13/10

Date to Lab:

5/25/10

Received:

Ruby Baker

EAD

302 Morgan Mill Road
Bldg C

Stephenville, TX 76401

(254) 965-3500

Fax: (254) 965-8000

VIA UPS

Enviro-Ag Engineering, Inc.

3404 Airway Blvd., Amarillo, TX 79118 (806) 353-6123

LABORATORY SERVICES



HYDRAULIC CONDUCTIVITY

REPORT

ASTM D-5084, Method C

Client / Project Name:

Sherwyn Wood

Project No:

10-05-18

Lab Sample Number:

1701

Sample ID

1

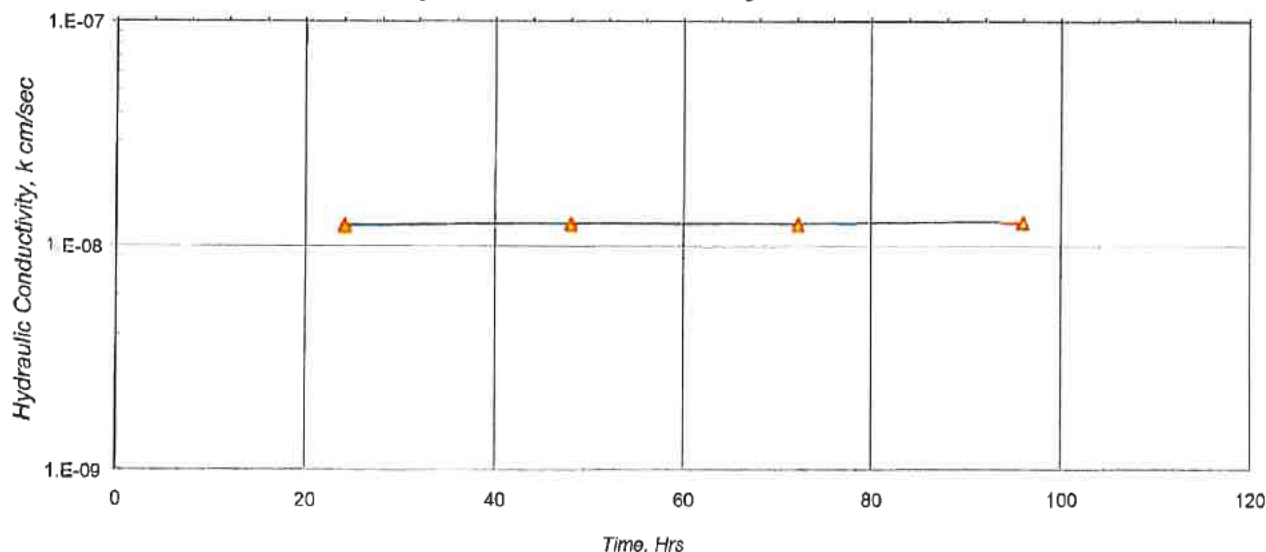
Sample Location:

RCS #1 - 1

Report Date:

June 14, 2010

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	1	
DESCRIPTION:	RCS #1 - 1	
	INITIAL	FINAL
HEIGHT, in.	4.6	4.7
DIAMETER, in.	2.8	2.9
WATER CONTENT, %	13.8	17.9
DRY DENSITY, pcf	115	113
SATURATION, %	81	98
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Yellow	
SAMPLE CONSISTENCY	Clay	

TEST DATA

ASTM D-5084, Method C

EFFECTIVE STRESS: 5 psi
GRADIENT RANGE: 2 - 2
IN / OUT RATIO: 1.00

		HYDRAULIC
		CONDUCTIVITY
TRIAL nos.	TIME hrs.	cm / sec
1	24.1	1.2E-08
2	48.1	1.3E-08
3	72.2	1.3E-08
4	96.0	1.3E-08

AVERAGE LAST 4: **1.3E-08**

COMMENTS:

Tap water used as permeant.

These results apply only to the above listed samples. The data and information are proprietary and can not be released without authorization of Enviro-Ag Engineering, Inc.

By accepting the data and results represented on this page, client agrees to limit the liability of Enviro-Ag Engineering, Inc. from Client and all other parties claims arising out of the use of this data to the cost for the respective test(s) represented here, and Client agrees to indemnify and hold harmless Enviro-Ag from and against all liability in excess of the aforementioned limit.

Z: Soils Lab\Perms\1910\10-05-18\1701

Print Date:

06/15/10

Reviewed By:

Micah Mullin

LSN:

1701

DCN: EAE-QC-GRAPH (rev. 11/10/04)

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LABORATORY SERVICES



HYDRAULIC CONDUCTIVITY

REPORT

ASTM D-5084, Method C

Client / Project Name

Sherwyn Wood

Project No:

10-05-18

Lab Sample Number:

1702

Sample ID:

2

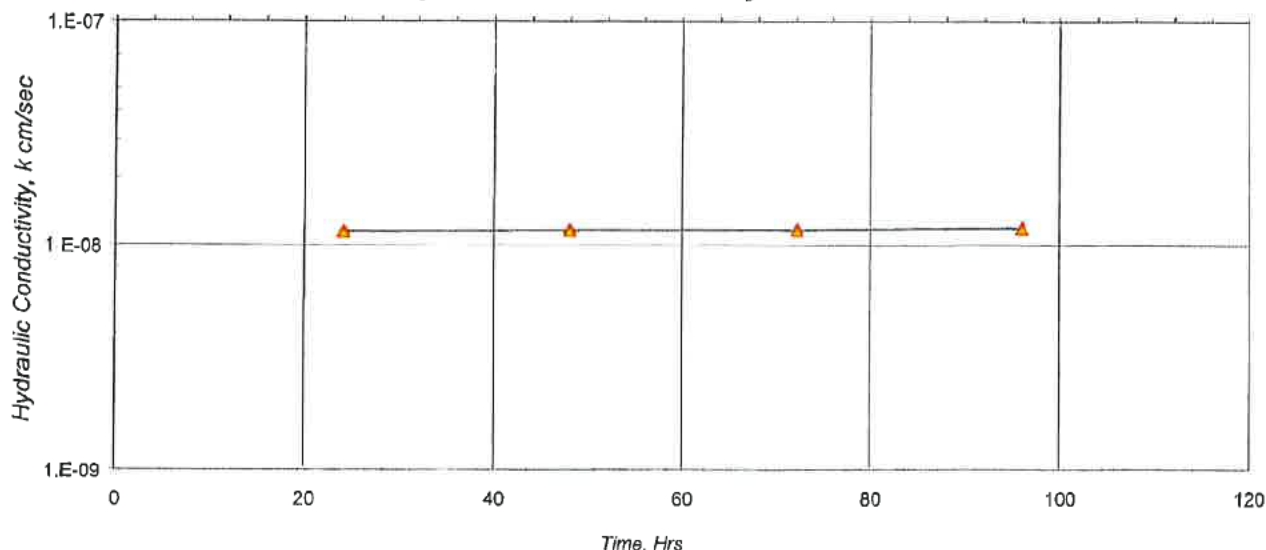
Sample Location

RCS #1 - 2

Report Date:

June 14, 2010

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	2	
DESCRIPTION:	RCS #1 - 2	
	INITIAL	FINAL
HEIGHT, in.	3.9	4.0
DIAMETER, in.	2.8	2.9
WATER CONTENT, %	13.7	17.4
DRY DENSITY, pcf	118	114
SATURATION, %	86	99
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Yellow	
SAMPLE CONSISTENCY	Clay	

TEST DATA

ASTM D-5084, Method C

EFFECTIVE STRESS: 5 psi
 GRADIENT RANGE: 2 - 2
 IN / OUT RATIO: 1.00

TRIAL	TIME	HYDRAULIC
nos.	hrs.	CONDUCTIVITY
		cm / sec
1	24.1	1.2E-08
2	48.1	1.2E-08
3	72.2	1.2E-08
4	96.0	1.2E-08

AVERAGE LAST 4 : 1.2E-08

COMMENTS:

Tap water used as permeant.

These results apply only to the above listed samples. The data and information are proprietary and can not be released without authorization of Enviro-Ag Engineering, Inc.

By accepting the data and results represented on this page, client agrees to limit the liability of Enviro-Ag Engineering, Inc. from Client and all other parties claims arising out of the use of this data to the cost for the respective test(s) represented here, and Client agrees to indemnify and hold harmless Enviro-Ag from and against all liability in excess of the aforementioned limit.

Z: Soils Lab\Perms 11910 \ 10-05-18 \ 1702

Print Date:

06/15/10

Reviewed By:

Micah Mullin

LSN:

1702

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LABORATORY SERVICES



HYDRAULIC CONDUCTIVITY

REPORT
ASTM D-5084, Method C

Client / Project Name

Sherwyn Wood

Project No:

10-05-18

Lab Sample Number

1703

Sample ID:

3

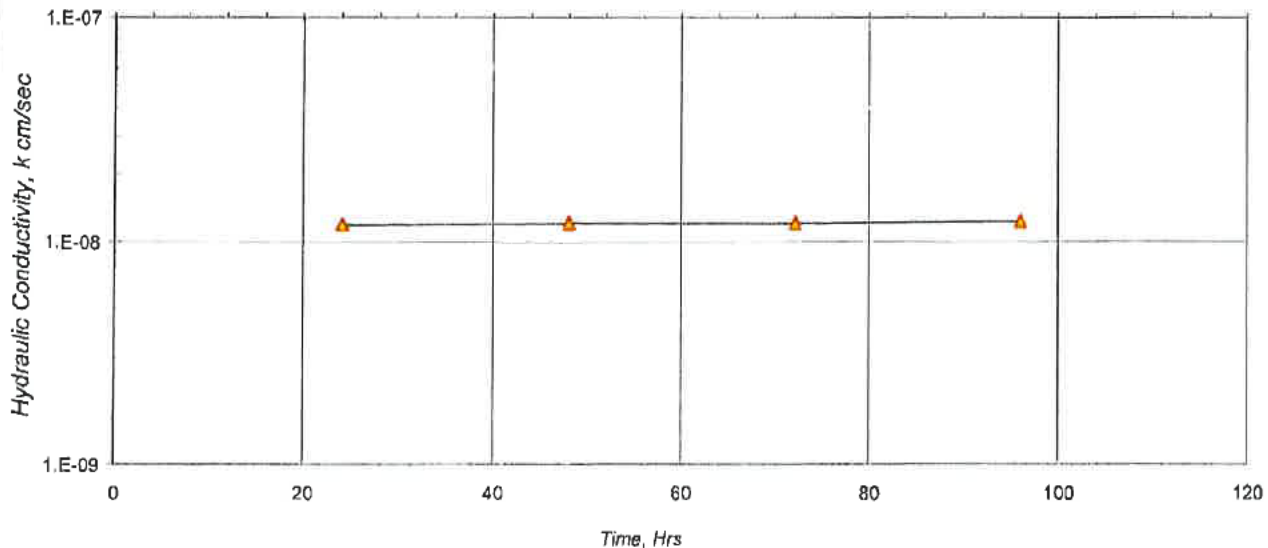
Sample Location

RCS #1 - 3

Report Date:

June 14, 2010

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	3	
DESCRIPTION:	RCS #1 - 3	
	INITIAL	FINAL
HEIGHT, in.	4.2	4.2
DIAMETER, in.	2.8	2.8
WATER CONTENT, %	11.8	16.8
DRY DENSITY, pcf	119	115
SATURATION, %	77	97
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Yellow	
SAMPLE CONSISTENCY	Clay	

TEST DATA

ASTM D-5084, Method C

EFFECTIVE STRESS: 5 psi
GRADIENT RANGE: 2 - 2
IN / OUT RATIO: 1.00

TRIAL nos.	TIME hrs.	HYDRAULIC CONDUCTIVITY cm/sec
1	24.1	1.2E-08
2	48.1	1.2E-08
3	72.2	1.2E-08
4	96.0	1.2E-08

AVERAGE LAST 4: **1.2E-08**

COMMENTS:

Tap water used as permeant.

These results apply only to the above listed samples. The data and information are proprietary and can not be released without authorization of Enviro-Ag Engineering Inc. By accepting the data and results represented on this page, client agrees to limit the liability of Enviro-Ag Engineering, Inc. from Client and all other parties claims arising out of the use of this data to the cost for the respective test(s) represented here, and Client agrees to indemnify and hold harmless Enviro-Ag from and against all liability in excess of the aforementioned limit.

Z: Solis Lab\Perms\1910\10-05-18\1703

Print Date:

06/15/10

Reviewed By:

Micah Mullin

LSN:

1703

DCN: EAE-QC-GRAPH (rev. 11/10/04)

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LABORATORY SERVICES



HYDRAULIC CONDUCTIVITY

REPORT

ASTM D-5084, Method C

Client / Project Name:

Sherwyn Wood

Project No:

10-05-18

Lab Sample Number:

1704

Sample ID:

4

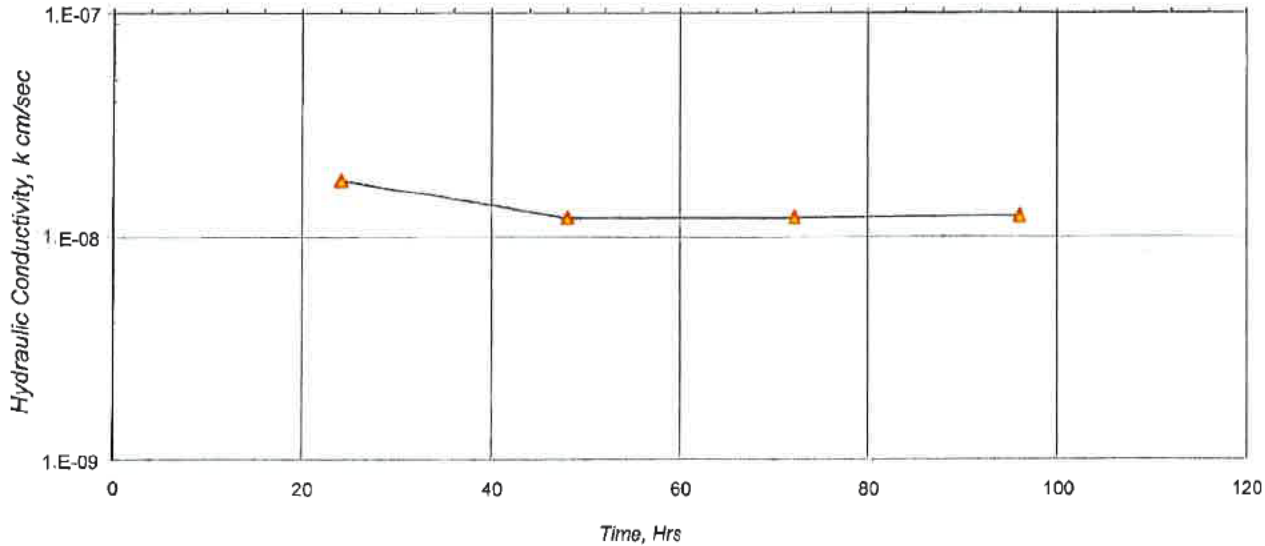
Sample Location:

RCS #1 - 4

Report Date:

June 14, 2010

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	4	
DESCRIPTION:	RCS #1 - 4	
	INITIAL	FINAL
HEIGHT, in.	4.4	4.5
DIAMETER, in.	2.8	2.9
WATER CONTENT, %	12.7	16.0
DRY DENSITY, pcf	121	117
SATURATION, %	86	98
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Yellow	
SAMPLE CONSISTENCY	Clay	

TEST DATA

ASTM D-5084, Method C

EFFECTIVE STRESS: 5 psi
GRADIENT RANGE: 2 - 2
IN / OUT RATIO: 0.87

		HYDRAULIC
		CONDUCTIVITY
TRIAL	TIME	
nos.	hrs.	cm / sec
1	24.1	1.8E-08
2	48.1	1.2E-08
3	72.2	1.2E-08
4	96.0	1.2E-08

AVERAGE LAST 4: **1.4E-08**

COMMENTS:

Tap water used as permeant.

These results apply only to the above listed samples. The data and information are proprietary and can not be released without authorization of Enviro-Ag Engineering, Inc.

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Z: Soils Lab\Perms (1910\10-05-18\1704)

Print Date:

06/15/10

Reviewed By:

Micah Mullin

LSN:

1704

DCN: EAE-QC-GRAPH (rev. 11/10/04)

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LABORATORY SERVICES



HYDRAULIC CONDUCTIVITY

REPORT

ASTM D-5084, Method C

Client / Project Name:

Sherwyn Wood

Project No:

10-05-18

Lab Sample Number:

1705

Sample ID:

5

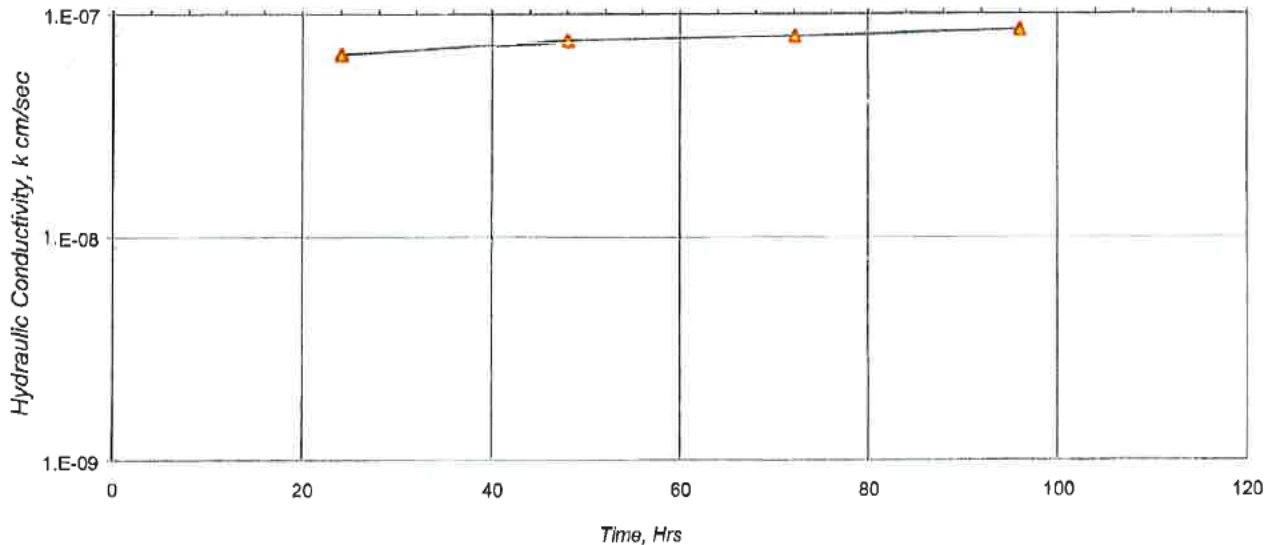
Sample Location:

RCS #1 - 5

Report Date:

June 14, 2010

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	5	
DESCRIPTION:	RCS #1 - 5	
	INITIAL	FINAL
HEIGHT, in.	4.4	4.4
DIAMETER, in.	2.9	2.9
WATER CONTENT, %	18.4	22.1
DRY DENSITY, pcf	106	105
SATURATION, %	85	99
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Yellow	
SAMPLE CONSISTENCY	Clay	

TEST DATA

ASTM D-5084, Method C

EFFECTIVE STRESS: 5 psi
GRADIENT RANGE: 2 - 2
IN / OUT RATIO: 1.05

		HYDRAULIC
TRIAL	TIME	CONDUCTIVITY
nos.	hrs.	cm / sec
1	24.1	6.6E-08
2	48.1	7.6E-08
3	72.2	8.0E-08
4	96.0	8.5E-08

AVERAGE LAST 4 : **7.7E-08**

COMMENTS:

Tap water used as permeant.

These results apply only to the above listed samples. The data and information are proprietary and can not be released without authorization of Enviro-Ag Engineering, Inc.

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2: Soils LabPerms \1910\10-05-18\1705

Print Date:

06/15/10

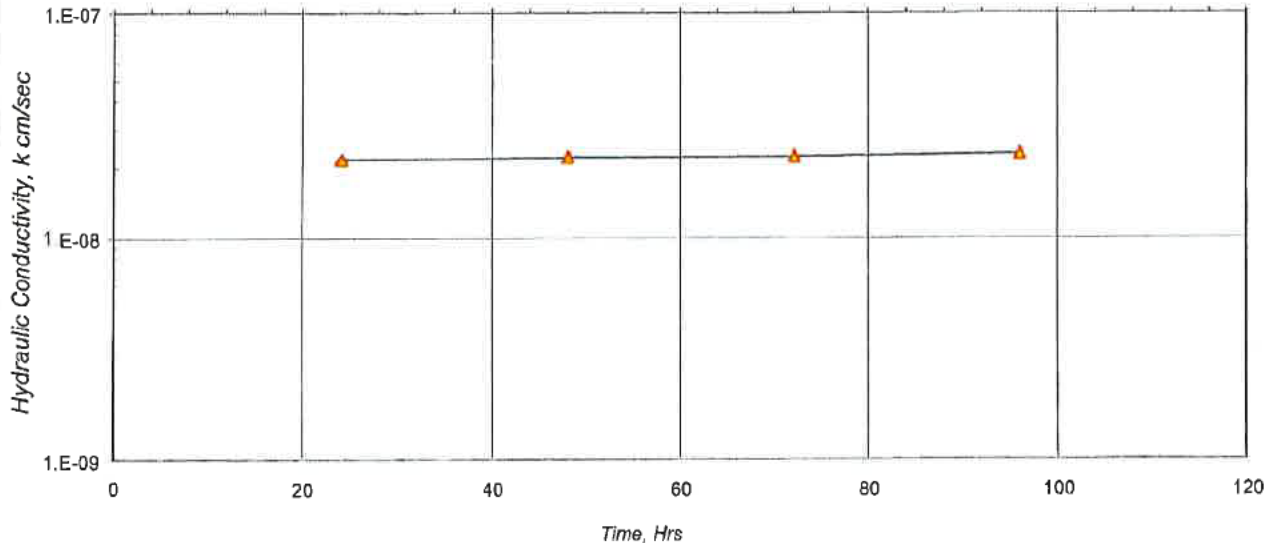
Reviewed By:

Micah Mullin

LSN:

1705

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	6	
DESCRIPTION:	RCS #1 - 6	
	<u>INITIAL</u>	<u>FINAL</u>
HEIGHT, in.	4.0	4.0
DIAMETER, in.	2.8	2.8
WATER CONTENT, %	15.3	21.1
DRY DENSITY, pcf	109	106
SATURATION, %	75	98
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Yellow	
SAMPLE CONSISTENCY	Clay	

TEST DATA

ASTM D-5084, Method C

EFFECTIVE STRESS: 5 psi
 GRADIENT RANGE: 2 - 3
 IN / OUT RATIO: 1.00

		HYDRAULIC
		CONDUCTIVITY
TRIAL	TIME	
<u>nos.</u>	<u>hrs.</u>	<u>cm/sec</u>
1	24.1	2.2E-08
2	48.1	2.3E-08
3	72.2	2.3E-08
4	96.0	2.3E-08

AVERAGE LAST 4 : **2.3E-08**

COMMENTS:

Tap water used as permeant.

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LABORATORY SERVICES



HYDRAULIC CONDUCTIVITY

REPORT

ASTM D-5084, Method C

Client / Project Name:

Sherwyn Wood

Project No.

10-05-18

Lab Sample Number:

1707

Sample ID:

7

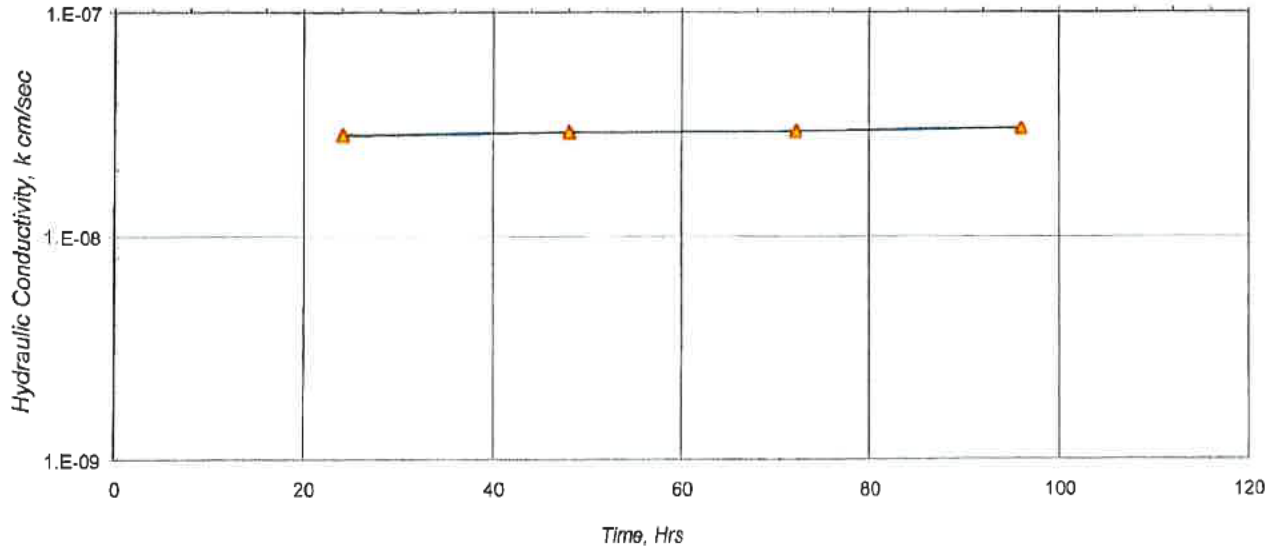
Sample Location:

RCS #1 - 7

Report Date:

June 14, 2010

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	7	
DESCRIPTION:	RCS #1 - 7	
	INITIAL	FINAL
HEIGHT, in.	5.1	5.1
DIAMETER, in.	2.9	2.9
WATER CONTENT, %	25.1	30.1
DRY DENSITY, pcf	95	93
SATURATION, %	87	100
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Dark Brown	
SAMPLE CONSISTENCY	Clay	

TEST DATA

ASTM D-5084, Method C

EFFECTIVE STRESS: 5 psi
GRADIENT RANGE: 2 - 2
IN / OUT RATIO: 1.00

		HYDRAULIC
TRIAL	TIME	CONDUCTIVITY
nos.	hrs.	cm/sec
1	24.1	2.9E-08
2	48.1	2.9E-08
3	72.2	3.0E-08
4	96.0	3.1E-08

AVERAGE LAST 4: 3.0E-08

COMMENTS:

Tap water used as permeant.

These results apply only to the above listed samples. The data and information are proprietary and can not be released without authorization of Enviro-Ag Engineering, Inc.

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Z: Soils Lab\Perms\1910\10-05-18\1707

Print Date:

06/15/10

Reviewed By:

Micah Mullin

LSN:

1707

DCN: EAE-QC-GRAPH (rev. 11/10/04)



RCS #1 LINER CERTIFICATION

Sherwin Wood Dairy
Erath County, Texas

In June 2007, two liner core samples were collected from runoff control structure (RCS) #1 at Sherwin Wood Dairy by Corey Mullin representing Enviro-Ag Engineering, Inc. The samples were collected to verify a minimum liner thickness of 12 inches and then submitted for permeability determination (ASTM D5084). Results of the permeability tests are as follows:

- RCS #1 Sample 1 - $1.2 \times 10E-08$ cm/sec
- RCS #1 Sample 2 - $1.0 \times 10E-08$ cm/sec

Based on the above permeability test results, the liner in RCS # meets the requirements of the TCEQ allowable seepage rates for runoff control structures (18 inches of liner material having $1.0 \times 10E-07$ cm/sec hydraulic conductivity or its equivalent). The sampling locations were backfilled with bentonite chips for closure.

Prepared by:

Norman H. Mullin, P.E.
Registration #66107

(Supporting Documentation Attached)

Enviro-Ag Engineering, Inc.

3404 Alway Blvd., Amarillo, TX 79118 (806) 353-6123

LABORATORY SERVICES

EAE

HYDRAULIC CONDUCTIVITY

REPORT

ASTM D-5084, Method C

Test / Project Name:

Sherwyn Wood / Pond Liner Certification

Project No:

07-04-30

Lab Sample Number:

14-001

Sample ID:

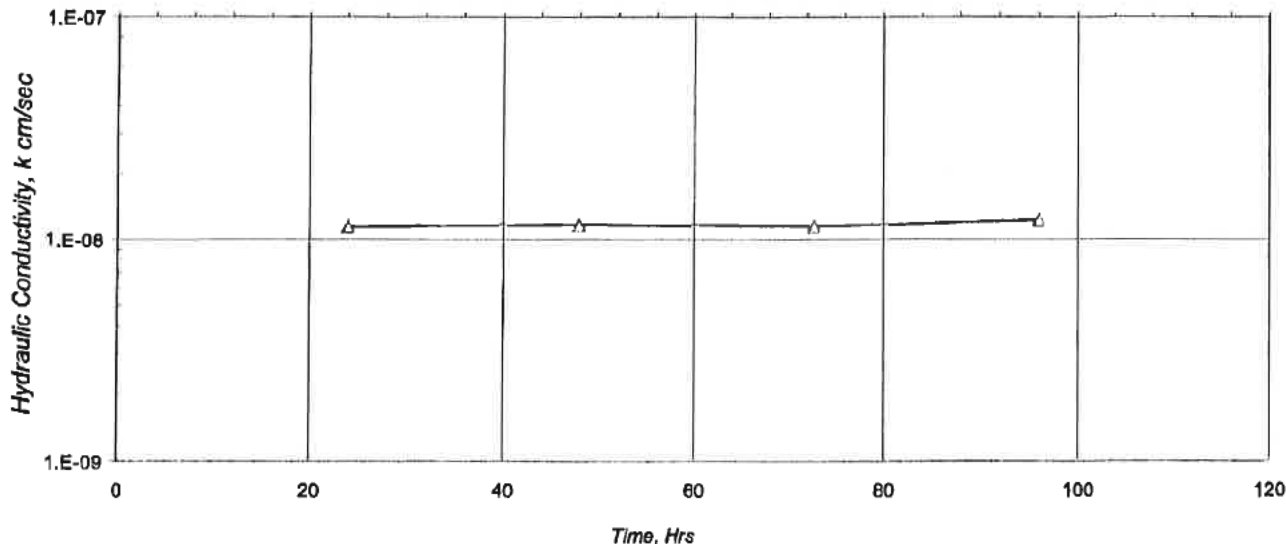
1

Sample Location:

Report Date:

June 20, 2007

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	1	
DESCRIPTION:	Unknown	
	INITIAL	FINAL
HEIGHT, in.	3.2	3.2
DIAMETER, in.	2.8	2.8
WATER CONTENT, %	17.1	20.5
DRY DENSITY, pcf	110	109
SATURATION, %	85	100
(Specific Gravity assumed as 2.72)		
SAMPLE COLOR	Dark Brown	
SAMPLE CONSISTENCY	Clay	

COMMENTS:

Tap water used as permeant.

TEST DATA

ASTM D-5084, Method C

EFFECTIVE STRESS: 5 psi
GRADIENT RANGE: 2 - 2
IN / OUT RATIO: 1.00
"B" PARAMETER: 0.95

TRIAL nos.	TIME hrs.	HYDRAULIC CONDUCTIVITY
		cm/sec
1	24.1	1.2E-08
2	47.9	1.2E-08
3	72.7	1.2E-08
4	96.0	1.2E-08

AVERAGE LAST 4: 1.2E-08

These results apply only to the above listed samples. The data and information are proprietary and cannot be released without authorization of Enviro-Ag Engineering, Inc.

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2: Soils Lab\Perms 12007\07-04-30\14-001

Print Date:

09/06/07

Reviewed By:

Michael Mears, EIT

LSN:

14-001

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LABORATORY SERVICES

EAE

HYDRAULIC CONDUCTIVITY

REPORT

ASTM D-5084, Method C

Client / Project Name:

Sherwyn Wood / Pond Liner Certification

Project No:

07-04-30

Lab Sample Number:

15-001

Sample ID:

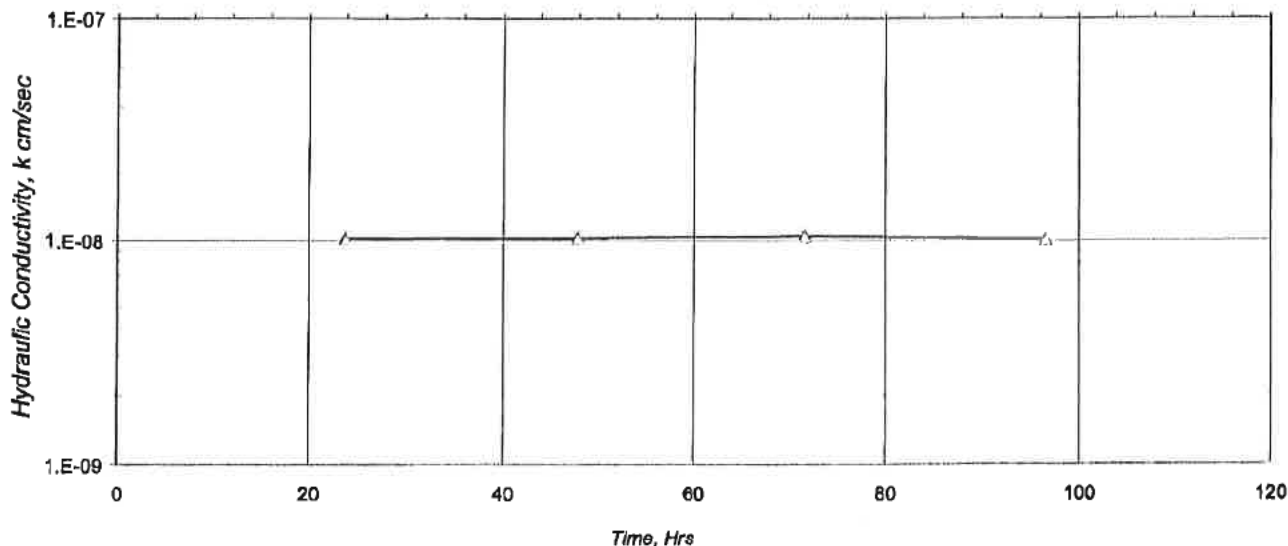
2

Sample Location:

Report Date:

June 20, 2007

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	2	
DESCRIPTION:	Unknown	
	INITIAL	FINAL
HEIGHT, in.	2.6	2.6
DIAMETER, in.	2.8	2.8
WATER CONTENT, %	14.8	24.9
DRY DENSITY, pcf	102	101
SATURATION, %	61	99
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Dark Brown	
SAMPLE CONSISTENCY	Clay	

COMMENTS:

Tap water used as permeant.

TEST DATA

ASTM D-5084, Method C

EFFECTIVE STRESS: 5 psi
GRADIENT RANGE: 3 - 3
IN / OUT RATIO: 1.00
"B" PARAMETER: 0.96

TRIAL nos.	TIME hrs.	HYDRAULIC CONDUCTIVITY
		cm / sec
1	23.8	1.0E-08
2	47.9	1.0E-08
3	71.7	1.0E-08
4	86.5	1.0E-08

AVERAGE LAST 4: 1.0E-08

These results apply only to the above listed samples. The data and information are proprietary and can not be released without authorization of Enviro-Ag Engineering, Inc.

By accepting the data and results represented on this page, client agrees to limit the liability of Enviro-Ag Engineering, Inc. from Client and all other parties claims arising out of the use of this data to the cost for the respective test(s) represented here, and Client agrees to indemnify and hold harmless Enviro-Ag from and against all liability in excess of the aforementioned limit.

Z: Soils Lab\Perms\2007\07-04-30\15-001

Print Date:

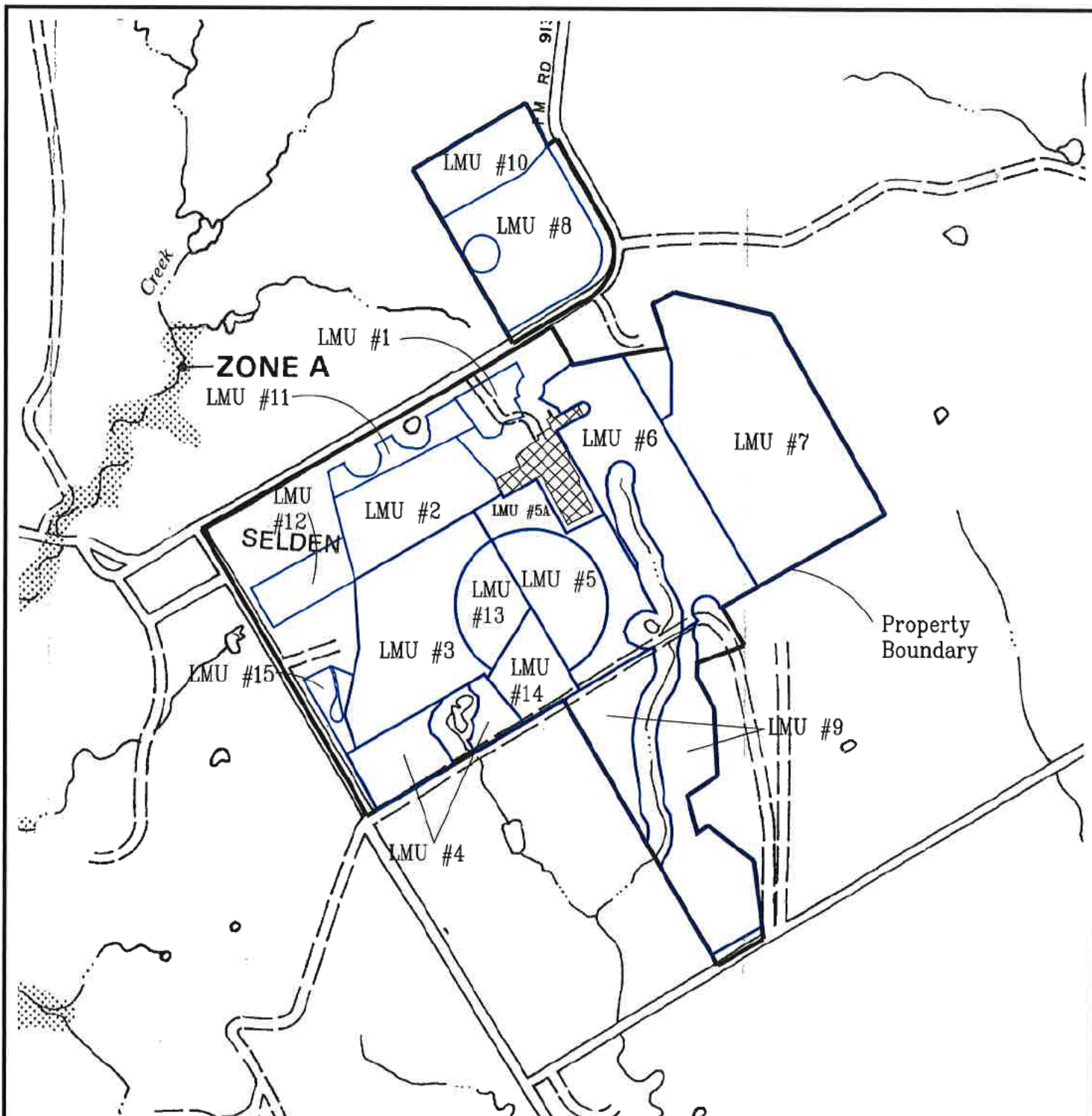
09/06/07

Reviewed By:

Michael Meers, EIT

LSN:

15-001



LEGEND:

 Denotes Production Area

Source: FEMA, Flood Plain Maps



No Scale

Sherwyn Wood Dairy
Stephenville, Texas
Erath County

FEMA Flood Map
Figure 3.1
Page 14



Enviro-Ag Engineering, Inc.
ENGINEERING CONSULTANTS
3404 Airway Blvd.
AMARILLO, TEXAS 79118
TEL (806) 353-6123 FAX (806) 353-4132

4.0 WASTE UTILIZATION & NUTRIENT MANAGEMENT PLAN

4.1 Nutrient Utilization

Agronomic application of dairy wastewater enhances soil productivity and provides the crop and forage growth with needed nutrients for optimum growth and vigor. Land application of wastewater will take place according to a Nutrient Utilization/Nutrient Management Plan (NUP/NMP) in accordance with NRCS Codes 590 and 633. The NUP/NMP for crop year 2025 is attached.

Per 30 TAC §321.42(j), existing dairy facilities located in a major sole-source impairment zone may request the TCEQ to allow the operator to provide manure, litter and wastewater to owners of third-party fields (areas not owned, operated, controlled, rented, or leased by the permittee) that have been identified in the PPP. Sherwyn Wood Dairy requests access to third-party fields to be operated in accordance with 30 TAC §321.42(j)(1)-(4). Third-party written contracts between the permittee and the third-party recipient will be maintained in the PPP. These contracts will confirm that the third party will allow manure, wastewater and slurry from the facility to be beneficially applied at agronomic rates based on the soil test phosphorus in accordance with applicable requirements of 30 TAC §321.36 and §321.40.

A Texas State Soil and Water Conservation Board (TSSWCB) certified Comprehensive Nutrient Management Plan (CNMP) has been developed.

4.2 Waste Handling Procedures

The dairy shall operate under the provisions of 30 TAC §321.42, which describes certain waste management and disposal requirements for individual water quality permits for dairy concentrated animal feeding operations (CAFOs) when an operation is located in a major sole-source impairment zone. Waste disposal options include:

- Beneficial use outside the watershed
- Disposed in permitted landfills outside the watershed
- Delivered to a composting facility approved by the Executive Director
- Other beneficial use approved by the Executive Director
- Applied on-site in accordance with a certified NRCS Code 590/633 NMP or NUP, as dictated by annual soil test results
- Provided to third parties as discussed above in Section 4.1

Waste Utilization and Nutrient Management Plan

Sherwyn Wood Dairy
757 CR 229
Stephenville, TX 76401
(254) 965-2372

TCEQ Permit Number:
WQ0004843000

Owner
Sherwyn & Angela Wood
757 CR 229
Stephenville, TX 76401

Operator
Same as Above

Type of Organic Nutrient Management Plan:
Other AFO-CAFO Waste Plan
located in Erath County

Prepared By:


(Signature)
Stephen Colby

Certified Nutrient Management Specialist
Certificate Number = TX2025004
Expiration Date = December 31, 2025
Enviro-Ag Engineering
9855 FM 847
Dublin, TX 76446
(254)965-3500

This plan is based on:
590 Organic Nutrient Management Plan V 5.0

8/7/25 3:26 PM

**2025
Executive Summary
Sherwyn Wood Dairy
WQ0004843000**

LMU Summary:

LMUs 1-5A & 10-12 are established in coastal bermudagrass overseeded with small grains for perennial coverage. LMUs 7, 8 & 9 are planted in corn and small grains. LMUs 6 is planted in sorghum and small grains.

Nutrient Summary:

LMU#	Max N Lb/ac Application Rates	Max P205 Lb/ac Application Rates	Planned N Lb/ac Application Rates	Planned P Lb/ac Application Rates	Crop Removal Rate N Lbs/ac.	Crop Removal Rate P205 Lbs/ac.
1	400	285	88	63	300	90
2	368	263	81	58	300	90
3	400	285	88	63	300	90
4	368	263	81	58	300	90
5	330	350	66	70	300	90
5A	127	90	28	20	300	90
6	294	210	65	46	277	94
7	294	210	65	46	246	108
8	294	210	65	46	246	108
9	400	285	84	60	387	148
10	400	285	84	60	330	104
11	400	285	84	60	300	90
12	127	90	27	19	300	90
13	330	350	66	70	300	90
14	368	263	77	55	300	90
15	400	285	84	60	300	90

Although this plan illustrates the certain LMUs being utilized for wastewater application, it is not the intent of this plan to limit application of wastewater and manure to specific LMUs. Solids or effluent may be applied to any LMU as long as the max. rates in the plan are not exceeded for the plan year.

Supplemental nutrients will be necessary to achieve the desired yields. Commercial fertilizer applications should be split such that individual application events do not exceed 100 lb/Ac. All remaining manure is to be hauled off by a contract hauler for beneficial use. Offsite manure transfer activities will be in accordance with NRCS and TCEQ requirements for sampling, recordkeeping, and land application.

Some fields have not been sampled by TCEQ for the current crop year. For those fields, this plan will utilize the most recent soil analysis.

PI Index by Field

Printed on: 8/7/25 3:26 PM

Client Name: Sherwyn Wood Dairy

Planner: Stephen Colby

This plan is based on: Nutrient Management Plan V 5.0

Permit #:

WQ0004843000

Date: 8/7/2025

Location: Erath

Rainfall: >25.0 inches

LMU or Fields	Crop	Slope	Runoff Curve	Soil Test P Level	Inorganic P ₂ O ₅ Appl Rate	Organic P ₂ O ₅ Appl Rate	Inorganic Method & Timing	Organic Method & Timing	Proximity of Appl to Named Stream	Runoff Class	Soil Erosion	Total Index Points	P Runoff Potential	Soil Test Date:
1	Coastal graze 1 AU/1 ac, SG mod graze	3.8%	80	8	0	6	0	4	1.25	2	0	21.25	Medium	10/7/24
2	Coastal graze 1 AU/1 ac, SG mod graze	5.1%	80	8	0	6	0	4	1.25	4	0	23.25	High	10/7/24
3	Coastal graze 1 AU/1 ac, SG mod graze	3.4%	80	8	0	6	0	4	1.25	2	0	21.25	Medium	9/9/23
4	Coastal graze 1 AU/1 ac, SG mod graze	4.5%	80	8	0	6	0	4	1.25	4	0	23.25	High	10/8/24
5	Coastal graze 1 AU/1 ac, SG mod graze	3.8%	80	8	0	6	0	0.5	2.5	2	0	19	Medium	10/8/24
5A	Coastal graze 1 AU/1 ac, SG mod graze	3.8%	80	8	0	6	0	4	5	2	0	25	High	10/8/24
6	Silage - Sorg7-10T;SG mod graze	4.7%	89	8	0	6	0	4	5	8	0	31	High	9/6/23
7	Silage - Corn16-20T;SG Silage-5-7T	2.4%	89	8	0	6	0	4	2.5	4	1.5	26	High	10/8/24
8	Silage - Corn16-20T;SG Silage-5-7T	3.2%	89	8	0	6	0	4	1.25	4	1.5	24.75	High	9/5/23
9	Silage - Corn16-20T;SG mod graze	2.5%	89	8	0	6	0	4	5	4	1.5	28.5	High	10/8/24
10	Coastal 3-Cut Hay; SG Silage 5-7T	4.7%	78	8	0	6	0	4	0	4	0	22	Medium	9/5/23
11	Coastal graze 1AU/1 ac, SG mod graze	2.5%	80	8	0	6	0	4	0	2	0	20	Medium	10/7/24
12	Coastal graze 1 AU/1 ac, SG mod graze	5.1%	80	8	0	6	0	4	1.25	4	0	23.25	High	9/5/23
13	Coastal graze 1 AU/1 ac, SG mod graze	3.8%	80	8	0	6	0	0.5	1.25	2	0	17.75	Medium	9/6/23
14	Coastal graze 1 AU/1 ac, SG mod graze	4.7%	80	8	0	6	0	4	1.25	4	0	23.25	High	9/6/23
15	Coastal graze 1 AU/1 ac, SG mod graze	3.4%	80	8	0	6	0	4	0	2	0	20	Medium	10/7/24

Waste Utilization and Nutrient Management Plan

EXECUTIVE SUMMARY:

Permit #: WQ0004843000

This Nutrient Management Plan has fields that meet NMP and/or NUP requirements.

See Attached Executive Summary

LOCATION AND PURPOSE OF THE PLAN

This animal operation is located in **Erath** County (see attached topo map and plan map for location.) The purpose of this plan is to outline the details of the land application of the effluent and solids produced by this operation. When the plan is fully implemented, it should minimize the effects of the land application of animal wastes on the soil, water, air, plant, and animal resources in and around the application area. This plan, when applied, will meet the requirements of the Natural Resources Conservation Service Waste Utilization Standard and Nutrient Management Standard.

The plan is for the year of **2025** and will remain in effect until revision based on new soil or manure analysis or crop change (yield or crop) result in a new P-Index rating or plan classification (NMP-NUP). The waste has been stored in a **Dairy Lagoon**. Approximately **990** head will be confined with the average weight of **1325** pounds. The animals will be confined **24** hours per day for **365** days per year.

Waste Utilization and Nutrient Management Plan

TABLES 1, 2 and 2a

Permit #:

WQ0004843000

Values in Table 1 may be based on actual analysis or "book" values during the initial planning to determine land application rates for the initial plan. When "book" values are used, they will be from NRCS, Texas Cooperative Extension or averages from other TX testing lab sources. Site specific data will be used as soon as feasible after production begins. Manure and/or effluent will be tested at least annually or in the year of application if it is stored for more than one year. If the actual values are more than 10% higher or lower than the estimated values, this plan will need to be revised accordingly.

Application of waste products may be made up to the Maximum Rate given in Table 2 or 2a as applicable. Table 2 applies to those that are subject to Nutrient Management Plan (NMP) requirements while Table 2a applies when subject to Nutrient Utilization Plan (NUP) requirements. Current requirements for both the NMP and NUP are given in the headers of the tables. Table 2a has a criteria involving the distance to a named stream when the Soil Test P Level is above 200 ppm in arid areas as well as special requirements when the site is in a TMDL watershed designated by TCEQ. For various P Index Ratings, the maximum rates in Table 2 are based on crop requirements, whereas the maximum rates in Table 2a are based on crop removal rates. County avg. rainfall information can be found in the TX Agronomy Technical Note 15, Phosphorus Assessment Tool for Texas, located in the eFOTG at the address given in the section entitled "Collecting Soil Samples for Analyses".

CROP REMOVAL RATES:

Crop Removal Rates of nitrogen (N), phosphorus (P), and potassium (K) in pounds per acre are given in Table 3 for the crop and yield planned for each field. This Table is included for information only, and should be used during the planning process to compare planned or maximum application rates to crop removal. Crop removal rates may be based on actual analysis of harvested material or default values in the database. P build-up will occur at higher rates when crop removal rates are exceeded..

SOLIDS APPLICATION:

The maximum solids application rates are given in Table 4 along with the current soil test P level, maximum P_2O_5 application rate, maximum tons per acre of solids and the total tons of solids per field that can be applied to each field. The maximum tons of solids that can be utilized on the fields planned is indicated in the box near the lower left corner of Table 4. When the total application acres of the fields are adequate to allow all of the solids to be applied, "Adequate" will be indicated below the tonnage in this box. If "Not Adequate" is indicated, then the lower box will indicate the tons of solids that must be utilized off-site unless more fields/acres are added. This plan is valid only if the application of waste to the crops listed does not exceed the per acre rates by more than 10%. If the yield of a crop does not meet the expected goal, the application rate should be adjusted the following year.

The estimated amounts of N, P_2O_5 , and K_2O contained in the solids are provided in Table 5 for the maximum application rate. Supplemental N and K_2O will be applied to achieve the yield goals in Table 4 when recommended by the soil test and the maximum rate of the solids does not meet the crop needs. When the maximum application rate is applied and Table 5 indicates additional commercial nutrients, they must be applied to fields as indicated. **NOTE:** If additional nitrogen is recommended, the producer should consider collecting soil samples from the 6 - 36 inch layer to see if there is any additional deep nitrogen available. Additional deep nitrogen within the root zone of the crop can be substituted for supplemental commercial nitrogen, and should be included in the soil test N ppm entry.

Waste Utilization and Nutrient Management Plan

SOLIDS APPLICATION: (cont)

Permit #:

WQ0004843000

In situations where more land is available than is needed to utilize the maximum application rate on each field, the application rates in Table 6 have been reduced to the level that does not exceed the amount of solids produced. Table 7 indicates the amount of nutrients provided and, if needed, the supplemental nutrients which **must** be applied when the application is based on these rates. The amounts of supplemental nutrients in Table 7 are based on the actual amount of waste available rather than the **maximum** rate that "could" be applied.

The second line from the bottom of Table 6 on the right has a box that will be "YES" or "NO". When the reduced rates use all solids to be produced in a year, this box will be "Yes". If the percentages are too low, it will be "No". If "No", either more acreage is needed on which to apply the solids or the solids will need to be transported off-site. The amount is located on the bottom line on the extreme right of the page.

Actual application will be based on the quantities produced, as well as, current manure analyses. **Application at the MAXIMUM rates shown in Table 4 will result in a more rapid build-up of phosphorus than if applied at lower rates. A different percentage may be used as long as the rate does not exceed the maximum shown in Table 4 for the field and the proper amount of supplemental nutrients are applied. Applying a lower rate to the fields with higher soil test P levels will slow down the P buildup and extend their land application life. Phosphorus will also build up more rapidly on pastureland than on hayland or cropland, since very few nutrients are actually removed by grazing animals.**

The solids may be applied to the same acreage every year according to Table 2 or 2a. The annual rates in both Table 4 and 6 may be doubled not to exceed the 2X the annual nitrogen requirement or nitrogen removal rate, as applicable. When the full biennial rate has been used, no additional phosphorus fertilizer or animal wastes may be applied in the alternate year. A column in both tables indicates whether the rates given are Annual Rates (A) or Biennial Rates (B). Rates given are based on Table 2 or 2a as applicable. Annual application rate for fields in a TMDL area with a Soil Test P level equal to or greater than 500 ppm or any field in a TMDL area with P Index Rating of Very High is 0.5 annual crop removal rate.

EFFLUENT APPLICATION:

The maximum effluent application rates are given in Table 8 for each field. This table provides the current soil test P level, maximum P_2O_5 application rate, effluent either in gallons per acre or acre inches per acre and the amount of effluent that can be applied per field. The maximum amount of effluent that can be utilized on the fields planned is indicated in a box near the lower left corner of Table 8. When the total application acres are adequate to allow all of the effluent to be applied, "Adequate" will be indicated below this box. If "Not Adequate" is indicated, then the lower box will indicate the amount of effluent that must be utilized off-site unless more field acres are added.

The estimated amounts of N, P, and K contained in the effluent are provided in Table 9 for the maximum application rate indicated in Table 8. Supplemental N and K_2O will be applied to achieve the yield goals when recommended by the soil test and the maximum rates of the effluent do not meet the crop requirements. **NOTE:** If additional nitrogen is recommended, the producer should consider collecting soil samples from the 6 - 36 inch layer to see if there is any additional deep nitrogen available. Additional deep nitrogen within the root zone of the crop can be substituted for supplemental commercial nitrogen.

Waste Utilization and Nutrient Management Plan

EFFLUENT APPLICATION: (cont)

Permit #:

WQ0004843000

In situations where more land is available than is needed to utilize the maximum application rate on each field, the application rates in Table 10 have been reduced to the level that does not exceed the amount of effluent produced. Table 11 indicates the amount of nutrients provided and, if needed, the supplemental nutrients which **must** be applied when application is made based on the rates in Table 10. These amounts of supplemental nutrients in Table 11 are based on the planned amount of effluent available rather than the **maximum** rate that "**could**" be applied.

The bottom line on the right of Table 10 has a box that will be "YES" or "NO". When the reduced rates uses all effluent to be produced in a year, this box will be "Yes". If the percentages are too low, it will be "No". If "No" is indicated, either more acreage is needed on which to apply the effluent or the effluent will need to be transported off-site.

Actual application will be based on the quantities produced, as well as, current manure analyses. **Application at the MAXIMUM rates shown in Table 8 will result in a more rapid build-up of phosphorus than if applied at lower rates. A different percentage may be used as long as the rate does not exceed the maximum shown in Table 8 for the field and the proper amount of supplemental nutrients are applied. Applying a lower rate to fields with higher soil test P levels will slow down the P buildup and extend their land application life. Phosphorus will also build up more rapidly on pastureland than on hayland or cropland, since very few nutrients are actually removed by grazing animals.**

The effluent may be applied to the same acreage every year according to Table 2 or 2a. The annual rates in both Table 8 and 10 may be doubled not to exceed the 2X the annual nitrogen requirement or nitrogen removal rate, as applicable, when the full biennial rate has been used, no additional phosphorus fertilizer or animal wastes may be applied in the alternate year. A column in both tables indicates whether the rates given are Annual Rates (A) or Biennial Rates (B). Rates given are based on Table 2 or 2a as applicable. Annual application rate for fields in a TMDL area with a Soil Test P level equal to or greater than 500 ppm or any field in a TMDL area with P Index Rating of Very High is 0.5 annual crop removal rate.

Maximum Hourly Application Rate - The maximum hourly application rate is determined by the texture of the soil layer with the lowest permeability within the upper 24 inches of the of the predominant soil in each field. The hourly application rate must be low enough to avoid runoff and/or ponding. For effluent with 0.5% solids or less, **DO NOT** exceed the rates shown in Table 1 of the attached Job Sheet titled, "*Waste Utilization, Determining Effluent Application Rates*". If the effluent contains more than 0.5% solids, those values must be reduced by the appropriate amount shown in Table 2 of the attached "*Waste Utilization, Determining Effluent Application Rates*" Job Sheet.

Maximum One-Time Application Rate - The maximum amount of effluent that can be applied to a given field at any one-time is the amount that will bring the top 24 inches of the soil to 100% field capacity. This amount is determined by subtracting the amount of water stored in the soil (estimated by feel and appearance method) from the available water holding capacity (AWC) of the soil. The available water holding capacity of the top 24 inches of the predominant soil of each field receiving effluent and the texture of the most restrictive layer in the upper 24 inches are given in Table 12.

Waste Utilization and Nutrient Management Plan

EFFLUENT APPLICATION: (cont)

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To determine any one-time application amount, the current percent of field capacity (FC) of the upper 24 inches of the predominant soil in the field should be estimated using the guidance in Table 3 of the attached Job Sheet, *"Waste Utilization, Determining Effluent Application Rates, rev 4/06"*. Additional information on estimating soil moisture can be found in the NRCS Program Aid 1619, *"Estimating Soil Moisture by Feel and Appearance"*, or from the University of Nebraska Extension publication No. G84-690-A by the same name. Both of these publications have pictures of various soils at different percentages of field capacity to be used as a guide to estimating soil moisture. Once the current percent of FC is estimated, it is subtracted from the AWC amount in Table 12 for the given field and the difference is the maximum application for those soil conditions on that day. Remember, the maximum hourly application and the maximum one time application rates are only estimates to be used as a guide.

Solids/Effluent Land Application: - Land application of solids and/or effluent should be made at appropriate times to meet crop needs, but can be made at any time as long as the total annual (or biennial) rate, maximum hourly rate, and the maximum one time application rates are not exceeded. Effluent should be surface applied uniformly. No runoff or ponding should occur during application thus frequent observations should be made. Neither effluent or solids will be applied to slopes >8% with a runoff curve >80, or steeper than 16% slope with a runoff curve of 70 or greater, unless the application is part of an erosion control plan. Waste will not be spread at night, during rainfall events, or on frozen or saturated soils if a potential risk for runoff exists. Waste will not be applied to frequently flooded soils during months when the soils typically flood. If frequently flooded soil occur on any potential application field see attached, "Water Features Table", for months when flooding is expected. Solids should be applied with a manure spreader as uniformly as feasible. Surface applications with trucks should only be made when soil conditions are favorable in order to minimize soil compaction.

Managing Runoff -

A minimum 100 ft. setback or vegetated buffer (Filter Strip, Field Border, Riparian Forested Buffer, etc.) will be established and maintained between the application area and all surface water bodies, sink holes, and watercourses as designated on Soil Survey sheets or USGS topographic maps. A minimum application distance from private and public will be 150 ft. and 500 ft. respectively. A minimum application distance from water wells used exclusively for agricultural irrigation will be 100 ft. Table 9 provides a summary of the setbacks and out areas of each field.

Managing Leaching -

When soils with sandy, loamy sand, or gravelly surface textures have a Nitrogen Leaching Index score of >2 appropriate measures will be used to minimize the potential of leaching. These measures will include, split applications of waste, and may include double cropping, or cover crops, and irrigation water management (on fields that receive supplemental or full irrigation).

MORTALITY MANAGEMENT:

All mortality will be disposed of properly within 3 days according to the Texas Commission on Environmental Quality (TCEQ) rules. The preferred method for disposal of routine mortality is by a rendering plant. Before planning this method, contact the facility or its representative to be informed of special handling procedures, equipment needs, scheduling requirements, etc. Maintain a list of contact phone numbers so information will be readily available following a catastrophic die-off. Verify that local companies which have previously picked up and/or rendered dead animals are still doing so. A number of rendering companies across the state have stopped dead animal pick up service, and others have raised their fees significantly. Periodically review the availability and cost of rendering so that the plan can be modified if necessary. This can be an excellent option if mortality can be loaded and transported while still fresh or the mortality can be refrigerated until loaded and transported.

Waste Utilization and Nutrient Management Plan

MORTALITY MANAGEMENT: (cont)

Permit #:

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Disposal in a landfill may be an option in some locations. Before planning this option, the closest commercial, regional, county, or municipal landfill should be contacted to determine if the landfill has a permit which would allow acceptance of dead animals (swine, sheep, cattle, etc.). Also ask if there are any restrictions on type and volume of animal mortality that will be accepted at the facility. Landfill fees and transport, offloading, and handling procedures should be discussed with landfill managers and documented for reference when needed. The landfill is not a viable option if the producer does not own or have access to a vehicle capable of transporting mortality quickly in an emergency situation. After a catastrophic die-off is not a good time to find out that a driver and truck to transport mortality will not be available for several weeks (**MAKE ARRANGEMENTS NOW, NOT AFTER THE ANIMALS ARE DEAD**).

On-farm disposal of catastrophic mortality may be considered if site conditions permit. On-farm methods include burial, composting, and incineration. Incinerators and composters are excellent options for routine mortality but usually do not have the capacity to handle mortality volumes associated with catastrophic events. Composting and incineration should not be relied on for catastrophic mortality handling without a documented evaluation of worst anticipated mortality condition (number, type, and weight of animals), and the anticipated capacity of the system (i.e., lb./hr. incineration rate, hrs/day of operation). NRCS Mortality Facility Standard 316 will be used for all mortality management.

See the attached soil interpretation, ENG - Animal Mortality Disposal (Catastrophic) Trench, to make a preliminary assessment of the limitations of the soils on this farm for burial of catastrophic mortality. The attached TX NRCS Technical Guidance, Catastrophic Animal Mortality Management (Burial Method) should be used as a guide to overcome minor limitations and as design criteria for the construction of burial pits for catastrophic mortality. Mortality burial sites shall be located outside the 100 -year floodplain. Mortality burial will not be less than 200 feet from a well, spring, or water course. A FIELD INVESTIGATION BY A QUALIFIED PROFESSIONAL SHOULD BE MADE BEFORE AN AREA IS USED FOR A BURIAL SITE FOR CATASTROPHIC MORTALITY EVENTS. **The TCEQ Industrial and Hazardous Waste Permits Section, MC-130, must be contacted before burial of catastrophic mortality.**

**TCEQ
Industrial and Hazardous Waste Permits Section, MC-130
PO Box 13087
Austin, TX 78711-3087
Phone: 512-239-2334 Fax: 512-239-6383**

Air Quality:

The following steps should be taken when spreading effluent or solids to reduce problems associated with odor.

1. Avoid spreading effluent or solids when wind will blow odors toward populated areas.
2. Avoid spreading effluent or solids immediately before weekends or holidays, if people are likely to be engaged in nearby outdoor activities.
3. Avoid spreading effluent or solids near heavily traveled highways.
4. Make applications in the morning when the air is warming, rather than in the late afternoon.
5. All materials will be handled in a manner to minimize the generation of particulate matter, odors, and greenhouse gas emissions.

Waste Utilization and Nutrient Management Plan

EFFLUENT AND SOLIDS STORAGE & TESTING:

Permit #:

WQ0004843000

Effluent and solids will be stored in facilities designed, constructed, and maintained according to USDA NRCS Standards and specifications.

Effluent and solids sampling is needed to get a better idea of the nutrients actually being applied. Effluent and/or solids samples will be collected at least annually, or in the year of its use if waste is typically stored for more than 1 year. The samples will be submitted immediately to a lab for testing. If sent to Texas A&M soil lab or SFASU Soil Testing Lab for analysis, use the "plant and forage analysis" form and note the type of operation. Request that the manure be analyzed for percent dry matter, solids, total nitrogen, total phosphorus, and total potassium. Further information on collecting effluent and manure samples for analysis can be found in the TCE publication No. L-5175, *"Managing Crop Nutrients Through Soil, Manure and Effluent Testing"*. **TCEQ sampling rules and testing requirements will be followed on permitted sites.**

COLLECTING SOIL SAMPLES FOR ANALYSIS:

Collect a composite sample for each field (or area of similar soils and management not more than 40 acres in size) comprised of 10 - 15 randomly selected cores. Each core should represent 0 - 6 inches below the surface except for when injection has been done over 6" in depth, then the core should represent the 3-9" layer. Thoroughly mix each set of core samples, and select about a pint of the mixture as the sample for analysis. Label each sample for the field that it represents. Request that the samples be analyzed for nitrate nitrogen, plant-available phosphorus, potassium, sodium, magnesium, calcium, sulfur, boron, conductivity; and pH. Also note on the samples that they are from an effluent or solids application area. **TCEQ sampling rules and testing requirements will be followed on permitted sites.** A weighted average of 0-2 and 2-6 inch layers will be used for calculations on permitted sites.

Further information on collecting soil samples can be found on the TCE Form D-494, p 2, TCE Publication No. L-1793, and TCEQ RG-408. Additional NRCS guidance and requirements can be found in the Nutrient Management (590) standard located in the Texas electronic Field Office Technical Guide (eFOTG) at:

http://efotg.nrcs.usda.gov/efotg_locator.aspx?map=TX

Click the county desired.

Click Section IV in the left column under eFOTG

Type: 590 in the Search Menu above eFOTG and click: **GO**

Click on the desired item under Nutrient Management in the left column

SOIL ANALYSIS:

A soil analysis will be completed for all areas to be used for all effluent or solids application areas. The soil test analysis method will be **Mehlich III with inductively coupled plasma (ICP)**. The area will be tested and analyzed at least annually to monitor P build up.

Waste Utilization and Nutrient Management Plan

OPERATION AND MAINTENANCE:

Permit #:

WQ0004843000

Application equipment should be maintained in good working order and it should be calibrated annually so that the desired rate and amount of effluent and solids will be applied.

Information on calibrating manure spreaders can be found in the TCE publication No. L-5175, *"Managing Crop Nutrients Through Soil, Manure and Effluent Testing"*. Information on calibrating big gun sprinklers can be found in the Arkansas Extension publication, *"Calibrating Stationary Big Gun Sprinklers for Manure Application"*. For information on calibrating tank spreaders, traveling guns, and additional information on other manure spreading equipment, see Nebraska Extension publication No. G95-1267-A, *"Manure Applicator Calibration"*. Observe and follow manufacturer's recommended maintenance schedules for all equipment and facilities involved in the waste management system. For information on lagoon functions, refer to TCE publication E9, *"Proper Lagoon Management"*.

Any changes in this system should be discussed with the local Soil and Water Conservation District, USDA Natural Resources Conservation Service, or other qualified professional prior to their implementation.

Plan Prepared by: Stephen Colby

Date: 8/7/2025

Plan Approved by: 

Date: 8/7/25

Producer Signature: Discussed with Producer

Date: 8/7/25

The producer's signature indicates that this plan has been discussed with him/her.

If this plan is not signed by the producer, indicate how the plan was provided to the producer.

Waste Utilization and Nutrient Management Plan

Table 1 - Estimated Effluent and Solids Quantities Produced

Permit #: WQ0004843000

Avg. Number of Animals				Type of Waste			
990				Dairy Lagoon			
				Dairy Solids			

Contact the local Soil and Water Conservation District or USDA Natural Resources Conservation Service office if the total number of animals change by more than 10% so your plan can be revised.

Estimated Acre Inches of Effluent to be Available Annually* 193

Estimated Tons Solids to be Land Applied Annually (on or off site)* 9,663.1

*From engineering design.

Estimated Nutrient Availabilty Effluent				Estimated Nutrient Availabilty Solids			
	pounds/yr	Pounds / 1000 gal	Pounds / Acre Inch		pounds / yr	pounds / ton	
N	1,887	0.36	9.8	**	N	33,422	3.5
P2O5	2,000	0.38	10.4		P2O5	23,835	2.5
K2O	12,055	2.30	62.6		K2O	39,552	4.1

** Effluent Values Based on Analysis dated: June 4, 2024

** Solids Values Based on Analysis dated: June 4, 2024

Default values were used on all fields for plant removal of nutrients and yield levels.

Waste Utilization and Nutrient Management Plan

TABLE 2. A Nutrient Management Plan (NMP) is required where Soil Test P Level ^{1/} is:

- less than 200 ppm statewide or
- or < 350 ppm in arid areas ^{2/} with a named stream > one mile.

P – Index Rating	Maximum TMDL Annual P Application Rate ^{5/}	Maximum Annual P Application	Maximum Biennial Application Rate
Very Low, Low	Annual Nitrogen (N) Requirement	Annual Nitrogen (N) Requirement	2.0 Times Annual N Requirement
Medium	2.0 Times Annual Crop P Requirement ^{3/}	2.0 Times Annual Crop P Requirement ^{3/}	2.0 Times Annual N Requirement
High ⁵	1.5 Times Annual Crop P Requirement ^{3/}	1.5 Times Annual Crop P Requirement ^{3/}	Double the Maximum Annual P Application Not to Exceed 2 times the Annual N Requirement
Very High ⁵	1.0 Times Annual Crop P Requirement ^{3/}	1.0 Times Annual Crop P Requirement ^{3/}	Double the Maximum Annual P Application Not to Exceed 2 times the Annual N Requirement

TABLE 2a. A Nutrient Utilization Plan (NUP) is required by TCEQ where Soil Test P Level ^{1/} is:

- equal to or greater than 200 ppm in non-arid areas ^{2/} or
- equal to or greater than 350 ppm in arid areas ^{2/} with a named stream greater than one mile or
- equal to or greater than 200 ppm in arid areas ^{2/} with a named stream less than one mile.

P – Index Rating	Maximum TMDL Annual P Application Rate ^{5/}	Maximum Annual P Application	Maximum Biennial Application Rate
Very Low, Low	1.0 Times Annual Crop P Removal ^{4/}	Annual N Crop Removal	2.0 Times Annual N Removal
Medium	1.0 Times Annual Crop P Removal ^{4/}	1.5 Times Annual Crop P Removal ^{4/}	Double the Maximum Annual P Application Not to Exceed 2 times the Annual N Crop Removal
High ⁵	1.0 Times Annual Crop P Removal ^{4/}	1.0 Times Annual Crop P Removal ^{4/}	Double the Maximum Annual P Application Not to Exceed 2 times the Annual N Crop Removal
Very High ⁵	0.5 Times Annual Crop P Removal ^{4/}	0.5 Times Annual Crop P Removal ^{4/}	Double the Maximum Annual P Application Not to Exceed 2 times the Annual N Crop Removal

Footnotes Applicable to both Tables

- 1/ Soil test P will be Mehlich III by inductively coupled plasma (ICP).
- 2/ Non-arid areas, counties receiving => 25 inches annual rainfall, will use the 200 ppm P level while arid areas, counties receiving < 25 inches of annual rainfall, will use the 350 ppm P level. See map in TX Agronomy Technical Note 15, Phosphorus Assessment Tool for Texas, for county designations.
- 3/ Not to exceed the annual nitrogen requirement rate.
- 4/ Not to exceed the annual nitrogen removal rate.
- 5/ When soil test phosphorus levels are ≥ 500 ppm, with a P-Index rating of “High” or “Very High”, there will be no additional application of phosphorus to a CMU or field.

Waste Utilization and Nutrient Management Plan

Table 3 - Crop Removal Rates (For Information Only)

Permit #: WQ0004843000

LMU or Field No.	Acres	Crop and P Index Level	TCEQ Plan Type	Actual Crop Analysis or Default	Total Est. N Removal lbs/Ac/Yr	Total Est. P ₂ O ₅ Removal lbs/Ac/Yr	Total Est. K ₂ O Removal lbs/Ac/Yr
1	10.0	Coastal graze 1 AU/1 ac, SG mod graze M	NMP	Default	300	90	267
2	33.0	Coastal graze 1 AU/1 ac, SG mod graze H	NMP	Default	300	90	267
3	53.0	Coastal graze 1 AU/1 ac, SG mod graze M	NMP	Default	300	90	267
4	21.0	Coastal graze 1 AU/1 ac, SG mod graze H	NMP	Default	300	90	267
5	26.0	Coastal graze 1 AU/1 ac, SG mod graze M	NMP	Default	300	90	267
5A	25.0	Coastal graze 1 AU/1 ac, SG mod graze H	NUP	Default	300	90	267
6	59.0	Silage - Sorg7-10T;SG GreenChop-6-7T H	NMP	Default	277	94	129
7	104.0	Silage - Corn16-20T;SG Silage-5-7T H	NMP	Default	246	108	231
8	42.0	Silage - Corn16-20T;SG Silage-5-7T H	NMP	Default	246	108	231
9	61.0	Silage - Corn16-20T;SG GreenChop-8-9T H	NMP	Default	387	148	226
10	21.0	Coastal GC (30%DM) 9-11T; SG GC 6-7T M	NMP	Default	330	104	190
11	9.0	Coastal graze 1 AU/1 ac, SG mod graze M	NMP	Default	300	90	267
12	12.0	Coastal graze 1 AU/1 ac, SG mod graze H	NUP	Default	300	90	267
13	16.0	Coastal graze 1 AU/1 ac, SG mod graze M	NMP	Default	300	90	267
14	15.0	Coastal graze 1 AU/1 ac, SG mod graze H	NMP	Default	300	90	267
15	5.0	Coastal graze 1 AU/1 ac, SG mod graze M	NMP	Default	300	90	267

NOTE: When crops are used for grazing, only a portion of the nutrients used by the crop are removed from the field in the live weight gain of the livestock, the remainder is returned to the land in manure and urine. The book "Southern Forages" estimates the N, P, & K removed in 100 pounds live weight gain as follows: **2.5 lbs N, 0.68 lbs P, 0.15 lbs K**

WQ0004843000

Est. Solids Produced Annually (wet tons)	LMU or Field No.	Acres	Crop Management and PI runoff potential	Current Soil Test P Level (ppm)	Max Annual P2O5 lbs/acre	Annual/Biennial	Maximum Solids Allowable Tons/Acre	Maximum Allowable Application Per field (Tons)
9,663	1	10.0	Coastal graze 1 AU/1 ac, SG mod graze M	190	285	A	115.6	1156
	2	33.0	Coastal graze 1 AU/1 ac, SG mod graze H	125	263	A	106.4	3512
	3	53.0	Coastal graze 1 AU/1 ac, SG mod graze M	96	285	A	115.6	6129
	4	21.0	Coastal graze 1 AU/1 ac, SG mod graze H	163	263	A	106.4	2235
	5							
	5A	25.0	Coastal graze 1 AU/1 ac, SG mod graze H	223	90	A	36.7	917
	6	59.0	Silage - Sorg7-10T;SG GreenChop-6-7T H	64	210	A	85.1	5023
	7	104.0	Silage - Corn16-20T;SG Silage-5-7T H	43	210	A	85.1	8854
	8	42.0	Silage - Corn16-20T;SG Silage-5-7T H	23	210	A	85.1	3576
	9	61.0	Silage - Corn16-20T;SG GreenChop-8-9T H	21	285	A	115.5	7048
	10	21.0	Coastal GC (30%DM) 9-11T; SG GC 6-7T M	29	285	A	115.6	2429
	11	9.0	Coastal graze 1 AU/1 ac, SG mod graze M	101	285	A	115.6	1041
	12	12.0	Coastal graze 1 AU/1 ac, SG mod graze H	203	90	A	36.7	440
	13							
	14	15.0	Coastal graze 1 AU/1 ac, SG mod graze H	120	263	A	106.4	1596
	15	5.0	Coastal graze 1 AU/1 ac, SG mod graze M	129	285	A	115.6	578
Total Solids Application Acres								
470								
Application Allowable on-site (tons)								
44534.8								
Adequate								
Solids to be used off site (tons)								
0.0								

End of Table 4

Waste Utilization and Nutrient Management Plan

Table 5 - Nutrients Applied/Needs at Maximum Solids Rates

Permit #: [WQ0004843000](#)

LMU / Field #	Nutrients Applied When Application is at Maximum Rates			Supplemental Nutrients Needed When Application is at Maximum Rates			
	N Lb/ac	P ₂ O ₅ Lb/ac	K ₂ O Lb/ac	N Lb/ac	P ₂ O ₅ Lb/ac	K ₂ O Lb/ac	Lime T/Ac
1	400	285	473	0	0	0	0
2	368	263	436	5	0	0	0
3	400	285	473	0	0	0	0
4	368	263	436	0	0	0	0
5							
5A	127	90	150	205	0	0	0
6	294	210	348	0	0	0	0
7	294	210	348	0	0	0	0
8	294	210	348	0	0	0	0
9	400	285	473	70	0	0	0
10	400	285	473	0	0	0	0
11	400	285	473	0	0	0	0
12	127	90	150	185	0	0	0
13							
14	368	263	436	0	0	0	0
15	400	285	473	0	0	0	0

Waste Utilization and Nutrient Management Plan

Table 6 - Planned Solids Application Rates

Permit #: WQ0004843000

[illegible]

Waste Utilization and Nutrient Management Plan

Table 7 - Nutrients Applied/Needed at Planned Solids Rates

Permit #:

WQ0004843000

Red cells? Proceed to adjustment page and fix.

LMU / Field #	Nutrients Applied at Planned Rates			Supplemental Nutrients Needed at Planned Rates			
	N Lb/ac	P ₂ O ₅ Lb/ac	K ₂ O Lb/ac	N Lb/ac	P ₂ O ₅ Lb/ac	K ₂ O Lb/ac	Lime T/Ac
1	88	63	104	250	0	0	0
2	81	58	96	295	0	0	0
3	88	63	104	260	0	0	0
4	81	58	96	260	0	0	0
5							
5A	28	20	33	305	0	0	0
6	65	46	77	170	0	0	0
7	65	46	77	205	0	0	0
8	65	46	77	205	0	0	0
9	84	60	99	385	85	0	0
10	84	60	99	260	95	0	0
11	84	60	99	280	0	0	0
12	27	19	32	285	0	0	0
13							
14	77	55	91	240	0	0	0
15	84	60	99	265	0	0	0

Waste Utilization and Nutrient Management Plan

Table 8 - Maximum Effluent Application Per Field

Permit #:

WQ0004843000

Est. Available Effluent (ac inches)	LMU or Field No.	Acres	Double crop	Crop Management and PI runoff potential	Current Soil Test P Level (ppm)	Max Annual P ₂ O ₅ (lbs/acre)	Annual/Biennial	Maximum Effluent Allowable (ac in/ac)	Maximum Effluent Allowable / Field (ac in)
193	1								
Source:	2								
	3								
	4								
Dairy Lagoon	5	26.0		Coastal graze 1 AU/1 ac, SG mod graze M	184	350	A	33.7	876
	5A								
	6								
	7								
	8								
	9								
	10								
	11								
	12								
	13	16.0		Coastal graze 1 AU/1 ac, SG mod graze M	137	350	A	33.7	539
	14								
	15								
Total Effluent Application Acres									
42									
Maximum Effluent Application Allowable On-Site (ac in)									
1415									
Adequate									
Effluent to be used Off-Site (ac in)									
0									

End of Table 8

Waste Utilization and Nutrient Management Plan

Table 9 - Nutrients Applied/Needed at Maximum Effluent Rates

Permit #:

WQ0004843000

LMU / Field #	Nutrients Applied When Application is at Maximum Rates			Supplemental Nutrients Needed When Application is at Maximum Rates			
	N Lb/ac	P ₂ O ₅ Lb/ac	K ₂ O Lb/ac	N Lb/ac	P ₂ O ₅ Lb/ac	K ₂ O Lb/ac	Lime T/Ac
1	330	350	2108	20	0	0	0
2							
3							
4							
5							
5A	330	350	2108	0	0	0	0
6							
7							
8							
9							
10	330	350	2108	0	0	0	0
11							
12							
13							
14							
15	330	350	2108	0	0	0	0

Waste Utilization and Nutrient Management Plan

Table 10 - Planned Effluent Application Rates

Permit #: [WQ0004843000](#)

LMU or Field No.	Acres	Double crop	Crop Management and PI runoff potential	Current Soil Test P ppm	Annual / Biennial	Maximum Effluent (ac in/ac)	% of Maximum to apply	Planned Effluent (ac in/ac)	Planned Effluent / field (Ac. In)
1	26.0		Coastal graze 1 AU/1 ac, SG mod graze M	184	A	33.7	20.0	6.7	175
2									
3									
4									
5									
5A	16.0		Coastal graze 1 AU/1 ac, SG mod graze M	137	A	33.7	20.0	6.7	108
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
Acres	42.0	Will the planned application rates use all of the Effluent?							283 YES

Waste Utilization and Nutrient Management Plan

Table 11 - Nutrients Applied/Needed at the Planned Effluent Rates

Permit #:

WQ0004843000

Red cells? Proceed to adjustment page and fix.

LMU / Field #	Nutrients Applied at Planned Rates			Supplemental Nutrients Needed at Planned Rates			
	N Lb/ac	P ₂ O ₅ Lb/ac	K ₂ O Lb/ac	N Lb/ac	P ₂ O ₅ Lb/ac	K ₂ O Lb/ac	Lime T/Ac
1							
2							
3							
4							
5	66	70	422	285	0	0	0
5A							
6							
7							
8							
9							
10							
11							
12							
13	66	70	422	250	0	0	0
14							
15							

Waste Utilization and Nutrient Management Plan

Table 12 - Available Water Capacity to 24 inches(or less) of predominant soil in fields receiving effluent and Texture of the most restrictive soil layer in the upper 24 inches Permit #: WQ0004843000

LMU / Field #	AWC (inches)	Restrictive Texture	LMU / Field #	AWC (inches)	Restrictive Texture
1	3.96	HoB			
2					
3					
4					
5					
5A					
6					
7					
8					
9					
10	1.61	PcB			
11					
12					
13					
14					
15					

Waste Utilization and Nutrient Management Plan

Table 13 - Non Application Areas by Field

Permit #:

WQ0004843000

FS = 393-Filter Strip; FB = 386-Field Border, RFB = 391-Riparian Forest Buffer; OLEA = Other Land Excluded Area

LMU / Field #	FS Acres	FB Acres	RFB Acres	OLEA Acres	Total Excluded
1	0.0	0.0			
2	0.0	0.0			
3	0.0	0.0			
4	0.0	0.0			
5	0.0	0.0			
5A	0.0	0.0			
6	0.0	0.0			
7	0.0	0.0			
8	0.0	0.0			
9	0.0	0.0			
10	0.0	0.0			
11	0.0	0.0			
12	0.0	0.0			
13	0.0	0.0			
14	0.0	0.0			
15	0.0	0.0			

See Application Map for location of buffers

Total 590-633 application acres: 512.0

LMU / Field #	FS Acres	FB Acres	RFB Acres	OLEA Acres	Total Excluded
<div> <div> </div> <div> </div> </div>					

Totals	0.0	0.0	0.0	0.0	0.0
---------------	-----	-----	-----	-----	-----

Total 590-633 Field Acres: 512.0

Waste Utilization and Nutrient Management Data Entries

General Data

Date : 8/7/2025
Farmer Name : Sherwyn Wood Dairy
County in which the Land is located : Erath
Type of Waste Plan : Other AFO-CAFO Waste Plan
Is this plan in a TMDL watershed for nutrients?
Yes or No : Yes
Is any field PERMITTED by TCEQ?
Yes or No : Yes
Permit # : WQ0004843000

All other entries on General Page appear on the Cover Page

Animal Information

Plan Year : 2025
Are you receiving waste from another producer? No
Number of animals : 990
Approximate Weight : 1325
Days per year in confinement : 365
Hours per day confined : 24
ACRE FEET of effluent to be irrigated* : 16.06
Estimated annual gallons of effluent to be irrigated/applied annually : 5233118.88
For effluent, do you want application rates shown in gallons or acre inches? : acre inches
Estimated Tons Solids to be Land Applied Annually (on or off site)* : 3614
Is this the first Year of the AFO-CAFO Operation? : No

Analysis Information

Effluent Information

Date of Analysis: 6/4/2024
Manure Source: Dairy Lagoon
Nitrogen % From Analysis: 0.0054
Phosphorus % From Analysis: 0.002
Potassium % From Analysis: 0.023
Moisture % From Analysis: 99.8

Manure / Solids Information

Date of Analysis: 6/4/2024
Manure Source: Dairy Solids
Nitrogen % From Analysis: 0.578
Phosphorus % From Analysis: 0.144
Potassium % From Analysis: 0.456
Moisture % From Analysis: 62.6
What will be Applied to Fields on this Farm? Both Effluent and Solids
Is this Farm part of an AFO-CAFO? No

This plan is based on: rganic Nutrient Management Plan
Printed on: 8/7/25 3:26 PM

Field and Buffer Entries

Permit #: WQ0004843000

Printed on: 8/7/25 3:26 PM

Plan is based on: 590 Organic Nutrient Management Plan

FS = 393-Filter Strip, FB = 386-Field Border, RFB = 391-Riparian Forest Buffer, OLEA = Other Land Exclusion Areas or non-application areas (i.e. headquarters, freq. flooded areas, wooded areas, water bodies, etc)

NOTE: Field Border (FB) is expressed in ACRES on this spreadsheet, but as LINEAR FEET on the CPO.

[illegible]

Soil Test, Crop Information and Plant Analysis Data Entries

Printed on: 8/7/25 3:26 PM

Plan is based on: 590 Organic Nutrient Management Plan V 5.0

Permit #: WQ0004843000

[illegible]

Solids Application Rate Entries

Solids - Set the Planned Application Rates

Permit #: WQ

9663 "Wet tons" of solids produced Annually			Will the planned rates use all of the Tons to be used off-site at plann				
LMU or Field No.	Acres	Crop Management and PI runoff potential	Current Soil Test P ppm	Crop P ₂ O ₅ Req.	Annual or Biennial Application Cycle	Maximum Solids Allowable Tons/Ac	Enter % of Maximum Planned to Apply
1	10.0	Coastal graze 1 AU/1 ac, SG mod graze M	190	175	Annual	115.6	22.0
2	33.0	Coastal graze 1 AU/1 ac, SG mod graze H	125	175	Annual	106.4	22.0
3	53.0	Coastal graze 1 AU/1 ac, SG mod graze M	96	175	Annual	115.6	22.0
4	21.0	Coastal graze 1 AU/1 ac, SG mod graze H	163	175	Annual	106.4	22.0
5							
5A	25.0	Coastal graze 1 AU/1 ac, SG mod graze H	223	175	Annual	36.7	22.0
6	59.0	Silage - Sorg7-10T;SG GreenChop-6-7T H	64	140	Annual	85.1	22.0
7	104.0	Silage - Corn16-20T;SG Silage-5-7T H	43	140	Annual	85.1	22.0
8	42.0	Silage - Corn16-20T;SG Silage-5-7T H	23	140	Annual	85.1	22.0
9	61.0	Silage - Corn16-20T;SG GreenChop-8-9T H	21	190	Annual	115.5	21.0
10	21.0	Coastal GC (30%DM) 9-11T; SG GC 6-7T M	29	205	Annual	115.6	21.0
11	9.0	Coastal graze 1 AU/1 ac, SG mod graze M	101	175	Annual	115.6	21.0
12	12.0	Coastal graze 1 AU/1 ac, SG mod graze H	203	175	Annual	36.7	21.0
13							
14	15.0	Coastal graze 1 AU/1 ac, SG mod graze H	120	175	Annual	106.4	21.0
15	5.0	Coastal graze 1 AU/1 ac, SG mod graze M	129	175	Annual	115.6	21.0

Effluent Application Rate Entries

Effluent - Set the Planned Application Rates

Permit #:

WQ0004843000

5233119		Gallons of Effluent to be used annually			Will the planned rates use all of the effluent?				Yes
193		Acre inches of Effluent to be used annually							
LMU or Field No.	Acres	Crop Management and PI runoff potential	Current Soil Test P (ppm)	Crop P2O5 Req.	Annual or Biennial Application Cycle	Max Effluent Allowable (ac in/ac)	Enter % of Maximum Planned to Apply	Planned Effluent (ac in/ac)	Planned Effluent per field (acre inches)
1	26.0	Coastal graze 1 AU/1 ac, SG mod graze M	184	175	Annual	33.7	20.0	6.74	175
2									
3									
4									
5									
5A	16.0	Coastal graze 1 AU/1 ac, SG mod graze M	137	175	Annual	33.7	20.0	6.74	108
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
Total Effluent This Page									283

[illegible]




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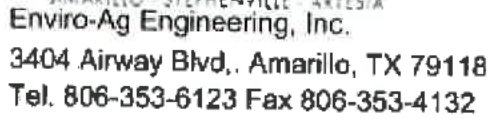

Fax: 806.677.0329

Lab No: 3482		LABORATORY ANALYSIS REPORT		Report Date: 07/08/2024 01:04 pm																																																																																											
Send To: 6224		ENVIRO-AG ENGINEERING INC 3404 AIRWAY BLVD AMARILLO, TX 79118		 Casey Johnson Technical Director																																																																																											
Client Name: Sample ID:		SHERWYN WOOD DAIRY RCS 1		Received: 06/11/2024 Sampled: 06/04/2024 Invoice No: 425750 P.O. #: COREY MULLIN																																																																																											
<table border="1"><thead><tr><th colspan="3">Analysis results</th><th>lbs/acre-in</th><th>meq/L</th></tr></thead><tbody><tr><td colspan="5">NUTRIENTS</td></tr><tr><td colspan="5">Nitrogen</td></tr><tr><td>Total Nitrogen</td><td>54</td><td>ppm</td><td>12</td><td>3.9</td></tr><tr><td>Organic Nitrogen</td><td>25</td><td>ppm</td><td>6</td><td>1.8</td></tr><tr><td>Ammonium Nitrogen</td><td>28.9</td><td>ppm</td><td>7</td><td>2.1</td></tr><tr><td>Nitrate+Nitrite Nitrogen</td><td><0.20</td><td>ppm</td><td>0</td><td>0</td></tr><tr><td colspan="5">Major and Secondary Nutrients</td></tr><tr><td>Phosphorus</td><td>20</td><td>ppm</td><td></td><td></td></tr><tr><td>Phosphorus as P2O5</td><td>50</td><td>ppm</td><td>11</td><td></td></tr><tr><td>Potassium</td><td>230</td><td>ppm</td><td></td><td>5.9</td></tr><tr><td>Potassium as K2O</td><td>280</td><td>ppm</td><td>63</td><td></td></tr><tr><td colspan="5">OTHER PROPERTIES</td></tr><tr><td>Moisture</td><td>99.8</td><td>%</td><td></td><td></td></tr><tr><td>Total Solids</td><td>0.2</td><td>%</td><td>453</td><td></td></tr><tr><td>Organic Matter</td><td>0.1</td><td>%</td><td>227</td><td></td></tr><tr><td>Ash</td><td><0.10</td><td>%</td><td></td><td></td></tr><tr><td>C:N Ratio</td><td>10.7</td><td>ratio</td><td></td><td></td></tr></tbody></table>						Analysis results			lbs/acre-in	meq/L	NUTRIENTS					Nitrogen					Total Nitrogen	54	ppm	12	3.9	Organic Nitrogen	25	ppm	6	1.8	Ammonium Nitrogen	28.9	ppm	7	2.1	Nitrate+Nitrite Nitrogen	<0.20	ppm	0	0	Major and Secondary Nutrients					Phosphorus	20	ppm			Phosphorus as P2O5	50	ppm	11		Potassium	230	ppm		5.9	Potassium as K2O	280	ppm	63		OTHER PROPERTIES					Moisture	99.8	%			Total Solids	0.2	%	453		Organic Matter	0.1	%	227		Ash	<0.10	%			C:N Ratio	10.7	ratio		
Analysis results			lbs/acre-in	meq/L																																																																																											
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Ash	<0.10	%																																																																																													
C:N Ratio	10.7	ratio																																																																																													
Amended Report - Any information on this report supersedes the previous report on 06/26/2024																																																																																															

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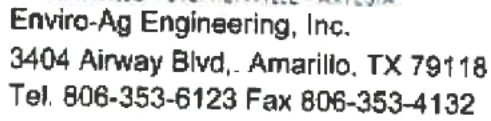
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Send To: 6224		ENVIRO-AG ENGINEERING INC 3404 AIRWAY BLVD AMARILLO, TX 79118		 Amy Meier Data Review Coordinator	
Results For: Sample ID:		SHERWYN WOOD DAIRY PEN MANURE		Received: 06/12/2024 Sampled: 06/04/2024 Invoice No: 425756 P.O. #: COREY MULLIN	
				Total content Estimated available first year*	
				Analysis (dry basis) Analysis (as rec'd) lbs per Acre-In lbs per 1000 gal lbs per Acre-In lbs per 1000 gal	
				NUTRIENTS	
				Nitrogen	
				Total Nitrogen % 1.545 0.578 3503.5 52.0 497.6 19.7	
				Organic Nitrogen % 1.524 0.570 3455.1 51.3 476.8 18.9	
				Ammonium Nitrogen % 0.021 0.008 48.5 0.7 18.1 0.7	
				Nitrate+Nitrite Nitrogen % 0.0032 0.0012 19.4 0.1 2.7 0.1	
				Major and Secondary Nutrients	
				Phosphorus % 0.398 0.144	
				Phosphorus as P2O5 % 0.911 0.330 5522.0 29.7 673.3 26.7	
				Potassium % 1.26 0.456	
				Potassium as K2O % 1.51 0.547 9152.9 49.2 1240.0 49.2	
				OTHER PROPERTIES	
				Moisture % 62.6	
				Total Solids % 37.4 226700 3366	
				Organic Matter % 41.2 15.4 93347 1386	
				Ash % 22.0 1980	
				C:N Ratio ratio 15.4	

* Assumes 37% of organic nitrogen available during first crop year after application. Assumes 100% of ammonium and nitrate nitrogen available, but should be adjusted for potential field losses at application site.

The reported analytical results apply only to the sample as it was supplied.
The report may not be reproduced, except in full, without permission of ServiTech.

Page 1 of 1

Your opinion is valuable to us. Please let us know what you think about our services! Send an email to feedback@servitech.com.



Producer/Facility: Sherwyn Wood Dairy

Date Sampled: 6/4/2024

Date Shipped: 6/10/2024

Sample Type	Sample ID	Number of Containers	Test Package	Proper Preservation	Matrix
Manure	Pen Manure 3531	1	EAE TX CO KS MANURE	Y	OT
Manure	Compost 3532	1	EAE TX CO KS MANURE	Y	OT

Received By: De

Jon Niermann, *Chairman*
Emily Lindley, *Commissioner*
Bobby Janecka, *Commissioner*
Kelly Keel, *Interim Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 31, 2023

CERTIFIED MAIL 7022 2410 0000 5131 7339
RETURN RECEIPT REQUESTED

Mr. Sherwyn Dallas Wood
Sherwyn Wood Dairy
757 CR 229
Stephenville, Texas 76401

Re: Annual Soil Sample Analysis Results at Sherwyn Wood Dairy
CAFO Permit No.: WQ0004843000

Dear Mr. Wood

Attached are the analytical results for the soil samples that were collected at your facility on September 5, 2023 and September 6, 2023. A copy of the sampling map is attached. Please utilize these results to update your nutrient management plan.

In addition, if any of the results are greater than 200 parts per million for phosphorus, please develop a new nutrient utilization plan (NUP) or revise your existing NUP, in accordance with your permit. All new or revised NUPs that are required to be submitted for TCEQ review and approval shall be mailed to the following address:

Water Quality Assessment Section Manager
Water Quality Division, MC 150
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

If you collected a duplicate sample following RG-408 protocol during the TCEQ sampling event that indicates a significant difference in the TCEQ analysis results (greater than 20% difference), you may choose to dispute the TCEQ sample results within 20 calendar days from the date of this letter. You must provide copies of all supporting documentation, including but not limited to your sample results, chain of custody documentation and laboratory quality assurance documentation. Please submit this information in writing to the TCEQ at the following address:

ATTN: Annual CAFO Soil Sample Analysis Disputes
Water Section Manager
Dallas/Fort Worth Regional Office
Texas Commission on Environmental Quality
2309 Gravel Drive
Fort Worth, TX 76118-6951

An analysis dispute received after the time allocated above will not be eligible for re-analysis. If you have any questions, please feel free to contact Mr. Michael Martin in the Stephenville Office at 254-552-1900.

Sincerely,

A handwritten signature in blue ink, appearing to read "Michael Martin", with a long horizontal flourish extending to the right.

Michael Martin, Team Leader, Water Section
DFW Region Office
Texas Commission on Environmental Quality

MM/dm

Enclosures: Laboratory Analysis Reports



TEXAS
COMMISSION ON
ENVIRONMENTAL
QUALITY

Chain of Custody Record

55673

33

Location: Sherwin Wood

(Do not fill in this shaded area if the facility information must be confidential)

Permit #:

WG 4843

Region:

Organization #:

PCA Code:

Program:

Sampler telephone number:

(231) 552-1000

E-Mail ID:

Sampler: (signature)

[Signature]

Sampler: (please print clearly)

Cody Cheson

Lab ID Number	Sample ID	Date	Time	# of Bottles	Grab/ Comp.	Matrix L,S,M,O,T	CL2	pH	Cond.	Analyses Requested	REMARKS
13105	-01	9-5-23	9:45							See EPA	LMU 1 (0-2)
13106	-02		9:45								LMU 1 (2-6)
13107	-03		9:45								LMU 1 (6-24)
13108	-04		10:30								LMU 2 (0-6)
13109	-05		10:30								LMU 2 (6-24)
13110	-06		11:06								LMU 3 (0-2)
13111	-07		11:06								LMU 3 (2-6)
13112	-08		11:06								LMU 3 (6-24)
13113	-09	9/6/23	1230								LMU 4 (0-2)
13114	-10	9/6/23	1230								LMU 4 (2-6)

Relinquished by:

[Signature]

Date

9/20/23

Time

Received by:

[Signature]

9-21-23

For Laboratory Use:

Relinquished by:

Date

Time

Received by:

Received on ice:

Y

N

deg. C

Relinquished by:

Date

Time

Received by:

Preservatives:

Y

N

Relinquished by:

Date

Time

Received by:

COC Seal:

Y

N

Shipper name:

Fed Ex

Shipper Number:

7734 7405 0436

Seals Intact:

Y

N

Report for Samples analyzed Under Contract Number: 582-10-99518

Report ID: 055673a-45224

Print Date: 25-Oct-23

Texas A&M AgriLife Extension Service Soil, Water and Forage Testing Laboratory
108 Soil Testing Laboratory, 2478 TAMU
College Station, TX 77843-2478
979-862-4955

Client Name: Sherwyn Wood
Client address: not provided

Standard Sample Report TCEQ COC# 055673

Laboratory ID:	TCEQ/client Sample ID:	Sample Depth (inches)	Sample Coll. Date:	Collector Name:	TCEQ Region #	Date Received	Sample Type:	Sample opened Date	Sample Ground Date	Process Tech.
13105	55673-01	0-2	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13106	55673-02	2-6	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13107	55673-03	6-24	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13108	55673-04	0-6	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13109	55673-05	6-24	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13110	55673-06	0-2	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13111	55673-07	2-6	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13112	55673-08	6-24	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13113	55673-09	0-2	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13114	55673-10	2-6	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP

Methods and Sample Preparation:

Receiving of samples

Processing - SWFTL0097R0.SOP

Upon opening of sample chests, all samples are identified and organized as listed on COC to insure completeness and condition of shipment. Individually each sample is spread across a non-reactive tray where foreign materials is physically removed and discarded. The sample(s) are then placed inside a 65C drying oven and allow to remain until dry. Individual samples were then removed from drying oven and pulverized with an Agvise soil pulverizer fitted with a shaking 2mm screen. Every attempt was again made to remove any remaining plant tissue in the pulverized sample(s). Soil was then transferred to the laboratory sample cups and while additional sample was stored.

Analytical Methods:

Soil pH 2:1 DI water:soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Schofield, R.K. and A.W. Taylor. 1955. The measurement of soil pH. Soil Sci. Soc. Am. Proc. 19:164-167.

Soil Conductivity 2:1 DI Water:Soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Rhoades, J.D. 1982. Soluble salts. p. 167-178. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI

Soil Nitrate-N KCl Extractable with Cd-Reduction Analyses

NO3-N EXTRACTION - SWFTL0014R5.SOP/NO3-N ANALYSIS - SWFTL0089R1.SOP

Keeney, D.R. and D.W. Nelson. 1982. Nitrogen - inorganic forms. p. 643-687. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil P, K, Ca, Mg, S and Na -- Mehlich III by ICP

M3 EXTRACTION - SWFTL0079R1.SOP/M3 ANALYSIS - SWFTL0081R2.SOP

Mehlich-3 soil test extractant: a modification of Mehlich-2 extractant. Commun. Soil Sci. Plant Anal. 15(12):1409-1416

Report ID: 055673a-45224 Print Date: 25-Oct-23
Standard Sample Report TCEQ COC# 055673

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg units	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
13105	55673-01	183	ppm	340	ppm	7028	ppm	464	ppm	72.4	ppm	64.6	ppm
13106	55673-02	92.3	ppm	217	ppm	10687	ppm	385	ppm	79.0	ppm	77.1	ppm
13107	55673-03	14.8	ppm	192	ppm	15372	ppm	304	ppm	105	ppm	72.8	ppm
13108	55673-04	150	ppm	815	ppm	9449	ppm	452	ppm	79.9	ppm	38.6	ppm
13109	55673-05	19.4	ppm	415	ppm	15247	ppm	296	ppm	112	ppm	148	ppm
13110	55673-06	96.0	ppm	447	ppm	9442	ppm	359	ppm	75.7	ppm	87.9	ppm
13111	55673-07	43.5	ppm	232	ppm	10050	ppm	316	ppm	73.6	ppm	89.1	ppm
13112	55673-08	11.7	ppm	221	ppm	11562	ppm	263	ppm	86.7	ppm	94.6	ppm
13113	55673-09	132	ppm	530	ppm	12554	ppm	397	ppm	120	ppm	41.6	ppm
13114	55673-10	66.6	ppm	379	ppm	10832	ppm	337	ppm	85.9	ppm	49.3	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.0065	ppm	0.2012	ppm	0.2235	ppm	0.0705	ppm	0.0039	ppm	0.0460	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
13105	55673-01	10/10/2023	FMR	10/11/2023	JLP
13106	55673-02	10/10/2023	FMR	10/11/2023	JLP
13107	55673-03	10/10/2023	FMR	10/11/2023	JLP
13108	55673-04	10/10/2023	FMR	10/11/2023	JLP
13109	55673-05	10/10/2023	FMR	10/11/2023	JLP
13110	55673-06	10/10/2023	FMR	10/11/2023	JLP
13111	55673-07	10/10/2023	FMR	10/11/2023	JLP
13112	55673-08	10/10/2023	FMR	10/11/2023	JLP
13113	55673-09	10/10/2023	FMR	10/11/2023	JLP
13114	55673-10	10/10/2023	FMR	10/11/2023	JLP

Report ID: 055673a-45224 Print Date: 25-Oct-23
Standard Sample Report TCEQ COC# 055673

Laboratory ID:	TCEQ/client Sample ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
13105	55673-01	7.19	NA	0.479	dS/M	80.932	ppm
13106	55673-02	7.77	NA	0.328	dS/M	24.571	ppm
13107	55673-03	7.87	NA	0.297	dS/M	11.712	ppm
13108	55673-04	7.62	NA	0.328	dS/M	42.474	ppm
13109	55673-05	8	NA	0.169	dS/M	12.571	ppm
13110	55673-06	7.71	NA	0.306	dS/M	26.159	ppm
13111	55673-07	7.79	NA	0.293	dS/M	17.097	ppm
13112	55673-08	7.82	NA	0.447	dS/M	16.123	ppm
13113	55673-09	7.38	NA	0.421	dS/M	42.217	ppm
13114	55673-10	7.71	NA	0.418	dS/M	18.412	ppm

Laboratory ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
		Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
13105	55673-01	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13106	55673-02	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13107	55673-03	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13108	55673-04	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13109	55673-05	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13110	55673-06	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13111	55673-07	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13112	55673-08	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13113	55673-09	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13114	55673-10	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW

Laboratory ID:		Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
13119	IC953	49.5	ppm	319	ppm	2251	ppm	358	ppm	38.8	ppm	49.3	ppm
13120	IC954	49.5	ppm	315	ppm	2275	ppm	361	ppm	37.5	ppm	50.5	ppm
	Mean IC	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm
	IC Lower	45.0	ppm	274.0	ppm	1864.0	ppm	300.0	ppm	28.0	ppm	29.0	ppm
	IC Upper	54.4	ppm	321.0	ppm	2329.0	ppm	365.0	ppm	47.2	ppm	51.0	ppm
	blk205	<0.0132	ppm	<0.201	ppm	<0.223	ppm	<0.0706	ppm	<0.003939	ppm	<0.0460	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.0065	ppm	0.2012	ppm	0.2235	ppm	0.0705	ppm	0.0039	ppm	0.0460	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
IC953	10/10/2023	FMR	10/11/2023	JLP
IC954	10/10/2023	FMR	10/11/2023	JLP
blk205	10/10/2023	FMR	10/11/2023	JLP

Report ID: 055673a-45224

Print Date: 25-Oct-23

Quality Control Report

TCEQ COC# 055673

Laboratory ID:		pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units	Nitrate-N % recovery
13119	IC953	5.8	na	0.249	dS/M	6.267	ppm	
13120	IC954	5.8	na	0.25	dS/M	5.636	ppm	
	Mean IC	5.83	na	0.2495	dS/M	5.9515	ppm	
13120spike	Spiked sample	-	-	-	-	4.9	ppm	83.4
	IC lower	5.760	na	0.238	dS/M	4.6	ppm	
	IC Upper	5.990	na	0.306	dS/M	7.1	ppm	
	blk205	-	na	0	dS/M	-1.088	ppm	

Laboratory ID:	pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
IC953	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
IC954	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
blk205	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW

REQUEST FOR ANALYSIS
TCEQ-BOSQUE 1255/1226 SOIL SAMPLES

COC Number: 55673

Sample ID: 01-10

Standard Request for Analysis

NO3-N

Mg

P Mehlich III by ICP

Conductivity

K

pH

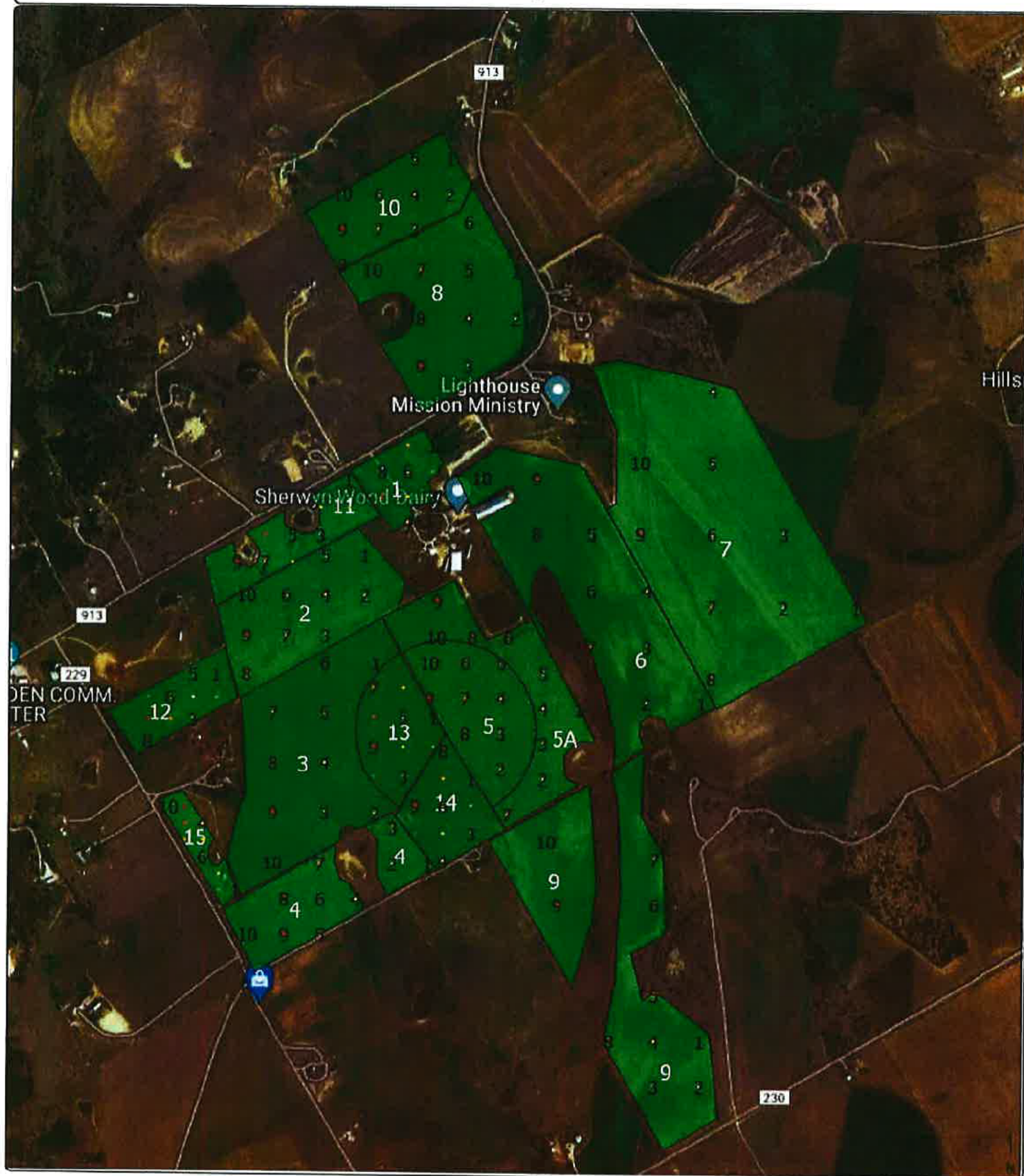
Na

Additional Tests

NA

Sherwyn Wood Dairy757 CR 229, Stephenville, TX 76401**Mar 4, 2021 Permit**

This map was generated by the Region 4 Stephenville Office of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the TCEQ Region 4 Stephenville Office at 254-552-1900.





Chain of Custody Record

55674

Location: Sheepwain Wood

Permit #: W0004843

Region: Organization #: PCA Code: Program: Sampler telephone number: (254) 552-1300

E-Mail ID: Sampler: (signature) [Signature] Sampler: (please print clearly) Cody Cheson

Lab ID Number	Sample ID	Date	Time	# of Bottles	Grab/ Comp.	Matrix L,S,M,O,T	CL2	pH	Cond.	Analyses Requested	REMARKS
130723	-01	9/6/23	1230							See RFA	LMU 4 (6-24)
130734	-02	9/6/23	1150								LMU 5 (6-24)
130745	-03	9/6/23	1150								LMU 5 (6-24)
130756	-04	9/6/23	1135								LMU 5A (6-24)
130767	-05	9/6/23	1135								LMU 5A (6-24)
130778	-06	9/6/23	1015								LMU 6 (6-24)
13081	-07	9/6/23	1015								LMU 6 (6-24)
13082	-08	9/6/23	0945								LMU 7 (6-24)
13083	-09	9/6/23	0945								LMU 7 (6-24)
13084	-10	9-5-23	8:47								LMU 8 (6-24)

Relinquished by: [Signature] Date: 9-21-23 Time: Received by: [Signature]

Relinquished by: Date: Time: Received by:

Relinquished by: Date: Time: Received by:

Relinquished by: Date: Time: Received by:

Shipper name: Fed Ex Shipper Number: 7734 7405 0436

For Laboratory Use:

Received on ice: Y N deg. C

Preservatives: Y N

COC Seal: Y N

Seals Intact: Y N

Report for Samples analyzed Under Contract Number: 582-10-99518

Report ID: 055674a-45224

Print Date: 25-Oct-23

Texas A&M AgriLife Extension Service Soil, Water and Forage Testing Laboratory
108 Soil Testing Laboratory, 2478 TAMU
College Station, TX 77843-2478
979-862-4955

Client Name: Sherwyn Wood
Client address: not provided

Standard Sample Report TCEQ COC# 055674

Laboratory ID:	TCEQ/client Sample ID:	Sample Depth (inches)	Sample Coll. Date:	Collector Name:	TCEQ Region #	Date Received	Sample Type:	Sample opened Date	Sample Ground Date	Process Tech.
13073	55674-01	6-24	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13074	55674-02	0-6	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13075	55674-03	6-24	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13076	55674-04	0-6	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13077	55674-05	6-24	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13078	55674-06	0-6	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP

Methods and Sample Preparation:

Receiving of samples

Processing - SWFTL0097R0.SOP

Upon opening of sample chests, all samples are identified and organized as listed on COC to insure completeness and condition of shipment. Individually each sample is spread across a non-reactive tray where foreign materials is physically removed and discarded. The sample(s) are then placed inside a 65C drying oven and allow to remain until dry. Individual samples were then removed from drying oven and pulverized with an Agvise soil pulverizer fitted with a shaking 2mm screen. Every attempt was again made to remove any remaining plant tissue in the pulverized sample(s). Soil was then transferred to the laboratory sample cups and while additional sample was stored.

Analytical Methods:

Soil pH 2:1 DI water:soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Schofield, R.K. and A.W. Taylor. 1955. The measurement of soil pH. Soil Sci. Soc. Am. Proc. 19:164-167.

Soil Conductivity 2:1 DI Water:Soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Rhoades, J.D. 1982. Soluble salts. p. 167-178. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil Nitrate-N KCl Extractable with Cd-Reduction Analyses

NO3-N EXTRACTION - SWFTL0014R5.SOP/NO3-N ANALYSIS - SWFTL0089R1.SOP

Keeney, D.R. and D.W. Nelson. 1982. Nitrogen - inorganic forms. p. 643-687. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil P, K, Ca, Mg, S and Na -- Mehlich III by ICP

M3 EXTRACTION - SWFTL0079R1.SOP/M3 ANALYSIS - SWFTL0081R2.SOP

Mehlich-3 soil test extractant: a modification of Mehlich-2 extractant. Commun. Soil Sci. Plant Anal. 15(12):1409-1416

Report ID: 055674a-45224

Print Date: 25-Oct-23

Standard Sample Report

TCEQ COC# 055674

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg units	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
13073	55674-01	3.36	ppm	169	ppm	14415	ppm	204	ppm	97.8	ppm	81.5	ppm
13074	55674-02	103	ppm	783	ppm	9012	ppm	582	ppm	80.4	ppm	181	ppm
13075	55674-03	8.03	ppm	256	ppm	12522	ppm	362	ppm	89.1	ppm	283	ppm
13076	55674-04	93.1	ppm	550	ppm	9396	ppm	379	ppm	80.0	ppm	81.0	ppm
13077	55674-05	6.32	ppm	170	ppm	16483	ppm	246	ppm	106	ppm	123	ppm
13078	55674-06	63.5	ppm	298	ppm	11712	ppm	369	ppm	76.3	ppm	62.8	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.0065	ppm	0.2012	ppm	0.2235	ppm	0.0705	ppm	0.0039	ppm	0.0460	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
13073	55674-01	10/10/2023	FMR	10/11/2023	JLP
13074	55674-02	10/10/2023	FMR	10/11/2023	JLP
13075	55674-03	10/10/2023	FMR	10/11/2023	JLP
13076	55674-04	10/10/2023	FMR	10/11/2023	JLP
13077	55674-05	10/10/2023	FMR	10/11/2023	JLP
13078	55674-06	10/10/2023	FMR	10/11/2023	JLP

Report ID: 055674a-45224

Print Date: 25-Oct-23

Standard Sample Report

TCEQ COC# 055674

Laboratory ID:	TCEQ/client Sample ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
13073	55674-01	7.79	NA	0.293	dS/M	9.279	ppm
13074	55674-02	7.76	NA	0.358	dS/M	50.588	ppm
13075	55674-03	7.96	NA	0.523	dS/M	14.38	ppm
13076	55674-04	7.63	NA	0.449	dS/M	62.045	ppm
13077	55674-05	7.88	NA	0.399	dS/M	11.619	ppm
13078	55674-06	7.63	NA	0.461	dS/M	45.476	ppm

Laboratory ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
		Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
13073	55674-01	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13074	55674-02	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13075	55674-03	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13076	55674-04	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13077	55674-05	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13078	55674-06	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW

Report ID: 055674a-45224
Quality Control Report

Print Date: 25-Oct-23
TCEQ COC# 055674

Laboratory ID:		Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg units	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
13079	IC949	44.5	ppm	311	ppm	2272	ppm	357	ppm	34.6	ppm	48.4	ppm
13080	IC950	45.6	ppm	312	ppm	2268	ppm	358	ppm	34.6	ppm	48.1	ppm
	Mean IC	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm
	IC Lower	45.0	ppm	274.0	ppm	1864.0	ppm	300.0	ppm	28.0	ppm	29.0	ppm
	IC Upper	54.4	ppm	321.0	ppm	2329.0	ppm	365.0	ppm	47.2	ppm	51.0	ppm
	blk205	<0.0132	ppm	<0.201	ppm	<0.223	ppm	<0.0706	ppm	<0.003939	ppm	<0.0460	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg units	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.0065	ppm	0.2012	ppm	0.2235	ppm	0.0705	ppm	0.0039	ppm	0.0460	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
IC949	10/10/2023	FMR	10/11/2023	JLP
IC950	10/10/2023	FMR	10/11/2023	JLP
blk205	10/10/2023	FMR	10/11/2023	JLP

Quality Control Report

TCEQ COC# 055674

Laboratory ID:		pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units	Nitrate-N % recovery
13079	IC949	5.8	na	0.251	dS/M	6.556	ppm	
13080	IC950	5.8	na	0.249	dS/M	5.665	ppm	
	Mean IC	5.83	na	0.25	dS/M	6.1105	ppm	
13080spike	Spiked sample	-	-	-	-	4.9	ppm	83.4
	IC lower	5.760	na	0.238	dS/M	4.6	ppm	
	IC Upper	5.990	na	0.306	dS/M	7.1	ppm	
	blk205	-	na	0	dS/M	-1.088	ppm	

Laboratory ID:	pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
IC949	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
IC950	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
blk205	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW

Report for Samples analyzed Under Contract Number: 582-10-99518

Report ID: 055674b-45224

Print Date: 25-Oct-23

Texas A&M AgriLife Extension Service Soil, Water and Forage Testing Laboratory
108 Soil Testing Laboratory, 2478 TAMU
College Station, TX 77843-2478
979-862-4955

Client Name: Sherwyn Wood
Client address: not provided

Standard Sample Report TCEQ COC# 055674

Laboratory ID:	TCEQ/client Sample ID:	Sample Depth (inches)	Sample Coll. Date:	Collector Name:	TCEQ Region #	Date Received	Sample Type:	Sample opened Date	Sample Ground Date	Process Tech.
13081	55674-07	6-24	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13082	55674-08	0-6	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13083	55674-09	6-24	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13084	55674-10	0-6	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP

Methods and Sample Preparation:

Receiving of samples

Processing - SWFTL0097R0.SOP

Upon opening of sample chests, all samples are identified and organized as listed on COC to insure completeness and condition of shipment. Individually each sample is spread across a non-reactive tray where foreign materials is physically removed and discarded. The sample(s) are then placed inside a 65C drying oven and allow to remain until dry. Individual samples were then removed from drying oven and pulverized with an Agvise soil pulverizer fitted with a shaking 2mm screen. Every attempt was again made to remove any remaining plant tissue in the pulverized sample(s). Soil was then transferred to the laboratory sample cups and while additional sample was stored.

Analytical Methods:

Soil pH 2:1 DI water:soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Schofield, R.K. and A.W. Taylor. 1955. The measurement of soil pH. Soil Sci. Soc. Am. Proc. 19:164-167.

Soil Conductivity 2:1 DI Water:Soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Rhoades, J.D. 1982. Soluble salts. p. 167-178. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil Nitrate-N KCl Extractable with Cd-Reduction Analyses

NO3-N EXTRACTION - SWFTL0014R5.SOP/NO3-N ANALYSIS - SWFTL0089R1.SOP

Keeney, D.R. and D.W. Nelson. 1982. Nitrogen - inorganic forms. p. 643-687. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil P, K, Ca, Mg, S and Na -- Mehlich III by ICP

M3 EXTRACTION - SWFTL0079R1.SOP/M3 ANALYSIS - SWFTL0081R2.SOP

Mehlich-3 soil test extractant: a modification of Mehlich-2 extractant. Commun. Soil Sci. Plant Anal. 15(12):1409-1416

Report ID: 055674b-45224

Print Date: 25-Oct-23

Standard Sample Report

TCEQ COC# 055674

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg units	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
13081	55674-07	7.31	ppm	216	ppm	17555	ppm	236	ppm	455	ppm	235	ppm
13082	55674-08	63.9	ppm	298	ppm	12330	ppm	344	ppm	89.6	ppm	53.0	ppm
13083	55674-09	5.78	ppm	218	ppm	16624	ppm	187	ppm	102	ppm	45.3	ppm
13084	55674-10	23.3	ppm	289	ppm	12393	ppm	328	ppm	80.4	ppm	54.7	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.0065	ppm	0.2012	ppm	0.2235	ppm	0.0705	ppm	0.0039	ppm	0.0460	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
13081	55674-07	10/10/2023	FMR	10/11/2023	JLP
13082	55674-08	10/10/2023	FMR	10/11/2023	JLP
13083	55674-09	10/10/2023	FMR	10/11/2023	JLP
13084	55674-10	10/10/2023	FMR	10/11/2023	JLP

Report ID: 055674b-45224

Print Date: 25-Oct-23

Standard Sample Report

TCEQ COC# 055674

Laboratory ID:	TCEQ/client Sample ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
13081	55674-07	7.7	NA	1.49	dS/M	19.273	ppm
13082	55674-08	7.7	NA	0.297	dS/M	30.277	ppm
13083	55674-09	7.81	NA	0.323	dS/M	26.69	ppm
13084	55674-10	7.75	NA	0.206	dS/M	18.859	ppm

Laboratory ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
		Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
13081	55674-07	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13082	55674-08	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13083	55674-09	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13084	55674-10	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW

Report ID: 055674b-45224
Quality Control Report

Print Date: 25-Oct-23
TCEQ COC# 055674

Laboratory ID:		Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
13099	IC951	47.5	ppm	308	ppm	2252	ppm	351	ppm	35.6	ppm	47.5	ppm
13100	IC952	48.1	ppm	318	ppm	2317	ppm	361	ppm	37.1	ppm	49.0	ppm
	Mean IC	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm
	IC Lower	45.0	ppm	274.0	ppm	1864.0	ppm	300.0	ppm	28.0	ppm	29.0	ppm
	IC Upper	54.4	ppm	321.0	ppm	2329.0	ppm	365.0	ppm	47.2	ppm	51.0	ppm
	blk205	<0.0132	ppm	<0.201	ppm	<0.223	ppm	<0.0706	ppm	<0.003939	ppm	<0.0460	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.0065	ppm	0.2012	ppm	0.2235	ppm	0.0705	ppm	0.0039	ppm	0.0460	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
IC951	10/10/2023	FMR	10/11/2023	JLP
IC952	10/10/2023	FMR	10/11/2023	JLP
blk205	10/10/2023	FMR	10/11/2023	JLP

Report ID: 055674b-45224

Print Date: 25-Oct-23

Quality Control Report

TCEQ COC# 055674

Laboratory ID:		pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units	Nitrate-N % recovery
13099	IC951	5.8	na	0.248	dS/M	6.633	ppm	
13100	IC952	5.8	na	0.25	dS/M	5.633	ppm	
	Mean IC	5.835	na	0.249	dS/M	6.133	ppm	
13100spike	Spiked sample	-	-	-	-	4.9	ppm	83.4
	IC lower	5.760	na	0.238	dS/M	4.6	ppm	
	IC Upper	5.990	na	0.306	dS/M	7.1	ppm	
	blk205	-	na	0	dS/M	-1.088	ppm	

Laboratory ID:	pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
IC951	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
IC952	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
blk205	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW

Attachment F

TCEQ STAFF CONTACT INFORMATION

TCEQ - BOSQUE 1255-1226 SOIL SAMPLES

Date: 9-6-23 COC#: 55474

Should you need to contact TCEQ regarding this sample, please contact the following staff as appropriate:

Primary Contact	Investigator	Phone #	Email Address
	Vanessa Gardner	254-552-1903	Vanessa.Gardner@tceq.texas.gov
	Michael Martin	254-552-1901	Michael.Martin@tceq.texas.gov
	Cody Christian	254-552-1912	Cody.Christian@tceq.texas.gov
	Chris Pearson	254-552-1905	Chris.Pearson@tceq.texas.gov

If the primary investigator cannot be reached within one business day, the following persons may be contacted:

Michael Martin, Team Leader, Stephenville Off.	254-552-1901	Michael.Martin@tceq.texas.gov
Rebecca Stephens, Administrative Assistant	254-552-1900	Rebecca.Stephens@tceq.texas.gov
Jeff Tate, Water Section Manager, Dallas/Ft. Worth Regional Office	817-588-5875	Jeff.Tate@tceq.texas.gov
Cassandra Derrick, Project Manager, Field Operations Support Div., Austin Central Office	512-239-5304	Cassandra.Derrick@tceq.texas.gov

Mailing Addresses:

Stephenville Special Project Office 580-D W. Lingleville Rd. Stephenville, Texas 76401 Main: 254-552-1900 or 1-800-687-7078 Fax: 254-552-1922	Dallas/Ft. Worth Regional Office 2309 Gravel Drive Fort Worth, Texas 76118 Main: 817-588-5800 Fax: 817-588-5701
--	--



Chain of Custody Record

55675

33

Location:

Shreevyn Wood

(Do not fill in this shaded area if the facility information must be confidential)

Permit #:

WQ4843

Region:

Organization #:

PCA Code:

Program:

Sampler telephone number:

(231) 552-1100

E-Mail ID:

Sampler: (signature)

[Signature]

Sampler: (please print clearly)

Cody Christian

Lab ID Number

Sample ID

Date

Time

of Bottles

Grab/ Comp.

Matrix L,S,M,O,T

CL2

pH

Cond.

Analyses Requested

REMARKS

13085

-01

9-5-23

8:47

See RFA

LMU 8 (6-24)

13086

-02

9/6/23

1110

LMU 9 (0-6)

13087

-03

9/6/23

1110

LMU 9 (6-24)

13088

-04

9-5-23

9:15

LMU 10 (0-6)

13089

-05

9-5-23

9:15

LMU 10 (6-24)

13090

-06

10:10

LMU 11 (0-2)

13091

-07

10:10

LMU 11 (2-6)

13092

-08

10:10

LMU 11 (6-24)

13093

-09

10:40

LMU 12 (0-6)

13094

-10

10:40

LMU 12 (6-24)

Relinquished by:

[Signature]

Date

9/20/23

Time

Received by:

[Signature] 9-21-23

For Laboratory Use:

Relinquished by:

Date

Time

Received by:

Received on ice:

Y

N

deg. C

Relinquished by:

Date

Time

Received by:

Preservatives:

Y

N

Relinquished by:

Date

Time

Received by:

COC Seal:

Y

N

Shipper name:

Fed Ex

Shipper Number:

7734 7405 0436

Seals Intact:

Y

N

Report for Samples analyzed Under Contract Number: 582-10-99518

Report ID: 055675a-45224

Print Date: 25-Oct-23

Texas A&M AgriLife Extension Service Soil, Water and Forage Testing Laboratory
108 Soil Testing Laboratory, 2478 TAMU
College Station, TX 77843-2478
979-862-4955

Client Name: Sherwyn Wood
Client address: not provided

Standard Sample Report TCEQ COC# 055675

Laboratory ID:	TCEQ/client Sample ID:	Sample Depth (inches)	Sample Coll. Date:	Collector Name:	TCEQ Region #	Date Received	Sample Type:	Sample opened Date	Sample Ground Date	Process Tech.
13085	55675-01	6-24	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13086	55675-02	0-6	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13087	55675-03	6-24	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13088	55675-04	0-6	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13089	55675-05	6-24	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13090	55675-06	0-2	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13091	55675-07	2-6	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13092	55675-08	6-24	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13093	55675-09	0-6	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13094	55675-10	6-24	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP

Methods and Sample Preparation:

Receiving of samples

Processing - SWFTL0097R0.SOP

Upon opening of sample chests, all samples are identified and organized as listed on COC to insure completeness and condition of shipment. Individually each sample is spread across a non-reactive tray where foreign materials is physically removed and discarded. The sample(s) are then placed inside a 65C drying oven and allow to remain until dry. Individual samples were then removed from drying oven and pulverized with an Agvise soil pulverizer fitted with a shaking 2mm screen. Every attempt was again made to remove any remaining plant tissue in the pulverized sample(s). Soil was then transferred to the laboratory sample cups and while additional sample was stored.

Analytical Methods:

Soil pH 2:1 DI water:soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Schofield, R.K. and A.W. Taylor. 1955. The measurement of soil pH. Soil Sci. Soc. Am. Proc. 19:164-167.

Soil Conductivity 2:1 DI Water:Soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Rhoades, J.D. 1982. Soluble salts. p. 167-178. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil Nitrate-N KCl Extractable with Cd-Reduction Analyses

NO3-N EXTRACTION - SWFTL0014R5.SOP/NO3-N ANALYSIS - SWFTL0089R1.SOP

Keeney, D.R. and D.W. Nelson. 1982. Nitrogen - inorganic forms. p. 643-687. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil P, K, Ca, Mg, S and Na -- Mehlich III by ICP

M3 EXTRACTION - SWFTL0079R1.SOP/M3 ANALYSIS - SWFTL0081R2.SOP

Mehlich-3 soil test extractant: a modification of Mehlich-2 extractant. Commun. Soil Sci. Plant Anal. 15(12):1409-1416

Report ID: 055675a-45224 Print Date: 25-Oct-23
Standard Sample Report TCEQ COC# 055675

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg units	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
13085	55675-01	1.34	ppm	178	ppm	16214	ppm	267	ppm	110	ppm	72.7	ppm
13086	55675-02	19.2	ppm	229	ppm	12963	ppm	275	ppm	94.1	ppm	42.1	ppm
13087	55675-03	5.04	ppm	226	ppm	15808	ppm	229	ppm	115	ppm	69.0	ppm
13088	55675-04	29.0	ppm	198	ppm	11203	ppm	248	ppm	79.6	ppm	39.5	ppm
13089	55675-05	3.67	ppm	151	ppm	16342	ppm	143	ppm	106	ppm	39.2	ppm
13090	55675-06	216	ppm	679	ppm	10488	ppm	491	ppm	96.9	ppm	71.1	ppm
13091	55675-07	127	ppm	408	ppm	11002	ppm	384	ppm	92.1	ppm	56.4	ppm
13092	55675-08	16.1	ppm	189	ppm	15565	ppm	201	ppm	129	ppm	109	ppm
13093	55675-09	203	ppm	568	ppm	9915	ppm	358	ppm	81.2	ppm	66.2	ppm
13094	55675-10	15.1	ppm	179	ppm	14154	ppm	191	ppm	93.3	ppm	60.0	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.0065	ppm	0.2012	ppm	0.2235	ppm	0.0705	ppm	0.0039	ppm	0.0460	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
13085	55675-01	10/10/2023	FMR	10/11/2023	JLP
13086	55675-02	10/10/2023	FMR	10/11/2023	JLP
13087	55675-03	10/10/2023	FMR	10/11/2023	JLP
13088	55675-04	10/10/2023	FMR	10/11/2023	JLP
13089	55675-05	10/10/2023	FMR	10/11/2023	JLP
13090	55675-06	10/10/2023	FMR	10/11/2023	JLP
13091	55675-07	10/10/2023	FMR	10/11/2023	JLP
13092	55675-08	10/10/2023	FMR	10/11/2023	JLP
13093	55675-09	10/10/2023	FMR	10/11/2023	JLP
13094	55675-10	10/10/2023	FMR	10/11/2023	JLP

Report ID: 055675a-45224

Print Date: 25-Oct-23

Standard Sample Report

TCEQ COC# 055675

Laboratory ID:	TCEQ/client Sample ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
13085	55675-01	7.85	NA	0.283	dS/M	10.156	ppm
13086	55675-02	7.75	NA	0.371	dS/M	26.78	ppm
13087	55675-03	7.72	NA	0.641	dS/M	24.192	ppm
13088	55675-04	7.74	NA	0.333	dS/M	26.757	ppm
13089	55675-05	7.78	NA	0.198	dS/M	20.006	ppm
13090	55675-06	7.22	NA	0.496	dS/M	75.203	ppm
13091	55675-07	7.7	NA	0.319	dS/M	29.782	ppm
13092	55675-08	7.9	NA	0.39	dS/M	12.725	ppm
13093	55675-09	7.73	NA	0.387	dS/M	42.953	ppm
13094	55675-10	7.78	NA	0.582	dS/M	35.321	ppm

Laboratory ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
		Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
13085	55675-01	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13086	55675-02	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13087	55675-03	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13088	55675-04	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13089	55675-05	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13090	55675-06	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13091	55675-07	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13092	55675-08	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13093	55675-09	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13094	55675-10	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW

Report ID: 055675a-45224
Quality Control Report

Print Date: 25-Oct-23
TCEQ COC# 055675

Laboratory ID:		Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
13099	IC951	47.5	ppm	308	ppm	2252	ppm	351	ppm	35.6	ppm	47.5	ppm
13100	IC952	48.1	ppm	318	ppm	2317	ppm	361	ppm	37.1	ppm	49.0	ppm
	Mean IC	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm
	IC Lower	45.0	ppm	274.0	ppm	1864.0	ppm	300.0	ppm	28.0	ppm	29.0	ppm
	IC Upper	54.4	ppm	321.0	ppm	2329.0	ppm	365.0	ppm	47.2	ppm	51.0	ppm
	blk205	<0.0132	ppm	<0.201	ppm	<0.223	ppm	<0.0706	ppm	<0.003939	ppm	<0.0460	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.0065	ppm	0.2012	ppm	0.2235	ppm	0.0705	ppm	0.0039	ppm	0.0460	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
IC951	10/10/2023	FMR	10/11/2023	JLP
IC952	10/10/2023	FMR	10/11/2023	JLP
blk205	10/10/2023	FMR	10/11/2023	JLP

Quality Control Report

TCEQ COC# 055675

Laboratory ID:		pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units	Nitrate-N % recovery
13099	IC951	5.8	na	0.248	dS/M	6.633	ppm	
13100	IC952	5.8	na	0.25	dS/M	5.633	ppm	
	Mean IC	5.835	na	0.249	dS/M	6.133	ppm	
13100spike	Spiked sample	-	-	-	-	4.9	ppm	83.4
	IC lower	5.760	na	0.238	dS/M	4.6	ppm	
	IC Upper	5.990	na	0.306	dS/M	7.1	ppm	
	blk205	-	na	0	dS/M	-1.088	ppm	

Laboratory ID:	pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
IC951	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
IC952	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
blk205	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW

REQUEST FOR ANALYSIS
TCEQ-BOSQUE 1255/1226 SOIL SAMPLES

COC Number: 55675	
Sample ID: 01-10	
Standard Request for Analysis	
NO3-N	Mg
P Mehlich III by ICP	Conductivity
K	pH
Na	
Additional Tests	
NA	



Chain of Custody Record

55676

33

Location:

Shawnee Wood

(Do not fill in this shaded area if the facility information must be confidential)

Permit #:

W04843

Region:

Organization #:

PCA Code:

Program:

Sampler telephone number:

(254) 552-1900

E-Mail ID:

Sampler: (signature)

[Signature]

Sampler: (please print clearly)

Cody Christian

Lab ID Number

Sample ID

Date

Time

of Bottles

Grab/Comp.

Matrix L,S,M,O,T

CL2

pH

Cond.

Analyses Requested

REMARKS

13095

-01

9-5-23

11:26

See RFA

LMU 13 (0-2)

13096

-02

9-5-23

11:26

LMU 13 (2-6)

13097

-03

9-5-23

11:26

LMU 13 (6-24)

13098

-04

9/6/23

12:12

LMU 14 (0-6)

13101

-05

9/6/23

12:12

LMU 14 (6-24)

13102

-06

9/6/23

12:50

LMU 15 (0-2)

13103

-07

9/6/23

12:50

LMU 15 (2-6)

13104

-08

9/6/23

12:50

LMU 15 (6-24)

Relinquished by:

Debra Nunez

Date

9/6/23

Time

Received by:

[Signature] 9-21-23

For Laboratory Use:

Relinquished by:

Date

Time

Received by:

Received on ice:

Y

N

deg. C

Relinquished by:

Date

Time

Received by:

Preservatives:

Y

N

Relinquished by:

Date

Time

Received by:

COC Seal:

Y

N

Shipper name:

Fed Ex

Shipper Number:

7734 7405 0936

Seals Intact:

Y

N

Report for Samples analyzed Under Contract Number: 582-10-99518

Report ID: 055676a-45224

Print Date: 25-Oct-23

Texas A&M AgriLife Extension Service Soil, Water and Forage Testing Laboratory
108 Soil Testing Laboratory, 2478 TAMU
College Station, TX 77843-2478
979-862-4955

Client Name: Sherwyn Wood
Client address: not provided

Standard Sample Report TCEQ COC# 055676

Laboratory ID:	TCEQ/client Sample ID:	Sample Depth (Inches)	Sample Coll. Date:	Collector Name:	TCEQ Region #	Date Received	Sample Type:	Sample opened Date	Sample Ground Date	Process Tech.
13095	55676-01	0-2	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13096	55676-02	2-6	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13097	55676-03	6-24	9/5/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13098	55676-04	0-6	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP

Methods and Sample Preparation:

Receiving of samples

Processing - SWFTL0097R0.SOP

Upon opening of sample chests, all samples are identified and organized as listed on COC to insure completeness and condition of shipment. Individually each sample is spread across a non-reactive tray where foreign materials is physically removed and discarded. The sample(s) are then placed inside a 65C drying oven and allow to remain until dry. Individual samples were then removed from drying oven and pulverized with an Agvise soil pulverizer fitted with a shaking 2mm screen. Every attempt was again made to remove any remaining plant tissue in the pulverized sample(s). Soil was then transferred to the laboratory sample cups and while additional sample was stored.

Analytical Methods:

Soil pH 2:1 DI water:soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Schofield, R.K. and A.W. Taylor. 1955. The measurement of soil pH. Soil Sci. Soc. Am. Proc. 19:164-167.

Soil Conductivity 2:1 DI Water:Soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Rhoades, J.D. 1982. Soluble salts. p. 167-178. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil Nitrate-N KCl Extractable with Cd-Reduction Analyses

NO3-N EXTRACTION - SWFTL0014R5.SOP/NO3-N ANALYSIS - SWFTL0089R1.SOP

Keeney, D.R. and D.W. Nelson. 1982. Nitrogen - inorganic forms. p. 643-687. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil P, K, Ca, Mg, S and Na -- Mehlich III by ICP

M3 EXTRACTION - SWFTL0079R1.SOP/M3 ANALYSIS - SWFTL0081R2.SOP

Mehlich-3 soil test extractant: a modification of Mehlich-2 extractant. Commun. Soil Sci. Plant Anal. 15(12):1409-1416

Report ID: 055676a-45224

Print Date: 25-Oct-23

Standard Sample Report

TCEQ COC# 055676

Laboratory ID:	TCEQ/client	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III
	Sample ID:	P conc.	P units	K conc.	K units	Ca conc.	Ca units	Mg conc.	Mg units	S conc.	S units	Na conc.	Na units
13095	55676-01	137	ppm	773	ppm	9375	ppm	528	ppm	77.2	ppm	205	ppm
13096	55676-02	109	ppm	512	ppm	8856	ppm	441	ppm	75.6	ppm	184	ppm
13097	55676-03	6.51	ppm	207	ppm	15717	ppm	298	ppm	118	ppm	145	ppm
13098	55676-04	120	ppm	538	ppm	12017	ppm	323	ppm	96.2	ppm	69.3	ppm

Laboratory ID:	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III
	P conc.	P units	K conc.	K units	Ca conc.	Ca units	Mg conc.	Mg conc.	S conc.	S units	Na conc.	Na units
Detection Limit	0.0065	ppm	0.2012	ppm	0.2235	ppm	0.0705	ppm	0.0039	ppm	0.0460	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	TCEQ/client	Mehlich III	Mehlich III	Mehlich III	Mehlich III
	Sample ID:	Extract Date	Extract Tech	Anal. Date	Anal. Tech
13095	55676-01	10/10/2023	FMR	10/11/2023	JLP
13096	55676-02	10/10/2023	FMR	10/11/2023	JLP
13097	55676-03	10/10/2023	FMR	10/11/2023	JLP
13098	55676-04	10/10/2023	FMR	10/11/2023	JLP

Report ID: 055676a-45224 Print Date: 25-Oct-23
 Standard Sample Report TCEQ COC# 055676

Laboratory ID:	TCEQ/client	pH	pH	Conductivity	Conductivity	Nitrate-N	Nitrate-N
	Sample ID:		units		units		units
13095	55676-01	7.84	NA	0.609	dS/M	41.194	ppm
13096	55676-02	7.86	NA	0.494	dS/M	25.561	ppm
13097	55676-03	7.88	NA	0.593	dS/M	10.722	ppm
13098	55676-04	7.58	NA	0.324	dS/M	42.278	ppm

Laboratory ID:	pH	pH	Conductivity	Conductivity	Nitrate-N	Nitrate-N
		units		units		units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	TCEQ/client	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
	Sample ID:	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
13095	55676-01	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13096	55676-02	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13097	55676-03	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13098	55676-04	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW

Report ID: 055676a-45224
Quality Control Report

Print Date: 25-Oct-23
TCEQ COC# 055676

Laboratory ID:		Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
13099	IC951	47.5	ppm	308	ppm	2252	ppm	351	ppm	35.6	ppm	47.5	ppm
13100	IC952	48.1	ppm	318	ppm	2317	ppm	361	ppm	37.1	ppm	49.0	ppm
	Mean IC	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm
	IC Lower	45.0	ppm	274.0	ppm	1864.0	ppm	300.0	ppm	28.0	ppm	29.0	ppm
	IC Upper	54.4	ppm	321.0	ppm	2329.0	ppm	365.0	ppm	47.2	ppm	51.0	ppm
	blk205	<0.0132	ppm	<0.201	ppm	<0.223	ppm	<0.0706	ppm	<0.003939	ppm	<0.0460	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.0065	ppm	0.2012	ppm	0.2235	ppm	0.0705	ppm	0.0039	ppm	0.0460	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
IC951	10/10/2023	FMR	10/11/2023	JLP
IC952	10/10/2023	FMR	10/11/2023	JLP
blk205	10/10/2023	FMR	10/11/2023	JLP

Quality Control Report

TCEQ COC# 055676

Laboratory ID:		pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units	Nitrate-N % recovery
13099	IC951	5.8	na	0.248	dS/M	6.633	ppm	
13100	IC952	5.8	na	0.25	dS/M	5.633	ppm	
	Mean IC	5.835	na	0.249	dS/M	6.133	ppm	
13100spike	Spiked sample	-	-	-	-	4.9	ppm	83.4
	IC lower	5.760	na	0.238	dS/M	4.6	ppm	
	IC Upper	5.990	na	0.306	dS/M	7.1	ppm	
	blk205	-	na	0	dS/M	-1.088	ppm	

Laboratory ID:	pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
IC951	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
IC952	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
blk205	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW

Report for Samples analyzed Under Contract Number: 582-10-99518

Report ID: 055676b-45224

Print Date: 25-Oct-23

Texas A&M AgriLife Extension Service Soil, Water and Forage Testing Laboratory
108 Soil Testing Laboratory, 2478 TAMU
College Station, TX 77843-2478
979-862-4955

Client Name: Sherwyn Wood
Client address: not provided

Standard Sample Report TCEQ COC# 055676

Laboratory ID:	TCEQ/client Sample ID:	Sample Depth (inches)	Sample Coll. Date:	Collector Name:	TCEQ Region #	Date Received	Sample Type:	Sample opened Date	Sample Ground Date	Process Tech.
13101	55676-05	6-24	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13102	55676-06	0-2	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13103	55676-07	2-6	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP
13104	55676-08	6-24	9/6/2023	Cody Christian	4	9/21/2023	soil	9/21/2023	10/5/2023	TLP

Methods and Sample Preparation:

Receiving of samples

Processing - SWFTL0097R0.SOP

Upon opening of sample chests, all samples are identified and organized as listed on COC to insure completeness and condition of shipment. Individually each sample is spread across a non-reactive tray where foreign materials is physically removed and discarded. The sample(s) are then placed inside a 65C drying oven and allow to remain until dry. Individual samples were then removed from drying oven and pulverized with an Agvise soil pulverizer fitted with a shaking 2mm screen. Every attempt was again made to remove any remaining plant tissue in the pulverized sample(s). Soil was then transferred to the laboratory sample cups and while additional sample was stored.

Analytical Methods:

Soil pH 2:1 DI Water:soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Schofield, R.K. and A.W. Taylor. 1955. The measurement of soil pH. Soil Sci. Soc. Am. Proc. 19:164-167.

Soil Conductivity 2:1 DI Water:Soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Rhoades, J.D. 1982. Soluble salts. p. 167-178. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil Nitrate-N KCl Extractable with Cd-Reduction Analyses

NO3-N EXTRACTION - SWFTL0014R5.SOP/NO3-N ANALYSIS - SWFTL0089R1.SOP

Keeney, D.R. and D.W. Nelson. 1982. Nitrogen - inorganic forms. p. 643-687. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil P, K, Ca, Mg, S and Na -- Mehlich III by ICP

M3 EXTRACTION - SWFTL0079R1.SOP/M3 ANALYSIS - SWFTL0081R2.SOP

Mehlich-3 soil test extractant: a modification of Mehlich-2 extractant. Commun. Soil Sci. Plant Anal. 15(12):1409-1416

Report ID: 055676b-45224

Print Date: 25-Oct-23

Standard Sample Report

TCEQ COC# 055676

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg units	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
13101	55676-05	14.5	ppm	172	ppm	16036	ppm	209	ppm	101	ppm	37.2	ppm
13102	55676-06	126	ppm	744	ppm	20116	ppm	420	ppm	160	ppm	53.7	ppm
13103	55676-07	135	ppm	784	ppm	10918	ppm	356	ppm	103	ppm	54.0	ppm
13104	55676-08	4.37	ppm	156	ppm	17496	ppm	162	ppm	116	ppm	43.7	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.0065	ppm	0.2012	ppm	0.2235	ppm	0.0705	ppm	0.0039	ppm	0.0460	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
13101	55676-05	10/10/2023	FMR	10/11/2023	JLP
13102	55676-06	10/10/2023	FMR	10/11/2023	JLP
13103	55676-07	10/10/2023	FMR	10/11/2023	JLP
13104	55676-08	10/10/2023	FMR	10/11/2023	JLP

Report ID: 055676b-45224

Print Date: 25-Oct-23

Standard Sample Report

TCEQ COC# 055676

Laboratory ID:	TCEQ/client Sample ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
13101	55676-05	7.89	NA	0.232	dS/M	13.593	ppm
13102	55676-06	7.52	NA	0.35	dS/M	32.598	ppm
13103	55676-07	7.58	NA	0.289	dS/M	28.011	ppm
13104	55676-08	7.78	NA	0.211	dS/M	15.104	ppm

Laboratory ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
		Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
13101	55676-05	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13102	55676-06	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13103	55676-07	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
13104	55676-08	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW

Report ID: 055676b-45224
Quality Control Report

Print Date: 25-Oct-23
TCEQ COC# 055676

Laboratory ID:		Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
13119	IC953	49.5	ppm	319	ppm	2251	ppm	358	ppm	38.8	ppm	49.3	ppm
13120	IC954	49.5	ppm	315	ppm	2275	ppm	361	ppm	37.5	ppm	50.5	ppm
	Mean IC	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm
	IC Lower	45.0	ppm	274.0	ppm	1864.0	ppm	300.0	ppm	28.0	ppm	29.0	ppm
	IC Upper	54.4	ppm	321.0	ppm	2329.0	ppm	365.0	ppm	47.2	ppm	51.0	ppm
	blk205	<0.0132	ppm	<0.201	ppm	<0.223	ppm	<0.0706	ppm	<0.003939	ppm	<0.0460	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.0065	ppm	0.2012	ppm	0.2235	ppm	0.0705	ppm	0.0039	ppm	0.0460	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
IC953	10/10/2023	FMR	10/11/2023	JLP
IC954	10/10/2023	FMR	10/11/2023	JLP
blk205	10/10/2023	FMR	10/11/2023	JLP

Report ID: 055676b-45224

Print Date: 25-Oct-23

Quality Control Report

TCEQ COC# 055676

Laboratory ID:		pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units	Nitrate-N % recovery
13119	IC953	5.8	na	0.249	dS/M	6.267	ppm	
13120	IC954	5.8	na	0.25	dS/M	5.636	ppm	
	Mean IC	5.83	na	0.2495	dS/M	5.9515	ppm	
13120spike	Spiked sample	-	-	-	-	4.9	ppm	83.4
	IC lower	5.760	na	0.238	dS/M	4.6	ppm	
	IC Upper	5.990	na	0.306	dS/M	7.1	ppm	
	blk205	-	na	0	dS/M	-1.088	ppm	

Laboratory ID:	pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
IC953	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
IC954	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW
blk205	10/9/2023	DEC	10/10/2023	DEC	10/10/2023	DEC	10/10/2023	FMR	10/11/2023	JW

REQUEST FOR ANALYSIS
TCEQ-BOSQUE 1255/1226 SOIL SAMPLES

COC Number: 55676	
Sample ID: 01-09	
Standard Request for Analysis	
NO3-N	Mg
P Mehlich III by ICP	Conductivity
K	pH
Na	
Additional Tests	
NA	

Jon Niermann, *Chairman*
Bobby Janecka, *Commissioner*
Catarina R. Gonzales, *Commissioner*
Kelly Keel, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 11, 2024

CERTIFIED MAIL 7022 2410 0000 5131 8077
RETURN RECEIPT REQUESTED

Mr. Sherwyn Dallas Wood
Sherwyn Wood Dairy
757 CR 229
Stephenville, Texas 76401

Re: Annual Soil Sample Analysis Results at Sherwyn Wood Dairy
CAFO Permit No.: WQ0004843000

Dear Mr. Wood

Attached are the analytical results for the soil samples that were collected at your facility on October 7, 2024, and October 8, 2024. A copy of the sampling map is attached. Please utilize these results to update your nutrient management plan.

In addition, if any of the results are greater than 200 parts per million for phosphorus, please develop a new nutrient utilization plan (NUP) or revise your existing NUP, in accordance with your permit. All new or revised NUPs that are required to be submitted for TCEQ review and approval shall be mailed to the following address:

Water Quality Assessment Section Manager
Water Quality Division, MC 150
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

If you collected a duplicate sample following RG-408 protocol during the TCEQ sampling event that indicates a significant difference in the TCEQ analysis results (greater than 20% difference), you may choose to dispute the TCEQ sample results within 20 calendar days from the date of this letter. You must provide copies of all supporting documentation, including but not limited to your sample results, chain of custody documentation and laboratory quality assurance documentation. Please submit this information in writing to the TCEQ at the following address:

ATTN: Annual CAFO Soil Sample Analysis Disputes
Water Section Manager
Dallas/Fort Worth Regional Office
Texas Commission on Environmental Quality
2309 Gravel Drive
Fort Worth, TX 76118-6951

An analysis dispute received after the time allocated above will not be eligible for re-analysis. If you have any questions, please feel free to contact Mr. Michael Martin in the Stephenville Office at 254-552-1900.

Sincerely,

A handwritten signature in blue ink, appearing to read "Michael Martin", with a long horizontal flourish extending to the right.

Michael Martin, Team Leader, Water Section
DFW Region Office
Texas Commission on Environmental Quality

MM/dm

Enclosures: Laboratory Analysis Reports



Chain of Custody Record

55770

19

Location:

Sherwyn Wood Dairy

(Do not fill in this shaded area if the facility information must be confidential)

Permit #:

4843

Region:

Organization #:

PCA Code:

Program:

Sampler telephone number:

(754) 552-1900

E-Mail ID:

Sampler: (signature)

[Signature]

Sampler: (please print clearly)

Cody Chavis

Lab ID Number

Sample ID

Date

Time

of Bottles

Grab/ Comp.

Matrix L,S,M,O,T

CL2

pH

Cond.

Analyses Requested

REMARKS

14221

-01

10-7-24

11:00

See RFA

Lmu 1 (0-2)

14222

-02

11:00

Lmu 1 (2-6)

14223

-03

11:00

Lmu 1 (6-24)

14224

-04

11:30

Lmu 2 (0-6)

14225

-05

11:30

Lmu 2 (6-24)

14226

-06

Lmu 3 (0-6)

14227

-07

Lmu 3 (6-24)

14228

-08

10-8-24

14:00

Lmu 4 (0-2)

14229

-09

14:00

Lmu 4 (2-6)

14230

-10

14:00

Lmu 4 (6-24)

Relinquished by:

Dillon Weisen

Date

10/15/24

Time

8:48

Received by:

JH 10-16-24

For Laboratory Use:

Relinquished by:

Date

Time

Received by:

Received on ice:

Y

N

deg. C

Relinquished by:

Date

Time

Received by:

Preservatives:

Y

N

Relinquished by:

Date

Time

Received by:

COC Seal:

Y

N

Shipper name:

Ex

Shipper Number:

7792 678 1214

Seals Intact:

Y

N

Report for Samples analyzed Under Contract Number: 582-10-99518

Report ID: 055770a-45622

Print Date: 26-Nov-24

Texas A&M AgriLife Extension Service Soil, Water and Forage Testing Laboratory
108 Soil Testing Laboratory, 2478 TAMU
College Station, TX 77843-2478
979-862-4955

Client Name: Sherwyn Wood Dairy
Client address: not provided

Standard Sample Report TCEQ COC# 055770

Laboratory ID:	TCEQ/client Sample ID:	Sample Depth (inches)	Sample Coll. Date:	Collector Name:	TCEQ Region #	Date Received	Sample Type:	Sample opened Date	Sample Ground Date	Process Tech.
14221	55770-01	0-2	10/7/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP
14222	55770-02	2-6	10/7/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP
14223	55770-03	6-24	10/7/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP
14224	55770-04	0-6	10/7/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP
14225	55770-05	6-24	10/7/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP
14226	55770-08	0-2	10/8/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP
14227	55770-09	2-6	10/8/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP
14228	55770-10	6-24	10/8/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP

Methods and Sample Preparation:

Receiving of samples

Processing - SWFTL0097R0.SOP

Upon opening of sample chests, all samples are identified and organized as listed on COC to insure completeness and condition of shipment. Individually each sample is spread across a non-reactive tray where foreign materials is physically removed and discarded. The sample(s) are then placed inside a 65C drying oven and allow to remain until dry. Individual samples were then removed from drying oven and pulverized with an Agvise soil pulverizer fitted with a shaking 2mm screen. Every attempt was again made to remove any remaining plant tissue in the pulverized sample(s). Soil was then transferred to the laboratory sample cups and while additional sample was stored.

Analytical Methods:

Soil pH 2:1 DI water:soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Schofield, R.K. and A.W. Taylor. 1955. The measurement of soil pH. Soil Sci. Soc. Am. Proc. 19:164-167.

Soil Conductivity 2:1 DI Water:Soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Rhoades, J.D. 1982. Soluble salts. p. 167-178. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil Nitrate-N KCl Extractable with Cd-Reduction Analyses

NO3-N EXTRACTION - SWFTL0014R5.SOP/NO3-N ANALYSIS - SWFTL0089R1.SOP

Keeney, D.R. and D.W. Nelson. 1982. Nitrogen - inorganic forms. p. 643-687. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil P, K, Ca, Mg, S and Na -- Mehlich III by ICP

M3 EXTRACTION - SWFTL0079R1.SOP/M3 ANALYSIS - SWFTL0081R2.SOP

Mehlich-3 soil test extractant: a modification of Mehlich-2 extractant. Commun. Soil Sci. Plant Anal. 15(12):1409-1416

Laboratory ID:	TCEQ/client	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III
	Sample ID:	P conc.	P units	K conc.	K units	Ca conc.	Ca units	Mg conc.	Mg units	S conc.	S units	Na conc.	Na units
14221	55770-01	190	ppm	341	ppm	7022	ppm	460	ppm	77.8	ppm	21.6	ppm
14222	55770-02	105	ppm	247	ppm	9167	ppm	403	ppm	87.6	ppm	51.6	ppm
14223	55770-03	11.4	ppm	183	ppm	16024	ppm	280	ppm	146	ppm	108	ppm
14224	55770-04	125	ppm	750	ppm	9255	ppm	434	ppm	87.2	ppm	24.4	ppm
14225	55770-05	8.71	ppm	328	ppm	18827	ppm	284	ppm	169	ppm	78.3	ppm
14226	55770-08	163	ppm	471	ppm	11010	ppm	361	ppm	110	ppm	19.7	ppm
14227	55770-09	62.6	ppm	387	ppm	13561	ppm	322	ppm	123	ppm	29.7	ppm
14228	55770-10	5.19	ppm	207	ppm	22445	ppm	210	ppm	189	ppm	40.9	ppm

Laboratory ID:	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III	Mehlich III
	P conc.	P units	K conc.	K units	Ca conc.	Ca units	Mg conc.	Mg conc.	S conc.	S units	Na conc.	Na units
Detection Limit	0.0117	ppm	0.1371	ppm	0.0183	ppm	0.0849	ppm	0.0394	ppm	0.0036	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	TCEQ/client	Mehlich III	Mehlich III	Mehlich III	Mehlich III
	Sample ID:	Extract Date	Extract Tech	Anal.Date	Anal. Tech
14221	55770-01	11/13/2024	FMR	11/14/2024	JLP
14222	55770-02	11/13/2024	FMR	11/14/2024	JLP
14223	55770-03	11/13/2024	FMR	11/14/2024	JLP
14224	55770-04	11/13/2024	FMR	11/14/2024	JLP
14225	55770-05	11/13/2024	FMR	11/14/2024	JLP
14226	55770-08	11/13/2024	FMR	11/14/2024	JLP
14227	55770-09	11/13/2024	FMR	11/14/2024	JLP
14228	55770-10	11/13/2024	FMR	11/14/2024	JLP

Report ID: 055770a-45622 Print Date: 26-Nov-24
 Standard Sample Report TCEQ COC# 055770

Laboratory ID:	TCEQ/client	pH	pH	Conductivity	Conductivity	Nitrate-N	Nitrate-N
	Sample ID:		units		units		units
14221	55770-01	7.25	NA	0.3	dS/M	29.8	ppm
14222	55770-02	7.68	NA	0.315	dS/M	12.616	ppm
14223	55770-03	7.8	NA	0.342	dS/M	9.157	ppm
14224	55770-04	7.54	NA	0.271	dS/M	12.68	ppm
14225	55770-05	7.83	NA	0.26	dS/M	4.568	ppm
14226	55770-08	7.24	NA	0.264	dS/M	28.438	ppm
14227	55770-09	7.66	NA	0.241	dS/M	9.011	ppm
14228	55770-10	7.82	NA	0.273	dS/M	5.645	ppm

Laboratory ID:	pH	pH	Conductivity	Conductivity	Nitrate-N	Nitrate-N
		units		units		units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	TCEQ/client	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
	Sample ID:	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
14221	55770-01	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
14222	55770-02	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
14223	55770-03	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
14224	55770-04	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
14225	55770-05	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
14226	55770-08	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
14227	55770-09	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
14228	55770-10	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW

Laboratory ID:		Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
14239	IC1019	46.4	ppm	293	ppm	2186	ppm	336	ppm	39.3	ppm	44.4	ppm
14240	IC1020	47.0	ppm	294	ppm	2142	ppm	343	ppm	38.8	ppm	42.8	ppm
	Mean IC	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm
	IC Lower	39.4	ppm	241.0	ppm	1610.0	ppm	269.0	ppm	25.9	ppm	28.0	ppm
	IC Upper	47.2	ppm	307.0	ppm	2531.0	ppm	341.0	ppm	41.0	ppm	53.0	ppm
	blk219	0.104	ppm	<0.131	ppm	<2.04	ppm	<0.294	ppm	<0.1000	ppm	<0.0100	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.0117	ppm	0.1371	ppm	0.0183	ppm	0.0849	ppm	0.0394	ppm	0.0036	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
IC1019	11/13/2024	FMR	11/14/2024	JLP
IC1020	11/13/2024	FMR	11/14/2024	JLP
blk219	11/13/2024	FMR	11/14/2024	JLP

Quality Control Report

TCEQ COC# 055770

Laboratory ID:		pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units	Nitrate-N % recovery
14239	IC1019	5.9	na	0.253	dS/M	5.669	ppm	
14240	IC1020	5.9	na	0.251	dS/M	5.718	ppm	
	Mean IC	5.86	na	0.252	dS/M	5.6935	ppm	
14240spike	Spiked sample	-	-	-	-	4.5	ppm	82.4
	IC lower	5.760	na	0.241	dS/M	4.5	ppm	
	IC Upper	5.990	na	0.299	dS/M	6.9	ppm	
	blk219	-	na	0	dS/M	0.184	ppm	

Laboratory ID:	pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
IC1019	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
IC1020	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
blk219	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW

**REQUEST FOR ANALYSIS
TCEQ-BOSQUE 1255/1226 SOIL SAMPLES**

COC Number: 55770

Sample ID: 01-05, 08-10

Standard Request for Analysis

NO₃-N

Mg

P Mehlich III by ICP

Conductivity

K

pH

Na

Additional Tests

NA



Chain of Custody Record

55771

19

Location:

Sherwyn Wood Dairy

(Do not fill in this shaded area if the facility information must be confidential)

Permit #:

4843

Region:

Organization #:

PCA Code:

Program:

Sampler telephone number:

(254) 552-1900

E-Mail ID:

Sampler: (signature)

Sampler: (please print clearly)

Cody Christenson

Lab ID Number	Sample ID	Date	Time	# of Bottles	Grab/ Comp.	Matrix L,S,M,O,T	EL2	pH	Cond.	Analyses Requested	REMARKS
14229	-01	10-8-24	11:36							SU RFA	LMU 5 (0-2)
14230	-02		11:36								LMU 5 (2-6)
14231	-03		11:36								LMU 5 (6-24)
14232	-04		11:55								LMU 5A (0-2)
14233	-05		11:55								LMU 5A (2-6)
14234	-06		11:55								LMU 5A (6-24)
	-07										LMU 6 (0-6)
	-08										LMU 6 (6-24)
14235	-09	10-8-24	12:23								LMU 7 (0-6)
14236	-10	10-8-24	12:23								LMU 7 (6-24)

Relinquished by:

Delon Wilson

Date

10/15/24

Time

8:48

Received by:

JH 10-16-24

For Laboratory Use:

Relinquished by:

Date

Time

Received by:

Received on ice:

Y

N

deg. C

Relinquished by:

Date

Time

Received by:

Preservatives:

Y

N

Relinquished by:

Date

Time

Received by:

COC Seal:

Y

N

Shipper name:

Fed Ex

Shipper Number:

7792 6781 1214

Seals Intact:

Y

N

Report for Samples analyzed Under Contract Number: 582-10-99518

Report ID: 055771a-45622

Print Date: 26-Nov-24

Texas A&M AgriLife Extension Service Soil, Water and Forage Testing Laboratory
108 Soil Testing Laboratory, 2478 TAMU
College Station, TX 77843-2478
979-862-4955

Client Name: Sherwyn Wood Dairy
Client address: not provided

Standard Sample Report TCEQ COC# 055771

Laboratory ID:	TCEQ/client Sample ID:	Sample Depth (inches)	Sample Coll. Date:	Collector Name:	TCEQ Region #	Date Received	Sample Type:	Sample opened Date	Sample Ground Date	Process Tech.
14229	55771-01	0-2	10/8/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP
14230	55771-02	2-6	10/8/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP
14231	55771-03	6-24	10/8/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP
14232	55771-04	0-2	10/8/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP
14233	55771-05	2-6	10/8/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP
14234	55771-06	6-24	10/8/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP
14235	55771-09	0-6	10/8/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP
14236	55771-10	6-24	10/8/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP

Methods and Sample Preparation:

Receiving of samples Processing - SWFTL0097R0.SOP

Upon opening of sample chests, all samples are identified and organized as listed on COC to insure completeness and condition of shipment. Individually each sample is spread across a non-reactive tray where foreign materials is physically removed and discarded. The sample(s) are then placed inside a 65C drying oven and allow to remain until dry. Individual samples were then removed from drying oven and pulverized with an Agvise soil pulverizer fitted with a shaking 2mm screen. Every attempt was again made to remove any remaining plant tissue in the pulverized sample(s). Soil was then transferred to the laboratory sample cups and while additional sample was stored.

Analytical Methods:

Soil pH 2:1 DI water:soil SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Schofield, R.K. and A.W. Taylor. 1955. The measurement of soil pH. Soil Sci. Soc. Am. Proc. 19:164-167.

Soil Conductivity 2:1 DI Water:Soil SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Rhoades, J.D. 1982. Soluble salts. p. 167-178. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil Nitrate-N KCl Extractable with Cd-Reduction Analyses

NO3-N EXTRACTION - SWFTL0014R5.SOP/NO3-N ANALYSIS - SWFTL0089R1.SOP

Keeney, D.R. and D.W. Nelson. 1982. Nitrogen - inorganic forms. p. 643-687. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil P, K, Ca, Mg, S and Na -- Mehlich III by ICP

M3 EXTRACTION - SWFTL0079R1.SOP/M3 ANALYSIS - SWFTL0081R2.SOP

Mehlich-3 soil test extractant: a modification of Mehlich-2 extractant. Commun. Soil Sci. Plant Anal. 15(12):1409-1416

Report ID: 055771a-45622 Print Date: 26-Nov-24
Standard Sample Report TCEQ COC# 055771

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg units	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
14229	55771-01	184	ppm	1001	ppm	6967	ppm	630	ppm	73.3	ppm	96.9	ppm
14230	55771-02	79.8	ppm	607	ppm	9718	ppm	591	ppm	92.9	ppm	139	ppm
14231	55771-03	8.16	ppm	259	ppm	14253	ppm	371	ppm	130	ppm	299	ppm
14232	55771-04	223	ppm	707	ppm	7306	ppm	454	ppm	80.7	ppm	69.6	ppm
14233	55771-05	92.4	ppm	582	ppm	10272	ppm	408	ppm	107	ppm	92.0	ppm
14234	55771-06	6.05	ppm	205	ppm	19924	ppm	259	ppm	179	ppm	137	ppm
14235	55771-09	42.9	ppm	293	ppm	13538	ppm	331	ppm	119	ppm	41.5	ppm
14236	55771-10	4.67	ppm	188	ppm	21715	ppm	181	ppm	185	ppm	45.9	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.0117	ppm	0.1371	ppm	0.0183	ppm	0.0849	ppm	0.0394	ppm	0.0036	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
14229	55771-01	11/13/2024	FMR	11/14/2024	JLP
14230	55771-02	11/13/2024	FMR	11/14/2024	JLP
14231	55771-03	11/13/2024	FMR	11/14/2024	JLP
14232	55771-04	11/13/2024	FMR	11/14/2024	JLP
14233	55771-05	11/13/2024	FMR	11/14/2024	JLP
14234	55771-06	11/13/2024	FMR	11/14/2024	JLP
14235	55771-09	11/13/2024	FMR	11/14/2024	JLP
14236	55771-10	11/13/2024	FMR	11/14/2024	JLP

Report ID: 055771a-45622 Print Date: 26-Nov-24
Standard Sample Report TCEQ COC# 055771

Laboratory ID:	TCEQ/client	pH	pH	Conductivity	Conductivity	Nitrate-N	Nitrate-N
	Sample ID:		units		units		units
14229	55771-01	7.5	NA	0.4	dS/M	25.665	ppm
14230	55771-02	7.86	NA	0.382	dS/M	7.99	ppm
14231	55771-03	7.94	NA	0.434	dS/M	3.328	ppm
14232	55771-04	7.53	NA	0.487	dS/M	34.495	ppm
14233	55771-05	7.85	NA	0.405	dS/M	16.547	ppm
14234	55771-06	7.89	NA	0.496	dS/M	7.934	ppm
14235	55771-09	7.63	NA	0.468	dS/M	20.366	ppm
14236	55771-10	7.77	NA	0.447	dS/M	12.257	ppm

Laboratory ID:	pH	pH	Conductivity	Conductivity	Nitrate-N	Nitrate-N
		units		units		units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	TCEQ/client	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
	Sample ID:	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
14229	55771-01	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
14230	55771-02	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
14231	55771-03	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
14232	55771-04	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
14233	55771-05	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
14234	55771-06	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
14235	55771-09	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
14236	55771-10	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW

Laboratory ID:		Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
14239	IC1019	46.4	ppm	293	ppm	2186	ppm	336	ppm	39.3	ppm	44.4	ppm
14240	IC1020	47.0	ppm	294	ppm	2142	ppm	343	ppm	38.8	ppm	42.8	ppm
	Mean IC	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm
	IC Lower	39.4	ppm	241.0	ppm	1610.0	ppm	269.0	ppm	25.9	ppm	28.0	ppm
	IC Upper	47.2	ppm	307.0	ppm	2531.0	ppm	341.0	ppm	41.0	ppm	53.0	ppm
	blk219	0.104	ppm	<0.131	ppm	<2.04	ppm	<0.294	ppm	<0.1000	ppm	<0.0100	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.0117	ppm	0.1371	ppm	0.0183	ppm	0.0849	ppm	0.0394	ppm	0.0036	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
IC1019	11/13/2024	FMR	11/14/2024	JLP
IC1020	11/13/2024	FMR	11/14/2024	JLP
blk219	11/13/2024	FMR	11/14/2024	JLP

Quality Control Report

TCEQ COC# 055771

Laboratory ID:		pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units	Nitrate-N % recovery
14239	IC1019	5.9	na	0.253	dS/M	5.669	ppm	
14240	IC1020	5.9	na	0.251	dS/M	5.718	ppm	
	Mean IC	5.86	na	0.252	dS/M	5.6935	ppm	
14240spike	Spiked sample	-	-	-	-	4.5	ppm	82.4
	IC lower	5.760	na	0.241	dS/M	4.5	ppm	
	IC Upper	5.990	na	0.299	dS/M	6.9	ppm	
	blk219	-	na	0	dS/M	0.184	ppm	

Laboratory ID:	pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
IC1019	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
IC1020	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
blk219	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW

REQUEST FOR ANALYSIS
TCEQ-BOSQUE 1255/1226 SOIL SAMPLES

COC Number: 55771	
Sample ID: 01-02, 09, 10	
Standard Request for Analysis	
NO ₃ -N	Mg
P Mehlich III by ICP	Conductivity
K	pH
Na	
Additional Tests	
NA	



TEXAS
COMMISSION ON
ENVIRONMENTAL
QUALITY

Chain of Custody Record

55772

19

Location:

Sherwyn Wood Dairy

Permit #:

4843

(Do not fill in this shaded area if the facility information must be confidential)

Region:

Organization #:

PCA Code:

Program:

Sampler telephone number:

(254) 552-1900

E-Mail ID:

Sampler: (signature)

Sampler: (please print clearly)

Cody Christian

Lab ID Number	Sample ID	Date	Time	# of Bottles	Grab/ Comp.	Matrix L,S,M,O,T	CL2	pH	Cond.	Analyses Requested	REMARKS
	-01									See RFA	LMU8 (0-6)
	-02										LMU8 (6-24)
14237	-03	10-8-24	13:03								LMU9 (0-6)
14238	-04	+	13:03								LMU9 (6-24)
	-05										LMU10 (0-6)
	-06										LMU10 (6-24)
14241	-07	10-7-24	11:15								LMU11 (0-6)
14242	-08	10-7-24	11:15								LMU11 (6-24)
	-09										LMU12 (0-6)
	-10										LMU12 (6-24)

Relinquished by:

Deborah Nielsen

Date

10/15/24

Time

8:48

Received by:

J. [Signature]

10-16-24

For Laboratory Use:

Relinquished by:

Date

Time

Received by:

Received on ice:

Y

N

deg. C

Relinquished by:

Date

Time

Received by:

Preservatives:

Y

N

Relinquished by:

Date

Time

Received by:

COC Seal:

Y

N

Shipper name:

Fed Ex

Shipper Number:

7792 6781 1214

Seals Intact:

Y

N

Report for Samples analyzed Under Contract Number: 582-10-99518

Report ID: 055772a-45622

Print Date: 26-Nov-24

Texas A&M AgriLife Extension Service Soil, Water and Forage Testing Laboratory
108 Soil Testing Laboratory, 2478 TAMU
College Station, TX 77843-2478
979-862-4955

Client Name: Sherwyn Wood Dairy
Client address: not provided

Standard Sample Report TCEQ COC# 055772

Laboratory ID:	TCEQ/client Sample ID:	Sample Depth (inches)	Sample Coll. Date:	Collector Name:	TCEQ Region #	Date Received	Sample Type:	Sample opened Date	Sample Ground Date	Process Tech.
14237	55772-03	0-6	10/8/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP
14238	55772-04	6-24	10/8/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP

Methods and Sample Preparation:

Receiving of samples

Processing - SWFTL0097R0.SOP

Upon opening of sample chests, all samples are identified and organized as listed on COC to insure completeness and condition of shipment. Individually each sample is spread across a non-reactive tray where foreign materials is physically removed and discarded. The sample(s) are then placed inside a 65C drying oven and allow to remain until dry. Individual samples were then removed from drying oven and pulverized with an Agvise soil pulverizer fitted with a shaking 2mm screen. Every attempt was again made to remove any remaining plant tissue in the pulverized sample(s). Soil was then transferred to the laboratory sample cups and while additional sample was stored.

Analytical Methods:

Soil pH 2:1 DI water:soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Schofield, R.K. and A.W. Taylor. 1955. The measurement of soil pH. Soil Sci. Soc. Am. Proc. 19:164-167.

Soil Conductivity 2:1 DI Water:Soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Rhoades, J.D. 1982. Soluble salts. p. 167-178. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil Nitrate-N KCl Extractable with Cd-Reduction Analyses

NO3-N EXTRACTION - SWFTL0014R5.SOP/NO3-N ANALYSIS - SWFTL0089R1.SOP

Keeney, D.R. and D.W. Nelson. 1982. Nitrogen - inorganic forms. p. 643-687. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil P, K, Ca, Mg, S and Na -- Mehlich III by ICP

M3 EXTRACTION - SWFTL0079R1.SOP/M3 ANALYSIS - SWFTL0081R2.SOP

Mehlich-3 soil test extractant: a modification of Mehlich-2 extractant. Commun. Soil Sci. Plant Anal. 15(12):1409-1416

Report ID: 055772a-45622 Print Date: 26-Nov-24
 Standard Sample Report TCEQ COC# 055772

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg units	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
14237	55772-03	21.0	ppm	255	ppm	13912	ppm	294	ppm	124	ppm	32.1	ppm
14238	55772-04	4.53	ppm	220	ppm	20962	ppm	206	ppm	190	ppm	49.6	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.0117	ppm	0.1371	ppm	0.0183	ppm	0.0849	ppm	0.0394	ppm	0.0036	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
14237	55772-03	11/13/2024	FMR	11/14/2024	JLP
14238	55772-04	11/13/2024	FMR	11/14/2024	JLP

Report ID: 055772a-45622 Print Date: 26-Nov-24
 Standard Sample Report TCEQ COC# 055772

Laboratory ID:	TCEQ/client	pH	pH	Conductivity	Conductivity	Nitrate-N	Nitrate-N
	Sample ID:		units		units		units
14237	55772-03	7.67	NA	0.579	dS/M	14.604	ppm
14238	55772-04	7.78	NA	0.489	dS/M	17.452	ppm

Laboratory ID:	pH	pH	Conductivity	Conductivity	Nitrate-N	Nitrate-N
		units		units		units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	TCEQ/client	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
	Sample ID:	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
14237	55772-03	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
14238	55772-04	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW

Laboratory ID:		Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
14239	IC1019	46.4	ppm	293	ppm	2186	ppm	336	ppm	39.3	ppm	44.4	ppm
14240	IC1020	47.0	ppm	294	ppm	2142	ppm	343	ppm	38.8	ppm	42.8	ppm
	Mean IC	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm
	IC Lower	39.4	ppm	241.0	ppm	1610.0	ppm	269.0	ppm	25.9	ppm	28.0	ppm
	IC Upper	47.2	ppm	307.0	ppm	2531.0	ppm	341.0	ppm	41.0	ppm	53.0	ppm
	blk219	0.104	ppm	<0.131	ppm	<2.04	ppm	<0.294	ppm	<0.1000	ppm	<0.0100	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.0117	ppm	0.1371	ppm	0.0183	ppm	0.0849	ppm	0.0394	ppm	0.0036	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
IC1019	11/13/2024	FMR	11/14/2024	JLP
IC1020	11/13/2024	FMR	11/14/2024	JLP
blk219	11/13/2024	FMR	11/14/2024	JLP

Quality Control Report

TCEQ COC# 055772

Laboratory ID:		pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units	Nitrate-N % recovery
14239	IC1019	5.9	na	0.253	dS/M	5.669	ppm	
14240	IC1020	5.9	na	0.251	dS/M	5.718	ppm	
	Mean IC	5.86	na	0.252	dS/M	5.6935	ppm	
14240spike	Spiked sample	-	-	-	-	4.5	ppm	82.4
	IC lower	5.760	na	0.241	dS/M	4.5	ppm	
	IC Upper	5.990	na	0.299	dS/M	6.9	ppm	
	blk219	-	na	0	dS/M	0.184	ppm	

Laboratory ID:	pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
IC1019	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
IC1020	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
blk219	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW

Report for Samples analyzed Under Contract Number: 582-10-99518

Report ID: 055772b-45622

Print Date: 26-Nov-24

Texas A&M AgriLife Extension Service Soil, Water and Forage Testing Laboratory
108 Soil Testing Laboratory, 2478 TAMU
College Station, TX 77843-2478
979-862-4955

Client Name: Sherwyn Wood Dairy
Client address: not provided

Standard Sample Report TCEQ COC# 055772

Laboratory ID:	TCEQ/client Sample ID:	Sample Depth (inches)	Sample Coll. Date:	Collector Name:	TCEQ Region #	Date Received	Sample Type:	Sample opened Date	Sample Ground Date	Process Tech.
14241	55772-07	0-6	10/7/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP
14242	55772-08	6-24	10/7/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP

Methods and Sample Preparation:

Receiving of samples Processing - SWFTL0097R0.SOP

Upon opening of sample chests, all samples are identified and organized as listed on COC to insure completeness and condition of shipment. Individually each sample is spread across a non-reactive tray where foreign materials is physically removed and discarded. The sample(s) are then placed inside a 65C drying oven and allow to remain until dry. Individual samples were then removed from drying oven and pulverized with an Agvise soil pulverizer fitted with a shaking 2mm screen. Every attempt was again made to remove any remaining plant tissue in the pulverized sample(s). Soil was then transferred to the laboratory sample cups and while additional sample was stored.

Analytical Methods:

Soil pH 2:1 DI water:soil SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Schofield, R.K. and A.W. Taylor. 1955. The measurement of soil pH. Soil Sci. Soc. Am. Proc. 19:164-167.

Soil Conductivity 2:1 DI Water:Soil SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Rhoades, J.D. 1982. Soluble salts. p. 167-178. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil Nitrate-N KCl Extractable with Cd-Reduction Analyses NO3-N EXTRACTION - SWFTL0014R5.SOP/NO3-N ANALYSIS - SWFTL0089R1.SOP

Keeney, D.R. and D.W. Nelson. 1982. Nitrogen - inorganic forms. p. 643-687. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil P, K, Ca, Mg, S and Na -- Mehlich III by ICP M3 EXTRACTION - SWFTL0079R1.SOP/M3 ANALYSIS - SWFTL0081R2.SOP

Mehlich-3 soil test extractant: a modification of Mehlich-2 extractant Commun. Soil Sci. Plant Anal. 15(12):1409-1416

Report ID: 055772b-45622 Print Date: 26-Nov-24
 Standard Sample Report TCEQ COC# 055772

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg units	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
14241	55772-07	101	ppm	343	ppm	15219	ppm	362	ppm	144	ppm	27.8	ppm
14242	55772-08	9.38	ppm	195	ppm	24619	ppm	233	ppm	207	ppm	50.0	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.1528	ppm	0.0977	ppm	0.0434	ppm	0.0040	ppm	0.0010	ppm	0.0106	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
14241	55772-07	11/18/2024	FMR	11/19/2024	JLP
14242	55772-08	11/18/2024	FMR	11/19/2024	JLP

Report ID: 055772b-45622 Print Date: 26-Nov-24
 Standard Sample Report TCEQ COC# 055772

Laboratory ID:	TCEQ/client	pH	pH	Conductivity	Conductivity	Nitrate-N	Nitrate-N
	Sample ID:		units		units		units
14241	55772-07	7.49	NA	0.308	dS/M	18.896	ppm
14242	55772-08	7.89	NA	0.203	dS/M	5.412	ppm

Laboratory ID:	pH	pH	Conductivity	Conductivity	Nitrate-N	Nitrate-N
		units		units		units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	TCEQ/client	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
	Sample ID:	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
14241	55772-07	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
14242	55772-08	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW

Laboratory ID:		Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
14259	IC1021	45.1	ppm	277	ppm	2052	ppm	316	ppm	35.4	ppm	37.9	ppm
14260	IC1022	41.6	ppm	254	ppm	1888	ppm	295	ppm	32.2	ppm	35.7	ppm
	Mean IC	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm
	IC Lower	39.4	ppm	241.0	ppm	1610.0	ppm	269.0	ppm	25.9	ppm	28.0	ppm
	IC Upper	47.2	ppm	307.0	ppm	2531.0	ppm	341.0	ppm	41.0	ppm	53.0	ppm
	blk220	0.16	ppm	<0.0977	ppm	<0.0434	ppm	<0.003973	ppm	<0.01000	ppm	<0.1000	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.1528	ppm	0.0977	ppm	0.0434	ppm	0.0040	ppm	0.0010	ppm	0.0106	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
IC1021	11/18/2024	FMR	11/19/2024	JLP
IC1022	11/18/2024	FMR	11/19/2024	JLP
blk220	11/18/2024	FMR	11/19/2024	JLP

Quality Control Report

TCEQ COC# 055772

Laboratory ID:		pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units	Nitrate-N % recovery
14259	IC1021	5.9	na	0.252	dS/M	5.584	ppm	
14260	IC1022	5.9	na	0.25	dS/M	5.669	ppm	
	Mean IC	5.86	na	0.251	dS/M	5.6265	ppm	
14260spike	Spiked sample	-	-	-	-	4.4	ppm	80.7
	IC lower	5.760	na	0.241	dS/M	4.5	ppm	
	IC Upper	5.990	na	0.299	dS/M	6.9	ppm	
	blk220	-	na	0	dS/M	0.563	ppm	

Laboratory ID:	pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
IC1021	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
IC1022	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
blk220	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW

REQUEST FOR ANALYSIS
TCEQ-BOSQUE 1255/1226 SOIL SAMPLES

COC Number: 55772

Sample ID: 03, 04, 07, 08

Standard Request for Analysis

NO₃-N

Mg

P Mehlich III by ICP

Conductivity

K

pH

Na

Additional Tests

NO A



Chain of Custody Record

55773

19

Location: Sherwyn Wood Dairy
(Do not fill in this shaded area if the facility information must be confidential)

Permit #: 4843

Region: Organization #: PCA Code: Program: Sampler telephone number: (254) 552-1900

E-Mail ID: Sampler: (signature) [Signature] Sampler: (please print clearly) Cody Christian

Lab ID Number	Sample ID	Date	Time	# of Bottles	Grab/ Comp.	Matrix L,S,M,O,T	CL2	pH	Cond.	Analyses Requested	REMARKS
	-01									See RFA	Lmu13 (0-6)
	-02										Lmu13 (6-24)
	-03										Lmu14 (0-6)
	-04										Lmu14 (6-24)
<u>M243</u>	-05	<u>10-8-24</u>	<u>13:45</u>								Lmu15 (0-6)
<u>14244</u>	-06	<u>1</u>	<u>13:45</u>								Lmu15 (6-24)
	-07										
	-08										
	-09										
	-10										

Relinquished by: Dalaly Nunez Date: 10/19/24 Time: 8:48 Received by: [Signature] Date: 10-16-24

Relinquished by: Date: Time: Received by:

Relinquished by: Date: Time: Received by:

Relinquished by: Date: Time: Received by:

Shipper name: Fed Ex Shipper Number: 7792 6781 1214

For Laboratory Use:

Received on ice: Y N deg. C

Preservatives: Y N

COC Seal: Y N

Seals Intact: Y N

Report for Samples analyzed Under Contract Number: 582-10-99518

Report ID: 055773a-45622

Print Date: 26-Nov-24

Texas A&M AgriLife Extension Service Soil, Water and Forage Testing Laboratory
108 Soil Testing Laboratory, 2478 TAMU
College Station, TX 77843-2478
979-862-4955

Client Name: Sherwyn Wood Dairy
Client address: not provided

Standard Sample Report TCEQ COC# 055773

Laboratory ID:	TCEQ/client Sample ID:	Sample Depth (inches)	Sample Coll. Date:	Collector Name:	TCEQ Region #	Date Received	Sample Type:	Sample opened Date	Sample Ground Date	Process Tech.
14243	55773-05	0-6	10/8/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP
14244	55773-06	6-24	10/8/2024	Cody Christian	4	10/16/2024	soil	10/16/2024	10/25/2024	TLP

Methods and Sample Preparation:

Receiving of samples

Processing - SWFTL0097R0.SOP

Upon opening of sample chests, all samples are identified and organized as listed on COC to insure completeness and condition of shipment. Individually each sample is spread across a non-reactive tray where foreign materials is physically removed and discarded. The sample(s) are then placed inside a 65C drying oven and allow to remain until dry. Individual samples were then removed from drying oven and pulverized with an Agvise soil pulverizer fitted with a shaking 2mm screen. Every attempt was again made to remove any remaining plant tissue in the pulverized sample(s). Soil was then transferred to the laboratory sample cups and while additional sample was stored.

Analytical Methods:

Soil pH 2:1 DI water:soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Schofield, R.K. and A.W. Taylor. 1955. The measurement of soil pH. Soil Sci. Soc. Am. Proc. 19:164-167.

Soil Conductivity 2:1 DI Water:Soil

SOIL pH AND CONDUCTIVITY - SWFTL0015R1.SOP

Rhoades, J.D. 1982. Soluble salts. p. 167-178. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil Nitrate-N KCl Extractable with Cd-Reduction Analyses

NO3-N EXTRACTION - SWFTL0014R5.SOP/NO3-N ANALYSIS - SWFTL0089R1.SOP

Keeney, D.R. and D.W. Nelson. 1982. Nitrogen - inorganic forms. p. 643-687. In: A.L. Page, et al. (ed.). Methods of Soil Analysis: Part 2. Agronomy Monogr. 9. 2nd ed. ASA and SSSA, Madison, WI.

Soil P, K, Ca, Mg, S and Na -- Mehlich III by ICP

M3 EXTRACTION - SWFTL0079R1.SOP/M3 ANALYSIS - SWFTL0081R2.SOP

Mehlich-3 soil test extractant: a modification of Mehlich-2 extractant. Commun. Soil Sci. Plant Anal. 15(12):1409-1416

Report ID: 055773a-45622 Print Date: 26-Nov-24
 Standard Sample Report TCEQ COC# 055773

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg units	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
14243	55773-05	129	ppm	542	ppm	12237	ppm	338	ppm	122	ppm	17.2	ppm
14244	55773-06	5.06	ppm	181	ppm	30385	ppm	190	ppm	239	ppm	28.1	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.1528	ppm	0.0977	ppm	0.0434	ppm	0.0040	ppm	0.0010	ppm	0.0106	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
14243	55773-05	11/18/2024	FMR	11/19/2024	JLP
14244	55773-06	11/18/2024	FMR	11/19/2024	JLP

Report ID: 055773a-45622 Print Date: 26-Nov-24
 Standard Sample Report TCEQ COC# 055773

Laboratory ID:	TCEQ/client Sample ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
14243	55773-05	7.47	NA	0.36	dS/M	24.383	ppm
14244	55773-06	7.81	NA	0.318	dS/M	21.521	ppm

Laboratory ID:	pH	pH units	Conductivity	Conductivity units	Nitrate-N	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	TCEQ/client Sample ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
		Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
14243	55773-05	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
14244	55773-06	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW

Laboratory ID:		Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
14259	IC1021	45.1	ppm	277	ppm	2052	ppm	316	ppm	35.4	ppm	37.9	ppm
14260	IC1022	41.6	ppm	254	ppm	1888	ppm	295	ppm	32.2	ppm	35.7	ppm
	Mean IC	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm	0	ppm
	IC Lower	39.4	ppm	241.0	ppm	1610.0	ppm	269.0	ppm	25.9	ppm	28.0	ppm
	IC Upper	47.2	ppm	307.0	ppm	2531.0	ppm	341.0	ppm	41.0	ppm	53.0	ppm
	blk220	0.16	ppm	<0.0977	ppm	<0.0434	ppm	<0.003973	ppm	<0.01000	ppm	<0.1000	ppm

Laboratory ID:	Mehlich III P conc.	Mehlich III P units	Mehlich III K conc.	Mehlich III K units	Mehlich III Ca conc.	Mehlich III Ca units	Mehlich III Mg conc.	Mehlich III Mg conc.	Mehlich III S conc.	Mehlich III S units	Mehlich III Na conc.	Mehlich III Na units
Detection Limit	0.1528	ppm	0.0977	ppm	0.0434	ppm	0.0040	ppm	0.0010	ppm	0.0106	ppm
Reporting Limit	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm	1	ppm

Laboratory ID:	Mehlich III Extract Date	Mehlich III Extract Tech	Mehlich III Anal.Date	Mehlich III Anal. Tech
IC1021	11/18/2024	FMR	11/19/2024	JLP
IC1022	11/18/2024	FMR	11/19/2024	JLP
blk220	11/18/2024	FMR	11/19/2024	JLP

Quality Control Report

TCEQ COC# 055773

Laboratory ID:		pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units	Nitrate-N % recovery
14259	IC1021	5.9	na	0.252	dS/M	5.584	ppm	
14260	IC1022	5.9	na	0.25	dS/M	5.669	ppm	
	Mean IC	5.86	na	0.251	dS/M	5.6265	ppm	
14260spike	Spiked sample	-	-	-	-	4.4	ppm	80.7
	IC lower	5.760	na	0.241	dS/M	4.5	ppm	
	IC Upper	5.990	na	0.299	dS/M	6.9	ppm	
	blk220	-	na	0	dS/M	0.563	ppm	

Laboratory ID:	pH	pH units	Conductivity conc.	Conductivity units	Nitrate-N conc.	Nitrate-N units
Detection Limit	0.01	na	0.001	dS/M	0.01	ppm
Reporting Limit	0.1	na	0.001	dS/M	1	ppm

Laboratory ID:	pH/Conductivity prep		pH Analysis		Conductivity		Nitrate-N Extract		Nitrate-N Analysis	
	Date	Tech	Date	Tech	Date	Tech	Date	Tech	Date	Tech
IC1021	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
IC1022	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW
blk220	11/12/2024	DEC	11/12/2024	DEC	11/12/2024	DEC	11/13/2024	FMR	11/14/2024	JW

REQUEST FOR ANALYSIS
TCEQ-BOSQUE 1255/1226 SOIL SAMPLES

COC Number: 55773	
Sample ID: 05, 06	
Standard Request for Analysis	
NO3-N	Mg
P Mehlich III by ICP	Conductivity
K	pH
Na	
Additional Tests	
NA	

Sherwyn Wood Dairy757 CR 229, Stephenville, TX 76401**Mar 4, 2021 Permit**

This map was generated by the Region 4 Stephenville Office of the Texas Commission on Environmental Quality. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. For more information concerning this map, contact the TCEQ Region 4 Stephenville Office at 254-552-1900.



5.0 RECHARGE FEATURE CERTIFICATION

CERTIFICATION

I certify that potential Recharge Features in the form of artificial penetrations and natural features exist on property utilized under this application as defined in 30 TAC §321.32(50). The protective measures in the form of best management practices identified in this report, when implemented, are designed to avoid adverse impacts to these features and associated groundwater formations.

All information presented on this page and in the following supporting documents is true and accurate to the best of my knowledge.



Norman H. Mullin 8/11/25

Norman Mullin, P.E.

Enviro-Ag Engineering, Inc.

Firm #F-2507

5.1 General

This recharge feature certification report was authorized by Mr. Sherwyn Wood representing Sherwyn Wood Dairy. The findings and recommendations contained herein were compiled by Mrs. Jourdan Mullin and Mr. Norman Mullin, P.E., of Enviro-Ag Engineering, Inc., Amarillo, Texas,

5.2 Purpose of Report

Sherwyn and Angela Wood are applying for a renewal of current TPDES #4843 under 30 TAC, Chapter 321, Subchapter B, Concentrated Animal Feeding Operations. The purpose of this report is to determine if the subject property has any natural or artificial features, either on or beneath the ground surface, which would provide a significant pathway for effluent or solids from the facility into the underlying aquifer. At a minimum, the records and/or maps of the following entities/agencies were reviewed to locate any artificial recharge features: A) Texas Railroad Commission, B) local water district, C) Texas Water Development Board, D) TCEQ, E) Natural Resource Conservation Service (NRCS), F) current land owners and G) onsite inspection. The TCEQ Regulatory Guidance RG-433 was followed to identify recharge features and recommend best management practices.

5.3 Property Under Evaluation

The property under evaluation consists of approximately 675 acres in Erath County, Texas. The area is within the jurisdiction of Middle Trinity Ground Water Conservation District.

5.4 Definition of Waste Production

The processes by which wastewater is produced at a dairy begins with the use of fresh water to clean manure from the milking parlor and equipment sanitization. Wastewater from the milking parlor is directed to a concrete settling lane then into the earthen settling basin and then to RCS #1 for storage and disposal through beneficial land application.

The second process of wastewater production involves the accumulation of manure solids in the open confinement lots. Rain falling on the open lots comes into contact with the manure layer and absorbs some of the excreted nutrients present in manure. The nutrient enriched runoff is considered wastewater, which flows by designed slopes from the open lots toward the settling basins and into the RCS.

Manure solids accumulated in the open confinement lots are collected at least annually and hauled off-site to farmland by a waste transporter. While in the open lots, manure becomes compacted and slowly permeable due to hoof action by the cattle. This compacted manure layer results in an increase of the overall runoff volume during rainfall events. Infiltration of nutrients downward through the manure layer into the underlying soils is considered minimal as a result of pen surface compaction (Sweeten, 1990).

5.5 Definition of Recharge Feature

TCEQ rules define a "Recharge Feature" as: "Those natural or artificial features either on or beneath the ground surface at the site under evaluation that provide or create a significant hydrologic connection between the ground surface and the underlying groundwater within an aquifer. Significant artificial features include, but are not limited to, wells and excavation or material pits. Significant natural hydrologic connections include, but are not limited to: faults, fractures, sinkholes or other macro pores that allow direct surface infiltration; a permeable or shallow soil material that overlies and aquifer; exposed geologic formations that are identified as an aquifer; or a water course bisecting an aquifer." (30 TAC §321.32(50))

The TCEQ Regulatory Guidance RG-433 further defines a "recharge feature" as: "A natural or artificial feature either on or beneath the ground surface that provides or creates a significant hydrologic connection (or pathway) between the ground surface and the underlying groundwater within an aquifer."

The guidance document also defines a "significant pathway" as: "A significant pathway between the land surface and the subsurface has the ability to transmit waste, wastewater, or precipitation mixed with waste to groundwater. The wastewater may impact the groundwater quality within an aquifer or migrate laterally to discharge as seeps that may impact surface water quality. Recharge features with significant pathways include geomorphologic, geologic, soil, and artificial features. Agricultural practices may also enhance existing recharge features."

EVALUATION OF NATURAL FEATURES

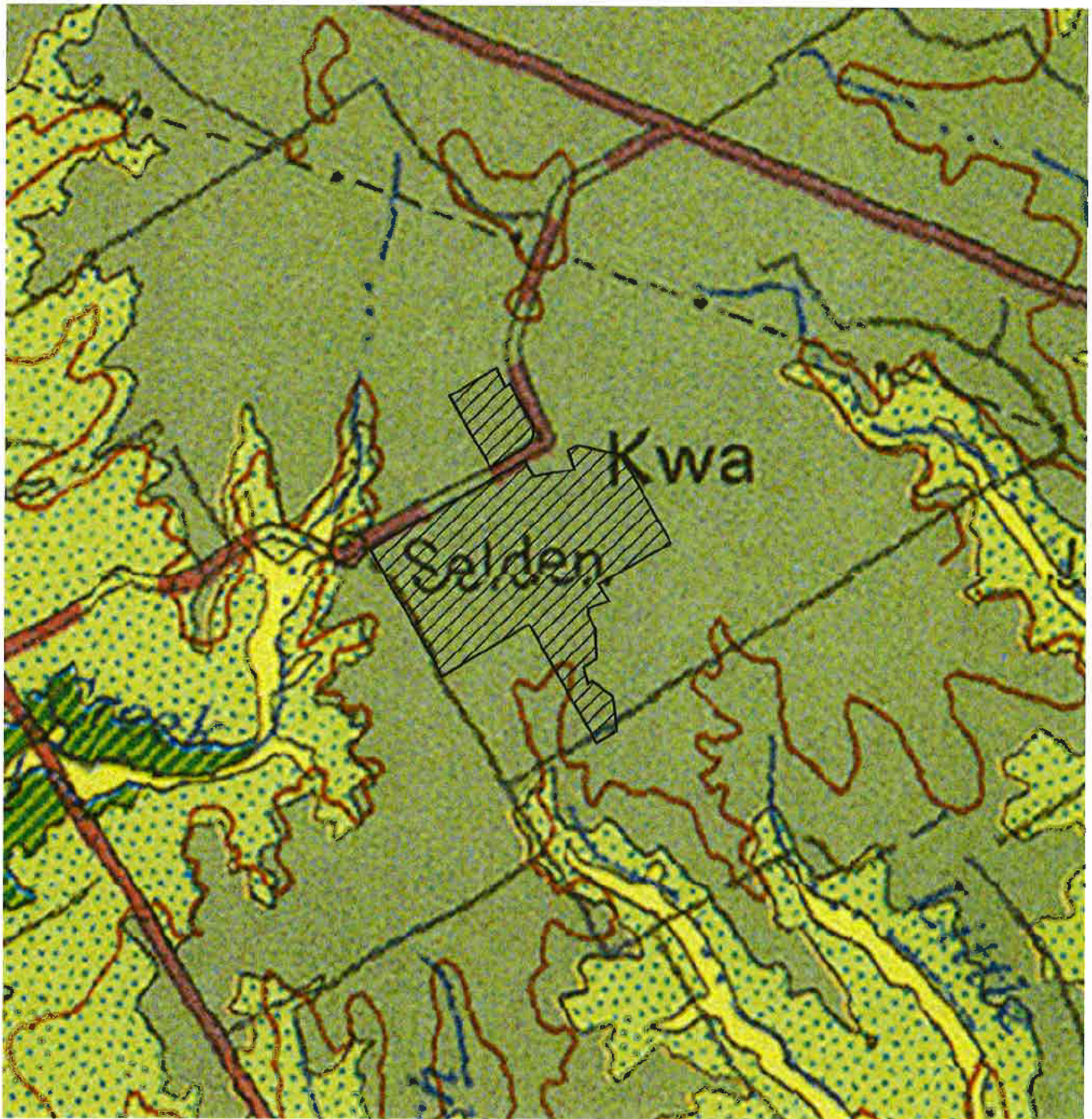
5.6 Geomorphologic/Geologic Features

The Windthorst-Duffau and Maloterre-Dugout-Purves soil associations in this area of Erath County are immediately underlain by the Cretaceous Walnut Formation as shown in Figure 5.1, Geologic Atlas.

The Walnut Formation comprises the beds of clay and nonchalky limestones at the base of the Fredericksburg division. They consist of alternations of calcareous laminated clays, weathering yellow on oxidation, semicrystalline limestone flags, and shell agglomerate, all of which grade upward without break into the more chalky beds of the Edwards limestones. In places they weather into rich black soils and make extensive agricultural belts (Hill, 1901.)

Forming the upper unit of the Trinity Group, the Paluxy Formation consist of up to 400 feet of predominantly fine to coarse-grained sand interbedded with clay and shale. Underlying the Paluxy, the Glen Rose Formation forms a gulfward-thickening wedge of marine carbonates consisting primarily of limestone. Paluxy bedrock outcrops along the northeast portion of this site. Limiting application rates of wastewater and manure will protect this feature form adverse impacts.

The basal unit of the Trinity Group consists of the Twin Mountains and Travis Peak formations, which are laterally separated by a facies change. To the north, the Twin Mountains Formation consists mainly of medium-to coarse-grained sands, silty clays, and conglomerates (Ashworth, 1995).



Legend:

Kwa - Cretaceous Walnut Formation

Source: Geologic Atlas of Texas, Abilene Sheet, 1972.



No Scale

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Geologic Atlas of Texas
Figure 5.1
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5.6.1 Outcrops/Stream Interception

An inspection of the CAFO property and review of the USGS topographic map indicated the presence of the Little Duffau Creek located in LMUs #4, #6 and #9. All of these areas are protected with buffers from waste and wastewater application. The freshwater ponds located in LMUs #4, #5A, #8, #9 and #11 are also protected with buffers from waste and wastewater application. The caliche pit and freshwater pond located on the east side of the property is not located in an LMU and therefore is protected from waste and wastewater application.

5.6.2 Excessive Slopes

No slopes of greater than 8 percent are present on the property.

5.6.3 Other Large-Scale Conduits

No faults, fractured sediments, caves, sinkholes, solution cavities, vugs or concentrated or extensive animal burrowing was observed during an on-site visit, nor is identified on the geologic atlas, soil surveys or USGS maps.

5.6.4 Surface Water

The "water in the state" designation is based on Enviro-Ag Engineering, Inc., site inspections, the permittee's knowledge of the property and the USDA-FSA aerial photograph (2017). The buffer zones and LMU boundaries in Figure 6.1 (Refer to Section 6) are submitted with this application for TCEQ approval.

5.6.5 Aquifer

The Trinity aquifer consist of early Cretaceous age formations of the Trinity Group where they occur in a band extending through the central part of the state in all or parts of 55 counties, from the Red River in North Texas to the Hill Country of South-Central Texas.

Formations comprising the Trinity Group are (from youngest to oldest) the Paluxy, Glen Rose, and Twin Mountains-Travis peak. Updip, where the Glen Rose thins or is missing, the Paluxy and Twin Mountains coalesce to form the Antlers Formation. The Antlers consists of up to 900 feet of sand and gravel, with clay beds in the middle section. Water from the Antlers is mainly used for irrigation in the outcrop area of North and Central Texas (Ashworth and Hopkins, 1995).

The aquifer is underlain and confined by low-permeability rocks that range in age from Precambrian to Jurassic. Where the aquifer does not crop out, it is confined above by the Walnut Formation in most of the area.

Recharge to the Trinity aquifer is generally as precipitation that falls on aquifer outcrop areas and as seepage from streams and ponds where the head gradient is downward. In the Hill Country, water might flow laterally into the Trinity aquifer from the adjacent Edwards-Trinity aquifer. The aquifer discharges by evapotranspiration, spring discharges, diffuse lateral or upward leakage into shallower aquifers, and withdrawals from wells

(USGS, 2003). Land application at agronomic rates and maintain permanent cover crops will protect the feature from adverse impacts associated with this operation.

5.7 Soil Features

Soil mapping units included in this section for the production area and land application areas were taken from the electronic NRCS Soil Survey for Erath County. Soils descriptions are included in the supporting documentation and were obtained from the most current version of the NRCS electronic soil information database for Erath County available on the NRCS Web Soil Survey.

5.7.1 Production Area

Soils underlying the pen and pond areas are predominately of the Slidell (HoB), Maloterre (Ma) and Purves (PcB) series. The RCS has been certified as meeting TCEQ guidelines for soil liner (30 TAC §321.38(g)). Best management practices pertaining to surface drainage, surface compaction and manure management within the open lot confinement area will be followed. Steve Evans, Ph.D., soil physicist with the USDA Agricultural Research Service in Bushland, Texas, stated that his work with lysimeters and potential evapotranspiration indicated limited infiltration and even less deep percolation will occur on areas with sloped surfaces (1996). Work performed by the NRCS calculated the feedlot surface curve number (potential for runoff) as 90 on a scale of 100.

5.7.2 Land Application Areas

Soils underlying the land application areas are primarily of the Slidell (HoB), Maloterre (Ma), Purves (PcB and PcC) and Purves-Dugout (Pd) series. The application of wastewater and/or manure will be performed at agronomic rates according to an approved NUP/NMP. No pooling or ponding is anticipated due to application through sprinklers.

Figure 5.2 shows the soils underlying the property as delineated from the electronic NRCS Soil Survey map for Erath County. The electronic version of the soil survey is considered the most current soils information available. Table 5.1 is a summary of the estimated physical properties of the soils in the subject area, obtained from the NRCS Web Soil Survey.

Table 5.1: Estimated Soil Properties

Soil Series (Map ID)	Slope (%)	HSG	Depth (in)	USDA Soil Texture	Permeability / Infiltration Rate (in/hr)	Available Water Capacity (in/in of soil)
BdC – Bolar	3-5	C	0-16	Clay Loam	0.6-2.0	0.17-0.21
			16-32		0.6-2.0	0.16-0.20
Denton		D	0-10	Silty Loam	0.06-0.20	0.11-0.15
			10-28		0.06-0.20	0.09-0.14
DeB – Denton	1-3	C	0-13	Silty Clay	0.06-0.20	0.10-0.18
			13-19		0.06-0.6	0.10-0.18

			19-36		0.20-2.0	0.10-0.14
HoB – Slidell	1-3	D	0-19 19-32	Clay	.001-0.06 .001-0.06	0.10-0.18 0.10-0.18
Ma – Maloterre	-----	D	0-5 5-20	Gravelly Clay Loam	0.60-2.0 0.06-2.0	0.14-0.16 -----
PcB – Purves	1-3	D	0-8 8-12 12-14 14-40	Clay	0.06-0.20 0.06-0.6 0.06-0.6 0.06-2.0	0.12-0.20 0.08-0.18 0.04-0.07 -----
PcC – Purves	3-5	D	0-7 7-12 12-17 7-40	Clay	0.06-0.20 0.06-0.6 0.06-0.6 0.06-2.0	0.12-0.20 0.08-0.18 0.04-0.07 -----
Pd – Purves	-----	D	0-8 8-12 12-14 14-24	Stony Clay	0.06-0.20 0.06-0.6 0.06-0.6 0.06-2.0	0.11-0.20 0.08-0.18 0.04-0.07 -----
Dugout		D	0-8 8-18 18-28	Gravelly Clay Loam	0.20-0.6 0.20-0.6 0.06-2.0	0.06-0.15 0.07-0.16 -----
Maloterre		D	0-8 8-18	Gravelly Clay Loam	0.6-2.0 .001-0.06	0.06-0.11 -----

The major soil series within each LMU are identified in Table 5.2. All soils at the site that have been identified by NRCS as being at high risk for various limitations are presented in Table 5.3. Associated best management practices will be implemented, as appropriate, based on physical and economic conditions.

Table 5.2: Major Soil Types

LMU ID	Major Soil Type
3 4, 5, 6, 7, 8, 9	Slidell (HoB)
2, 10, 12, 14, 15	Maloterre (Ma)
5A, 13	Purves-Dugout-Maloterre (Pd)
1, 11	Purves (PcB)

Table 5.3: Potential Soil Limitations for Land Application

Soil Series	Potential Soil Limitations	Best Management Practices
BdC	Depth to Bedrock Slow Water Movement	<ul style="list-style-type: none"> – Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP). -Land Application will be based upon the AWC (refer to NMP) of the soil and will not exceed agronomic rates for nutrients. - No land application to inundated soils.

Soil Series	Potential Soil Limitations	Best Management Practices
HoB, DeB	Slow Water Movement	<ul style="list-style-type: none"> - Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP). - No land application to inundated soils.
Ma	Depth to Bedrock Droughty	<ul style="list-style-type: none"> - Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP). -Land Application will be based upon the AWC (refer to NMP) of the soil and will not exceed agronomic rates for nutrients. - No land application to inundated soils.
PcB, PcC	Droughty Depth to Bedrock Slow Water Movement	<ul style="list-style-type: none"> - Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP). -Land Application will be based upon the AWC (refer to NMP) of the soil and will not exceed agronomic rates for nutrients. - No land application to inundated soils.
Pd	Droughty Depth to Bedrock Slow Water Movement Large Stones on the Surface	<ul style="list-style-type: none"> - Land Application not to exceed agronomic rates for nutrients and soil hydraulic rates (refer to NMP). -Land Application will be based upon the AWC (refer to NMP) of the soil and will not exceed agronomic rates for nutrients. - No land application to inundated soils.

5.7.3 Erosion

Figure 5.2 shows the onsite soils classified by NRCS as Highly Erodible Land (HEL), including Purves (PcB and PcC). LMUs will be protected with typical conservation farming practices within the standards of the NRCS. The following methods will be used to control/prevent erosion of exposed soils in the production area:

- Seeding/sprigging exposed areas with forage or cover crops,
- Constructing terraces or berms (shortening the length and steepness of slopes),
- Covering erosive areas with road surfacing materials,
- Implementing reduced tillage practices,
- Maintaining a cover of plants or crop residue.



Map Revised 7/21/2025

LEGEND:

 Denotes Production Area

Note: For Specifics on Soils Refer to Table 5.3



Source: USDA-NRCS Soil Survey, Soil Survey Geographic Database for (Erath County, TX). Available at: <http://soildatamart.nrcs.usda.gov>. Accessed July, 2025.

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NRCS Soils Map
Figure 5.2
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ARTIFICIAL FEATURES

5.8 Railroad Commission Records

A search of the online RRC map viewer was conducted. No proposed locations or existing penetrations for oil and gas were identified on the subject property. Railroad Commission database information is included as an attachment to this document.

5.9 Ground Water Conservation District Records

The Middle Trinity Groundwater Conservation District (GCD) online database was reviewed for artificial penetrations. Should an abandoned penetration be encountered anywhere on the subject property at any time, the penetration will be marked, inspected and properly sealed to prevent a potential impact to the underlying aquifer. Appropriate well plugging reports shall be submitted as required to the Texas Department of Licensing and Regulation (TDLR) and will be maintained in the onsite PPP.

5.10 GeoSearch

GeoSearch was not utilized in this report.

5.11 Texas Water Development Board Water Data Interactive (WDI)

The TWDB WDI online database was reviewed for artificial penetrations. The database revealed water wells registered with the TWDB as being located on the subject property. The wells that could be correlated with onsite wells are shown on Table 5.4.

5.12 Natural Resource Conservation Service

The historical NRCS Soil Survey of Erath County (1973) was reviewed for locations of potential recharge features. No potential recharge features were identified.

5.13 Other Artificial Features

Numerous features, such as irrigation tail water pits and stock ponds, exist on the subject property and are shown to be buffered on Figure 5.3. These areas shall be buffered during land application events or backfilled prior to the first land application event.

5.14 Previous/Current Landowner

Mr. Sherwyn Wood was contacted regarding then presence of any potential recharge features on the property. Mr. Wood has owned the subject property for two decades and is considered the most knowledgeable about the property. The previous landowner could not be located. Mr. Wood confirmed the locations of all active water wells.

5.15 Onsite Inspection

The property has been inspected both on the ground and by historical mapping. All active water wells were documented on the property during the onsite inspection and are shown on Figure 5.3. The BMPs for all wells are listed in Table 5.4. Should any open well or test hole be encountered, it will be marked, reported to the Engineer, included on

Figure 5.3 and properly plugged (30 TAC §321.34(f)(3)(B)). Well plugging reports shall be submitted as required to the Texas Department of Licensing and Registration (Well Drillers Board) and will be maintained in the onsite PPP.

All well data listed in Table 5.4 is based on information received from the water district, TCEQ and TWDB files, onsite inspection, and interviews of persons knowledgeable of the property. The map number corresponds to the location shown in Figure 5.3. The well identification number corresponds to the database number or drilling report number used by the water district, TCEQ or TWDB Commission.

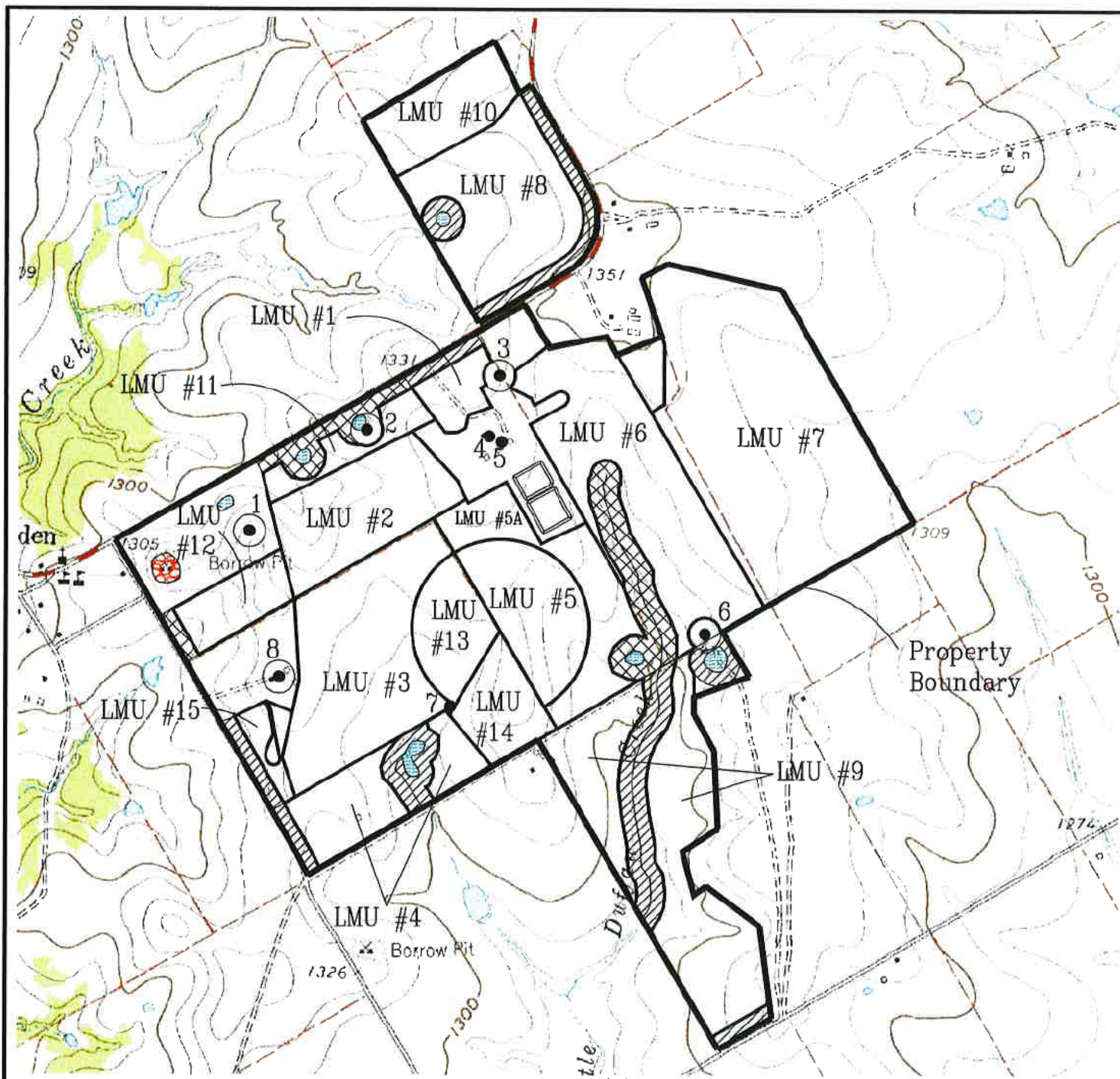
Table 5.4: Well Information

Map No.	Well ID	Best Management Practices
1	16797	<ul style="list-style-type: none"> • Maintain 150-ft buffer
2	N/A	<ul style="list-style-type: none"> • Maintain 150-ft buffer
3	480269	<ul style="list-style-type: none"> • Maintain 150-ft buffer
4	16795	<ul style="list-style-type: none"> • See Attached Approved Well Buffer Exception
5	16792	<ul style="list-style-type: none"> • See Attached Approved Well Buffer Exception
6	16793	<ul style="list-style-type: none"> • Maintain 150-ft buffer
7	16790	<ul style="list-style-type: none"> • See Attached Approved Well Buffer Exception
8	16794	<ul style="list-style-type: none"> • Maintain 150-ft buffer

Note: A copy of the well logs for onsite wells are attached.

No public water supply wells are located within 500 feet of the property boundary. All off-site wells within the required buffer distances required by this authorization are shown (on the Site Map) with their appropriate buffers. Wells outside the required buffer distances are shown for reference only.

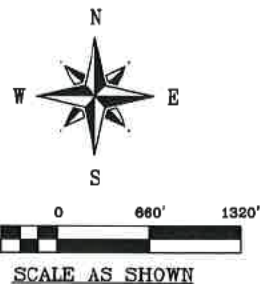
All irrigation systems or water distribution systems into which any type of chemical or foreign substance, such as wastewater, is distributed into the water pumped from the well are required by 16 TAC §76 to install an in-line, automatic quick-closing check valve capable of preventing pollution of groundwater.



Map Revised 3/4/2020

LEGEND:

- Denotes Water Well
- ⊙ Denotes Well w/150-ft Buffer
- ▨ Denotes 130-ft Buffer
- ▩ Denotes 138-ft Buffer
- ▧ Denotes Fresh Water Pond
- ▦ Denotes Caliche Pit



Source: USDA-NRCS. Geospatial Data Gateway. Available at: <http://datagateway.nrcs.usda.gov/>. Digital Raster Graphic County Mosaic by NRCS - Accessed December 2013.

• Refer to Figures 1.3 & 1.4 for overall facility maps.

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Recharge Feature Map
Figure 5.3
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- Wood, Sherwyn Current Landowner Interview, July 2025.

Supporting Documentation

USDA Soil Descriptions & Limitations

Texas Railroad Commission Map

Water District Well Location Map (if available)

Onsite Well Logs (if available)

Physical Soil Properties

This table shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In this table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In this table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, saturated hydraulic conductivity (K_{sat}), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (oven-dry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates in the table are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity (Ksat) is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In this table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter. The content of organic matter in a soil can be maintained by returning crop residue to the soil.

Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in the table as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and Ksat. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook."

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Reference:

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. (<http://soils.usda.gov>)

Report—Physical Soil Properties

Physical Soil Properties—Erath County, Texas														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
BdC—Bolar-Denton complex 3 to 5 percent slopes														
Bolar	0-16	20-34- 45	17-36- 53	27-30- 40	1.21-1.38	4.00-14.00	0.17-0.21	2.4-6.8	1.0-4.0	.20	.20	2	4L	86
	16-32	15-34- 45	15-36- 50	20-30- 40	1.34-1.46	4.00-14.00	0.16-0.20	0.4-5.9	0.5-2.0	.28	.28			
	32-36	15-34- 45	15-36- 50	20-30- 40	1.38-1.56	4.00-14.00	0.12-0.16	0.3-5.5	0.3-1.0	.17	.32			
	36-80	—	—	—	—	0.42-14.00	—	—	—					
Denton	0-10	3- 6- 15	40-48- 57	40-46- 57	1.16-1.34	0.42-1.40	0.11-0.15	5.0-11.1	1.0-4.0	.17	.17	2	4	86
	10-28	5- 7- 25	28-48- 60	35-45- 55	1.28-1.41	0.42-1.40	0.09-0.14	3.7-10.3	1.0-4.0	.20	.20			
	28-32	5- 7- 25	28-48- 60	35-45- 55	1.31-1.41	0.42-1.40	0.09-0.13	2.7-9.4	0.5-2.0	.32	.32			
	32-38	5- 7- 30	40-63- 83	12-30- 40	1.36-1.45	4.00-14.00	0.08-0.12	0.0-5.2	0.1-1.0	.43	.43			
	38-80	—	—	—	—	0.42-14.00	—	—	—					
DeB—Denton silty clay, 1 to 3 percent slopes														
Denton	0-13	0- 6- 20	40-44- 60	40-50- 57	1.18-1.32	0.42-1.40	0.10-0.18	6.0-15.0	1.0-4.0	.20	.20	3	4	86
	13-19	0- 7- 20	40-43- 63	35-50- 55	1.28-1.50	0.42-4.00	0.10-0.18	6.0-12.0	1.0-3.0	.24	.24			
	19-36	5-15- 30	40-60- 75	20-25- 40	1.40-1.65	1.40-14.00	0.10-0.14	0.8-5.4	0.1-1.5	.43	.43			
	36-52	5-15- 30	40-60- 83	12-25- 40	1.40-1.65	1.40-14.00	0.08-0.12	0.1-5.1	0.1-1.0	.49	.49			
	52-80	—	—	—	—	0.42-14.00	—	—	—					

Physical Soil Properties—Erath County, Texas														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
HoB—Slidell clay, 1 to 3 percent slopes														
Slidell	0-19	0-22- 35	20-28- 40	40-50- 60	1.10-1.45	0.01-0.42	0.10-0.18	7.0-16.0	1.0-4.0	.17	.17	5	4	86
	19-32	0-22- 35	20-28- 60	40-50- 60	1.10-1.45	0.01-0.42	0.10-0.18	6.6-17.0	1.0-3.0	.24	.24			
	32-49	0-22- 35	20-28- 60	40-50- 60	1.20-1.55	0.01-0.42	0.10-0.18	4.9-13.0	0.1-1.0	.24	.24			
	49-80	0-22- 35	20-28- 60	40-50- 60	1.20-1.55	0.01-0.42	0.10-0.18	4.9-10.8	0.1-1.0	.24	.24			
Ma—Maloterre gravelly clay loam, 1 to 8 percent slopes														
Maloterre	0-5	20-31- 45	20-35- 45	30-34- 40	1.37-1.39	4.00-14.00	0.14-0.16	2.6-5.6	0.5-1.0	.15	.28	1	5	56
	5-20	—	—	—	—	0.42-14.00	—	—	—					
PcB—Purves clay, 1 to 3 percent slopes														
Purves	0-8	8-25- 40	7-28- 40	40-48- 55	1.15-1.45	0.42-1.40	0.12-0.20	5.4-10.9	1.0-5.0	.10	.10	1	4	86
	8-12	8-26- 40	20-29- 54	35-45- 55	1.20-1.45	0.42-4.00	0.08-0.18	5.0-10.3	1.0-4.0	.15	.15			
	12-14	8-26- 40	20-29- 54	35-45- 55	1.20-1.45	0.42-4.00	0.04-0.07	1.0-6.9	1.0-3.0	.05	.17			
	14-40	—	—	—	—	0.42-14.00	—	—	—					

Physical Soil Properties—Erath County, Texas														
Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
PcC—Purves clay, 3 to 5 percent slopes														
Purves	0-7	8-25- 40	7-28- 40	40-48- 55	1.15-1.45	0.42-1.40	0.12-0.20	5.4-10.9	1.0-5.0	.15	.15	1	4	86
	7-12	8-26- 40	20-29- 54	35-45- 55	1.20-1.45	0.42-4.00	0.08-0.18	5.0-10.3	1.0-4.0	.17	.17			
	12-17	8-26- 40	20-29- 54	35-45- 55	1.20-1.45	0.42-4.00	0.04-0.07	1.0-6.9	1.0-3.0	.05	.17			
	17-40	—	—	—	—	0.42-14.00	—	—	—					
Pd—Purves-Dugout-Maloterre complex, 1 to 20 percent slopes														
Purves, stony clay	0-8	8-25- 40	7-28- 40	40-48- 55	1.16-1.35	0.42-1.40	0.11-0.20	4.1-9.3	1.0-5.0	.05	.10	1	5	56
	8-12	8-26- 40	20-29- 54	35-45- 55	1.17-1.47	0.42-4.00	0.08-0.18	2.9-10.8	1.0-4.0	.15	.15			
	12-14	8-26- 40	20-29- 54	35-45- 55	1.21-1.47	0.42-4.00	0.04-0.07	1.0-7.3	1.0-3.0	.05	.17			
	14-24	—	—	—	—	0.42-14.00	—	—	—					
Dugout, gravelly clay loam	0-8	22-30- 42	28-42- 51	27-28- 35	1.31-1.47	1.40-4.00	0.06-0.15	1.9-5.4	1.0-2.0	.15	.28	1	5	56
	8-18	20-23- 40	28-48- 60	15-29- 35	1.40-1.53	1.40-4.00	0.07-0.16	0.0-4.9	0.1-1.2	.28	.28			
	18-28	—	—	—	—	0.42-14.00	—	—	—					
Maloterre, gravelly clay loam	0-8	30-35- 45	24-36- 43	27-29- 35	1.18-1.40	4.00-14.00	0.06-0.11	1.8-6.0	1.0-7.0	.15	.24	1	5	56
	8-18	—	—	—	—	0.01-0.42	—	—	—					

Data Source Information

Soil Survey Area: Erath County, Texas

Survey Area Data: Version 21, Aug 30, 2024



RUSLE2 Related Attributes

This report summarizes those soil attributes used by the Revised Universal Soil Loss Equation Version 2 (RUSLE2) for the map units in the selected area. The report includes the map unit symbol, the component name, and the percent of the component in the map unit. Soil property data for each map unit component include the hydrologic soil group, erosion factor Kf for the surface horizon, erosion factor T, and the representative percentage of sand, silt, and clay in the mineral surface horizon. Missing surface data may indicate the presence of an organic layer.

Report—RUSLE2 Related Attributes

Soil properties and interpretations for erosion runoff calculations. The surface mineral horizon properties are displayed or the first mineral horizon below an organic surface horizon. Organic horizons are not displayed.

RUSLE2 Related Attributes—Erath County, Texas								
Map symbol and soil name	Pct. of map unit	Slope length (ft)	Hydrologic group	Kf	T factor	Representative value		
						% Sand	% Silt	% Clay
BdC—Bolar-Denton complex 3 to 5 percent slopes								
Bolar	55	180	C	.20	2	34.0	36.0	30.0
Denton	35	200	D	.17	2	6.0	48.0	46.0
DeB—Denton silty clay, 1 to 3 percent slopes								
Denton	85	298	C	.20	3	6.0	44.0	50.0
HoB—Slidell clay, 1 to 3 percent slopes								
Slidell	85	298	D	.17	5	22.0	28.0	50.0
Ma—Maloterre gravelly clay loam, 1 to 8 percent slopes								
Maloterre	80	161	D	.28	1	31.0	35.0	34.0
PcB—Purves clay, 1 to 3 percent slopes								
Purves	89	298	D	.10	1	25.0	27.5	47.5
PcC—Purves clay, 3 to 5 percent slopes								
Purves	89	180	D	.15	1	25.0	27.5	47.5
Pd—Purves-Dugout-Maloterre complex, 1 to 20 percent slopes								
Purves, stony clay	37	200	D	.10	1	25.0	27.5	47.5
Dugout, gravelly clay loam	25	161	D	.28	1	30.0	42.0	28.0
Maloterre, gravelly clay loam	22	180	D	.24	1	35.0	36.0	29.0

Data Source Information

Soil Survey Area: Erath County, Texas

Survey Area Data: Version 21, Aug 30, 2024



Selected Soil Interpretations

This report allows the customer to produce a report showing the results of the soil interpretation(s) of his or her choice. It is useful when a standard report that displays the results of the selected interpretation(s) is not available.

When customers select this report, they are presented with a list of interpretations with results for the selected map units. The customer may select up to three interpretations to be presented in table format.

For a description of the particular interpretations and their criteria, use the "Selected Survey Area Interpretation Descriptions" report.

Report—Selected Soil Interpretations

Selected Soil Interpretations—Erath County, Texas							
Map symbol and soil name	Pct. of map unit	AWM - Irrigation Disposal of Wastewater		AWM - Land Application of Municipal Sewage Sludge		ENG - Sewage Lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
BdC—Bolar-Denton complex 3 to 5 percent slopes							
Bolar	55	Somewhat limited		Somewhat limited		Very limited	
		Seepage, porous bedrock	0.50	Slow water movement	0.37	Depth to hard bedrock	1.00
		Slow water movement	0.37	Depth to bedrock	0.07	Seepage	0.50
		Too steep for surface application	0.08			Slope	0.32
		Depth to bedrock	0.07				
Denton	35	Very limited		Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00	Depth to hard bedrock	1.00
		Droughty	0.44	Droughty	0.44	Seepage	0.50
		Depth to bedrock	0.01	Depth to bedrock	0.01	Slope	0.08
DeB—Denton silty clay, 1 to 3 percent slopes							
Denton	85	Very limited		Very limited		Somewhat limited	
		Slow water movement	1.00	Slow water movement	1.00	Seepage	0.50
		Seepage, porous bedrock	0.50			Depth to hard bedrock	0.26
HoB—Slidell clay, 1 to 3 percent slopes							
Slidell	85	Very limited		Very limited		Not limited	
		Slow water movement	1.00	Slow water movement	1.00		

Selected Soil Interpretations--Erath County, Texas							
Map symbol and soil name	Pct. of map unit	AWM - Irrigation Disposal of Wastewater		AWM - Land Application of Municipal Sewage Sludge		ENG - Sewage Lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Ma—Maloterre gravelly clay loam, 1 to 8 percent slopes							
Maloterre	80	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Droughty	1.00	Droughty	1.00	Slope	0.68
		Seepage, porous bedrock	0.50			Seepage	0.21
		Too steep for surface application	0.32				
PcB—Purves clay, 1 to 3 percent slopes							
Purves	89	Very limited		Very limited		Very limited	
		Droughty	1.00	Droughty	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00		
		Slow water movement	1.00	Slow water movement	1.00		
		Seepage, porous bedrock	0.50				
PcC—Purves clay, 3 to 5 percent slopes							
Purves	89	Very limited		Very limited		Very limited	
		Droughty	1.00	Droughty	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	0.32
		Slow water movement	1.00	Slow water movement	1.00		
		Seepage, porous bedrock	0.50				
		Too steep for surface application	0.08				

Selected Soil Interpretations--Erath County, Texas							
Map symbol and soil name	Pct. of map unit	AWM - Irrigation Disposal of Wastewater		AWM - Land Application of Municipal Sewage Sludge		ENG - Sewage Lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Pd--Purves-Dugout-Maloterre complex, 1 to 20 percent slopes							
Purves, stony clay	37	Very limited		Very limited		Very limited	
		Droughty	1.00	Droughty	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	0.08
		Slow water movement	1.00	Slow water movement	1.00		
		Large stones on the surface	1.00	Large stones on the surface	1.00		
		Seepage, porous bedrock	0.50				
Dugout, gravelly clay loam	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Droughty	1.00	Droughty	1.00	Slope	0.68
		Seepage, porous bedrock	0.50	Slow water movement	0.37	Seepage	0.21
		Slow water movement	0.37				
		Too steep for surface application	0.32				
Maloterre, gravelly clay loam	22	Very limited		Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	0.32
		Droughty	1.00	Droughty	1.00		
		Seepage, porous bedrock	0.50				
		Too steep for surface application	0.08				

Data Source Information

Soil Survey Area: Erath County, Texas
 Survey Area Data: Version 21, Aug 30, 2024



Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Zak Covar, *Commissioner*
Richard A. Hyde, P.E., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 4, 2014

91 7199 9991 7033 3071 6954

CERTIFIED MAIL

Sherwyn Dallas Wood
Sherwyn Wood Dairy
757 County Road 229
Stephenville, Texas 76401

Re: Well Buffer Exception Request, Permit No. WQ0004843000, Sherwyn Wood Dairy,
Erath County (CN 601313950; RN 102586807)

Dear Mr. Wood:

The Water Quality Assessment (WQA) Team of the Texas Commission on Environmental Quality (TCEQ) has reviewed a well buffer exception request submitted on your behalf by Enviro-Ag Engineering, Inc. for one (1) onsite water well identified as Well #7. The buffer exception request was signed and sealed by Mr. Norman Mullin, P.E. The buffer exception request indicates that the well does not meet the specified well buffer distance of 150 feet from potential contaminant sources (LMU #3, #4, and #5). Protective measures for the well identified by Mr. Mullin include a concrete surface slab, steel sleeve, and an enclosed structure which prevents wastewater from contacting the wellhead.

The TCEQ approves the well buffer exception for Well #7 provided it is protected in accordance with the recharge feature evaluation and certification required by 30 Texas Administrative Code (TAC), Chapter 321.34(f)(3). If you choose not to maintain the protective measures, the required buffer distances, in accordance with 30 TAC 321.38(b), for the wells must be implemented. Annual inspections around the well shall be made in order to ensure no runoff or wastes encroach upon the well.

This approval letter and all supporting documentation must be kept on-site and made available to TCEQ personnel upon request. If you have any questions, please contact me by phone at (512) 239-4591 or by e-mail at Lynda.Clayton@tceq.texas.gov.

Sincerely,

A handwritten signature in dark ink, appearing to read "Lynda Clayton".

for Lynda Clayton, Team Leader
Water Quality Assessment Team (MC-150)
Water Quality Division

cc: Mr. Norman Mullin, P.E., Enviro-Ag Engineering, Inc., 3404 Airway Blvd Amarillo,
Texas 79118

Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Jon Niermann, *Commissioner*
Richard A. Hyde, P.E., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

91 7199 9991 7033 3073 0578

November 19, 2015

CERTIFIED MAIL

Mr. Sherwyn D. Wood
Sherwyn Wood Dairy
757 County Road 229
Stephenville, Texas 76401-7350

Re: Well Buffer Exception Request, Sherwyn Wood Dairy, Permit Number WQ0004843000
(CN601313950; RN102586807)

Dear Mr. Wood:

The Water Quality Assessment (WQA) Team has reviewed the well buffer exception request for one water well identified as Well #4 in a document dated November 17, 2015. The well buffer exception document was signed and certified by Mr. Norman Mullin, P.E., and requested an exception to the 150-foot buffer requirement for this facility well. Protective measures for the well identified by Mr. Mullin include a concrete slab.

The TCEQ approves the well buffer exception for Well #4 provided it is protected in accordance with the recharge feature evaluation and certification required by 30 Texas Administrative Code (TAC), Chapter 321.34(f)(3). If you choose not to maintain the protective measures, the required buffer distance, in accordance with 30 TAC 321.38(b), for the well must be implemented. Annual inspections around the well shall be made in order to ensure no runoff or wastes encroach upon the well.

This approval letter and all supporting documentation must be kept on-site and made available to TCEQ personnel upon request. If you have any questions, please contact me by phone at (512) 239-4591 or by e-mail at Lynda.Clayton@tceq.texas.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Lynda Clayton".

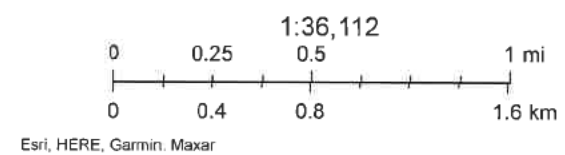
Lynda Clayton, Team Leader
Water Quality Assessment Team (MC-150)
Water Quality Division

LC/AG/tc

cc: Mr. Norman Mullin, P.E., 3404 Airway Blvd., Amarillo, Texas 79118



July 30, 2025



Public GIS Viewer Legend

Well Number	Water Supply from Oil / Gas
Well Locations	Observation
Permitted Location	Observation from Oil
Dry Hole	Observation from Gas
Oil	Observation from Oil / Gas
Gas	Storage
Oil / Gas	Service
Plugged Oil	Service from Oil
Plugged Gas	Service from Gas
Canceled / Abandoned Location	Service from Oil / Gas
Plugged Oil / Gas	Storage from Oil / Gas
Injection / Disposal	Injection / Disposal from Storage
Core Test	Injection / Disposal from Storage / Oil
Sulfur Test	Injection / Disposal from Storage / Gas
Storage from Oil	Injection / Disposal from Storage / Oil / Gas
Storage from Gas	Observation from Storage
Shut-In Oil	Observation from Storage / Oil
Shut-In Gas	Observation from Storage / Gas
Injection / Disposal from Oil	Observation from Storage / Oil / Gas
Injection / Disposal from Gas	Service from Storage
Injection / Disposal from Oil / Gas	Service from Storage / Oil
Geothermal	Service from Storage / Gas
Brine Mining	Service from Storage / Oil / Gas
Water Supply	Plugged Storage
Water Supply from Oil	Plugged Storage / Oil
Water Supply from Gas	

Page 1 of 3

Public GIS Viewer Legend

Plugged Storage / Gas	Storage / Brine Mining / Oil
Plugged Storage Oil / Gas	Storage / Brine Mining / Gas
Brine Mining	Storage / Brine Mining / Oil / Gas
Brine Mining / Oil	Injection / Disposal from Storage / Brine Mining
Brine Mining / Gas	Injection / Disposal from Storage / Brine Mining / Oil
Brine Mining / Oil / Gas	Injection / Disposal from Storage / Brine Mining / Gas
Injection / Disposal from Brine Mining	Injection / Disposal from Storage / Brine Mining / Oil / Gas
Injection / Disposal from Brine Mining / Oil	Observation from Storage / Brine Mining
Injection / Disposal from Brine Mining / Gas	Observation from Storage / Brine Mining / Oil
Injection / Disposal from Brine Mining / Oil / Gas	Observation from Storage / Brine Mining / Gas
Observation from Brine Mining	Observation from Storage / Brine Mining / Oil / Gas
Observation from Brine Mining / Oil	Plugged Storage / Brine Mining
Observation from Brine Mining / Gas	Plugged Storage / Brine Mining / Oil
Observation from Brine Mining / Oil / Gas	Plugged Storage / Brine Mining / Gas
Service from Brine Mining	Plugged Storage / Brine Mining / Oil / Gas
Service from Brine Mining / Oil	
Service from Brine Mining / Gas	Orphan Wells
Service from Brine Mining / Oil / Gas	Commercial Disposal
Plugged Brine Mining	Injection/Disposal
Plugged Brine Mining / Oil	HCTS Deeper than 15,000 ft.
Plugged Brine Mining / Gas	
Plugged Brine Mining / Oil / Gas	
Storage / Brine Mining	

Page 2 of 3

Public GIS Viewer Legend

High Cost Tight Sands	
EOR H13 Oil Wells	Alert Areas
Well Logs	
Horiz/Dir Surface Locations	Water
Horizontal Well	
Directional Well	City Limits
Horizontal/Directional Lines	
LPGAS Sites	Counties
QPipelines	Operator Cleanup Program Sites
	Active
Pipelines	Closed
	Voluntary Cleanup Program Sites
Bay Tracts	VCP, Accepted
	VCP, Closed
Offshore Areas	Brownfield Response Program Sites
	Brownfield, Accepted
Offshore Tracts	Brownfield, Closed
	Commercial Waste Disposal Sites & Discharge Permits
Water Lines	Commercial Waste Disposal
	Discharge Permits
Subdivisions	Oil and Gas Districts
Railroads	AED Districts
Surveys	Pipeline Safety Regions
Quads	

Page 3 of 3

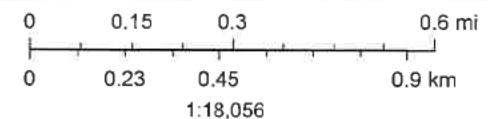
Sherwyn Wood Dairy



Texas Water
Development Board

July 10, 2025

-  Plugging Reports
-  Well Reports
-  TWDB Groundwater



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

The data in Water Data Interactive represents the best available information provided by the TWDB and third-party cooperators of the TWDB. The TWDB provides information via this web site as a public service. Neither the State of Texas nor the TWDB assumes any legal liability or responsibility or makes any guarantees or warranties as to the accuracy, completeness or suitability of the information for any particular purpose. The TWDB systematically revises or removes data discovered to be incorrect. If you find inaccurate information or have questions, please contact

STATE OF TEXAS WELL REPORT for Tracking #480269

Owner: **Sherwyn Wood** Owner Well #: **3672**
 Address: **757 CR 229** Grid #: **31-56-7**
Stephenville, TX 76404
 Well Location: **FM 913** Latitude: **32° 09' 01.67" N**
Stephenville, TX 76401 Longitude: **098° 05' 23.69" W**
 Well County: **Erath** Elevation: **No Data**

Type of Work: **New Well** Proposed Use: **Domestic**

Drilling Start Date: **6/8/2017** Drilling End Date: **6/8/2017**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	11	0	5
	8	5	179

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

Filter Pack Intervals:	Top Depth (ft.)	Bottom Depth (ft.)	Filter Material	Size
	75	179	Gravel	12/20

Annular Seal Data:	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
	0	75	Cement 8 Bags/Sacks

Seal Method: **Pumped**

Sealed By: **Driller**

Distance to Property Line (ft.): **40**

Distance to Sepsic Field or other concentrated contamination (ft.): **100+**

Distance to Septic Tank (ft.): **not on Form**

Method of Verification: **Customer**

Surface Completion: **Surface Sleeve Installed** Surface Completion by Driller

Water Level: **80 ft. below land surface on 2017-06-08**

Packers: **No Data**

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

Well Tests: **Jetted** Yield: **10 GPM with unk ft. drawdown after 1 hours**

Water Quality:

Strata Depth (ft.)

78 - 165

Water Type

Paluxy

Chemical Analysis Made: **No**

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

Certification Date: **The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.**

Company Information: **Associated Well Services, Inc.**

PO Box 16
Stephenville, TX 76401

Driller Name: **Russell Langford**

License Number: **56062**

Comments: **No Data**

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description	Size (in.)	Type	Material	Screen Size	Top (ft.)	Bottom (ft.)
0	1	Topsoil						
1	19	Tan clay, Shale & Limestone		4	Blank	New Plastic (PVC)	40	0
19	78	Grey Clay, Shale & Limestone		4	Screen	New Plastic (PVC)	0.020	79
78	165	Grey Sandy Clay & Sand						
165	179	Grey Clay, Shale & Limestone						

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

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

6.0 SURFACE WATER & TMDL ASSESSMENT

6.1 Surface Water Assessment

Figure 6.1, Aerial Photograph, shows the existing land features, production area, Land Management Unit boundaries, and areas designated as "water in the state," as defined by 30 TAC §321.32(63). Buffer zones between waters in the state and LMUs will be maintained as required in 30 TAC §321.40(h) plus additional filter strips specified by NRCS Code 393, as required in 30 TAC §321.42(w)(2). Based on NRCS Code 393, Appendix 3, Table 1, and LMU slope and soil types, the buffer zones shown in the attached map will be maintained. According to NRCS, Codes 601 (applied to severely eroded areas) and 332 (applied to cropland) are not currently applicable to the LMUs at this facility. Should field conditions or cropping systems change, Codes 601 and 332 will be implemented as necessary.

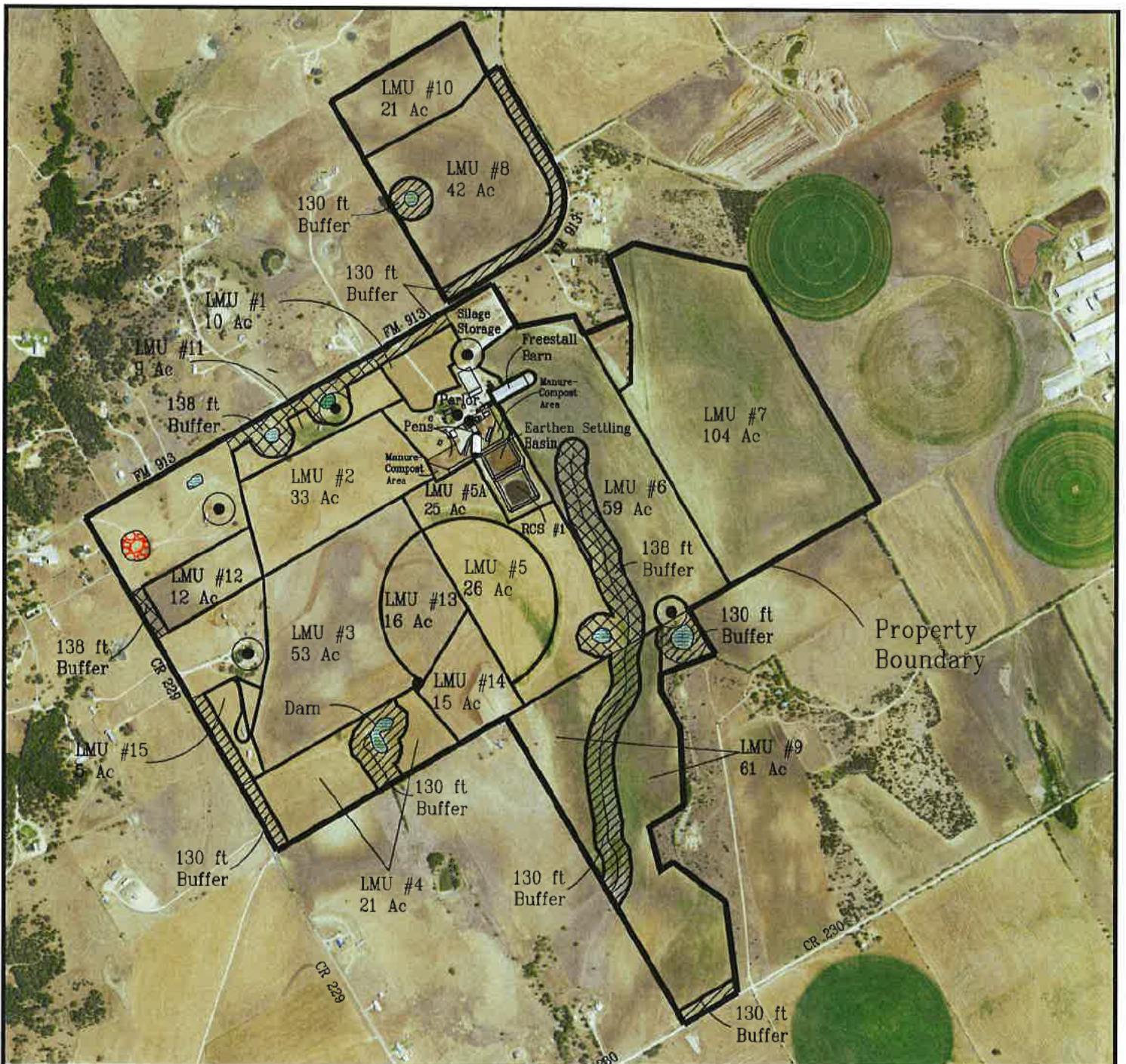
The "water in the state" designation is based on Enviro-Ag Engineering, Inc., site inspections, the permittee's knowledge of the property and the USDA-FSA aerial photograph (2017). The buffer zones and LMU boundaries in Figure 6.1 are submitted with this application for TCEQ approval.

6.2 TMDL Assessment

Sherwyn Wood Dairy is located in Segment 1226, Upper North Bosque River, Brazos River Basin, which is a 303(d)-listed watershed. To demonstrate that Sherwyn Wood Dairy is designed and will be constructed and operated in a manner that is consistent with the Phosphorus Total Maximum Daily Load (TMDL) and Implementation Plan approved in 2001 and to address the other listed impairments for this segment, the following practices have been or will be implemented:

1. Implement a Nutrient Utilization Plan that limits P application to crop requirement and incorporates a P reduction component on fields over 200 ppm P.
2. Limit maximum P level in soils to 200 ppm.
3. Perform annual soil sampling in accordance with the provisions of 30 TAC §321.42(k)-(m) and with Texas Cooperative Extension guidelines for composite sampling.
4. Implement a certified Comprehensive Nutrient Management Plan that meets the NRCS requirements for a whole-farm Resource Management System
5. Maintain contracts with owners of third party fields in accordance with 30 TAC §321.42(j)(1)-(4) and with applicable requirements of 30 TAC §321.36 and §321.40.
6. Operate the facility in accordance with 30 TAC §321.42 with additional Best Management Practices as follows:
 - a. Scrape freestalls and cattle lanes to reduce or eliminate the need for flushing
 - b. Excluding extraneous drainage areas from the RCSs (roof areas, etc.)

- c. Reduce the potential for soil erosion and downgradient sediment deposition by maintaining permanent pastures and additional filter strips adjacent to waters in the state, as described above in Section 6.1



Map Revised 7/21/2025

LEGEND:

- Denotes Water Well
- ⊙ Denotes Well w/150-ft Buffer
- ▨ Denotes 130-ft Buffer
- ▩ Denotes 138-ft Buffer
- ▬ Denotes Fresh Water Pond
- ▭ Denotes Caliche Pit



SCALE AS SHOWN

Source: USDA-NRCS. Geospatial Data Gateway. Available at: <http://datagateway.nrcs.usda.gov/>. Digital Ortho Graphic County Mosaic by NRCS - Accessed July, 2025.

• Refer to Figures 1.3 & 1.4 for overall facility maps.

Sherwyn Wood Dairy
Stephenville, Texas
Erath County

Aerial Photograph
Figure 6.1
Page 34



Enviro-Ag Engineering, Inc.
ENGINEERING CONSULTANTS
3404 Airway Blvd.
AMARILLO, TEXAS 79118
TEL (806) 353-6123 FAX (806) 353-4132

7.0 AIR STANDARD PERMIT REQUIREMENTS

7.1 Permit Requirements

Due to the headcount, the CAFO meets the TCEQ Air Quality Permit-By-Rule (PBR) authorization in 30 TAC §106.161 for facilities that confine less than 1000 head of cattle. See attached PBR Checklist; therefore an odor control plan is not required. The following is a list of Best Management Practices that may be implemented at the facility to decrease odors.

- Pen surfaces will be maintained to reduce ponding.
- The manure in the confinement pens will be removed on a regular basis (at least once annually) to prevent the manure from building up in the pens.
- Removal of manure and pond solids will be done in favorable wind conditions carrying odors away from nearby receptors. The TCEQ must be notified prior to RCS cleanout.
- Land application shall only occur from one hour after sunrise until one hour before sunset, unless written consent is obtained from current occupants of all residences within ¼-mile of the LMU boundary that receives waste or wastewater.
- Dust will be controlled on facility roads with the use of a portable water truck on an as-needed basis to minimize fugitive dust emissions.
- Dead animals will be disposed of by a commercial rendering service within 72-hours or properly composted on-site.

Texas Commission on Environmental Quality
Title 30 Texas Administrative Code § 106.161
Air Permit by Rule (PBR) Checklist-Animal Feeding Operations

This checklist was developed by the Texas Commission on Environmental Quality (TCEQ) to assist applicants in determining whether an animal feeding operation meets all general and specific requirements of the permit by rule (PBR). If all PBR requirements cannot be met, the facility will not be allowed to operate under the PBR, and an application for a construction permit will be required. This checklist should accompany the Form PI-7, entitled, "Registration for Permits by Rule." Check the most appropriate answer and include any additional information in the spaces provided. If additional space is needed, please include an extra page and reference the question number. **A complete Form PI-7, complete Checklist, and any other supporting documents must be reviewed and approved by the TCEQ prior to beginning construction if the facility is for caged poultry (egg laying or pullet) operations only.** The PBR forms, tables, checklists, and guidance documents are available from the TCEQ Air Permits Division website at, www.tceq.state.tx.us/nav/permits/air_permits.html

For additional assistance with your application, including resources to help calculate your emissions, please visit the Small Business and Local Government Assistance (SBLGA) webpage at the following link: www.TexasEnviroHelp.org

Please Check the Most Appropriate Answer					
Livestock:					
Are the animal feeding operations designed to feed livestock? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A					
<i>If "YES," answer the Questions 1 - 3 and 9 and no registration is required, but retain this checklist and keep records.</i>					
<i>If "NO," skip to Question 4.</i>					
1. If the animal feeding operations designed to feed <u>only one</u> of the following livestock categories, indicate the number below:					
Livestock Category	Limits	Number of Actual Livestock	Response		
Cattle	1,000	990	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		
Horses and Mules	1,000		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		
Swine weighing more than 55 pounds	2,500		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		
Sheep and Goats	2,500		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		
2. If the animal feeding operations are designed to feed <u>more than one</u> type of livestock, indicate the number of actual livestock, and then calculate the equivalent animal sub-totals by multiplying the factor indicated by the number of actual livestock. To calculate the "Total Animal Equivalents," add the equivalent animal sub-totals together.					
Livestock Category	Factor	x	Number of Actual Livestock	=	Equivalent Animal Sub-total
Cattle	1.0	x	990	=	990
Horses and Mules	2.0	x		=	
Swine weighing more than 55 pounds	0.4	x		=	
Sheep and Goats	0.1	x		=	
Total Animal Equivalents =					990
Are the total of animal equivalents less than or equal to 1000? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A					

Texas Commission on Environmental Quality
Title 30 Texas Administrative Code § 106.161
Air Permit by Rule (PBR) Checklist-Animal Feeding Operations

Please Check the Most Appropriate Answer	
Birds and Poultry	
3. When determining the number of animals above, mothers with nursing young were counted as a single animal while the young were nursing. Once removed from the mother, the young animals were counted as individual animals. Swine weighing 55 pounds or less were not counted when determining the number of animals. Were animals on the pasture not considered as part of the animal feeding operations?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
4. Is the operation designed to feed <u>no more</u> than 55,000 turkeys or other birds (excluding ducks) concentrated in open lots?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
<i>If "YES," list the total number of birds.</i>	
5. Is the operation designed to feed no more than 5,000 ducks?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
<i>If "YES," list the total number of ducks</i>	
6. Are all caged poultry operations designed to feed <u>no more</u> than 30,000 birds?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
<i>If "YES," list the total number of birds.</i>	
7. Do all housed poultry operations use wood shavings (or similar) as litter?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
8. If the caged poultry operation is designed to feed more than 30,000 birds and uses dry manure storage and handling system, then list the total number of birds, the type of birds, and answer the next Question. Otherwise, skip to Question 9.	
Total Number of Birds:	Bird Type:
An egg laying or caged pullet operation must be located at least 1/4 mile (1320 feet) from any recreational area, school, residence, or other structure not occupied or used solely by the owner of the operation.	
<i>List the distance to the nearest structure or recreational area.</i>	
Feed Handling	
9. Are products from the animal feeding operation (including on-site feed handling and feed milling operations) covered under this PBR registration shipped to any off-site location?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

Registration: If the animal feeding operation consists only of livestock or outdoor birds and poultry, no registration is required. Any caged poultry (egg laying or pullet) operations must register and obtain approval prior to construction. All others should complete the checklist and retain records on site to demonstrate compliance with the PBR.

Records: In order to demonstrate compliance with the general and specific requirements for this PBR, animal feeding operations are required to maintain sufficient records to show that all requirements are met at all times. Records should include (but are not limited to) number and type of animals housed; methods and application of dust and odor controls; feed handling amounts and methods; and housekeeping.

Estimate Air Emissions: In general, air emissions estimates are not required during a PBR registration review for animal feeding operations. However, in order to demonstrate compliance with the general requirements for PBRs, animal feeding operation applicants may be asked to estimate air emissions from their animal feeding operations during a PBR review or during an Investigation. These estimates can be made by compiling the required records. If sufficient records are maintained on site and requirements are being met, the animal feeding operation and the TCEQ will be able to establish these emission rates if needed.

Save Form

Reset Form