

INDUSTRIAL WASTEWATER PERMIT MAJOR AMENDMENT APPLICATION

Permit No. WQ0003074000

Prepared For:

Schreiber Foods, Inc.
923 County Road 176
Stephenville, TX 76401



August 22, 2024

Conducted By:



Table of Contents

LIST OF FIGURES	iii
ATTACHMENT A – APPLICATION FEE	1
ATTACHMENT B – CORE DATA FORM	2
ATTACHMENT C – 7.5-MINUTE USGS MAPS	3
C.1 Stephenville and Knob Hill, Texas Quadrangles	3
ATTACHMENT D – ADJACENT LANDOWNERS	4
D.1 Adjacent Landowners List	4
D.2 Adjacent Landowners Map	4
ATTACHMENT E – PHOTOGRAPHS	7
E.1 Photograph Location Map	7
E.2 Photographs	7
ATTACHMENT 1 – FACILITY/SITE INFORMATION AND MAPS	11
1.1 Process Flow Diagram	11
1.2 Vicinity Map	11
1.3 7.5 Minute USGS Map	11
1.4 Site Map	11
ATTACHMENT 2 – FLOODPLAIN INFORMATION	16
2.1 FEMA Floodplain Map	16
2.2 Protective Measures	16
ATTACHMENT 3 – IMPOUNDMENT FACILITY & LINER/GEOLOGY INFORMATION	18
ATTACHMENT 4 – SAFETY DATA SHEETS	19
ATTACHMENT 5 – ANNUAL CROPPING PLAN	20
5.1 Annual Cropping Plan	20
ATTACHMENT 6 – WATER WELL INFORMATION	22
6.1 Water Well Map	22
6.2 Water Well Information	22
6.3 Monitoring Well Map	22
6.4 Monitor Well Information	22
ATTACHMENT 7 – SOIL INFORMATION	25
7.1 Soil Information	25

ATTACHMENT 8 – POLLUTANT ANALYSIS DATA.....	26
ATTACHMENT 9 – ENGINEERING REPORT	27
9.1 Purpose	27
9.2 Background.....	27
9.3 Impoundment Facility	27
9.4 Water Balance Calculations	27
9.5 Storage Calculations	27
ATTACHMENT 10 – STORAGE LAGOON CONTINGENCY PLAN.....	30
ATTACHMENT 11 – PUBLIC INVOLVEMENT PLAN	31
ATTACHMENT 12 – GROUNDWATER TECHNICAL REPORT	32
12.1 Purpose	32
12.2 Geologic Atlas Map.....	32
12.3 Geomorphologic/Geologic Features	32
12.4 Aquifer Information	32
12.5 Water Wells	33
12.6 Best Management Practices.....	33
12.7 References.....	33

LIST OF FIGURES

Figure D.1: Adjacent Landowners Map.....	6
Figure E.1: Photograph Location Map.....	8
Figure E.2a: Photographs.....	9
Figure E.2b: Photographs.....	10
Figure 1.1: Process Flow Diagram.....	12
Figure 1.2: Vicinity Map.....	13
Figure 1.3: 7.5-Min USGS Map.....	14
Figure 1.4: Site Map.....	15
Figure 2.1: FEMA Floodplain Map.....	17
Figure 5.1: Annual Cropping Plan.....	21
Figure 6.1: Water Well Map.....	23
Figure 6.2: Monitoring Well Map.....	24
Figure 9.1: Water Balance Calculations.....	28
Figure 9.2: Storage Calculations.....	29
Figure 12.1: Geologic Atlas Map.....	34

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
TCEQ INDUSTRIAL WASTEWATER PERMIT APPLICATION

INDUSTRIAL ADMINISTRATIVE REPORT 1.0

This report is required for all applications for TPDES permits and TLAPs. Contact the Applications Review and Processing Team at 512-239-4671 with any questions about completing this report

Item 1. Application Information and Fees (Instructions, Page 26)

- a. Complete each field with the requested information, if applicable.

Applicant Name: Schreiber Foods, Inc. EPA ID No.: TX000068221

Permit No.: WQ0003074000 Expiration Date: 6/25/2029

- b. Check the box next to the appropriate authorization type.

☒ Industrial Wastewater (wastewater and stormwater)

☐ Industrial Stormwater (stormwater only)

- c. Check the box next to the appropriate facility status.

☒ Active

☐ Inactive

- d. Check the box next to the appropriate permit type.

☐ TPDES Permit

☒ TLAP

- e. Check the box next to the appropriate application type.

☐ New

☐ Renewal with changes

☐ Renewal without changes

☒ Major amendment with renewal

☐ Major amendment without renewal

☐ Minor amendment without renewal

☐ Minor modification without renewal

- f. If applying for an amendment or modification, describe the request: Increasing the application acres from 50 acres to 61 acres, increasing the average daily flow from 132,000 gallons per day to 192,000 gallons per day, amending the organic loading rate from lbs./acre/year to lbs./acre/day measured as biochemical oxygen demand (5-day) and amending the nitrogen loading rate from lbs./acre/year to lbs./acre/year measured as total nitrogen.

- g. Application Fee

EPA Classification	New	Major Amend. (with or without renewal)	Renewal (with or without changes)	Minor Amend. / Minor Mod. (without renewal)
Minor facility not subject to EPA categorical effluent guidelines (40 CFR Parts 400-471)	<input type="checkbox"/> \$350	<input checked="" type="checkbox"/> \$350	<input type="checkbox"/> \$315	<input type="checkbox"/> \$150
Minor facility subject to EPA categorical effluent guidelines (40 CFR Parts 400-471)	<input type="checkbox"/> \$1,250	<input type="checkbox"/> \$1,250	<input type="checkbox"/> \$1,215	<input type="checkbox"/> \$150
Major facility	N/A ¹	<input type="checkbox"/> \$2,050	<input type="checkbox"/> \$2,015	<input type="checkbox"/> \$450

¹ All facilities are designated as minors until formally classified as a major by EPA.

For TCEQ Use Only

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

h. Payment Information

Mailed

Check or money order No.: [Click to enter text.](#) Check or money order amt.: [Click to enter text.](#)

Named printed on check or money order: [Click to enter text.](#)

Epay

Voucher number: [600355 & 600356](#) Copy of voucher attachment: [Attachment A](#)

Item 2. Applicant Information (Instructions, Pages 26)

- a. Customer Number, if applicant is an existing customer: [CN602630972](#)

Note: Locate the customer number using the [TCEQ's Central Registry Customer Search](#)².

- b. Legal name of the entity (applicant) applying for this permit: [Schreiber Foods, Inc.](#)

Note: The owner of the facility must apply for the permit. The legal name must be spelled exactly as filed with the TX SOS, Texas Comptroller of Public Accounts, County, or in the legal documents forming the entity.

- c. Name and title of the person signing the application. (**Note:** The person must be an executive official that meets signatory requirements in 30 TAC § 305.44.)

☒ Mr. ☐ Ms. First/Last Name: [Paul Batkins](#)

Title: [Plant Manager](#)

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

- d. Will the applicant have overall financial responsibility for the facility?

☒ Yes ☐ No

Note: The entity with overall financial responsibility for the facility must apply as a co-applicant, if not the facility owner.

Item 3. Co-applicant Information (Instructions, Page 27)

☐ Check this box if there is no co-applicant.; otherwise, complete the below questions.

- a. Legal name of the entity (co-applicant) applying for this permit: [Click to enter text.](#)

Note: The legal name must be spelled exactly as filed with the TX SOS, Texas Comptroller of Public Accounts, County, or in the legal documents forming the entity.

- b. Customer Number (if applicant is an existing customer): [CNClick to enter text.](#)

Note: Locate the customer number using the TCEQ's Central Registry Customer Search.

- c. Name and title of the person signing the application. (**Note:** The person must be an executive official that meets signatory requirements in 30 TAC § 305.44.)

☐ Mr. ☐ Ms. First/Last Name: [Click to enter text.](#)

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

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

² <https://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch>

- d. Will the co-applicant have overall financial responsibility for the facility?

☐ Yes ☐ No

Note: The entity with overall financial responsibility for the facility must apply as a co-applicant, if not the facility owner.

Item 4. Core Data Form (Instructions, Pages 27)

- a. Complete one Core Data Form (TCEQ Form 10400) for each customer (applicant and co-applicant(s)) and include as an attachment. If the customer type selected on the Core Data Form is Individual, complete Attachment 1 of the Administrative Report. Attachment: B

Item 5. Application Contact Information (Instructions, Page 27)

Provide names of two individuals who can be contact for additional information about this application. Indicate if the individual can be contact about administrative or technical information, or both.

- a. ☒ Administrative Contact . ☒ Technical Contact

☒ Mr. ☐ Ms. Full Name (First and Last): Paul Bytheway

Title: Environmental Engineer Credential: Click to enter text.

Organization Name: Schreiber Foods, Inc.

Mailing Address: 400 N Washington Street

City: Green Bay State: WI Zip Code: 54301

Phone No: 920/445-6109 Fax No: 920/445-2200 Email: Paul.Bytheway@schreiberfoods.com

- b. ☒ Administrative Contact . ☒ Technical Contact

☒ Mr. ☐ Ms. Full Name (First and Last): Corey Mullin

Title: Consultant Credential: Click to enter text.

Organization Name: Enviro-Ag Engineering

Mailing Address: 9855 FM 847

City: Dublin State: TX Zip Code: 76446

Phone No: 254/485-3892 Fax No: 254/965-8000 Email: cmullin@enviroag.com

Attachment: Click to enter text.

Item 6. Permit Contact Information (Instructions, Pages 28)

Provide two names of individuals that can be contacted throughout the permit term.

- a. ☒ Mr. ☐ Ms. Full Name (First and Last): Paul Bytheway

Title: Environmental Engineer Credential: Click to enter text.

Organization Name: Schreiber Foods, Inc.

Mailing Address: 400 N Washington Street

City: Green Bay State: WI Zip Code: 54301

Phone No: 920/445-6109 Fax No: 920/445-2200 Email: Paul.Bytheway@schreiberfoods.com

- b. ☒ Mr. ☐ Ms. Full Name (First and Last): Corey Mullin

Title: Consultant Credential: Click to enter text.

Organization Name: Enviro-Ag Engineering

Mailing Address: 9855 FM 847

City: Dublin State: TX Zip Code: 76446

Phone No: 254/485-3892 Fax No: 254/965-8000 Email: cmullin@enviroag.com

Attachment: Click to enter text.

91

Item 7. Billing Contact Information (Instructions, Page 28)

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

Provide the complete mailing address where the annual fee invoice should be mailed and the name and phone number of the permittee's representative responsible for payment of the invoice.

☒ Mr. ☐ Ms. Full Name (First and Last): Gary McCaffity

Title: Environmental Health & Safety Manager, Operations

Credential: Click to enter text.

Organization Name: Schreiber Foods, Inc.

Mailing Address: 923 CR 176

City: Stephenville State: TX Zip Code: 76401

Phone No: 254/552-7717

Fax No: 254/552-7896

Email:

Gary.McCaffity@schreiberfoods.com

Item 8. DMR/MER Contact Information (Instructions, Page 28)

Provide the name and mailing address of the person delegated to receive and submit DMRs or MERs. **Note:** DMR data must be submitted through the NetDMR system. An electronic reporting account can be established once the facility has obtained the permit number.

☒ Mr. ☐ Ms. Full Name (First and Last): Gary McCaffity

Title: Environmental Health & Safety Manager, Operations

Credential: Click to enter text.

Organization Name: Schreiber Foods, Inc.

Mailing Address: 923 CR 176

City: Stephenville State: TX Zip Code: 76401

Phone No: 254/552-7717

Fax No: 254/552-7896

Email:

Gary.McCaffity@schreiberfoods.com

Item 9. NOTICE INFORMATION (Instructions, Pages 28

a. Individual Publishing the Notices

☐ Mr. ☒ Ms. Full Name (First and Last): Jourdan Mullin

Title: Consultant

Credential: Click to enter text.

Organization Name: Enviro-Ag Engineering

Mailing Address: 9855 FM 847

City: Dublin State: TX Zip Code: 76446

Phone No: 806/679-5570

Fax No: 254/965-8000

Email: jmullin@enviroag.com

b. Method for Receiving Notice of Receipt and Intent to Obtain a Water Quality Permit Package (only for NORI, NAPD will be sent via regular mail)

☒ E-mail: jmullin@enviroag.com

☐ Fax: Click to enter text.

☒ Regular Mail (USPS)

Mailing Address: 9855 FM 847

City: Dublin State: TX Zip Code: 76446

c. Contact in the Notice

☒ Mr. ☐ Ms Full Name (First and Last): Paul Bytheway
Title: Environmental Engineer Credential: Click to enter text.
Organization Name: Schreiber Foods, Inc.
Phone No: 920/455-6109 Fax No: 920/455-2200 Email:
Paul.Bytheway@schreiberfoods.com

d. Public Viewing Location Information

Note: If the facility or outfall is located in more than one county, provide a public viewing place for each county.

Public building name: Erath County Courthouse Location within the building: Erath County Extension Office
Physical Address of Building: 100 Washington St. Room 206
City: Stephenville County: Erath

e. Bilingual Notice Requirements

This information is required for new, major amendment, and renewal applications. It is not required for minor amendment or minor modification applications.

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

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

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

☒ Yes ☐ No ☐ N/A (Minor amendment or modification)

If no, publication of an alternative language notice is not required; skip to Item 8 (Regulated Entity and Permitted 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 ☐ N/A (Minor amendment or modification)

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

☐ Yes ☒ No ☐ N/A (Minor amendment or modification)

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 ☐ N/A (Minor amendment or modification)

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

- f. Plain Language Summary Template - Complete the Plain Language Summary at the end of this application.

Item 10. Regulated Entity and Permitted Site Information (Instructions Pages 29-30)

- a. TCEQ issued Regulated Entity Number (RN), if available: RN102780665

Central Registry to determine the RN or to see if the larger site may already be registered as a Regulated Entity. If the site is found, provide the assigned RN.

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

c. Is the location address of the facility in the existing permit the same?

☒ Yes ☐ No ☐ N/A (new permit)

Note: If the facility is located in Bexar, Comal, Hays, Kinney, Medina, Travis, Uvalde, or Williamson County, additional information concerning protection of the Edwards Aquifer may be required.

d. Owner of treatment facility:

☐ Mr. ☐ Ms. Full Name (First and Last): Click to enter text.

or Organization Name: Schreiber Foods, Inc.

Mailing Address: 400 N. Washington Street

City: Green Bay State: WI Zip Code: 54301

Phone No: 920/455-6109 Fax No: 920/455-2200 Email: Paul.Bytheway@schreiberfoods.com

e. Ownership of facility: ☐ Public ☒ Private ☐ Both ☐ Federal

f. Owner of land where treatment facility is or will be: Click to enter text.

☐ Mr. ☐ Ms. Full Name (First and Last): Click to enter text.

or Organization Name: Schreiber Foods, Inc.

Mailing Address: 400 N. Washington Street

City: Green Bay State: WI Zip Code: 54301

Phone No: 920/455-6109 Fax No: 920/455-2200 Email: Paul.Bytheway@schreiberfoods.com

Note: If not the same as the facility owner, attach a long-term lease agreement in effect for at least six years (In some cases, a lease may not suffice - see instructions). Attachment: Click to enter text.

g. Owner of effluent TLAP disposal site (if applicable): Click to enter text.

☐ Mr. ☐ Ms. Full Name (First and Last): Click to enter text.

or Organization Name: Schreiber Foods, Inc.

Mailing Address: 400 N. Washington Street

City: Green Bay State: TX Zip Code: 54301

Phone No: 920/455-6109 Fax No: 920/455-2200 Email: Paul.Bytheway@schreiberfoods.com

Note: If not the same as the facility owner, attach a long-term lease agreement in effect for at least six years. Attachment: Click to enter text.

h. Owner of sewage sludge disposal site (if applicable):

☐ Mr. ☐ Ms. Full Name (First and Last): Click to enter text.

or Organization Name: Click to enter text.

Mailing Address: Click to enter text.

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

Phone No: Click to enter text. Fax No: Click to enter text. Email: Click to enter text.

Note: If not the same as the facility owner, attach a long-term lease agreement in effect for at least six years. Attachment: [Click to enter text.](#)

Item 11. TDPES Discharge/TLAP Disposal Information (Instructions, Pages 31-32)

- a. Is the facility located on or does the treated effluent cross Native American Land?
☐ Yes ☒ No
- b. Attach an original full size USGS Topographic Map (or an 8.5"×11" reproduced portion for renewal or amendment applications) with all required information. Check the box next to each item below to confirm it has been included on the map.
- | | |
|---|--|
| <input checked="" type="checkbox"/> One-mile radius | <input checked="" type="checkbox"/> Three-miles downstream information |
| <input checked="" type="checkbox"/> Applicant's property boundaries | <input checked="" type="checkbox"/> Treatment facility boundaries |
| <input type="checkbox"/> Labeled point(s) of discharge | <input type="checkbox"/> Highlighted discharge route(s) |
| <input checked="" type="checkbox"/> Effluent disposal site boundaries | <input checked="" type="checkbox"/> All wastewater ponds |
| <input type="checkbox"/> Sewage sludge disposal site | <input type="checkbox"/> New and future construction |

Attachment: C

- c. Is the location of the sewage sludge disposal site in the existing permit accurate?
☐ Yes ☒ No or New Permit

If no, or a new application, provide an accurate location description: N/A

- d. Are the point(s) of discharge in the existing permit correct?
☐ Yes ☒ No or New Permit

If no, or a new application, provide an accurate location description: N/A

- e. Are the discharge route(s) in the existing permit correct?
☐ Yes ☒ No or New Permit

If no, or a new permit, provide an accurate description of the discharge route: N/A

- f. City nearest the outfall(s): N/A

- g. County in which the outfalls(s) is/are located: N/A

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

☐ Yes ☒ No

If yes, indicate by a check mark if: ☐ Authorization granted ☐ Authorization pending

For new and amendment applications, attach copies of letters that show proof of contact and provide the approval letter upon receipt. Attachment: [Click to enter text.](#)

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

- i. For TLAPs, is the location of the effluent disposal site in the existing permit accurate?
☒ Yes ☐ No or New Permit

If no, or a new application, provide an accurate location description: [Click to enter text.](#)

☒ Yes ☐ No or New Permit

If no, or a new application, provide an accurate location description: [Click to enter text.](#)

- j. City nearest the disposal site: [Stephenville](#)
- k. County in which the disposal site is located: [Erath](#)
- l. Disposal Site Latitude: [32D 16' 10"](#) Longitude: [98D 11' 27"](#)
- m. For TLAPs, describe how effluent is/will be routed from the treatment facility to the disposal site:
[Effluent from the treatment facility is pumped through an underground pipeline to the waste disposal areas.](#)
- n. For TLAPs, identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: [Unnamed tributary to the South Paluxy River.](#)

Item 12. MISCELLANEOUS INFORMATION (Instructions, Page 33)

- a. Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?
☐ Yes ☒ No
If yes, list each person: [Click to enter text.](#)
- b. Do you owe any fees to the TCEQ?
☐ Yes ☒ No
If yes, provide the account no.: [Click to enter text.](#) and total amount due: [Click to enter text.](#)
- c. Do you owe any penalties to the TCEQ?
☐ Yes ☒ No
If yes, provide the enforcement order no.: [Click to enter text.](#) and amount due: [Click to enter text.](#)

Item 13. SIGNATURE PAGE (Instructions, Pages 33-34)

Permit No: WQ0003074000

Applicant Name: Schreiber Foods, Inc.

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

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

Signatory name (typed or printed): Paul Batkins

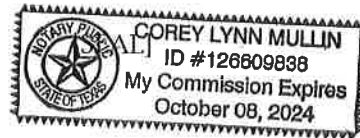
Signatory title: Plant Manager

Signature: Paul Batkins Date: 2/3/23
(Use blue ink)

Subscribed and Sworn to before me by the said Paul Batkins
on this 3rd day of February, 2023.
My commission expires on the 3th day of October, 2024.

[Signature]
Notary Public

Erath
County, Texas



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

INDUSTRIAL ADMINISTRATIVE REPORT 1.1

The following information is required for new and amendment applications.

Item 1. AFFECTED LANDOWNER INFORMATION (Instructions, Pages 35-36)

- a. Attach a landowner map or drawing, with scale, as applicable. Check the box next to each item to confirm it has been provided.
- ☒ The applicant's property boundaries.
 - ☒ The facility site boundaries within the applicant's property boundaries.
 - ☐ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone.
 - ☒ The property boundaries of all landowners surrounding the applicant's property. (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
 - ☐ The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream.
 - ☐ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge.
 - ☐ The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides.
 - ☒ The boundaries of the effluent disposal site (e.g., irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property.
 - ☒ The property boundaries of all landowners surrounding the applicant's property boundaries where the effluent disposal site is located.
 - ☐ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners within one-quarter mile of the applicant's property boundaries where the sewage sludge land application site is located.
 - ☐ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (e.g., sludge surface disposal site or sludge monofil) is located.

Attachment: D

- b. Check the box next to the format of the landowners list:

☒ Readable/Writeable CD ☐ Four sets of labels

Attachment: D

- d. Provide the source of the landowners' names and mailing addresses: Erath County Appraisal District

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

☐ Yes ☒ No

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

Item 2. ORIGINAL PHOTOGRAPHS (Instructions, Page 37)

Provide original ground level photographs. Check the box next to each of the following items to indicate it is included.

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

Attachment: E

Plain Language Summary Forms

Individual Industrial Wastewater Application

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

Schreiber Foods, Inc (CN602630972) operates Schreiber Foods (RN102780665), a manufacturing/processing plant of cheese products. The facility is located at 923 County Road 176, near the city of Stephenville, Erath County, Texas 76401.

This application is for a major amendment with renewal to increasing the application acres from 50 acres to 61 acres, increasing the average daily flow from 132,000 gallons per day to 192,000 gallons per day, amending the organic loading rate from lbs./acre/year to lbs./acre/day measured as biochemical oxygen demand (5-day) and amending the nitrogen loading rate from lbs./acre/year to lbs./acre/year measured as total nitrogen.

Raw milk is brought to the plant in tankers. In the process of converting this milk into finished products (Cream Cheese) much of the water is extracted. This water, which is known by the industry as "cow water" is captured and used for cleaning purposes along with fresh water. This wash is then captured along with milk minerals, organics, and cleaning compounds and directed to the wastewater treatment facility. All domestic sewage is collected and treated by a chlorination system prior to being commingled with the process wastewater from the plant operations at the lift station.

Process water is collected and routed through monitoring stations which include a bar screen for solids removal and a dissolved air flotation tank for solids removal. Domestic wastewater is treated by a chlorination system prior to being commingled with process wastewater at the lift station. From the lift station, the commingled effluent is pumped to a storage/treatment system consisting of one 3-million-gallon aeration lagoon equipped with 200 hp. of aeration pump, two aeration lagoons (Aerated Storage Basin No. 1 & 2) both with 3 million gallons of storage capacity and 60 hp. of aeration equipment, and one 13.9-million-gallon storage lagoon. Effluent from the lagoons is routed to a center pivot irrigation system that includes a 61-acre tract for irrigation crops consisting of coastal Bermuda grass as a primary crop and ryegrass as a supplemental cool-weather crop.

Schreiber Foods, Inc (CN602630972) opera Schreiber Foods (RN102780665), una planta de fabricación/procesamiento de productos de queso. La instalación está ubicada en 923 County Road 176, cerca de la ciudad de Stephenville, Condado de Erath, Texas 76401.

Esta solicitud es para una modificación principal con renovación para aumentar los acres de aplicación de 50 acres a 61 acres, aumentar el flujo promedio diario de 132,000 galones por día a 192,000 galones por día, modificar la tasa de carga orgánica de lbs./acre/año a lbs./acre/día medida como demanda bioquímica de oxígeno (5 días) y modificando la tasa de carga de nitrógeno de lbs./acre/año a lbs./acre/año medida como nitrógeno total.

La leche cruda se lleva a la planta en camiones cisterna. En el proceso de convertir esta leche en productos terminados (Queso Crema) se extrae gran parte del agua. Esta agua, que la industria conoce como "agua de vaca", es captada y utilizada con fines de limpieza junto con el agua dulce. Luego, este lavado se captura junto con los minerales de la leche, los compuestos orgánicos y los compuestos de limpieza y se dirige a la planta de tratamiento de aguas residuales. Todas las aguas residuales domésticas son recolectadas y tratadas por un sistema de cloración antes de mezclarse con las aguas residuales del proceso de las operaciones de la planta en la estación de bombeo.

El agua de proceso se recolecta y se enruta a través de estaciones de monitoreo que incluyen una pantalla de barra para la eliminación de sólidos y un tanque de flotación de aire disuelto para la eliminación de sólidos. Las aguas residuales domésticas se tratan mediante un sistema de cloración antes de mezclarse con las aguas residuales del proceso en la estación de bombeo. Desde la estación de bombeo, el efluente mezclado se bombea a un sistema de almacenamiento/tratamiento que consta de una laguna de aireación de 3 millones de galones equipada con 200 hp. de bomba de aireación, dos lagunas de aireación (Cuenca de Almacenamiento Aireada No. 1 y 2) ambas con 3 millones de galones de capacidad de almacenamiento y 60 hp. de equipo de aireación y una laguna de almacenamiento de 13.9 millones de galones. El efluente de las lagunas se dirige a un sistema de riego de pivote central que incluye un tramo de 61 acres para cultivos de riego que consisten en pasto Bermuda costero como cultivo principal y raigrás como cultivo complementario de clima frío.

TECHNICAL REPORT 1.0

INDUSTRIAL

The following information **is required** for all applications for a TLAP or an individual TPDES discharge permit.

For additional information or clarification on the requested information, refer to the Instructions for Completing the Industrial Wastewater Permit Application¹ available on the TCEQ website.

If more than one outfall is included in the application, provide applicable information for each individual outfall. **If an item does not apply to the facility, enter N/A** to indicate that the item has been considered. Include separate reports or additional sheets as **clearly cross-referenced attachments** and provide the attachment number in the space provided for the item the attachment addresses.

NOTE: This application is for an industrial wastewater permit only. Additional authorizations from the TCEQ Waste Permits Division or the TCEQ Air Permits Division may be needed.

1. FACILITY/SITE INFORMATION (Instructions, Pages 39-40)

- a. Describe the general nature of the business and type(s) of industrial and commercial activities. Include all applicable SIC codes (up to 4).

Schreiber Foods, Inc. is a specialty dairy food manufacturer, producing a variety of cheeses. Primary SIC Code = 2022, Secondary SIC Code = 2023, Primary NAICS Code = 311513, Secondary NAICS Code = 31514.

- b. Describe all wastewater-generating processes at the facility.

Raw milk is brought to the plant in tankers. In the process of converting this milk into finished products (Cream Cheese) much of the water is extracted. This water, which is known by the industry as "cow water" is captured and used for cleaning purposes along with fresh water. This wash is then captured along with milk minerals, organics, and cleaning compounds and directed to the wastewater treatment facility.

All domestic sewage is collected and treated by a chlorination system prior to being commingled with the process wastewater from the plant operations at the lift station.

¹ https://www.tceq.texas.gov/permitting/wastewater/industrial/TPDES_industrial_wastewater_steps.html

- c. Provide a list of raw materials, major intermediates, and final products handled at the facility.

Materials List

Raw Materials	Intermediate Products	Final Products
Raw Milk	Whey	Cream Cheese
Block Cheese		Chunk, Sliced and Shredded Cheese

Attachment: Click to enter text.

- d. Attach a facility map (drawn to scale) with the following information:

- Production areas, maintenance areas, materials-handling areas, waste-disposal areas, and water intake structures.
- The location of each unit of the WWTP including the location of wastewater collection sumps, impoundments, outfalls, and sampling points, if significantly different from outfall locations.

Attachment: 1

- e. Is this a new permit application for an existing facility?

☐ Yes ☒ No

If **yes**, provide background discussion: Click to enter text.

- f. Is/will the treatment facility/disposal site be located above the 100-year frequency flood level.

☒ Yes ☐ No

List source(s) used to determine 100-year frequency flood plain: FEMA Flood Map ID: 480218008B

If **no**, provide the elevation of the 100-year frequency flood plain and describe what protective measures are used/proposed to prevent flooding (including tail water and rainfall run-on controls) of the treatment facility and disposal area: Click to enter text.

Attachment: 2

- g. For **new** or **major amendment** permit applications, will any construction operations result in a discharge of fill material into a water in the state?

☐ Yes ☒ No ☐ N/A (renewal only)

- h. If **yes** to Item 1.g, has the applicant applied for a USACE CWA Chapter 404 Dredge and Fill permit?

☐ Yes ☐ No

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

If **no**, provide an approximate date of application submittal to the USACE: Click to enter text.

2. TREATMENT SYSTEM (Instructions, Page 40)

- a. List any physical, chemical, or biological treatment process(es) used/proposed to treat wastewater at this facility. Include a description of each treatment process, starting with initial treatment and finishing with the outfall/point of disposal.

Process water is collected and routed through monitoring stations which include a bar screen for solids removal and a dissolved air flotation tank for solids removal. Domestic wastewater is treated by a chlorination system prior to being commingled with process wastewater at the lift station. From the lift station, the commingled effluent is pumped to a storage/treatment system consisting of one 3 million gallon aeration lagoon equipped with 200 hp. of aeration pump, two aeration lagoons (Aerated Storage Basin No. 1 & 2) both with 3 million gallons of storage capacity and 60 hp. of aeration equipment, and one 13.9 million gallon storage lagoon. Effluent from the lagoons is routed to a center pivot irrigation system that includes a 61-acre tract for irrigation crops consisting of coastal Bermuda grass as a primary crop and ryegrass as a supplemental cool-weather crop.

- b. Attach a flow schematic **with a water balance** showing all sources of water and wastewater flow into the facility, wastewater flow into and from each treatment unit, and wastewater flow to each outfall/point of disposal.

Attachment: 1

3. IMPOUNDMENTS (Instructions, Pages 40-42)

Does the facility use or plan to use any wastewater impoundments (e.g., lagoons or ponds?)

☒ Yes ☐ No

If **no**, proceed to Item 4. If **yes**, complete **Item 3.a** for **existing** impoundments and **Items 3.a - 3.e** for **new or proposed** impoundments. **NOTE:** See instructions, Pages 40-42, for additional information on the attachments required by Items 3.a – 3.e.

- a. Complete the table with the following information for each existing, new, or proposed impoundment:

Use Designation: Indicate the use designation for each impoundment as Treatment (T), Disposal (D), Containment (C), or Evaporation (E).

Associated Outfall Number: Provide an outfall number if a discharge occurs or will occur.

Liner Type: Indicate the liner type as Compacted clay liner (C), In-situ clay liner (I), Synthetic/plastic/rubber liner (S), or Alternate liner (A). **NOTE:** See instructions for further detail on liner specifications. If an alternate liner (A) is selected, include an attachment that provides a description of the alternate liner and any additional technical information necessary for an evaluation.

Leak Detection System: If any leak detection systems are in place/planned, enter Y for yes. Otherwise, enter N for no.

Groundwater Monitoring Wells and Data: If groundwater monitoring wells are in place/planned, enter Y for yes. Otherwise, enter N for no. Attach any existing groundwater monitoring data.

Dimensions: Provide the dimensions, freeboard, surface area, storage capacity of the impoundments, and the maximum depth (not including freeboard). For impoundments with irregular shapes, submit surface area instead of length and width.

Compliance with 40 CFR Part 257, Subpart D: If the impoundment is required to be in compliance with 40 CFR Part 257, Subpart D, enter Y for yes. Otherwise, enter N for no.

Date of Construction: Enter the date construction of the impoundment commenced (mm/dd/yy).

Impoundment Information

Parameter	Pond #1	Pond #2	Pond #3	Pond #4
Use Designation: (T) (D) (C) or (E)	T	T	T	T
Associated Outfall Number	001	001	001	001
Liner Type (C) (I) (S) or (A)	C	C	C	C
Alt. Liner Attachment Reference				
Leak Detection System, Y/N	N	N	N	N
Groundwater Monitoring Wells, Y/N	Y	Y	Y	Y
Groundwater Monitoring Data Attachment	Y	Y	Y	Y
Pond Bottom Located Above The Seasonal High-Water Table, Y/N	Y	Y	Y	Y
Length (ft)	355	340	340	576
Width (ft)	140	140	140	385
Max Depth From Water Surface (ft), Not Including Freeboard	10	10	10	13.3
Freeboard (ft)	2	2	2	2
Surface Area (acres)	1.14	1.09	1.09	4.68
Storage Capacity (gallons)	3,000,000	3,000,000	3,000,000	13,900,000
40 CFR Part 257, Subpart D, Y/N	No	No	No	No
Date of Construction				11/23/2020

Impoundment Information

Parameter	Pond #	Pond #	Pond #	Pond #
Use Designation: (T) (D) (C) or (E)				
Associated Outfall Number				
Liner Type (C) (I) (S) or (A)				
Alt. Liner Attachment Reference				
Leak Detection System, Y/N				
Groundwater Monitoring Wells, Y/N				
Groundwater Monitoring Data Attachment				
Pond Bottom Located Above The Seasonal High-Water Table, Y/N				
Length (ft)				
Width (ft)				
Max Depth From Water Surface (ft), not including freeboard				
Freeboard (ft)				
Surface Area (acres)				
Storage Capacity (gallons)				
40 CFR Part 257, Subpart D, Y/N				
Date of Construction				

Attachment: 3

The following information (**Items 3.b – 3.e**) is required only for **new or proposed** impoundments.

b. For new or proposed impoundments, attach any available information on the following items. If attached, check **yes** in the appropriate box. Otherwise, check **no** or **not yet designed**.

i. Liner data

☐ Yes ☐ No ☐ Not yet designed

ii. Leak detection system or groundwater monitoring data

☐ Yes ☐ No ☐ Not yet designed

iii. Groundwater impacts

☐ Yes ☐ No ☐ Not yet designed

NOTE: Item b.iii is required if the bottom of the pond is not above the seasonal high-water table in the shallowest water-bearing zone.

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

For TLAP applications: Items 3.c – 3.e are not required, continue to Item 4.

c. Attach a USGS map or a color copy of original quality and scale which accurately locates and identifies all known water supply wells and monitor wells within 1/2-mile of the impoundments.

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

d. Attach copies of State Water Well Reports (e.g., driller's logs, completion data, etc.), and data on depths to groundwater for all known water supply wells including a description of how the depths to groundwater were obtained.

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

e. Attach information pertaining to the groundwater, soils, geology, pond liner, etc. used to assess the potential for migration of wastes from the impoundments or the potential for contamination of groundwater or surface water.

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

4. OUTFALL/DISPOSAL METHOD INFORMATION (Instructions, Pages 42-43)

Complete the following tables to describe the location and wastewater discharge or disposal operations for each outfall for discharge operations, and for each point of disposal for TLAP operations.

If there are more outfalls/points of disposal at the facility than the spaces provided, copies of pages 6 and/or numbered accordingly (i.e., page 6a, 6b, etc.) may be used to provide information on the additional outfalls.

For TLAP applications: Indicate the disposal method and each individual irrigation area **I**, evaporation pond **E**, or subsurface drainage system **S** by providing the appropriate letter designation for the disposal method followed by a numerical designation for each disposal area in the space provided for **Outfall** number (e.g. **E1** for evaporation pond 1, **I2** for irrigation area No. 2, etc.).

Outfall Latitude and Longitude

Outfall Number	Latitude-decimal degrees	Longitude-decimal degrees
I1	32°16'17.30"N	98°11'16.41"W
I2	32°15'59.05"N	98°11'18.32"W

Outfall Location Description

Outfall Number	Location Description
I1	Located north of Schreiber Foods plant and north of pond #4.
I2	Located north of Schreiber Foods plant and south of pond #4

Description of Sampling Points (if different from Outfall location)

Outfall Number	Description of Sampling Point

Outfall Flow Information – Permitted and Proposed

Outfall Number	Permitted Daily Avg Flow (MGD)	Permitted Daily Max Flow (MGD)	Proposed Daily Avg Flow (MGD)	Proposed Daily Max Flow (MGD)	Anticipated Discharge Date (mm/dd/yy)
I1 & I2	0.132	*	0.192	*	9/1/2023
	*No daily Max Flow				

Outfall Discharge – Method and Measurement

Outfall Number	Pumped Discharge? Y/N	Gravity Discharge? Y/N	Type of Flow Measurement Device Used
I1	Y	N	Flow Meter
I2	Y	N	Flow Meter

Outfall Discharge – Flow Characteristics

Outfall Number	Intermittent Discharge? Y/N	Continuous Discharge? Y/N	Seasonal Discharge? Y/N	Discharge Duration (hrs/day)	Discharge Duration (days/mo)	Discharge Duration (mo/yr)
I1	Y	Y	Y	24	30	12
I2	Y	Y	Y	24	30	12

Wastestream Contributions

Outfall No.: T-1

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Process	0.189800	98.85
Sanitary	0.0022	1.15

Outfall No.: C-2 & C-3

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Aeration Basins	0.192	100

Outfall No.: S-4

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Storage	0.192	100

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

5. BLOWDOWN AND ONCE-THROUGH COOLING WATER DISCHARGES (Instructions, Page 44)

- a. Does the facility use/propose to use any cooling towers which discharge blowdown or other wastestreams to the outfall(s)?

☒ Yes ☐ No

NOTE: If the facility uses or plans to use cooling towers, Item 12 **is required**.

- b. Does the facility use or plan to use any boilers that discharge blowdown or other wastestreams to the outfall(s)?

☒ Yes ☐ No

- c. Does or will the facility discharge once-through cooling water to the outfall(s)?

☐ Yes ☒ No

NOTE: If the facility uses or plans to use once-through cooling water, Item 12 **is required**.

- d. If **yes** to Items 5.a, 5.b, **or** 5.c, attach the SDS with the following information for each chemical additive.

- Manufacturers Product Identification Number
- Product use (e.g., biocide, fungicide, corrosion inhibitor, etc.)
- Chemical composition including CASRN for each ingredient
- Classify product as non-persistent, persistent, or bioaccumulative
- Product or active ingredient half-life
- Frequency of product use (e.g., 2 hours/day once every two weeks)
- Product toxicity data specific to fish and aquatic invertebrate organisms
- Concentration of whole product or active ingredient, as appropriate, in wastestream.

Attach a summary of this information in addition to the submittal of the SDS for each specific wastestream and the associated chemical additives and specify which outfalls are affected.

Attachment: 4

- e. Cooling Towers and Boilers

If **yes** to either Item 5.a **or** 5.b, complete the following table.

Cooling Towers and Boilers

Type of Unit	Number of Units	Dly Avg Blowdown (gallons/day)	Dly Max Blowdown (gallons/day)
Cooling Towers	4	3,000	5,200
Boilers	2	212	300

6. STORMWATER MANAGEMENT (Instructions, Page 44)

Are there any existing/proposed outfalls which discharge stormwater associated with industrial activities, as defined at 40 CFR § 122.26(b)(14), commingled with any other wastestream?

☐ Yes ☒ No

If **yes**, briefly describe the industrial processes and activities that occur outdoors or in some manner which may result in exposure of the activities or materials to stormwater: [Click to enter text.](#)

7. DOMESTIC SEWAGE, SEWAGE SLUDGE, AND SEPTAGE MANAGEMENT AND DISPOSAL (Instructions, Page 45)

Domestic Sewage - Waste and wastewater from humans or household operations that is discharged to a wastewater collection system or otherwise enters a treatment works.

- a. Check the box next to the appropriate method of domestic sewage and domestic sewage sludge treatment or disposal. Complete Worksheet 5.0 or Item 7.b if directed to do so.
- ☐ Domestic sewage is routed (i.e., connected to or transported to) to a WWTP permitted to receive domestic sewage for treatment, disposal, or both. **Complete Item 7.b.**
 - ☐ Domestic sewage disposed of by an on-site septic tank and drainfield system. **Complete Item 7.b.**
 - ☒ Domestic and industrial treatment sludge **ARE commingled** prior to use or disposal.
 - ☐ Industrial wastewater and domestic sewage are treated separately, and the respective sludge **IS NOT commingled** prior to sludge use or disposal. **Complete Worksheet 5.0.**
 - ☐ Facility is a POTW. **Complete Worksheet 5.0.**
 - ☐ Domestic sewage is not generated on-site.
 - ☐ Other (e.g., portable toilets), specify and **Complete Item 7.b:** [Click to enter text.](#)
- b. Provide the name and TCEQ, NPDES, or TPDES Permit No. of the waste-disposal facility which receives the domestic sewage/septage. If hauled by motorized vehicle, provide the name and TCEQ Registration No. of the hauler.

Domestic Sewage Plant/Hauler Name

Plant/Hauler Name	Permit/Registration No.
Cowboy Septic	21102

8. IMPROVEMENTS OR COMPLIANCE/ENFORCEMENT REQUIREMENTS (Instructions, Page 45)

- a. Is the permittee currently required to meet any implementation schedule for compliance or enforcement?
- ☐ Yes ☒ No
- b. Has the permittee completed or planned for any improvements or construction projects?
- ☐ Yes ☒ No
- c. If **yes** to either 8.a or 8.b, provide a brief summary of the requirements and a status update: [Click to enter text.](#)

9. TOXICITY TESTING (Instructions, Page 45)

Have any biological tests for acute or chronic toxicity been made on any of the discharges or on a receiving water in relation to the discharge within the last three years?

☐ Yes ☒ No

If **yes**, identify the tests and describe their purposes: [Click to enter text.](#)

Additionally, attach a copy of all tests performed which **have not** been submitted to the TCEQ or EPA.

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

10. OFF-SITE/THIRD PARTY WASTES (Instructions, Page 45)

- a. Does or will the facility receive wastes from off-site sources for treatment at the facility, disposal on-site via land application, or discharge via a permitted outfall?

☐ Yes ☒ No

If **yes**, provide responses to Items 10.b through 10.d below.

If **no**, proceed to Item 11.

- b. Attach the following information to the application:

- List of wastes received (including volumes, characterization, and capability with on-site wastes).
- Identify the sources of wastes received (including the legal name and addresses of the generators).
- Description of the relationship of waste source(s) with the facility's activities.

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

- c. Is or will wastewater from another TCEQ, NPDES, or TPDES permitted facility commingled with this facility's wastewater after final treatment and prior to discharge via the final outfall/point of disposal?

☐ Yes ☐ No

If **yes**, provide the name, address, and TCEQ, NPDES, or TPDES permit number of the contributing facility and a copy of any agreements or contracts relating to this activity.

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

- d. Is this facility a POTW that accepts/will accept process wastewater from any SIU and has/is required to have an approved pretreatment program under the NPDES/TPDES program?

☐ Yes ☐ No

If **yes**, **Worksheet 6.o** of this application **is required**.

11. RADIOACTIVE MATERIALS (Instructions, Pages 46)

- a. Are/will radioactive materials be mined, used, stored, or processed at this facility?

☐ Yes ☒ No

If **yes**, use the following table to provide the results of one analysis of the effluent for all radioactive materials that may be present. Provide results in pCi/L.

Radioactive Materials Mined, Used, Stored, or Processed

Radioactive Material	Concentration (pCi/L)

- b. Does the applicant or anyone at the facility have any knowledge or reason to believe that radioactive materials may be present in the discharge, including naturally occurring radioactive materials in the source waters or on the facility property?

☐ Yes ☒ No

If **yes**, use the following table to provide the results of one analysis of the effluent for all radioactive materials that may be present. Provide results in pCi/L. Do not include information provided in response to Item 11.a.

Radioactive Materials Present in the Discharge

Radioactive Material	Concentration (pCi/L)

12. COOLING WATER (Instructions, Pages 46-47)

- a. Does the facility use or propose to use water for cooling purposes?

☐ Yes ☒ No

If **no**, stop here. If **yes**, complete Items 12.b thru 12.f.

- b. Cooling water is/will be obtained from a groundwater source (e.g., on-site well).

☐ Yes ☐ No

If **yes**, stop here. If **no**, continue.

- c. Cooling Water Supplier

- i. Provide the name of the owner(s) and operator(s) for the CWIS that supplies or will supply water for cooling purposes to the facility.

Cooling Water Intake Structure(s) Owner(s) and Operator(s)

CWIS ID				
Owner				
Operator				

- ii. Cooling water is/will be obtained from a Public Water Supplier (PWS)

☐ Yes ☐ No

If **no**, continue. If **yes**, provide the PWS Registration No. and stop here: PWS No. [Click to enter text.](#)

- iii. Cooling water is/will be obtained from a reclaimed water source?

☐ Yes ☐ No

If **no**, continue. If **yes**, provide the Reuse Authorization No. and stop here: [Click to enter text.](#)

NOTE: Item 13 is required only for existing permitted facilities.

13. PERMIT CHANGE REQUESTS (Instructions, Pages 49-50)

- a. Is the facility requesting a **major amendment** of an existing permit?

☒ Yes ☐ No

If **yes**, list each request individually and provide the following information: 1) detailed information regarding the scope of each request and 2) a justification for each request. Attach any supplemental information or additional data to support each request.

Increasing the application acres from 50 acres to 61 acres, increasing the average daily flow from 132,000 gallons per day to 192,000 gallons per day, amending the organic loading rate from lbs./acre/year to lbs./acre/day measured as biochemical oxygen demand (5-day) and amending the nitrogen loading rate from lbs./acre/year to lbs./acre/year measured as total nitrogen.

- b. Is the facility requesting any **minor amendments** to the permit?

☐ Yes ☒ No

If **yes**, list and discuss the requested changes.

Click to enter text.

- c. Is the facility requesting any **minor modifications** to the permit?

☐ Yes ☒ No

If **yes**, list and discuss the requested changes.

Click to enter text.

WORKSHEET 3.0

LAND APPLICATION OF EFFLUENT

This worksheet is required for all applications for a permit to dispose of wastewater by land application.

1. TYPE OF DISPOSAL SYSTEM (Instructions, Page 70)

Check the box next to the type of land disposal requested by this application:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Irrigation | <input type="checkbox"/> Subsurface application |
| <input type="checkbox"/> Evaporation | <input type="checkbox"/> Subsurface soils absorption |
| <input type="checkbox"/> Evapotranspiration beds | <input type="checkbox"/> Surface application |
| <input type="checkbox"/> Drip irrigation system | <input type="checkbox"/> Other, specify: Click to enter text. |

2. LAND APPLICATION AREA (Instructions, Page 70)

Land Application Area Information

Effluent Application (gallons/day)	Irrigation Acreage (acres)	Describe land use & indicate type(s) of crop(s)	Public Access? (Y/N)
192,000	61	Coastal Bermudagrass is the primary crop and ryegrass as the cool weather crop.	N
192,000	61	Soybean Hay is the primary crop, and the small grains is the cool weather crop	N
192,000	61	Forage Sorghum is the primary crop, and the small grains is the cool weather crop	N

3. ANNUAL CROPPING PLAN (Instructions, Page 70)

Attach the required cropping plan that includes each of the following:

- Cool and warm season plant species
- Breakdown of acreage and percent of total acreage for each crop
- Crop growing season
- Harvesting method/number of harvests
- Minimum/maximum harvest height
- Crop yield goals
- Soils map
- Nitrogen requirements per crop
- Additional fertilizer requirements

4. WELL AND MAP INFORMATION (Instructions, Page 71)

a. Check each box to confirm the required information is shown and labeled on the attached USGS map:

- ☒ The exact boundaries of the land application area
- ☒ On-site buildings
- ☒ Waste-disposal or treatment facilities
- ☒ Effluent storage and tailwater control facilities
- ☒ Buffer zones
- ☒ All surface waters in the state onsite and within 500 feet of the property boundaries
- ☒ All water wells within 1/2-mile of the disposal site, wastewater ponds, or property boundaries
- ☐ All springs and seeps onsite and within 500 feet of the property boundaries

Attachment: 6

b. List and cross reference all water wells located on or within 500 feet of the disposal site, wastewater ponds, or property boundaries in the following table. Attach additional pages as necessary to include all of the wells.

Well and Map Information Table

Well ID	Well Use	Producing? Y/N/U	Open, cased, capped, or plugged?	Proposed Best Management Practice
2 (State Well #3147802)	Public	Y	Cased	500-ft Buffer
4 (District ID #27625)	Domestic	Y	Cased	500-ft Buffer
7 (Plugging Report #28143)	Domestic	N	Plugged	N/A
8 (State Well #605326)	Public	Y	Cased	500-ft Buffer
14 (State Well #598116)	Domestic	Y	Cased	500-ft Buffer
17 (State Well #598115)	Domestic	Y	Cased	500-ft Buffer
21 (District ID #6371)	Domestic	Y	Cased	500-ft Buffer
35 (District ID #125643)	Public	Y	Cased	500-ft Buffer

Attachment: 6

c. Groundwater monitoring wells or lysimeters are/will be installed around the land application site or wastewater ponds.

☒ Yes ☐ No

If **yes**, provide the existing/proposed location of the monitoring wells or lysimeters on the site map attached for Item 4.a. Additionally, attach information on the depth of the wells or lysimeters, sampling schedule, and monitoring parameters for TCEQ review, possible modification, and approval.

Attachment: 6

- d. Attach a short groundwater technical report using *30 TAC § 309.20(a)(4)* as guidance.

Attachment: 6

5. SOIL MAP AND SOIL INFORMATION (Instructions, Page 72)

Check each box to confirm that the following information is attached:

- a. ☒ USDA NRCS Soil Survey Map depicting the area to be used for land application with the locations identified by fields and crops
- b. ☒ Breakdown of acreage and percent of total acreage for each soil type
- c. ☒ Copies of laboratory soil analyses

Attachment: 7

6. LABORATORY ACCREDITATION CERTIFICATION (Instructions, Page 73)

Effective July 1, 2008, all laboratory tests performed must meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification* with the following general exemptions:

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

Review *30 TAC Chapter 25* for specific requirements. The following certification statement shall be signed and submitted with every application. See Instructions, Page 32, for a list of approved signatories.

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



(Signature)

7. EFFLUENT MONITORING DATA (Instructions, Page 73)

Completion of Table 14 **is required** for all **renewal** and **major amendment** applications. Complete the table with monitoring data for the previous two years for all parameters regulated in the current permit. An additional table has been provided with blank headers for parameters regulated in the current permit which are not listed in Table 14.

Table 14 for Site No.: 1

Samples are (check one): ☐ Composites ☒ Grabs

Date (mo/yr)	Daily Avg Flow (gpd)	BOD ₅ (mg/L)	TSS (mg/L)	Nitrogen (mg/L)	Conductivity (mmhos/cm)	Total acres irrigated	Hydraulic Application rate (acre-feet/month)
August 2022	106,500	21.1	N/A	26.2	N/A	50	5.76
July 2022	105,077	31.7	N/A	34.4	N/A	50	7.22
June 2022	106,607	33.6	N/A	38.1	N/A	50	8.80
May 2022	100,872	25.6	N/A	29.4	N/A	50	1.63
April 2022	99,889	45.1	134	20.2	N/A	50	8.84
March 2022	96,694	48.2	N/A	24.2	N/A	50	9.18
February 2022	94,359	49.7	N/A	12.9	N/A	50	4.79
January 2022	98,726	43.6	N/A	14.8	N/A	50	8.45
December 2021	96,242	41.3	N/A	13.6	N/A	50	7.21
November 2021	94,233	33.2	N/A	16.1	N/A	50	8.55
October 2021	86,655	33.3	N/A	24.8	N/A	50	5.17
September 2021	102,274	32.2	63.9	33.9	N/A	50	17.94
August 2021	101,472	34.7	N/A	34.3	N/A	50	6.08
July 2021	94,852	29.8	N/A	28.4	N/A	50	6.43
June 2021	88,043	23.8	N/A	28.6	N/A	50	6.82
May 2021	80,248	42.1	N/A	15.7	N/A	50	5.30
April 2021	81,008	42.2	51.8	14.4	N/A	50	7.90
March 2021	65,222	34.4	N/A	15.7	N/A	50	10.81
February 2021	100,240	32.6	N/A	15.3	N/A	50	1.51
January 2021	98,285	34.3	N/A	16.2	N/A	50	3.93
December 2020	86,615	39.8	N/A	16.4	N/A	50	2.83
November 2020	87,682	18.3	N/A	10.5	N/A	50	0.76

Date (mo/yr)	Daily Avg Flow (gpd)	BOD ₅ (mg/L)	TSS (mg/L)	Nitrogen (mg/L)	Conductivity (mmhos/cm)	Total acres irrigated	Hydraulic Application rate (acre-feet/month)
October 2020	83,504	20.5	117	13.2	N/A	50	4.61
September 2020	83,955	22.9	N/A	32.7	N/A	50	7.89
August 2020	83,040	17.8	N/A	13.8	N/A	50	6.68

Attach an explanation of all persistent excursions to permitted parameters and corrective actions taken.

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

Use this table to provide effluent analysis for parameters regulated in the current permit which are not listed in Table 14.

Additional Parameter Effluent Analysis

Date (mo/yr)	Chloride (mg/L)	Sodium (mg/L)	Total Phosphorus (mg/L)	TDS (mg/L)	Oil & Grease (mg/L)	pH (SU)	
August 2022	N/A	N/A	N/A	N/A	0.0	8.20	
July 2022	N/A	N/A	N/A	N/A	0.0	8.2	
June 2022	N/A	N/A	N/A	N/A	5.7	8.3	
May 2022	N/A	N/A	N/A	N/A	0.0	8.28	
April 2022	999	813	15.2	2910	6.9	8.24	
March 2022	N/A	N/A	N/A	N/A	7.1	8.39	
February 2022	N/A	N/A	N/A	N/A	0.0	8.38	
January 2022	N/A	N/A	N/A	N/A	1.3	8.38	
December 2021	N/A	N/A	N/A	N/A	3.2	8.08	
November 2021	N/A	N/A	N/A	N/A	0.0	8.49	
October 2021	N/A	N/A	N/A	N/A	0.0	N/A	
September 2021	1500	949	4.9	3,500	0.0	8.46	
August 2021	N/A	N/A	N/A	N/A	0.0	8.29	
July 2021	N/A	N/A	N/A	N/A	0.0	8.37	
June 2021	N/A	N/A	N/A	N/A	0.0	8.24	
May 2021	N/A	N/A	N/A	N/A	0.0	8.28	
April 2021	N/A	842	1.3	2,540	0.0	8.44	
March 2021	N/A	N/A	N/A	N/A	0.0	8.50	
February 2021	N/A	N/A	N/A	N/A	0.0	8.64	
January 2021	N/A	N/A	N/A	N/A	1.68	8.64	
December 2020	N/A	N/A	N/A	N/A	0.0	8.62	
November 2020	N/A	N/A	N/A	N/A	0.0	8.57	
October 2020	N/A	968	3.8	2,480	0.0	8.16	
September 2020	N/A	N/A	N/A	N/A	0.0	8.16	
August 2020	N/A	N/A	N/A	N/A	0.0	8.21	

Attach an explanation of all persistent excursions to permitted parameters and corrective actions taken.

Attachment: Click to enter text.

8. POLLUTANT ANALYSIS (Instructions, Page 73)

- Provide the date range of all sampling events conducted to obtain the analytical data submitted with this application (e.g., 05/01/2018-05/30/2018): 10/27/2022, 11/2/2022, 12/1/2022, 12/6/2022
- ☒ Check the box to confirm all samples were collected no more than 12 months prior to the date of application submittal.
- Completion of Tables 15 and 16 **is required** for all applications for the authorization of land application.

Table 15 for Site No.: 1; Samples are (check one):

☐ Composites ☒ Grabs

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
BOD (5-day)	ND	31.6	31	25.6
CBOD (5-day)	ND	26.1	46.6	65.1
Chemical oxygen demand	140	669	672	713
Total organic carbon	52.5	67.2	117	64.9
Ammonia nitrogen	3.73	3.29	8.02	5.05
Total suspended solids	730	1280	750	753
Nitrate nitrogen	ND	1.94	0.587	0.578
Total organic nitrogen	9.57	26.4	8.38	7.85
Total phosphorus	10.4	9.61	12.1	12.0
Oil and grease	7.4	10.1	11.2	6.02
Total residual chlorine	0.921	0.930	ND	0.823
Total dissolved solids	4020	3810	3780	3000
Sulfate	191	181	131	123
Chloride	1280	1320	1050	1050
Fluoride	ND	ND	ND	ND
Fecal Coliform (cfu/100 mL)	1900	800	300	500
Specific conductance (mmhos/cm)	5410	5560	5080	4950
pH (standard units; min/max)	8.68	9.04	8.52	8.4
Soluble sodium	1110	1000	980	1020
Soluble calcium	63.6	55.4	59.3	61.9
Soluble magnesium	42.9	37.5	37.9	38.3
SAR (unitless)	22.6	23.4	20.2	21.6

Table 16: for Site No.: 1; Samples are (check one):

☐ Composites ☒ Grabs

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (µg/L)
Aluminum, total	3.80	4.18	4.03	4.31	2.5
Antimony, total	ND	ND	ND	ND	5
Arsenic, total	ND	ND	ND	ND	0.5
Barium, total	0.0775	0.0785	0.0847	0.0835	3
Beryllium, total	ND	ND	ND	ND	0.5
Boron, total	ND	ND	ND	ND	20
Cadmium, total	ND	ND	ND	ND	1
Chromium, total	ND	ND	ND	ND	3

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (µg/L)
Chromium, hexavalent	ND	ND	ND	ND	3
Chromium, trivalent	ND	0.00350	ND	ND	N/A
Copper, total	ND	ND	ND	ND	2
Cyanide	ND	ND	ND	ND	2/10
Lead, total	ND	ND	ND	ND	0.5
Mercury, total	ND	ND	ND	ND	0.005/0.0005
Nickel, total	ND	ND	0.0146	0.0115	2
Selenium, total	ND	ND	ND	ND	5
Silver, total	ND	ND	ND	ND	0.5
Thallium, total	ND	ND	ND	ND	0.5
Zinc, total	0.117	0.119	0.173	0.154	5.0

WORKSHEET 3.1 SURFACE LAND APPLICATION AND EVAPORATION

This worksheet **is required** for all applications for a permit to dispose of wastewater by surface land application or evaporation.

1. EDWARDS AQUIFER (Instructions, Page 74)

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

☐ Yes ☒ No

If **no**, proceed to Item 2. If **yes**, complete Items 1.b and 1.c.

b. Check the box next to the subchapter applicable to the facility.

☐ *30 TAC Chapter 213, Subchapter A*

☐ *30 TAC Chapter 213, Subchapter B*

c. If *30 TAC Chapter 213, Subchapter A* applies, attach **either**: 1) a Geologic Assessment (if conducted in accordance with *30 TAC § 213.5*) **or** 2) a report that contains the following information:

- A description of the surface geological units within the proposed land application site and wastewater pond area.
- The location and extent of any sensitive recharge features in the land application site and wastewater pond area
- A list of any proposed BMPs to protect the recharge features.

Attachment: Click to enter text.

2. SURFACE SPRAY/IRRIGATION (Instructions, Pages 74-75)

a. Provide the following information on the irrigation operations:

Area under irrigation (acres): 61

Design application rate (acre-ft/acre/yr): 3.53

Design application frequency (hours/day): 24

Design application frequency (days/week): 7

Design total nitrogen loading rate (lbs nitrogen/acre/year): 340

Average slope of the application area (percent): 2.1

Maximum slope of the application area (percent): 3.0

Irrigation efficiency (percent): 85

Effluent conductivity (mmhos/cm): 5410

Soil conductivity (mmhos/cm): see attachment 7

Curve number: 71

Describe the application method and equipment: Center Pivot Systems

- b. Attach a detailed engineering report which includes a water balance, storage volume calculations, and a nitrogen balance.

Attachment: 9

3. EVAPORATION PONDS (Instructions, Page 75)

- a. Daily average effluent flow into ponds: N/A gallons per day
- b. Attach a separate engineering report of evaporation calculations for average long-term and worst-case critical conditions.

Attachment: Click to enter text.

4. EVAPOTRANSPIRATION BEDS (Instructions, Page 75)

- a. Provide the following information on the evapotranspiration beds:
- Number of beds: N/A
- Area of bed(s) (acres): Click to enter text.
- Depth of bed(s) (feet): Click to enter text.
- Void ratio of soil in the beds: Click to enter text.
- Storage volume within the beds (include units): Click to enter text.
- Description of any lining to protect groundwater: Click to enter text.
- b. Attach a certification by a licensed Texas professional engineer that the liner meets TCEQ requirements.

Attachment: Click to enter text.

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

Attachment: Click to enter text.

5. OVERLAND FLOW (Instructions, Page 75)

- a. Provide the following information on the overland flow:
- Area used for application (acres): N/A
- Slopes for application area (percent): Click to enter text.
- Design application rate (gpm/foot of slope width): Click to enter text.
- Slope length (feet): Click to enter text.

Design BOD₅ loading rate (lbs BOD₅/acre/day): Click to enter text

Design application frequency (hours/day): Click to enter text

Design application frequency (days/week): Click to enter text

- b. Attach a separate engineering report with the method of application and design requirements according to *30 TAC § 217.212*.

Attachment: Click to enter text.

ATTACHMENT A – APPLICATION FEE

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

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

Transaction Information

Trace Number: 582EA000512353
Date: 11/07/2022 12:28 PM
Payment Method: CC - Authorization 000005031G
ePay Actor: COREY MULLIN
Actor Email: cmullin@enviroag.com
IP: 108.161.11.143
TCEQ Amount: \$350.00
Texas.gov Price: \$358.13*

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

Payment Contact Information

Name: COREY MULLIN
Company: ENVIRO-AG ENGINEERING
Address: 9855 FM 847, DUBLIN, TX 76446
Phone: 254-485-3892

Cart Items

Click on the voucher number to see the voucher details.

Voucher	Fee Description	AR Number	Amount
600355	WW PERMIT - MINOR FACILITY NOT SUBJECT TO 40 CFR 400-471 - MAJOR AMENDMENT		\$300.00
600356	30 TAC 305.53B WQ NOTIFICATION FEE		\$50.00
TCEQ Amount:			\$350.00

[ePay Again](#)
[Exit ePay](#)

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

ATTACHMENT B – CORE DATA FORM



TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
<input type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)		<input checked="" type="checkbox"/> Other Major Amendment with Permit Renewal
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 602630972		RN 102780665

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)		01/11/2023	
<input type="checkbox"/> New Customer		<input type="checkbox"/> Update to Customer Information		<input type="checkbox"/> Change in Regulated Entity Ownership	
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)					
The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).					
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John) <i>If new Customer, enter previous Customer below:</i>					
Schreiber Foods, Inc.					
7. TX SOS/CPA Filing Number		8. TX State Tax ID (11 digits)		9. Federal Tax ID (9 digits)	
0005147706		30005825481		10. DUNS Number (if applicable)	
11. Type of Customer:		<input checked="" type="checkbox"/> Corporation		<input type="checkbox"/> Individual	
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Other		<input type="checkbox"/> Sole Proprietorship		Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited	
12. Number of Employees		<input type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input checked="" type="checkbox"/> 501 and higher		13. Independently Owned and Operated?	
				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following					
<input type="checkbox"/> Owner		<input type="checkbox"/> Operator		<input checked="" type="checkbox"/> Owner & Operator	
<input type="checkbox"/> Occupational Licensee		<input type="checkbox"/> Responsible Party		<input type="checkbox"/> Voluntary Cleanup Applicant <input type="checkbox"/> Other:	
15. Mailing Address:		P.O. Box 19010			
City		Green Bay		State WI	
ZIP		54307		ZIP + 4 9010	
16. Country Mailing Information (if outside USA)				17. E-Mail Address (if applicable)	
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)	
(920) 455-6109				(920) 455-2200	

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected below this form should be accompanied by a permit application)	
<input type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information	
The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC).	
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)	

Schreiber Foods							
23. Street Address of the Regulated Entity: (No PO Boxes)	923 CR 176						
	City	Stephenville	State	TX	ZIP	76401	ZIP + 4
24. County	Erath						

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:								
26. Nearest City					State		Nearest ZIP Code	
Stephenville					TX		76401	
27. Latitude (N) In Decimal:			28. Longitude (W) In Decimal:					
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds			
32	15	46.07	98	11	18.21			
29. Primary SIC Code (4 digits)		30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)		
2022		2023		311513		31514		
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)								
Manufacture/Processing of Cheese Products								
34. Mailing Address:		923 CR 176						
		City	Stephenville	State	TX	ZIP	76401	ZIP + 4
35. E-Mail Address:		Paul.Bytheway@schreiberfoods.com						
36. Telephone Number			37. Extension or Code			38. Fax Number (if applicable)		
(920) 455-6109						(920) 455-2200		

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

<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Title V Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Voluntary Cleanup	<input checked="" type="checkbox"/> Waste Water	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:
WQ0003074000				

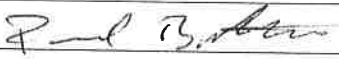
SECTION IV: Preparer Information

40. Name:	Corey Mullin		41. Title:	Consultant
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
(254) 485-3892		(254) 965-8000	cmullin@enviroag.com	

SECTION V: Authorized Signature

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

Company:	Schreiber Foods, Inc.	Job Title:	Plant Manager
----------	-----------------------	------------	---------------

Name (In Print):	Paul Batkins	Phone:	(254) 552- 7717
Signature:		Date:	2/3/23

ATTACHMENT C – 7.5-MINUTE USGS MAPS

C.1 Stephenville and Knob Hill, Texas Quadrangles

The 7.5-minute quadrangle maps show the plant site, irrigation sites and a 1-mile radius.

ATTACHMENT D – ADJACENT LANDOWNERS

D.1 Adjacent Landowners List

Table D.1 lists the adjacent landowners names and addresses corresponding to the map in Figure D.1.

D.2 Adjacent Landowners Map

Figure D.1, Adjacent Landowners Map, shows the properties adjacent to the facility property boundary, as obtained from the Erath County Appraisal District (CAD).

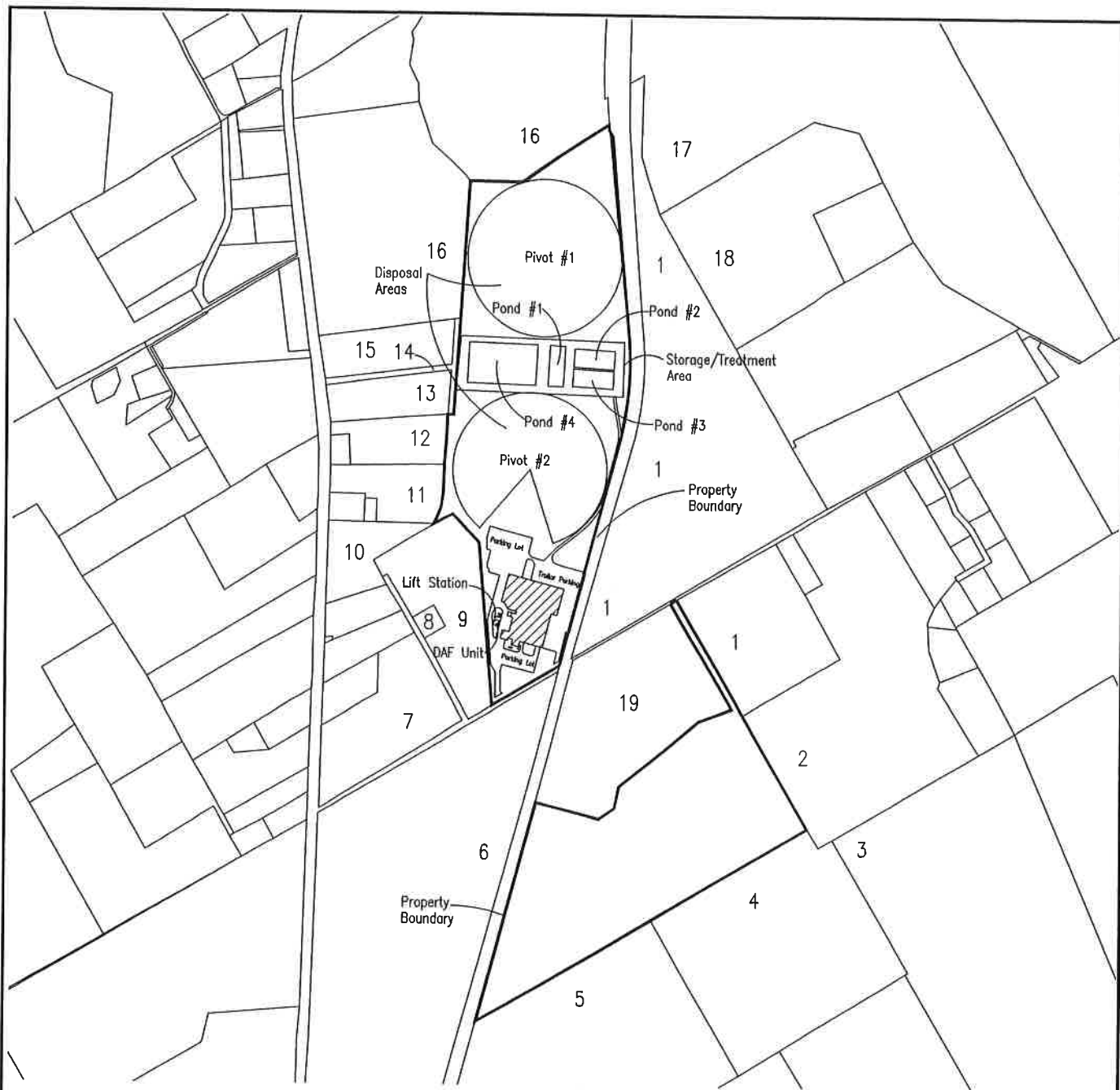
TABLE D.1
ADJACENT LANDOWNERS LIST

Name: <u>Nell Gordon Properties LLC, Marcia Series</u> Number on Map 1 Address: <u>Marcia Lynn Griffin</u> Address: <u>114 Byron Nelson St.</u> Address: <u>Stephenville, TX 76401</u>	Name: <u>Jacob & Kayla Vanden Berge</u> Number on Map 2 Address: <u>2345 CR 177</u> Address: <u>Stephenville, TX 76401</u>
Name: <u>Jack E & Ellen Vanden Berge</u> Number on Map 3 Address: <u>404 Morgan Mill Rd</u> Address: <u>Stephenville, TX 76401</u>	Name: <u>Rose Tina Reese</u> Number on Map 4 Address: <u>9600 Divot Dr.</u> Address: <u>Granbury, TX 76049</u>
Name: <u>Curtis Bolling Allen Trust & Richard Bolling</u> Number on Map 5 Address: <u>Gary Bolling Trustee</u> Address: <u>1530 Bates</u> Address: <u>Stephenville, TX 76401</u>	Name: <u>Board of Regents of the TX A&M University System</u> Number on Map 6 Address: <u>ATTN: System Real Estate</u> Address: <u>301 Tarrow Street 6th Floor</u> Address: <u>College Station, TX 77840-7896</u>
Name: <u>Bachus Brothers Trust</u> Number on Map 7 Address: <u>PO Box 552</u> Address: <u>Stephenville, TX 76401</u>	Name: <u>Brazos Electric Power Coop Inc.</u> Number on Map 8 Address: <u>PO Box 2585</u> Address: <u>Waco, TX 76702-2585</u>
Name: <u>Top Dog Realty, LLC</u> Number on Map 9 Address: <u>PO Box 590</u> Address: <u>Cabool, MO 65689</u>	Name: <u>Zeb R & Sharon M Cummins</u> Number on Map 10 Address: <u>176 Brock Springs Ln.</u> Address: <u>Weatherford, TX 76087-4073</u>
Name: <u>Poukhovski Dmitri & Angelique Denneman</u> Number on Map 11 Address: <u>4250 N US Hwy 281</u> Address: <u>Stephenville, TX 76401-9272</u>	Name: <u>Rodney W Rutledge</u> Number on Map 12 Address: <u>4324 N US Hwy 281</u> Address: <u>Stephenville, TX 76401-9786</u>
Name: <u>Sowle Tyler & Kaitlin Sowle</u> Number on Map 13 Address: <u>4552 N US Hwy 281</u> Address: <u>Stephenville, TX 76401</u>	Name: <u>Collier & Son Inc</u> Number on Map 14 Address: <u>2240 Overhill Rd.</u> Address: <u>Stephenville, TX 76401</u>
Name: <u>Manuel & Tandi Remy</u> Number on Map 15 Address: <u>4630 N US Hwy 281</u> Address: <u>Stephenville, TX 76401</u>	Name: <u>Lawrence Dean & Gloria Taylor</u> Number on Map 16 Address: <u>PO Box 137</u> Address: <u>Stephenville, TX 76401-0000</u>
Name: <u>Frazier Paradox Ranch, LLC</u> Number on Map 17 Address: <u>3493 CR 176</u> Address: <u>Stephenville, TX 76401</u>	Name: <u>John R & Sharon A Nicholson</u> Number on Map 18 Address: <u>1509 Southwood Blvd</u> Address: <u>Arlington, TX 76013-5005</u>
Name: <u>CDS STXDC 2021 LLC</u> Number on Map 19 Address: <u>125 Camelot Dr</u> Address: <u>Fond Du Lac, WI 54935</u>	

Please identify where you obtained the landowner information:

Erath County Appraisal District; October 2022

Facility Name: Schreiber Foods, Inc.



Legend:

 Denotes Production Area

Map Revised 10/18/2022



SCALE: 1" = 1320'

Schreiber Foods, Inc.
Stephenville, TX
Erath County

Adjacent Landowner Map
Figure D.1
Page 6



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

ATTACHMENT E – PHOTOGRAPHS

E.1 Photograph Location Map

Figure E.1, Photograph Location Map, shows the location of each photograph and the direction the camera was facing when the photograph was taken.

E.2 Photographs

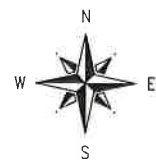
Figures E.2a-b, Photographs, are original photographs of the effluent disposal sites and production area.



Map Generated 11/8/2022

Legend:

● Denotes Photograph Location



SCALE: 1" = 800'

Source: USDA-NRCS. Geospatial Data Gateway. Available at: <http://datagateway.nrcs.usda.gov/>. Digital Raster Graphic County Mosaic by NRCS - Accessed November 2017.

Schreiber Foods, Inc.
Stephenville, TX
Erath County

Photograph Location Map
Figure E.1
Page 8



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



1



2



3



4

Schreiber Foods, Inc.
Stephenville, Texas
Erath County

Photographs
Figure E.2a
Page 9



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



5



6

Schreiber Foods, Inc.
Stephenville, Texas
Erath County

Photographs
Figure E.2b
Page 10



Enviro-Ag Engineering, Inc.
ENGINEERING CONSULTANTS
3404 Airway Boulevard
AMARILLO, TEXAS 79119
TEL (806) 353-6123 FAX (806) 353-4132

ATTACHMENT 1 – FACILITY/SITE INFORMATION AND MAPS

1.1 Process Flow Diagram

Figure 1.1, Process Flow Diagram, provides an overall schematic of the plant processes at the site.

1.2 Vicinity Map

Figure 1.2, Vicinity Map, is a general highway map generated in AutoCAD using Tiger Primary and Secondary roads data from geospatial Data Gateway at <http://datagateway.nrcs.usda.gov/> (retrieved 2022). The location of the facility is depicted on the map.

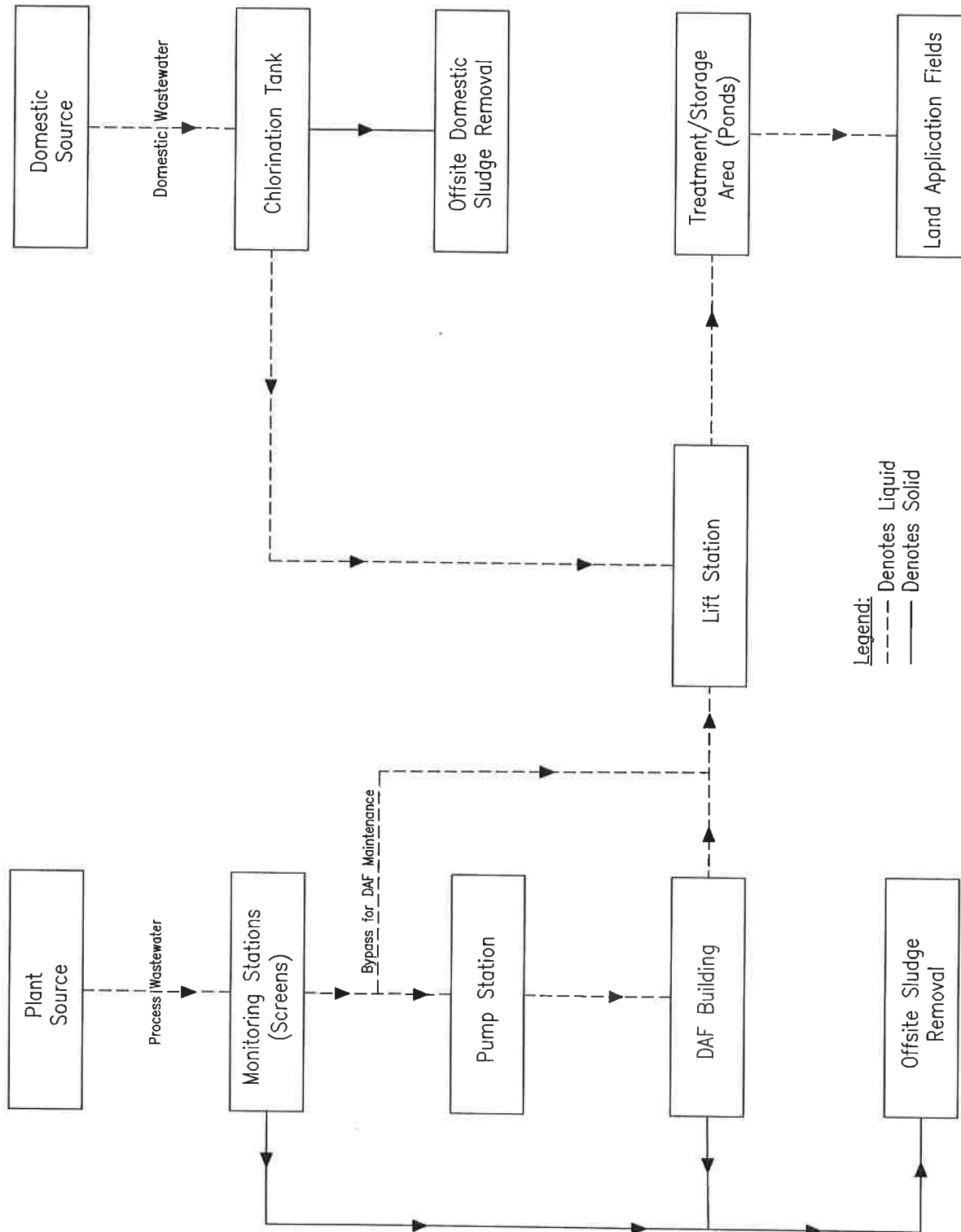
1.3 7.5 Minute USGS Map

Figure 1.3, entitled 7.5 Minute USGS Map, is a seamless, high-quality copy of the 7.5-Minute USGS quadrangle map (Stephenville and Knob Hill, TX quadrangle) that shows the boundary of the land owned, operated, or controlled by the facility and used as part of the application; and all springs, lakes, or ponds located on-site and within 1 mile of the property boundary.

1.4 Site Map

Figure 1.4, Site Map, is a scaled drawing of the entire property to be permitted showing the locations of the following:

- Production Area
- Storage/Treatment Area
- Waste Disposal Areas



00058

Schreiber Foods
Stephenville, TX
Erath County

Process Flow Diagram
Figure 1.1
Page 12

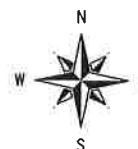



Enviro-Ag Engineering, Inc.
ENGINEERING CONSULTANTS
3404 Airway Boulevard
AMARILLO, TEXAS 79118
TEL (806) 353-6123 FAX (806) 353-4132



Legend:
 Denotes Facility

Map Generated 10/18/2022



2 miles 0 2 miles 4 miles

 SCALE: 1" = 4 miles

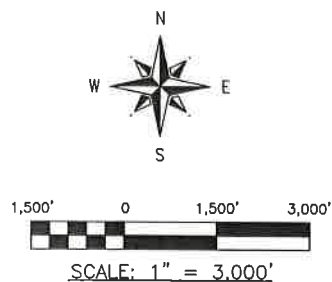
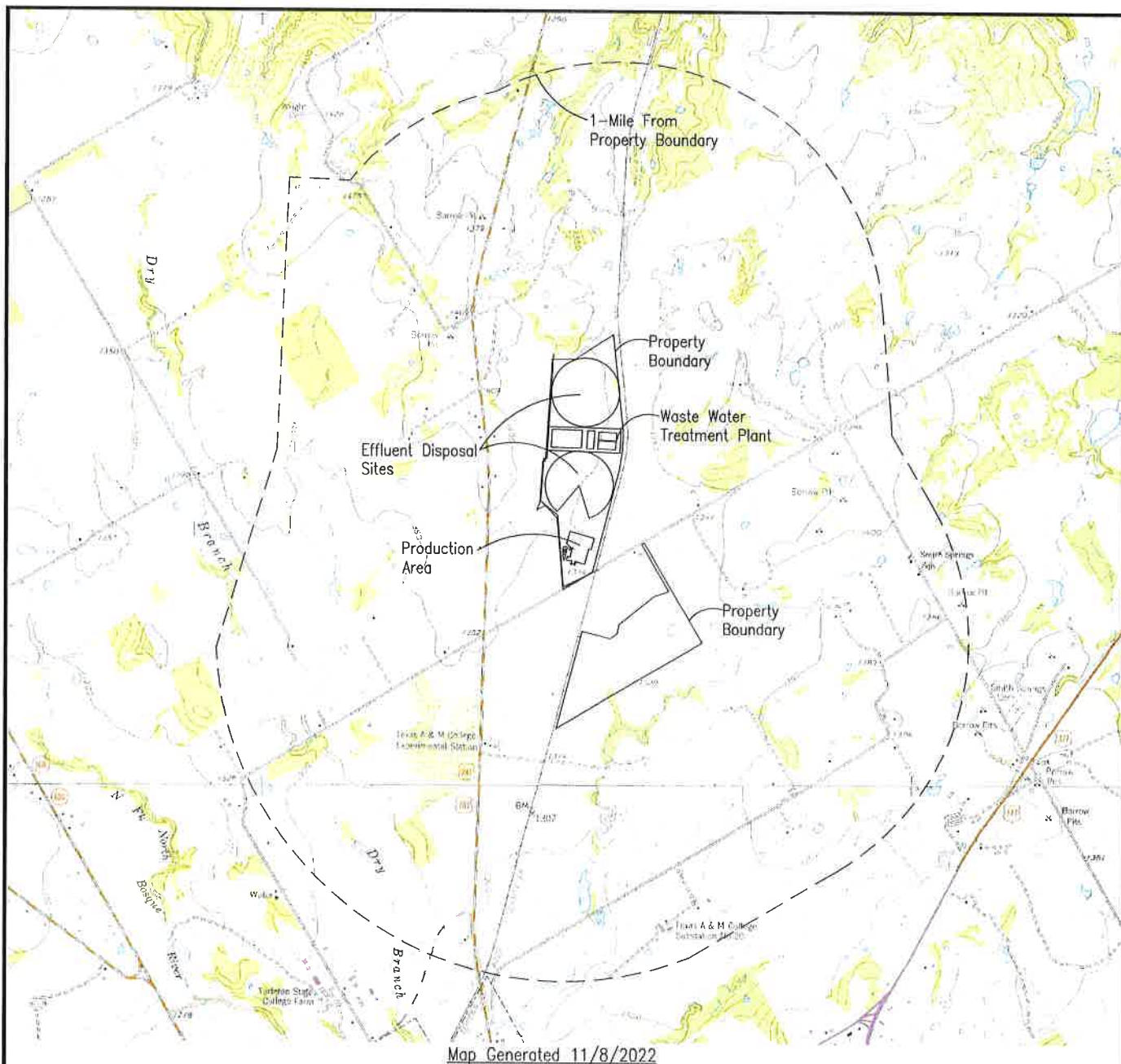
Source: USDA-NRCS. Geospatial Data Gateway. Available at:
<http://datagateway.nrcs.usda.gov/>. Tiger Roads, 2010 -
 Accessed December 2017

Schreiber Foods, Inc.
 Stephenville, Texas
 Erath County

Vicinity Map
 Figure 1.2
 Page 13



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



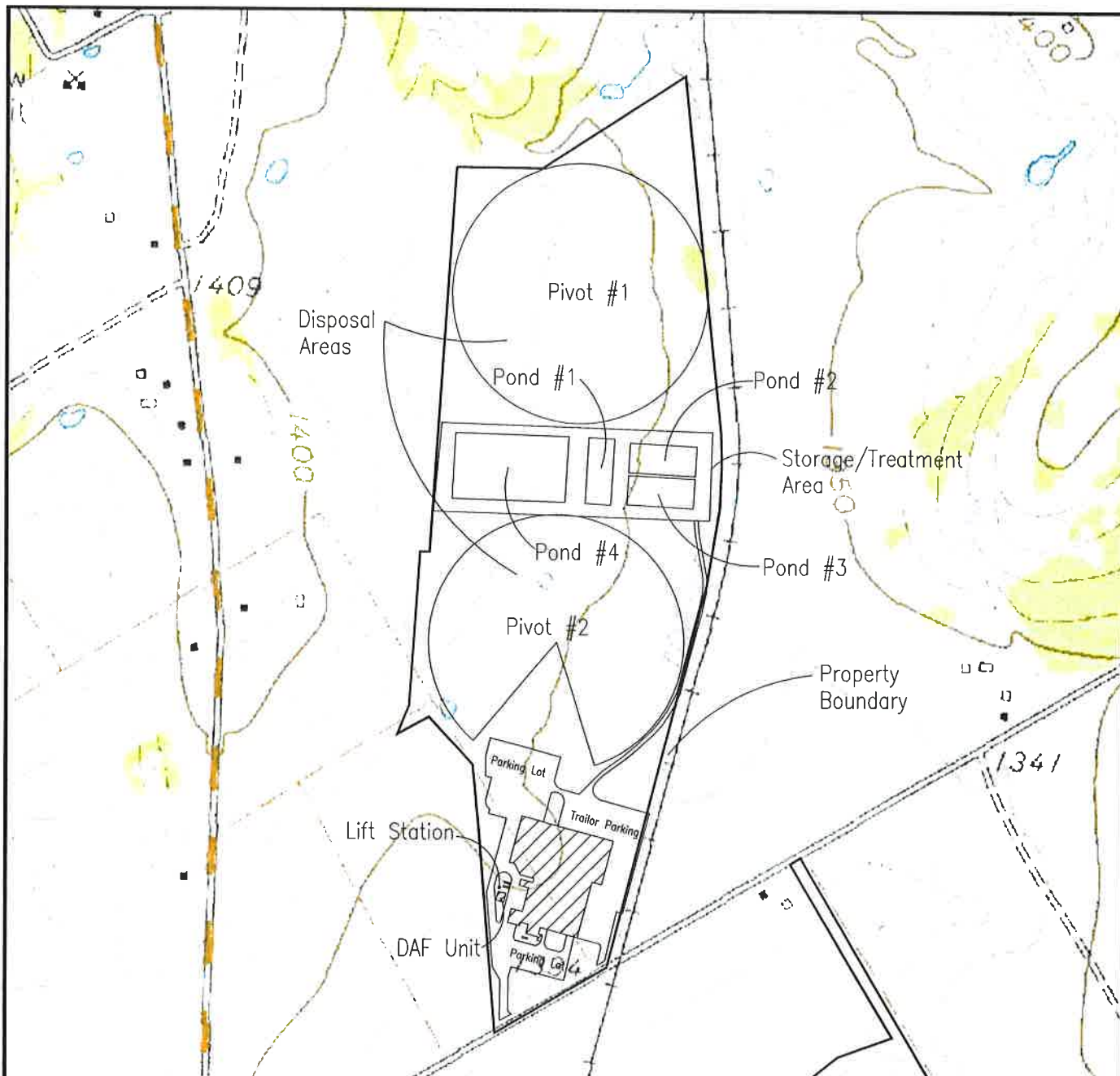
Source: USDA-NRCS. Geospatial Data Gateway. Available at: <http://datagateway.nrcs.usda.gov/>. Digital Raster Graphic County Mosaic by NRCS - Accessed December 2016.

Schreiber Foods, Inc.
Stephenville, TX
Erath County

7.5 Minute USGS Map
Figure 1.3
Page 14

ENVIRO-AG
EAE
ENGINEERING, INC.

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



Legend:

 Denotes Production Area

Source: USDA-NRCS. Geospatial Data Gateway. Available at: <http://datagateway.nrcs.usda.gov/>. Digital Raster Graphic County Mosaic by NRCS - Accessed December 2016.



SCALE: 1" = 800'

Schreiber Foods, Inc.
Stephenville, TX
Erath County

Site Map
Figure 1.4
Page 15

ENVIRO-AG
EAE
ENGINEERING, INC.

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

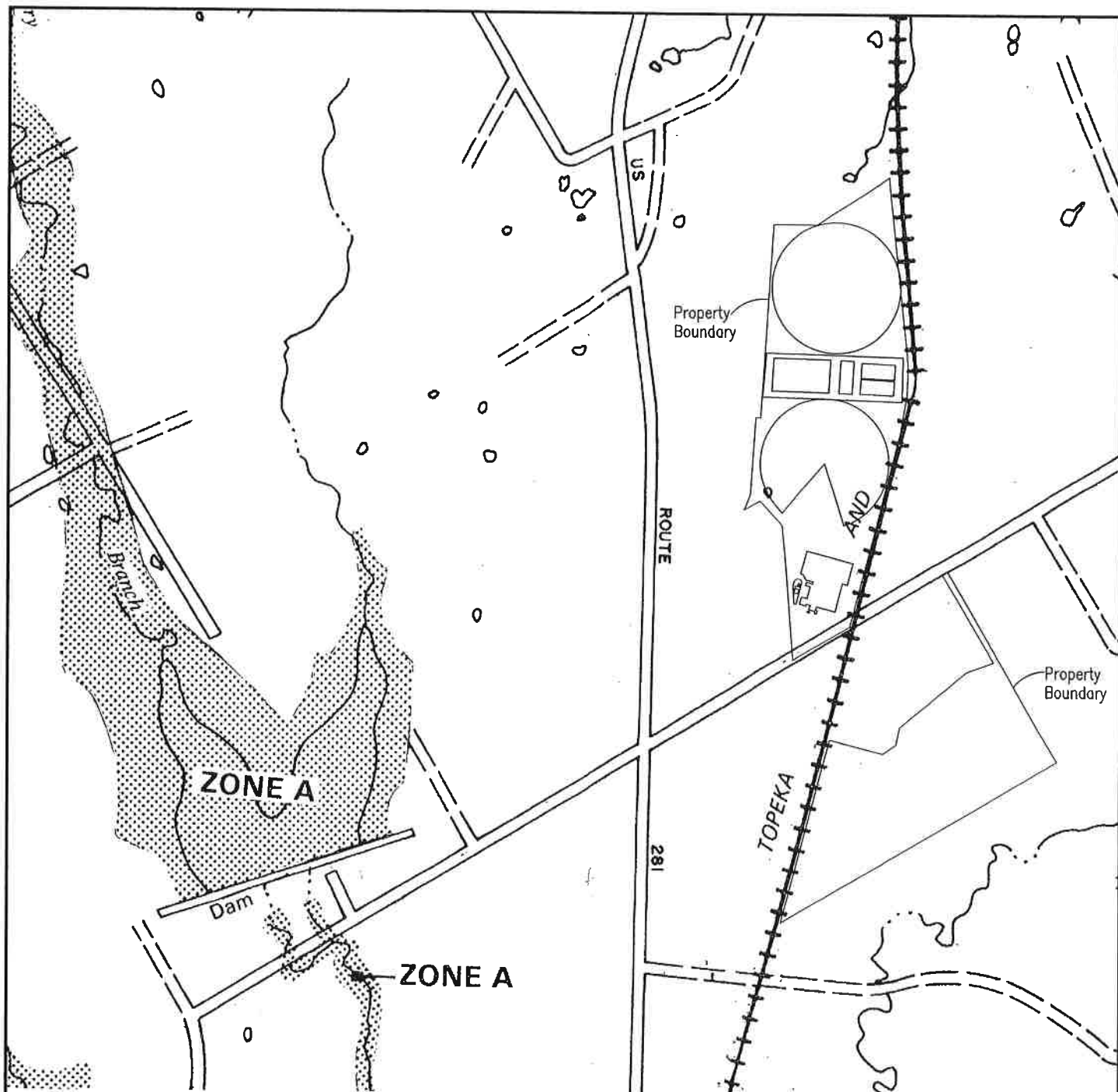
ATTACHMENT 2 – FLOODPLAIN INFORMATION

2.1 FEMA Floodplain Map

Figure 2.1, FEMA Floodplain Map, shows the production area and waste disposal areas overlain on a copy of the FEMA map panels for this area of Erath County.

2.2 Protective Measures

According to the FEMA Floodplain map for Erath County, the production area and waste disposal areas are not located in a 100-year floodplain area.



Source: FEMA Flood Map



No Scale

Schreiber Foods, Inc.
Stephenville, TX
Erath County

FEMA Floodplain Map
Figure 2.1
Page 17



Enviro-Ag Engineering, Inc.
ENGINEERING CONSULTANTS
3404 Airway Boulevard
AMARILLO, TEXAS 79118
TEL (806) 353-6120 (806) 353-4132

ATTACHMENT 3 – IMPOUNDMENT FACILITY & LINER/GEOLOGY INFORMATION

Documentation on the existing facility impoundments was taken from onsite facility files and previous TCEQ applications. The documentation is included as an attachment to this section.

Schreiber Foods, Inc.

Exhibit XVII

North and South Pond Data

SOUTHWESTERN LABORATORIES

April 18, 1989

AMPI - Stephenville, TX

<u>Test Location</u>	<u>North</u>	<u>South</u>	<u>Minimum Requirement</u>
1. Description			
Color	Yellow & Gray	Yellow & Gray	
Texture	Sandy Lean Clay	Sandy Lean Clay	
Unified Classification	CL	CL	
Sample Depth, Inches	24	24	24
Terberg Limits			
Liquid Limit, %	33	32	30
Plastic Limit, %	14	14	
Plasticity Index	19	18	15
Passing No. 200 Sieve, %	89.6	81.1	30
Constant Head Permeability, cm/sec.	1.2×10^{-8}	2.3×10^{-8}	1.0×10^{-7}
Molded Density, pcf	113.7	110.2	
Molded Moisture, %	18.5	19.4	

Report No. 901604

Schreiber Foods, Inc.

Exhibit XVI

Pond #3 Data

John Hall, Chairman
Pam Reed, Commissioner
Peggy Garner, Commissioner
Anthony Grigsby, Executive Director



TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

September 5, 1994

Mr. Kenneth L. Petersen, Jr.
Small, Craig, & Werkenthin
100 Congress Ave., Suite 1100
Austin, Texas 78701-4099

RE: AMPI Stephenville Facility (Permit No. 03074)
Liner Plan Approval

Dear Mr. Petersen:

We have received the engineering drawings and technical specifications for the liner requirements for the new wastewater lagoon to be constructed at the Stephenville Facility submitted with your letter dated 9/2/94 and a letter from Mr. Cliff Lutz, P.E. dated 9/1/94. These materials were submitted to satisfy the requirements of Special Provision 9.F of Permit No. 03074.

Review of these materials indicates that the proposed liner is in accordance with the provisions of the permit as stated below:

- (i) The soil liner shall contain at least 3 feet of clay-rich (liquid limit greater than or equal to 30 and plasticity index greater than or equal to 15) soil material along the sides and bottom of the pond, lagoon or impoundment compacted in lifts of no more than 9 inches, to 95% standard proctor density at the optimum moisture content to achieve a permeability equal to or less than 1×10^{-7} cm/sec.

Upon that basis, the pond liner plans are approved. Within 60 days of completion of construction of the new lagoon, the engineer must provide written certification to the Permitting Section of the Watershed Management Division that the pond liner meets these specifications.

Sincerely,

Karen D. Cleveland

Karen D. Cleveland, P.E.
Permitting Section

KDC

cc: Cliff Lutz, P.E. - AMPI
Frank Kelly - AMPI



ASSOCIATED MILK PRODUCERS, INC.
Southern Region

December 29, 1994

Karen Cleveland
Texas Natural Resource Conservation Commission
Industrial Permits Section
Watershed Management Division
Room 286, Building F
12015 North IH-35
Austin, TX 78753

Reference: AMPI Stephenville Facility
TNRCC Permit Number 03074

Dear Ms. Cleveland:

The Associated Milk Producers, Incorporation (AMPI) are pleased to submit certification required by our amended wastewater permit.

The certification is that our new lagoon liner complies with TNRCC specifications. Certification is required by VI Special Provisions, Item 9.A. of the permit.

Please find enclosed results of testing.

Sincerely,

ASSOCIATED MILK PRODUCERS, INC.

A handwritten signature in cursive script that reads "Frank Kelly". The signature is written in dark ink and is positioned above the printed name and title.

Frank Kelly
Environmental Engineer

FK/cs

enclosure

cc: Paul Walter, AMPI
Ned French, AMPI
Thomas Rack, AMPI
Gary Christian, AMPI

Huntingdon/SWL

Huntingdon Engineering & Environmental, Inc.

1700 Gravel Drive
Fort Worth, TX 76118

(817) 284-1155
Metro (817) 589-7211
Fax (817) 593-1470

December 23, 1994

Texas Natural Resource Conservation Commission
Room 286, Building "F"
12015 North IH-35
Austin, Texas 78753

Attn: Ms. Karen Cleveland
Industrial Permits Section
Watershed Management Division

Re: Associated Milk Producers, Inc.
Erath County, Texas

Dear Ms. Cleveland:

Huntingdon/SWL has completed sampling and testing of the soils exposed in a wastewater retention ponds at the Associated Milk Producers, Inc.; Erath County. The test results including sample thickness, Atterberg limits, percent passing the number 200 sieve in-place density and permeability, are tabulated on the attached report. Our findings indicate the soils meet the criteria established by the Texas Water Commission.

Very truly yours,

HUNTINGDON/SWL



Kemp E. Akeman, P.E.
Operations Manager, Fort Worth

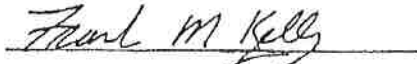


12/28/94

tm

Submitted by: Associated Milk Producers, Inc.

Signed by:



Date:

12-29-94

Huntingdon/SwL Report No. 406948

ASSOCIATED MILK PRODUCERS, INC.

POND NUMBER 3

TEST LOCATION	Hole #2 No. 1	Hole #2 No. 2	Hole #2 No. 3	No. 4-Dam Northside	No. 5-Dam Northside	Minimum Requirements
Bolt Description						
Color	Reddish Brown	Reddish Brown	Reddish Brown	Reddish Brown	Reddish Brown	
Texture	Clay	Clay	Clay	Clay	Clay	
Unified Classification	Fine	Fine	Fine	Fine	Fine	
Sample Depth	0-1'	1'-2'	2'-3'	0'-2'	2'-3'	36"
Atterberg Limits						
Liquid Limit, (%)	39	40	38	48	47	30
Plastic Limit, (%)	19	20	18	19	21	
Plasticity Index	20	20	20	29	26	15
Passing No. 200 Sieve, (%)	74.1	69.0	72.0	77.0	76.0	30
Permeability (cm/sec.)	3.2×10^{-8}	3.2×10^{-8}	3.2×10^{-8}	3.2×10^{-8}	3.2×10^{-8}	1.0×10^{-7}

Huntingdon/SWL Report No. 406948

POND NUMBER 3

 1.0×10^{-7}

3



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

November 23, 2020

TCEQ
Industrial Permits Team, MC-148
P.O. Box 13087
Austin, TX 78711-3087

Re: As-Built Drawing and Certifications of Additional Holding Pond (Pond #4) to Satisfy Item S of the Special Provisions of Permit No. WQ0003074000 for Schreiber Foods, Inc., Erath, Texas

Dear Sir or Madam,

Attached you will find the as-built capacity certification and soil liner certification for a new irrigation holding pond (Pond #4) meeting the requirements of Item S of the Special Provisions of Permit No. WQ0003074000. The pond was constructed in accordance with the approved plans/specifications per the attached TCEQ letter dated December 11, 2019 and in compliance with Item H of the Special Provisions in the permit. Please accept the attached documentation and pond certifications to satisfy the requirement of Item S of the Special Provisions of the permit.

If you have any questions, please do not hesitate to contact me at 806-350-5458 or by email at emerine@enviroag.com.

Respectfully Submitted,

Erick Emerine, P.E.

Enviro-Ag Engineering, Inc.

Encl: Pond #4 As-Built Capacity Certification and Soil Liner Certification w/ Support Docs

Cc: TCEQ Compliance Monitoring Team

Schreiber Foods, Inc.

EAE file



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

November 23, 2020

TCEQ
Compliance Monitoring Team, MC-224
P.O. Box 13087
Austin, TX 78711-3087

Re: As-Built Drawing and Certifications of Additional Holding Pond (Pond #4) to Satisfy Item S of the Special Provisions of Permit No. WQ0003074000 for Schreiber Foods, Inc., Erath, Texas

Dear Sir or Madam,

Attached you will find the as-built capacity certification and soil liner certification for a new irrigation holding pond (Pond #4) meeting the requirements of Item S of the Special Provisions of Permit No. WQ0003074000. The pond was constructed in accordance with the approved plans/specifications per the attached TCEQ letter dated December 11, 2019 and in compliance with Item H of the Special Provisions in the permit. Please accept the attached documentation and pond certifications to satisfy the requirement of Item S of the Special Provisions of the permit.

If you have any questions, please do not hesitate to contact me at 806-350-5458 or by email at emerine@enviroag.com.

Respectfully Submitted,

Erick Emerine, P.E.

Enviro-Ag Engineering, Inc.

Encl: Pond #4 As-Built Capacity Certification and Soil Liner Certification w/ Support Docs

Cc: TCEQ Industrial Permits Team

Schreiber Foods, Inc.

EAE file

Jon Niermann, *Chairman*
Emily Lindley, *Commissioner*
Bobby Janecka, *Commissioner*
Toby Baker, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 11, 2019

Mr. Erick Emerine, P.E.,
Enviro-Ag Engineering, Inc.
3404 Airway Boulevard
Amarillo, Texas 79118

Re: Construction Plan of Additional Holding Pond to Satisfy Item S of the Special Provision of Permit No. WQ0003074000 for Schreiber Foods, Inc., Erath, Texas

Mr. Emerine:

The Texas Commission on Environmental Quality Water Quality Division received your letter with plans dated December 3, 2019 and additional material provided on December 11, 2019. We agree with your determination that the construction plans meet the requirements for Special Provisions H and S of permit No. WQ0003074000 for a new irrigation holding pond to provide the required additional capacity. The information you provided will be added to the permit file (WQ0003074000).

As agreed, on December 11, 2019 by email, ensure the monitor well located at the northwest side of the construction site is protected during construction.

If you have any questions, please contact me by telephone at (512) 239-4570 or Thomas.Starr@tceq.texas.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas Starr", written over a horizontal line.

Thomas Starr, P.E.
Wastewater Permitting Section (MC-148)
Water Quality Division

TES/kb



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

CAPACITY CERTIFICATION

Schrelber Foods, Inc.
Stephenville, Erath County, TX

Capacity Certification – Pond #4 (Industrial Wastewater Storage/Irrigation Pond)

An as-built survey was conducted on 10/09/2020 by Enviro-Ag Engineering, Inc., to determine the total capacity of Pond #4. The capacity with two feet of dry freeboard was calculated to be:

Structure	Capacity
Pond #4	42.93 acre-feet

Attached with this certification includes the as-built capacity drawing plan/profile and a pond marker schematic with stage/storage volumes.

Respectfully submitted,



11-23-2020

Erick Emerine, P.E. – License No. 103494
Enviro-Ag Engineering, Inc. – Engineering Firm No. 2507

Attachments: As-Built Capacity Drawing Plan & Profile
Pond Marker Schematic

Schreiber Foods, Inc. - Stephenville, TX - 11/20/2020

Note:

Industrial Wastewater Pond #4 Volume Data

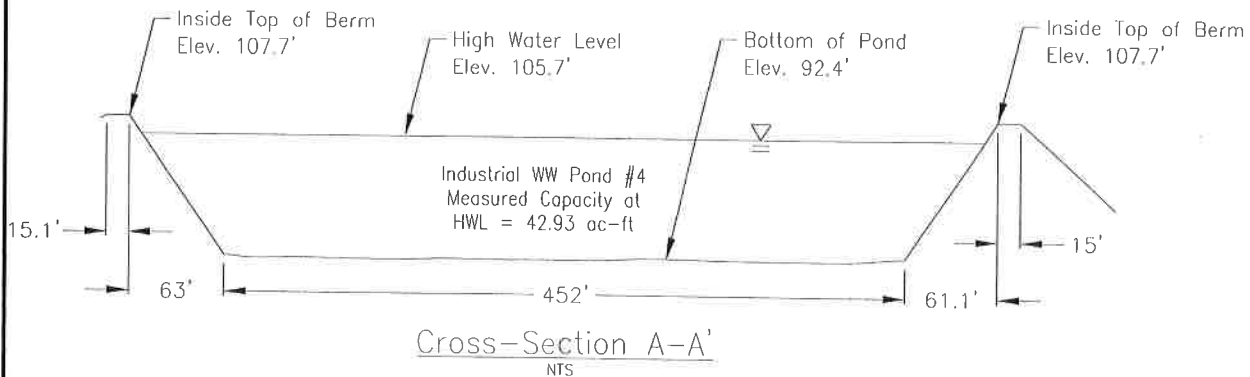
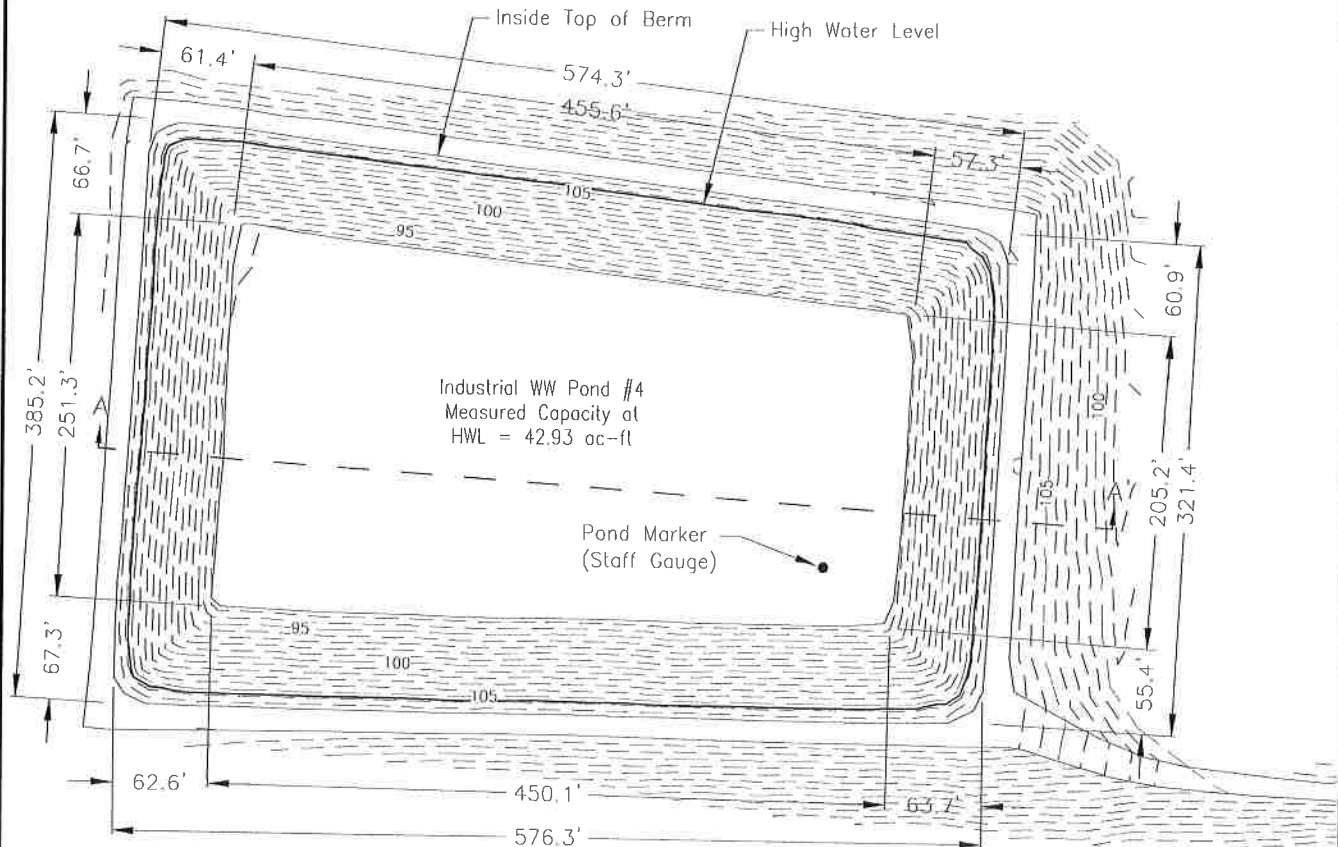
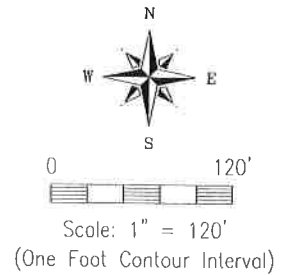
Dimensions rounded to the nearest tenth of a foot.

Date Surveyed: 10/09/2020

Surveyed By: CM

Drawn By: EE

Inside Top of Berm Elevation	107.7'
Bottom Elevation	92.4'
H.W.L. Elevation w/ 2' Freeboard	105.7'
Capacity at H.W.L.	42.93 Ac-Ft
Surface Area at H.W.L.	4.32 Acres
Surface Area at I.T.B.	4.68 Acres

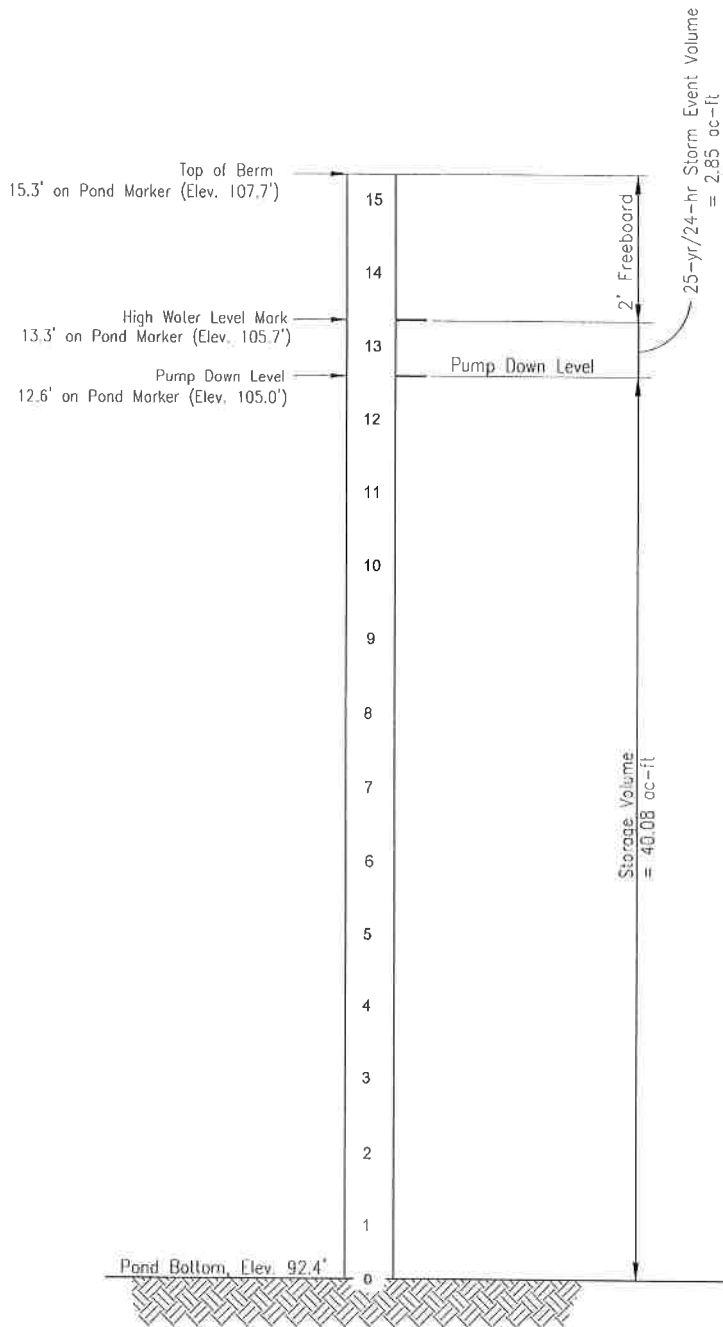


Schreiber Foods, Inc.
Stephenville
Erath County, TX

Pond #4 - Industrial WW Pond
As-Built Capacity Drawing
Plan & Profile

ENVIRO-AG
EAE
ENGINEERING, INC.

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



Cumulative Volume	Gallons by Foot
42.93 Ac-Ft	411,948 Gal.
41.66 Ac-Ft	1,337,917 Gal.
37.56 Ac-Ft	1,285,662 Gal.
33.61 Ac-Ft	1,234,218 Gal.
29.82 Ac-Ft	1,183,571 Gal.
26.19 Ac-Ft	1,133,955 Gal.
22.71 Ac-Ft	1,085,235 Gal.
19.38 Ac-Ft	1,037,531 Gal.
16.20 Ac-Ft	990,821 Gal.
13.16 Ac-Ft	944,974 Gal.
10.26 Ac-Ft	899,909 Gal.
7.49 Ac-Ft	855,663 Gal.
4.87 Ac-Ft	810,296 Gal.
2.38 Ac-Ft	775,813 Gal.

Schreiber Foods, Inc.
Stephenville
Erath County, TX

Pond #4 - Industrial WW Pond
As-Built Capacity Drawing
Pond Marker Schematic

ENVIRO-AG
EAE
ENGINEERING, INC.

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



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

SOIL LINER CERTIFICATION

Schreiber Foods, Inc.
Stephenville, Erath County, TX

Soil Liner Certification – Pond #4 (Industrial Wastewater Storage/Irrigation Pond)

Six 3-inch Shelby tube core samples were collected from Pond #4 to document that the liner meets the requirements of the TCEQ for soil liner. The liner thickness was documented to be at least 36 inches.

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

- | | |
|--|-----------------------------|
| • Pond #4 – Sample 1 (West Bottom, Lab #5473) | 6.2×10^{-8} cm/sec |
| • Pond #4 – Sample 2 (East Bottom, Lab #5474) | 4.1×10^{-8} cm/sec |
| • Pond #4 – Sample 3 (East Sidewall, Lab #5475) | 4.6×10^{-8} cm/sec |
| • Pond #4 – Sample 4 (South Sidewall, Lab #5476) | 4.6×10^{-8} cm/sec |
| • Pond #4 – Sample 5 (West Sidewall, Lab #5477) | 3.8×10^{-8} cm/sec |
| • Pond #4 – Sample 6 (North Sidewall, Lab #5478) | 3.1×10^{-8} cm/sec |

Based on the above documentation, the liner in Pond #4 is determined to be in accordance with TCEQ requirements for soil liners. The test locations were backfilled with bentonite chips. The test results meet the requirements of the TCEQ for hydraulic conductivity considered protective of ground and surface water sources. The pond was constructed in accordance with the approved plans and specifications. Attached with this certification includes the soil liner seepage rate calculations, permeability test results, pond embankment construction moisture/density tests and soil liner construction moisture density tests.

Respectfully submitted,

Erick Emerine, P.E. – License No. 103494
Enviro-Ag Engineering, Inc. – Firm No. 2507



11-23-2020

Attachments: Seepage Calculations
 EAE Permeability Lab Reports
 GSS Laboratories & Specialty Testing Moisture Density Testing Reports

CALCULATION OF SPECIFIC DISCHARGE

SITE: Schreiber Foods, Inc.
 LOCATION: Stephenville, Erath County, TX
 STRUCTURE: Pond #4 (Industrial WW Storage/Irrigation Pond)

ENGINEER: E. Emerine
 DATE: 11/20/2020

This worksheet calculates the specific discharge through a soil liner based on the measured thickness of the installed clay liner and the results of the permeability testing. The maximum allowable specific discharge of the installed liner is 1.1×10^{-6} cm/sec or 0.0374 in/day.

Laboratory Sample I.D.	Hydraulic Conductivity Results of Core Samples							
	5473	5474	5475	5476	5477	5478		
1. Water Depth, feet	13.3	13.3	13.3	13.3	13.3	13.3		
2. Liner Thickness, inches	36.0	36.0	36.0	36.0	36.0	36.0		
3. Hydraulic Conductivity, cm/sec	6.20E-08	4.10E-08	4.60E-08	4.60E-08	3.80E-08	3.10E-08		
4. Calculated specific discharge, v								
Seepage Rate, inches/day	0.0115	0.0076	0.0085	0.0085	0.0070	0.0057		
Maximum Seepage Rate, inches/day	0.0374	0.0374	0.0374	0.0374	0.0374	0.0374		

NOTES:

- (1) Water depth of the pond in feet.
- (2) Soil liner thickness in inches.

- (3) Hydraulic conductivity of the core sample(s) as determined by flexible wall permeameter in cm/sec (Ref. ASTM D 5084).

The following equation is used:

$$v = k (H + d) / d$$

where: v = Specific Discharge of area representative of core sample, inches/day

d = Measure Liner Thickness at core sample location, feet

k = Hydraulic Conductivity of liner based on core sample testing, inches/day

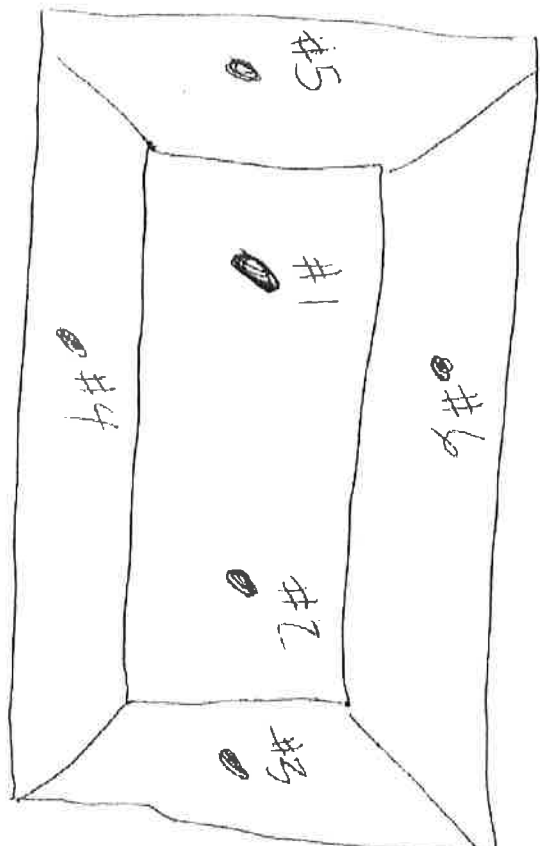
H = Maximum Water Depth, feet

- (4) Maximum Allowable Seepage Rate of 1.1×10^{-6} cm/sec (0.0374 in/day).



11-23-2020

11/12/19

[illegible]

302 Morgan Mill Road
Bldg C
Stephenville, TX 76401
(254) 965-3500
Fax: (254) 965-8000

Facility Name: Schreiber 6000.7

Project Engineer: Erick Enesine

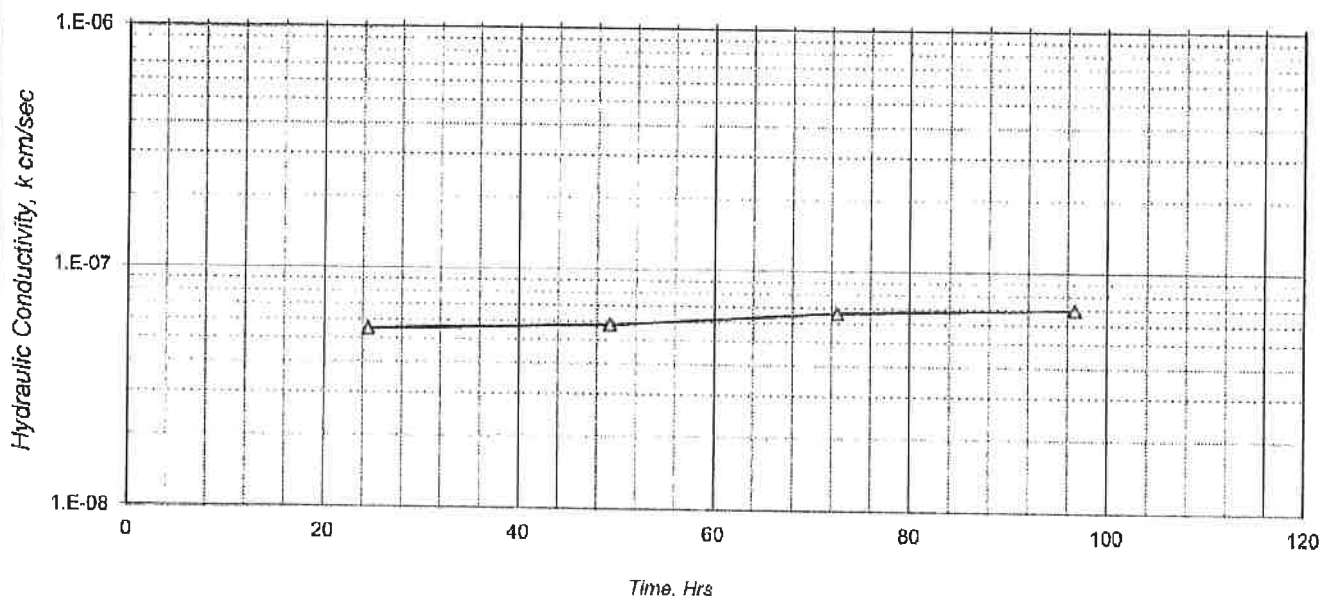
Sampled by: Carey Muller

Date Sampled: 10/9/2020

Date to Lab: 10/13/2020

Received: *James Hartley*

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	1	
DESCRIPTION:	#1	
	<u>INITIAL</u>	<u>FINAL</u>
HEIGHT, in.	2.7	2.8
DIAMETER, in.	2.9	2.9
WATER CONTENT, %	10.9	14.3
DRY DENSITY, pcf	124	122
SATURATION, %	81	100
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Light Brown	
SAMPLE CONSISTENCY	Clay/Sand	

TEST DATA

ASTM D-5084, Method C

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

TRIAL <u>nos.</u>	TIME <u>hrs.</u>	HYDRAULIC CONDUCTIVITY
		<u>cm / sec</u>
1	24.5	5.5E-08
2	49.3	5.8E-08
3	72.7	6.7E-08
4	96.8	7.0E-08

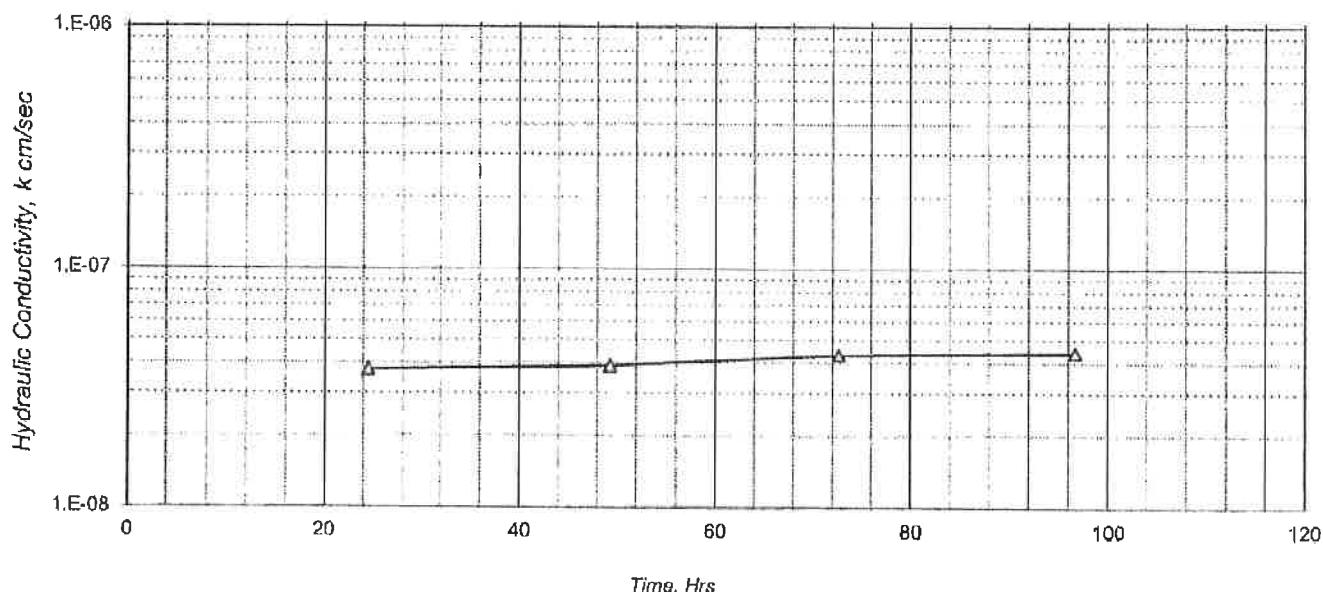
AVERAGE LAST 4 : **6.2E-08**

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.

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	2	
DESCRIPTION:	#2	
	<u>INITIAL</u>	<u>FINAL</u>
HEIGHT, in.	2.7	2.7
DIAMETER, in.	2.9	2.9
WATER CONTENT, %	10.8	16.0
DRY DENSITY, pcf	120	117
SATURATION, %	71	99
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Light Brown	
SAMPLE CONSISTENCY	Clay/Caliche	

TEST DATA

ASTM D-5084, Method C

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

TRIAL <u>nos.</u>	TIME <u>hrs.</u>	HYDRAULIC CONDUCTIVITY
		<u>cm / sec</u>
1	24.5	3.8E-08
2	49.3	3.9E-08
3	72.7	4.4E-08
4	96.8	4.4E-08

AVERAGE LAST 4: **4.1E-08**

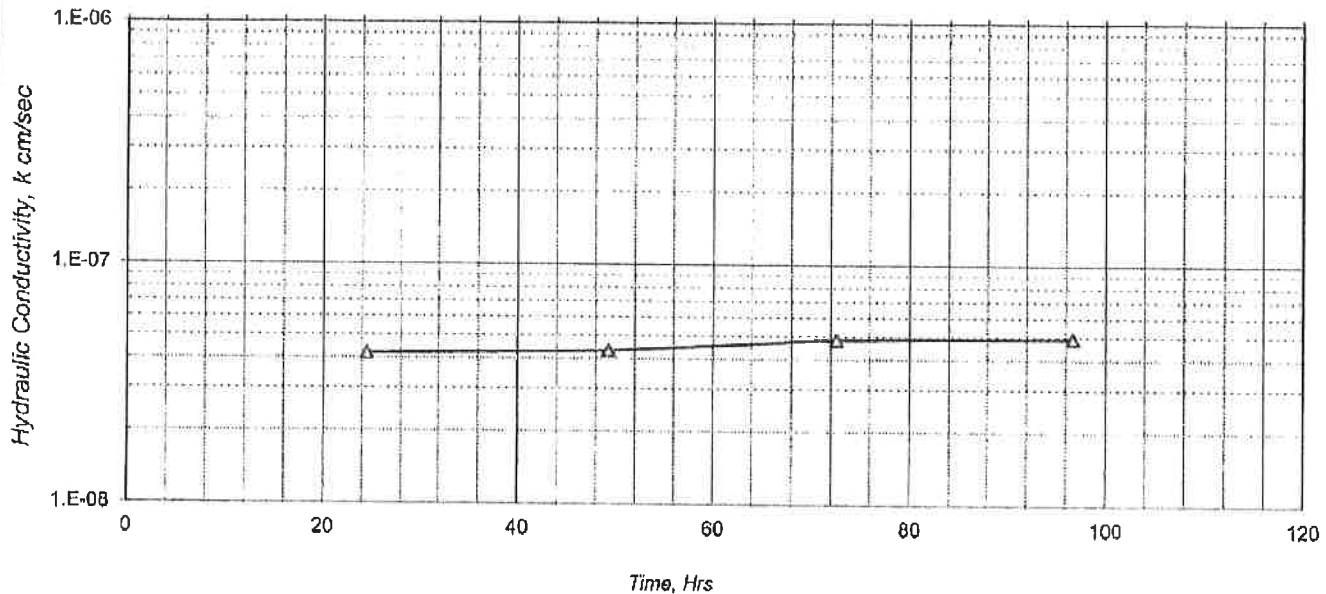
COMMENTS:

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.

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	3	
DESCRIPTION:	#3	
	<u>INITIAL</u>	<u>FINAL</u>
HEIGHT, in.	3.0	3.0
DIAMETER, in.	2.9	2.9
WATER CONTENT, %	10.5	16.1
DRY DENSITY, pcf	119	118
SATURATION, %	68	100
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Light Brown	
SAMPLE CONSISTENCY	Clay/Caliche	

TEST DATA

ASTM D-5084, Method C

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

TRIAL nos.	TIME hrs.	HYDRAULIC CONDUCTIVITY
		cm / sec
1	24.5	4.2E-08
2	49.3	4.3E-08
3	72.7	4.8E-08
4	96.8	4.9E-08

AVERAGE LAST 4: **4.6E-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.

Client / Project Name:

Schreiber Lagoon

Project No:
20/05/10

Lab Sample Number:

5476

Sample ID

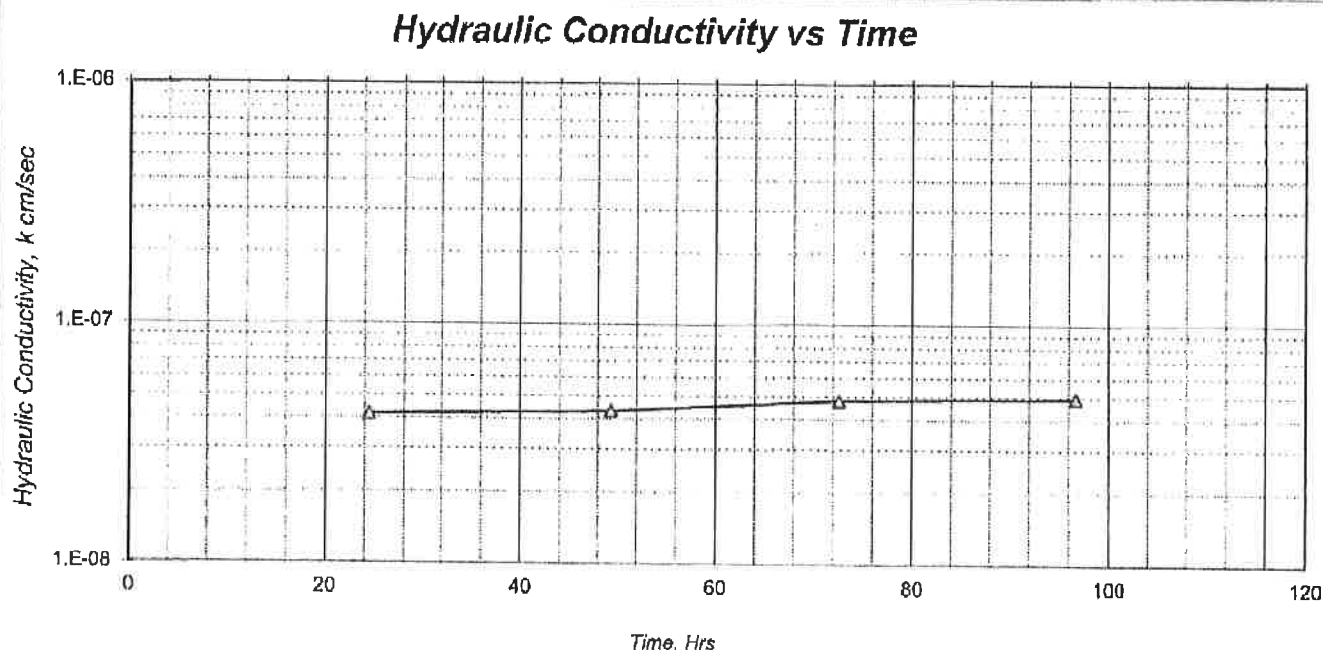
71

SAMPLE LOCATION

#4

Report Date:

November 2, 2020



SPECIMEN DATA

SAMPLE ID:	4	
DESCRIPTION:	#4	
	<u>INITIAL</u>	<u>FINAL</u>
HEIGHT, in.	3.0	3.0
DIAMETER, in.	2.9	2.9
WATER CONTENT, %	11.4	16.6
DRY DENSITY, pcf	118	116
SATURATION, %	73	100
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Light Brown	
SAMPLE CONSISTENCY	Clay/Caliche	

TEST DATA

<u>ASTM D-5084, Method C</u>		
EFFECTIVE STRESS:		5 psi
GRADIENT RANGE:		2 - 3
IN / OUT RATIO:		1.00
<hr/>		
		HYDRAULIC
TRIAL	TIME	CONDUCTIVITY
<u>nos.</u>	<u>hrs.</u>	<u>cm / sec</u>
1	24.5	4.2E-08
2	49.3	4.3E-08
3	72.7	4.8E-08
4	96.8	4.9E-08
AVERAGE LAST 4 :		4.6E-08

COMMENTS:

Tap water used as permeant.

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\1920\20/05/10\5476

Print Date:

11/02/20

Reviewed By:

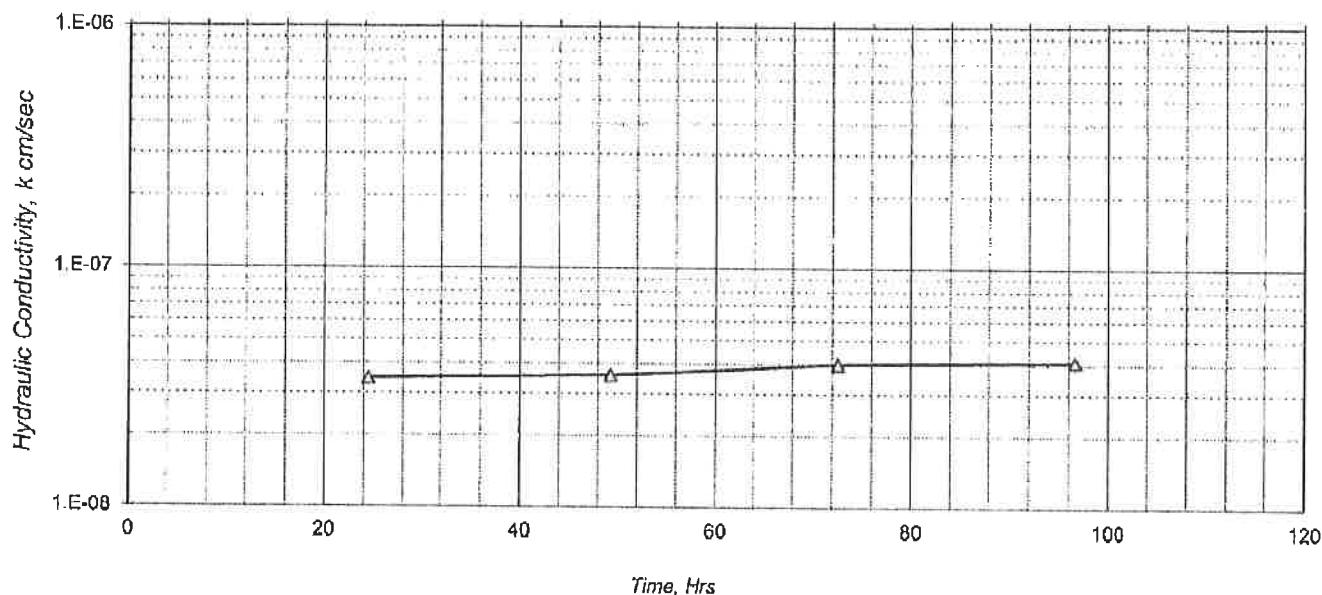
Micah Mullin

LSN:

00085

5476

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	5	
DESCRIPTION:	#5	
	<u>INITIAL</u>	<u>FINAL</u>
HEIGHT, in.	2.5	2.5
DIAMETER, in.	2.9	2.9
WATER CONTENT, %	10.2	15.2
DRY DENSITY, pcf	120	119
SATURATION, %	69	100
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Brown	
SAMPLE CONSISTENCY	Clay/Caliche	

TEST DATA

ASTM D-5084, Method C

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

TRIAL <u>nos.</u>	TIME <u>hrs.</u>	HYDRAULIC CONDUCTIVITY
		<u>cm / sec</u>
1	24.5	3.5E-08
2	49.3	3.6E-08
3	72.7	4.0E-08
4	96.8	4.1E-08

AVERAGE LAST 4 : 3.8E-08

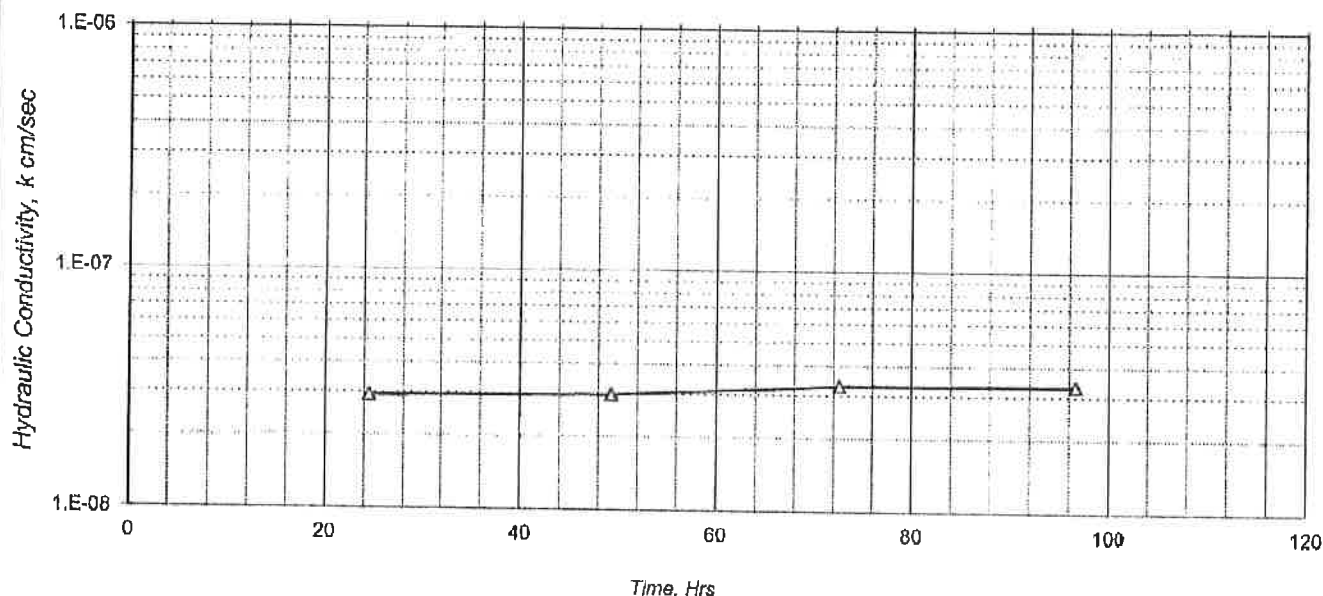
COMMENTS:

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.

Hydraulic Conductivity vs Time



SPECIMEN DATA

SAMPLE ID:	6	
DESCRIPTION:	#6	
	<u>INITIAL</u>	<u>FINAL</u>
HEIGHT, in.	2.8	2.8
DIAMETER, in.	2.9	2.9
WATER CONTENT, %	9.6	16.2
DRY DENSITY, pcf	119	117
SATURATION, %	62	98
(Specific Gravity assumed as 2.7)		
SAMPLE COLOR	Brown	
SAMPLE CONSISTENCY	Clay/Caliche	

TEST DATA

ASTM D-5084, Method C		
EFFECTIVE STRESS:	5 psi	
GRADIENT RANGE:	2 - 3	
IN / OUT RATIO:	1.00	
	HYDRAULIC CONDUCTIVITY	
<u>TRIAL nos.</u>	<u>TIME hrs.</u>	<u>cm / sec</u>
1	24.5	2.9E-08
2	49.3	3.0E-08
3	72.7	3.3E-08
4	96.8	3.3E-08
AVERAGE LAST 4:		3.1E-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.



EMBANKMENTS

IN-PLACE DENSITY TEST SERVICE ORDER

CLIENT: Big Iron
ADDRESS: PO Box 69, Blanket, Tx, 76432
Project: SchrieberFood
AUTH: Jeff

CLIENT NO:
REPORT NO: 200511
DATE: 8-31-2020
PAGE: 1 of 1

JOBSITE INFORMATION	TEST	METHOD	REQUIREMENTS
Contr: Big Iron	DENSITY	ASTM D 2922	96
JOBSITE: Jeff	MOISTURE	ASTM D 3017	-1 to +3
TIME:	GAUGE NO.	3430	
REMARKS:			

MOISTURE / DENSITY RELATIONS

M/D NO.	TEST OF	MATERIAL DESCRIPTION	OPTIMUM MOISTURE	MAXIMUM DENSITY
1	Emb	Lt Br Silty Loam	15.3	113.2
2	Emb	Purple & Grey Clay	17.4	105.4

IN-PLACE DENSITY TESTS

TEST NO.	TEST LOCATION	M/D NO.	MOISTURE CONTENT	DENSITY pcf	PERCENT COMPACTION
E Berm # 1		2	17.3 %	106.1 wet	100.7
S Berm # 2		2	16.4 %	105.0 wet	99.6
N Berm # 3		2	16.8 %	105.1 wet	99.7
S Berm # 4		1	16.8 %	113.2 wet	100.0
E Berm # 6		1	16.8 %	113.1 wet	99.9
N Berm # 6		1	16.9 %	113.4 wet	100.2
N Berm # 7		1	16.4 %	113.3 wet	100.0
S Berm # 8		1	16.4 %	112.9 wet	99.7
E Berm # 9		1	16.0 %	113.7 wet	100.4
			lbs	wet	
			%	dry	

TECHNICIAN: J. Stone
TIME: START _____ Stop _____
CLIENT REP: _____

CONTRACTOR NOTIFIED OF RESULTS (Y/N) _____

OFF	DIV	TEST	UNITS
Time		1 Day	
Trip			
Total			

TECHNICIAN: *CWS*



IN-PLACE DENSITY TEST SERVICE ORDER

CLIENT: Big Iron
ADDRESS: PO Box 69, Blanket, Tx, 76432
Project: SchrieberFood
AUTH: Jeff

CLIENT NO:
REPORT NO: 200514-A
DATE: 9-1-2020
PAGE: 1 of 2

JOB SITE INFORMATION	TEST	METHOD	REQUIREMENTS
Contr: Big Iron	DENSITY	ASTM D 2922	95
JOB SITE: Jeff	MOISTURE	ASTM D 3017	-1 to +3
TIME: 1 Day	GAUGE NO.	3430	
REMARKS:			

MOISTURE / DENSITY RELATIONS

M/D NO.	TEST OF	MATERIAL DESCRIPTION	OPTIMUM MOISTURE	MAXIMUM DENSITY
1	Embankment	Lt Br Silty Clay	15.3	113.2
2	Embankment	Purple & Grey Clay	17.4	105.4
3	Embankment	Green & Grey Clay	16.2	114.4

IN-PLACE DENSITY TESTS

TEST NO.	TEST LOCATION	M/D Linee	MOISTURE CONTENT	DENSITY pcf	PERCENT COMPACTION
#10 N Berm		2	18.1 %	106.0	100.6
#11 S berm		2	17.1 %	106.1	100.6
#12 E Berm		1	16.1 %	109.7	97.0
#13 E Berm		2	16.9 %	104.8	99.4
# 14 S Berm		1	16.9 %	112.9	99.7
#15 N Berm		1	15.9 %	111.9	98.9
#16 S Berm		1	15.3 %	113.5	100.3
#17 E Berm		1	16.1 %	114.9	101.5
#18 N Berm		3	16.0 %	113.1	98.9
#19 E Berm		3	15.9 %	113.4	99.1

TECHNICIAN: J. Slone
TIME: START _____ Stop _____
CLIENT REP: _____

CONTRACTOR NOTIFIED OF RESULTS (Y/N) _____

OFF	DIV	TEST	UNITS
Time			
Trip			
Total			

TECHNICIAN: *CS*



IN-PLACE DENSITY TEST SERVICE ORDER

CLIENT: Big Iron
ADDRESS: PO Box 69, Blanket, Tx, 76432
Project: SchrieberFood
AUTH: Jeff

CLIENT NO:
REPORT NO: 200514-B
DATE: 9-1-2020
PAGE: 2 of 2

JOB SITE INFORMATION	TEST	METHOD	REQUIREMENTS
Contr: Big Iron	DENSITY	ASTM D 2922	95
JOB SITE: Jeff	MOISTURE	ASTM D 3017	-1 to +3
TIME: 1 Day	GAUGE NO.	3430	
REMARKS:			

MOISTURE / DENSITY RELATIONS

M/D NO.	TEST OF	MATERIAL DESCRIPTION	OPTIMUM MOISTURE	MAXIMUM DENSITY
1	Embankment	Lt Br Silty Clay	15.3	113.2
2	Embankment	Purple & Grey Clay	17.4	106.4
3	Embankment	Green & Grey Clay	15.2	114.4

IN-PLACE DENSITY TESTS

TEST NO.	TEST LOCATION	M/D Linee	MOISTURE CONTENT	DENSITY pcf	PERCENT COMPACTION
#20 N Berm		3	lbs	wet	
			15.0 %	113.0 dry	98.8
#21 S Berm		3	lbs	wet	
			16.1 %	112.9 dry	98.7
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	

TECHNICIAN: J. Stone
TIME: START _____ Stop _____
CLIENT REP: _____

CONTRACTOR NOTIFIED OF RESULTS (Y/N) _____

OFF	DIV	TEST	UNITS
Time			
Trip			
Total			

TECHNICIAN:



IN-PLACE DENSITY TEST SERVICE ORDER

CLIENT: Big Iron
 ADDRESS: PO Box 69, Blanket, Tx, 76432
 Project: SchrieberFood
 AUTH: Jeff

CLIENT NO:
 REPORT NO: 200615
 DATE: 9-8-2020
 PAGE: 1 of 2

JOB SITE INFORMATION	TEST	METHOD	REQUIREMENTS
Contr: Big Iron	DENSITY	ASTM D 2922	95
JOB SITE: Jeff	MOISTURE	ASTM D 3017	-1 to +3
TIME: 1 Day	GAUGE NO.	3430	
REMARKS:			

MOISTURE / DENSITY RELATIONS

M/D NO.	TEST OF	MATERIAL DESCRIPTION	OPTIMUM MOISTURE	MAXIMUM DENSITY
1	Embankment	Lt Br Silty Clay	15.3	113.2
2	Embankment	Purple & Grey Clay	17.4	106.4
3	Embankment	Green & Grey Clay	15.2	114.4

IN-PLACE DENSITY TESTS

TEST NO.	TEST LOCATION	M/D Line	MOISTURE CONTENT	DENSITY pcf	PERCENT COMPACTION
#22 E Embankment Berm		3	16.7 %	117.2	98.0
#23 N Berm		3	17.0 %	113.1	98.9
#24 S Berm		3	15.9 %	110.2	96.3
#25 E Berm		3	14.4 %	114.0	98.7
#26 N Berm		3	16.8 %	109.9	96.0
#27 S Berm		3	14.8 %	111.2	98.1
#28 N Berm		3	14.2 %	110.6	96.6
#29 S berm		3	14.4 %	114.2	99.8
#30 E Berm		1	15.9 %	110.4	97.5
#31 E Berm		3	16.1 %	113.1	98.9

TECHNICIAN: J. Stone
 TIME: START _____ Stop _____
 CLIENT REP: _____
 CONTRACTOR NOTIFIED OF RESULTS (Y/N) _____

OFF	DIV	TEST	UNITS
Time			
Trip			
Total			

TECHNICIAN: CJS



IN-PLACE DENSITY TEST SERVICE ORDER

CLIENT: Big Iron
ADDRESS: PO Box 69, Blanket, Tx, 76432
Project: SchrieberFood
AUTH: Jeff

CLIENT NO:
REPORT NO: 200515
DATE: 9-8-2020
PAGE: 2 of 2

JOB SITE INFORMATION	TEST	METHOD	REQUIREMENTS
Contr: Big Iron	DENSITY	ASTM D 2922	95
JOB SITE: Jeff	MOISTURE	ASTM D 3017	-1 to +3
TIME:	GAUGE NO.	3430	
REMARKS: Corrected Copy			

MOISTURE / DENSITY RELATIONS

M/D NO.	TEST OF	MATERIAL DESCRIPTION	OPTIMUM MOISTURE	MAXIMUM DENSITY
1	Embankment	Lt Br Silty Clay	15.3	113.2
2	Embankment	Purple & Grey Clay	17.4	105.4
3	Embankment	Green & Grey Clay	15.2	114.4

IN-PLACE DENSITY TESTS

TEST NO.	TEST LOCATION	M/D Line	MOISTURE CONTENT	DENSITY pcf	PERCENT COMPACTION
#32 S Emb Berm		3	15.5 %	109.9 dry	96.1
#33 N Emb Berm		3	14.7 %	113.1 dry	98.9
#34 E Emb Berm		3	15.3 %	111.1 dry	97.1
#35 N Berm		3	14.6 %	112.4 dry	98.3
#36 S Berm		3	14.9 %	113.6 dry	99.3
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			16.1 %	dry	

TECHNICIAN: J. Slone
TIME: START _____ Stop _____
CLIENT REP: _____

CONTRACTOR NOTIFIED OF RESULTS (Y/N) _____

OFF	DIV	TEST	UNITS
Time			
Trip			
Total			

TECHNICIAN: C. J. S.



IN-PLACE DENSITY TEST SERVICE ORDER

CLIENT: Big Iron
 ADDRESS: PO Box 69, Blanket, Tx, 76432
 Project: SchrieberFood
 AUTH: Jeff

CLIENT NO:
 REPORT NO: 200516-A
 DATE: 9-14-2020
 PAGE: 1 of 2

JOBSITE INFORMATION	TEST	METHOD	REQUIREMENTS
Contr: Big Iron	DENSITY	ASTM D 2922	95
JOBSITE: Jeff	MOISTURE	ASTM D 3017	-1 to +3
TIME: 1 Day	GAUGE NO.	3430	
REMARKS:			

MOISTURE / DENSITY RELATIONS

M/D NO.	TEST OF	MATERIAL DESCRIPTION	OPTIMUM MOISTURE	MAXIMUM DENSITY
1	Embankment Berm	Lt Br Silty Clay	15.3	113.2
2	Embankment Berm	Purple & Grey Clay	17.4	105.4
3	Embankment Berm	Green & Grey Clay	15.2	114.4

IN-PLACE DENSITY TESTS

TEST NO.	TEST LOCATION	M/D Linee	MOISTURE CONTENT	DENSITY pcf	PERCENT COMPACTION
			lbs	wet	
#37 E Berm		1	14.9 %	112.4 dry	99.2
			lbs	wet	
#38 S Berm		1	15.0 %	110.6 dry	97.8
			lbs	wet	
#39 N Berm		2	16.7 %	104.8 dry	99.4
			lbs	wet	
#40 S Berm		3	15.2 %	113.6 dry	99.3
			lbs	wet	
#41 N Berm		3	16.1 %	110.4 dry	95.9
			lbs	wet	
#42 E Berm		3	15.0 %	110.9 dry	96.9
			lbs	wet	
#43 N Berm		3	14.4 %	113.1 dry	98.9
			lbs	wet	
#44 E Berm		3	14.8 %	109.7 dry	95.9
			lbs	wet	
#45 S Berm		3	16.0 %	111.1 dry	97.1
			lbs	wet	
#46 S Berm		3	14.7 %	113.1 dry	98.9

TECHNICIAN: J. Slone
 TIME: START _____ Stop _____
 CLIENT REP: _____

CONTRACTOR NOTIFIED OF RESULTS (Y/N) _____

OFF	DIV	TEST	UNITS
Time		1 Day	
Trip			
Total			

TECHNICIAN: CJS



IN-PLACE DENSITY TEST SERVICE ORDER

CLIENT: Big Iron
 ADDRESS: PO Box 69, Blanket, Tx, 76432
 Project: SchrieberFood
 AUTH: Jeff

CLIENT NO:
 REPORT NO: 200516-B
 DATE: 9-14-2020
 PAGE: 2 of 2

JOBSITE INFORMATION	TEST	METHOD	REQUIREMENTS
Contr: Big Iron	DENSITY	ASTM D 2922	95
JOBSITE: Jeff	MOISTURE	ASTM D 3017	-1 to +3
TIME:	GAUGE NO.	3430	
REMARKS:			

MOISTURE / DENSITY RELATIONS

M/D NO.	TEST OF	MATERIAL DESCRIPTION	OPTIMUM MOISTURE	MAXIMUM DENSITY
1	Emb	Lt Br Silty Clay	15.3	113.2
2	Emb	Purple & Grey Clay	17.4	105.4
3	Emb	Green & Grey Clay	15.2	114.4

IN-PLACE DENSITY TESTS

TEST NO.	TEST LOCATION	M/D Linee	MOISTURE CONTENT	DENSITY pcf	PERCENT COMPACTION
#47 E Berm		3	15.9 %	113.2 wet	99.0
#48 N Berm		3	14.3 %	114.0 wet	99.7
#49 E Berm		1	15.1 %	110.9 dry	98.9
#50 S Berm		3	14.7 %	112.4 wet	98.3
#51 N Berm		3	16.0 %	110.3 dry	96.4
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	

TECHNICIAN: J. Stone
 TIME: START _____ Stop _____
 CLIENT REP: _____

CONTRACTOR NOTIFIED OF RESULTS (Y/N) _____

OFF	DIV	TEST	UNITS	
Time				
Trip				
Total				

TECHNICIAN:



IN-PLACE DENSITY TEST SERVICE ORDER

CLIENT: Big Iron
 ADDRESS: PO Box 69, Blanket, Tx, 76432
 Project: SchrieberFood
 AUTH: Jeff

CLIENT NO:
 REPORT NO: 200517-A
 DATE: 9-14-2020
 PAGE: 1 of 3

JOBSITE INFORMATION	TEST	METHOD	REQUIREMENTS
Contr: Big Iron	DENSITY	ASTM D 2922	95
JOBSITE: Jeff	MOISTURE	ASTM D 3017	-1 to +3
TIME: 1 Day	GAUGE NO.	3430	
REMARKS:			

MOISTURE / DENSITY RELATIONS

M/D NO.	TEST OF	MATERIAL DESCRIPTION	OPTIMUM MOISTURE	MAXIMUM DENSITY
1	Embankment Berm	Lt Br Silty Clay	15.3	113.2
2	Embankment Berm	Purple & Grey Clay	17.4	105.4
3	Embankment Berm	Green & Grey Clay	16.2	114.4

IN-PLACE DENSITY TESTS

TEST NO.	TEST LOCATION	M/D Line	MOISTURE CONTENT	DENSITY pcf	PERCENT COMPACTION
#52 S Berm		2	18.1 %	105.4 dry	100.0
#53 E Berm		3	14.6 %	102.1 dry	96.9
#54 N Berm		2	18.1 %	109.1 dry	95.4
#55 E Berm		2	17.9 %	103.6 dry	98.3
#56 S Berm		3	14.5 %	109.7 dry	96.9
#57 N Berm		3	15.8 %	113.0 dry	98.8
#58 S Berm		3	18.5 %	111.6 dry	97.6
#59 N Berm		3	17.8 %	112.4 dry	98.3
#60 E Berm		3	16.2 %	110.9 dry	96.9
#61 N Berm		3	14.5 %	111.6 dry	97.6

TECHNICIAN: J. Stone
 TIME: START _____ Stop _____
 CLIENT REP: _____

CONTRACTOR NOTIFIED OF RESULTS (Y/N) _____

OFF	DIV	TEST	UNITS
Time		1 Day	
Trip			
Total			

TECHNICIAN:



IN-PLACE DENSITY TEST SERVICE ORDER

CLIENT: Big Iron
 ADDRESS: PO Box 69, Blanket, Tx, 76432
 Project: SchrieberFood
 AUTH: Jeff

CLIENT NO:
 REPORT NO: 200517-B
 DATE: 9-15-2020
 PAGE: 2 of 3

leber JOBSITE INFORMATION	TEST	METHOD	REQUIREMENTS
Contr: Big Iron	DENSITY	ASTM D 2922	95
JOBSITE: Jeff	MOISTURE	ASTM D 3017	-1 to +3
TIME:	GAUGE NO.	3430	
REMARKS:			

MOISTURE / DENSITY RELATIONS

M/D NO.	TEST OF	MATERIAL DESCRIPTION	OPTIMUM MOISTURE	MAXIMUM DENSITY
1	Embankment Berm	Lt Br Silty Clay	15.3	113.2
2	Embankment Berm	Purple & Grey Clay	17.4	105.4
3	Embankment Berm	Green & Grey Clay	15.2	114.4

IN-PLACE DENSITY TESTS

TEST NO.	TEST LOCATION	M/D Line#	MOISTURE CONTENT	DENSITY pcf	PERCENT COMPACTION
#62 S Berm		3	15.0 %	109.7 wet	95.9
#63 E Berm		3	15.4 %	110.1 wet	96.7
#64 S Berm		3	15.0 %	113.6 wet	99.3
#65 N Berm		3	16.1 %	114.1 wet	99.7
#66 E Berm		3	16.6 %	110.2 wet	96.3
#67 N Berm		3	15.8 %	111.1 wet	97.1
#68 E Berm		3	15.9 %	113.1 wet	98.9
#69 S Berm		3	15.6 %	114.1 wet	99.7
#70 S Berm		3	14.5 %	109.5 wet	95.8
#71 N Berm		3	16.0 %	110.4 wet	96.5

TECHNICIAN: J. Stone
 TIME: START _____ Stop _____
 CLIENT REP: _____

CONTRACTOR NOTIFIED OF RESULTS (Y/N) _____

OFF	DIV	TEST	UNITS
Time			
Trip			
Total			

TECHNICIAN:



IN-PLACE DENSITY TEST SERVICE ORDER

CLIENT: Big Iron
 ADDRESS: PO Box 69, Blanket, Tx, 78432
 Project: SchrieberFood
 AUTH: Jeff

CLIENT NO:
 REPORT NO: 200517-C
 DATE: 9-15-2020
 PAGE: 3 of 3

JOB SITE INFORMATION	TEST	METHOD	REQUIREMENTS
Contr: Big Iron	DENSITY	ASTM D 2922	95
JOB SITE: Jeff	MOISTURE	ASTM D 3017	-1 to +3
TIME:	GAUGE NO.	3430	
REMARKS:			

MOISTURE / DENSITY RELATIONS

M/D NO.	TEST OF	MATERIAL DESCRIPTION	OPTIMUM MOISTURE	MAXIMUM DENSITY
1	Embankment Berm	Lt Br Silty Clay	15.3	113.2
2	Embankment Berm	Purple & Grey Clay	17.4	105.4
3	Embankment Berm	Green & Grey Clay	15.2	114.4

IN-PLACE DENSITY TESTS

TEST NO.	TEST LOCATION	M/D Linee	MOISTURE CONTENT	DENSITY pcf	PERCENT COMPACTION
#72 E Berm		3	15.6 %	113.6 wet	99.3
#73 E Berm		3	15.3 %	110.4 wet	96.5
#74 N Berm		3	15.0 %	112.2 wet	98.1
#75 S Berm		2	18.1 %	108.0 wet	100.6
#76 N Berm		2	17.8 %	102.6 wet	97.3
#77 S Berm		2	18.0 %	103.0 wet	97.7
#78 E Berm		3	15.6 %	114.4 wet	100.0
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	

TECHNICIAN: J. Stone
 TIME: START _____ Stop _____
 CLIENT REP: _____

CONTRACTOR NOTIFIED OF RESULTS (Y/N) _____

OFF	DIV	TEST	UNITS
Time			
Trip			
Total			

TECHNICIAN: *CJS*



LINER
TOTAL PERFORMED 42

IN-PLACE DENSITY TEST SERVICE ORDER

CLIENT: Big Iron
ADDRESS: PO Box 69, Blanket, Tx, 76432
Project: SchrieberFood
AUTH: Jeff

CLIENT NO:
REPORT NO: 200518
DATE: 9-16 & 17-2020
PAGE: 2 of 2

leber

JOBSITE INFORMATION	TEST	METHOD	REQUIREMENTS
Contr: Big Iron	DENSITY	ASTM D 2922	95
JOBSITE: Jeff	MOISTURE	ASTM D 3017	-1 to +3
TIME:	GAUGE NO.	3430	
REMARKS: East Berm Liner			

MOISTURE / DENSITY RELATIONS

M/D NO.	TEST OF	MATERIAL DESCRIPTION	OPTIMUM MOISTURE	MAXIMUM DENSITY
2	Liner	Purple Clay	21.1	103.4
3	Liner	Purple & Gray Clay	17.4	105.4
4	Liner	Green & Gray Clay	15.2	114.4

IN-PLACE DENSITY TESTS

TEST NO.	TEST LOCATION	M/D Line	MOISTURE CONTENT	DENSITY pcf	PERCENT COMPACTION
			lbs	wet	
	E Berm Liner 0 - 6" 9/16/20	2	21.2 %	102.1 dry	98.7
			lbs	wet	
	E Berm Liner 6" - 12" 9/16/20	2	20.4 %	101.6 dry	98.3
			lbs	wet	
	E Berm Liner 12" - 18" 9/16/20	3	18.0 %	102.7 dry	97.4
			lbs	wet	
	E Berm Liner 18" - 24" 9/16/20	3	17.0 %	104.4 dry	99.1
			lbs	wet	
	E Berm Liner 24" - 30" 9/16/20	3	18.4 %	103.5 dry	98.2
			lbs	wet	
	E Berm Liner 30" - 36" 9/17/20	3	18.1 %	105.2 dry	99.8
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	

TECHNICIAN: J. Stone
TIME: START _____ Stop _____
CLIENT REP: _____

CONTRACTOR NOTIFIED OF RESULTS (Y/N) _____

OFF	DIV	TEST	UNITS
Time			
Trip			
Total			

TECHNICIAN: CJS



IN-PLACE DENSITY TEST SERVICE ORDER

CLIENT: Blg Iron
 ADDRESS: PO Box 69, Blanket, Tx, 76432
 Project: SchrieberFood
 AUTH: Jeff

CLIENT NO:
 REPORT NO: 200519
 DATE: 9-17 & 21-2020
 PAGE: 2 of 2

JOBSITE INFORMATION	TEST	METHOD	REQUIREMENTS
Contr: Blg Iron	DENSITY	ASTM D 2922	95
JOBSITE: Jeff	MOISTURE	ASTM D 3017	-1 to +3
TIME:	GAUGE NO.	3430	
REMARKS: North Berm Liner			

MOISTURE / DENSITY RELATIONS

M/D NO.	TEST OF	MATERIAL DESCRIPTION	OPTIMUM MOISTURE	MAXIMUM DENSITY
2	Liner	Purple Clay	21.1	103.4
3	Liner	Purple & Grey Clay	17.4	105.4
4	Liner	Green & Grey Clay	15.2	114.4

IN-PLACE DENSITY TESTS

TEST NO.	TEST LOCATION	M/D Linee	MOISTURE CONTENT	DENSITY pcf	PERCENT COMPACTION
			lbs	wet	
	N Berm Liner 0 - 6" 9/17/20	3	18.4 %	105.4 dry	100.0
			lbs	wet	
	N Berm Liner 6" * 12" 9/17/20	4	16.0 %	111.1 dry	97.1
			lbs	wet	
	N Berm Liner 12" - 18" 9/17/20	3	16.9 %	105.4 dry	100.0
			lbs	wet	
	N Berm Liner 18" - 24" 9/17/20	4	16.0 %	110.6 dry	96.7
			lbs	wet	
	N Berm Liner 24" - 30" 9/18/20	4	16.4 %	114.4 dry	100.0
			lbs	wet	
	N Berm Liner 30" - 36" 9/18/20	3	16.8 %	103.6 dry	98.3
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	

TECHNICIAN: J. Slone
 TIME: START _____ Stop _____
 CLIENT REP: _____

CONTRACTOR NOTIFIED OF RESULTS (Y/N) _____

OFF	DIV	TEST	UNITS
Time			
Trip			
Total			

TECHNICIAN: CJS



IN-PLACE DENSITY TEST SERVICE ORDER

CLIENT: Big Iron
ADDRESS: PO Box 69, Blanket, Tx, 76432
Project: SchrieberFood
AUTH: Jeff
leber

CLIENT NO:
REPORT NO: 200900
DATE: 9-24 825-2020
PAGE: 2 of 2

JOBSITE INFORMATION	TEST	METHOD	REQUIREMENTS
Contr: Big Iron	DENSITY	ASTM D 2922	95
JOBSITE: Jeff	MOISTURE	ASTM D 3017	-1 to +3
TIME:	GAUGE NO.	3430	
REMARKS: South Berm Liner			

MOISTURE / DENSITY RELATIONS

M/D NO.	TEST OF	MATERIAL DESCRIPTION	OPTIMUM MOISTURE	MAXIMUM DENSITY
2	Liner	Purple Clay	21.1	103.4
3	Liner	Purple & Grey Clay	17.4	105.4
4	Liner	Dk Br Clay	17.3	104.9

IN-PLACE DENSITY TESTS

TEST NO.	TEST LOCATION	M/D Linee	MOISTURE CONTENT	DENSITY pcf	PERCENT COMPACTION
			lbs	wet	
	S Berm Liner 0-6"	4	17.7 %	104.1 dry	99.2
			lbs	wet	
	S berm Liner 6"-12"	4	17.3 %	105.3 dry	100.4
			lbs	wet	
	S Berm Liner 12"-18"	4	17.3 %	102.9 dry	98.1
			lbs	wet	
	S Berm Liner 18"-24"	4	17.7 %	103.1 dry	98.3
			lbs	wet	
	S Berm Liner 24"-30"	4	17.0 %	104.0 dry	99.1
			lbs	wet	
	S Berm Liner 30"-36"	4	18.3 %	103.1 dry	98.3
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	

TECHNICIAN: J. Stone

TIME: START _____ Stop _____

CLIENT REP: _____

CONTRACTOR NOTIFIED OF RESULTS (Y/N) _____

OFF	DIV	TEST	UNITS	
Time				
Trip				
Total				

TECHNICIAN: *CJS*



IN-PLACE DENSITY TEST SERVICE ORDER

CLIENT: Big Iron
ADDRESS: PO Box 69, Blanket, Tx, 76432
Project: SchrieberFood
AUTH: Jeff

CLIENT NO:
REPORT NO: 200903
DATE: 9-30, 10-1, 10-2, 10-5-2020
PAGE: 2 of 2

JOBSITE INFORMATION	TEST	METHOD	REQUIREMENTS
Contr: Big Iron	DENSITY	ASTM D 2922	95
JOBSITE: Jeff	MOISTURE	ASTM D 3017	-1 to +3
TIME:	GAUGE NO.	3430	
REMARKS: Bottom Liner E 1/3			

MOISTURE / DENSITY RELATIONS

M/D NO.	TEST OF	MATERIAL DESCRIPTION	OPTIMUM MOISTURE	MAXIMUM DENSITY
2	Liner	Purple Clay	21.1	103.4
3	Liner	Purple & Grey Clay	17.4	105.4
4	Liner	Dk Br Clay	17.3	104.9

IN-PLACE DENSITY TESTS

TEST NO.	TEST LOCATION	M/D Linee	MOISTURE CONTENT	DENSITY pcf	PERCENT COMPACTION
			lbs	wet	
	Bottom Liner E 1/3 0-6" 9/30	3	17.4 %	105.3 dry	99.9
			lbs	wet	
	Bottom Liner E 1/3 6"-12" 9/30	3	17.0 %	102.7 dry	97.4
			lbs	wet	
	Bottom Liner E 1/3 12"-18" 10/1	3	18.1 %	102.2 dry	97.0
			lbs	wet	
	Bottom Liner E 1/3 18"-24" 10/1	2	20.6 %	102.9 dry	99.5
			lbs	wet	
	Bottom Liner E 1/3 24"-30" 10/2	2	20.7 %	102.7 dry	99.3
			lbs	wet	
	Bottom Liner E 1/3 30"-36" 10/5	2	22.0 %	102.8 dry	99.4
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	

TECHNICIAN: J. Stone
TIME: START _____ Stop _____
CLIENT REP: _____

CONTRACTOR NOTIFIED OF RESULTS (Y/N) _____

OFF	DIV	TEST	UNITS
Time			
Trip			
Total			

TECHNICIAN: CLS



IN-PLACE DENSITY TEST SERVICE ORDER

CLIENT: Big Iron
ADDRESS: PO Box 69, Blanket, Tx, 76432
Project: SchrieberFood
AUTH: Jeff
 leber

CLIENT NO: _____
REPORT NO: 200904
DATE: 10-1, 10-2, 10-5 -2020
PAGE: 2 of 2

JOBSITE INFORMATION

Contr: Big Iron
JOBSITE: Jeff
TIME: _____
REMARKS: Bottom Liner W 1/3

TEST

DENSITY
MOISTURE
GAUGE NO.

METHOD

ASTM D 2922
ASTM D 3017
3430

REQUIREMENTS

96
-1 to +3

MOISTURE / DENSITY RELATIONS

M/D NO.	TEST OF	MATERIAL DESCRIPTION	OPTIMUM MOISTURE	MAXIMUM DENSITY
2	Liner	Purple Clay	21.1	103.4
3	Liner	Purple & Grey Clay	17.4	105.4
4	Liner	Dk Br Clay	17.3	104.9

IN-PLACE DENSITY TESTS

TEST NO	TEST LOCATION	M/D Linee	MOISTURE CONTENT	DENSITY pcf	PERCENT COMPACTION
	Bottom Liner W 1/3 0-6" 10/1	3	lbs 16.9 %	wet 102.0	96.8
	Bottom Liner W 1/3 6"-12" 10/1	3	lbs 18.0 %	wet 105.0	99.6
	Bottom Liner W 1/3 12"-18" 10/1	3	lbs 17.7 %	wet 103.0	97.7
	Bottom Liner W 1/3 18"-24" 10/1	2	lbs 21.1 %	wet 104.2	100.8
	Bottom Liner W 1/3 24"-30" 10/2	3	lbs 16.9 %	wet 105.3	99.9
	Bottom Liner W 1/3 30"-36" 10/5	2	lbs 20.8 %	wet 104.1	100.7
			lbs %	wet	
			lbs %	dry	
			lbs %	wet	
			lbs %	dry	
			lbs %	wet	
			lbs %	dry	
			lbs %	wet	
			lbs %	dry	

TECHNICIAN: J. Stone

TIME: START _____ Stop _____

CLIENT REP: _____

CONTRACTOR NOTIFIED OF RESULTS (Y/N) _____

OFF	DIV	TEST	UNITS
Time			
Trip			
Total			

TECHNICIAN: *CJS*



IN-PLACE DENSITY TEST SERVICE ORDER

CLIENT: Big Iron
 ADDRESS: PO Box 69, Blanket, Tx, 76432
 Project: SchrieberFood
 AUTH: Jeff

CLIENT NO:
 REPORT NO: 200805
 DATE: 10-1, 10-2, 10-5 -2020
 PAGE: 1 of 1

JOBSITE INFORMATION	TEST	METHOD	REQUIREMENTS
Contr: Big Iron	DENSITY	ASTM D 2922	95
JOBSITE: Jeff	MOISTURE	ASTM D 3017	-1 to +3
TIME:	GAUGE NO.	3430	
REMARKS: Bottom Liner Center 1/3			

MOISTURE / DENSITY RELATIONS

M/D NO.	TEST OF	MATERIAL DESCRIPTION	OPTIMUM MOISTURE	MAXIMUM DENSITY
2	Liner	Purple Clay	21.1	103.4
3	Liner	Purple & Grey Clay	17.4	105.4
4	Liner	Dk Br Clay	17.3	104.9

IN-PLACE DENSITY TESTS

TEST NO.	TEST LOCATION	M/D Line	MOISTURE CONTENT	DENSITY pcf	PERCENT COMPACTION
			lbs	wet	
	Bottom Liner Cen 1/3 0-6" 10/1	3	17.1 %	103.1 dry	97.8
			lbs	wet	
	Bottom Liner Cen 1/3 6"-12" 10/1	3	18.1 %	102.9 dry	97.6
			lbs	wet	
	Bottom Liner Cen 1/3 12"-18" 10/1	2	21.8 %	106.0 dry	102.5
			lbs	wet	
	Bottom Liner Cen 1/3 18"-24" 10/1	2	21.7 %	105.1 dry	101.9
			lbs	wet	
	Bottom Liner Cen 1/3 24"-30" 10/2	2	21.8 %	101.8 dry	98.5
			lbs	wet	
	Bottom Liner Cen 1/3 30"-36" 10/5	3	18.0 %	102.4 dry	97.6
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	

TECHNICIAN: J. Slone

TIME: START _____ Stop _____

CLIENT REP: _____

CONTRACTOR NOTIFIED OF RESULTS (Y/N) _____

OFF	DIV	TEST	UNITS	
Time				
Trip				
Total				

TECHNICIAN:



IN-PLACE DENSITY TEST SERVICE ORDER

CLIENT: Big Iron
 ADDRESS: PO Box 69, Blanket, Tx, 76432
 Project: SchrieberFood
 AUTH: Jeff
 feber

CLIENT NO:
 REPORT NO: 200906
 DATE: 10-1, 10-2, 10-5 -2020
 PAGE: 1 of 1

JOBSITE INFORMATION	TEST	METHOD	REQUIREMENTS
Contr: Big Iron	DENSITY	ASTM D 2922	95
JOBSITE: Jeff	MOISTURE	ASTM D 3017	-1 to +3
TIME:	GAUGE NO.	3430	
REMARKS: W Berm Liner			

MOISTURE / DENSITY RELATIONS

M/D NO.	TEST OF	MATERIAL DESCRIPTION	OPTIMUM MOISTURE	MAXIMUM DENSITY
2	Liner	Purple Clay	21.1	103.4
3	Liner	Purple & Grey Clay	17.4	105.4
4	Liner	Dk Br Clay	17.3	104.9

IN-PLACE DENSITY TESTS

TEST NO.	TEST LOCATION	M/D Linee	MOISTURE CONTENT	DENSITY pcf	PERCENT COMPACTION
			lbs	wet	
W Berm Liner 0-6" 10/1		2	21.8 %	105.1 dry	101.6
			lbs	wet	
W Berm Liner 6"-12" 10/1		2	20.3 %	104.7 dry	101.3
			lbs	wet	
W Berm Liner 12"-18" 10/1		2	20.4 %	103.6 dry	100.2
			lbs	wet	
W Berm Liner 18"-24" 10/2		2	20.6 %	102.1 dry	98.7
			lbs	wet	
W Berm Liner 24"-30" 10/2		2	21.0 %	103.0 dry	99.6
			lbs	wet	
W Berm Liner 30"-36" 10/5		2	20.6 %	102.0 dry	98.6
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	
			lbs	wet	
			%	dry	

TECHNICIAN: J. Stone
 TIME: START _____ Stop _____
 CLIENT REP: _____

CONTRACTOR NOTIFIED OF RESULTS (Y/N) _____

OFF	DIV	TEST	UNITS	
Time				
Trip				
Total				

TECHNICIAN:

ATTACHMENT 4 – SAFETY DATA SHEETS

SDS Summary Table

<u>Manufactures Product Identification Number</u>	<u>Product Use</u>	<u>Chemical Composition</u>	<u>Product Classification</u>	<u>Product or active ingredient half-life</u>	<u>Frequency of product use</u>	<u>Product toxicity data for fish and aquatic invertebrate</u>	<u>Concentration of whole product in waste stream</u>	<u>Concentration of active ingredient in waste stream</u>
ALGARITE 800	Bioocide, Fungicide & Algaecide	-Water – 7732-18-5 -Glutaraldehyde - 111-30-8	Non-Persistent	4 hrs.	Daily	-Algae Acute: EC50 2.64 mg/l 72 Hrs. -Daphnia Acute: EC50 > 50 mg/l 24 Hrs. -Daphnia Acute: EC50 17 to 25 mg/l 24 Hrs. -Algae Acute: LC50 0.11 mg/l 48 Hrs. -Daphnia Acute: LC50 0.69 mg/l 48 Hrs. Fish Acute: LC50 10.8 mg/l 96 Hrs.	<0.1%	<0.1%
AQUA AMMONIA 26 DGE BE	Cleansing Agent	-Water – 7732-18-5 -Aqua Ammonia – 1336-21-6	Non-Persistent	3 hrs.	Daily	-Acute toxicity to invertebrates: LC50 2.94 mg un-ionized NH3-N/L 48 Hrs. -Acute toxicity to Fish: LC50= 0.09-3.51 mg un-ionized NH3L 96 Hrs.	<0.1%	<0.1%
BWT - 20	Boiler Oxygen Scavenger	-Water – 7732-18-5 -Sodium Hydroxide – 1310-73-2	Non-Persistent	3.5 hrs.	Daily	-Bluegill: LC50 9 mg/l 48 Hrs. -Mosquitofish: LC50 11 mg/l 96 Hrs.	<0.1%	<0.1%
BTW – 90	Boiler Scale Inhibitor	-Water – 7732-18-5 -Sodium Hydroxide – 1310-73-2	Non-Persistent	3.5 hrs.	Daily	-Bluegill: LC50 4 mg/l 48 Hrs. -Mosquitofish: LC50 5 mg/l 96 Hrs.	<0.1%	<0.1%
Sulfuric Acid 93%	PH Adjuster	-Water – 7732-18-5 -Sulfuric Acid 93% - 7664-93-9	Non-Persistent	1 min.	Daily	-Bluegill (Sunfish): LC50; 48 Hrs.: 49 mg/l (Tap water, 20 deg C) -Flounder: LC50; 48 Hrs.: 100-330 mg/l (Aerated water)	<0.1%	<0.1%
BROMMAX 7.1	Water Treatment Anti-Microbial	-Sulfamic Acid, N-Bromo, Sodium Salt – 1004542-84-0 -Sodium Hydroxide – 1310-73-2	Non-Persistent	30 min.	Two times weekly	No Information Available	<0.1%	<0.1%
CU-MOL	Closed Loop Inhibitor	-Molybdic Acid Disodium Salt – 10102-40-6 -Disodium Tetra borate Decahydrate – 001303-96-4 -Potassium Hydroxide = 1310-58-3	Non-Persistent	30 min.	Once per month	-Bluegill: LC50 1 mg/l 48 Hrs. -Mosquitofish: LC50 1.25 mg/l 96 Hrs.	<0.1%	<0.1%
CWT-1100M	Scale Inhibitor	-Water – 7732-18-5 -Sodium Hydroxide – 1310-73-2	Non-Persistent	3.5 hrs.	Daily	-Bluegill: LC50 16 mg/l 48 Hrs. -Mosquitofish: LC50 21 mg/l 96 Hrs.	<0.1%	<0.1%

SAFETY DATA SHEET

COMPANY IDENTITY: CCI
PRODUCT IDENTITY: ALGARITE 800

SDS DATE: 10/23/2014
REPLACES: 06/09/2012

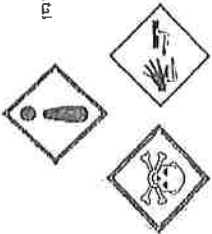
This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements and the International Chemical Safety Cards of the Global Harmonizing System.
THIS SDS COMPLES WITH CFR 1910.1200 (HAZARD COMMUNICATIONS STANDARD)
IMPORTANT: Read this SDS before handling & disposing of this product.
Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: ALGARITE 800
SDS NUMBER: CR4414
COMPANY IDENTITY: CCI CHEMICAL
COMPANY ADDRESS: 3540 EAST 26TH STREET, VERNON, CALIFORNIA 90058
COMPANY PHONE: 800-767-9112
EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)
CANUTEC: 1-613-996-6666 (CANADA)

SECTION 2. HAZARDS IDENTIFICATION

HAZARD STATEMENTS:
H100 = General, H200s = Physical, H300 = Health, H400s = Environmental
H301+H302 Harmful if swallowed, Toxic if swallowed.
H317 May cause an allergic skin reaction.
H330 Causes eye irritation.
H335 May cause respiratory irritation.



PRECAUTIONARY STATEMENTS:

P100s = General, P200s = Prevention, P300s = Response, P400s = Storage, P500s = Disposal
P262 Do not get in eyes, on skin, or on clothing.
P283 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present & easy to do – Continue rinsing.
P309+P311 If exposed or you feel unwell: Call a POISON CENTER or doctor/physician.
P403+P102 Store locked up. Keep out of reach of children.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	EINECS#	WT. %
Water	7732-18-5	231-791-2	50
Glyceraldehyde	111-30-8		50

Trace components: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CFR 4).

SECTION 4. FIRST AID MEASURES

EYE CONTACT:
If this product enters the eyes, open eyes while under gently running water. Use sufficient force to open eyelids. Roll eyes to expose more surface. Minimum flushing is for 15 minutes. Seek immediate medical attention.

SKIN CONTACT:
If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.

INHALATION:
Move person to fresh air, if effects occur, consult a physician.

SWALLOWING:
If swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, give two glasses of water to drink. DO NOT INDUCE VOMITING. Never induce vomiting or give liquids to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.

NOTES TO PHYSICIAN:

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (such as: Gastric lavage after endotracheal intubation).

Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of the label and SDS to physician or health professional with victim.

SECTION 5. FIRE FIGHTING MEASURES

FIRE & EXPLOSIONS PREVENTIVE MEASURES:
None.

EXTINGUISHING MEDIA:
Water, Water spray, Foam, carbon dioxide (CO2). Dry powder.

SPECIAL FIRE FIGHTING PROCEDURES:

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

UNUSUAL EXPLOSION AND FIRE PROCEDURES:

None.

FLASH POINT: >100°C (212°F)

AUTOIGNITION TEMPERATURE: N/A

RESPIRATORY EXPOSURE CONTROLS:

A respiratory protective program that meets OSHA CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

VENTILATION:

LOCAL EXHAUST: Recommended
MECHANICAL (General): Recommended
SPECIAL: None
OTHER: None
Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

PERSONAL PROTECTION:

Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse.

WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers. Wash at the end of each work shift & before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES:

APPEARANCE: Yellow clear liquid
ODOR: Sharp, fruity, medicinal
ODOR THRESHOLD: Not Available
PH (Neutrality): 3.8 (Acidic)
MELTING POINT/FREEZING POINT: -20°C
BOILING RANGE (DBP 50% Dry Point): >100°C (212°F)
FLASH POINT (TEST METHOD): None
EVAPORATION RATE (n-BUTYL ACETATE=1): Not Applicable
FLAMMABILITY CLASSIFICATION: Non-Combustible
LOWER FLAMMABLE LIMIT IN AIR (% by vol): Not Applicable
UPPER FLAMMABLE LIMIT IN AIR (% by vol): Not Applicable
VAPOR PRESSURE (mm of Hg @ 20°C): Not Available
VAPOR DENSITY (air = 1): 0.2
GRAVITY @ 68/68°F (Water = 1): Not Available
SPECIFIC GRAVITY (Water = 1): 1.08-1.10
POUNDS/GALLON: 9.091
WATER SOLUBILITY: Complete
VISCOSITY (mPa.s): N/A
AUTO IGNITION TEMPERATURE: None
DECOMPOSITION TEMPERATURE: Not Available

SECTION 10. STABILITY & REACTIVITY

STABILITY: Stable under most conditions.
CONDITIONS TO AVOID: Isolate from extreme heat, and open flame.

SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE AND ENVIRONMENTAL PRECAUTIONS:

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel.

PERSONAL PRECAUTIONS:

Spilled material may cause a slipping hazard. Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment.

ENVIRONMENTAL PRECAUTIONS:

Stop spill at source. Contain temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Close or cap valves and/or block or plug hole in holding container and transfer to another container, keep from entering storm sewers and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.

CONTAINMENT AND CLEAN-UP MEASURES:

Absorb spilled liquid with poly pads or other suitable absorbent materials. Clean up with non-combustible absorbent (such as sand, soil, and so on). Shovel up and place all spill residue in suitable containers. Dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal (see Section 13- Disposal Considerations).

SECTION 7. HANDLING AND STORAGE

HANDLING:

Product shipped/handled hot can cause thermal burns. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

STORAGE:

Freezing will affect the physical condition and may damage the material. Keep in a dry cool place (0-30°C). Keep away from heat and sources of ignition.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

MATERIAL	CAS#	TWA (OSHA)	TLV (ACGIH)
Water	7732-18-5	None Known	None Known
Glutaraldehyde	111-30-8	Not Established	0.2 mg/m3
MATERIAL	CAS#	CEILING STEL (OSHA/ACGIH)	HAAP
Glutaraldehyde	111-30-8	N/A	None Known

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

MATERIALS TO AVOID:
Strong acids, strong oxidants.

HAZARDOUS DECOMPOSITION PRODUCTS:
Oxides of carbon.

HAZARDOUS POLYMERIZATION:
Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

LD50 Oral: 320 mg/kg Rat
LD50 Dermal >2000 mg/kg Rabbit
LC50 Inhalation 0.28 mg/L (4 hours) Rat

CONDITIONS AGGRAVATED:
None Known.

CHRONIC HAZARDS

CHRONIC TOXICITY:
In animals, effects have been reported on the following organs after ingestion: Gastrointestinal tract, heart, and kidney. Doses levels producing these effects were many times a strong association between elevated blood pressure and prolonged dietary ovumuse. Related effects could occur in the kidneys.

CARCINOGENICITY:
This product is not classified as a carcinogen by NTP, IARC or OSHA.

MUTAGENIC DATA:
In vitro genetic toxicity studies were negative.

DEVELOPMENTAL TOXICITY:
Did not cause birth defects or any other fetal effects in laboratory animals.

SECTION 12. ECOLOGICAL INFORMATION

AQUATIC TOXICITY:
This product may be toxic to fish and aquatic organisms. Keep product from entering waterways and water sheds.

48-Hour LC50 in Invertebrates:

Daphnia magna: 10-100 mg/L

96-Hour EC50(LC50) in Invertebrates:

Crassostrea virginica (oyster) 0.25 mg/L
Mysid shrimp 5.5 mg/L

96-Hour LC50 in Fish:

Trout/Sunfish/Sheepshead minnow 10-39 mg/L
Golden orfe 10-100 mg/L

Avian Diezry LC50:

Mallard ducks >5000 ppm
Bobwhite quail >5000 ppm

Avian Acute Oral LD50:

Mallard ducks 0.73 ml/kg

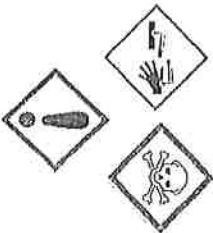
Acute Toxicity in Plants, 72-hr EC50:

Algae 0.1-1.0 mg/L

SECTION 13. DISPOSAL CONSIDERATIONS

Processing, use or contamination may change the waste management options. Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If in doubt, contact appropriate agencies.

SECTION 14. TRANSPORT INFORMATION
DOT/IDG SHIP NAME: UN2922, Corrosive Liquid, Toxic, N.O.S. (Gluaraldehyde), 8, (6.1), PG, III.
DRUM LABEL: (CORROSIVE)(TOXIC)
LATA / ICAO: UN2922, Corrosive Liquid, Toxic, N.O.S. (Gluaraldehyde), 8, (6.1), PG, III.
IMO / IMDG: UN2922, Corrosive Liquid, Toxic, N.O.S. (Gluaraldehyde), 8, (6.1), PG, III.
EMERGENCY RESPONSE GUIDEBOOK NUMBER 134



SECTION 15. REGULATORY INFORMATION

SARA (Superfund Amendments and Reauthorization Act)

SARA 302 Extremely Hazardous Substances List. No components of this product are listed.

SARA 312 Hazard Category

Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

SARA 313 Toxic Chemical List

No components of this product are present above the de minimus levels.

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act)

No components of this product are present above the de minimus levels.

RCRA (Resource Conservation and Recovery Act) Listed Hazardous Waste

No components of this product are listed.

CWA (Clean Water Act) Listed Substances

No component of this product is listed.

FDA (Food and Drug Administration)

This product is approved under the following FDA (21CFR) sections: 173.320, 175.105, 176.170, 176.180, 176.300 Limitations 176.170, 176.180; For use only as an antimicrobial agent in pigment and filler slurries used in the manufacture of paper and paperboard at levels not to exceed 300 parts per million by weight of the slurry solids. For 173.320; For use as a single additive for beet-sugar mills not more than 250 ppm.

TSCA (Toxic Substances Control Act) Applicability

All components are listed on the TSCA Inventory. Registered pesticides are exempt from the requirements of TSCA.

FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act)

This product is a registered pesticide. EPA Reg. No. 1448-354-65317

HAZARD RATINGS:

HEALTH (NTPA): 3, HEALTH (HMIS): 3, FLAMMABILITY: 1, PHYSICAL HAZARD: 0

(Personal Protection Rating to be supplied by user based on use conditions.)

This information is intended solely for the use of individuals trained in the NTPA & HMIS hazard rating system.

NOTICE

All information, recommendations, and suggestions appearing herein concerning this product are based upon data obtained from the manufacturer and/or recognized technical sources; however, C.C.I. makes no warranty, representation or guaranty as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of the product. Additional product literature may be available upon request. Since actual use by others is beyond our control, no warranty, express or implied is made by C.C.I. as to the effects of such use, the results to be obtained or the safety and toxicity of the product nor does C.C.I. assume any liability arising out of use by others of this product.

BRENNING SOUTHWEST
PRODUCT IDENTITY: AQUA AMMONIA 26 DEG 26
MSDS #: 987987

NEW MSDS DATE: 01/31/2011

DATE: 01/31/11
PAGE 3 OF 5

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION:

EXPOSURE CONTROLS

Ventilate to keep vapors of this material below 15 ppm.
If over TLV, in accordance with 29 CFR 1910.134,
use NIOSH approved positive-pressure self-contained breathing apparatus.
Consult Safety Equipment Supplier Use explosion-proof equipment.

VENTILATION

LOCAL EXHAUST : Necessary
MECHANICAL (GENERAL) : Necessary
SPECIAL : None
OTHER : None

PERSONAL PROTECTIONS:

Wear OSHA Standard full face shield. Consult Safety Equipment Supplier for wear
gloves, apron & footwear impervious to this material. Wash clothing before
reuse.

WORK & HYGIENE PRACTICES:

Provide readily accessible eye wash stations & safety showers.
Wash at end of each workshift & before eating, smoking or using the toilet
Promptly remove clothing that becomes contaminated. Destroy contaminated
leather articles launder or discard contaminated clothing

SECTION 9 PHYSICAL DATA

APPEARANCE

Color :
Boiling Range : 37 91 106 °C / 100 97 212 °F
Density : 0.680 g/mL (20 °C) (Liquid Component)
Lower Flammable Limit in Air (% by Vol.) : 542.60 (lowest Component)
Flash Point (Test Method): 100 °C / 212 °F (TCC) (lowest Component)
Flammability Classification: Class IIB
Gravity @ 60 °F : 0.680

ACIDITY/ALKALINITY (Neutral):

Formulation : 14.6

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

Formulation : 0.000

BRENNING SOUTHWEST
PRODUCT IDENTITY: AQUA AMMONIA 26 DEG 26
MSDS #: 987987

NEW MSDS DATE: 01/31/2011

DATE: 01/31/11
PAGE 4 OF 5

SECTION 11 TOXICOLOGICAL INFORMATION

MATERIAL

Water : 7732-18-5 9999 ppm TLV (ACGIH) 8AP
Aqua Ammonia : 1336-21-6 50 ppm No
Aqua Ammonia : 1336-21-6 50 ppm No
Aqua Ammonia : 1336-21-6 50 ppm No

ACUTE HAZARDS

EYE & SKIN CONTACT:
Severe burns to skin, defoliation, dermatitis.
This product may cause allergic skin reaction.
Severe burns to eyes, redness, tearing, blurred vision.
Liquid can cause severe skin & eye burns. Wash thoroughly after handling.
Irritation can cause severe skin & eye burns. Wash thoroughly after handling.
Inhalation may cause severe respiratory tract irritation, may cause asthma-like reaction.
can cause allergic respiratory or asthma-like reaction.
Swallowing:
Harmful or fatal if swallowed.
Common Acute Hazards/Conditions Aggravated
Persons with severe skin, liver or kidney problems should avoid use
Chronic Hazards
CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:
This product has no carcinogenic listed by IARC, NTP, NIOSH,
OSHA or ACGIH, as of this date, greater or equal to 0.1%.

SECTION 12. ECOLOGICAL INFORMATION

ENVIRONMENTAL INFORMATION:

Material : CAS # 1336-21-6
Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)
Aqua Ammonia : 1336-21-6 10000 ppm (Water)

AQUATIC HAZARD INFORMATION:

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Aqua Ammonia : 1336-21-6 10000 ppm (Water)

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Aqua Ammonia : 1336-21-6 10000 ppm (Water)

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Aqua Ammonia : 1336-21-6 10000 ppm (Water)

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Aqua Ammonia : 1336-21-6 10000 ppm (Water)

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Aqua Ammonia : 1336-21-6 10000 ppm (Water)

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Aqua Ammonia : 1336-21-6 10000 ppm (Water)

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Aqua Ammonia : 1336-21-6 10000 ppm (Water)

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Aqua Ammonia : 1336-21-6 10000 ppm (Water)

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Aqua Ammonia : 1336-21-6 10000 ppm (Water)

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Aqua Ammonia : 1336-21-6 10000 ppm (Water)

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Aqua Ammonia : 1336-21-6 10000 ppm (Water)

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Aqua Ammonia : 1336-21-6 10000 ppm (Water)

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Aqua Ammonia : 1336-21-6 10000 ppm (Water)

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Aqua Ammonia : 1336-21-6 10000 ppm (Water)

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Aqua Ammonia : 1336-21-6 10000 ppm (Water)

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Aqua Ammonia : 1336-21-6 10000 ppm (Water)

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Aqua Ammonia : 1336-21-6 10000 ppm (Water)

Aqua Ammonia : 1336-21-6 250.0 mg/kg (CAS)

Product #: 25768 Name: AQUA AMMONIA 26 DEG (29.4%) Desc: (DOT 311330)
From BRENNING'S 11711 HURST RD Thursday, September 11, 2014

SHREVEPORT, LOUISIANA
PRODUCT IDENTITY: AQUA AMMONIA 26 DEG 26
NEW MSDS DATE: 09/31/2011
MSDS #: 987987

DATE: 09/31/11
PAGE 5 OF 5

SECTION 14. TRANSPORT INFORMATION

DOT SHIPPING NAME: Ammonia Solutions, 8, DME12, PG-II, 11
"NO" must be put on every shipping label if in a container of over 3400 pounds.
DOT LABEL: CORROSIVE
EMERGENCY RESPONSE CATEGORY NUMBER: 154

SECTION 15. REGULATORY INFORMATION

EPA REGULATION:
SARA SECTION 311/312 HAZARDS: ACUTE HEALTH

All components of this product are on the TSCA list.

This material contains no known products restricted under SARA Title III.
Section 313 in amounts greater or equal to 1%.

SARA TITLE III IMMEDIATES
CAS# 1316-21-6 WT. % (REG. SECTION) 1000
1316-21-6 27 (311,312)

IF > 3400 POUNDS OF THIS PRODUCT IS IN ONE CONTAINER THE "NO" OF
AQUA AMMONIA IS EXCLUDED.

STATE REGULATIONS: Product is not subject to California Prop 65.

SECTION 16. OTHER INFORMATION

HAZARD RATINGS:
HEALTH (H302): 3
CORRUPT (C01): 1
FLAMMABILITY: 1
REACTIVITY: 0

This information is intended solely for the use of individuals
employed in the OPEN & HXIS hazard rating systems

EMPLOYEE TRAINING
Employees should be made aware of all hazards of this material (as stated
in this MSDS) before handling it.

NOTICE

The supplier disclaims all expressed or implied warranties of merchantability
or fitness for a specific use, with respect to the product or the information
provided herein, except for information that is stated to be accurate and
reliable. The supplier disclaims all liability for any damage or loss resulting
from the use of this product or the information provided herein. While the information is believed to be
accurate, we make no representation as to its accuracy or sufficiency.
Conditions of use are beyond our control, and therefore users are responsible
for verifying the data under their own operating conditions and they assume
the risk of using the data. Users are responsible for the safe handling and disposal
of this product. The user should read the entire MSDS and follow the instructions
regarding all risks in regard to the publication of use of, or reliance upon,
information contained herein.
This information relates only to the product designated herein, and does not
relate to its use in combination with any other material or process.

SAFETY DATA SHEET

1/7 BWT-30

COMPANY IDENTITY: CCI
PRODUCT IDENTITY: BWT-20
SDS DATE: 08/24/2017
REPLACES: 01/22/2014

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements and the International
Chemical Safety Cards of the Global Harmonizing System.
THIS SDS COMPLES WITH CFR 1910.1200 (HAZARD COMMUNICATIONS STANDARD)
IMPORTANT: Read this SDS before handling & disposing of this product.
Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: BWT-20
SDS NUMBER: CR32
COMPANY IDENTITY: CCI CHEMICAL
COMPANY ADDRESS: 3540 EAST 26TH STREET, VERNON, CALIFORNIA 90038
COMPANY PHONE: 800-767-9112
EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)
CANUTEC: 1-613-996-6666 (CANADA)

SECTION 2. HAZARDS IDENTIFICATION

HAZARD!!



EXPOSURE PREVENTION:

HAZARD STATEMENTS:

H100s = General, H200s = Physical, H300 = Health, H400s = Environmental
H290
H314
Causes severe skin burns and eye damage.

PRECAUTIONARY STATEMENTS:

P100s = General, P200s = Prevention, P300s = Response, P400s = Storage, P500s = Disposal
P262 Do not get in eyes, on skin, or on clothing.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present &
easy to do - Continue rinsing.
P305+P351 If exposed or you feel unwell: Call a POISON CENTER or doctor/physician.
P403+P02 Store locked up. Keep out of reach of children.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	INECS#
Sodium Hydroxide	1310-73-2	215-185-5
Water	7732-18-5	231-791-2

INFORMATION While Brenntag believes the information contained herein to be accurate, Brenntag makes no representation or warranty express
or implied, regarding, and assumes no liability for the accuracy or completeness of the information. The Buyer assumes all responsibility
for handling, using and/or reworking the Product in accordance with the applicable federal, state, and local law. The user shall not in
any way limit or prejudice the operation and effect of any of the provisions of Brenntag's terms and conditions of sale.

Trace components: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

SECTION 4. FIRST AID MEASURES

EYE CONTACT:

If this product enters the eyes, open eyes while under gently running water. Use sufficient force to open eyelids. Roll eyes to expose more surface. **Minimum** flushing is for 15 minutes. Seek immediate medical attention.

SKIN CONTACT:

If the product contaminates the skin, immediately begin decontamination with running water. **Minimum** flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse. Discard contaminated shoes.

INHALATION:

After high vapor exposure, remove to fresh air. If it is suspected that the fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest, breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR). Seek immediate medical attention. In case of inhalation of decommission products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

SWALLOWING:

If swallowed, **CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION.** If professional advice is not available, give two glasses of water to drink. **DO NOT INDUCE VOMITING.** Never induce vomiting or give liquids to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.

NOTES TO PHYSICIAN:

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (such as: Oesophageal lavage after endotracheal intubation).

Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of the label and SDS to physician or health professional with victim.

SECTION 5. FIRE FIGHTING MEASURES

FIRE & EXPLOSIONS PREVENTIVE MEASURES:

Isolate from extreme heat and open flame.

EXTINGUISHING MEDIA:

In case of fire in surroundings, all extinguishing agents allowed. Contact with acids gives off hydrogen sulfide, a toxic and flammable gas that may form explosive mixtures in air.

SPECIAL FIRE FIGHTING PROCEDURES:

Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots). Use NIOSH approved positive-pressure self-contained breathing apparatus.

UNUSUAL EXPLOSION AND FIRE PROCEDURES:

Noncombustible.
Isolate from acids.
Closed containers may explode if exposed to extreme heat.
Applying to hot surfaces requires special precautions.

SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE AND ENVIRONMENTAL PRECAUTIONS:

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel.

PERSONAL PROTECTIVE EQUIPMENT:

The proper protective equipment for incidental release (such as: 1 liter of the product released in a well-ventilated area), use impermeable gloves (nitrile-gloves, rubber gloves and nitrile gloves, over latex gloves), goggles, face shield, and appropriate body protection. In the event of a large release, use impermeable gloves, specific for the material handled, chemically resistant suit and boots, and hard hat. Self-Contained Breathing Apparatus or respirator may be required where engineering controls are not adequate or conditions for potential exposure exist. When respirators are required, select NIOSH/MSHA approved based on actual or potential airborne concentrations in accordance with latest OSHA and/or ANSI recommendations.

ENVIRONMENTAL PRECAUTIONS:

Stop spill at source. Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Close or cap valves and/or block or plug hole in leaking container and transfer to another container, keep from entering storm sewers and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.

CONTAMINANT AND CLEAN-UP MEASURES:

Absorb spilled liquid with poly pads or other suitable absorbent materials. If necessary, neutralize using suitable buffering material (acid with soda ash or base with phosphoric acid), and test area with litmus paper to confirm neutralization. Clean up with non-combustible absorbent (such as sand, soil, and so on). Shovel up and place all spill residue in suitable containers. Dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and protect characteristics at time of disposal (see Section 13- Disposal Considerations).

SECTION 7. HANDLING AND STORAGE

HANDLING:

Use only with adequate ventilation. Do not get in eyes, on skin or clothing. Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse.

STORAGE:

Keep separated from strong oxidants, strong acids, metals, food & feedstuffs. Keep dry. Do not store above 49 C/120 F. Keep container tightly closed & upright when not in use to prevent leakage. Wear full face shield, gloves & full protective clothing when opening or handling. When empty, drain completely, replace bungs securely.

NONBULK: CONTAINERS:

Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in a secondary containers or in a diked area, as appropriate. Store containers away from incompatible chemicals (see section 10, Stability and Reactivity). Post warning and "NO SMOKING" signs in storage and use areas, as appropriate. Empty containers should be handle with care. Never store food, feed. Or drinking water in containers which held this product.

BULK CONTAINERS:

All tanks and pipelines which contain this material must be labeled. Perform routine maintenance on tanks or pipelines which contain this product. Report all leaks immediately to the proper personnel.

TANK CAR SHIPMENTS:

Tank cars carrying this product should be loaded and unloaded in strict accordance with tank-car manufacturers Recommendations and all established on-site safety procedures. Appropriate personal protective equipment must be used (see Section 8, Engineering Controls and Personal Protective Equipment). All loading and unloading equipment must be inspected, prior to each use. Loading and unloading operations must be accorded, at all times. Tank cars must be verified to be correct for receiving this product and be properly prepared, prior to starting the transfer operations. Hoses must be verified to be in the correct positions, before starting transfer operations. A sample (if required) must be taken and verified prior to starting transfer operations. All lines must be blown-down and purged before disconnecting them from the tank car vessel.

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT:

Follow practices indicated in section 6 (Accidental Release Measures). Make sure certain application equipment is locked and tagged-out safely. Always use this product in areas where adequate ventilations is provided. Collect all residues and dispose of according to applicable Federal, State, Provincial, or local procedures.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

MATERIAL	CAS#	EINECS#	TWA (OSHA)	TLV (ACGIH)
Sodium hydroxide	1310-73-2	215-185-5	None Known	None Known
Water	7732-18-15	231-791-2	None Known	None Known

MATERIAL	CAS#	EINECS#	CEILING STEL (OSHA/ACGIH)	HAP
Sodium Hydroxide	1310-73-2	215-185-5	2 ppm	None Known
				No

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

RESPIRATORY EXPOSURE CONTROLS:

A respiratory protective program that meets OSHA CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

VENTILATION:

LOCAL EXHAUST:	Necessary	MECHANICAL (General): Necessary
SPECIAL:	None	OTHER: None
Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.		

PERSONAL PROTECTION:

Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse.

WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers. Wash at the end of each work shift & before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES:

APPEARANCE:	Water clear liquid
ODOR:	Mild odor
ODOR THRESHOLD:	Not Available
pH (1% Solution):	10-12
MELTING POINT/FREEZING POINT:	Not Available
BOILING RANGE (BP, 50% Dry Point):	Not Applicable
FLASH POINT (TEST METHOD):	Not Applicable
EVAPORATION RATE (n-BUTYL ACETATE=1):	Not Applicable
FLAMMABILITY CLASSIFICATION:	Non-Combustible
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	Not Applicable
UPPER FLAMMABLE LIMIT IN AIR (% by vol):	Not Available
VAPOR PRESSURE (mm of Hg @ 20 C:	N/A
VAPOR DENSITY (air = 1):	N/A
GRAVITY @ 68/68 F / 20/20 C:	1.25-1.28
SPECIFIC GRAVITY (Water = 1):	10.42-10.67
POUNDS/GALLON:	Complete
WATER SOLUBILITY:	Complete
PARTITION COEFFICIENT (n-Octanol/Water):	Not Available
AUTO IGNITION TEMPERATURE:	Not Applicable
DECOMPOSITION TEMPERATURE:	Not Available

SECTION 10. STABILITY & REACTIVITY

STABILITY:

Stable under most conditions.

CONDITIONS TO AVOID:

Isolate from extreme heat, and open flame.

MATERIALS TO AVOID:

The substance is a strong base, reacts violently with acids and is corrosive. Reacts violently with strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS:

Hydrogen Sulfide

HAZARDOUS POLYMERIZATION:

Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE HAZARDS

EYE & SKIN CONTACT:

Severe burns to skin, defatting, dermatitis.

Severe burns to eyes, redness, tearing, and blurred vision.

Liquid can cause severe skin & eye burns. Wash thoroughly after handling.

INHALATION:

Severe respiratory tract irritation may occur. Vapor harmful.

The applicable occupational exposure limit value should not be exceeded during any part of working exposure.

SWALLOWING:

Harmful or fatal if swallowed.

SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

CONDITIONS AGGRAVATED:

None Known.

CHRONIC HAZARDS

CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:

This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date

Greater or equal to 0.1%.

IRRITANCY OF PRODUCT: This product is irritating to contaminated tissue.

SENSITIZATION TO THE PRODUCT: No component of this product is known to be a sensitizer.

MUTAGENICITY: This product is not reported to produce mutagenic effects in humans.

EMBRYOTOXICITY: This product is not reported to produce embryotoxic effects in humans.

TERATOGENICITY: This product is not reported to produce teratogenic effects in humans.

REPRODUCTIVE TOXICITY: This product is not reported to cause reproductive effects in humans.

A mutagen is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate through generations. A carcinogen is a chemical which causes damage to developing embryo (such as within the eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A teratogen is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A reproductive toxin is any substance which interferes in any way with the reproductive process.

MAMMALIAN TOXICITY INFORMATION

TOXICITY DATA: Toxicology information for components > 1% concentration is given below:

SODIUM HYDROXIDE:

Eye irritation (monkey):

Eye irritation (rabbit): 500 ml, 24 hours (severe)

Eye irritation (rabbit): 1% solution (severe)

Eye irritation (rabbit): 1 mg, 24 hours (severe)

Cytogenic analysis system (grasshopper parietal): 20 mg

LD50 (interperitoneal, mouse): 40 mg/kg

LDLO (oral, rabbit): 500 mg/kg

LD50 – Dose that is lethal to 50% of a given species by a given route of exposure.

LC50 – Air concentration that is lethal to 50% of a given species in a given period of time.

LDLO – Lowest lethal dose in a given species by a given route of exposure.

SECTION 12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

EFFECT OF MATERIAL ON PLANTS AND ANIMALS:

This product may be harmful or fatal to plant and animal life if released into the environment.

Refer to section 11 (Toxicological information) for further data on the effects of this product's components on test animals.

EFFECT OF MATERIAL ON AQUATIC LIFE:

SODIUM HYDROXIDE:

LC100 (Cyprinus carpio): 180 ppm/24 hours 25 C

TLm (mosquito fish): 125 ppm/96 hour (fresh water)

TLm (bluegill): 99 mg/L/48 hour (tap water)

MOBILITY IN SOIL:

Mobility of this material has not been determined.

DEGRADABILITY:

This product is completely biodegradable.

ACCUMULATION:

Bioaccumulation of this product has not been determined.

SECTION 13. DISPOSAL CONSIDERATIONS

Processing, use or contamination may change the waste management options. Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If in doubt, contact appropriate agencies.

SECTION 14. TRANSPORT INFORMATION

DOT/TDG SHIP NAME: UN1824, Sodium hydroxide solution, 8, PG-II
DRIUM LABEL: (CORROSIVE)
IATA/ICAO: UN1824, Sodium hydroxide solution, 8, PG-II
IMO / IMDG: UN1824, Sodium hydroxide solution, 8, PG-II
EMERGENCY RESPONSE GUIDEBOOK NUMBER 154



SECTION 15. REGULATORY INFORMATION

EPA REGULATIONS:
SARA SECTION 311/312 HAZARDS: Acute Health

SARA Title III Section 313 Supplier Notification
ALL components of this product are on the TSCA list.
This product contains the indicated < * > toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR 372.
This information must be included in all MSDSs that are copied and distributed for this material.

SARA TITLE III INGREDIENTS	CAS#	INECS#	(REG-SECTION)	RQ (LBS)
Sodium Hydroxide	1310-73-2	215-185-5	(311,312)	1000

Any release equal to or exceeding the RQ must be reported to the National Response Center (800-424-8802) and appropriate state and local regulatory agencies as described in 40 CFR 302.6 and 40 CFR 355.40 respectively. Failure to report may result in substantial civil and criminal penalties. State & local regulations may be more restrictive than federal regulations.

STATE REGULATIONS:
CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65):
This product contains no chemicals known to the State of California to cause cancer or reproductive toxicity.

INTERNATIONAL REGULATIONS:
The components of this product are listed on the chemical inventories of the following countries:
Australia (AICS), Canada (DSL/DSL), China (IECSC), Europe (EINECS/ELINCS), Japan (METI/CSCL, MH/W/MSHL), South Korea (KECI), New Zealand (NZDOC), Philippines (PICCS), Switzerland (SWISS), Taiwan (NIECS), USA (TSCA).

CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)
D2B: Irritating to skin / eyes
E: Corrosive Material.

SECTION 16. OTHER INFORMATION

HAZARD RATINGS:
HEALTH (NFPA): 2, HEALTH (HMIS): 2, FLAMMABILITY: 0, PHYSICAL HAZARD: 1
(Personal Protection Rating to be supplied by user based on use conditions)
This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating system.

EMPLOYEE TRAINING:
See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

NOTICE

All information, recommendations, and suggestions appearing herein concerning this product are based upon data obtained from the manufacturer and/or recognized technical sources; however, C.C.I. makes no warranty, representation or guaranty as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of the product. Additional product literature may be available upon request. Since actual use by others is beyond our control, no warranty, express or implied is made by C.C.I. as to the effects of such use, the results to be obtained or the safety and toxicity of the product nor does C.C.I. assume any liability arising out of use by others of this product.

SAFETY DATA SHEET

COMPANY IDENTITY: CCI
PRODUCT IDENTITY: BWT-90

SDS DATE: 01/22/2014
REPLACES: 11/07/2011

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements and the International Chemical Safety Cards of the Global Harmonizing System.
THIS SDS COMPLIES WITH CFR 1910.1200 (HAZARD COMMUNICATIONS STANDARD)
IMPORTANT: Read this SDS before handling & disposing of this product.
Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: BWT-90
SDS NUMBER: CR56
COMPANY IDENTITY: CCI CHEMICAL
COMPANY ADDRESS: 3540 EAST 26TH STREET, YERNON, CALIFORNIA 90058
COMPANY PHONE: 800-767-9112
EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)
CANUTEC: 1-613-996-6666 (CANADA)

SECTION 2. HAZARDS IDENTIFICATION

ANGER !!



EXPOSURE PREVENTION: AVOID ALL CONTACT !

HAZARD STATEMENTS:
H106 = General, H200s = Physical, H300 = Health, H400s = Environmental
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

PRECAUTIONARY STATEMENTS:
P100s = General, P200s = Prevention, P390s = Response, P400s = Storage, P500s = Disposal
P262 Do not get in eyes, on skin, or on clothing.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P311 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present & easy to do – Continue rinsing.
P309+P311 If exposed or you feel unwell: Call a POISON CENTER or doctor/physician.
P403+P02 Store locked up. Keep out of reach of children.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	INECS#
Sodium Hydroxide	1310-73-2	215-185-5
Water	7732-18-5	231-791-2

Trace components: Trace ingredients (if any) are present in < 1% concentration, < 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients constitutes significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

SECTION 4. FIRST AID MEASURES

EYE CONTACT:

If this product enters the eyes, open eyes while under gently running water. Use sufficient force to open eyelids. Roll eyes to expose more surface. Minimum flushing is for 15 minutes. Seek immediate medical attention.

SKIN CONTACT:

If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.

INHALATION:

A fair high vapor exposure, remove to fresh air. If it is suspected that the fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. Breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR). Seek immediate medical attention. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

SWALLOWING:

If swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, give two glasses of water to drink. DO NOT INDUCE VOMITING. Never induce vomiting or give liquids to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.

NOTES TO PHYSICIAN:

There is no specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (such as: Gastric lavage after endotracheal intubation).

Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of the label and SDS to physician or health professional with victim.

SECTION 5. FIRE FIGHTING MEASURES

FIRE & EXPLOSIONS PREVENTIVE MEASURES:

Isolate from extreme heat and open flame.

EXTINGUISHING MEDIA:

In case of fire in surroundings, all extinguishing agents allowed. Contact with acids gives off hydrogen sulfide, a toxic and flammable gas that may form explosive mixtures in air.

SPECIAL FIRE FIGHTING PROCEDURES:

Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear.
(Helmet with face shield, bunker coat, gloves & rubber boots). Use NIOSH approved positive-pressure self-contained breathing apparatus.

UNUSUAL EXPLOSION AND FIRE PROCEDURES:

Nonecombustible.
Isolate from acids.
Closed containers may explode if exposed to extreme heat.
Applying to hot surfaces requires special precautions.

SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE AND ENVIRONMENTAL PRECAUTIONS:

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel.

PERSONAL PROTECTIVE EQUIPMENT:

The proper protective equipment for incidental releases (such as: 1. Liner of the product released in a well-ventilated area, use impermeable gloves (nitrile-gloves, rubber gloves and nitrile gloves, over black gloves), goggles, face shield, and appropriate body protection. In the event of a large release, use impermeable gloves, specific for the material handled, chemically resistant suit and boots, and hard hat. Self-Contained Breathing Apparatus or respirator may be required where engineering controls are not adequate or conditioning for potential exposure exist. When respirators are required, select NIOSH/MSHA approved based on actual or potential airborne concentrations in accordance with latest OSHA and/or ANSI recommendations.

ENVIRONMENTAL PRECAUTIONS:

Stop spill at source. Contain wet temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the materials. Close or cap valves and/or block or plug hole in leaking container and transfer to another container, keep from entering storm sewer and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.

CONTAINMENT AND CLEAN-UP MEASURES:

Absorb spilled liquid with poly pads or other suitable absorbent materials. If necessary, neutralize using suitable buffering material. Wash with soda ash or base with phosphoric acid, and test area with litmus paper to confirm neutralization. Clean up with non-combustible absorbent (such as sand, soil, and so on). Shovel up and place all spill residue in suitable containers. Dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal (see Section 13 - Disposal Considerations).

SECTION 7. HANDLING AND STORAGE

HANDLING:

Use only with adequate ventilation. Do not get in eyes, on skin or clothing. Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse. NEVER pour water into this substance. When dissolving or diluting, always add it slowly to the water.

STORAGE:

Keep separated from strong oxidants, strong acids, metals, food & feedstuffs. Keep dry.
Do not store above 49 C/120 F. Keep container tightly closed & upright when not in use to prevent leakage.
Wear full face shield, gloves & full protective clothing when opening or handling. When empty, drain completely, replace bung securely.

NONBULK CONTAINERS:

Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in a secondary container or in a diked area, as appropriate.
Store containers away from incompatible chemicals (see section 10, Stability and Reactivity). Post warning and "NO SMOKING" signs in storage and use areas, as appropriate. Empty containers should be handled with care. Never store food, feed, Or drinking water in containers which held this product.

BULK CONTAINERS:

All tanks and pipelines which contain this material must be labeled. Perform routine maintenance on tanks or pipelines which contain this product. Report all leaks immediately to the proper personnel.

TANK CAR SHIPMENTS:

Tank cars carrying this product should be loaded and unloaded in strict accordance with tank-car manufacturer's Recommendations and all established on-site safety procedures. Appropriate personal protective equipment must be used (see Section 8, Engineering Controls and Personal Protective Equipment). All loading and unloading equipment must be inspected prior to each use. Loading and unloading operations must be attended, at all times. Tank cars must be vented to be correct for receiving this product and be properly prepared, prior to starting the transfer operations. Hoses must be verified to be in the correct positions, before starting transfer operations. A sample (if required) must be taken and verified prior to starting transfer operations. All lines must be blown-down and purged before disconnecting them from the tank car vessel.

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT:

Follow practices indicated in section 6 (Accidental Release Measures). Make sure certain application equipment is locked and tagged-out safely. Always use this product in areas where adequate ventilation is provided.
Collect all mixtures and dispose of according to applicable Federal, State, Provincial, or local procedures.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

MATERIAL	CAS#	ELINECS#	TWA (OSHA)	TLV (ACGIH)	
Sodium hydroxide	1310-73-2	215-185-5	None Known	None Known	
Water	7732-18-15	231-791-2	None Known	None Known	
MATERIAL	CAS#	ELINECS#	CELLING 2 ppm	STEL (OSHA/ACGIH)	HAP
Sodium Hydroxide	1310-73-2	215-185-5	None Known	None Known	No

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

RESPIRATORY EXPOSURE CONTROLS:

A respiratory protective program that meets OSHA CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

VENTILATION:

LOCAL EXHAUST:	Necessary	MECHANICAL (General):	Necessary
SPECIAL:	None	OTHER:	None

Please refer to ACGIH document, "Industrial Ventilation , A Manual of Recommended Practices", most recent edition, for details.

PERSONAL PROTECTION:
Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse.

WORK & HYGIENIC PRACTICES:
Provide readily accessible eye wash stations & safety showers. Wash at the end of each work shift & before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles, launder or discard contaminated clothing.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES:

APPEARANCE:	Water clear liquid
ODOR:	Mild odor
ODOR THRESHOLD:	Not Available
pH (Neat):	12-13
MELTING POINT/FREEZING POINT:	Not Available
BOILING RANGE (DBP 50% Dg Point):	Not Applicable
FLASH POINT (TEST METHOD):	Not Applicable
EVAPORATION RATE (n-Butyl Acetate=1):	Not Applicable
FLAMMABILITY CLASSIFICATION:	Non-Combustible
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	Not Applicable
UPPER FLAMMABLE LIMIT IN AIR (% by vol):	Not Available
VAPOR PRESSURE (mm of Hg@20 C:	N/A
VAPOR DENSITY (air = 1):	N/A
GRAVITY @ 68/68F / 20/20C:	1.31
SPECIFIC GRAVITY (Water = 1):	10.9254
POUNDS/GALLON:	Complete
WATER SOLUBILITY:	Not Available
PARTITION COEFFICIENT (n-Octane/Water):	Not Applicable
AUTO IGNITION TEMPERATURE:	Not Applicable
DECOMPOSITION TEMPERATURE:	Not Available

SECTION 10. STABILITY & REACTIVITY

STABILITY:

Stable under most conditions.

CONDITIONS TO AVOID:

Isolate from extreme heat, and open flame.

MATERIALS TO AVOID:

The substance is a strong base, reacts violently with acids and is corrosive.

Reacts violently with strong acids, causing fire & explosion hazard. Attacks many plastics, rubber, coatings, many metals such as aluminum, zinc, tin, & lead, forming flammable/explosive gas (hydrogen).

Reacts with ammonium salts to produce ammonia & causing fire hazard.

Rapidly absorbs carbon dioxide & water from the air.

Contact with moisture will generate heat.

HAZARDOUS DECOMPOSITION PRODUCTS:
Hydrogen Sulfide.

HAZARDOUS POLYMERIZATION:
Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE HAZARDS

EYE & SKIN CONTACT:

Severe burns to skin, deftacting, dermatitis.

Severe burns to eyes, redness, tearing, blurred vision.

Liquid can cause severe skin & eye burns. Wash thoroughly after handling.

INHALATION:

Severe respiratory tract irritation may occur. Vapor harmful.

The applicable occupational exposure limit value should not be exceeded during any part of working exposure.

SWALLOWING:

Harmful or fatal if swallowed.

SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

CONDITIONS AGGRAVATED:

None Known.

CHRONIC HAZARDS

CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:

This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date Greater or equal to 0.1%.

IRRITANCY OF PRODUCT: This product is irritating to contaminated tissue.

SENSITIZATION TO THE PRODUCT: No component of this product is known to be a sensitizer.

MUTAGENICITY: This product is not reported to produce mutagenic effects in humans.

EMBRYOTOXICITY: This product is not reported to produce embryotoxic effects in humans.

TERATOGENICITY: This product is not reported to produce teratogenic effects in humans.

REPRODUCTIVE TOXICITY: This product is not reported to cause reproductive effects in humans.

A mutagen is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines. An embryotoxin is a chemical which causes damage to developing embryo (such as within the eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A teratogen is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A reproductive toxin is any substance which interferes in any way with the reproductive process.

MAMMALIAN TOXICITY INFORMATION

TOXICITY DATA: Toxicology information for components > 1% concentration is given below

SODIUM HYDROXIDE:	
Eye irritation (monkey):	1%, 24 hours (severe)
Eye irritation (rabbit):	500 ml, 24 hours (severe)
Eye irritation (rabbit):	1% solution (severe)
Eye irritation (rabbit):	1 mg, 24 hours (severe)
Cytogenic analysis system (grasshopper paracenteral):	20 mg
LD50 (interperoneal, mouse):	40 mg/kg
LDLO (oral, rabbit):	500 mg/kg

LD50 – Dose that is lethal to 50% of a given species by a given route of exposure.
LC50 – Air concentration that is lethal to 50% of a given species in a given period of time.
LDLO – Lowest lethal dose in a given species by a given route of exposure.

SECTION 12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

EFFECT OF MATERIAL ON PLANTS AND ANIMALS:

This product may be harmful or fatal to plant and animal life if released into the environment.
Refer to section 11 (Toxicological Information) for further data on the effects of this product's components on test animals.

EFFECT OF MATERIAL ON AQUATIC LIFE:

SODIUM HYDROXIDE:	
LC100 (Cyprinus carpio):	180 ppm/24 hours 25 C
T1a (mosquito fish):	125 ppm/96 hour (fresh water)
T1a (bluegill):	99 mg/L/48 hour (tap water)

MOBILITY IN SOIL:

Mobility of this material has not been determined.

DEGRADABILITY:

This product is completely biodegradable.

ACCUMULATION:

Bioaccumulation of this product has not been determined.

SECTION 13. DISPOSAL CONSIDERATIONS

Processing, use or contamination may change the waste management options. Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If in doubt, contact appropriate agencies.

SECTION 14. TRANSPORT INFORMATION

DOT/IDG SHIP NAME: UN1760, Corrosive Liquid, N.O.S. (Contains Sodium hydroxide), 8, PG-II
DRLM LABEL: (CORROSIVE)
LATA / ICAO: UN1760, Corrosive Liquid, N.O.S. (Contains Sodium hydroxide), 8, PG-II
IMO / IMDG: UN1760, Corrosive Liquid, N.O.S. (Contains Sodium hydroxide), 8, PG-II
EMERGENCY RESPONSE GUIDEBOOK NUMBER: 134

SECTION 15. REGULATORY INFORMATION

EPA REGULATIONS:

SARA SECTION 311/312 HAZARDS: Acute Health

ALL components of this product are on the TSCA list.

SARA Title III Section 313 Supplier Notification

This product contains the indicated < * > toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR 372.

This information must be included in all MSDSs that are copied and distributed for this material.

SARA TITLE III INGREDIENTS CAS# EINECS# (REG-SECTION) RQ (LBS)

Sodium Hydroxide 1310-73-2 215-185-5 (311,312) 1000

Any release equal to or exceeding the RQ must be reported to the National Response Center (800-424-8802) and appropriate state and local regulatory agencies as described in 40 CFR 302.6 and 40 CFR 355.40 respectively. Failure to report may result in substantial civil and criminal penalties. State & local regulations may be more restrictive than federal regulations.

STATE REGULATIONS:

CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65):

This product contains no chemical known to the State of California to cause cancer or reproductive toxicity.

INTERNATIONAL REGULATIONS:

The components of this product are listed on the chemical inventories of the following countries:
Australia (AICS), Canada (DSL/NDSL), China (IECC), Europe (EINECS/ELINCS), Japan (MET/CSCL, MHL/WSHL), South Korea (KECI), New Zealand (NZIO), Philippines (PICCS), Switzerland (SWISS), Taiwan (NECSD), USA (TSCA).

CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

D2B: Irritating to skin / eyes
E: Corrosive Material.

SECTION 16. OTHER INFORMATION

HAZARD RATINGS:

HEALTH (HFP): 3, HEALTH (HMS): 3, FLAMMABILITY: 0, PHYSICAL HAZARD: 2
(Personal Protection Rating to be supplied by user based on use conditions)

This information is intended solely for the use of individuals trained in the HFP & HMS hazard rating system.

EMPLOYEE TRAINING:

See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.



SAFETY DATA SHEET

COMPANY IDENTITY: CCI
PRODUCT IDENTITY: SULFURIC ACID 93%
SDS DATE: 06/20/2013
REPLACES: 03/05/2012

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements and the International Chemical Safety Cards of the Global Harmonizing System.
THIS SDS COMPLEIES WITH GFA 1910.1200 (HAZARD COMMUNICATIONS STANDARD)
IMPORTANT: Read this SDS before handling & disposing of this product.
Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: SULFURIC ACID 93%
SDS NUMBER: CRI1900
COMPANY IDENTITY: CCI CHEMICAL
COMPANY ADDRESS: 3540 EAST 26TH STREET, VERNON, CALIFORNIA 90058
COMPANY PHONE: 800-767-9112
EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)
CANUTEC: 1-613-996-6666 (CANADA)

SECTION 2. HAZARDS IDENTIFICATION

DANGER !!



EXPOSURE PREVENTION: AVOID ALL CONTACT !

HAZARD STATEMENTS:
H100s = General, H200s = Physical, H300 = Health, H400s = Environmental
H290 May be corrosive to metals.
H304 May be fatal if swallowed.
H314 Causes severe skin burns and eye damage.

PRECAUTIONARY STATEMENTS:

P100s = General, P200s = Prevention, P300s = Response, P400s = Storage, P500s = Disposal
P262 Do not get in eyes, on skin, or on clothing.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present & easy to do – Continue rinsing.
P309+311 If exposed or you feel unwell: Call a POISON CENTER or doctor/physician.
P405+102 Store locked up. Keep out of reach of children.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	EINECS#	WT %
Sulfuric Acid 93%	7664-93-9	231-639-5	93-94
Water	7732-18-5	231-791-2	5-7

ALL information, recommendations, and suggestions appearing herein concerning this product are based upon data obtained from the manufacturer and/or recognized technical sources; however, C.C.I. makes no warranty, representation or guaranty as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of the product. Additional product literature may be available upon request. Since actual use by others is beyond our control, no warranty, express or implied is made by C.C.I. as to the effects of such use. The results to be obtained or the safety and toxicity of the product nor does C.C.I. assume any liability arising out of use by others of this product.

NOTICE

Trace components: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract irritants, and sensitizers). None of the trace ingredients contain significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

SECTION 4. FIRST AID MEASURES

EYE CONTACT:

If this product enters the eyes, open eyes while under gently running water. Use sufficient force to open eyelids. Roll eyes to expose more surface. Minimum flushing is for 15 minutes. Seek immediate medical attention.

SKIN CONTACT:

If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.

INHALATION:

After high vapor exposure, remove to fresh air. If it is suspected that the fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. Breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR). Seek immediate medical attention. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

SWALLOWING:

If swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, give two glasses of water to drink. DO NOT INDUCE VOMITING. Never induce vomiting or give liquids to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.

NOTES TO PHYSICIAN:

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means that likely to cause aspiration (such as: Gastric lavage after endotracheal intubation).

Victims of chemical exposure must be taken for medical attention. Reactants should be taken for medical attention, if necessary. Take a copy of the label and SDS to physician or health professional with victim.

SECTION 5. FIRE FIGHTING MEASURES

FIRE & EXPLOSIONS PREVENTIVE MEASURES:

Isolate from extreme heat and open flame. Release of sulfur dioxide at extremely high temperatures.

EXTINGUISHING MEDIA:

Use media appropriate for surrounding material. Use water spray to cool container exposed to fire. DO NOT get water inside containers.

SPECIAL FIRE FIGHTING PROCEDURES:

Water spray may be ineffective on fire but can protect fire-fighters and cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots). Use MOSH approved positive-pressure self-contained breathing apparatus.

UNUSUAL EXPLOSION AND FIRE PROCEDURES:

Reacts with most metals, especially when dilute. Hydrogen gas release (Extremely flammable, explosive). Risk of explosion when acid combined with water organic materials or base solutions in enclosed spaces (Vacuum trucks, tanks). Follow appropriate National Fire Protection Association (NFPA) codes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE AND ENVIRONMENTAL PRECAUTIONS:

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel.

PERSONAL PROTECTIVE EQUIPMENT:

The proper protective equipment for incidental releases (such as: 1 Liter of the product released in a well-ventilated area), use impermeable gloves (nitrile gloves, rubber gloves and nitrile gloves, over latex gloves), goggles, face shield, and appropriate body protection. In the event of a large release, use impermeable gloves, specific for the material handled, chemically resistant suit and boots, and hard hat. Self-Contained Breathing Apparatus or respirator may be required where engineering controls are not adequate or conditions for potential exposure exist. When respirators are required, select NIOSH/MSHA approved based on actual or potential airborne concentrations in accordance with latest OSHA and/or ANSI recommendations.

ENVIRONMENTAL PRECAUTIONS:

Stop spill at source. Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Close or cap valves and/or block or plug hole in leaking container and transfer to another container. Keep from entering storm sewers and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.

CONTAINMENT AND CLEAN-UP MEASURES:

Absorb spilled liquid with poly pads or other suitable absorbent materials. If necessary, neutralize using suitable buffering material (cautiously dilute and neutralize with lime or soda ash), and test area with litmus paper to confirm neutralization. Clean up with non-combustible absorbent (such as: sand, soil, and so on). Shovel up and place all spill residue in suitable containers. Dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal (see Section 13 - Disposal Considerations).

SECTION 7. HANDLING AND STORAGE

HANDLING:

Use only with adequate ventilation. Do not get in eyes, on skin or clothing. Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse. NEVER pour water into this substance.

STORAGE:

Sulfuric Acid must be stored in containers or tanks that have been specially designed for use with Sulfuric Acid. Do NOT add water or other products to contents in containers as violent reactions will result with resulting high heat, pressure and/or generation of hazardous acid mists. Keep containers away from heat, sparks, and flame. All closed containers must be safely vented before each opening.

NONBULK: CONTAINERS:

Store containers should be moved in a secondary container or, where freezing is possible, Material should be moved in a secondary container or in a closed van, as appropriate. Store containers away from incompatible chemicals (see section 10. Stability and Reactivity); 255 venting and/or SMOKE/FI signs in storage and use areas, as appropriate. Empty containers should be handled with care. Never store food, feed, or drinking water in containers which held this product.

BULK CONTAINERS:

All tanks and pipelines which contain this material must be labeled. Perform routine maintenance on tanks or pipelines which contain this product. Report all leaks immediately to the proper personnel.

TANK CAR SHIPMENTS:

Tank cars and their product should be loaded and unloaded in strict accordance with tank-car manufacturer's recommendations and all established on-site safety procedures. Appropriate personal protective equipment must be used. (see Section 8, Engineering Controls and Personal Protective Equipment.) All loading and unloading equipment must be inspected prior to each use. Loading and unloading operations must be attended at all times. Tank cars must be verified to be correct for receiving this product and be properly prepared prior to starting the transfer operations. Hoses must be verified to be in the correct position, before starting transfer operations. A sample (if required) must be taken and verified prior to starting transfer operations. All lines must be blown-out and purged before disconnecting them from the tank car vessel.

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT:

Follow practices indicated in section 6 (Accidental Release Measures). Make sure certain application equipment is locked and tagged out safely. Always use this product in areas where adequate ventilation is provided. Collect all residues and dispose of according to applicable Federal, State, Provincial, or local procedures.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

MATERIAL	CAS#	ELINECS#	TWA (OSHA)	TLV (ACGIH)
Sulfuric Acid	7664-93-9	231-639-5	1 mg/m ³	1 mg/m ³
Water	7732-18-15	231-791-2	None Known	None Known

MATERIAL	CAS#	EINECS#	CELLING	STEL (OSHA/ACGIH)	HAP
Sulfuric Acid	7664-93-9	231-639-5	None Known	5 mg/m ³	No

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

RESPIRATORY EXPOSURE CONTROLS:

A respiratory protective program that meets OSHA CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

VENTILATION:

LOCAL EXHAUST:	Necessary	MECHANICAL (General):	Necessary
SPECIAL:	None	OTHER:	None

Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

PERSONAL PROTECTION:

Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse.

WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers. Wash at the end of each work shift & before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE:	Light, oily- clear colorless to yellow
ODOR:	None
ODOR THRESHOLD:	Not Available
pH (Neutrality):	0.3 (1 N solution @ 25 C (75 F))
MELTING POINT/FREEZING POINT:	-10 C
BOILING RANGE:	350 - 358 deg C
FLASH POINT (TEST METHOD):	Not Applicable
EVAPORATION RATE (n-BUTYL ACETATE=1):	Not Applicable
FLAMMABILITY CLASSIFICATION:	Non-Combustible
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	Not Applicable
UPPER FLAMMABLE LIMIT IN AIR (% by vol):	Not Available
VAPOR PRESSURE (mm Hg @ 20 C:	< 0.001 mm Hg @ 20 deg C
VAPOR DENSITY (air = 1):	3.58
GRAVITY @ 68/68F (7/2020C):	1.84
SPECIFIC GRAVITY (Water = 1):	1.3445
POUNDS/GALLON:	
WATER SOLUBILITY:	Complete
PARTITION COEFFICIENT (n-Octadec/Water):	Not Available
AUTO IGNITION TEMPERATURE:	Not Applicable
DECOMPOSITION TEMPERATURE:	Not Available

SECTION 10. STABILITY & REACTIVITY

STABILITY:
Stable under most conditions.

CONDITIONS TO AVOID:
Isolate from extreme heat, and open flame. Possibility of decomposition. Release of dangerous gases (Sulfur oxides SO2 SO3)

MATERIALS TO AVOID:

Avoid temperatures greater than 350°C. Yields sulfur trioxide gas, which is toxic, corrosive, and an oxidizer. Nitro compounds, carboxides, dienes, alcohols (when heated): cause explosions. Oxidizing agents, such as chlorates and permanganates: causes fires and possible explosions. Alkyl compounds and aldehydes: undergoes polymerization, possibly violent. Alkalies, amines, water, hydrogen salts, carboxylic acid anhydrides, nitriles, olefinic organics, glycols, aqueous acids: causes strong exothermic reactions. Carbonates, cyanides, sulfides, sulfites, metals such as copper: yields toxic gas.

HAZARDOUS DECOMPOSITION PRODUCTS:

Sulfur trioxide gas.

HAZARDOUS POLYMERIZATION:

Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE HAZARDS

EYE & SKIN CONTACT:

Severe burns to skin, defining dermatitis.
Severe burns to eyes, redness, tearing, blurred vision.
Liquid can cause severe skin & eye burns. Wash thoroughly after handling.

INHALATION:

Severe respiratory tract irritation may occur. Vapor harmful.
The applicable occupational exposure limit value should not be exceeded during any part of working exposure.

SWALLOWING:

Harmful or fatal if swallowed.

SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

CONDITIONS AGGRAVATED:

None known.

CHRONIC HAZARDS

CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:

This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date.
Greater or equal to 0.1%.

IRRITANCY OF PRODUCT: This product is irritating to contaminated tissue.

SENSITIZATION TO THE PRODUCT: No component of this product is known to be a sensitizer.

MUTAGENICITY: This product is not reported to produce mutagenic effects in humans.

EMBRYOTOXICITY: This product is not reported to produce embryotoxic effects in humans.

TERATOGENICITY: This product is not reported to produce teratogenic effects in humans.

REPRODUCTIVE TOXICITY: This product is not reported to cause reproductive effects in humans.

A **mutagen** is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines. An **embryotoxin** is a chemical which causes damage to developing embryo (such as within the eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A **teratogen** is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A **reproductive toxin** is any substance which interferes in any way with the reproductive process.

MAMMALIAN TOXICITY INFORMATION

TOXICITY DATA: Toxicology information for components > 1% concentration is given below:

SULFURIC ACID:

Eye irritation (rabbit):	Draize test: 230 ug (severe)
Inhalation (mouse):	LC50 = 320 mg/m3/2H
Inhalation (rat):	LC50 = 510 mg/m3
Oral (rat):	LD50 = 2140 mg/kg

LD50 – Dose that is lethal to 50% of a given species by a given route of exposure.

LC50 – Air concentration that is lethal to 50% of a given species in a given period of time.

LDLO – Lowest lethal dose in a given species by a given route of exposure.

SECTION 12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

EFFECT OF MATERIAL ON PLANTS AND ANIMALS:

This product may be harmful or fatal to plant and animal life if released into the environment.
Refer to section 11 (Toxicological Information) for further data on the effects of this product's components on test animals.

EFFECT OF MATERIAL ON AQUATIC LIFE:

SULFURIC ACID:	
Bluegill (Sunfish):	LC50: 48 hours : 49 mg/L (Tap water, 20 deg C)
Flounder:	LC50: 48 hours : 100-330 mg/L (Aerated water)

MOBILITY IN SOIL:

Mobility of this material has not been determined.

DEGRADABILITY:

This product is completely biodegradable.

ACCUMULATION:

Bioaccumulation of this product has not been determined.

SECTION 13. DISPOSAL CONSIDERATIONS

Processing, use or contamination may change the waste management options. Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If in doubt, contact appropriate agencies.

SECTION 14. TRANSPORT INFORMATION

DOT/IDG SHIP NAME: UN1330, SULFURIC ACID, 8, PG-II
 DRUM LABEL: (CORROSIVE)
 IATA / ICAO: UN1330, SULFURIC ACID, 8, PG-II
 IMO / IMDG: UN1330, SULFURIC ACID, 8, PG-II
 EMERGENCY RESPONSE GUIDEBOOK NUMBER 137



EPA REGULATIONS:

SARA SECTION 313 HAZARDS: This product contains a chemical of chemicals which use subject to the reporting requirements of the Act and Title 40n of the code of Federal Regulations, Part 372.

ALL components of this product are on the TSCA list.

SARA Title III Section 313 Supplier Notification

This product contains the indicated < * > toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR, 312.

This information must be included in all MSDSs that are copied and distributed for this material.

SARA TITLE III INGREDIENTS	CAS#	INECS#	WT%	(REG.SECTION)	RQ (LBS)
SULFURIC ACID	7664-93-9	231-639-5	99.94	(103.502.313)	1000

Regulation (E.S.A.):
 CERCLA Section 103 Hazardous substances (40 CFR 302.4); SARA Section 302 Extremely Hazardous Substance (40 CFR 355); Yes: SARA Section 313 Toxic Chemicals (40 CFR 372.65); US: TSCA Inventory: Listed: Sulfuric (Acid) (Final RQ): 1000 pounds (454 kg)

STATE REGULATIONS:

CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65):

This product contains no chemicals known to the State of California to cause cancer or reproductive toxicity.

INTERNATIONAL REGULATIONS:

The components of this product are listed on the chemical inventories of the following countries:
 Australia (AMCS), Canada (DSL/NDSL), China (HECOS), Europe (EINECS/ELINCS), Japan (MET/CSCL), Malaysia (MCS), New Zealand (NZDOC), Philippines (PICCS), Switzerland (SWISS), Taiwan (NECS), USA (TSCA).

CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

D2B: Irritating to skin / eyes.

E: Corrosive Material.

SECTION 16. OTHER INFORMATION

HAZARD RATINGS:

HEALTH (NTP): 3, FLAMMABILITY: 0, PHYSICAL HAZARD: 2
 (Personal Protection Rating to be supplied by user based on use conditions.)

This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating system.

EMPLOYEE TRAINING:

See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

NOTICE

All information, recommendations, and suggestions appearing herein concerning this product are based upon data obtained from the manufacturer and/or recognized technical sources; however, C.C.I. makes no warranty, representation or guaranty as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of the product. Additional product literature may be available upon request. Since actual use by others is beyond our control, no warranty, express or implied is made by C.C.I. as to the effects of such use, the results to be obtained or the safety and toxicity of the product nor does C.C.I. assume any liability arising out of use by others of this product.

SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product Identifier:	BRODMAX 7.1	Product Code:	28
Chemical Family:	Water Treatment/Antimicrobial Solution		
Enviro Tech Chemical Services, Inc. 500 Winmoore Way Modesto, CA 95358 (209) 581-9576 (7 AM to 5 PM, PST, Monday to Friday)			

24 Hr. Emergency Tel.#: 800-424-9300

SECTION 2 - HAZARDS IDENTIFICATION

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). These requirements differ from the classification criteria and hazard information required for safety data sheets of non-pesticide chemicals. Please see Section 1.5 for FIFRA labeling information.

Classification of this Substance or Mixture:

- Skin Irritant - Category 2
- Serious Eye Damage - Category 1
- Corrosive to Metals - Category 1
- Acute Toxicity - Inhalation Category 4
- Acute Toxicity - Dermal Category 5

Signal Word: DANGER

Hazard Statements:

- Causes skin irritation
- Causes serious eye damage
- May be corrosive to metals
- May be harmful if inhaled
- May be harmful in contact with skin

Precautionary Statements:

- Wear protective gloves/protective clothing/eye protection/face protection if in ETES; Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- Keep away from heat/sparks/open flames/hot surfaces - No smoking.
- Keep/store away from clothing - Combustible materials.
- Take any precaution to avoid mixing with combustibles.
- Keep only in original container.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Concentration
SULFAMIC ACID, N-HOMO, SODIUM SALT	1008542-84-0	15-23%
SODIUM HYDROXIDE	1310-73-2	1-5%

SECTION 4 - FIRST-AID MEASURES

- Inhalation:** Get medical advice/attention if you feel unwell or are concerned.
- Skin Contact:** Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belt); Wash with plenty of lukewarm, gently flowing water with a flushing/circulation of 15-20 minutes. If skin irritation or rash occurs; Get medical advice/attention. Wash contaminated clothing before re-use or discard.
- Eye Contact:** Remove source of exposure or move person to clean air. Rinse eyes cautiously with lukewarm gently flowing water for several minutes, while holding eye eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 30 minutes. Take care not to rinse contaminated water into the unaffected eye or into the face. Immediately call a POISON CENTER/doctor.
- Ingestion:** Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.
- Most Important Symptoms and Effects, both Acute and Delayed:** Causes irritation/burns that may result in permanent impairment of vision, even blindness. Contact with skin can cause irritation. May be harmful if swallowed.



SAFETY DATA SHEET

Indication of any immediate Medical Attention and Special Treatment Needed: Treat symptomatically

SECTION 5 - FIRE-FIGHTING MEASURES

- Extinguishing Media:** Use water spray, powder, foam, carbon dioxide.
- Special hazards arising from the substance or mixture:** Non combustible. May give off irritating or toxic fumes (or gases) in a fire.
- Flammability classification (OSHA 29 CFR 1910.108) (Hazchem 2012):** Non flammable.
- Hazardous Combustion Products:** May cause fire and explosion when in contact with incompatible materials.
- Special protective equipment and precautions for firefighters:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures:** Ventilate area of leak or spill. Wear appropriate personal protective equipment, as specified in Section 8, isolate hazard area, keep unnecessary and unprotected personnel from entering.
- Methods and materials for containment and cleaning up:** SPILL, SPILLS (less than 1 gallon): Pick small spills with non material (sand, earth, etc.). Collect in plastic containers only. Wash area and all dry. LARGE SPILL: Should be dried with sand ahead of spill. Collect in plastic containers only. Ensure adequate decontamination of tools and equipment following clean up.
- Special spill response procedures:** Collect spills in plastic containers only. Prevent from entering sewers, waterways, or low areas.

SECTION 7 - HANDLING AND STORAGE

- Precautions for safe handling:** Wear at least chemical resistant gloves and eye protection, face shield, and chemical resistant garments when handling, moving or using this product. Do not contaminate water, food, or feed by storage or disposal.
- Conditions for safe storage:** Store in a cool, dry, well ventilated place away from direct sunlight. Keep container closed when not in use.
- Incompatible materials:** Avoid strong oxidizing agents, soft metals, heat and acids.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

- Ventilation and engineering measures:** Forced air, local exhaust, or open air is adequate.
- Respiratory Protection:** Not a respiratory irritant unless dealing with a mist form, then wear appropriate NIOSH respirator.
- Skin Protection:** Wear chemical resistant gloves and chemical resistant garments when handling. Wash garments before re-use.
- Eye/Face Protection:** Wear chemical goggles; also wear a face shield if spraying hazard ends.
- Other Protective Equipment:** Eye wash facility and emergency shower should be in close proximity.
- General Hygiene Conditions:** Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industry hygiene and safety practice.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- Appearance:** Bright orange liquid
- Odor:** Mild chlorine like odor
- pH:** 12.5-13.0 (1:100)
- Boiling/Freezing point:** < -1°C / 30°F
- Initial boiling point and boiling range:** No information available
- Flash Point:** Not applicable
- Flammability (solid, gas):** Non flammable
- Specific gravity:** 1.3 - 1.35 g/mL
- Solubility in water:** Complete
- Decomposition temperature:** No information available
- Viscosity:** 15-25 cSt at 25°C / 68°F

SECTION 10 - STABILITY AND REACTIVITY

- Reactivity:** Reactive with oxidizing agents, reducing agents, organic materials, metals, acids and alkalis.
- Chemical Stability:** Stable for up to 1 year when stored under normal conditions.
- Possibility of hazardous reactions:** May react with incompatible materials.
- Conditions to avoid:** Avoid contact with strong acids and oxidizers. Incompatible materials and cold temperatures.
- Incompatible materials:** Avoid strong reducing agents, soft metals, heat and acids.
- Hazardous decomposition products:** Nitrogen oxides, bromine and hydrochloric acid vapors.

SAFETY DATA SHEET

SECTION 11 - TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry - Inhalation: YES
Routes of entry - Skin & eye: YES
Routes of entry - Ingestion: YES
Routes of entry - Skin absorption: NO

Potential Health Effects:

Signs and symptoms of short term (acute) exposure:
Inhalation: May cause irritation to respiratory system in mist/vapor form
Ingestion: Corrosive. Swallowing causes severe burns of mouth, throat and stomach. Severe burning of throat, swelling, permanent tissue destruction can occur. May result in permanent disability. Provide severe pain relief, vomiting, charcoal, shock, resuscitating and/or fill in blood pressure. Damage may appear days after exposure.
Skin: Corrosive! Contact with skin causes irritation or severe burns and scarring with greater exposures.
Eye: Corrosive! Causes irritation of eyes, and with greater exposures it can cause burns that may result in permanent impairment of vision, even blindness.

Potential Chronic Health Effects:

Mutagenicity: May have mutagenic and tumorigenic effects with long term exposure.
Carcinogenicity: Not expected to be a carcinogen or tumorigen.
Reproductive effects: May cause reproductive effects.
Sensitization to material: Not a known sensitizer in humans or animals.
Specific target organ effects: No information available.
Medical conditions aggravated by overexposure: No information available.

Toxicological data: The calculated ATE values for this mixture are:

ATE oral = > 5000 mg/kg

ATE dermal = > 2000 mg/kg

ATE inhalation (mb) = 2.65 mg/L

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: May be harmful to aquatic life.
Persistence and degradability: No information available.
Bioaccumulation potential: No information available.
Mobility in soil: No information available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Handling (for disposal): Do not contaminate water, food, or feed by storage and/or disposal. When handling refer to protective measures listed in sections 7 and 8. Empty residue from containers, rinse container well.
Method of disposal: Dispose of in accordance with all applicable federal, state, provincial and local regulations. Contact your local state, provincial or federal environmental agency for specific rules.
RCRA: If product becomes a waste, it does meet the criteria of a hazardous waste as defined by the US EPA because of Corrosivity D002.

SECTION 14 - TRANSPORTATION INFORMATION

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

Please note the GHS and DOT Standards are NOT identical and therefore can have varying classifications.

US 49 CFR/DOT/ATA/IMDG information:

UN No.: 1750

UN Proper Shipping Name: Corrosive Liquid, n.c.s. (fumeless salt)

Transportation hazard class(es): 8

SAFETY DATA SHEET

Packing Group: III

Environmental hazards: Not a Marine Pollutant.

SECTION 15 - REGULATORY INFORMATION

PIPA Classification/Typical Hazard Labeling, as outlined in EPA, Label Review Manual

Hazard Data	HAZARD
Signal Word	Not Classified (NC)
Acute Toxicity, oral	Not Classified (NC)
Acute Toxicity, dermal	Not Classified (NC)
Acute Toxicity, inhalation	Not Classified (NC)
Severe Irritation/Corrosion	Category 1: Corrosive. Causes skin burns.
Severe eye damage	Category 1: Corrosive. Causes irreversible eye damage.
Sensitization	Not Classified (NC)
Environmental (aquatic) toxicity	This pesticide is toxic to fish and other aquatic organisms.

US Federal Information:

TSCA Information: All components are listed on the TSCA Inventory.
US CERCLA reportable quantity (RQ): Not a Regulated Material.
SARA Title III: Acute Health Hazard

SECTION 16 - OTHER INFORMATION

Legend:

SARA: The Superfund Amendments and Reauthorization Act

RCRA: Resource Conservation and Recovery Act

TSCA: Toxic Substances Control Act

CFR: Code of Federal Regulations

DOT: Department of Transportation

ATE: Acute Toxicity Estimate

Preparation date: 6/09/2014

SAFETY DATA SHEET

COMPANY IDENTITY: CCI
PRODUCT IDENTITY: CL-MOL

SDS DATE: 02/23/2015
REPLACES 02/07/2010

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements and the International Chemical Safety Cards of the Global Harmonizing System.
THIS SDS COMPLES WITH CFR 1910.1200 HAZARD COMMUNICATIONS STANDARD
IMPORTANT: Read this SDS before handling & disposing of this product.
Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: CL-MOL
SDS NUMBER: CR363
COMPANY IDENTITY: CCI CHEMICAL
COMPANY ADDRESS: 3540 EAST 26th STREET, VERNON, CALIFORNIA 90058
COMPANY PHONE: 800-767-9112
EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)
CANUTEC: 1-613-996-6666 (CANADA)

SECTION 2. HAZARDS IDENTIFICATION

HAZARD STATEMENTS:

H100s = General, H200s = Physical, H300 = Health, H400s = Environmental
H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.
H330 Causes eye irritation.

PRECAUTIONARY STATEMENTS:

P100s = General, P200s = Prevention, P300s = Response, P400s = Storage, P500s = Disposal
P262 Do not get in eyes, on skin, or on clothing.
P303+P331 If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present & easy to do – Continue rinsing.
P309+P311 if exposed or you feel unwell: Call a POISON CENTER or doctor/physician.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	WT. %
Molybdic Acid Disodium Salt	10102-40-6	5-10
Sodium Tetra borate Decahydrate	001303-96-4	5-10
Potassium Hydroxide	1310-58-3	3-5

Trace components: Trace ingredients (if any) are present in ≤ 1% concentration, (≤ 0.1% for potential carcinogens, reproductive toxins, respiratory tract irritants, and sensitizers). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

SECTION 4. FIRST AID MEASURES

EYE CONTACT:

If this product enters the eyes, open eyes while under gently running water. Use sufficient force to open eyelids. Roll eyes to expose more surface. Minimum flushing is for 15 minutes. Seek immediate medical attention.

SKIN CONTACT:

If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.

INHALATION:

Move person to fresh air, if effects occur, consult a physician.

SWALLOWING:

If swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, give two glasses of water to drink. DO NOT INDUCE VOMITING. Never induce vomiting or give liquids to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.

NOTES TO PHYSICIAN:

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (such as: gastric lavage after endotracheal intubation).

Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of the label and SDS to physician or health professional with victim.

SECTION 5. FIRE FIGHTING MEASURES

FIRE & EXPLOSIONS PREVENTIVE MEASURES:

Isolate from extreme heat and open flame.

EXTINGUISHING MEDIA:

Water, Water spray, foam, carbon dioxide (CO₂), Dry powder.

SPECIAL FIRE FIGHTING PROCEDURES:

Wear self-contained breathing apparatus and full body protective clothing.

UNUSUAL EXPLOSION AND FIRE PROCEDURES:

None.

FLASH POINT: NONE

AUTOIGNITION TEMPERATURE: N/A

SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE AND ENVIRONMENTAL PRECAUTIONS:

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel.

PERSONAL PRECAUTIONS:

Spilled material may cause a slipping hazard. Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment.

ENVIRONMENTAL PRECAUTIONS:

Stop spill at source. Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Close or cap valves and/or block or plug hole in leaking container and transfer to another container. Keep from entering storm sewers and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.

CONTAINMENT AND CLEAN-UP MEASURES:

Absorb spilled liquid with poly pads or other suitable absorbent materials. Clean up with non-combustible absorbent (such as sand, soil, and so on). Shovel up and place all spill residue in suitable containers. Dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal (see Section 13- Disposal Considerations).

SECTION 7. HANDLING AND STORAGE

HANDLING:

Product shipped/handled hot can cause thermal burns. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

STORAGE:

Freezing will affect the physical condition and may damage the material. Keep in a dry cool place (0-30°C). Keep away from heat and sources of ignition.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Material	CAS#	ELINECS#	TWA (OSHA)	TLV (ACGIH)
Potassium Hydroxide	1310-58-3	231-791-2	None Known	None Known

Material	CAS#	ELINECS#	CEILING	STEL (OSHA/ACGIH)	HAP
Potassium Hydroxide	1310-58-3	231-791-2	2 ppm	None Known	No

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

RESPIRATORY EXPOSURE CONTROLS:

A respiratory protective program that meets OSHA CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

VENTILATION:

LOCAL EXHAUST:	Recommended	MECHANICAL (General): Recommended
SPECIAL:	None	None
Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.		

PERSONAL PROTECTION:

Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse.

WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers. Wash at the end of each work shift & before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES:

APPEARANCE:	Pale yellow/straw clear liquid
ODOR:	Mild odor
ODOR THRESHOLD:	Not Available
PH (1%):	9-10
MELTING POINT/FREEZING POINT:	N/A
BOILING RANGE (1BP, 50% D5P, 10%):	212°C
FLASH POINT (TEST METHOD):	None
EVAPORATION RATE (n-BUTYL ACETATE=1):	Not Applicable
FLAMMABILITY CLASSIFICATION:	Not-Combustible
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	Not Applicable
UPPER FLAMMABLE LIMIT IN AIR (% by vol):	Not Available
VAPOR PRESSURE (mm of Hg @ 20 C):	Not Available
VAPOR DENSITY (air = 1):	Not Available
GRAVITY @ 68/68F / 20/20C:	1.05-1.10
SPECIFIC GRAVITY (Water = 1):	9.09
POUNDS/GALLON:	Complete
WATER SOLUBILITY:	N/A
VISCOSITY (mPa.s):	N/A
AUTO IGNITION TEMPERATURE:	Not Available
DECOMPOSITION TEMPERATURE:	Not Available

SECTION 10. STABILITY & REACTIVITY

STABILITY:

Stable under most conditions.

CONDITIONS TO AVOID:

Isolate from extreme heat, and open flame.

MATERIALS TO AVOID:
Oxidizing agents may cause exothermic reactions.

HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon monoxide and dioxide.

HAZARDOUS POLYMERIZATION:
Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION
Toxicology information for components > 1% concentration is given below.

NONE KNOWN

CONDITIONS AGGRAVATED:
None Known.

CHRONIC HAZARDS

CHRONIC TOXICITY:
In animals, effects have been reported on the following organs after ingestions: Gastrointestinal tract, heart, and kidney. Does levels producing these effects were many times a strong association between elevated blood pressure and prolonged dietary exposure. Related effects could occur in the kidneys.

CARCINOGENICITY:
This product is not classified as a carcinogen by NTP, IARC or OSHA.

MUTAGENIC DATA:
In vitro genetic toxicity studies were negative.

DEVELOPMENTAL TOXICITY:
Did not cause birth defects or any other fetal effects in laboratory animals.

SECTION 12. ECOLOGICAL INFORMATION

AQUATIC TOXICITY:
N/A

FRESH FISH TOXICITY:
N/A

ALGAE TOXICITY:
Algal inhibition test are not appropriate. The flocculating characteristics of the product interfere directly in the test medium preventing homogeneous distribution which invalidates the test.

BIOACCUMULATION:
Does not bioaccumulate.

SECTION 13. DISPOSAL CONSIDERATIONS

Processing, use or contamination may change the waste management options. Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If in doubt, consult appropriate agencies.

SECTION 14. TRANSPORT INFORMATION

UNNA: N/A
Classification: NON-HAZARDOUS
Proper Shipping Name: INDUSTRIAL WATER TREATMENT COMPOUND, NON D.O.T REGULATED
D.O.T Hazard Name (49CFR 172.101): NONE
D.O.T ID Number (49CFR 172.101): NONE
D.O.T Hazard Class (49CFR 172.101): NONE
ICRA Hazard Class (40CFR 111.11) (disregarded): NONE
EPA Priority pollutants (40CFR 172.55): NONE

HAZARD RATINGS:
HEALTH (NTPA): 1, HEALTH (HMIS): 1, FLAMMABILITY: 0, PHYSICAL HAZARD: 1
(Personal Protection Rating to be supplied by user based on use conditions.)
This information is intended solely for the use of individuals trained in the NTPA & HMIS hazard rating system.

SAFETY DATA SHEET

COMPANY IDENTITY: CCI
PRODUCT IDENTITY: CWT-1100M
SDS DATE: 01/22/2014
REPLACES: 02/072010

This Safety Data Sheet conforms to ANSI Z400.5, and to the formal requirements and the International Chemical Safety Cards of the Global Harmonizing System.
THIS SDS COMPLIES WITH CFR 1910.1200 (HAZARD COMMUNICATIONS STANDARD)
IMPORTANT: Read this SDS before handling & disposing of this product.
Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: CWT-1100M
SDS NUMBER: CR4049
COMPANY IDENTITY: CCI CHEMICAL
COMPANY ADDRESS: 3540 EAST 26TH STREET, VERNON, CALIFORNIA 90058
COMPANY PHONE: 800-767-9112
EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)
CANUTEC: 1-613-996-6666 (CANADA)

SECTION 2. HAZARDS IDENTIFICATION

HAZARD STATEMENTS:
H100s = General, H200s = Physical, H300 = Health, H400s = Environmental
H317 May cause allergic skin reaction.
H320 Causes eye irritation.
H330 May be harmful if swallowed.

PRECAUTIONARY STATEMENTS:
P100s = General, P200s = Prevention, P300s = Response, P400s = Storage, P500s = Disposal
P262 Do not get in eyes, on skin, or on clothing.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present & easy to do – Continue rinsing.
P309+P311 If exposed or you feel unwell: Call a POISON CENTER or doctor/physician.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	ENRCS#
Water	7732-18-5	231-191-2
Sodium Hydroxide	1310-73-2	

Trace components: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

SECTION 4. FIRST AID MEASURES

EYE CONTACT:

If this product enters the eyes, open eyes while under gently running water. Use sufficient force to open eyelids. Roll eyes to expose more surface. Minimum flushing is for 15 minutes. Seek immediate medical attention.

SKIN CONTACT:

If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.

INHALATION:

Move person to fresh air, if effects occur, consult a physician.

SWALLOWING:

If swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, give two glasses of water to drink. DO NOT INDUCE VOMITING. Never induce vomiting or give liquids to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.

NOTES TO PHYSICIAN:

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should be induced mechanically or pharmacologically, if it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (such as: Gastric lavage after endotracheal intubation).

Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of the label and SDS to physician or health professional with victim.

SECTION 5. FIRE FIGHTING MEASURES

FIRE & EXPLOSIONS PREVENTIVE MEASURES:

Isolate from extreme heat and open flame.

EXTINGUISHING MEDIA:

Water, Water spray, foam, carbon dioxide (CO2), Dry powder.

SPECIAL FIRE FIGHTING PROCEDURES:

None.

UNUSUAL EXPLOSION AND FIRE PROCEDURES:

None.

FLASH POINT: N/A

AUTOIGNITION TEMPERATURE: N/A

SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE AND ENVIRONMENTAL PRECAUTIONS:

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel.

PERSONAL PRECAUTIONS:

Spilled material may cause a slipping hazard. Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment.

ENVIRONMENTAL PRECAUTIONS:

Stop spill at source. Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Close or cap valves and/or block or plug hole in leaking container and transfer to another container; keep from entering storm sewers and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.

CONTAINMENT AND CLEAN-UP MEASURES:

Absorb spilled liquid with poly pads or other suitable absorbent materials. Clean up with non-combustible absorbent (such as: sand, soil, and so on). Shovel up and place all spill residue in suitable containers. Dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal (see Section 13- Disposal Considerations).

SECTION 7. HANDLING AND STORAGE

HANDLING:

Product shipped/handled hot can cause thermal burns. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

STORAGE:

Freezing will affect the physical condition and may damage the material. Keep in a dry cool place (0-30°C). Keep away from heat and sources of ignition.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

MATERIAL	CAS#	EINECS#	TLV A (OSHA)	TLV A (ACGIH)
Water	7732-18-15	231-791-2	None Known	None Known
Sodiumhydroxide	1310-73-2		None Known	None Known
MATERIAL	CAS#	EINECS#	CEILING STEL (OSHA/ACGIH)	HAP
Sodium Hydroxide	1310-73-2		None Known	No

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

RESPIRATORY EXPOSURE CONTROLS:

A respiratory protective program that meets OSHA CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

VENTILATION: Necessary
LOCAL EXHAUST: Necessary
SPECIAL: None
OTHER: None
Please refer to ACGIH document, "Industrial Ventilation , A Manual of Recommended Practices", most recent edition, for details.

PERSONAL PROTECTION:
Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse.

WORK & HYGIENIC PRACTICES:
Provide readily accessible eye wash stations & safety showers. Wash at the end of each work shift & before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES:

APPEARANCE: Clear Amber Liquid
ODOR: Negligible
ODOR THRESHOLD: Not Available
PH (Aqueous): 11-12
MELTING POINT/FREEZING POINT: N/A
BOILING RANGE (BP):50%_{DY} Point): Not Applicable
FLASH POINT (TEST METHOD): N/A
EVAPORATION RATE (n-BUTYL ACETATE=1): Not Applicable
FLAMMABILITY CLASSIFICATION: Non-Combustible
LOWER FLAMMABLE LIMIT IN AIR (% by vol): Not Applicable
UPPER FLAMMABLE LIMIT IN AIR (% by vol): Not Available
VAPOR PRESSURE (mm of Hg)@20 C: Not Available
VAPOR DENSITY (air = 1): Not Available
GRAVITY @ 68/68F / 20/20C: 1.26
SPECIFIC GRAVITY (Water = 1): 10.5084
POUNDS/GAL(LON): Complete
WATER SOLUBILITY: N/A
VISCOSITY (mPa.s): N/A
AUTO IGNITION TEMPERATURE: N/A
DECOMPOSITION TEMPERATURE: Not Available

SECTION 10. STABILITY & REACTIVITY

STABILITY:
Stable under most conditions.
CONDITIONS TO A VOID:
Isolate from extreme heat, and open flame.
MATERIALS TO AVOID:
Reactive metals and strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS:
Elevated temperatures may produce Phosphines, Nox, Carbon Monoxide, and Carbon Dioxide.
HAZARDOUS POLYMERIZATION:
Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

LD50 Oral: LD50/oral/rat > 2000 mg/kg (estimated)
LD50 Dermal: LD50/oral/rat > 2000 mg/kg (estimated)
LD50 Inhalation: The product is not expected to be toxic by inhalation.

CONDITIONS AGGRAVATED:

None Known.

CHRONIC HAZARDS

CHRONIC TOXICITY:
In animals, effects have been reported on the following organs after ingesters: Gastrointestinal tract, heart, and kidney. Does levels producing these effects were many time a strong association between elevated blood pressure and prolonged dietary overuse. Related effects could occur in the kidneys.

CARCINOGENICITY:
This product is not classified as a carcinogen by NTP, IARC or OSHA.

MUTAGENIC DATA:
In vitro genetic toxicity studies were negative.

DEVELOPMENTAL TOXICITY:
Did not cause birth defects or any other fetal effects in laboratory animals.

SECTION 12. ECOLOGICAL INFORMATION

AQUATIC TOXICITY:
The effects of this product on aquatic organisms are rapidly and significantly mitigated by the presence of dissolved organic carbon in the aquatic environment.

FRESH FISH TOXICITY:
LC50, Danio rerio/96 hr > 10 mg/l (OECD 203)

ALGAE TOXICITY:
Algal inhibition test are not appropriate. The flocculating characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.

DAPHNIA:
EC50/Daphnia magna/48 hr > 10 mg/l (OECD 202)

BIOACCUMULATION:
Does not bioaccumulate.

SECTION 13. DISPOSAL CONSIDERATIONS

Processing, use or contamination may change the waste management options. Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If in doubt, contact appropriate agencies.

SECTION 14. TRANSPORT INFORMATION

UNNA: N/A
Classification: NON D.O.T REGULATED
Proper Shipping Name: INDUSTRIAL WATER TREATMENT COMPOUND, NON D.O.T. REGULATED
D.O.T Hazard Name (49CFR 172.101): NONE
D.O.T ID Number (49CFR 172.101): NONE
D.O.T Hazard Class (49CFR 172.101): NONE
RCRA Hazard Class (40CFR 261.11): discarded: NONE
EPA Priority pollutants (40CFR 122.53): NONE

HAZARD RATINGS:

HEALTH (NFPA): 2, HEALTH (HMIS): 2, FLAMMABILITY: 0, PHYSICAL HAZARD: 1
(Personal Protection Rating to be supplied by user based on use conditions.)

This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating system.

NOTICE

All information, recommendations, and suggestions appearing herein concerning this product are based upon data obtained from the manufacturer and/or recognized technical sources; however, C.C.I. makes no warranty, representation or guaranty as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of the product. Additional product literature may be available upon request. Since actual use by others is beyond our control, no warranty, express or implied is made by C.C.I. as to the effects of such use, the results to be obtained or the safety and toxicity of the product nor does C.C.I. assume any liability arising out of use by others of this product.

ATTACHMENT 5 – ANNUAL CROPPING PLAN

5.1 Annual Cropping Plan

Figure 5.1 is the annual cropping plan for the facility. The annual cropping plan will be updated annually to assist the facility in the management of land application practices to ensure that wastewater and associated nutrients are applied at agronomic rates. The facility is permitted to land apply effluent to approximately 61 acres of improved grasses.

Schreiber Foods, Inc.
Annual Cropping Plan
Figure 5.1

ENVIRO-AG ENGINEERING, INC.

Field ID	Planned Crop Rotation	Crop Yield (1)	Crop Salt Tolerances (2)	Crop N Requirement lb./Ac (3)	0-6" Soil N Residual lb./Ac (4)	Crop N required lb./Ac (5)	Wastewater Analysis N lb./Ac-in (6)	Adjusted Plant Available N lb./Ac-in (7)	Ac-In/Ac of Wastewater to apply (8)	Total Gallons/Ac (9)
Pivot 1 Summer	Coastal Hay	2 Cut	8.0-12.0	200	16	184	6.81	5.45	33.8	917,095
Pivot 1 Winter	Small Grain Hay	2.5 Tons	6.0-8.0	140	0	140	6.81	5.45	25.7	697,790
Pivot 1 Summer	Forage Sorghum Hay	3.5 Tons	6.0-8.0	240	16	224	6.81	5.45	41.1	1,116,464
Pivot 1 Summer	Soybean Hay	2.5 Tons	4.0-6.0	180	16	164	6.81	5.45	30.1	817,411
Pivot 2 Summer	Coastal Hay	2 Cut	8.0-12.0	200	22	178	6.81	5.45	32.7	887,190
Pivot 2 Winter	Small Grain Hay	2.5 Tons	6.0-8.0	140	0	140	6.81	5.45	25.7	697,790
Pivot 2 Summer	Forage Sorghum Hay	3.5 Tons	6.0-8.0	240	22	218	6.81	5.45	40.0	1,086,559
Pivot 2 Summer	Soybean Hay	2.5 Tons	4.0-6.0	180	22	158	6.81	5.45	29.0	787,506

Notes:

- (1) Expected yields based on historical data from facility and county. The coastal, soybeans and small grains will be harvested at a maximum height of 12" to 15" and a minimum of 4" from the ground. The forage sorghum hay will be harvested at a maximum height of 6' to 7' and a minimum of 6' from the ground.
- (2) Taken from 30 TAC 309.20(b)(3)(B) Table 3
- (3) From USDA-NRCS Code 590/633 "S Crops" database
- (4) Taken from annual soil test results from April 4, 2022. All fields will be re-sampled and the annual cropping plan will be updated prior to waste application. It is assumed that residual N will be utilized with the summer crop.
- (5) Remainder N required to meet crop demands (crop requirement - residual N)
- (6) Taken from the October 19, 2022 weekly irrigation sample at Schreiber Foods, Inc., Erath County.
- (7) Availability of N is calculated utilizing 30 TAC 309C.
- (8) Acre inch of wastewater to be applied based lb/ac-in available N (remainder crop N divided by adjusted plant N). No additional fertilizer is required at this rate.
- (9) Total Gallons/Ac to be applied (Ac-In/Ac of wastewater x 27154 = gallons)



ANALYTICAL REPORT

November 01, 2022

Schreiber Foods Inc.

Sample Delivery Group: L1548022
Samples Received: 10/19/2022
Project Number:
Description: Weekly Irrigation
Report To: Gary McCaffty
823 CR 176
Stephenville, TX 76401

Entire Report Reviewed By: *Reagan Johnson*

Reagan Johnson
Project Manager

Results relate only to the items tested or calculated and are reported in rounded values. The test report shall not be used for any purpose other than to provide information to the customer. Pace Analytical National is not responsible for any errors or omissions in the report. Analytical National is permitted per guidance provided in laboratory standard operating procedures, ENFSI-2017-0067 and ENFSI-2017-0068, where sampling conducted by the customer, results relate to the accuracy of the information provided, and no warranty is intended.

Pace Analytical National

11205 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

ACCOUNT:
Schreiber Foods Inc

PROJECT

SDG
L1548022

DATE/TIME
10/19/22 11:28

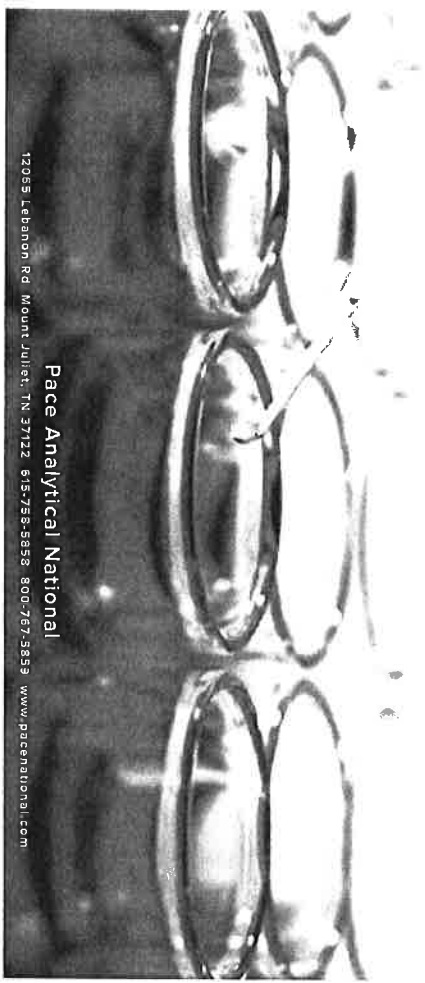
PAGE
1 of 21

GP	Tc	Ss	Cn	Sr	OC	GI	AI	Sc
----	----	----	----	----	----	----	----	----

TABLE OF CONTENTS

C3 Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Sr: Sample Results	5
IRRIGATION WATER GRAB L1548022-01	5
INF L1548022-05	6
EFF L1548022-06	7
OC: Quality Control Summary	8
Wet Chemistry by Method 1664A	8
Wet Chemistry by Method 351.2	9
Wet Chemistry by Method 353.2	11
Wet Chemistry by Method SM5210B	12
GI: Glossary of Terms	14
AI: Accreditations & Locations	15
Sc: Sample Chain of Custody	16

GP	Tc	Ss	Cn	Sr	OC	GI	AI	Sc
----	----	----	----	----	----	----	----	----



ACCOUNT:
Schreiber Foods Inc

PROJECT

SDG
L1548022

DATE/TIME
10/19/22 11:39

PAGE
2 of 21

SAMPLE SUMMARY

Collection d by: John Galt
Collection date/time: 10/19/22 10:50
Received date/time: 10/19/22 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis	Location
Wet Chemistry by Method 353.2 Wet Chemistry by Method 353.2 Wet Chemistry by Method 353.2 Wet Chemistry by Method 353.2 Wet Chemistry by Method 353.2	WG948972	1	10/29/22 23:10	10/29/22 23:10	CAT	Allen, TX
	WG948972	1	10/29/22 11:03	10/29/22 15:30	TX	Allen, TX
	WG948972	5	10/28/22 19:07	10/29/22 23:10	CAT	Mt. Juliet, TN
	WG948972	1	10/27/22 15:52	10/27/22 15:52	Big	Allen, TX
	WG948972	1	10/19/22 14:56	10/24/22 11:12	RJP	Allen, TX
Collected date/time: 10/19/22 11:15 Received date/time: 10/19/22 10:00						
Sample (Soil)						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis	Location
Wet Chemistry by Method 3562.09	WG948024	1	10/20/22 10:53	10/25/22 10:08	RJP	Allen, TX
			Collected by: John Galt	Collected date/time: 10/19/22 11:15	Received date/time: 10/19/22 10:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis	Location
Wet Chemistry by Method 3562.09	WG948024	1	10/20/22 10:57	10/25/22 10:20	RJP	Allen, TX

Tc
Sr
Ca
Ss
Gl
Al
Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or noted within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Reagan Johnson

Project Manager

Tc
Sr
Ca
Ss
Gl
Al
Sc

ACCOUNT
Schreiber Foods, Inc

PROJECT

SOG
LUS48022

DATE/TIME
10/19/22 11:39

PAGE
3 of 21

ACCOUNT
Schreiber Foods, Inc

PROJECT

SOG
LUS48022

DATE/TIME
10/19/22 11:38

PAGE
4 of 21

IRRIGATION WATER GRAB

SAMPLE RESULTS - 01

Collected date/time: 10/17/22 10:40
L1549022

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Nitrogen	30.1		0.0500	1	10/29/2022 23:10	W61949823

Wet Chemistry by Method 1664A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Oil & Grease (Hexane Ext)	ND		5.00	1	10/31/2022 15:30	W61950352

Wet Chemistry by Method 3512

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Kyocarbonyl (TKN)	29.4		1.25	5	10/29/2022 23:10	W61949505

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Ammonia-Nitrite	0.756		0.0500	1	10/27/2022 15:52	W61949873

Wet Chemistry by Method SMS210B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
SDS	15.0		5.00	1	10/24/2022 11:12	W61948572



ACCOUNT
Schnobor Foods, Inc.

PROJECT

SDG
L1549022

DATE/TIME
10/07/22 11:38

PAGE
5 of 21

ACCOUNT
Schnobor Foods, Inc.

PROJECT

SDG
L1549022

DATE/TIME
10/07/22 11:38

PAGE
6 of 21

INF
Collected date/time: 10/19/22 11:15

SAMPLE RESULTS - 05

Collected date/time: 10/19/22 11:15
L1549022

Wet Chemistry by Method SMS210B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
BOD	91.2		6.00	1	10/25/2022 10:18	W51946024



Collected date/time: 10/10/22 11:15

SAMPLE RESULTS - 06
11542072

L1543022

Additional information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
pH (On Site)	8.47	°C
Temperature (on-site)	62	

Wet Chemistry by Method SM5210B

Analyte	Result	Qualifier	RDL	Duration	Analysis	Batch
END	39.7	mg/l	3.00	1	10/29/2012 10:20	W379H4520

Sc Al Ga Oc Sr Cu Ss Tc

WG1950352
Wet Chemistry by ME

Wet Chemistry by Method 1654A

QUALITY CONTROL SUMMARY

L154B022.01

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
042 Gamma-Hexachlor	U		0.350	5.00

	Cell Averages	Cell Deviation	Cell Size	Cell Shape	Cell Location
Sample (CS) - Laboratory Sample (LCS)					
LCS R03S5A06-1	10/3/22 15:30	LCS01_R03S5A06-3	10/3/22 15:30		

Acetone	mg/l	mg/l	mg/l	mg/l
Oil & Grease (Petroleum Est)	40.0	40.5	37.4	16.1

1156347-0: Original Sample (C₂) • Mail to: Equine MS

Analysis	Spice Amount			MS Result
	mg/l	mg/l	mg/l	
MS Result				MS Result

Year	1995	2000	2005	2010	2015	2020
Population (millions)	1.2	1.4	1.6	1.8	2.0	2.2
GDP (billions of dollars)	100	150	200	250	300	350
Life expectancy (years)	75	78	80	82	84	86
Urban population (%)	45	55	65	75	85	90
Female population (%)	50	50	50	50	50	50
Population growth rate (%)	1.5	1.2	1.0	0.8	0.6	0.4
Population density (per sq km)	100	120	140	160	180	200
Population pyramid	[Diagram showing population pyramid for 1995, 2000, 2005, 2010, 2015, and 2020]					

Accepted for publication 12 November 2007

2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100

QUALITY CONTROL SUMMARY

WG1949505

Met Chemistry by Meridian 351.2

Method Blank (MS)

LS180223

Analyte	MS Result	MS Result	MS Result
Aspartic Acid	0.00	0.00	0.00
Glutamic Acid	0.00	0.00	0.00
Proline	0.00	0.00	0.00

LS180223-05 Original Sample (OS) - Duplicate (DU)

Analyte	Original Result	Duplicate	DUP Result
Aspartic Acid	0.00	0.00	0.00
Glutamic Acid	0.00	0.00	0.00
Proline	0.00	0.00	0.00

LS180223-06 Original Sample (OS) - Duplicate (DU)

Analyte	Original Result	Duplicate	DUP Result
Aspartic Acid	0.00	0.00	0.00
Glutamic Acid	0.00	0.00	0.00
Proline	0.00	0.00	0.00

Laboratory Control Sample (LCS)

Analyte	MS Result	MS Result	MS Result
Aspartic Acid	0.00	0.00	0.00
Glutamic Acid	0.00	0.00	0.00
Proline	0.00	0.00	0.00

LS180223-07 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Analyte	Original Result	MS Result	MSD Result
Aspartic Acid	0.00	0.00	0.00
Glutamic Acid	0.00	0.00	0.00
Proline	0.00	0.00	0.00

Sample Name: MS Matrix Spike (MS) to matrix reference

ACCOUNT

RESULT

DOC

DATE/TIME

NAME

ACCOUNT

PROJECT

DO

DATE/TIME

NAME

QUALITY CONTROL SUMMARY

WG1949505

Met Chemistry by Meridian 351.2

Method Blank (MS)

LS180223

Analyte	MS Result	MS Result	MS Result
Aspartic Acid	0.00	0.00	0.00
Glutamic Acid	0.00	0.00	0.00
Proline	0.00	0.00	0.00

LS180223-05 Original Sample (OS) - Matrix Spike (MS)

Analyte	Original Result	MS Result	MS Result
Aspartic Acid	0.00	0.00	0.00
Glutamic Acid	0.00	0.00	0.00
Proline	0.00	0.00	0.00

LS180223-06 Original Sample (OS) - Duplicate (DU)

Analyte	Original Result	Duplicate	DUP Result
Aspartic Acid	0.00	0.00	0.00
Glutamic Acid	0.00	0.00	0.00
Proline	0.00	0.00	0.00

Laboratory Control Sample (LCS)

Analyte	MS Result	MS Result	MS Result
Aspartic Acid	0.00	0.00	0.00
Glutamic Acid	0.00	0.00	0.00
Proline	0.00	0.00	0.00

LS180223-07 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Analyte	Original Result	MS Result	MSD Result
Aspartic Acid	0.00	0.00	0.00
Glutamic Acid	0.00	0.00	0.00
Proline	0.00	0.00	0.00

Sample Name: MS Matrix Spike (MS) to matrix reference

ACCOUNT

PROJECT

DO

DATE/TIME

NAME

Sc

Sc

WG1949873

Web Chemistry by Mettler 355.2

QUALITY CONTROL SUMMARY

L154931.21

Method Blank (MB)

DUP R055470-1 10/27/23 10 50

Analyte	mg/L	MB Result	MB MDL	MB BOL
Trace-Metal	U	0.0000	mg/L	0.0500

Laboratory Control Sample (LCS)

LCS R055470-2 10/27/23 10 51

Analyte	mg/L	LCS Result	LCS Rec	Rec Limit	LCS Qualifier
Trace-Metal	2.80	2.80	100	100.000	

L154931-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

(OS) L154931-01 10/27/23 10 54 - (MS) R055470-3 10/27/23 10 55 - (MSD) R055470-4 10/27/23 10 51

Analyte	mg/L	Original Result	DUP Result	DUP Rec	DUP Limit	DUP Qualifier	MS Result	MS Rec	MS Limit	MSD Result	MSD Rec	MSD Limit	MSD Qualifier	PPM Limit
Trace-Metal	2.80	2.80	3.37	3.37	50.0	50.0	2.80	50.0	50.0	2.80	50.0	50.0	50.0	30

L154931-02 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

(OS) L154931-02 10/27/23 10 55 - (MS) R055470-5 10/27/23 10 56 - (MSD) R055470-6 10/27/23 10 57

Analyte	mg/L	Original Result	MS Result	MS Rec	MS Limit	MSD Result	MSD Rec	MSD Limit	DUP Result	DUP Rec	DUP Limit	DUP Qualifier	PPM Limit
Trace-Metal	2.80	1.53	3.91	3.92	93.2	91.4	93.2	93.2	2.80	93.2	93.2	93.2	20

ACCOUNT
S&P Chemical Inc.

PROJECT

DOA
11/1/23DATE/TIME
11/1/23 11:00PAGE
Page 2/1

WG1945317

Web Chemistry by Mettler 045208

QUALITY CONTROL SUMMARY

L154931.21

Method Blank (MB)

DUP R0553079-1 10/24/23 10 32

Analyte	mg/L	MB Result	MB MDL	MB BOL
BOD	U	0.100	mg/L	0.200

L1547249-01 Original Sample (OS) - Duplicate (DUP)

(OS) L1547249-01 10/24/23 10 33 - (DUP) R0553079-2 10/24/23 10 34

Analyte	mg/L	Original Result	DUP Result	DUP Rec	DUP Limit	DUP Qualifier
BOD	ND	ND	1	0	20	20

L1547249-01 Original Sample (OS) - Duplicate (DUP)

(OS) L1547249-01 10/24/23 10 33 - (DUP) R0553079-3 10/24/23 10 35

Analyte	mg/L	Original Result	DUP Result	DUP Rec	DUP Limit	DUP Qualifier
BOD	ND	ND	1	0	20	20

Laboratory Control Sample (LCS)

LCS R0553079-2 10/24/23 10 35

Analyte	mg/L	Original Result	LCS Result	LCS Rec	Rec Limit	LCS Qualifier
BOD	ND	ND	79	95.5	50.00	

ACCOUNT
S&P Chemical Inc.

PROJECT

DOA
11/1/23DATE/TIME
11/1/23 11:00PAGE
Page 1/1

00144

The information shown is designed to guide reading the various forms used in your report of analytical results from the laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Randomly selected data that may be provided by the system, and contained within its scope, include: Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blank, Field Spills, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results reflect the accuracy of the information obtained, and are the samples as they are received.

55

Qc Sr Cn

result reported has already been corrected for this factor.

11

cup/notebook worth writing angles...

4

potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable

The information in the results column should always be accompanied by either an MDL or a Method Detection Limit of ng/L . Reporting Detection Limit that defines a lower value than the MDL is not pertinent for this analysis.

Confidence level of 2 sigma

1604-1605, 1606-1607, 1608-1609, 1610-1611, 1612-1613, 1614-1615, 1616-1617, 1618-1619, 1620-1621, 1622-1623, 1624-1625, 1626-1627, 1628-1629, 1630-1631, 1632-1633, 1634-1635, 1636-1637, 1638-1639, 1640-1641, 1642-1643, 1644-1645, 1646-1647, 1648-1649, 1650-1651, 1652-1653, 1654-1655, 1656-1657, 1658-1659, 1660-1661, 1662-1663, 1664-1665, 1666-1667, 1668-1669, 1670-1671, 1672-1673, 1674-1675, 1676-1677, 1678-1679, 1680-1681, 1682-1683, 1684-1685, 1686-1687, 1688-1689, 1690-1691, 1692-1693, 1694-1695, 1696-1697, 1698-1699, 1700-1701, 1702-1703, 1704-1705, 1706-1707, 1708-1709, 1710-1711, 1712-1713, 1714-1715, 1716-1717, 1718-1719, 1720-1721, 1722-1723, 1724-1725, 1726-1727, 1728-1729, 1730-1731, 1732-1733, 1734-1735, 1736-1737, 1738-1739, 1740-1741, 1742-1743, 1744-1745, 1746-1747, 1748-1749, 1750-1751, 1752-1753, 1754-1755, 1756-1757, 1758-1759, 1760-1761, 1762-1763, 1764-1765, 1766-1767, 1768-1769, 1770-1771, 1772-1773, 1774-1775, 1776-1777, 1778-1779, 1780-1781, 1782-1783, 1784-1785, 1786-1787, 1788-1789, 1790-1791, 1792-1793, 1794-1795, 1796-1797, 1798-1799, 1800-1801, 1802-1803, 1804-1805, 1806-1807, 1808-1809, 1810-1811, 1812-1813, 1814-1815, 1816-1817, 1818-1819, 1820-1821, 1822-1823, 1824-1825, 1826-1827, 1828-1829, 1830-1831, 1832-1833, 1834-1835, 1836-1837, 1838-1839, 1840-1841, 1842-1843, 1844-1845, 1846-1847, 1848-1849, 1850-1851, 1852-1853, 1854-1855, 1856-1857, 1858-1859, 1860-1861, 1862-1863, 1864-1865, 1866-1867, 1868-1869, 1870-1871, 1872-1873, 1874-1875, 1876-1877, 1878-1879, 1880-1881, 1882-1883, 1884-1885, 1886-1887, 1888-1889, 1890-1891, 1892-1893, 1894-1895, 1896-1897, 1898-1899, 1900-1901, 1902-1903, 1904-1905, 1906-1907, 1908-1909, 1910-1911, 1912-1913, 1914-1915, 1916-1917, 1918-1919, 1920-1921, 1922-1923, 1924-1925, 1926-1927, 1928-1929, 1930-1931, 1932-1933, 1934-1935, 1936-1937, 1938-1939, 1940-1941, 1942-1943, 1944-1945, 1946-1947, 1948-1949, 1950-1951, 1952-1953, 1954-1955, 1956-1957, 1958-1959, 1960-1961, 1962-1963, 1964-1965, 1966-1967, 1968-1969, 1970-1971, 1972-1973, 1974-1975, 1976-1977, 1978-1979, 1980-1981, 1982-1983, 1984-1985, 1986-1987, 1988-1989, 1990-1991, 1992-1993, 1994-1995, 1996-1997, 1998-1999, 2000-2001, 2002-2003, 2004-2005, 2006-2007, 2008-2009, 2010-2011, 2012-2013, 2014-2015, 2016-2017, 2018-2019, 2020-2021, 2022-2023, 2024-2025, 2026-2027, 2028-2029, 2030-2031, 2032-2033, 2034-2035, 2036-2037, 2038-2039, 2040-2041, 2042-2043, 2044-2045, 2046-2047, 2048-2049, 2050-2051, 2052-2053, 2054-2055, 2056-2057, 2058-2059, 2060-2061, 2062-2063, 2064-2065, 2066-2067, 2068-2069, 2070-2071, 2072-2073, 2074-2075, 2076-2077, 2078-2079, 2080-2081, 2082-2083, 2084-2085, 2086-2087, 2088-2089, 2090-2091, 2092-2093, 2094-2095, 2096-2097, 2098-2099, 2100-2101, 2102-2103, 2104-2105, 2106-2107, 2108-2109, 2110-2111, 2112-2113, 2114-2115, 2116-2117, 2118-2119, 2120-2121, 2122-2123, 2124-2125, 2126-2127, 2128-2129, 2130-2131, 2132-2133, 2134-2135, 2136-2137, 2138-2139, 2140-2141, 2142-2143, 2144-2145, 2146-2147, 2148-2149, 2150-2151, 2152-2153, 2154-2155, 2156-2157, 2158-2159, 2160-2161, 2162-2163, 2164-2165, 2166-2167, 2168-2169, 2170-2171, 2172-2173, 2174-2175, 2176-2177, 2178-2179, 2180-2181, 2182-2183, 2184-2185, 2186-2187, 2188-2189, 2190-2191, 2192-2193, 2194-2195, 2196-2197, 2198-2199, 2200-2201, 2202-2203, 2204-2205, 2206-2207, 2208-2209, 2210-2211, 2212-2213, 2214-2215, 2216-2217, 2218-2219, 2220-2221, 2222-2223, 2224-2225, 2226-2227, 2228-2229, 2230-2231, 2232-2233, 2234-2235, 2236-2237, 2238-2239, 2240-2241, 2242-2243, 2244-2245, 2246-2247, 2248-2249, 2250-2251, 2252-2253, 2254-2255, 2256-2257, 2258-2259, 2260-2261, 2262-2263, 2264-2265, 2266-2267, 2268-2269, 2270-2271, 2272-2273, 2274-2275, 2276-2277, 2278-2279, 2280-2281, 2282-2283, 2284-2285, 2286-2287, 2288-2289, 2290-2291, 2292-2293, 2294-2295, 2296-2297, 2298-2299, 2300-2301, 2302-2303, 2304-2305, 2306-2307, 2308-2309, 2310-2311, 2312-2313, 2314-2315, 2316-2317, 2318-2319, 2320-2321, 2322-2323, 2324-2325, 2326-2327, 2328-2329, 2330-2331, 2332-2333, 2334-2335, 2336-2337, 2338-2339, 2340-2341, 2342-2343, 2344-2345, 2346-2347, 23

Being performed on your systems typically, not on laboratory generated material.

chain of custody and documentation of all evidence, including photographs, should be maintained throughout the investigation. The chain of custody and documentation should be maintained in a secure location.

This section of your report will provide the results of all testing performed on your sample. These results are provided

The Journal of the American Chemical Society
Volume 125, Number 1, January 1, 2003
Published by the American Chemical Society
5001 Lankford Street, Suite 1200, Washington, DC 20004
Phone: (202) 861-9820 Fax: (202) 861-9821
E-mail: membership@chemsoc.org
Web: <http://www.acs.org>

Time of preparation and/or analysis	Time of screening the country file
10 min	10 min
15 min	15 min
20 min	20 min
25 min	25 min
30 min	30 min
35 min	35 min
40 min	40 min
45 min	45 min
50 min	50 min
55 min	55 min
60 min	60 min
65 min	65 min
70 min	70 min
75 min	75 min
80 min	80 min
85 min	85 min
90 min	90 min
95 min	95 min
100 min	100 min
105 min	105 min
110 min	110 min
115 min	115 min
120 min	120 min
125 min	125 min
130 min	130 min
135 min	135 min
140 min	140 min
145 min	145 min
150 min	150 min
155 min	155 min
160 min	160 min
165 min	165 min
170 min	170 min
175 min	175 min
180 min	180 min
185 min	185 min
190 min	190 min
195 min	195 min
200 min	200 min
205 min	205 min
210 min	210 min
215 min	215 min
220 min	220 min
225 min	225 min
230 min	230 min
235 min	235 min
240 min	240 min
245 min	245 min
250 min	250 min
255 min	255 min
260 min	260 min
265 min	265 min
270 min	270 min
275 min	275 min
280 min	280 min
285 min	285 min
290 min	290 min
295 min	295 min
300 min	300 min
305 min	305 min
310 min	310 min
315 min	315 min
320 min	320 min
325 min	325 min
330 min	330 min
335 min	335 min
340 min	340 min
345 min	345 min
350 min	350 min
355 min	355 min
360 min	360 min
365 min	365 min
370 min	370 min
375 min	375 min
380 min	380 min
385 min	385 min
390 min	390 min
395 min	395 min
400 min	400 min
405 min	405 min
410 min	410 min
415 min	415 min
420 min	420 min
425 min	425 min
430 min	430 min
435 min	435 min
440 min	440 min
445 min	445 min
450 min	450 min
455 min	455 min
460 min	460 min
465 min	465 min
470 min	470 min
475 min	475 min
480 min	480 min
485 min	485 min
490 min	490 min
495 min	495 min
500 min	500 min
505 min	505 min
510 min	510 min
515 min	515 min
520 min	520 min
525 min	525 min
530 min	530 min
535 min	535 min
540 min	540 min
545 min	545 min
550 min	550 min
555 min	555 min
560 min	560 min
565 min	565 min
570 min	570 min
575 min	575 min
580 min	580 min
585 min	585 min
590 min	590 min
595 min	595 min
600 min	600 min
605 min	605 min
610 min	610 min
615 min	615 min
620 min	620 min
625 min	625 min
630 min	630 min
635 min	635 min
640 min	640 min
645 min	645 min
650 min	650 min
655 min	655 min
660 min	660 min
665 min	665 min
670 min	670 min
675 min	675 min
680 min	680 min
685 min	685 min
690 min	690 min
695 min	695 min
700 min	700 min
705 min	705 min
710 min	710 min
715 min	715 min
720 min	720 min
725 min	725 min
730 min	730 min
735 min	735 min
740 min	740 min
745 min	745 min
750 min	750 min
755 min	755 min
760 min	760 min
765	

The sample matrix interfered with the ability to make any accurate determination; spike value is high

Test replicates show more than 30% difference between high and low values

RPD value not applicable for sample concentrations less than 5 times the reporting limit

Al Sc

Al Ga Sc

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	4340	NEC-605
Alaska	7426	TN000020214
Arizona	42812	3935
Arkansas	62-0469	New Hampshire
California	2932	New Jersey-NELAP
Colorado	TN00003	New Mexico
Connecticut	PH-0397	New York
Florida	ED937	North Carolina
Georgia	NELAP	North Carolina
Idaho	923	North Dakota
Illinois	TN00003	Ohio-VAP
Indiana	200006	Oklahoma
Iowa	C-IN401	Oregon
Kansas	E-10277	Pennsylvania
Kentucky	KY90070	Rhode Island
Kentucky	5	South Carolina
Louisiana	AE0392	South Dakota
Maine	LA010	Tennessee
Maryland	TN00003	Texas
Massachusetts	324	Texas
Michigan	N-TN003	Utah
Minnesota	9550	Vermont
Mississippi	047999-395	Virginia
Missouri	TN00003	Washington
Montana	340	West Virginia
Nebraska	CERTIFIED	Wisconsin
Nevada	1481 CT	Wyoming
NEW YORK	1481 CT	AAH-LAP LLC ENLAP
North Carolina	1481 CT	DOO
North Dakota	TN00003	USA
Ohio	BP-Cryo	P20-15-00234
Oklahoma		
Oregon		
Pennsylvania		
Rhode Island		
South Carolina		
South Dakota		
Tennessee		
Texas		
Utah		
Vermont		
Virginia		
Washington		
West Virginia		
Wisconsin		
Wyoming		

Pace Analytical Services, LLC-Dallas 400 W. Bethany Drive Suite 190 Allen, TX 75013

Alabama	4340	NEC-605
Alaska	7426	TN000020214
Arizona	42812	3935
Arkansas	62-0469	New Hampshire
California	2932	New Jersey-NELAP
Colorado	TN00003	New Mexico
Connecticut	PH-0397	New York
Florida	ED937	North Carolina
Georgia	NELAP	North Carolina
Idaho	923	North Dakota
Illinois	TN00003	Ohio-VAP
Indiana	200006	Oklahoma
Iowa	C-IN401	Oregon
Kansas	E-10277	Pennsylvania
Kentucky	KY90070	Rhode Island
Kentucky	5	South Carolina
Louisiana	AE0392	South Dakota
Maine	LA010	Tennessee
Maryland	TN00003	Texas
Massachusetts	324	Texas
Michigan	N-TN003	Utah
Minnesota	9550	Vermont
Mississippi	047999-395	Virginia
Missouri	TN00003	Washington
Montana	340	West Virginia
Nebraska	CERTIFIED	Wisconsin
Nevada	1481 CT	Wyoming
NEW YORK	1481 CT	AAH-LAP LLC ENLAP
North Carolina	1481 CT	DOO
North Dakota	TN00003	USA
Ohio	BP-Cryo	P20-15-00234
Oklahoma		
Oregon		
Pennsylvania		
Rhode Island		
South Carolina		
South Dakota		
Tennessee		
Texas		
Utah		
Vermont		
Virginia		
Washington		
West Virginia		
Wisconsin		
Wyoming		

* Drinking Water * Underground Storage Tanks * Airspace Toxicity * Commercial/Industrial * Mold * Wastewater * No Accreditation not applicable
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical



Schreiber Foods Inc.
 823 CR 175
 Stephenville, TX 79401

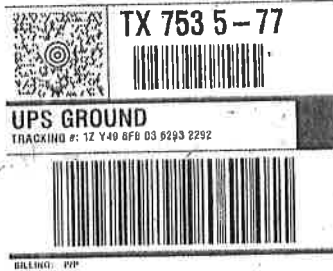
Client Information:
 Project Name: 254-552-7717
 Project #:
 Date: 10/14/22

Test Results:

Test Name	Result	Pass/Fail
ALLBOD 1L-HDPE NoPros	Pass	X
ALLNO2NO3 250ml-HDPE-H2SO4	Pass	X
ALLOGHEX 1L-Amb-Add HCl	Pass	X
TKN 250ml-HDPE-H2SO4	Pass	X

Signature: [Signature]
Date: 10/14/22

STEPHEN WILK
SHIP TO:
PACE AHA
(972) 727-
STE 190
400 W BETHANY DR
ALLEN TX 75013-3714



REF 1-01430-040210
BFI Department to Chicago, Stephenville
We do not deliver to this location.
BFI Department to Chicago, Stephenville
We do not deliver to this location.

Pace Analytical	Document Name:	Document Revised: 7/27/20
	Sample Condition Upon Receipt	Page 1 of 1
	Document No.: F-DAT-C-001-Rev.14	Issuing Authority: Pace Dallas Quality Office

Sample Condition Upon Receipt

☒ Dallas ☐ Ft Worth ☐ Corpus Christi ☐ Austin

Client Name: Schreiber Foods Inc Project Work order (place label):

Courier: FedEx ☐ UPS ☒ USPS ☐ Client ☐ ISO ☐ PACE ☐ Other:

Tracking #: 1Z Y40 8FB 03 9293 2292

Custody Seal on Cooler/Box: Yes ☐ No ☒

Received on ice: Wet ☒ Blue ☐ No ice ☐

Receiving Lab 1 Thermometer Used: 1819

Receiving Lab 2 Thermometer Used: _____

Cooler Temp °C: 2.2 (Recorded) +0.5 (Correction Factor) 2.7 (Actual)

Cooler Temp °C: _____ (Recorded) _____ (Correction Factor) _____ (Actual)

Temperature should be above freezing to 6°C unless collected same day as receipt in which evidence of cooling is acceptable

Triage Person: DB Date: 10/19/22

Chain of Custody relinquished	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Sampler name & signature on COC	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Short HT analyses (<72 hrs)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Login Person: OC Date: 10/19

Sufficient Volume received	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Correct Container used	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Container Intact	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Sample pH Acceptable	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>
pH Strips: <u>4.00s</u>	
Residual Chlorine Present	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
Cl Strips: _____	
Sulfide Present	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
Lead Acetate Strips: _____	
Are soil samples (volatiles, TPH) received in 5035A Kits (not applicable to TCLP VOA or PST Program TPH)	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
Unpreserved 5035A soil frozen within 48 hrs	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
Headspace in VOA (>6mm)	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
Project sampled in USDA Regulated Area outside of Texas	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
State Sampled: _____	
Non-Conformance(s): _____	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Labelling Person (if different than log-in): _____ Date: _____

Schreiber Foods Inc.
 612 CR 116
 Stephenville, TX 79481

Order Information
 Order # 1548022
 Order Date 12/11/12
 Order Status Open

Customer Information
 Company Name **US F&B**
 Contact Person **John Doe**
 Phone **254-552-7717**

Product Information
 Product Description **ALL BOD 1L HDPE NUTS**
 Quantity **1000**
 Unit of Measure **EA**

Shipping Information
 Ship To **US F&B**
 Address **1548022**
 City **Stephenville**
 State **TX**
 Zip **79481**

Order Details

Item #	Description	Quantity	Unit of Measure	Price	Total Price
1	ALL BOD 1L HDPE NUTS	1000	EA	0.25	250.00

Comments
 1548022

Signature
 [Signature]

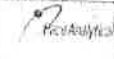
SHIP TO
 FACE AND
 1548022
 1548022
 1548022
 455 W BETHANY DR
 ALLEN TX 75013-3714

TX 753 5-77

UPS GROUND
 TRACKING # 1Z Y48 8F6 03 0203 2202

BILL TO: POP

1548022-940210
 254-552-7717

	Document Name:	Document Revised: 11/17/20
	Sample Condition Upon Receipt	Page 1 of 1
	Document No: F.DAL-001 rev.14	Issuing Authority: Pace Dallas Quality Office

Sample Condition Upon Receipt

☒ Dallas
 ☐ Ft Worth
 ☐ Corpus Christi
 ☐ Austin

Client Name: Schreiber Foods, Inc. Project Work order (place label)

Container: FedEx ☐ UPS ☐ USPS ☐ Client ☐ ISO ☐ PAC ☐ Other: _____

Tracking #: 12449 8F8 03 6243 2212

Custody Seal on Cooler/Box: Yes ☐ No ☒

Received on ice: Wet ☒ Dry ☐ No ice ☐

Receiving Lab 1 Thermometer Used: 1819 Cooler Temp °C: 2.5 (Recorded) 10.5 (Correction Factor) 35 (Actual)

Receiving Lab 2 Thermometer Used: _____ Cooler Temp °C: _____ (Recorded) _____ (Correction Factor) _____ (Actual)

Temperature should be above freezing to 0°C unless collected under dry as receipt in which evidence of cooling is acceptable

Trigge Person: DS Date: 10/14/21

Chain of Custody relinquished	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Sampler name & signature on COC	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Short HI analysis (<72 hrs)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Log in Person: DS Date: 10/14

Sufficient Volume received	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Correct Container used	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Container Intact	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Sample pH Acceptable	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>
pH Strips: <u>6.0/6.5</u>	
Residual Chlorine Present	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input checked="" type="checkbox"/>
Cl Strips:	
Sulfide Present	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input checked="" type="checkbox"/>
Lead Acetate Strips:	
Are soil samples (volatiles, TPH) received in 5035A kits (not applicable to TCLP VOA or PST Program TPH)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input checked="" type="checkbox"/>
Unpreserved 5035A soil frozen within 48 hrs	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input checked="" type="checkbox"/>
Headspace in VOA (>6mm)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input checked="" type="checkbox"/>
Project sampled in USDA Regulated Area outside of Texas	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input checked="" type="checkbox"/>
State Sampled:	
Non-Conformance(s):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Labeling Person (if different than log-in): _____ Date: _____

ATTACHMENT 6 – WATER WELL INFORMATION

6.1 Water Well Map

Figure 6.1, Water well Map, shows the locations of water wells within ½ mile of the property boundary. Water wells within irrigation fields or adjacent to irrigation fields will be protected with 150-ft buffers.

6.2 Water Well Information

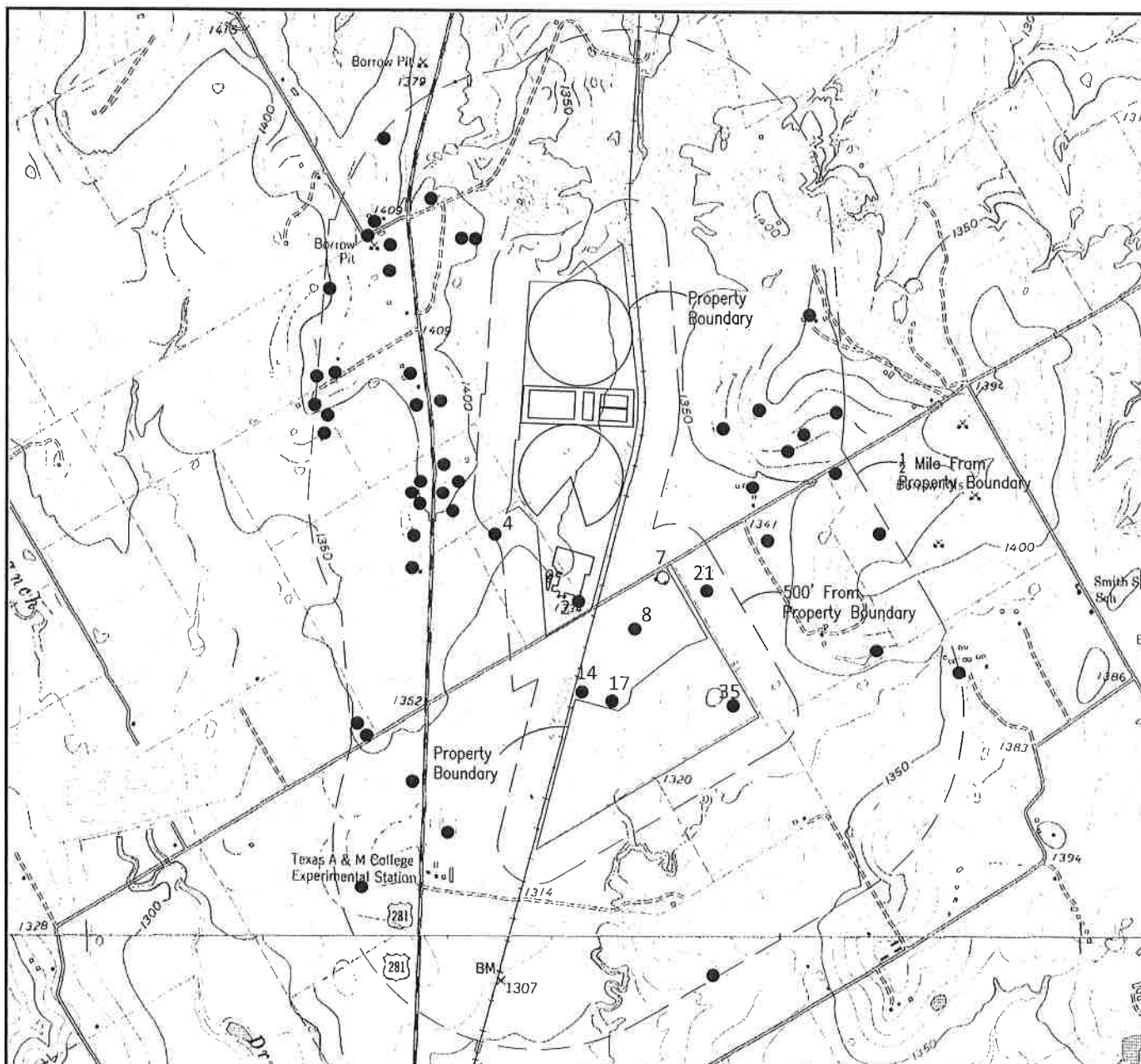
Water well data was obtained from a variety of sources, including on-site inspections, Research, a database research firm in Toronto Ontario, the Texas Water Development Board (TWDB) WIID online database, and the Middle Trinity Groundwater Conservation District. The information provided by Environmental Risk Information Services (ERIS) was obtained from a variety of public sources. ERIS does not ensure and makes no warranty or representation as to the accuracy, reliability, quality, or errors occurring from data conversion or the interpretation of their report. The TWDB WIID database includes data from the TWDB Groundwater Database and Submitted Driller's Reports. ERIS, TWDB and Middle Trinity GCD wells are shown on maps and in the table if the location could be verified on-site or using the well log or district database information. Well information is provided in Worksheet 3-Section 5 of the Technical Report.

6.3 Monitoring Well Map

Figure 6.2, Monitoring Well Map, shows the locations of the existing monitor wells located within the property boundary.

6.4 Monitor Well Information

The facility groundwater monitoring plan and analytical results are included as an attachment to this section.



Map Generated 11/8/2022

Legend:

- Denotes Water Well
- Denotes Plugged Well

Source: USDA-NRCS. Geospatial Data Gateway. Available at: <http://datagateway.nrcs.usda.gov/>. Digital Raster Graphic County Mosaic by NRCS - Accessed December 2016.



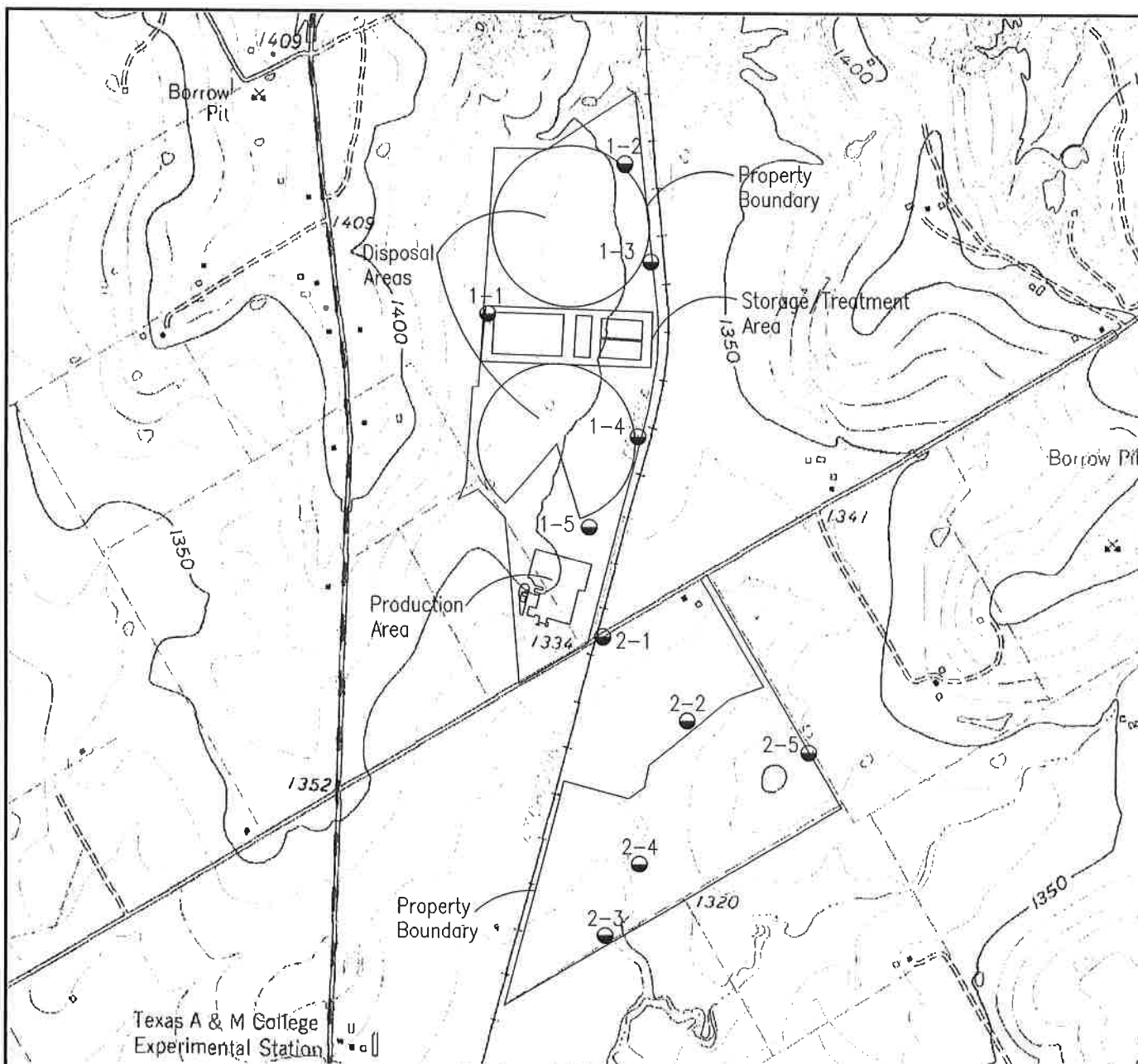
1,000' 0 1,000' 2,000'
SCALE: 1" = 2,000'

Schreiber Foods, Inc.
Stephenville, TX
Erath County

Water Well Map
Figure 6.1
Page 23

ENVIRO-AG
EAE
ENGINEERING, INC.

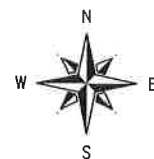
Enviro-Ag Engineering, Inc.
ENGINEERING CONSULTANTS
3404 Airway Boulevard
AMARILLO, TEXAS 79118
TEL (806) 353-6123 FAX (806) 353-4132



Legend:

● Denotes Monitoring Well

Source: USDA-NRCS. Geospatial Data Gateway. Available at: <http://datagateway.nrcs.usda.gov/>. Digital Raster Graphic County Mosaic by NRCS - Accessed December 2016.



660' 0 660' 1,320'
SCALE: 1" = 1,320'

Schreiber Foods, Inc.
Stephenville, TX
Erath County

Monitoring Well Map
Figure 6.2
Page 24

ENVIRO-AG
EAE
ENGINEERING, INC.

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



TEXAS WATER WELL REPORT

Project Property:

Schreiber Foods
Schreiber Foods
Stephenville TX 76401

Project No:

22100504558

Requested by:

Enviro-Ag Engineering, Inc.

Date Completed:

October 12, 2022

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 info@ersinfo.com ersinfo.com

Table of Contents

Table of Contents.....	2
Executive Summary.....	3
Executive Summary: Report Summary.....	4
Executive Summary: Site Report Summary - Project Property.....	5
Executive Summary: Site Report Summary - Surrounding Properties.....	6
Map.....	12
Aerial.....	15
Detail Report.....	17
Appendix: Database Descriptions.....	49
Definitions.....	50

Notice, IMPORTANT LIMITATIONS and YOUR LIABILITY

Reliance on information in Report: This report DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as database review of environmental records.

License for use of information in Report: No page of this report can be used without this cover page, this notice and the project property identifier. The information in Report(s) may not be modified or re-sold.

Your Liability for misuse: Using this Service and/or its reports in a manner contrary to this Notice or your agreement will be in breach of copyright and contract and ERS may obtain damages for such misuse, including damages caused to third parties, and gives ERS the right to terminate your account, rescind your license to any previous reports and to bar you from future use of the Service.

No warranty of Accuracy or Liability for ERS: The information contained in this report has been produced by ERS Information Inc. ("ERS") using various sources of information, including information provided by Federal and State government departments. The report applies only to the address and up to the date specified on the cover of this report, and any alterations or deviation from this description will require a new report. This report and the data contained herein does not purport to be and does not constitute a guarantee of the accuracy of the information contained herein and does not constitute a legal opinion nor medical advice. Although ERS has endeavored to present you with information that is accurate, ERS disclaims, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence, negligence or otherwise, and for any consequences arising therefrom. Liability on the part of ERS is limited to the monetary value paid for this report.

Trademark and Copyright: You may not use the ERS trademarks or attribute any work to ERS other than as outlined above. This Service and Report(s) are protected by copyright owned by ERS Information Inc. Copyright in data used in the Service or Report(s) (the "Data") is owned by ERS or its licensors. The Service, Report(s) and Data may not be copied or reproduced in whole or in any substantial part without prior written consent of ERS.

Executive Summary

Property Information:

Project Property:

Schreiber Foods
Schreiber Foods Stephenville TX 76401

Project No:

Coordinates:

Latitude: 32.26830716
Longitude: -98.1879828
UTM Northing: 3,570,464.82
UTM Easting: 576,476.29
UTM Zone: 14S
Target Property Geometry: POLYGON

County/Parish Covered:

Erath (TX)

Zipcode(s) Covered:

Stephenville TX: 76401

State(s) Covered:

TX

Executive Summary: Report Summary

Database	Searched	Project Property	Within 1.6km	Total
Federal	No Federal databasss were selected to be included in the search.			
FED USGS	Y	0	0	0
State				
TCEQ WELL LOGS	Y	1	48	49
SDRW WELLS	Y	0	25	25
GWDB	Y	1	1	2
WW HIGH PLAINS	Y	0	0	0
WW HARRIS GAL	Y	0	0	0
WUD	Y	1	4	5

* PO - Property Only

Total:	2	79	82
--------	---	----	----

Executive Summary: Site Report Summary - Project Property

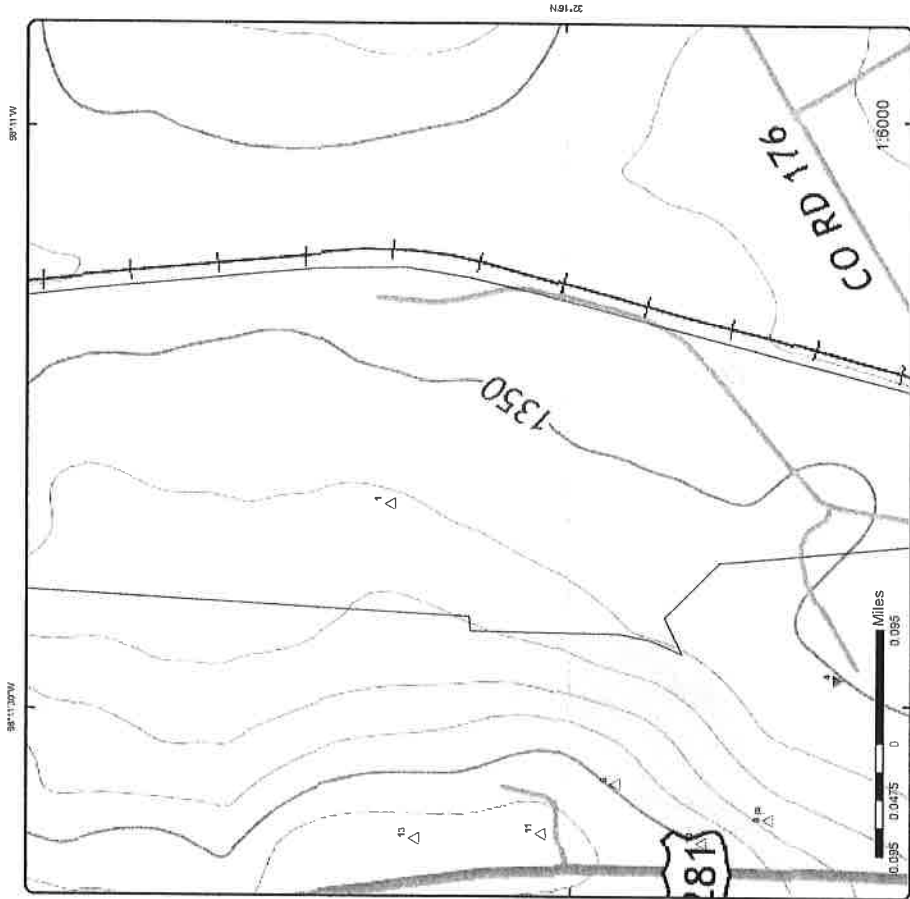
Map Key	DB	Company/Site Name	Address	Direction	Distance (m/ft)	Page Number
1	TCEQ WELL LOGS		TX	NW	0.00 / 0.00	17
			Grid No Owners Name: 31-47-3C COLLIER RANCH			
2	WUD	SCHREIBER FOODS	TX	S	0.00 / 0.00	17
			WTRSRC Utility Name: G0720264 SCHREIBER FOODS INC			
3	GWOB		TX	S	0.00 / 0.00	17
			State Well No Owner: 3147302 AMPI Cheese Plant			

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (m/ft)	Page Number
4	TCEQ WELL LOGS		TX	SW	0.11 / 562.28	18
			Grid No Owners Name: 31-47-8 MILK TRANSPORT SERVICES			
5	SDRW WELLS		TX	WSW	0.12 / 645.10	18
			Well Rpt Track No: 214325			
6	TCEQ WELL LOGS		TX	NNW	0.14 / 759.29	19
			Grid No Owners Name: 31-47-8 COLLIER & SONS (WHITACRE)			
7	TCEQ WELL LOGS		TX	SSE	0.15 / 774.16	19
			Grid No Owners Name: 31-47-8 LOUIS BOLLINGEL			
8	SDRW WELLS		923 County Road 176 Stephenville TX 76401	SSE	0.15 / 777.32	19
			Well Rpt Track No: 605328			
9	TCEQ WELL LOGS		TX	SW	0.16 / 824.26	20
			Grid No Owners Name: 31-47-8 ROY ED GRIFFIN			
9	TCEQ WELL LOGS		TX	SW	0.16 / 824.26	20
			Grid No Owners Name: 31-47-8 ROY ED GRIFFIN			
10	TCEQ WELL LOGS		TX	WSW	0.16 / 837.29	21
			Grid No Owners Name: 31-47-8 JEHOVAH WITNESS KINGDOM HALL			
11	WUD	MILK TRANSPORT SERVICES	TX	WSW	0.17 / 887.84	21
			WTRSRC Utility Name: G0720940A WESTERN DAIRY TRANSPORT LLC			
12	SDRW WELLS		2 miles North US Highway 281 Stephenville TX	NNW	0.17 / 891.89	21
			Well Rpt Track No: 254530			
13	TCEQ WELL LOGS		TX	W	0.18 / 947.96	22
			Grid No Owners Name: 31-47-3 DEAN TAYLOR			
14	SDRW WELLS		1356 CR 176 Stephenville TX 76401	S	0.18 / 952.37	22
			Well Rpt Track No: 598115			
15	TCEQ WELL LOGS		TX	WSW	0.22 / 1,168.88	23

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Page Number	Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Page Number
16	TCEQ WELL LOGS		Grid No Owners Name: 31-47-8 ERIC SIMS	WSW	0.23 / 1,194.41	23	27	SDRW WELLS		TBD CR 176 Stephenville TX 76401 Well Rpt Track No: 543981	E	0.32 / 1,879.10	27
17	SDRW WELLS		TX Grid No Owners Name: 31-47-8U S.J COOK			23	28	TCEQ WELL LOGS		TX Grid No Owners Name: 31-47-8 SOLID ROCK CHURCH	NW	0.34 / 1,802.02	27
18	TCEQ WELL LOGS		1355 CR 176 Stephenville TX 76401 Well Rpt Track No: 598115	S	0.23 / 1,235.15	24	29	SDRW WELLS		Off of 281 N Stephenville TX 76401 Well Rpt Track No: 220554	WNW	0.35 / 1,897.88	28
19	SDRW WELLS		TX Grid No Owners Name: 31-47-8M A.T GORDON	ESE	0.24 / 1,269.11	24	29	SDRW WELLS		Off of 281 N Stephenville TX 76401 Well Rpt Track No: 220557	WNW	0.35 / 1,897.88	28
20	TCEQ WELL LOGS		4237 N. St. Hwy 281 Stephenville TX 76401 Well Rpt Track No: 584499	WSW	0.24 / 1,290.27	25	30	TCEQ WELL LOGS		TX Grid No Owners Name: 31-47-8 KELLY CASSTEVEN	SE	0.37 / 1,950.67	30
21	TCEQ WELL LOGS		TX Grid No Owners Name: 31-47-8U C.L FENNER	WSW	0.26 / 1,375.35	25	31	SDRW WELLS		214 CR 434 Stephenville TX 76401 Well Rpt Track No: 100893	NW	0.39 / 2,034.06	30
22	TCEQ WELL LOGS		TX Grid No Owners Name: 31-47-8 SE	ESE	0.27 / 1,412.81	25	31	TCEQ WELL LOGS		TX Grid No Owners Name: 31-47-8 HARVEY WILLIAMS	NW	0.39 / 2,034.06	31
23	TCEQ WELL LOGS		TX Grid No Owners Name: 31-47-8L TROY MOORE	WNW	0.28 / 1,456.89	26	32	SDRW WELLS		TBD CR 176 Stephenville TX 76401 Well Rpt Track No: 543980	E	0.40 / 2,116.70	31
23	TCEQ WELL LOGS		TX Grid No Owners Name: 31-47-8D TROY MOORE	WNW	0.28 / 1,456.89	26	33	TCEQ WELL LOGS		TX Grid No Owners Name: 31-47-8 MR TERRY ANTOINE	NW	0.41 / 2,188.54	31
24	TCEQ WELL LOGS		TX Grid No Owners Name: 31-47-8 DEBBIE MOORE	WNW	0.28 / 1,456.89	26	34	SDRW WELLS		TBD CR 176 Stephenville TX 76401 Well Rpt Track No: 590730	E	0.42 / 2,202.35	32
25	TCEQ WELL LOGS		TX Grid No Owners Name: 31-47-8 STEVE MCCOY	NW	0.28 / 1,461.17	26	35	WUD	SCHREIBER FOODS	TX WTRSRC Utility Name: G07200268 SCHREIBER FOODS INC	SSE	0.42 / 2,243.35	32
25	TCEQ WELL LOGS		TX Grid No Owners Name: 31-47-8L H. L. GABHART	SW	0.28 / 1,462.63	26	36	TCEQ WELL LOGS		TX Grid No Owners Name: 31-47-8 F. E. SUTTON	ENE	0.44 / 2,313.42	33
26	TCEQ WELL LOGS		TX Grid No Owners Name: 31-47-8 JIM BACHUS	W	0.29 / 1,539.93	27	37	SDRW WELLS		CR 909 Stephenville TX 76401	WNW	0.45 / 2,356.80	33

Map Key	OB	Company/Site Name	Address	Direction	Distance (mft)	Page Number
63	TCEQ WELL LOGS		Grid No Owners Name: 31-47-8 BERT WRIGHT			44
			TX	NW	0.77 / 4,069.64	
64	TCEQ WELL LOGS		Grid No Owners Name: 31-47-8 LARRY REAVIS			45
			TX	NW	0.81 / 4,293.96	
65	WUD	TARLETON STATE UNIVERSITY SOUTHWES	Grid No Owners Name: 31-47-8 TOM CRAWFORD			45
			TX	SW	0.82 / 4,327.74	
65	SDRW WELLS		WTRSRG Utility Name: G0720056A TARLETON STATE UNIVERSITY SOUTHWES			45
			5025 CR 518	SW	0.83 / 4,327.74	
			Stephenville TX 76401			
			Well Rpt Track No: 230895			
66	SDRW WELLS		2703 CR 455	E	0.84 / 4,421.41	46
			Stephenville TX 76401			
			Well Rpt Track No: 425567			
67	TCEQ WELL LOGS		TX	ENE	0.85 / 4,502.04	47
			Grid No Owners Name: 31-47-8 BILL TIDWELL			
68	TCEQ WELL LOGS		TX	SSW	0.88 / 4,620.09	47
			Grid No Owners Name: 31-47-8N TEXAS AGRICULTURAL EXP STA			
69	TCEQ WELL LOGS		TX	NW	0.89 / 4,723.57	47
			Grid No Owners Name: 31-47-8 KEN ROUSE			
70	TCEQ WELL LOGS		TX	ESE	0.92 / 4,878.47	47
			Grid No Owners Name: 31-47-8 BERT WRIGHT			
71	TCEQ WELL LOGS		TX	W	0.94 / 4,941.82	47
			Grid No Owners Name: 31-47-8 RACHEAL FRAIZER			
72	WUD	WHITE HORSE CHRISTIAN ACADEMY	TX	SSE	0.97 / 5,132.67	48
			WTRSRG Utility Name: G0720053A WHITE HORSE CHRISTIAN ACADEMY			
73	TCEQ WELL LOGS		TX	NW	0.99 / 5,247.97	48
			Grid No Owners Name: N/A BILLY WEIR			

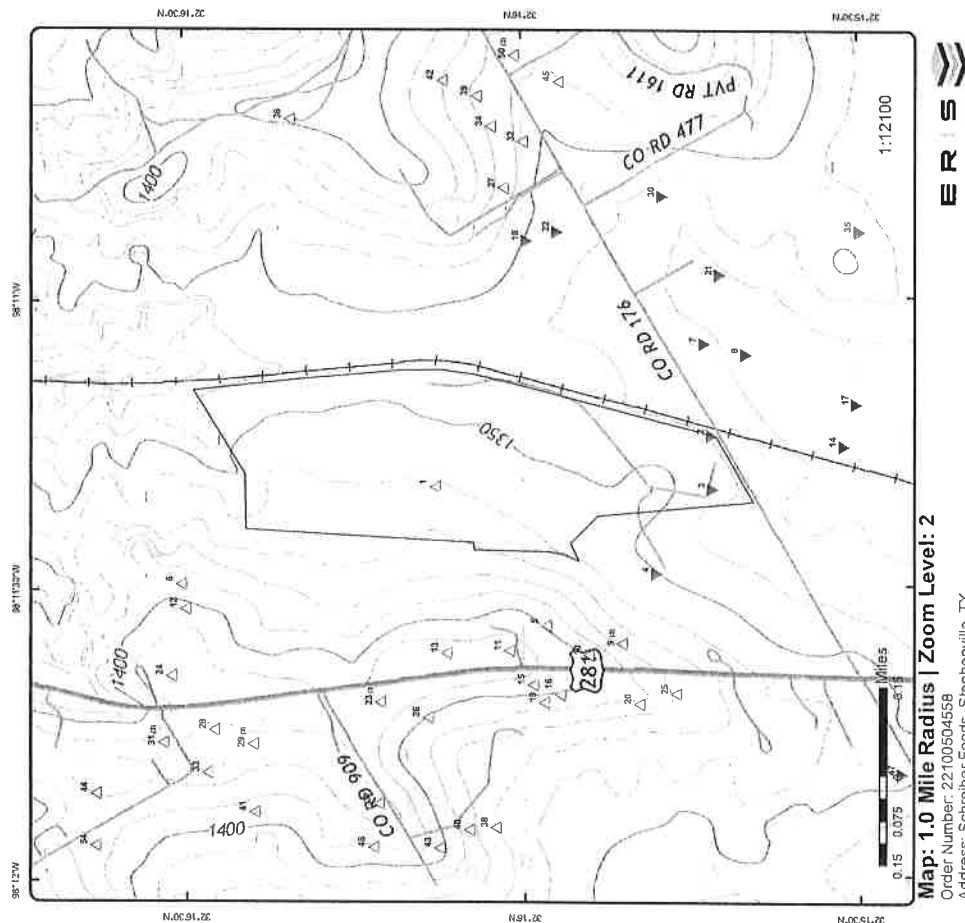


Plotted Water Wells

- Project Property Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- Eris Areas with Higher Elevation
- Eris Areas with Same Elevation
- Eris Areas with Lower Elevation
- Eris Areas with Unknown Elevation

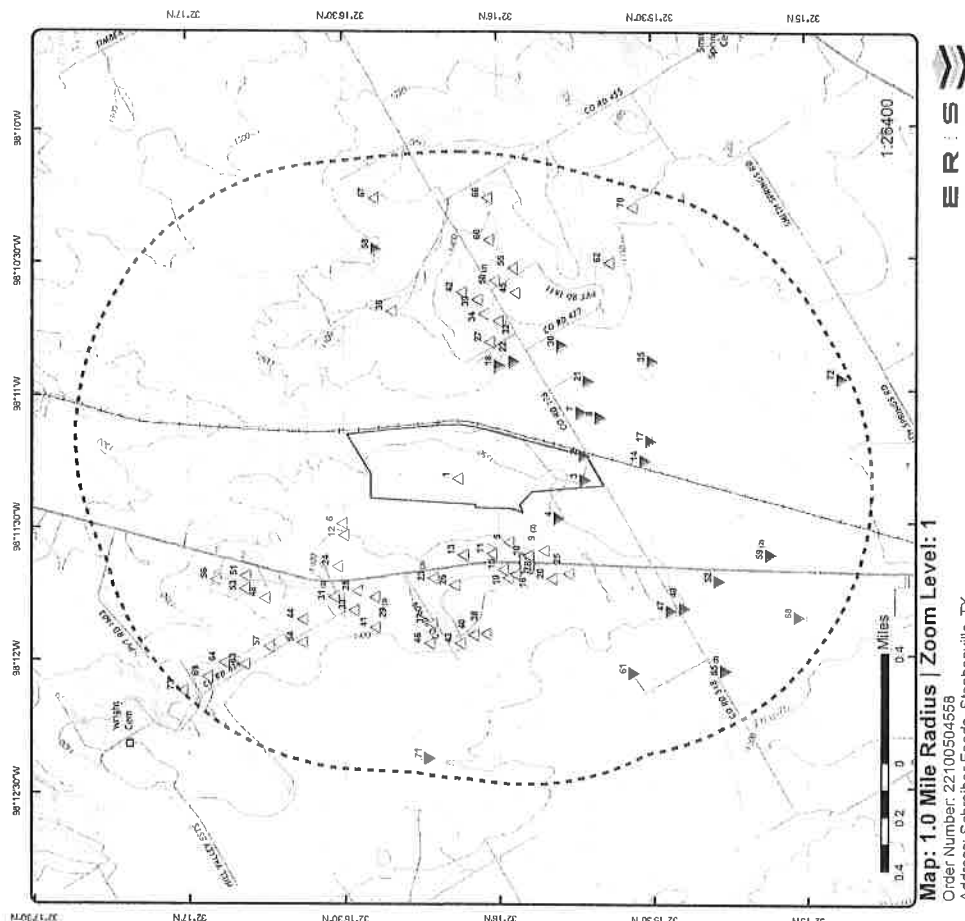
Order No: 22100504558

erisinfo.com | Environmental Risk Information Services



Source: © US Geological Survey

© Eris Information Inc.



Source: © US Geological Survey

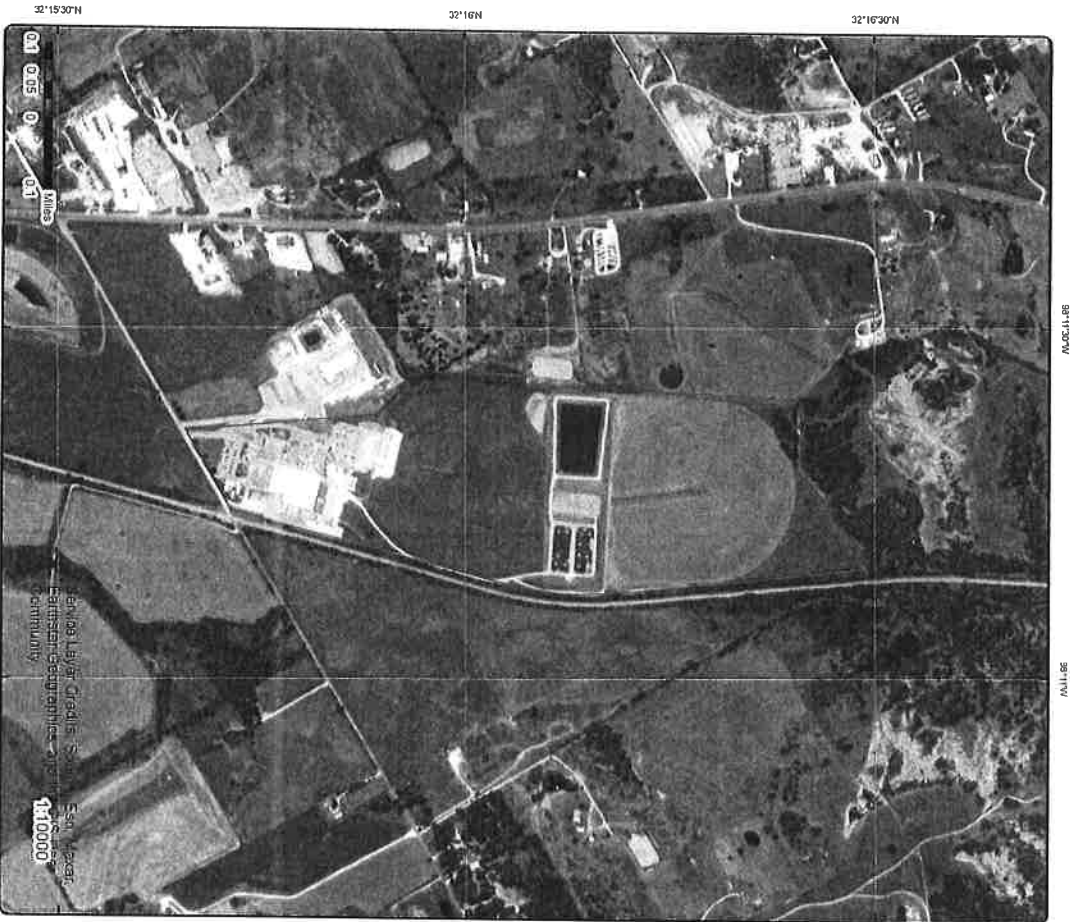
© Eris Information Inc.

Detail Report

Map Key	Number of Records	Direction	Distance (mft)	Site	DB
1	1 of 1	NW	0.00 / 0.00	TX	TCEQ WELL LOGS
Grid No:	31-47-3C				
Date Drilled:	06/18/1971				
Owner's Name:	COLLIER RANCH				
County:	ERATH				
Water Usage:	DOMESTIC				
State Lease:	139				
Depth Drilled:	230				
Latitude:	-38.19150927118219				
Longitude:	-98.27509631788815				

2	1 of 1	S	0.00 / 0.00	SCHREIBER FOODS TX	WUD
PMS ID:	0720026	Segment:			
WTRSRC:	G0720026A	System Sta:	ACTIVE		
SI Well No:	G0720026A	Contact Phone:	254-552-7736		
Operating Status:	OPERATIONAL	Primary Co:	JUSTIN GROTE		
Well Depth:	450	Contact Tr:	SCHREIBER FOODS INC		
Water Usage:	ACTIVE - PERMANENT	Utility No:	SCHREIBER FOODS		
State Law:	08/01/1998	Aquifer:	218TRNT		
Date Drilled:	Yes	Waterbody:			
Compliant:	450	Latitude:	-32.26197222		
Screen Bottom:	400	Hydium:	-98.18736687		
Gallons Per Minute:	80	Horz Meth:	DOQ		
Depth Agen:	001	Horz Acc:	15		
EPD:	001	Horz Ref:	STRUC_CEN		
Type:	Drill	Horz Date:	08-Feb-2007		
Constr:	Yes	Horz Org:	TCEQ		
Confer:	Yes	Horz Datum:	NAD83		
CCN:	Yes	Ownr Dis:	3236-142		
Alluvial:	N				

3	1 of 1	S	0.00 / 0.00	TX	GWDB
State Well No:	3147302	Water Level Status:			
SHA:	8	Cur Wtr Lvl Well:	No		
RPH:	0	Wtr Quality Avail:	Yes		
GCD:	Wichita Falls GCD	Cur Wtr Qual Well:	No		
Well Type:	Windmill Water	Supporting Agency:	Texas Water Development Board		
Pump:	Summers	Operator's Agency:	Dallies Log		
Power Type:	Electric Motor	Well Use:	218TRNT		
Well Rep Track No:		Aquifer Code Desc:	Trinity Group		
USGS Site No:		Aquifer ID:	28		
TCEQ Source ID:	G0720026A	Aquifer:	Trinity		
GCD Well No:		Classification:	Major		
Owner Well No:		Aquifer Pick Mtd:			



9	1 of 2	SW	0.16 / 824.26	TX	TCQ WELL LOGS
Grid No:	31-47-8				
Date Drilled:	12/04/1991				
Owners Name:	ROY ED GRIFFIN				
County:	ERATH				
Water Usage:	DOMESTIC				
Static Depth:	280				
Depth Drilled:	360				
Latitude:	-98.193299				
	32.294233				
3	2 of 2	SW	0.16 / 824.26	TX	TCQ WELL LOGS
Grid No:	31-47-8				
Date Drilled:	06/27/1985				
Owners Name:	ROY ED GRIFFIN				
County:	ERATH				
Water Usage:	DOMESTIC				
Static Level:	300				
Depth Drilled:	360				

11	1 of 1	MSW	0.17 / 987.54	MLK TRANSPORT SERVICES	TX
PWS ID:	0720040	Segment:	ACTIVE		
WTRSRC:	G0720040A	System Sta:	31E-841-1294		
ID No:	G0720040A	Contract Phone:	VICTOR M ASHE		
SI Well No:		Primary Co:	OPERATOR		
Operating Status:	OPERATIONAL	Contract Tt:	WESTERN DAIRY TRANSPORT LLC		
Water User:	ACTIVE - PERMANENT	Utility Name:	MLK TRANSPORT SERVICES		
Static Lwr:		Amplifier:	2101WMT		
Date Drilled:	02/21/2001	Waterbody:			
Compliant:	Yes	Latitude:	32.26703056		
Screen Bottom:	449	Longitude:	-98.19248611		
Sediment Top:	389	Headturn:	83		
Sealions Per Minute:	65	Horz Wellb:	DOQ		
Drip Rate:	DRILL	Horz Acc:	53		
EPID:	001	Horz Date:	SRUC OEN		
Type :		Horz Datic:	08-Mar-2006		
CAD No:		Horz Org:	TCEG		
Constr:	T	Horz Datum:	NAD83		
Confine:	T	Quadrant:	3289-142		
CCN:	N	Ovwr Desc:			
Altitude:					

00161

	Map Key	Number of Records	Direction	Distance (m/m)	Site	DB
Full SDR Database: SDR08 Well Location (Map)	Prop Use Oil Descr:	TCEC Approve Plans:			Driller State:	TX
	Approve by Variance:	Loc Vty by Driller:			Driller Zip:	76057
	Scaled by Driller:	Yes			Driller County:	
	Scale Date:	Yes			Diet to Sup Contam:	
	Driller Signed:	James Lindley Jr			Diet to Sup Contam:	
	Apprentice Signed:	James Lindley Sr			Diet to Prod Line:	
	Surface Comp:	Surface Sleeve Installed			Diet Verif Method:	
	Surf Camp Oil Descr:				Horizon Datum Type:	
	Compil by Driller:	Yes			Elevation:	
	Pump Type:	Submersible			Latitude:	32.259379
	Pump Type Oil Descr:				Lat Degree:	32
	Pump Depth:	400.00			Lat Minute:	15
	Pump Hydraulic:	No			Lat Second:	30
	Injurious Water:	No			Longitude:	-98.1356473
	Country:	Earth			Long Degree:	98
	Known Loc Error:	No			Long Minute:	11
Grid No:	31-47-3			Long Seconds:	11.3	
Company Name:	Moores Water Well Service					
Well Location Description:						
Comments:						
Data Source:						

18	1 of 1	ESE	0.24 / 1,289.17	TX	TOEQ WELL LOSS
Grid No:	31-47-9M				
Dipole Depth:	311215778				
Operator Name:	A T GORDON				
County:	ERATH				
Water Usage:	DOMESTIC				
State Layer:	260				
Depth Drilled:	320				
Longitude:	-98.175778				
Latitude:	32.265896				

19	1 of 1	WSW	0.24 / 1,250.27	4267 N. St. Hwy 281 Stephenville TX 76401	SDRW WELLS
License No:	55065	Well Address1:	4267 N. St. Hwy 281		
PWS No:		Well Address2:	Stephenville		
Plug Rpt Track No:	584499	Well Zip:	76401		
Well Rpt Track No:		Owner Well No:	Royce Sims		
Orig Well Rpt Trk No:		Owner Name:	4267 N. St. Hwy 281		
Apprentice Rag No:		Owner Addr1:	Stephenville		
No of Wells Drilled:	1	Owner Addr2:	Stephenville		
Date Submitted:	2021-09-23	Owner City:	Stephenville		
Type of Work:	New Well	Owner State:	TX		
Type of Well on Descr:	Pumped	Owner Zip:	76401		
Seal Method:		Owner Country:			
Seal Method On Descr:		Driller Name:	Justin W Dowell		
Seal Method On Descr:		Driller Address1:	PO Box 402		
Plugged w/ 48hrs:	No	Driller Addr2:	Stephenville		
Drilling Start Dt:	2021-09-08	Driller City:	TX		
Drilling End Dt:	2021-09-08	Driller State:			
Proposed Use:	Domestic	Driller Zip:			
Prop Use On Descr:		Driller Country:			
ASCEA Approve Plans:		Driller Cont:			
ASCEA Approved:	Yes	Driller Contm:	105+		
Loc Vby by Driller:	Yes	Dist to Septic Trk:	55+		
Sealed by Driller:		Dist to Prop Line:	51+		
Sealed by Name:		Dist Verifi Method:	owner		
Driller Signed:	Justin Dowell				
Apprentice Signed:					

Order No: 22100504558

Map Key	Number of Records	Direction	Distance (m/ft)	Site	DB
Date Drilled: 10/22/1992 Owners Name: TROY MOORE County: ERATH Water Usage: DOMESTIC Static Level: 370 Depth Drilled: -98.195232 Latitude: 32.258198					
23	2 of 3	WNW	0.28 / 1,456.89	TX	TCEQ WELL LOGS
Grid No: 31-47-9D Date Drilled: 04/20/1974 Owners Name: TROY MOORE County: ERATH Water Usage: NOT REPORTED Static Level: 300 Depth Drilled: 374 Latitude: -98.195232 Longitude: 32.258198					
23	3 of 3	WNW	0.28 / 1,456.89	TX	TCEQ WELL LOGS
Grid No: 31-47-9 Date Drilled: 03/03/1992 Owners Name: DEBBIE MOORE County: ERATH Water Usage: DOMESTIC Static Level: 122 Depth Drilled: -98.194965 Latitude: 32.269483					
24	1 of 1	NW	0.28 / 1,461.17	TX	TCEQ WELL LOGS
Grid No: 31-47-9 Date Drilled: 08/11/1987 Owners Name: STEVE MCCOY County: ERATH Water Usage: DOMESTIC Static Level: 480 Depth Drilled: -98.194136 Latitude: 32.275351					
25	1 of 1	SW	0.28 / 1,462.62	TX	TCEQ WELL LOGS
Grid No: 31-47-9L Date Drilled: 12/20/1975 Owners Name: H. L. GASHART County: ERATH Water Usage: DOMESTIC Static Level: NOT REPORTED Depth Drilled: 80					
26					Order No: 22100504558
eisinfo.com Environmental Risk Information Services					

Map Key	Number of Records	Direction	Distance (m/ft)	Site	DB
Longitude: -98.194735241901759 Latitude: 32.26288443489351					
26	1 of 1	W	0.29 / 1,533.93	TX	TCEQ WELL LOGS
Grid No: 31-47-8 Date Drilled: 08/14/1997 Owners Name: JIM BACHUS County: ERATH Water Usage: DOMESTIC Static Level: 40 Depth Drilled: 115 Latitude: -98.19337436804413 Longitude: 32.269054120193524					
27	1 of 1	E	0.32 / 1,673.10	TX	SOPR WELLS
License No: \$6085 PWS No: Plug Rpt Track No: 543961 Well Rpt Track No: Orig Well Rpt Tk No: Apprentice Reg No: No of Wells Drilled: 1 Date Submitted: 2020-05-22 Type of Well: New Well Type of Well: Pumped Seal Method: Seal Mind Oth Desc: Plugged w/ 48hrs: No Drilling Start Dt: 2020-05-20 Drilling End Dt: 2020-05-20 Proposed Use: Domestic Prop Use Oth Desc: TCEQ Approve Plans: Approve by Variance: Loc Wry by Driller: Yes Sealed by Name: Justin Dowell Driller Signature: Apprentice Signed: Justin Dowell Surface Compl: Surface Sleeve Installed Surf Comp Oth Desc: Complete by Driller: Yes Pump Type: Submersible Pump Type Oth Desc: Pump Depth: 2020-05-20 Chemical Analysis: No Injurious Water: No County: Erath Known Loc Error: No Grid No: 31-47-8 Company Name: Dowell Well Service Well Location Description: Lol 1 Comments: Full SDR Database, SDR08 Well Location (Map) Data Source:					
28	1 of 1	NW	0.34 / 1,802.02	TX	TCEQ WELL LOGS
Grid No: 31-47-8 Date Drilled: 12/20/1975 Owners Name: H. L. GASHART County: ERATH Water Usage: DOMESTIC Static Level: NOT REPORTED Depth Drilled: 80					
28					Order No: 22100504558
eisinfo.com Environmental Risk Information Services					

Map Key	Number of Records	Direction	Distance (mi/ft)	Site	DB
Grid No:		31-47-3			
Date Drilled:		09/27/2000			
Owners Name:		SOLID ROCK CHURCH			
County:		ERATH			
Water Usage:		DOMESTIC			
Static Level:		410			
Depth Drilled:		500			
Longitude:		-98.1957			
Latitude:		32.274289			

29	1 of 3	WNW	0.36 / 1,897.88	Off of 281 N Stephenville TX 76401	SDRW WELLS
License No:	55033	Well Address:	Off of 281 N		
PMS No:		Well Addr2:	Stephenville		
Pump Rpt Track No:	127981	Well City:	76401		
Orig Well Rpt Trk No:	220554	Owner Well No:			
Driller Name:		Owner Name:	Chris Baughn		
No of Wells Drilled:		Owner Addr1:	1015 PR 897		
Date Submitted:	2010-08-24	Owner Addr2:	Stephenville		
Type of Work:	Replacement	Owner State:	TX		
Seal Method:	Not Applicable	Owner Zip:	76401		
Plugged w/ 48Hrs:	Yes	Owner Country:	Josh Aardal		
Drilling Start Dt:	2009-12-31	Driller Name:	PO Box 16		
Drilling End Dt:	2009-12-31	Driller Addr2:	Stephenville		
Proposed Use:	Domestic	Driller City:	TX		
Prop Use Oil Descr:		Driller State:	76401		
TCED Approve Plans:	No	Driller Oil Cntry:			
Approved by Variance:	No	Driller County:			
Sealed by Driller:	No	Dist to Ssp Contam:			
Driller Signed:	Josh Aardal	Dist to Sspic TK:			
Surface Compl:	Unknown	Dist to Prop Line:			
Surf Camp Oil Descr:	Unknown	Horizon Datum Type:			
Compl by Driller:		Elevation:	32.273333		
Pump Type:		Latitude:	32		
Pump Type Oil Descr:		Lat Degree:	16		
Pump Depth:	No	Lat Minute:	24		
Chemical Analysis:	No	Lat Second:	-98.196111		
Injurious Water:	No	Longitude:	98		
Known Loc Error:	No	Long Degree:	11		
Grid No:	31-47-3	Long Minute:	46		
Company Name:	Associated Services - Josh Aardal	Long Second:			
Well Location Description:					
Comments:	NK				
Data Source:	Full SDR Database, SDRDB Well Location (Map)				

29	2 of 3	WNW	0.36 / 1,897.88	Off of 281 N Stephenville TX 76401	SDRW WELLS
License No:	55033	Well Address:	Off of 281 N		
PMS No:		Well Addr2:	Stephenville		
Pump Rpt Track No:	220557	Well City:	76401		
Orig Well Rpt Trk No:		Owner Well No:	Chris Baughn		
Apprentice Reg No:		Owner Name:	1015 PR 897		
No of Wells Drilled:					
Order No:	22100504558				

Map Key	Number of Records	Direction	Distance (mi/ft)	Site	DB
Grid No:		2010-08-24			
Date Submitted:		Replacement			
Type of Work:		Owner Addr2:	Stephenville		
Seal Method:		Owner City:	TX		
Seal Method Oil Descr:		Owner State:	76401		
Plugged w/ 48Hrs:	No	Owner Zip:			
Drilling Start Dt:	2009-12-31	Owner Country:	Josh Aardal		
Drilling End Dt:	2009-12-31	Driller Name:	PO Box 16		
Proposed Use:	Domestic	Driller Addr2:	Stephenville		
Prop Use Oil Descr:		Driller City:	TX		
TCED Approve Plans:	No	Driller State:	76401		
Approved by Variance:	No	Driller Oil Cntry:			
Sealed by Driller:	Yes	Driller County:			
Driller Signed:	Josh Aardal	Dist to Ssp Contam:	100		
Surface Compl:	Surface Sleeve Installed	Dist to Sspic TK:	100		
Surf Camp Oil Descr:		Dist to Prop Line:	Customer/Verified		
Compl by Driller:		Horizon Datum Type:			
Pump Type:	Submersible	Elevation:	32.273333		
Pump Type Oil Descr:		Latitude:	32		
Pump Depth:	No	Lat Degree:	16		
Chemical Analysis:	No	Lat Minute:	24		
Injurious Water:	No	Lat Second:	-98.196111		
Known Loc Error:	No	Longitude:	98		
Grid No:	31-47-3	Long Degree:	11		
Company Name:	Associated Services - Josh Aardal	Long Minute:	46		
Well Location Description:		Long Second:			
Comments:	NK				
Data Source:	Full SDR Database, SDRDB Well Location (Map)				

29	3 of 3	WNW	0.36 / 1,897.88	5205 N. US Highway 281 Stephenville TX	SDRW WELLS
License No:	2404	Well Address:	5205 N. US Highway 281		
PMS No:		Well Addr2:	Stephenville		
Pump Rpt Track No:	265332	Well City:	Stephenville		
Orig Well Rpt Trk No:		Owner Well No:	Chris Baughn		
Apprentice Reg No:		Owner Name:	1015 PR 887		
No of Wells Drilled:		Owner Addr2:	Stephenville		
Date Submitted:	2011-08-02	Owner State:	TX		
Type of Work:	New Well	Owner Zip:			
Type of Work Oil Descr:	Pumped	Owner Country:	Gary Aardal		
Seal Method:		Driller Name:	P.O. Box 16		
Plugged w/ 48Hrs:	No	Driller Addr2:	Stephenville		
Drilling Start Dt:	2008-11-14	Driller City:	76401		
Drilling End Dt:	2008-11-14	Driller State:			
Proposed Use:	Domestic	Driller Oil Cntry:			
TCED Approve Plans:	No	Driller County:			
Approved by Variance:	No	Dist to Ssp Contam:	80		
Sealed by Driller:	Yes	Dist to Sspic TK:	100		
Driller Signed:	Gary Aardal	Dist to Prop Line:	Customer/Verified		
Surface Compl:	Surface Sleeve Installed	Horizon Datum Type:			
Surf Camp Oil Descr:		Elevation:	32.273333		
Compl by Driller:		Latitude:	32		
Pump Type:	Submersible	Lat Degree:	16		
Pump Type Oil Descr:		Lat Minute:	24		
Pump Depth:	420.00	Lat Second:	-98.196111		
Chemical Analysis:	No	Longitude:			
Order No:	22100504558				

Map Key	Number of Records	Direction	Distance (mily)	Site	DB
Injurious Water:	No			Long Degree: 98	
Country:	Erath			Long Minute: 11	
Known Loc Error:	No			Long Second: 48	
Grid No:	31-47-8				
Company Name:	Associated Services				
Well Location Description:					
Comments:	Sdls				
Data Source:	Full SDR Database, SDRDB Well Location (Map)				
30	1 of 1	SE	0.37 / 1,390.67	TX	TCED WELL LOGS
Grid No:	31-47-8				
Date Drilled:	12/18/2000				
Owners Name:	KELLY CASSTEVEENS				
County:	ERATH				
Water Usage:	DOMESTIC				
Static Level:	285				
Depth Drilled:	440				
Latitude:	-98.180423				
Latitude:	32.283165				
31	1 of 2	NW	0.39 / 2,034.06	214 CR 434 Stephenville TX 76401	SDRW WELLS
License No:	1891			Well Address1: 214 CR 434	
PWS No:				Well Addr2: Stephenville	
Plug Rpt Track No:	10693			Well Zip: 76401	
Orig Well Rpt Tk No:				Owner Well No: 1	
Apprentice Reg No:				Owner Name: Don Williams	
Date of Wells Drill:	2005-12-21			Owner Addr: 214 CR 434	
Type of Work:	Replacement			Owner State: Stephenville, TX	
Type of Wrk Oh Descr:	Terrie			Owner Zip: 76401	
Seal Method:				Owner Country: Mark A Dowell	
Seal Mthd Oh Desc:	No			Driller Name: PO Box 402	
Plugged w/ 48Hrs:	2005-12-20			Driller Address1: Stephenville	
Drilling Start Dt:	2005-12-20			Driller Addr2: TX	
Proposed Use:	Domestic			Driller State: 76401	
TCQA Approve Plans:	na			Driller Oh Cntry: Stephenville	
Approved by:	No			Driller Country: over 160	
Seal Vfy by Driller:	Yes			Dist to Septic Tk: over 53	
Sealed by Name:	Mark Dowell			Dist to Prop Line: owner	
Driller Signed:				Horizon Datum Type: Elevation:	
Apprentice Signed:				Latitude: 32.275555	
Surface Compl:	Surface Sleeve Installed			Lat Degree: 32	
Surf Comp Oh Desc:	Submersible			Lat Minute: 16	
Pump Type:				Lat Second: 32	
Pump Type Oh Desc:				Longitude: -98.196389	
Pump Depth:	No			Long Degree: 98	
Chemical Analysis:	No			Long Minute: 11	
Injurious Water:	Erath			Long Second: 47	
Country:	No				
Known Loc Error:	31-47-8				
Grid No:					
Company Name:	Dowell Well Service				
Well Location Description:	Full SDR Database, SDRDB Well Location (Map)				
Comments:	Jarrell Dowell Contractor				
Data Source:	Full SDR Database, SDRDB Well Location (Map)				
30					Order No: 22100504558

Map Key	Number of Records	Direction	Distance (mily)	Site	DB
31	2 of 2	NW	0.39 / 2,034.06	TX	TCED WELL LOGS
Grid No:	31-47-8				
Date Drilled:	04/19/1995				
Owners Name:	HARVEY WILLIAMS				
County:	ERATH				
Water Usage:	DOMESTIC				
Static Level:	215				
Depth Drilled:	350				
Latitude:	38.19606125316032				
Latitude:	32.27358221081145				
32	1 of 1	E	0.40 / 2,116.70	TBD CR 176 Stephenville TX 76401	SDRW WELLS
License No:	S8066			Well Address1: TBD CR 176	
PWS No:				Well Addr2: Stephenville	
Plug Rpt Track No:	543960			Well Zip: 76401	
Orig Well Rpt Tk No:				Owner Well No: Nick Baum	
Apprentice Reg No:	1			Owner Name: 5411 CR 522	
Date of Wells Drill:	2000-05-22			Owner Addr2: Stephenville	
Date Submitted:	New Well			Owner State: TX	
Type of Work:	Pumped			Owner Zip: 76401	
Type of Wrk Oh Descr:				Owner Country: Justin W Dowell	
Seal Method:	Seal Mthd Oh Desc:			Driller Name: PO Box 402	
Plugged w/ 48Hrs:	No			Driller Address1: Stephenville	
Drilling Start Dt:	2000-05-15			Driller Addr2: TX	
Drilling End Dt:	2000-05-15			Driller State: Stephenville	
Proposed Use:	Domestic			Driller Oh Cntry: TX	
TCQA Approve Plans:	Yes			Driller Country: 105+	
Approved by:	Yes			Dist to Septic Tk: 55+	
Seal Vfy by Driller:	Justin Dowell			Dist to Prop Line: 52	
Sealed by Name:				Dist to Septic Tk: whiel	
Driller Signed:				Horizon Datum Type: Elevation:	
Apprentice Signed:				Latitude: 32.266599	
Surface Compl:	Surface Sleeve Installed			Lat Degree: 32	
Surf Comp Oh Desc:	Submersible			Lat Minute: 15	
Pump Type:				Lat Second: 59.9	
Pump Type Oh Desc:				Longitude: -98.178833	
Pump Depth:	No			Long Degree: 98	
Chemical Analysis:	No			Long Minute: 10	
Injurious Water:	Erath			Long Second: 43.8	
Country:	No				
Known Loc Error:	31-47-3				
Grid No:					
Company Name:	Dowell Well Service				
Well Location Description:	Full SDR Database, SDRDB Well Location (Map)				
Comments:	Lat 2				
Data Source:	Full SDR Database, SDRDB Well Location (Map)				
33	1 of 1	NW	0.41 / 2,182.54	TX	TCED WELL LOGS
Grid No:	31-47-8				
Date Drilled:	09/15/1986				
31					Order No: 22100504558

Map Key	Number of Records	Direction	Distance (mi/ft)	Site	DB
Owners Name:	MR TERRY ANTOINE				
County:	ERATH				
Water Usage:	DOMESTIC				
Static Level:	275				
Depth Drilled:	405				
Latitude:	-98.19693				
	32.274284				

34	1 of 1	E	0.42 / 2,202.35	TBD CR 176 Stephenville TX 76401	SDRW WELLS
License No:	58065				
PWS No:					
Plug Rpt Track No:	580730				
Orig Well Rpt Tk No:					
Apprentice Reg No:	1				
No of Wells Drilled:	2020-12-04				
Date Submitted:	New Well				
Type of Work:	Pumped				
Plug Rpt Track No:					
Seal Method:	Pumped				
Seal Mthd Oh Desc:	No				
Plugged w/ 48Hrs:	2020-11-16				
Drilling Start Dt:	2020-11-16				
Proposed Use:	Domestic				
TC/EC Approve Plans:					
Approved by Variance:	Yes				
Loc Vry by Driller:	Yes				
Sealed by Driller:	Yes				
Driller Signed:	Justin Dowell				
Surface Sleeve:	Surface Sleeve Installed				
Surf Comp Oh Desc:	Yes				
Compl by Driller:	Submersible				
Pump Type Oh Desc:					
Pump Depth:	No				
Chemical Analysis:	No				
Injurious Water:	No				
County:	Erath				
Known Loc Error:	No				
Grid No:	31-47-9				
Company Name:	Dowell Well Services				
Well Location Description:					
Data Source:	Full SDR Database; SDRDB Well Location (Map)				

35	1 of 1	SSE	0.42 / 2,243.35	SCHREIBER FOODS TX	WUD
PWS ID:	0720268				
WTRSRC:	G0720268				
S No:	G0720268				
Operating Status:	OPERATIONAL				
Well Depth:	462				
Water Usage:	ACTIVE - PERMANENT				
Static Lev:	09/10/2010				
Date Drilled:	Yes				
Complaint:					
	Latitude: 32.2582778				

[erdinfo.com](https://info.erdinfo.com) | Environmental Risk Information Services

Order No: 22100504558

Map Key	Number of Records	Direction	Distance (mi/ft)	Site	DB
Screen Bottom:	337				
Screen Top:	317				
Gallons Per Minute:	83				
Depth Agen:	60				
EPID:	000				
Type:	DRILL				
CAD No:	T				
Constr:	T				
Confin:	T				
CCN:	N				
Alluvial:	N				
	Longitude: -98.1914444				
	Elevation: 83				
	Horz Mth: DOQ				
	Horz Acc: 15				
	Horz Ref: STRUC CEN				
	Horz Date: 08-Jan-2011				
	Horz Org: TCEQ				
	Horz Datum: NAD83				
	Quadrant: 3298-142				
	Ownt Des:				

36	1 of 1	ENE	0.44 / 2,313.42	TX	TCEQ WELL LOGS
License No:	59346				
PWS No:					
Plug Rpt Track No:	478048				
Orig Well Rpt Tk No:					
Apprentice Reg No:	1				
No of Wells Drilled:	2017-05-15				
Date Submitted:	New Well				
Type of Work:	Pumped				
Plug Rpt Track No:					
Seal Method:	Seal Mthd Oh Desc:				
Plugged w/ 48Hrs:	No				
Drilling Start Dt:	2017-04-19				
Drilling End Dt:	2017-04-19				
Proposed Use:	Domestic				
TC/EC Approve Plans:					
Approved by Variance:	Yes				
Loc Vry by Driller:	Yes				
Sealed by Driller:	Yes				
Driller Signed:	Justin Moore				
Surface Sleeve:	Surface Sleeve Installed				
Surf Comp Oh Desc:	Yes				
Compl by Driller:	Submersible				
Pump Type Oh Desc:					
Pump Depth:	400.00				
Chemical Analysis:	No				
Injurious Water:	No				
County:	Erath				
Known Loc Error:	No				
Grid No:	31-47-8				

SDRW WELLS

37	1 of 1	WNW	0.45 / 2,356.80	CR 909 Stephenville TX 76401	SDRW WELLS
License No:	59346				
PWS No:					
Plug Rpt Track No:	478048				
Orig Well Rpt Tk No:					
Apprentice Reg No:	1				
No of Wells Drilled:	2017-05-15				
Date Submitted:	New Well				
Type of Work:	Pumped				
Plug Rpt Track No:					
Seal Method:	Seal Mthd Oh Desc:				
Plugged w/ 48Hrs:	No				
Drilling Start Dt:	2017-04-19				
Drilling End Dt:	2017-04-19				
Proposed Use:	Domestic				
TC/EC Approve Plans:					
Approved by Variance:	Yes				
Loc Vry by Driller:	Yes				
Sealed by Driller:	Yes				
Driller Signed:	Justin Moore				
Surface Sleeve:	Surface Sleeve Installed				
Surf Comp Oh Desc:	Yes				
Compl by Driller:	Submersible				
Pump Type Oh Desc:					
Pump Depth:	400.00				
Chemical Analysis:	No				
Injurious Water:	No				
County:	Erath				
Known Loc Error:	No				
Grid No:	31-47-8				

[erdinfo.com](https://info.erdinfo.com) | Environmental Risk Information Services

Order No: 22100504558

Map Key	Number of Records	Direction	Distance (mi/ft)	Site	DB
Associated Well Services, Inc.					
Full SDR Database: SDR08 Well Location (Map)					
Company Name: Comments: Data Source:					
38	1 of 1	W	0.48 / 2,497.74	TX	TCEQ WELL LOGS
Grid No: 31-47-8					
Date Drilled: 07/03/1998					
Owners Name: WHISENAT, JOESANTO PROPA					
County: ERATH					
Water Usage: DOMESTIC					
Static Level: 330					
Depth Drilled: 458					
Latitude: -98.198538					
Longitude: -98.198538					
Latitude: 32.287394					

39	1 of 1	E	0.47 / 2,455.48	TX	SDRW WELLS
License No: 58066					
PWS No:					
Plug Rpt Track No: TBD CR 176					
Well Rpt Track No: 560729					
Orig Well Rpt Tr No: 76401					
No of Wells Drilled: 1					
Date Submitted: 2020-12-04					
Type of Work: New Well					
Type of Work: Pumped					
Seal Method: Sealed by Driller					
Seal Method: Sealed by Driller					
Plugged w/ 48Hrs: No					
Drilling Start Dt: 2020-11-12					
Drilling End Dt: 2020-11-12					
Proposed Use: Domestic					
TCEQ Approvs Plans: Approved by Variance					
Loc Vfy by Driller: Yes					
Sealed by Driller: Yes					
Driller Signed: Justin Dowell					
Apprentice Signed: Justin Dowell					
Surface Compl: Surface Sleeve Installed					
Surf Comp Oh Desc: Yes					
Pump Type: Submersible					
Pump Depth: 32					
Chemical Analysis: No					
Injurious Water: No					
Known Loc Error: No					
Grid No: 31-47-8					
Company Name: Dowell Well Service					
Well Location Description: Full SDR Database: SDR08 Well Location (Map)					
Data Source:					

40	1 of 1	W	0.47 / 2,480.26	TX	SDRW WELLS
----	--------	---	-----------------	----	------------

Map Key	Number of Records	Direction	Distance (mi/ft)	Site	DB
Stephenville TX 76401					
License No: 58066					
PWS No:					
Plug Rpt Track No: 568793					
Well Rpt Track No: 76401					
Orig Well Rpt Tr No: 76401					
No of Wells Drilled: 1					
Date Submitted: 2021-03-18					
Type of Work: New Well					
Type of Work: Pumped					
Seal Method: Sealed by Driller					
Seal Method: Sealed by Driller					
Plugged w/ 48Hrs: No					
Drilling Start Dt: 2021-03-12					
Drilling End Dt: 2021-03-12					
Proposed Use: Domestic					
TCEQ Approvs Plans: Approved by Variance					
Loc Vfy by Driller: Yes					
Sealed by Driller: Yes					
Driller Signed: Justin Dowell					
Apprentice Signed: Justin Dowell					
Surface Compl: Surface Sleeve Installed					
Surf Comp Oh Desc: Yes					
Pump Type: Submersible					
Pump Depth: 32					
Chemical Analysis: No					
Injurious Water: No					
Known Loc Error: No					
Grid No: 31-47-8					
Company Name: Dowell Well Service					
Well Location Description: Full SDR Database: SDR08 Well Location (Map)					
Data Source:					

41	1 of 1	WNW	0.47 / 2,497.60	TX	SDRW WELLS
License No: 55003					
PWS No:					
Plug Rpt Track No: 336531					
Well Rpt Track No: 76401					
Orig Well Rpt Tr No: 76401					
No of Wells Drilled: 1					
Date Submitted: 2013-08-19					
Type of Work: New Well					
Type of Work: Pumped					
Seal Method: Sealed by Driller					
Seal Method: Sealed by Driller					
Plugged w/ 48Hrs: No					
Drilling Start Dt: 2012-03-13					
Drilling End Dt: 2012-03-13					
Proposed Use: Domestic					
TCEQ Approvs Plans: Approved by Variance					
Loc Vfy by Driller: Yes					
Sealed by Driller: Yes					
Driller Signed: Justin Dowell					
Apprentice Signed: Justin Dowell					
Surface Compl: Surface Sleeve Installed					
Surf Comp Oh Desc: Yes					
Pump Type: Submersible					
Pump Depth: 32					
Chemical Analysis: No					
Injurious Water: No					
Known Loc Error: No					
Grid No: 31-47-8					
Company Name: Dowell Well Service					
Well Location Description: Full SDR Database: SDR08 Well Location (Map)					
Data Source:					

Map Key	Number of Records	Direction	Distance (mft)	Site	DB
Sealed by Name:					
Driller Signed:	Josh Aaral			Dist to Septic Tk:	
Apprentice Signed:				Dist Verif Method:	100+
Surface Compl:	Surface Sleeve Installed			Horizon Datum Type:	Customer verified
Surf Comp Oh Desc:				Elevation:	
Compl by Driller:				Latitude:	32.273333
Pump Type:	Submersible			Lat Degree:	32
Pump Type Oh Desc:				Lat Minute:	16
Pump Depth:	440.00			Lat Second:	24
Chemical Analysis:	No			Longitude:	-98.193055
Injurious Water:	No			Long Degree:	98
County:	Earth			Long Minute:	1
Known Loc Error:	No			Long Second:	53
Grid No:	31-47-8				
Company Name:					
Well Location Description:					
Comments:					
Data Source:					
Full SDR Database: SDRDB Well Location (Map)					
42	1 of 1	E	0.49 / 2,580.75	3055 CR 176 STEPHENVILLE TX 76401	SDRW WELLS
License No:					
4805				Well Address:	3055 CR 176
PWS No:				Well City:	STEPHENNVILLE
Pump Rpt Track No:	562001			Well Zip:	76401
Org Well Rpt Tk No:				Owner Well No:	
Apprentice Reg No:				Owner Name:	RANDY TATSCH
No of Wells Drilled:	1			Owner Addr2:	3055 CR 176
Date Submitted:	2020-12-20			Owner City:	STEPHENNVILLE
Type of Work:	New Well			Owner State:	TX
Type of Wk Oh Desc:	Pressure			Owner Zip:	76401
Seal Method:				Owner Country:	
Seal Mthd Oh Desc:	No			Driller Name:	Jeffrey D Bennett
Plugged w/ 48Hrs:	2020-10-23			Driller Address:	7300 W HWY 377
Drilling Start Dt:	2020-10-23			Driller City:	TOLAR
Proposed Use:	Domestic			Driller State:	TX
Prop Use Oh Desc:				Driller Zip:	76476
TCEQ Approve Plans:				Driller Oh Conty:	
Loc Vly by Driller:	Yes			Dist to Sept Contam:	
Sealed by Driller:	Yes			Dist to Septic Tk:	
Sealed by Name:	JEFF BENNETT			Dist to Septic Tk:	
Driller Signed:				Dist to Prop Line:	
Apprentice Signed:	JEFF BENNETT			Horizon Datum Type:	
Surface Compl:	Surface Sleeve Installed			Elevation:	32.268056
Surf Comp Oh Desc:				Latitude:	32
Compl by Driller:	Yes			Lat Degree:	32
Pump Type:				Lat Minute:	16
Pump Type Oh Desc:				Lat Second:	5
Pump Depth:	No			Longitude:	-98.176657
Chemical Analysis:	No			Long Degree:	98
Injurious Water:	Earth			Long Minute:	10
County:	No			Long Second:	36
Known Loc Error:	31-47-8				
Grid No:					
Company Name:	BENNETT WATER WELL DRILLING, INC.				
Well Location Description:					
Comments:					
Data Source:					
Full SDR Database: SDRDB Well Location (Map)					
43	1 of 1	W	0.50 / 2,656.02	TX	TCEQ WELL LOGS
Full SDR Database: SDRDB Well Location (Map)					

Map Key	Number of Records	Direction	Distance (mft)	Site	DB
Grid No:					
31-47-8					
Date Drilled:	09/04/1974				
Owners Name:	C. W FENNER				
County:	ERATH				
Water Usage:	DOMESTIC				
Seal Level:	62				
Depth Drilled:	115				
Longitude:	-98.19311533545698				
Latitude:	32.26819022874509				
44	1 of 1	NW	0.51 / 2,593.88	TX	SDRW WELLS
License No:					
4905				Well Address:	
PWS No:				Well City:	
Pump Rpt Track No:	96020			Well Zip:	
Org Well Rpt Tk No:				Owner Well No:	SCOTT BRANNON
Apprentice Reg No:				Owner Name:	P.O. BOX 236
No of Wells Drilled:	2006-06-25			Owner Addr2:	MORGAN HILL
Date Submitted:	New Well			Owner City:	TX
Type of Work:	Other			Owner State:	TX
Type of Wk Oh Desc:	CONVENTIONAL			Owner Zip:	76455
Seal Method:				Owner Country:	
Seal Mthd Oh Desc:	No			Driller Name:	Jeffrey D Bennett
Plugged w/ 48Hrs:	2006-04-20			Driller Address:	7300 W HWY 377
Drilling Start Dt:	2006-04-20			Driller City:	TOLAR
Proposed Use:	Domestic			Driller State:	TX
Prop Use Oh Desc:				Driller Zip:	76476
TCEQ Approve Plans:				Driller Oh Conty:	
Loc Vly by Driller:	No			Dist to Sept Contam:	
Sealed by Driller:	NO COMPANY			Dist to Septic Tk:	
Sealed by Name:	JEFF BENNETT			Dist to Septic Tk:	
Driller Signed:				Dist to Prop Line:	
Apprentice Signed:	JEFF BENNETT			Horizon Datum Type:	
Surface Compl:	Surface Sleeve Installed			Elevation:	32.277222
Surf Comp Oh Desc:				Latitude:	32
Compl by Driller:				Lat Degree:	32
Pump Type:				Lat Minute:	16
Pump Type Oh Desc:				Lat Second:	36
Pump Depth:	No			Longitude:	-98.1975
Chemical Analysis:	No			Long Degree:	98
Injurious Water:	Earth			Long Minute:	11
County:	No			Long Second:	51
Known Loc Error:	31-47-8				
Grid No:					
Company Name:	BENNETT WATER WELL DRILLING, INC.				
Well Location Description:					
Comments:					
Data Source:					
Full SDR Database: SDRDB Well Location (Map)					
45	1 of 1	ENE	0.51 / 2,713.16	TX	TCEQ WELL LOGS
Grid No:					
31-47-8M					
Date Drilled:	09/05/1975				
Owners Name:	SCOTT STONE				
County:	ERATH				
Water Usage:	DOMESTIC				
Seal Level:	290				
Depth Drilled:	320				
Longitude:	-98.177103				
Latitude:					

Map Key	Number of Records	Direction	Distance (mi/ft)	Site	DB
Latitude:		32.255723			
46	1 of 1	W	0.52 / 2,750.23	Highway 281 towards Morgan Mill Stephenville TX 76401	SDRW WELLS
License No:	2404	Well Address:	Highway 281 towards Morgan Mill		
Plug Rep Track No:		Well Addr2:	Stephenville		
Well Rep Track No:	74760	Well Zip:	76401		
Apprentice Reg No:		Owner Well No:			
No of Wells Drilled:		Owner Name:	Gary Davis		
Date Submitted:	2006-01-25	Owner Addr1:	395 Morgan Mill Road, #4		
Type of Work:	New Well	Owner Addr2:	TX		
Seal Method:	Pumped	Owner State:	Stephenville		
Seal Mthd Oth Desc:		Owner Country:	TX		
Plugged w/ 48hrs:	No	Driller Name:	Gary Acdal		
Drilling Start Dt:	2004-04-21	Driller Address1:	P. O. Box 16		
Drilling End Dt:	2004-04-21	Driller Addr2:	Stephenville		
Proposed Use:	Domestic	Driller City:	TX		
TCEQ Approval Plans:		Driller Zip:	76401		
Approve by Variance:	No	Driller Oth. Cntry:			
Loc Vty by Driller:	Yes	Driller Country:	100		
Sealed by Driller:		Dist to Sep Contam:			
Sealed by Name:	Gary Aardal	Dist to Septic Tk:	30		
Driller Signed:		Dist to Prop Line:	Customer Verified		
Apprentice Signed:		Horizon Datum Type:			
Surface Compl:	Surface Sleeve Installed	Elevation:	32.270278		
Surf Comp Oth Desc:		Latitude:	32		
Compit by Driller:	Submersible	Lat Degree:	32		
Pump Type Oth Desc:	360.00	Lat Minute:	13		
Pump Desc:		Latitude:	-98.139167		
Chemical Analysis:	No	Longitude:	98		
Injurious Water:	No	Long Degree:	11		
Country:	Earth	Long Minute:	57		
Known Loc Error:	No	Long Second:			
Grid No:	31-47-8				
Company Name:	Associated Services				
Well Location Description:					
Comments:	Sds				
Data Source:	Full SDR Database, SDRDB Well Location (Map)				
47	1 of 1	SW	0.52 / 2,767.58		TCEQ WELL LOGS
Grid No:	31-47-8				
Date Drilled:	12/07/1976				
Owners Name:	JOE TORRES				
County:	ERATH				
Water Usage:	DOMESTIC				
Static Level:	280				
Depth Drilled:	320				
Longitude:	-98.197097				
Latitude:	32.257257				
48	1 of 1	NW	0.54 / 2,831.60		TCEQ WELL LOGS
Grid No:					
Date Drilled:					
Owners Name:					
County:					
Water Usage:					
Static Level:					
Depth Drilled:					
Longitude:					
Latitude:					
Grid No:					
Company Name:					
Well Location Description:					
Comments:					
Data Source:					

38

esinfo.com | Environmental Risk Information Services

Order No: 22100504558

Map Key	Number of Records	Direction	Distance (mi/ft)	Site	DB
Grid No:	31-47-8				
Date Drilled:	11/03/1995				
Owners Name:	WINDLE GRAHAM				
County:	ERATH				
Water Usage:	DOMESTIC				
Static Level:	381				
Depth Drilled:	413				
Longitude:	-98.1361206221439				
Latitude:	32.27325858216245				
49	1 of 1	SW	0.54 / 2,860.77		TCEQ WELL LOGS
Grid No:	31-47-8				
Date Drilled:	03/26/1979				
Owners Name:	DAVID BARGER				
County:	ERATH				
Water Usage:	DOMESTIC				
Static Level:	280				
Depth Drilled:	329				
Longitude:	-98.195968				
Latitude:	32.25861				
50	1 of 2	E	0.54 / 2,864.37		SDRW WELLS
License No:	56062	Well Address:	2488 CR 176		
PWS No:		Well Addr2:	Stephenville		
Plug Rep Track No:	335178	Well Zip:	76401		
Well Rep Track No:		Owner Well No:	Elizabeth Talsch		
Apprentice Reg No:		Owner Name:	2488 CR 176		
No of Wells Drilled:		Owner Addr1:	Stephenville		
Date Submitted:	2013-08-15	Owner Addr2:			
Type of Work:	Replacement	Owner State:	TX		
Seal Method:	Pumped	Owner Country:	76401		
Seal Mthd Oth Desc:		Driller Name:	Russell Langford		
Plugged w/ 48hrs:	No	Driller Address1:			
Drilling Start Dt:	2012-05-23	Driller Addr2:			
Drilling End Dt:	2012-05-23	Driller City:			
Proposed Use:	Domestic	Driller Zip:			
TCEQ Approval Plans:		Driller Oth. Cntry:			
Approve by Variance:	No	Driller Country:			
Loc Vty by Driller:	Yes	Dist to Sep Contam:	56		
Sealed by Driller:		Dist to Septic Tk:	50		
Sealed by Name:	Russell Langford	Dist to Prop Line:	customer verified		
Driller Signed:		Horizon Datum Type:			
Apprentice Signed:		Elevation:	32.286667		
Surface Compl:	Surface Sleeve Installed	Latitude:	32		
Surf Comp Oth Desc:		Lat Degree:	32		
Compit by Driller:	Submersible	Lat Minute:	16		
Pump Type Oth Desc:	420.00	Latitude:	-98.176111		
Pump Desc:		Longitude:	98		
Chemical Analysis:	No	Long Degree:	10		
Injurious Water:	No	Long Minute:	34		
Country:	Earth	Long Second:			
Known Loc Error:	No				
Grid No:	31-47-8				
Company Name:					
Well Location Description:					
Comments:					
Data Source:					

39

esinfo.com | Environmental Risk Information Services

Order No: 22100504558

Map Key	Number of Records	Direction	Distance (mi/ft)	Site	DB
Comments:	Full SDR Database: SDRDB Well Location (Map)				
Data Source:					
50	2 of 2	E	0.54 / 2,894.37	TX	TCEQ WELL LOGS
Grid No: 31-47-8 Date Drilled: 09/09/2001 Owners Name: E.O. TATSCH County: ERATH Water Usage: DOMESTIC Static Level: 330 Depth Drilled: 537 Longitude: -98.17635238388242 Latitude: 32.2865359525103					

51	1 of 1	NW	0.54 / 2,873.19	6189 N US Hwy 281 Stephenville TX 76401	SDRW WELLS
License No: 1891 PWS No: Plug Rpt Track No: Well Rpt Track No: 168018 Orig Well Rpt Trk No: Apprentice Reg No: No of Wells Drilled: Date Submitted: 2009-02-10 Type of Work: Replacement Type of Well: Other Seal Method: Seal Method Seal Method: Seal Method Sealed by Name: Mark Dowell Sealed by Date: 2009-02-04 Drilling Start Date: 2009-02-04 Drilling End Date: 2009-02-04 Proposed Use: Domestic TCEQ Approve Plans: n/a Approve by Variance: No Loc. Vry by Driller: Yes Drilled by Name: Mark Dowell Drilled by Date: 2009-02-04 Surface Completion: Surface Sleeve Installed Pump Type: Submersible Pump Type: Oh Desc: Pump Depth: No Chemical Analysis: No Injurious Water: No County: Erath Known Loc Error: No Grid No: 31-47-8 Company Name: Dowell Well Service Well Location Description: Larrell Dowell Contractor Amended 3/31/09 Ref #5374 Data Source: Full SDR Database: SDRDB Well Location (Map)					
Well Address1: 6189 N US Hwy 281 Well Addr2: Well City: Stephenville Well Zip: 76401 Owner Well No: 1 Owner Name: Steve and Donna Walton Owner Addr1: 6189 N US Hwy 281 Owner Addr2: Owner City: Stephenville Owner State: TX Owner Zip: 76401 Driller Name: Mark A Dowell Driller Address1: PO Box 402 Driller Addr2: Driller City: Stephenville Driller State: TX Driller Zip: 76401 Driller Oh Cntry: Driller Country: 110 Dist to Sep Contain: Dist to Sep Line: Dist to Prop Line: Dist to Prop Method: Horizontal Station Type: Elevation: 32.280278 Lat Degree: 32 Lat Minute: 16 Lat Second: 49 Longitude: -98.194722 Long Degree: 98 Long Minute: 11 Long Second: 41					

52	1 of 1	SSW	0.56 / 2,932.69	TX	GWDB
40 envinfo.com Environmental Risk Information Services Order No: 22100504558					

Map Key	Number of Records	Direction	Distance (mi/ft)	Site	DB
State Well No:	3147901				
GMA:	8				
RWPA:	G - Brazos G				
GCD:	Middle Trinity GCD				
Well Type:	Withdrawal of Water				
Pump:					
Power Type:					
Well Rep Track No:					
Plug Rpt Track No:					
USGS Site No:					
GCD Source ID:					
Other Well No:					
Other Well No:					
Prev State Well No:					
Created Date:					
Last Update Date:					
Water Level:	None				
Latitude DD:	32.2547230				
Dlat:	32				
Mlat:	15				
Slat:	17				
Longitude DD:	-98.1952790				
Dlong:	98				
Mlong:	11				
Slong:	43				
Original Source:	Texas A&M				
Remarks:	Groundwater Database (GWDB) Report: GIS shapefile of GWDB well locations				

53	1 of 1	NW	0.57 / 3,022.43	TX	TCEQ WELL LOGS
Grid No: 31-47-8K Date Drilled: 08/21/1975 Owners Name: KENNETH MILLER County: ERATH Water Usage: DOMESTIC Static Level: NOT REPORTED Depth Drilled: 385 Longitude: -98.19830430142022 Latitude: 32.27352440611389					

54	1 of 1	NW	0.59 / 3,171.06	TX	TCEQ WELL LOGS
Grid No: 31-47-8 Date Drilled: 02/04/1999 Owners Name: J. O. BACHUS County: ERATH Water Usage: DOMESTIC Static Level: 70 Depth Drilled: 141 Longitude: -98.1989292005731 Latitude: 32.27724471934457					

55	1 of 1	E	0.60 / 3,169.55	325 CR 477 Stephenville TX 76401	SDRW WELLS
License No: 1891 41 envinfo.com Environmental Risk Information Services Order No: 22100504558					

Map Key	Number of Records	Direction	Distance (m/ft)	Site	DB
PWS No: Plug Rpt Track No: Orig Well Rpt Tk No: Apprentice Rag No: No of Wells Drilled: Date Submitted: Type of Work: Type of PWS Oth Desc: Seal Method: Seal Method Desc: Plugged w/ 48Hrs: Drilling Start Dt: Drilling End Dt: Proposed Use: Prop Use Oth Desc: TCEQ Approve Plans: Approve by Variance: Loc Vty by Driller: Sealed by Driller: Driller Signed: Apprentice Signed: Surfact Comp: Surf Comp Oth Desc: Surf Comp Oth Desc: Pump Type: Pump Depth: Chemical Analysis: Injurious Water: County: Known Loc Error: Grid No: Company Name: Well Location Description: Comments: Data Source:	203770 57240 2010-01-06 Replacement Other No 2009-12-28 2009-12-29 Domestic na No Yes Mark Dowell Robert Loudemink Surfacta Steeple Installed Submersible No No Erath No 31-47-9 Dowell Well Service Joe Riley contractor Full SDR Database, SDRDB Well Location (Map)	Direction Distance (m/ft) Site DB	Well Addr-2: Well City: Well Zip: Owner Well No: Owner Name: Owner Addr1: Owner Addr2: Owner City: Owner State: Owner Zip: Owner Country: Driller Country: Driller Addr1: Driller Addr2: Driller City: Driller State: Driller Zip: Driller Oth City: Driller Country: Dist to Sept Contam: Dist to Sept Tk: Dist to Prop Line: Horizn Datum Type: Elevation: Latitude: Lat Minute: Lat Second: Longitude: Long Degree: Long Minute: Long Second:	Stephenville 79401 James Sommer 325 CR 477 Stephenville TX 79401 Mark A Dowell PO Box 402 Stephenville TX 79401 100 48 owner 1320 32 12.855834 32 15 57 -98.17555 98 10 32	DB

56	1 of 1	NW	0.65 / 3,409.91	6345 NORTH US 281 STEPHENVILLE TX 76401	SDRW WELLS
License No: PWS No: Plug Rpt Track No: Orig Well Rpt Tk No: Apprentice Rag No: No of Wells Drilled: Date Submitted: Type of Work: Type of PWS Oth Desc: Seal Method: Seal Method Desc: Plugged w/ 48Hrs: Drilling Start Dt: Drilling End Dt: Proposed Use: Prop Use Oth Desc: TCEQ Approve Plans: Approve by Variance: Loc Vty by Driller: Sealed by Driller: Driller Signed: Apprentice Signed: Surfact Comp: Surf Comp Oth Desc: Surf Comp Oth Desc: Pump Type: Pump Depth: Chemical Analysis: Injurious Water: County: Known Loc Error: Grid No: Company Name: Well Location Description: Comments: Data Source:	1951 373582 58945 2014-09-23 New Well Other PRESSURED CEMENTED No 2014-08-25 2014-08-27 Domestic TCEQ No Yes EDDIE J POLLOCK NICHOLAS R POLLOCK Alternative Procedure Used	Direction Distance (m/ft) Site DB	Well Addr-2: Well City: Well Zip: Owner Well No: Owner Name: Owner Addr1: Owner Addr2: Owner City: Owner State: Owner Zip: Owner Country: Driller Country: Driller Addr1: Driller Addr2: Driller City: Driller State: Driller Zip: Driller Oth City: Driller Country: Dist to Sept Contam: Dist to Sept Tk: Dist to Prop Line: Horizn Datum Type:	6345 NORTH US 281 STEPHENVILLE 79401 MATT & MYLUSSA PARRHAM 6345 NORTH U S HWY 281 STEPHENVILLE TX 76401 Eddie J Pollock P O BOX 82 GLEN ROSE TX 76043 50+ 5+ HAND MEASURED	DB

42

e2sinfo.com | Environmental Risk Information Services

Order No: 22100504558

Map Key	Number of Records	Direction	Distance (m/ft)	Site	DB
Surf Comp Oth Desc: Compit by Driller: Pump Type: Pump Type Oth Desc: Pump Depth: Chemical Analysis: Injurious Water: County: Known Loc Error: Grid No: Company Name: Well Location Description: Comments: Data Source:	Submersible 420.00 No Erath No 31-47-8 POLLOCK WATER WELL DRILLING Full SDR Database, SDRDB Well Location (Map)	Direction Distance (m/ft) Site DB	Elevation: Latitude: Lat Degree: Lat Minute: Lat Second: Longitude: Long Degree: Long Minute: Long Second:	1386 32.282222 32 16 56 -98.195278 98 11 43	DB

57	1 of 1	NW	0.65 / 3,507.40	TX	TCEQ WELL LOGS
Grid No: Date Drilled: Owners Name: County: Water Usage: Static Level: Depth Drilled: Latitude:	31-47-8 12/06/1973 LLOYD DUNSON ERATH DOMESTIC 320 400 32.27902496450125	Direction Distance (m/ft) Site DB	Elevation: Latitude: Lat Degree: Lat Minute: Lat Second: Longitude: Long Degree: Long Minute: Long Second:	1386 32.282222 32 16 56 -98.195278 98 11 43	DB

58	1 of 1	ENE	0.67 / 3,519.85	TX	TCEQ WELL LOGS
Grid No: Date Drilled: Owners Name: County: Water Usage: Static Level: Depth Drilled: Latitude:	31-47-8 12/06/1973 LEVY ALEXANDER ERATH DOMESTIC 200 260 -98.1742992222462 32.27314489581876	Direction Distance (m/ft) Site DB	Elevation: Latitude: Lat Degree: Lat Minute: Lat Second: Longitude: Long Degree: Long Minute: Long Second:	1386 32.282222 32 16 56 -98.195278 98 11 43	DB

59	1 of 2	SSW	0.67 / 3,550.48	TX	TCEQ WELL LOGS
Grid No: Date Drilled: Owners Name: County: Water Usage: Static Level: Depth Drilled: Latitude:	31-55-2 05/27/1999 TEXAS EXPERIMENT STATION ERATH IRRIGATION 305 440 -98.19356 32.251736	Direction Distance (m/ft) Site DB	Elevation: Latitude: Lat Degree: Lat Minute: Lat Second: Longitude: Long Degree: Long Minute: Long Second:	1386 32.282222 32 16 56 -98.195278 98 11 43	DB

59	2 of 2	SSW	0.67 / 3,550.48	TX	TCEQ WELL LOGS
Grid No: Date Drilled: Owners Name: County: Water Usage: Static Level: Depth Drilled: Latitude:	31-55-2N 11/21/1973 TEXAS EXPERIMENT STATION ERATH IRRIGATION 305 440 -98.19356 32.251736	Direction Distance (m/ft) Site DB	Elevation: Latitude: Lat Degree: Lat Minute: Lat Second: Longitude: Long Degree: Long Minute: Long Second:	1386 32.282222 32 16 56 -98.195278 98 11 43	DB

43

e2sinfo.com | Environmental Risk Information Services

Order No: 22100504558

Map Key	Number of Records	Direction	Distance (mi/ft)	Site	DB
Owners Name: TEXAS AGRICULTURE EXPERIMENT FARM County: ERAITH Water Usage: NOT REPORTED Static Level: 300 Depth Drilled: 420 Longitude: -98.19366 Latitude: 32.251735					
60	1 of 1	E	0.89 / 3,621.29	TX	TCEQ WELL LOGS
Grid No: 31-47-8 Date Drilled: 12/28/1985 Owners Name: GORDON TAYLOR County: ERAITH Water Usage: IRRIGATION Static Level: 330 Depth Drilled: 430 Longitude: -98.1739235472117 Latitude: 32.2671213024289					
61	1 of 1	SW	0.70 / 3,710.72	TX	TCEQ WELL LOGS
Grid No: 31-47-8 Date Drilled: 07/09/1986 Owners Name: F. GRIFFIN County: ERAITH Water Usage: DOMESTIC Static Level: 300 Depth Drilled: 331 Longitude: -98.20110164341857 Latitude: 32.25933039560065					
62	1 of 1	ESE	0.71 / 3,728.73	TX	TCEQ WELL LOGS
Grid No: 31-47-8 Date Drilled: 10/23/1989 Owners Name: BERT WRIGHT County: ERAITH Water Usage: DOMESTIC Static Level: 301 Depth Drilled: 429 Longitude: -98.17526108264169 Latitude: 32.26063375100953					
63	1 of 1	NW	0.77 / 4,069.64	TX	TCEQ WELL LOGS
Grid No: 31-47-8 Date Drilled: 10/25/2000 Owners Name: LARRY REAVIS County: ERAITH Water Usage: DOMESTIC Static Level: 340 Depth Drilled: 440 Longitude: -98.200355320702					
44	einfo.com Environmental Risk Information Services				
Order No: 22100504558					
Map Key	Number of Records	Direction	Distance (mi/ft)	Site	DB
Latitude: 32.2803476981604					
64	1 of 1	NW	0.81 / 4,293.95	TX	TCEQ WELL LOGS
Grid No: 31-47-8 Date Drilled: 03/07/1987 Owners Name: TOM CRANFORD County: ERAITH Water Usage: DOMESTIC Static Level: 372 Depth Drilled: 419 Longitude: -98.20022925687856 Latitude: 32.28143397183065					
65	1 of 2	SW	0.82 / 4,327.74	TARLETON STATE UNIVERSITY SOUTHWES	WUD
PWS ID: 0720056 WTRSRC: G0720056A ID No: G0720056A St Well No: OPERATIONAL Well Depth: 439 Water Usage: ACTIVE - PERMANENT Static Level: 08/27/2010 Date Drilled: 10/23/2010 Completion: 394 Screen Bottom: 334 Screen Top: 100 Gallons Per Minute: DRILL Depth Agent: 001 EPD: 001 Type: CAD No: T Constr: F Confine: N CCN: N Alluvial: N					
Segment: ACTIVE System Sta: 254-988-9942 Contact Phone: HECTOR C DAVIS Primary Co: EHS COORDINATOR Contact Ti: TARLETON STATE UNIVERSITY Utility Name: SOUTHWES Utility Na: 2181TWT Aquifer: 32.25441111 Waterbody: -98.20094722 Latitude: 83 Longitude: 15 Hgt Elev: STRUC CEN Horz Ref: 07-Jan-2014 Horz Date: TCEQ Horz Org: NAD83 Horz Datum: 3298-142 Quadnum: 0wnr Des:					
65	2 of 2	SW	0.82 / 4,327.74	5026 CR 518 Stephenville TX 76401	SDRW WELLS
License No: 55064 PWS No: 55064 Plug Rpt Track No: 230985 Orig Well Rpt Trk No: 230985 Abandonment Reg No: 2010-09-24 No of Wells Drilled: New Well Date of Work: 2010-09-24 Type of Well: Other Type of Well Desc: Pressure Transm Seal Method: No Plugged w/ 48Hrs: 2010-06-03 Drilling Start Dt: 2010-08-27 Drilling End Dt:					
Well Address: 5026 CR 518 Well Addr2: Stephenville Well City: Stephenville Well Zip: 76401 Owner Well No: 1 Owner Name: TSU Dairy Center Owner Addr1: 5026 CR 518 Owner Addr2: Stephenville Owner City: Stephenville Owner State: TX Owner Zip: 76401 Owner County: Thomas Gasman Driller Name: 145 ROSE LANE Driller Address:					
45	einfo.com Environmental Risk Information Services				
Order No: 22100504558					

Map Key	Number of Records	Direction	Distance (mi/ft)	Site	DB
<div>Proposed Use: Public Supply</div> <div>Prop Use Oh Descr: TCEQ Approve Plans: Yes</div> <div>Approved by Variance: Yes</div> <div>Loc Vty by Driller: No</div> <div>Sealed by Driller: No</div> <div>Sealed by Name: Tom Gastmann</div> <div>Driller Signed: TOM GASTMANN - 55054</div> <div>Seal Code Oh Descr: Surface Slab Installed</div> <div>Surf Code Oh Descr: Surf Comp Oh Descr: Comp by Driller: Submersible</div> <div>Pump Type: Pump Type Oh Descr: 381.00</div> <div>Pump Depth: 381.00</div> <div>Chemical Analysis: Yes</div> <div>Injurious Water: No</div> <div>County: Erath</div> <div>Known Loc Error: No</div> <div>Grid No: 31-47-8</div> <div>Company Name: EARTH TECH</div> <div>Well Location Description: Amended 10/6/10 Rel # 9424</div> <div>Comments: Full SDR Database, SDRDB Well Location (Map)</div> <div>Data Source:</div>					<div>Driller City: FRISCO</div> <div>Driller State: TX</div> <div>Driller Zip: 75034</div> <div>Driller County:</div> <div>Driller Country:</div> <div>Dist to Sep Contam:</div> <div>Dist to Septic Tk:</div> <div>Dist to Prop Line:</div> <div>Dist Vent Method:</div> <div>Horizon Datum Type:</div> <div>Elevation: 32.254445</div> <div>Latitude: 32</div> <div>Lat Degree: 32</div> <div>Lat Minute: 15</div> <div>Lat Second: 16</div> <div>Longitude: -98.200834</div> <div>Long Degree: 98</div> <div>Long Minute: 12</div> <div>Long Second: 3</div>

66	1 of 1	E	0.84 / 4,421.41	2703 CR 455 Stephenville TX 76401	SDRW WELLS
License No:	1891	Well Address:	2703 CR 455		
PWS No:		Well Addr2:	Stephenville		
Plug Rpt Track No:	425567	Well City:	76401		
Orig Well Rpt Tk No:		Well Zip:			
Apprentice Signed:	1	Owner Well No:	James Young		
No of Wells Drilled:	2016-07-06	Owner Name:	2703 CR 455		
Date Submitted:	Replacement	Owner Addr:	Stephenville		
Type of Work:		Owner City:	TX		
Type of Work Oh Descr:	Positive Displacement	Owner State:	76401		
Seal Method:		Owner Zip:			
Seal Method Oh Descr:	No	Owner County:	Mark A Dowell		
Plugged w/ 48hrs:	2016-07-05	Driller Name:	P.O. Box 402		
Drilling Start Dt:	2016-07-06	Driller Address:	Stephenville		
Drilling End Dt:	Domestic	Driller Addr2:	TX		
Proposed Use:		Driller City:			
Prop Use Oh Descr:		Driller State:	76401		
TCEQ Approve Plans:		Driller Zip:			
Approved by Variance:		Driller Oh Cntry:			
Loc Vfy by Driller:	Yes	Driller County:	75		
Sealed by Driller:		Driller App Contam:	100+		
Sealed by Name:	Mark Dowell	Dist to Septic Tk:	Owner		
Driller Signed:		Dist to Prop Line:			
Surface Comp:	Surface Sleeve Installed	Dist Verif Method:			
Surf Comp Oh Descr:		Horizon Datum Type:			
Compil by Driller:	Yes	Elevation:			
Pump Type:	Submersible	Latitude:	32.267222		
Pump Type Oh Descr:		Lat Degree:	32		
Pump Depth:		Lat Minute:	16		
Chemical Analysis:	No	Lat Second:	2		
Injurious Water:	No	Longitude:	-98.171389		
County:	Erath	Long Degree:	98		
Known Loc Error:	No	Long Minute:	17		
Grid No:	31-47-8	Long Second:			
Company Name:	Dowell Well Service				
Well Location Description:					
Comments:	Full SDR Database, SDRDB Well Location (Map)				
Data Source:					

Map Key	Number of Records	Direction	Distance (mi/ft)	Site	DB
67	1 of 1	ENE	0.85 / 4,502.04	TX	TCEQ WELL LOGS
Grid No: 31-47-8 Date Drilled: 10/13/1987 Owners Name: BILL TOWELL County: ERATH Water Usage: DOMESTIC Static Level: 220 Depth Drilled: 280 Latitude: -96.11712823895996 Longitude: 32.273526313622256					

68	1 of 1	SSW	0.88 / 4,620.09	TX	TCEQ WELL LOGS
Grid No: 31-47-8N Date Drilled: 05/22/1976 Owners Name: TEXAS AGRICULTURAL EXP STA County: ERATH Water Usage: IRRIGATION Static Level: 200 Depth Drilled: 420 Latitude: -98.19752 Longitude: 32.250386					

69	1 of 1	NW	0.89 / 4,723.57	TX	TCEQ WELL LOGS
Grid No: 31-47-8 Date Drilled: 07/09/1993 Owners Name: KNUDSEN HOUSE County: ERATH Water Usage: DOMESTIC Static Level: 320 Depth Drilled: 390 Latitude: -99.20114025557927 Longitude: 32.282375198894					

70	1 of 1	ESE	0.92 / 4,978.47	TX	TCEQ WELL LOGS
Grid No: 31-47-8 Date Drilled: 10/23/1989 Owners Name: BERT WRIGHT County: ERATH Water Usage: DOMESTIC Static Level: 301 Depth Drilled: 429 Latitude: -98.17180723871115 Longitude: 32.25356219568612					

71	1 of 1	W	0.94 / 4,941.82	TX	TCEQ WELL LOGS
----	--------	---	-----------------	----	----------------

Map Key	Number of Records	Direction	Distance (mi/yr)	Site	DB
Grid No:	31-47-3				
Date Drilled:	04/24/1996				
Owners Name:	RACHEAL FRAIZER				
County:	ERATH				
Water Usage:	DOMESTIC				
Static Level:	200				
Depth Drilled:	295				
Longitude:	-98.200976				
Latitude:	32.258313				

72	1 of 1	SSE	0.97 / 5,132.67	WHITE HORSE CHRISTIAN ACADEMY	WUD
PWS ID:	0720063	Segment:	ACTIVE		
WTRSRC:	G0720063A	System Sta:	254-459-1230		
ID No:	G0720063A	Contact Phone:	OWNER		
St Well No:	OPERATIONAL	Primary Co:	VANESSA B HALFORD		
Operating Status:	423	Contact TI:	WHITE HORSE CHRISTIAN ACADEMY		
Well Depth:	ACTIVE - PERMANENT	Utility Na:	218TYMAT		
Water Use:	08/21/2001	Aquifer:	Waterbody:		
State Leg:	0	Latitude:	32.24802		
Depth From:	33	Longitude:	-98.182586		
Compliant:	0	Horz Acc:	DOQ		
Screen Bottom:	0	Horz Meth:	83		
Gallons Per Minute:	33	Horz Ref:	30		
Depth Again:	DRILL	Horz Date:	30-Nov-2017		
EPID:		Horz Org:	TCEQ		
Type :		Horz Datum:	NAD83		
CAO No:		Quadrant:	3298-113		
Constr:		Owner Des:			
CCN:					
Altval:					

73	1 of 1	NW	0.99 / 5,247.97	TX	TCEQ WELL LOGS
Grid No:	N/A				
Date Drilled:	06/09/1992				
Owners Name:	BILLY WEIR				
County:	ERATH				
Water Usage:	DOMESTIC				
Static Level:	270				
Depth Drilled:	360				
Longitude:	-98.203185				
Latitude:	32.280208				

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at this time of update.

Federal

Wells from NWIS:

The U.S. Geological Survey's National Water Information System (NWIS) is the nation's principal repository of water resources data. The NWIS includes comprehensive information of well-construction details, time-series data for gage height, streamflow, groundwater level, and precipitation and water use data. This NWIS dataset contains select Site Types from the overall NWIS Sites data, limited to the following Group Site Types only: Groundwater Group Site Types: Well, Collector or Rammy Type well, Hypoheic-zone well, Interconnected Wells, Multiple wells, Spring Group Site Type: Spring, and Other Group Site Types: Aggregate groundwater use, Cistem.

Government Publication Date: Mar 21, 2022

No Federal databases were selected to be included in the search.

State

Well Log Reports from Plotted Water Wells:

Locations of TCEQ Water Wells as derived from well logs in the Texas Commission on Environmental Quality (TCEQ) Water Well Report Viewer, which includes unnumbered water wells and those plotted to 2.5 minute grid locations (2.3 miles). In this collection of Well Log Reports, locations have been manually verified.

Government Publication Date: Jul 26, 2022

Select Wells from SDR:

Locations of wells from the Submitted Drillers Report (SDR) Database with select proposed usage: Domestic, Fracking Supply, Industrial, Irrigation, Other, Public Supply, Rig Supply, Stock, Unknown. SDR is populated from the online Texas Well Report Submission and Retrieval System (TWRSRS), a cooperative Texas Department of Licensing and Regulation (TDLR) and Texas Water Development Board (TWDB) application requiring registered water-well drillers to submit reports. Excludes SDR records with the following proposed usage: Closed-Loop Geothermal, De-watering, Environmental Soil Boring, Extinction, Injection, Monitor, Test Well.

Government Publication Date: Sep 8, 2022

Groundwater Database:

The Texas Water Development Board (TWDB) Groundwater Database (GWDB) contains information on selected water wells, springs, oil/gas wells (that were originally intended to be or were converted to water wells), water levels and water quality.

Government Publication Date: Apr 20, 2022

High Plains Water Wells:

Inventory of water wells in the High Plains Underground Water Conservation District No. 1 (HPUWCD), which was created in 1951. As a political subdivision of Texas, HPUWCD is charged with protecting, preserving and conserving aquifers within the District's 16-county service area.

Government Publication Date: Apr 20, 2022

Harris Galveston Subsidence District Water Wells:

List of water wells in the Harris-Galveston Subsidence District (HGSD). The HGSD was created by the 54th Texas Legislature as an underground water conservation district in 1975 to provide regulation of groundwater withdrawal to control subsidence.

Government Publication Date: May 18, 2022

Water Utility Database:

The Water Utility Database is defined as a collection of data from Texas Water Districts, Public Drinking Water Systems and Water and Sewer Utilities who submit information to the TCEQ. This database is an integrated database designed and developed to replace over 160 stand alone legacy systems representing over 5 million records of the former Texas Water Commission and the Texas Department of Health.

Government Publication Date: Oct 1, 2020

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Executive Summary: This portion of the report is divided into 3 sections:

Report Summary- Displays a chart indicating how many records fall on the project property and, within the report search radii.

Site Report Summary-Project Property- This section lists all the records which fall on the project property. For more details, see the Detail Report section.

Site Report Summary-Surrounding Properties- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the Detail Report section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates elevation: the red inverted triangle will indicate ERS Sites with Lower Elevation, the yellow triangle will indicate ERS Sites with Higher Elevation and the orange square will indicate ERS Sites with Same Elevation.

81-47-801

Static level 271 ft
 Arrow down to 364 ft 1 hr. at 390 gpm
 390 " 2 hr. at 390 "
 412 " 2 1/2 hr at 390 "

Pump shut off 1/2 hr
 water level reached 360 ft. pump started
 at 300 gpm.

Draw down to
 360 ft
 362 ft. 1 hr at 300 gpm
 360 ft. 2 hr at " "
 364 ft. 3 hr at " "
 361 ft. 4 hr at " "
 363 ft. 5 hr at " "
 360 ft. 6 hr at " "
 358 ft. 7 hr at " "
 362 ft. 8 hr at " "
 364 ft. 9 hr at " "
 363 ft. 10 hr at " "

Refrigerator pump shut off
 358 ft after 5 min
 354 " " 10 "
 351 " " 15 "
 348 " " 20 "
 344 " " 25 "

no section
 rock

SMITH & WOLF DRILLING COMPANY

Irrigation Well Drilling - Turnkey Jobs
 2030 W. Tarleton
 Phone 968-2161
 Stephenville, Texas 76401

STATEMENT
 Bonnie Smith

FARM
 LOCATION

WELL LOG
220-241 Clay & shale
241-243 White sand
243-250 Clay
250-272 Sand & gravel little clay
272-273 Rock
273-290 Clay
290-330 Sand
330-331 Rock
331-360 Clay & rock layers
360-378 Sand
378-380 Rock
380-381 Clay & rock
381-389 Red clay
389-440 Sand stone, clay & little sand
440-442 Brown clay
DRILLED 442'
CASING SET 442' 6"
PERFORATIONS 9 1/4"
GRAVEL

31-47-801

STATEMENT

Bill Wolf

Bonnie Smith

SMITH & WOLF DRILLING COMPANY

Irrigation Well Drilling - Turkey 1966

Phone 968-2161

2080 W. Tarkenton

Stephenville, Texas 76401

May 1

1968

FARM Cross Timbers Experimental Station

LOCATION Texas A & M College

WELL LOG

0-3 Top soil
 3-5 Yellow clay
 5-10 Blue clay
 10-14 Sand
 14-15 Rock
 15-19 Clay sandy blue
 19-24 Yellow clay
 24-46 Blue clay
 46-68 Blue shale
 68-69 Rock
 69-70 Blue clay
 70-78 Rock
 78-200 Clay & small layers rock
 200-220 Rock

DRILLED

CASING SET

PERFORATIONS

GRAVEL

County :

Location:

Observation well no. 31-47-801

Pumped well no.

Date	Hour	Average Q		Depth to water	ft. to water	Adjustment	ft. to water	Q (gpm)	Remarks
		1' (min)	1' (min)						
5-68		50	55	328	3				
		55	60	324	4				
		60	65	322	2				
		70	75	318	4				
		80	85	314	4				
		90	95	311	3				
		100	105	309	2				
		110	115	305	4				
		120	125	300	5				
		130	135	296	4				
		140	145	293	3				
		150	155	289	4				
		160	165	287	2				
		170	175	284	3				
		180	185	282	2				
		190	195	279	2				
		200	205	275	2				
		210	215	271	2				
		220	225	266	2				
		230	235	261	2				
		240	245	257	2				
		250	255	253	2				
		260	265	249	2				
		270	275	245	2				
		280	285	241	2				
		290	295	237	2				
		300	305	233	2				
		310	315	229	2				
		320	325	225	2				
		330	335	221	2				
		340	345	217	2				
		350	355	213	2				
		360	365	209	2				
		370	375	205	2				
		380	385	201	2				
		390	395	197	2				
		400	405	193	2				
		410	415	189	2				
		420	425	185	2				
		430	435	181	2				
		440	445	177	2				
		450	455	173	2				
		460	465	169	2				
		470	475	165	2				

TWBECW4

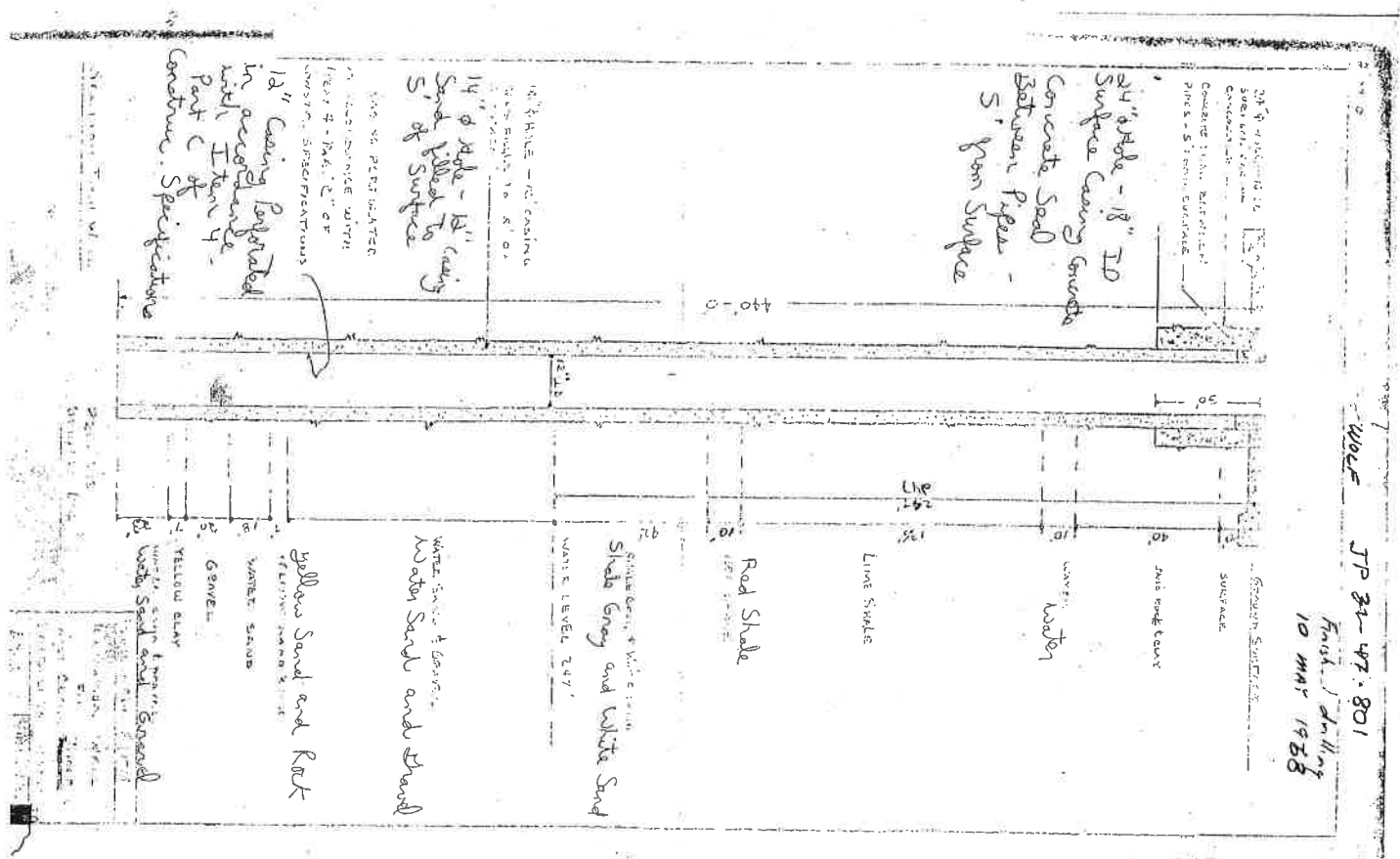
760 2 10

2

Observation well no. 31-47-801
Pumped well no. SAME

$$\text{fl. } r^2 =$$

Date	Hour	t (min)	t' (min)	t/t'	Depth to water	s (und- justed)	Adjust- ment Δs	s' (ad- justed)	Q (gpm)	Remarks
5-68		0			271				390	Pump ON
		60			364					
		120			390					
		150			412					
		180			360					Pump off 1/2 h
		240			362				300	
		300			360					
		360			364					
		420			361					
		480			363				300	
		540			360					
		600			358					
		660			362					
		720			364					
		780			363				300	
										Pump off
		5			358	0				
		10			354	4				
		15			351	3				
		20			348	3				
		25			344	4				
		30			341	3				
		35			336	5				
		40			333	3				
		45			331	2				



ATTENTION OWNER: Confidentially
 PRIVATELY KEPT BY THE STATE OF TEXAS
 1) OWNER: COLLIER & SON (MIDCARE) ADDRESS: Rt. 2 Box 2066 CITY: STEPHENVILLE STATE: TX ZIP: 76401-
 2) LOCATION OF WELL: COMPLY: ROAD 2 miles to N direction from STEPHENVILLE
 LEGAL DESCRIPTION SEE ATTACHED MAP

31.62.8

3) TYPE OF WORK: NEW WELL 4) PROPOSED USE: DOMESTIC 5) DRILLING METHOD: MOD ROTARY
 6) WELL LOG: 00070 DIAMETER OF ROPE FROM TO 7) BOREHOLE METHOD:
 DIAMETER 6.75 0 410 GRAVEL PACKED FROM 350 FT. TO 410 FT.
 DATE DRILLING: 09/27/93 STARTED: 09/27/93 COMPLETED: 09/30/93 IF SAMPLED... FROM FT. TO FT.

8) CASING, BULK PIPE, AND WELL SCREEN DATA:
 DIA. NEW/USED DESCRIPTION FROM TO GASE CASING SCREEN
 4 N PVC BLANK 0 380 SCH 40
 4 N PVC SLOTTED 380 410 SCH 40

9) CEMENTING DATA:
 SUBSISTENTIAL DESCRIPTION: FROM TO DESCRIPTION
 0 1 TOP SOIL
 1 20 CALICHE
 20 40 GREY CLAY
 40 280 GREY CLAY AND SHALE
 280 320 GREY CLAY AND SHALE
 320 340 GREY CLAY AND SHALE
 340 400 SAND AND GREY CLAY
 400 410 RED CLAY
 Cemented from 0 FT. TO 20 FT. No. of Sacks Used 3
 320 FT. TO 360 FT. 7
 Method used: CEMENT-POURED
 Cemented by: BILL & MARTIN
 SURFACE CEMENTATION:
 SPEC. STEEL SLEEVE

RECEIVED
 APR 27 1994

TEXAS NATURAL RESOURCES CONSERVATION COMMISSION
 WATER LEVEL: 340 FT. DATE: 09/30/93
 STATIC LEVEL: 340 FT. DATE: 09/30/93
 ARTESIAN FLOW: GPH. DATE:

12) BACKFILL:
 TYPE TYPE DEPTH
 SACK SACK 20

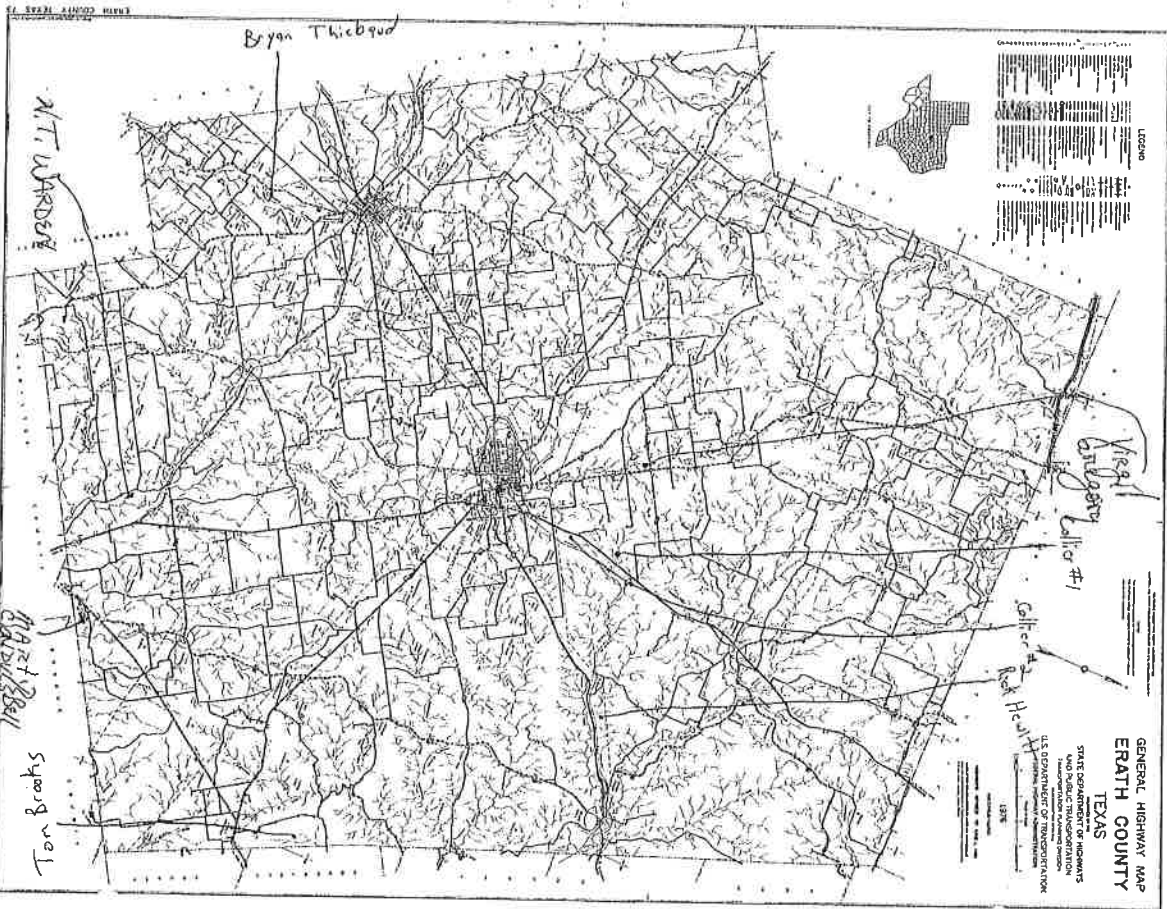
13) TYPE PUMP: 14) WELL TEST:
 SUBSISTENTIAL PUMP
 DEPTH TO PUMP: 380 YIELD: 12 GPM WITH UNK FT. DRAINAGE AFTER 24 HRS

15) WATER QUALITY:
 TYPE OF WATER: DEPTH OF STRATA: NO CHEMICAL ANALYSIS MADE
 NO STRATA OF UNDESIRABLE WATER PENETRATED

COMPANY NAME: ASSOCIATED SERVICES WATER WELL DRILLER'S LICENSE NO.: 2404
 ADDRESS: P.O. BOX 16 CITY: STEPHENVILLE STATE: TX ZIP CODE: 76401
 WELL NO. 31.47.8
 LOCATED ON MAP 31.47.8

I HEREBY CERTIFY THAT THIS WELL WAS DRILLED BY ME (OR UNDER MY SUPERVISION) AND THAT EACH AND ALL OF THE STATEMENTS HEREIN ARE TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I UNDERSTAND THAT FAILURE TO COMPLETE ITEMS 1 THRU 15 WILL RESULT IN THE LOG(S) BEING RETURNED TO COMPETITION AND RESIDENTIAL.

(signed) Bryan Thibodeau (signed) _____ (REGISTERED DRILLER/TRAINEE)



Send original copy by certified mail to: Texas Water Cor. 401 N. P.O. Box 13877, Austin, Texas 78711
 ATTENTION: Owners, Confidentially
 Please use block 14.
 State of Texas
 Texas Water Mail Orders Board
 P.O. Box 13877
 Austin, Texas 78711

WELL REPORT

1) OWNER: LOUIS BOLLINGEL (Name) ADDRESS: P. O. Box 149, Morgan Hill, TX 75665 (City) (State) (Zip)
 2) LOCATION OF WELL: ERATH (County) 4 (Mile N) (Mile S) (Mile E) (Mile W) direction from Stephenville (Town)

Other must complete the legal description below with distance and direction from two intersecting sections of survey, from, or be must locate and identify the well on an official plat of the State of Texas County General Highway Map and attach the map to this form.
 LEGAL DESCRIPTION:
 Section No. Block No. Township Survey Name
 Distance and direction from two intersecting sections of survey: See Attached Map

3) TYPE OF WORK (Check):
☒ New Well ☐ Existing
☐ Reconditioning ☐ Plugging
☐ Drilling Method (Check):
☐ Electric ☐ Hydraulic ☐ Air ☐ Mud Rotary ☐ Air Hammer ☐ Latent ☐ Sand
☐ Other ☐ Other

4) WELL LOG:
 Date Drilled: 4/14/93 Dr. (ft.) 193 From (ft.) 7-1/8 To (ft.) 7-5
 Started 4/14 Completed 4/14 1993

5) CASINO, BLANK PIPE, AND WELL SCREEN DATA:
 From (ft.) To (ft.) Description and color of formation material:

0	21	Clay
21	34	Clay
34	49	Clay
49	51	Tan Sand
51	61	Clay
61	75	Shale

 TEXAS WATER COMMISSION

6) CELESTIAL DATA (Rule 207.441):
 Cemented from 0 ft. to 20 ft. No. of Sacks Used 3
 Method used Conventional
 Cemented by Company

7) SURFACE COMPLETION:
☐ Spooled Surface Sack Installed (Rule 207.443A4)
☐ Spooled Saw Shave Installed (Rule 207.443A4)
☐ Friction Adapter Used (Rule 207.443B3)
☐ Approved Alternative Procedure Used (Rule 207.71)

8) TYPE PLUMB:
☐ True ☐ Lat ☒ Submersible ☐ Operator
☐ Other 60 ft.

9) WELL TESTS:
 Type Test ☐ Pump ☐ Baler ☐ Load ☒ Extended
 Yield: 10 gpm with 5 ft. drawdown after 1 hrs.

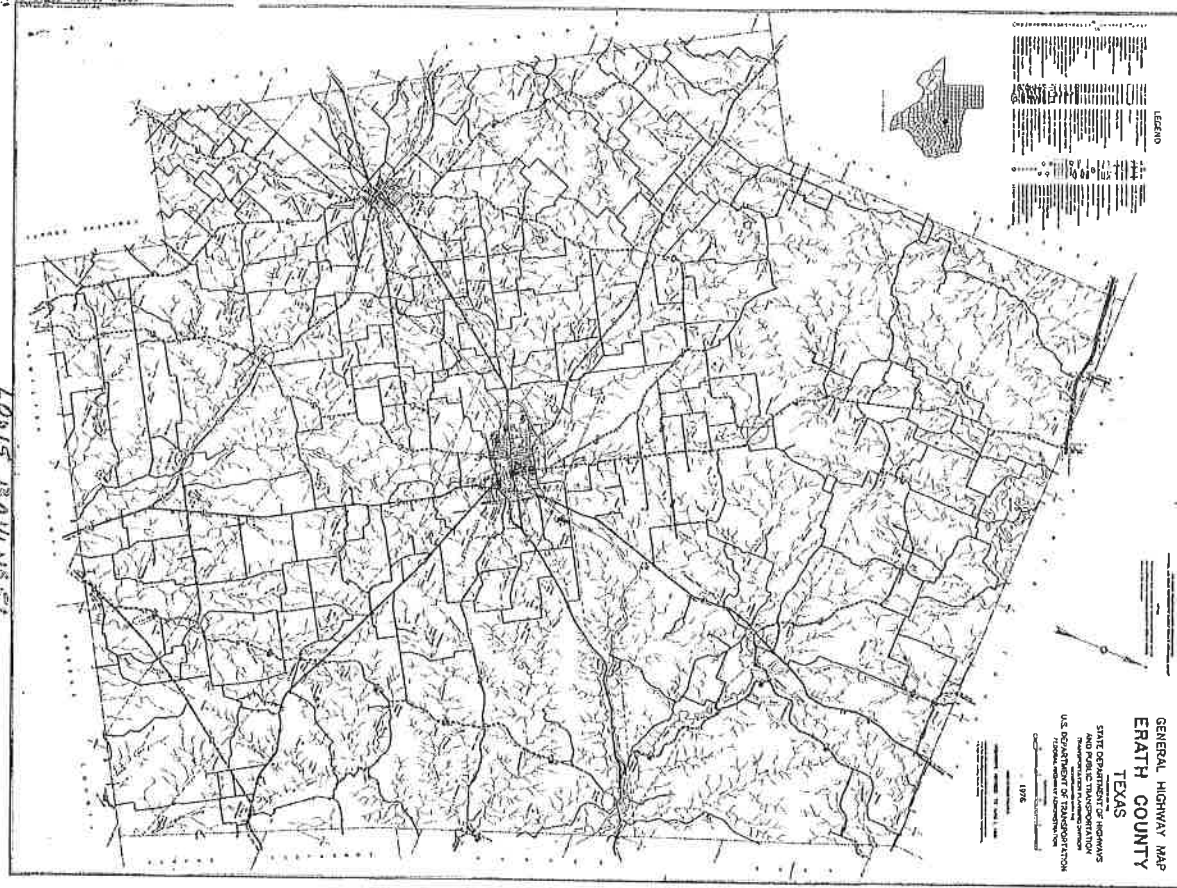
10) WATER QUALITY:
 Did you personally observe any areas within confined underground aquifer?
☐ Yes ☒ No
 Type of water: 2 yrs. water report or UNDERGROUND WATER
 Was a chemical analysis made? ☐ Yes ☒ No

11) WATER LEVEL:
 Static level 31 ft. below land surface
 Aquifer flow gpm Date 4/14/93

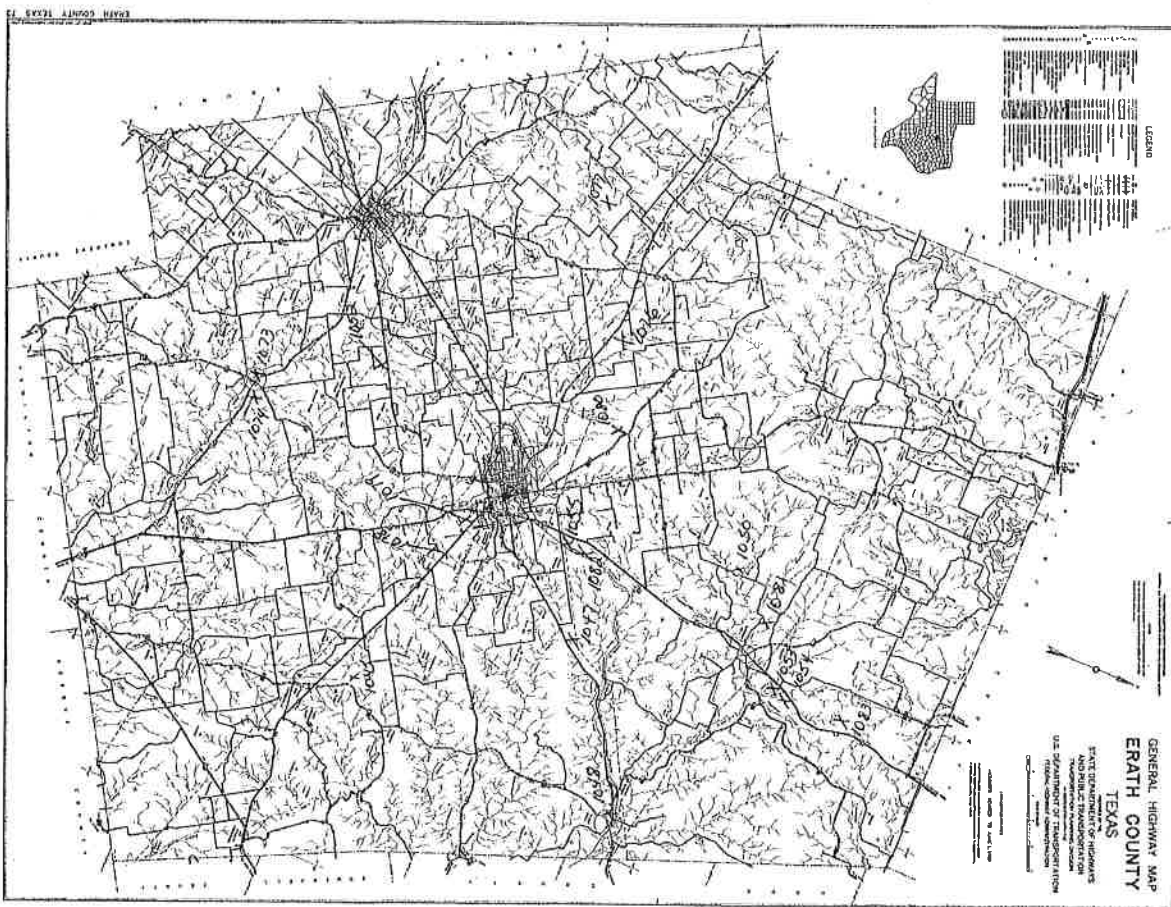
12) PACKERS:
 Type gpm Depth

13) ADDRESS:
200 Box 518 (Street or P.O.) (City) (State) (Zip)
Stephenville (City) (State) (Zip)
 (Signature) (Location Well City) (Registered Owner Name)
 For TWC use only: Well No. 214713 Located on map 214713

14) COMPANY NAME: Double Diamond Drilling (Type of pump)
 WELL DRILLER'S LICENSE NO. 2682
 TWC-0159 (Rev. 05-18-90) TEXAS WATER COMMISSION COPY



00184TOWA-0392 (12/29/83)



Please use black ink.
Send original copy by
mail to:
Texas Department of Water Resources
P. O. Box 13087
Austin, Texas 78711

State of Texas
WATER WELL REPORT
Attention Owner: Confidentiality Notice on Reverse Side

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

1) OWNER: Deborah Winters Kingdom Address: Rt 2 Stephenville, Tex 76401
County: Erath Section: 1 Township: N Direction from: Stephenville, Tex

2) LOCATION OF WELL:
Section No. 31-55-6 Block No. 1083 Township N Direction from: Stephenville, Tex

3) TYPE OF WORK (Check):
☐ New Well ☐ Deepening ☐ Domestic ☐ Industrial ☐ Public Supply
☐ Reconditioning ☐ Plugging ☐ Irrigation ☐ Test Well ☐ Other Other

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

5) WELL LOG:
Date drilled: 9-3-85 D.I. (in) 6 1/2 Surface 0 To (ft.) 420

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

7) CASING, BLANK PIPE, AND WELL SCREEN DATA:
D.I. (in) 4 N Pvc pipe 0 420-5440
Settling (ft.) 0 420-5440
From _____ To _____

8) CEMENTING DATA (Rule 319.441b)
Cemented from _____ ft. to _____ ft. 400
Method used: Pvc
Demanded by: Deborah Winters, Inc.

9) SURFACE COMPLETION
☐ Specified Surface Sbs Installed (Rule 319.441d)
☐ Piles Adapter Used (Rule 319.441d)
☐ Approved Alternative Procedure Used (Rule 319.71)

10) WATER LEVEL
Static level _____ ft. below land surface Date _____
Artificial flow _____ gpm. Date _____

11) PACKERS:
Type _____ Depth _____

12) TYPE PUMP:
☐ Turbine ☐ Jet ☐ Submersible ☐ Cylinder
☐ Other _____
Depth to pump bottom, cylinder, jet, etc. _____ ft.

13) WELL TESTS:
Type Test: ☐ Pump ☐ Boiler ☐ Jetted ☐ Estimated
Yield _____ gpm with _____ ft. drawdown after _____ hrs.

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

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

T DWR-0032 (1/72/8/83)

DEPARTMENT OF WATER RESOURCES COPY

COMPANY NAME: Deborah Winters Service Water Well Driller's License No. 1891
ADDRESS: P.O. Box 558 Stephenville Texas 76401
(Type or Print) (City) (State) (Zip)
Signed: Deborah Winters (Signature)
(Typed Name)
Please attach electric log, chemical analysis, and other pertinent information, if available.
For TOWNSHIP use only: 31-55-6 1083 N 1083
Well No. _____ Located on map _____

Please use black ink.
Send original copy to:
Texas Water Commission
P.O. Box 33892
Austin, Texas 78711

State of Texas
WATER WELL REPORT
ATTENTION OWNER: Confidentiality/Patridge Notice on Report Side

Texas Water Well Drilling Board
P.O. Box 12087
Austin, Texas 78711

11 OWNER: Dean Taylor Address: 450 W. Beach Stoughtonville, Texas 75481
City: Stoughtonville State: TX
12 LOCATION OF WELL: Earth Section No.: 3 Survey Name: Stoughtonville (Owner)
County: Earth Inlet in: 2W direction from: Stoughtonville (Towner)

Driller must complete the legal description on this report with distance and direction from two independently located or survey line, or the must locate and identify the corner on official survey or Public Land Trust County Corner. Signify this and attach the map to this form.

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

☒ See attached map

31-55-5

2) TYPE OF WORK (Check):
☒ New Well ☐ Deepening ☐ Domestic ☐ Industrial ☐ Motorist ☐ Public Supply ☐ Drilling Method (Check):
☐ Recirculating ☐ Plugging ☐ Irrigation ☐ Test Well ☐ Injection ☐ Other _____ ☐ Air Hammer ☐ Air Hammer ☐ Aired ☐ 30' and ☐ Driven

3) WELL LOG:
Date Drilling: 3-10 1988 Diameter of Hole: _____
Started: 3-11 1988 From (ft.) To (ft.)
Completed: 3-11 1988 From (ft.) To (ft.)

From To Description and color of formation (ft.) (ft.)

0 - 4	Topsoil				
4 - 80	Caliche				
80 - 100	Sandy white clay				
100 - 850	Shale				
200 - 260	Blue clay				
260 - 280	Sand clay				
280 - 300	Red clay				
300 - 340	Sand				
340 - 380	Red clay				
380 - 420	Sand				

9) CEMENTING DATA (Rule 319.4410)
Cemented from 300 ft. to 380 ft. No. of Sacks Used 5
or 0 ft. to 80 ft. No. of Sacks Used 5
Method used Pour
Cemented by Dowell Well Service, Inc.

10) SURFACE COMPLETION
☒ Specified Surface Sub. installed (Rule 319.4410)
☐ Private Access Used (Rule 319.4410)
☐ Approved Alternative Procedure Used (Rule 319.711)

11) WATER LEVEL
Static level 340 ft. below land surface
Artesian flow _____ gpm. Date _____
Type _____ Depth _____

12) PACKERS:
Type _____ Date _____
Depth _____

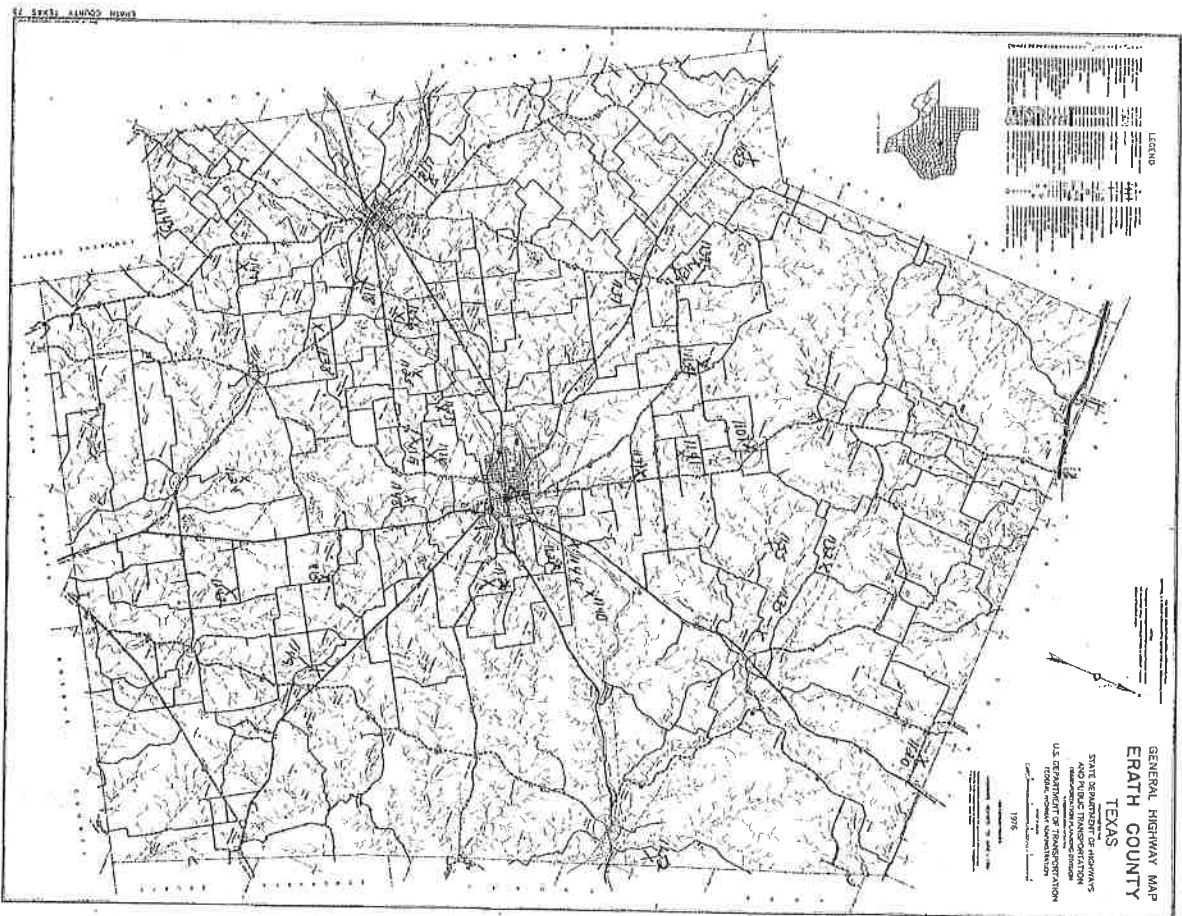
13) TYPE PUMP:
☐ Turbine ☒ Submersible ☐ Cylinder
☐ Other _____
Depth to pump bottom, cylinder, etc., etc. _____ ft.

14) WELL TESTS:
Type Test: ☐ Pump ☒ Bailor ☐ Estimated
Yield: _____ gpm with _____ ft. drawdown after _____ min.

15) WATER QUALITY:
(Use reverse side if necessary)
Did you routinely provide any tests which concluded undesirable water? ☐ Yes ☒ No
If yes, submit "REPORT OF UNSATISFACTORY WATER"
Type of test(s): _____
Was a chemical analysis made? ☐ Yes ☒ No

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

COMPANY NAME: Dowell Well Service, Inc. Water Well Driller's License No. 1291
ADDRESS: P.O. Box 558 Stoughtonville
City: Stoughtonville State: TX
Signed: Dean Taylor Date: 7/6/01
For TWC use only: 31-55-5
Location on map: _____



ATTENTION OWNER: Confidentiality
 Privilege Notice on Reverse Side

STATE OF TEXAS
 WATER WELL REPORT

1) OWNER: SINS, ERIC
 ADDRESS: R.T.2 BOX 15
 CITY: STEPHENVILLE STATE: TX ZIP: 76401

2) ADDRESS OF WELL:
 County: ERATH
 Street or RD: SAME
 City, State, ZIP Code: SAME

3) TYPE OF WORK: NEW WELL
 TX 76401-
 If Public Supply Well, Water Mains Submitted to the TWC22

4) PROPOSED USE: DOMESTIC
 If Public Supply Well, Water Mains Submitted to the TWC22

5) WELL LOG: 00094
 DIAL NEW/USED DESCRIPTION FROM TO GAGE CASTING SCREEN
 0 1 TOP SOIL
 1 5 SANDY CLAY
 5 20 CALICHE
 20 140 GREY CLAY AND SHALE
 140 250 HARD SHALE CLAY LAYERS
 250 350 SAND-GRAVEL AND GREY CLAY
 350 370 RED CLAY
 370 400 SAND AND CLAY LAYERS
 400 410 BLUE AND RED CLAY

6) DATE DRILLING: STARTED: 06/04/95
 DIAL NEW/USED DESCRIPTION FROM TO GAGE CASTING SCREEN
 0 1 TOP SOIL
 1 5 SANDY CLAY
 5 20 CALICHE
 20 140 GREY CLAY AND SHALE
 140 250 HARD SHALE CLAY LAYERS
 250 350 SAND-GRAVEL AND GREY CLAY
 350 370 RED CLAY
 370 400 SAND AND CLAY LAYERS
 400 410 BLUE AND RED CLAY

7) DRILLING METHOD: MUD ROTARY
 8) BOREHOLE COMPLETION: GRAVEL PACKED FROM 350 FT. TO 410 FT.
 IF GRAVEL... FROM FT. TO FT.

9) CEMENTING DATA:
 Cemented from 0 FT. TO 20 FT.
 350 FT. TO 350 FT.
 Method used: CEMENT-POURED
 Cemented by: GARY
 Distance to septic field lines: 150 FT.
 Method of verification of above distance:

10) SURFACE COMPLETION:
 SPEC. STEEL SLUICE
 11) WATER LEVEL:
 STATIC LEVEL: 300 FT. DATE: 06/09/95
 TESTER'S SIGNATURE: DATE: 06/09/95
 12) PACKERS: TYPE DEPTH
 SACK 20

RECEIVED
 JAN 23 1996
 P.E. & S. & L. RESOURCE
 CONSULTATION COMMISSION

13) TYPE PUMP: SUBMERGIBLE
 DEPTH TO PUMP: 350
 14) WELL TEST:
 PUMP
 YIELD: 10 GPM WITH UNK FT ORAHDOWN AFTER 24 HRS

15) WATER QUALITY:
 TYPE OF WATER: NO STRATA OF UNDESIRABLE WATER PENETRATED
 DEPTH OF STRATA:
 NO CHEMICAL ANALYSIS MADE

COMPANY NAME: ASSOCIATED SERVICES
 CITY: STEPHENVILLE STATE: TX ZIP CODE: 76401
 ADDRESS: P.O. BOX 16
 WATER WELL DRILLER'S LICENSE NO.: 2404
 FOR TWC USE ONLY
 WELL NO.
 LOCATED ON MAP

I HEREBY CERTIFY THAT THIS WELL WAS DRILLED BY ME (OR UNDER MY SUPERVISION) AND THAT EACH AND ALL OF THE STATEMENTS HEREIN ARE TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I UNDERSTAND THAT FAILURE TO COMPLETE ITEMS 1 THRU 15 WILL RESULT IN THE LOG(S) BEING RETURNED FOR COMPLETION AND RESUBMITTAL.

(signed) *Eric Sins* (signed) (REGISTERED DRILLER TRAINEE)

Please use black ink.
Send original copy by certified mail to the
State of Texas
WATER WELL REPORT
ATTENTION OWNER: Confidentiality Privilege Notice on Reverse Side
P.O. Box 12087
Austin, Texas 78711

1) OWNER: 89 Creek Address: Highway 31-40-10 (City) Stephenville (State) TX (Zip) 76661
2) LOCATION: SW 1/4 Sec 36 (Name) 4 (Mile in) 11 (M E, S W, etc.) (Section or RFD) (Town)

Driller must complete the legal description to the right with distances and direction from two intersecting sections of survey, book or plat, county and identify the General Highway, Area and Street (if any) to this point.
☐ Legal description: Section No. _____ Block No. _____ Township _____
Abstract No. _____ Survey Name _____
Distance and direction from two intersecting sections of survey: _____

3) TYPE OF WORK (Check):
☒ New Well ☐ Deepening ☐ Rehabilitation ☐ Plugging
4) PROPOSED USE (Check):
☒ Domestic ☐ Industrial ☐ Public Supply
☐ Irrigation ☐ Test Well ☐ Other _____

6) WELL LOG:
Date drilled: 5-1-84
DIA. (in.) From (ft.) To (ft.)
36.9 Surface 644
7) BOREHOLE COMPLETION:
☒ Open Hole ☐ Gravel Packed ☐ Straight Wall ☐ Underdrained
If Gravel Packed give material ... from _____ ft. to _____ ft.

8) CASING, BLANK PIPE, AND WELL SCREEN DATA:
From (ft.) To (ft.) Description and color of formation
0-1 200 Soil
1-35 Rock - Caliche
35-145 Dark Blue Clay
145-250 Darkstone
250-340 Blue + Red Clay
340-368 Water Sand
368-369 Red Red

9) CEMENTING DATA (Rule 319.44(b))
Cemented from 140 ft. to 0 ft.
Method used: 7 1/2 in. cement
Cemented by: W

10) SURFACE COMPLETION
☐ Specified Surface Stop Installed (Rule 319.44(c))
☐ Private Access Used (Rule 319.44(d))
☒ Approved Alternative Procedure Used (Rule 319.71)

11) WATER LEVEL:
Static level: 330 ft. below land surface Date: 5-1-84
Artesian flow: _____ gpm. Date: _____
12) PACKERS: Type _____ Depth _____

13) TYPE PUMP:
☐ Turbine ☐ Jet ☒ Jettable ☐ Cylinder
☐ Other _____
Depth to pump bench cylinder, jet, etc.: 358 ft.

14) WELL TESTS:
Type Test: ☐ Pump ☒ Jettable ☐ Jetted ☐ Estimated
Yield: 10 gpm with 0 ft. drawdown at 2 hrs.

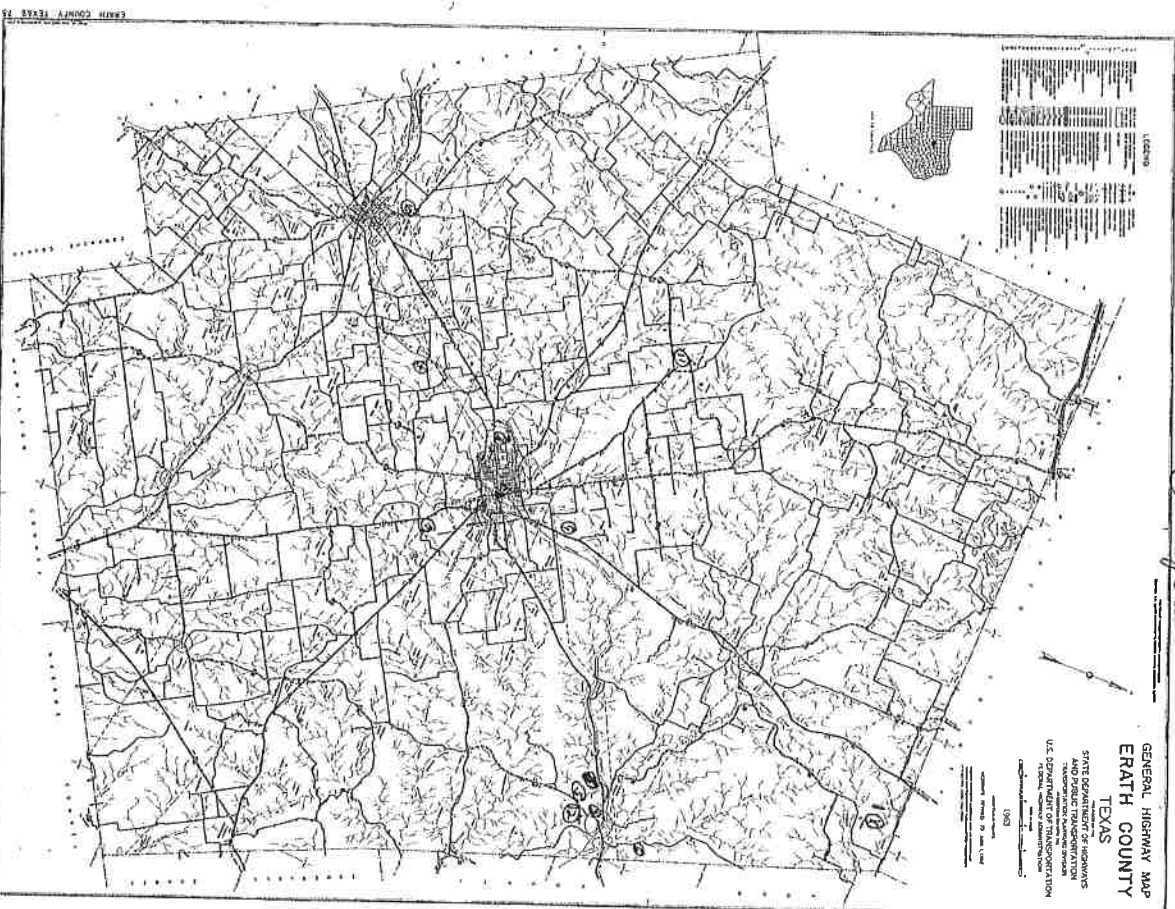
15) WATER QUALITY:
Did you knowingly pump any state which contained undesirable waste? ☐ Yes ☒ No
If yes, submit "NOTATION UNDESIRABLE WATER"
Type of water: Drinking ☐ Depth of water: 368
Was a chemical analysis made? ☐ Yes ☒ No

I, the undersigned, being duly sworn, depose and say that each and all of the statements herein are true to the best of my knowledge and belief; I understand that failure to furnish true and correct information is a crime under the laws of the State of Texas.
COMPANY NAME: Henry Drilling Water Well Driller's License No. 1352
ADDRESS: 1330 W McNeil (City) Stephenville (State) TX (Zip) 76661

(Signed) Henry Drilling (Signature of Driller)
(Signed) Stephenville (Registered Driller Name)
For TOWNSHIP only: Well No. 31-40-10 - SW 1/4 - Sec 36
LOTTED ON MAP: 1836

TOWN: 0321 (1/22/83)

DEPARTMENT OF WATER RESOURCES COPY



- ① Myrtle Bailey
- ② Ray Crum
- ③ David Clayton
- ④ Bill Sain
- ⑤ Doug Baskett
- ⑥ Paul Garrett
- ⑦ Tom Lamb
- ⑧ Jack Nelson
- ⑨ Ed Cook
- ⑩ Earl Mart
- ⑪ Mike Baily
- ⑫ Ray Crum

Send original copy by certified mail to the State of Texas, Department of Water Resources, P. O. Box 13087, Austin, Texas 78711. WATER WELL REPORT

For TDRW use only: Well No. 21-47-34, Located on map 405, Received: 4-5-81

Owner: A. T. Gordon Address: At 3 Stephenville, Texas (City) (State) (Zip)

Person having well drilled: Same (Name) (Address) (City) (State) (Zip)

Location of well: Stephenville (County) (State) (City) (Zip)

Latitude: 33° 14' N Longitude: 97° 10' W

Locate by: Survey (Method) (Date) (City) (State) (Zip)

Locate by: Survey (Method) (Date) (City) (State) (Zip)

Abstract No.: 1 (Only use sub 501 of section)

1) TYPE OF WELL (Check): Drilling (Type) (Check) (Date) (City) (State) (Zip)

2) PROPOSED USE (Check): Domestic (Type) (Check) (Date) (City) (State) (Zip)

3) TYPE OF WELL (Check): Drilling (Type) (Check) (Date) (City) (State) (Zip)

4) TYPE OF WELL (Check): Drilling (Type) (Check) (Date) (City) (State) (Zip)

5) TYPE OF WELL (Check): Drilling (Type) (Check) (Date) (City) (State) (Zip)

6) WELL LOG: 12-25-76 (Date) (City) (State) (Zip)

7) BOREHOLE COMPLETION: Open Hole (Type) (Check) (Date) (City) (State) (Zip)

8) CASING, BLANK PIPE, AND WELL SCREEN DATA: 4" x 1/2" Steel, slotted (Type) (Check) (Date) (City) (State) (Zip)

9) WATER LEVEL: 380 (Type) (Check) (Date) (City) (State) (Zip)

10) PACKERS: None (Type) (Check) (Date) (City) (State) (Zip)

11) TYPE PUMP: None (Type) (Check) (Date) (City) (State) (Zip)

12) WELL TESTS: None (Type) (Check) (Date) (City) (State) (Zip)

13) WATER QUALITY: None (Type) (Check) (Date) (City) (State) (Zip)

14) OTHER DATA: None (Type) (Check) (Date) (City) (State) (Zip)

15) COMMENTS: None (Type) (Check) (Date) (City) (State) (Zip)

16) SIGNATURE: None (Type) (Check) (Date) (City) (State) (Zip)

17) DATE: None (Type) (Check) (Date) (City) (State) (Zip)

18) CITY: None (Type) (Check) (Date) (City) (State) (Zip)

19) STATE: None (Type) (Check) (Date) (City) (State) (Zip)

20) ZIP: None (Type) (Check) (Date) (City) (State) (Zip)

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

Additional instructions on reverse side.

Send original copy by certified mail to the State of Texas, Department of Water Resources, P. O. Box 13087, Austin, Texas 78711. WATER WELL REPORT

For TDRW use only: Well No. 21-47-34, Located on map 405, Received: 4-5-81

Owner: A. T. Gordon Address: At 3 Stephenville, Texas (City) (State) (Zip)

Person having well drilled: Same (Name) (Address) (City) (State) (Zip)

Location of well: Stephenville (County) (State) (City) (Zip)

Latitude: 33° 14' N Longitude: 97° 10' W

Locate by: Survey (Method) (Date) (City) (State) (Zip)

Locate by: Survey (Method) (Date) (City) (State) (Zip)

Abstract No.: 1 (Only use sub 501 of section)

1) TYPE OF WELL (Check): Drilling (Type) (Check) (Date) (City) (State) (Zip)

2) PROPOSED USE (Check): Domestic (Type) (Check) (Date) (City) (State) (Zip)

3) TYPE OF WELL (Check): Drilling (Type) (Check) (Date) (City) (State) (Zip)

4) TYPE OF WELL (Check): Drilling (Type) (Check) (Date) (City) (State) (Zip)

5) TYPE OF WELL (Check): Drilling (Type) (Check) (Date) (City) (State) (Zip)

6) WELL LOG: 12-25-76 (Date) (City) (State) (Zip)

7) BOREHOLE COMPLETION: Open Hole (Type) (Check) (Date) (City) (State) (Zip)

8) CASING, BLANK PIPE, AND WELL SCREEN DATA: 4" x 1/2" Steel, slotted (Type) (Check) (Date) (City) (State) (Zip)

9) WATER LEVEL: 380 (Type) (Check) (Date) (City) (State) (Zip)

10) PACKERS: None (Type) (Check) (Date) (City) (State) (Zip)

11) TYPE PUMP: None (Type) (Check) (Date) (City) (State) (Zip)

12) WELL TESTS: None (Type) (Check) (Date) (City) (State) (Zip)

13) WATER QUALITY: None (Type) (Check) (Date) (City) (State) (Zip)

14) OTHER DATA: None (Type) (Check) (Date) (City) (State) (Zip)

15) COMMENTS: None (Type) (Check) (Date) (City) (State) (Zip)

16) SIGNATURE: None (Type) (Check) (Date) (City) (State) (Zip)

17) DATE: None (Type) (Check) (Date) (City) (State) (Zip)

18) CITY: None (Type) (Check) (Date) (City) (State) (Zip)

19) STATE: None (Type) (Check) (Date) (City) (State) (Zip)

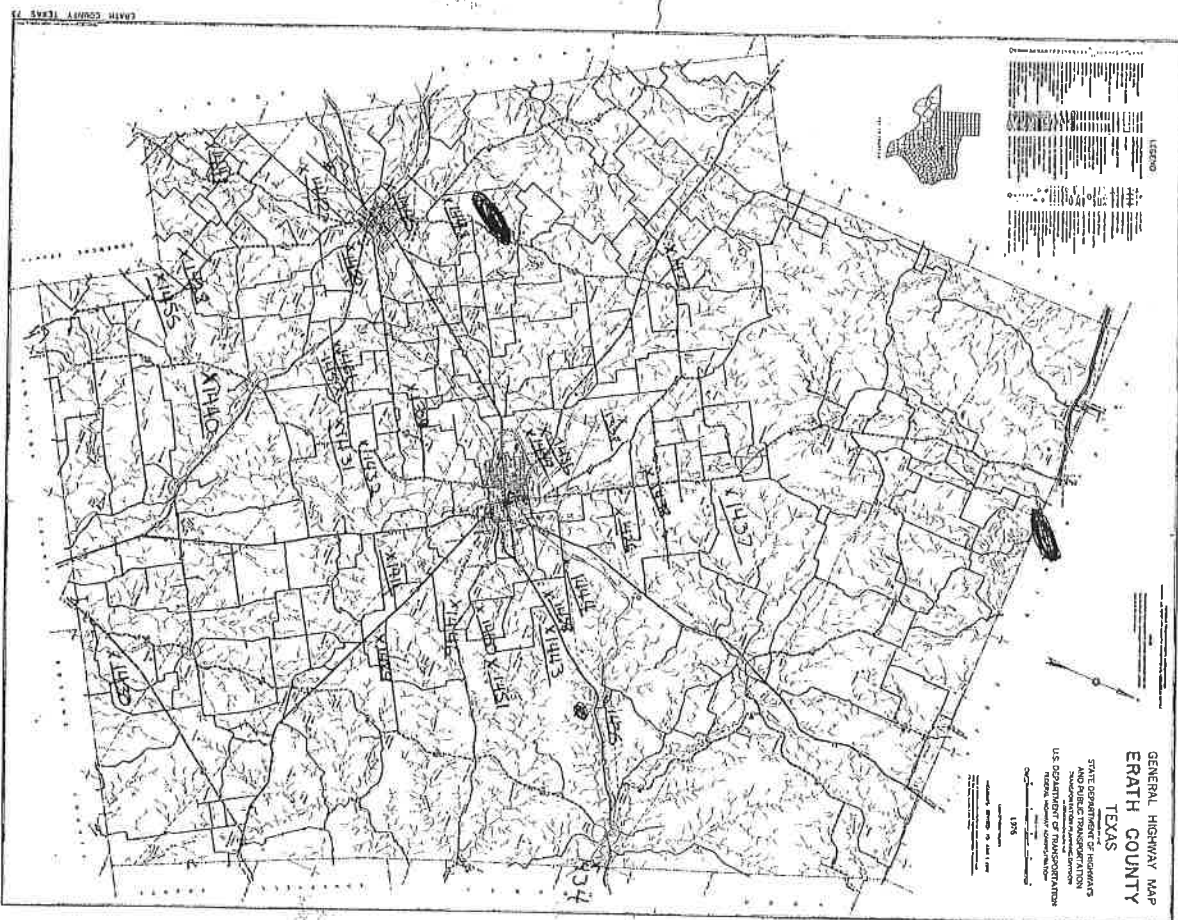
20) ZIP: None (Type) (Check) (Date) (City) (State) (Zip)

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

Additional instructions on reverse side.

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

Additional instructions on reverse side.



State of Texas
 Texas Water Well Driller's Board
 P.O. Box 13087
 Austin, Texas 78711

WATER WELL REPORT
 ATTENTION OWNER: Confidentiality Privilege Notice on Reverse Side

1) OWNER: Tracy Moore Address: Rt. 2 Stephenville, Tex. 76401
 2) LOCATION OF WELL: Erath County, 0 miles in N direction from Stephenville (Town)

Driller must complete the report description in the left column with distance and direction from two intersecting sections or survey lines, or the nearest town and identify the owner of the land on which the well is located. Distance and direction from two intersecting sections or survey lines must be given if the well is located on the property of the owner of the land on which the well is located.

3) TYPE OF WORK (Check):
☒ New Well ☐ Deepening ☐ Repairing ☐ Pumping

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

5) DRILLING METHOD (Check):
☐ Mud Rotary ☐ Air Hammer ☐ Open ☐ Bored ☐ Casing Rotary ☐ Cable Tool ☐ Auger ☐ Other

6) WELL LOG:
 Date drilled: 10/22/82 Diameter of hole: 6 1/2 inches
 From 0 to 450 feet

7) BOREHOLE COMPLETION:
☐ Open Hole ☐ Screen ☐ Gravel Packed ☐ Gravel Filter ☐ Underdrains

8) CASING, BLANK PIPE, AND WELL SCREEN DATA:
 From 0 to 450 feet

9) CEMENTING DATA:
 Cemented from 0 to 400 feet
 Method used: POURED
 Cemented by: Dorell Well Service Inc.

10) WATER LEVEL:
 Static level: 370 ft. below land surface
 Artesian flow: 0 gpm
 Date: 10-29-82

11) TYPE PUMP:
☐ Turbine ☐ Jet ☒ Submersible ☐ Cylinder
 Depth to pump bowl, cylinder, etc.: 10 ft.

12) WELL TESTS:
☐ Type Test ☐ Pump ☒ Slug ☐ Sealed ☐ Estimated
 Yield: 15 gpm with 15 ft. drawdown after 1 hr.

13) WATER QUALITY:
 Did you knowingly penetrate any strata which contained undesirable water? ☐ Yes ☒ No
 If yes, submit "REPORT OF UNDESIRABLE WATER" Type of water: None
 Was a chemical analysis made? ☐ Yes ☒ No

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief.

COMPANY NAME: Dorell Well Service Inc. Water Well Driller's License No. 1891
 ADDRESS: P.O. Box 5558 Stephenville, Texas 76401
 (Signed) Mark Dorell (Typed) Mark Dorell (Typed) Mark Dorell

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

TOWN 0931 (Rev. 5-27-82) DEPARTMENT OF WATER RESOURCES COPY

Send original copy by certified mail to the State of Texas
 Texas Water Development Board
 Austin, Texas 78711
 WATER WELL REPORT

1) OWNER: Person having well drilled: **H.L. Gashart** Address: **P.O. Box 388, Stephenville, Tx.**
 (Name) (City) (State)

2) LOCATION OF WELL: Direction from **Stephenville**
 County **Breath** 1 mile to **N** (City) (State)
 Locality by sketch map showing landmarks, roads, creeks, highway numbers, etc. # **Map on back**
 Give light location with distances and directions from adjacent sections of survey lines.
 Labor **None** League **None**
 Block **None** Survey **None**
 Abstract No. **None**
 (Use reverse side if necessary)

3) TYPE OF WORK (Check):
 New Well ☒ Deepening ☐
 Reconditioning ☐ Plugging ☐ Irrigation ☐ Test Well ☐ Other ☐
 3) TYPE OF WELL (Check):
 Battery ☒ Dry ☐
 Cable ☐ Jetted ☐ Bored ☐
 (Only set the size of section)

4) WELL LOG:
 Diameter of hole **6-3/4** in. Depth drilled **80** ft. Depth of completed well **0** ft. Date drilled **12/20/75**
 All measurements made from **0** ft. above ground level.

5) CASING:
 Type: Old ☐ New ☒ Steel ☐ Plastic ☒ Other ☐
 Cemented from **0** - **3** ft. and **15-45** ft.
 Diameter (feet) **8** 5/8 From (ft.) **0** To (ft.) **80** Casing

6) SCREENS:
 Preferred ☐ Slotted ☐
 Diameter From (ft.) **7** To (ft.) **8** Size

7) CONSTRUCTION (Check):
 Straight well ☐ Crawl packed ☐ Other ☐
 Under record ☐ Open hole ☐
 8) WATER LEVEL:
 Static level **0** ft. below land surface Date **12/20/75**
 Artesian pressure **0** lbs. per square inch Date **12/20/75**
 Depth to pump bowl, cylinder, jet, etc. **0** ft.
 Below land surface **0** ft.

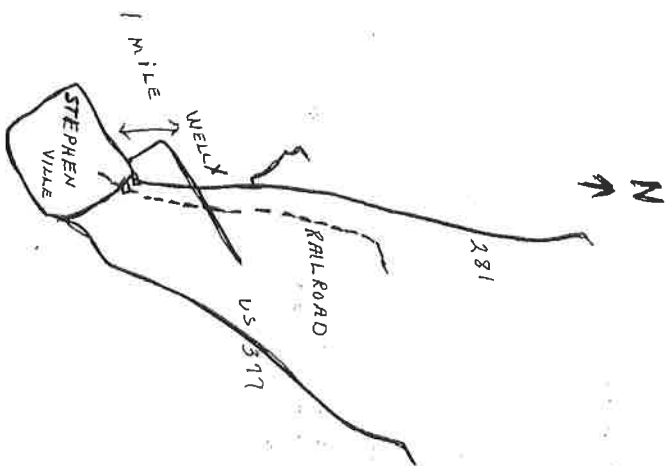
9) WATER QUALITY:
 Was a chemical analysis made? Yes ☒ No ☐
 Did any screen contain undesirable water? Yes ☐ No ☒
 Type of water? **None** Depth of water? **0**

NAME **C.W. Wolf** I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief.
 ADDRESS **P.O. Box 16** Water Well Driller's Registration No. **559**
 (City) **Stephenville** (State) **Texas**
 (Typed) **C.W. Wolf** (Signature) **WOLF DRILLING** (Company Name)

Please attach electric log, chemical analysis, and other pertinent information, if available.
 Additional instructions on reverse side.

2) LOCATION OF WELL:

The sketch showing the well location may be as accurate as possible, showing landmarks. In sufficient detail so that the well may be plotted on a General Highway Map of the county in which the well is located.
 Reference points from which distances are measured and directions given should be of a permanent nature (e.g., Highway intersection, store and creek bridges, railroad crossings). The distance and direction from the nearest town should always be indicated.
 When giving a legal description include a sketch showing location of the well within the described area. e.g., survey abstract. Information furnished in Section 2) of the FORM-G-53 is very important. Unless the well can be accurately located on a map the value of the other data contained in the Report is greatly reduced.



RECEIVED
 JUN 8 1976

TEXAS WATER
 DEVELOPMENT BOARD
 JAN 20 1976

State of Texas
WELL REPORT

State of Texas
WELL REPORT

State of Texas
WELL REPORT

State of Texas
WELL REPORT

1) OWNER: Devin Barker
2) ADDRESS: Rt 2 Stephenville TX 76401
3) TYPE OF WORK: Drilling
4) PROPOSED USE: Domestic
5) WELL LOG: 13' 97' 7 1/8' 115'
6) DRILLING METHOD: Air Rotary
7) Borehole Completion: Open Hole
8) CASING, BLANK PIPE, AND WELL SCREEN DATA: 1 1/2" 36'
9) CEMENTING DATA: 35' to 0' 115' 5'
10) SURFACE COMPLETION: 115' 156'
11) WATER LEVEL: 40' 8-14-97
12) PACKERS: 40' 8-14-97

TNRCC-0199 (Rev. 05-21-95)

White - TNRCC

Yellow - DRILLER

Pink - WELL OWNER

State of Texas
WELL REPORT

State of Texas
WELL REPORT

State of Texas
WELL REPORT

1) OWNER: Solid Rock Church
2) ADDRESS: P.O. Box 1616, Stephenville, TX 76401
3) TYPE OF WORK: Drilling
4) PROPOSED USE: Domestic
5) WELL LOG: 13' 97' 7 1/8' 115'
6) DRILLING METHOD: Air Rotary
7) Borehole Completion: Open Hole
8) CASING, BLANK PIPE, AND WELL SCREEN DATA: 1 1/2" 36'
9) CEMENTING DATA: 35' to 0' 115' 5'
10) SURFACE COMPLETION: 115' 156'
11) WATER LEVEL: 40' 8-14-97
12) PACKERS: 40' 8-14-97

TNRCC-0199 (Rev. 05-21-95)

White - TNRCC

Yellow - DRILLER

Pink - WELL OWNER

DEC 21 2006

Attention Owner: Confidentiality Privilege Notice on reverse side of owner's copy.

Texas Department of License and Regulation
Water Well Drilling/Pump Installer Program
P.O. Box 12157 Austin, Texas 78711 (512)463-7890 FAX (512)463-8815
Toll free (800)803-9202
Email address: water.well@license.state.tx.us

This form must be completed and filed with the department and owner within 60 days upon completion of the well.

WELL REPORT

Owner Name Kello Castorens	Address CR 176	City Stephenville	State TX	Zip 76401																														
County Earl	Physical Address Same	City Same	State TX	Zip 76401																														
3) Type of Work <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Reconditioning <input type="checkbox"/> Replacement <input type="checkbox"/> Deepening																																		
4) Proposed Use (check) <input type="checkbox"/> Monitor <input type="checkbox"/> Environmental Soil Boring <input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Industrial <input type="checkbox"/> Irrigation <input type="checkbox"/> De-watering <input type="checkbox"/> Testwell <input type="checkbox"/> Public Supply well, were plans submitted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																																		
5) Drilling Method (check) <input type="checkbox"/> Driven <input checked="" type="checkbox"/> Air Rotary <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Bored <input type="checkbox"/> Air Hammer <input type="checkbox"/> Cable Tool <input type="checkbox"/> Jetted <input type="checkbox"/> Other																																		
6) Drilling Date Started 4/11/95 Completed 4/18/95																																		
7) From (ft) To (ft) Description and color of formation material <table border="1"><tr><td>0</td><td>10</td><td>Red clay</td></tr><tr><td>10</td><td>20</td><td>Red clay</td></tr><tr><td>20</td><td>30</td><td>Red clay</td></tr><tr><td>30</td><td>40</td><td>Red clay</td></tr><tr><td>40</td><td>50</td><td>Red clay</td></tr><tr><td>50</td><td>60</td><td>Red clay</td></tr><tr><td>60</td><td>70</td><td>Red clay</td></tr><tr><td>70</td><td>80</td><td>Red clay</td></tr><tr><td>80</td><td>90</td><td>Red clay</td></tr><tr><td>90</td><td>100</td><td>Red clay</td></tr></table>					0	10	Red clay	10	20	Red clay	20	30	Red clay	30	40	Red clay	40	50	Red clay	50	60	Red clay	60	70	Red clay	70	80	Red clay	80	90	Red clay	90	100	Red clay
0	10	Red clay																																
10	20	Red clay																																
20	30	Red clay																																
30	40	Red clay																																
40	50	Red clay																																
50	60	Red clay																																
60	70	Red clay																																
70	80	Red clay																																
80	90	Red clay																																
90	100	Red clay																																
8) Borehole Completion <input type="checkbox"/> Open Hole <input type="checkbox"/> Straight Wall <input type="checkbox"/> Under-reamed <input type="checkbox"/> Gravel Packed <input type="checkbox"/> Other																																		
9) Cementing Data (Pulse 308.44(1)) Cemented from 0 ft. to 150 ft. No. of sacks used 11 Method used CONCRETE Company CONCRETE Distance to septic system field line N/A Method of verification of above distance N/A																																		
10) SURFACE COMPLETION <input type="checkbox"/> Specified Surface Slab Installed <input type="checkbox"/> Specified Surface Slab Installed <input type="checkbox"/> Pilius Adapter Used <input type="checkbox"/> Approved Alternative Procedure Used																																		
11) WATER LEVEL Static level 21.5 ft. below land surface Artesian flow None Date 4/19/95																																		
12) PACKERS Type None Date 4/19/95																																		
13) PLUGGED <input type="checkbox"/> Well plugged within 48 hours Casing left in well None From (ft) To (ft) Sacks used																																		
14) TYPE PUMP <input type="checkbox"/> Turbine <input type="checkbox"/> Submersible <input type="checkbox"/> Cylinder <input type="checkbox"/> Other																																		
15) WATER TEST Type test <input type="checkbox"/> Pump <input type="checkbox"/> Bailor <input type="checkbox"/> Jetted <input type="checkbox"/> Estimated Yield 4.0 gpm with 2.5 ft. drawdown after 1 1/2 hrs.																																		
16) WATER QUALITY Did you knowingly penetrate a strata which contains undesirable constituents? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If yes, submit a REPORT OF UNDESIRABLE WATER Was a chemical analysis made? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Depth of strata																																		
Company or individual's Name (type or print) Dozell Well Service																																		
Address P.O. Box 408																																		
City Stephenville																																		
State TX																																		
Zip 76401																																		
Signature Mark Dozell																																		

TDLR FORM 5001 WVD

White - TDLR

Yellow - Owner

Pink - Drilling/Pump Installer

Send original copy by certified mail to: TNRCC, P.O. Box 107 Austin, TX 78711-0087

Please use black ink

ATTENTION OWNER: Confidentiality Privilege Notice on Reverse Side

WELL REPORT

1) OWNER HARVEY WILLIAMS	Address Ft. 3 Box 88, Stephenville, TX 76401		
2) ADDRESS OF WELL: County Earl	City Stephenville	State TX	Zip 76401
3) TYPE OF WORK (check): <input type="checkbox"/> New Well <input type="checkbox"/> Reconditioning <input type="checkbox"/> Deepening <input type="checkbox"/> Replacement <input type="checkbox"/> Drilling			
4) PROPOSED USE (check): <input type="checkbox"/> Monitor <input type="checkbox"/> Environmental Soil Boring <input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Industrial <input type="checkbox"/> Irrigation <input type="checkbox"/> De-watering <input type="checkbox"/> Testwell <input type="checkbox"/> Public Supply well, were plans submitted to the TNRCC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
5) WELL LOG: Date Drilled: 4/19/95 Started: 4/19/95 Completed: 4/19/95			
6) DIAMETER OF HOLE: DIA (in) From (ft) To (ft) 7-7/8 350			
7) DRILLING METHOD (check): <input type="checkbox"/> Driven <input checked="" type="checkbox"/> Air Rotary <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Bored <input type="checkbox"/> Air Hammer <input type="checkbox"/> Cable Tool <input type="checkbox"/> Jetted <input type="checkbox"/> Other			
8) Borehole Completion (check): <input type="checkbox"/> Open Hole <input type="checkbox"/> Straight Wall <input type="checkbox"/> Under-reamed <input checked="" type="checkbox"/> Gravel Packed <input type="checkbox"/> Other If Gravel Packed give interval - from 150 ft. to 350 ft.			
9) CEMENTING DATA (Pulse 308.44(1)) Cemented from 0 ft. to 150 ft. No. of sacks used 11 Method used CONCRETE Company CONCRETE Distance to septic system field line N/A Method of verification of above distance N/A			
10) SURFACE COMPLETION <input type="checkbox"/> Specified Surface Slab Installed (Pulse 308.44(2A)) <input type="checkbox"/> Specified Surface Slab Installed (Pulse 308.44(2A)) <input type="checkbox"/> Pilius Adapter Used (Pulse 308.44(3)) <input type="checkbox"/> Approved Alternative Procedure Used (Pulse 308.71)			
11) WATER LEVEL Static level 21.5 ft. below land surface Artesian flow None Date 4/19/95			
12) PACKERS Type None Date 4/19/95			
13) PLUGGED <input type="checkbox"/> Well plugged within 48 hours Casing left in well None From (ft) To (ft) Sacks used			
14) TYPE PUMP <input type="checkbox"/> Turbine <input type="checkbox"/> Submersible <input type="checkbox"/> Cylinder <input type="checkbox"/> Other			
15) WATER TEST Type test <input type="checkbox"/> Pump <input type="checkbox"/> Bailor <input type="checkbox"/> Jetted <input type="checkbox"/> Estimated Yield 4.0 gpm with 2.5 ft. drawdown after 1 1/2 hrs.			
16) WATER QUALITY Did you knowingly penetrate any strata which contained undesirable constituents? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If yes, submit a REPORT OF UNDESIRABLE WATER Was a chemical analysis made? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Depth of strata			
Company or individual's Name (type or print) Dozell Well Service			
Address P.O. Box 408			
City Stephenville			
State TX			
Zip 76401			
Signature Harvey Williams			

TNRCC-0195 (Rev. 09-91-95)

TNRCC COPY

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

7

Send original copy of
this report to the
P.O. Department of Water Resources
Austin, Texas 78711

State of Texas
Texas Water Well Driller's Board
P.O. Box 13067
Austin, Texas 78711

WATER WELL REPORT
Confidentiality Privilege Notice on Reverse Side

11 OWNER: Mr. Terry Antoline
12 LOCATION OF WELL: 3 Hwy 281 miles in direction from Stephenville Tx. 76401
County: Erath

Driller must complete the legal description to the right
with distances and direction from two intersecting sec-
tions of survey, fence, or the most recent County
General Highway Atlas and attach the map to this report.

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

☐ See attached map. 00 31-54-7

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

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

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

61. WELL LOG:
Date drilled 9-15-86

From (ft.)	To (ft.)	Description and state of formation
0	2	Top Soil
2	14	Caliche
14	95	Blue clay and rock
95	260	Blue shale clay, rock layers.
260	305	Red clay
305	315	Sandy clay
315	330	Blue shale, rock layers
330	342	Red clay
342	355	Blue shale
355	368	Brown sandy clay
368	395	Sand and Gravel
395	405	RED CLAY

81. CASING, BLANK PIPE, AND WELL SCREEN DATA:

From (ft.)	To (ft.)	New	Size, Pipe, etc.	Setting (ft.)	Gate
0	42 N	Used	Steel	0	405
42 N	405	Used	Steel	0	405
405	405	Used	Steel	0	405

91. WATER LEVEL:
Cemented from 0 ft. to 365 ft.
Method used Pumped
Cemented by Wolf Drilling Co.
(Name of firm)

Static level 225 ft. below land surface Date 9-15-86
Artesian flow _____ gpm. Date _____

10. PACKERS:
Type _____ Depth _____

11. TYPE PUMP:
☐ Turbine ☐ Jet ☒ Submersible ☐ Cylinder
Depth to pump bowl, cylinder, jet, etc. _____ ft.

12. WATER QUALITY:
Did you knowingly produce any trace which contained undesirable
water? ☐ Yes ☒ No
Type of water _____
Was a chemical analysis made? ☐ Yes ☒ No

I hereby certify that this well was drilled by me for under my supervision and that
each and all of the statements herein are true to the best of my knowledge and belief.

COMPANY NAME: Wolf Drilling Co. Water Well Driller's License No. 559

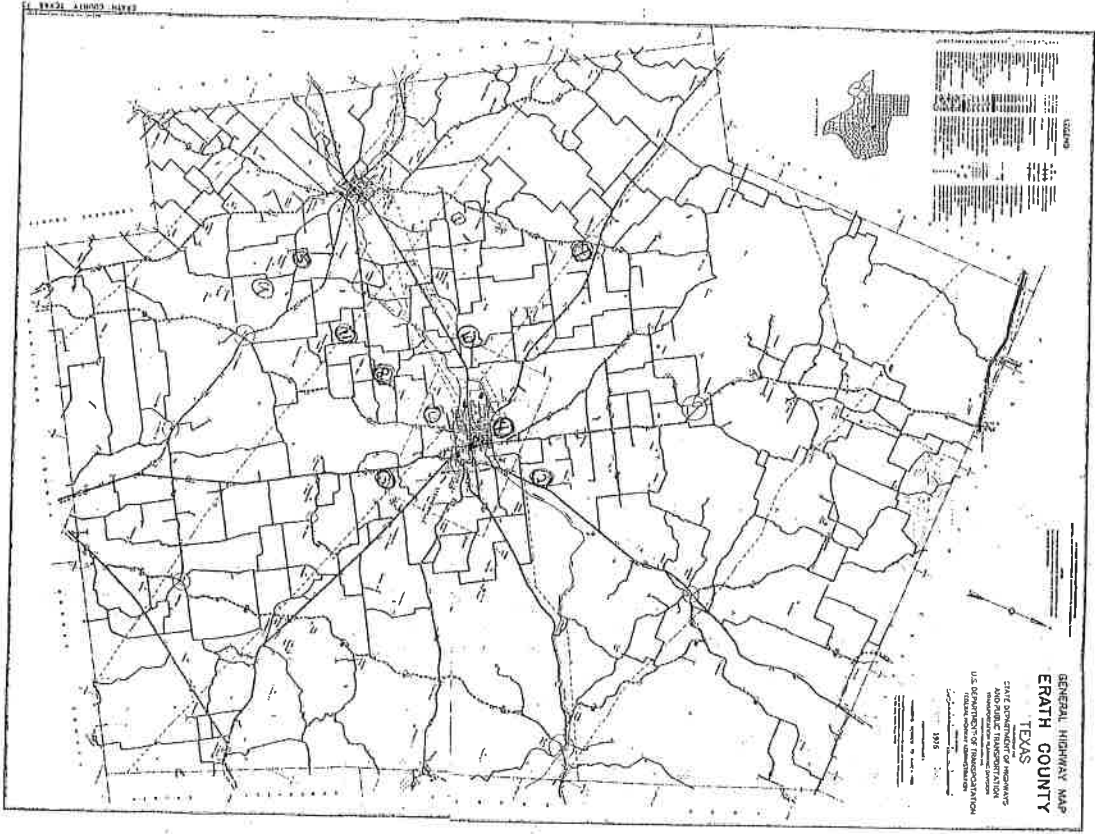
ADDRESS: P.O. Box 52 Stephenville Tx 76401

(Signed) C. B. Box 52 (Typed Name) Tys 76401

(Signature of Water Well Driller) (Typed Name) (Typed Name)

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

70MR 0292 (Rev. 5-27-82) DEPARTMENT OF WATER RESOURCES COPY



Send original copy by
certified mail to the
Texas Department of Water Resources
Austin, Texas 78711

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

For TDR Use Only
Well No. 31-47-35
Located on map C.R.S.
Recorded 1250

1) OWNER E.B. SUTTON Address Rt. 2 Box 346 Stephenville, Texas 76461
(Name) (City, State, Zip)
2) LOCATION 41 miles in NE direction from Stephenville
(County) (N.E., S.W., etc.) (Township)

Driller must complete the legal description to the right
with distance and direction from two intersecting
township or survey lines, or the must locate and identify the
location of the well on the map and attach the map to this form.
Section No. 423 Abstract No. 423
Distance and direction from two intersecting section of survey lines

☒ See attached map map 31-47-35

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

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

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

6) WELL LOG:
Date drilled 5-21-81 Diameter of hole
Dip (ft.) From (ft.) To (ft.)
Surface 0 400
If Gravel Packed give interval... from 400 ft. to 340 ft.

7) BOREHOLE COMPLETION:
☐ Open Hole ☐ Straight Well ☐ Underdrained
☒ Gravel Packed

8) CASING, BLANK PIPE, AND WELL SCREEN DATA:
From (ft.) To (ft.) Description and color of formation (meters)
0-10 Gravel
10-40 Gravel
40-60 Gravel
60-80 Gravel
80-100 Gravel
100-120 Gravel
120-140 Gravel
140-160 Gravel
160-180 Gravel
180-200 Gravel
200-220 Gravel
220-240 Gravel
240-260 Gravel
260-280 Gravel
280-300 Gravel
300-320 Gravel
320-340 Gravel
340-360 Gravel
360-380 Gravel
380-400 Gravel

9) WATER LEVEL:
Static level 300 ft. below land surface Date 5-21-81
Artesian flow 0 gpm.

10) PACKERS:
Type None Depth None

CEMENTING DATA
Cemented from 0 to 400 ft.
Method used Poured
Cemented by Dowell Well Service, Inc.
(Company or individual)

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

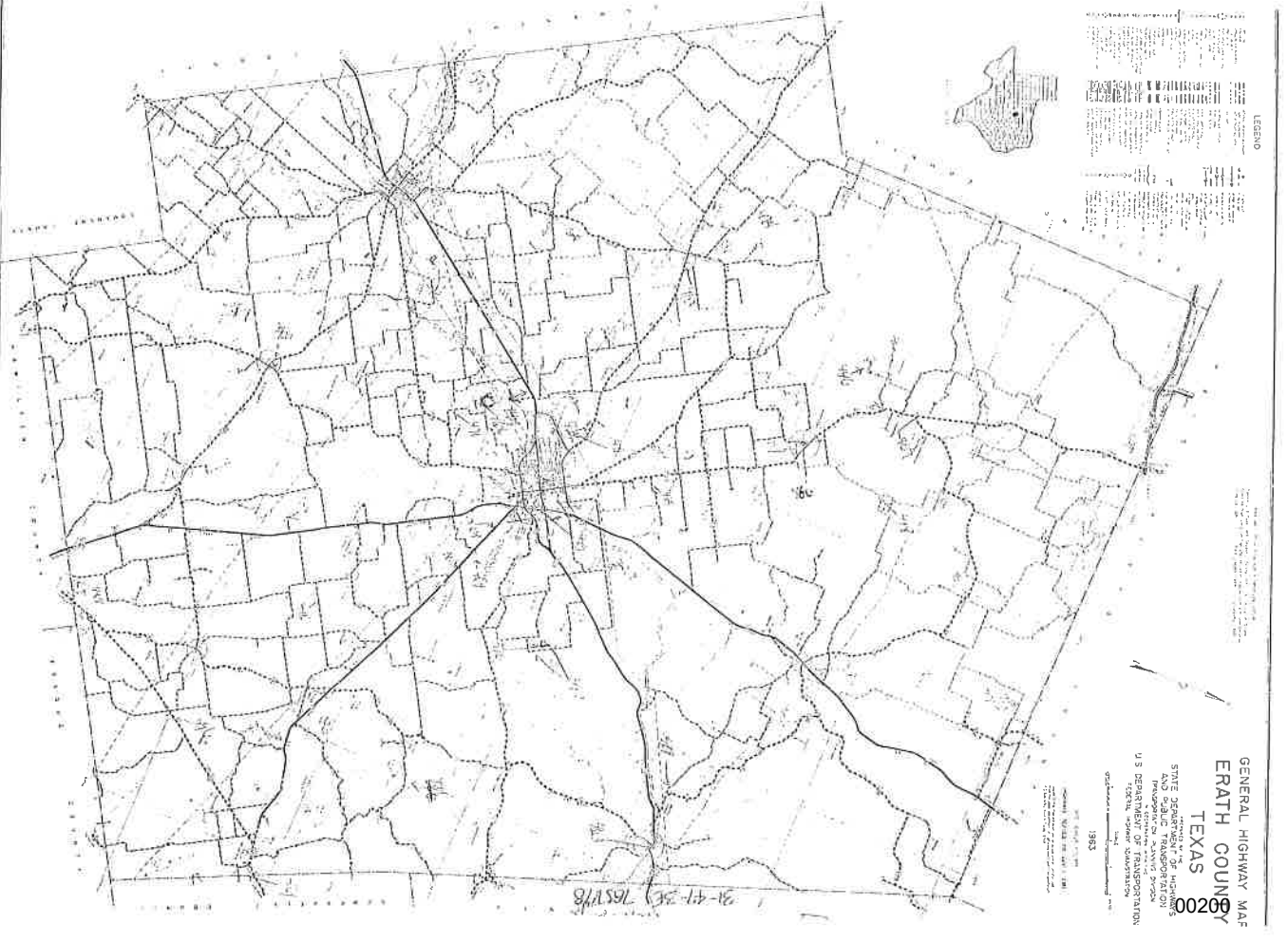
12) WELL TESTS:
☐ Type Test ☐ Pump ☐ Jetted ☐ Estimated
Yield: 200 gpm with 100 ft. drawdown at 100 ft.

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

NAME M.D. Dowell Water Well Driller Registration No. 1268
(Type or Print)
ADDRESS P.O. Box 558 Stephenville, Texas 76461
(Street or P.O. Box) (City, State, Zip)
(Signed) M.D. Dowell Dowell Well Service, Inc.
(Water Well Driller) (Company Name)

TDR-0292 (Rev. 1-12-78)

DEPARTMENT OF WATER RESOURCES COPY



ATTENTION OWNER: Confidentiality
 STATE OF TEXAS
 WATER WELL REPORT
 1) OWNER: UNIVERSAL JOBS/AMCO PROPA. ADDRESS: P.O. BOX 189 CITY: LIPAN STATE: TX ZIP: 75442
 2) ADDRESS OF WELL: COUNTY: EARTH GRID 1 21-47-8
 Street or RD: HIGHWAY 281
 City, State, Zip Code: STEPHENVILLE TX 75401

3) TYPE OF WORK: NEW WELL 4) PROPOSED USE: DOMESTIC
 If Public Supply Well, Water Place Submitted to the District

5) WELL LOG: 09913
 DATE DRILLED: 07/08/98
 STARTED: 07/08/98
 COMPLETED: 07/09/98
 DRA NEW/USED DESCRIPTION: FROM TO GAGE CASING SCREEN
 1 N PLASTIC, BLANK 0 398 SC40
 4 N PLASTIC, SLOTTED 398 458 SC40

6) DIAMETER OF HOLE: 6.75
 7) DRILLING METHOD: AIR ROTARY
 8) GRAVEL PACKED: FROM 360 FT. TO 458 FT.
 IF GRAVEL... FROM FT. TO FT.

9) CEMENTING DATA:
 Cemented from 0 FT. TO 20 FT. No. of Sacks Used 3
 300 FT. TO 360 FT. 8
 Method used: CEMENT-POURED
 Cemented by: GMR
 Distance to spigot field lines: 150 ft.
 Method of verification of above distance:
 CUSTOMER VERIFY
 10) SURFACE COMPLETION:
 SPEC. STEEL SIGN

11) WATER LEVEL:
 STATIC LEVEL: 330 FT. DATE: 07/07/98
 ARTESIAN FLOW: GPN. DATE:
 12) PACKERS:
 TYPE DEPTH
 13) TYPE PUMP:
 SUBMERGIBLE
 PUMP
 DEPTH TO PUMP: 360
 YIELD: 7 GPM WITH WORK FT. DRAMDOWN AFTER 24 HRS

13) WATER QUALITY:
 TYPE OF WATER: NO STRATA OF UNDERSATURATE WATER PENETRATED
 DEPTH OF STRATA:
 COMPANY NAME: ASSOCIATED SERVICES WATER WELL DRILLER'S LICENSE NO.: 2404
 ADDRESS: P.O. BOX 15 CITY: STEPHENVILLE STATE: TX ZIP CODE: 75401
 CITY: LIPAN STATE: TX ZIP: 75442

I HEREBY CERTIFY THAT THIS WELL WAS DRILLED BY ME (OR UNDER MY SUPERVISION) AND THAT EACH AND ALL OF THE STATEMENTS HEREIN ARE TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I UNDERSTAND THAT FAILURE TO COMPLETE ITEMS 1 THRU 15 WILL RESULT IN THE LOG(S) BEING RETURNED IN COMPLETELY AND UNUSABLE STATE.
 (signed) [Signature] (signed) [Signature] (REGISTERED DRILLER NAME)
 (LIPAN WATER WELL DRILLER)

FILED
 SEP 10 1998
 CO. 2
 CO. 2
 CO. 2

Send original copy by certified mail to the State of Texas
 P.O. Box 10067 Austin, Texas 78711
 WATER WELL REPORT

1) OWNER: Person having well drilled C. W. Jensen Address: Rt 5 Stephenville TX
 (Name) (City) (State) (Zip)
 Landowner: (Name) (City) (State) (Zip)

2) LOCATION: County: Smith Miles to N.E. (N.E. 1/4, S.W. 1/4, etc.)
 Locality by street map showing township, range, section, and section number, etc.
 Survey number, etc.
 Section: 4
 Township: 4
 Range: 15
 Section: 15

3) TYPE OF WORK (Check):
 New Well [X] Deepening []
 Second casing [] Plugging []
 4) PROPOSED USE (Check):
 Domestic [X] Industrial []
 Irrigation [] Test Well []
 Other []
 5) TYPE OF WELL (Check):
 Cased [X] Open []
 Driven [] Jetted []
 Dug []
 (Use preferred size if necessary)

6) WELL LOG:
 Diameter of hole 6 in. Depth drilled 115 ft. Depth of completed well 115 ft. Date drilled 5-24-74
 All measurements made from ft. above ground level.

7) CONSTRUCTION (Check):
 Straight wall [X] Crown packed []
 Under framed [] Open hole []
 8) WATER LEVEL:
 Static level 6.2 ft. below land surface Date 5-23-74
 Artesian pressure 135 psi per square inch Date
 Depth to pump bowls, cylinders, jet, etc. 10.5 ft.
 below land surface.

9) CEMENTING DATA:
 Cemented from 0 FT. TO 20 FT. No. of Sacks Used 3
 300 FT. TO 360 FT. 8
 Method used: CEMENT-POURED
 Cemented by: GMR
 Distance to spigot field lines: 150 ft.
 Method of verification of above distance:
 CUSTOMER VERIFY
 10) SURFACE COMPLETION:
 SPEC. STEEL SIGN

11) WATER LEVEL:
 STATIC LEVEL: 330 FT. DATE: 07/07/98
 ARTESIAN FLOW: GPN. DATE:
 12) PACKERS:
 TYPE DEPTH
 13) TYPE PUMP:
 SUBMERGIBLE
 PUMP
 DEPTH TO PUMP: 360
 YIELD: 7 GPM WITH WORK FT. DRAMDOWN AFTER 24 HRS

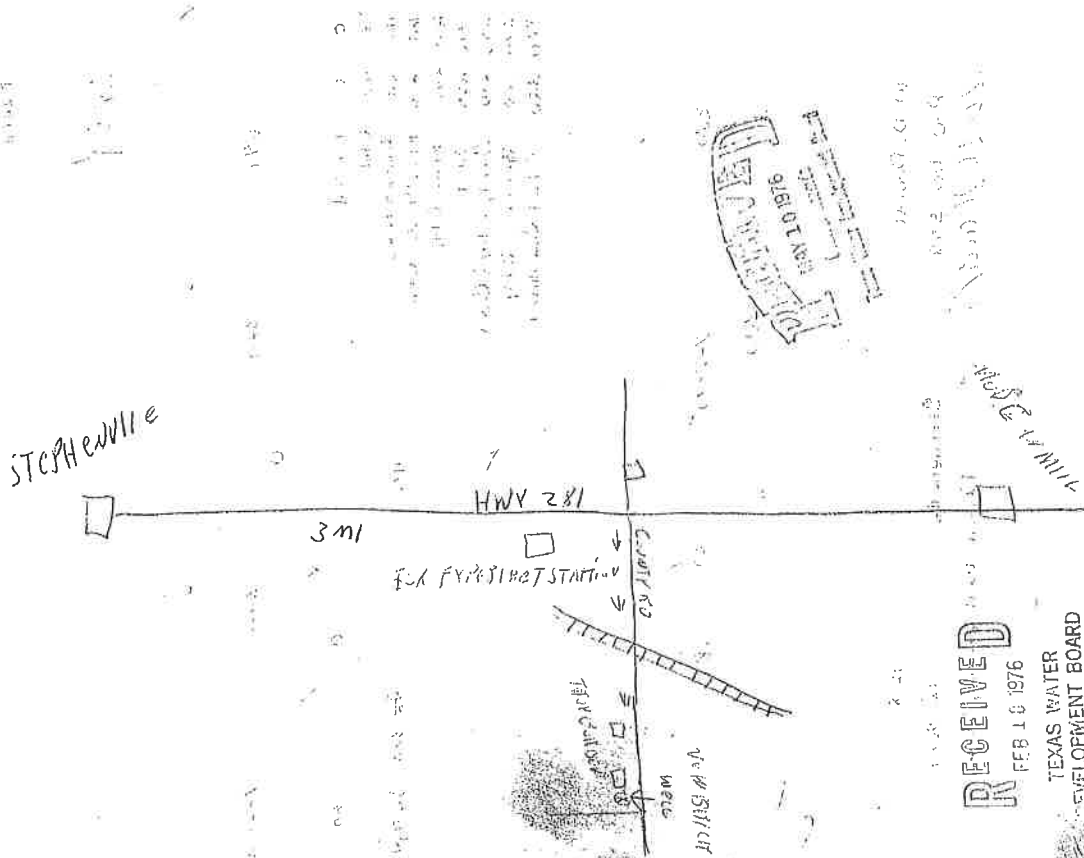
I HEREBY CERTIFY THAT THIS WELL WAS DRILLED BY ME (OR UNDER MY SUPERVISION) AND THAT EACH AND ALL OF THE STATEMENTS HEREIN ARE TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF.
 (signed) Tommy Riley (signed) Tommy Riley (REGISTERED DRILLER NAME)
 (LIPAN WATER WELL DRILLER)
 ADDRESS: 13300 McNeil Stephenville TX
 (City) (State) (Zip)
 ADDRESS: 13300 McNeil Stephenville TX
 (City) (State) (Zip)
 ADDRESS: 13300 McNeil Stephenville TX
 (City) (State) (Zip)

Please attach electric log, chemical analysis, and other pertinent information, if available.
 *Additional instructions on reverse side.

Additional instructions on reverse side.

Send original copy of this report to the Texas Water Development Board, Austin, Texas 78711.		State of Texas WATER WELL REPORT		Form 1054-1054 Revised 10-68	
1) OWNER: Person having well drilled: <u>Toby Stone</u>		Address: <u>(Hickman Hwy) Stephenville, TX</u>		City: <u>Stephenville</u>	
Landowner: <u>Same</u>		Address: <u>2100 Oakland Dr.</u>		City: <u>Stephenville</u>	
2) LOCATION OF WELL: County: <u>FRANKLIN</u>		Section: <u>1</u>		Range: <u>12N</u>	
Locate by sketch map showing landmarks, roads, creeks, highway number, etc.		Locate by section map showing landmarks, roads, creeks, highway number, etc.		Locate by section map showing landmarks, roads, creeks, highway number, etc.	
3) TYPE OF WELL (Check): a) PURPOSED USE (Check): Domestic <input type="checkbox"/> Irrigation <input type="checkbox"/> Industrial <input type="checkbox"/> Other <input type="checkbox"/>		b) TYPE OF WELL (Check): Hand-dug <input type="checkbox"/> Driven <input type="checkbox"/> Bored <input type="checkbox"/>		c) TYPE OF WELL (Check): Cable <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/>	
4) WELL LOG: Diameter of hole: <u>6 3/4</u> in. Depth drilled: <u>320</u> ft. Depth of completed well: <u>320</u> ft. Date drilled: <u>9-5-75</u>		All measurements made from <u>0</u> ft. above ground level.		5) COMMENTS (Check): a) PURPOSED USE (Check): Domestic <input type="checkbox"/> Irrigation <input type="checkbox"/> Industrial <input type="checkbox"/> Other <input type="checkbox"/>	
From To Description and color of formation material: 0 3 TOP SOIL 3 40 Clay 40 60 Limestone 60 80 Blue Shale & Clay 80 840 Blue Clay 840 855 Sand 855 880 Sandy Clay & Coal 880 300 Gravel & Clay 300 320 ? Rock Composition		b) COMMENTS (Check): a) PURPOSED USE (Check): Domestic <input type="checkbox"/> Irrigation <input type="checkbox"/> Industrial <input type="checkbox"/> Other <input type="checkbox"/>		c) TYPE OF WELL (Check): Hand-dug <input type="checkbox"/> Driven <input type="checkbox"/> Bored <input type="checkbox"/>	
7) COMMENTS (Check): a) PURPOSED USE (Check): Domestic <input type="checkbox"/> Irrigation <input type="checkbox"/> Industrial <input type="checkbox"/> Other <input type="checkbox"/>		b) TYPE OF WELL (Check): Hand-dug <input type="checkbox"/> Driven <input type="checkbox"/> Bored <input type="checkbox"/>		c) TYPE OF WELL (Check): Cable <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/>	
8) WATER LEVEL: Static level: <u>280</u> ft. below land surface Date: <u>9-5-75</u> Artesian pressure: <u>138</u> lbs. per square inch Date: Depth to pump bowls, cylinders, etc.: <u>300</u> ft. below land surface.		9) WELL TESTS: a) Pump test made? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, by whom? Yield: <u>20</u> gpm with <u>18</u> ft. drawdown after <u>1</u> hrs. b) Artesian flow: <u>138</u> lbs. per square inch c) Temperature of water: d) Water quality: Has a chemical analysis been made? Yes <input type="checkbox"/> No <input type="checkbox"/> Did any acids contain undesirable wastes? Yes <input type="checkbox"/> No <input type="checkbox"/> Type of water? <u>depth of water?</u>		10) WATER QUALITY: Has a chemical analysis been made? Yes <input type="checkbox"/> No <input type="checkbox"/> Did any acids contain undesirable wastes? Yes <input type="checkbox"/> No <input type="checkbox"/> Type of water? <u>depth of water?</u>	
Name: <u>W.D. Donahue</u>		Address: <u>2100 Oakland Dr.</u>		City: <u>Stephenville</u>	
Address: <u>P.O. Box 558</u>		Address: <u>2100 Oakland Dr.</u>		City: <u>Stephenville</u>	
City: <u>Stephenville</u>		City: <u>Stephenville</u>		City: <u>Stephenville</u>	
State: <u>TX</u>		State: <u>TX</u>		State: <u>TX</u>	
Signed: <u>W.D. Donahue</u>		Signed: <u>Donnell Well Service, Inc.</u>		Signed: <u>Donnell Well Service, Inc.</u>	
Title: <u>Owner</u>		Title: <u>Owner</u>		Title: <u>Owner</u>	

2) LOCATION OF WELL:
The sketch showing the well location must be as accurate as possible, showing landmarks, in sufficient detail so that the well may be located on a General Highway Map of the county in which the well is located.
Reference points from which distances are measured and directions given should be of a permanent nature (e.g., highway intersections, etc.). Distances should be given in feet and directions should be given in degrees from the nearest north should always be indicated.
When giving a legal description include a sketch showing location of the well within the described area. e.g., survey abstract.
Information furnished in Section 2) of the FORM-1054 is very important. Unless the well can be accurately located on a map the value of the other data contained in the report is greatly reduced.



Send original copy by certified mail to: THROCC, P.O. Box 31, Austin, TX 78711-0387

For THROCC use only: Well No. 31-47-8, located on map, 31-47-8, Section 8, T.2S, R.10E, E.10E, Austin, Texas 78711

WATER WELL REGISTRATION

1) OWNER: Joe Torres (Name) Address: 1200 E. 12th St., Austin, TX 78702 (City) (State) (Zip)

2) ADDRESS: 1200 E. 12th St., Austin, TX 78702 (City) (State) (Zip)

3) TYPE OF WELL: EPHH (Name) (City) (State) (Zip)

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

5) TYPE OF USE (Check): ☐ Domestic ☐ Industrial ☐ Municipal ☐ Other

6) WELL LOG: (See reverse side if necessary)

7) DRILLING METHOD (Check): ☐ Driven ☐ Air Hammer ☐ Cable Tool ☐ Other

8) Borehole Completion (Check): ☐ Open Hole ☐ Gravel Packed ☐ Cemented

9) CEMENTING DATA: (See reverse side if necessary)

10) WATER LEVEL: Static level: 260 ft. below land surface Date: 12-7-78

11) WATER LEVEL: Arterial pressure: 135 psi per square inch Date: 12-7-78

12) WATER QUALITY: (See reverse side if necessary)

13) TYPE PUMP: ☐ Turbine ☐ Jet ☐ Other

14) WELL TESTS: (See reverse side if necessary)

15) WATER QUALITY: (See reverse side if necessary)

16) PACKERS: (See reverse side if necessary)

17) SIGNATURE: (See reverse side if necessary)

Send original copy by certified mail to: THROCC, P.O. Box 31, Austin, TX 78711-0387

For THROCC use only: Well No. 31-47-8, located on map, 31-47-8, Section 8, T.2S, R.10E, E.10E, Austin, Texas 78711

WATER WELL REGISTRATION

1) OWNER: Wendell Graham (Name) Address: HCR-51 Box 151, Austin, TX 78711 (City) (State) (Zip)

2) ADDRESS: HCR-51 Box 151, Austin, TX 78711 (City) (State) (Zip)

3) TYPE OF WELL: EPHH (Name) (City) (State) (Zip)

4) PROPOSED USE (Check): ☐ Domestic ☐ Industrial ☐ Municipal ☐ Other

5) TYPE OF USE (Check): ☐ Domestic ☐ Industrial ☐ Municipal ☐ Other

6) WELL LOG: (See reverse side if necessary)

7) DRILLING METHOD (Check): ☐ Driven ☐ Air Hammer ☐ Cable Tool ☐ Other

8) Borehole Completion (Check): ☐ Open Hole ☐ Gravel Packed ☐ Cemented

9) CEMENTING DATA: (See reverse side if necessary)

10) WATER LEVEL: Static level: 260 ft. below land surface Date: 12-7-78

11) WATER LEVEL: Arterial pressure: 135 psi per square inch Date: 12-7-78

12) WATER QUALITY: (See reverse side if necessary)

13) TYPE PUMP: ☐ Turbine ☐ Jet ☐ Other

14) WELL TESTS: (See reverse side if necessary)

15) WATER QUALITY: (See reverse side if necessary)

16) PACKERS: (See reverse side if necessary)

17) SIGNATURE: (See reverse side if necessary)

Send original copy by
certified mail to the
Texas Department of Water Resources
P.O. Box 13897
Austin, Texas 78711

State of Texas
WATER WELL REPORT

For TWR use only
Well No. 31-47-8-T
Located on map 410
Received

DUP 81

1) OWNER: David Porter (Name) Address: 522 3rd St 109 Stephenville, TX 76401
2) LOCATION OF WELL: (Street or P.O. Box) (City) (State) (Zip)
County: Stephens 241 mile in 14 direction from N.E. 31-47-8-T (Twp)

Driller must complete the right description to the right
with dimensions and a sketch of the well on an official Quarter- or Half-Scale Texas County
General Highway Map and attach the map to this form. 29
Distance and direction from two intersecting section or survey lines

3) TYPE OF WORK (Check):
☒ Drilling Well ☐ Deepening ☐ Plugging
☐ Reconditioning ☐ Test Well ☐ Other

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

5) DRILLING METHOD (Check):
☒ Mud Rotary ☐ Air Hammer ☐ Open ☐ Bored
☐ Cast Iron ☐ Cast Tool ☐ Other

6) WELL LOG:
Date drilled: 3-26-79
Diameter of hole: 10 1/2 in. From (ft.) To (ft.)
10 1/2 0 325

7) BOREHOLE COMPLETION:
☐ Open Hole ☐ Sealed Well ☐ Underscreened
☒ Sealed Well ☐ Sealed Well ☐ Sealed Well

8) CASING, BLANK PIPE, AND WELL SCREEN DATA:
From (ft.) To (ft.) Description and color of formation
0-5 Top Soil
5-20 Blue Shale
20-238 Sand
238-280 Sand & Gravel
280-325 Sand

9) WATER LEVEL:
Static level: 280 ft. below land surface Date: 3-26-79
Artesian flow: _____ gpm.

10) PACKERS:
Type: _____ Depth: _____

11) TYPE PUMP:
☐ Turbine ☐ Jet ☐ Submersible ☐ Cylinder
Depth to pump bowl, cylinder, etc.: _____ ft.

12) WELL TESTS:
☐ Type Test ☐ Pump ☐ Draw ☐ Jetted ☐ Estimated
Yield: _____ gpm with _____ ft. drawdown after _____ hr.

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

NAME: MACKA D. DOWELL Water Well Driller Registration No. 1879
ADDRESS: 522 3rd St 109 Stephenville, TX 76401
(Signed) David Porter (Driller) (Company Name)

ATTENTION OWNER: Confidentiality
Privileged Notice on Reverse Side
1) OWNER: TAYLOR, ED
2) ADDRESS OF WELL: GRAD 3 31-47-8
County: BAKER
Street or R.O.: SMITH SPRINGS RD
City, State, Zip code: STEPHENVILLE TX 76401
3) TYPE OF WELL: ☐ Domestic ☐ Industrial ☐ Public Supply
4) PROPOSED USE: DOMESTIC
5) DRILLING METHOD: MUD ROTARY
6) BOREHOLE COMPLETION: SEaled Well

7) TYPE OF WORK: DRILLING
8) DATE DRILLED: 09/16/01
9) DATE TESTED: 09/16/01
10) TYPE OF TEST: PUMP
11) TYPE OF PUMP: TURBINE
12) TYPE OF TEST: PUMP
13) TYPE OF TEST: PUMP

14) TYPE OF TEST: PUMP
15) TYPE OF TEST: PUMP
16) TYPE OF TEST: PUMP
17) TYPE OF TEST: PUMP
18) TYPE OF TEST: PUMP
19) TYPE OF TEST: PUMP
20) TYPE OF TEST: PUMP

21) TYPE OF TEST: PUMP
22) TYPE OF TEST: PUMP
23) TYPE OF TEST: PUMP
24) TYPE OF TEST: PUMP
25) TYPE OF TEST: PUMP
26) TYPE OF TEST: PUMP
27) TYPE OF TEST: PUMP
28) TYPE OF TEST: PUMP
29) TYPE OF TEST: PUMP
30) TYPE OF TEST: PUMP

31) TYPE OF TEST: PUMP
32) TYPE OF TEST: PUMP
33) TYPE OF TEST: PUMP
34) TYPE OF TEST: PUMP
35) TYPE OF TEST: PUMP
36) TYPE OF TEST: PUMP
37) TYPE OF TEST: PUMP
38) TYPE OF TEST: PUMP
39) TYPE OF TEST: PUMP
40) TYPE OF TEST: PUMP

41) TYPE OF TEST: PUMP
42) TYPE OF TEST: PUMP
43) TYPE OF TEST: PUMP
44) TYPE OF TEST: PUMP
45) TYPE OF TEST: PUMP
46) TYPE OF TEST: PUMP
47) TYPE OF TEST: PUMP
48) TYPE OF TEST: PUMP
49) TYPE OF TEST: PUMP
50) TYPE OF TEST: PUMP

51) TYPE OF TEST: PUMP
52) TYPE OF TEST: PUMP
53) TYPE OF TEST: PUMP
54) TYPE OF TEST: PUMP
55) TYPE OF TEST: PUMP
56) TYPE OF TEST: PUMP
57) TYPE OF TEST: PUMP
58) TYPE OF TEST: PUMP
59) TYPE OF TEST: PUMP
60) TYPE OF TEST: PUMP

61) TYPE OF TEST: PUMP
62) TYPE OF TEST: PUMP
63) TYPE OF TEST: PUMP
64) TYPE OF TEST: PUMP
65) TYPE OF TEST: PUMP
66) TYPE OF TEST: PUMP
67) TYPE OF TEST: PUMP
68) TYPE OF TEST: PUMP
69) TYPE OF TEST: PUMP
70) TYPE OF TEST: PUMP

71) TYPE OF TEST: PUMP
72) TYPE OF TEST: PUMP
73) TYPE OF TEST: PUMP
74) TYPE OF TEST: PUMP
75) TYPE OF TEST: PUMP
76) TYPE OF TEST: PUMP
77) TYPE OF TEST: PUMP
78) TYPE OF TEST: PUMP
79) TYPE OF TEST: PUMP
80) TYPE OF TEST: PUMP

81) TYPE OF TEST: PUMP
82) TYPE OF TEST: PUMP
83) TYPE OF TEST: PUMP
84) TYPE OF TEST: PUMP
85) TYPE OF TEST: PUMP
86) TYPE OF TEST: PUMP
87) TYPE OF TEST: PUMP
88) TYPE OF TEST: PUMP
89) TYPE OF TEST: PUMP
90) TYPE OF TEST: PUMP

91) TYPE OF TEST: PUMP
92) TYPE OF TEST: PUMP
93) TYPE OF TEST: PUMP
94) TYPE OF TEST: PUMP
95) TYPE OF TEST: PUMP
96) TYPE OF TEST: PUMP
97) TYPE OF TEST: PUMP
98) TYPE OF TEST: PUMP
99) TYPE OF TEST: PUMP
100) TYPE OF TEST: PUMP

101) TYPE OF TEST: PUMP
102) TYPE OF TEST: PUMP
103) TYPE OF TEST: PUMP
104) TYPE OF TEST: PUMP
105) TYPE OF TEST: PUMP
106) TYPE OF TEST: PUMP
107) TYPE OF TEST: PUMP
108) TYPE OF TEST: PUMP
109) TYPE OF TEST: PUMP
110) TYPE OF TEST: PUMP

111) TYPE OF TEST: PUMP
112) TYPE OF TEST: PUMP
113) TYPE OF TEST: PUMP
114) TYPE OF TEST: PUMP
115) TYPE OF TEST: PUMP
116) TYPE OF TEST: PUMP
117) TYPE OF TEST: PUMP
118) TYPE OF TEST: PUMP
119) TYPE OF TEST: PUMP
120) TYPE OF TEST: PUMP

121) TYPE OF TEST: PUMP
122) TYPE OF TEST: PUMP
123) TYPE OF TEST: PUMP
124) TYPE OF TEST: PUMP
125) TYPE OF TEST: PUMP
126) TYPE OF TEST: PUMP
127) TYPE OF TEST: PUMP
128) TYPE OF TEST: PUMP
129) TYPE OF TEST: PUMP
130) TYPE OF TEST: PUMP

131) TYPE OF TEST: PUMP
132) TYPE OF TEST: PUMP
133) TYPE OF TEST: PUMP
134) TYPE OF TEST: PUMP
135) TYPE OF TEST: PUMP
136) TYPE OF TEST: PUMP
137) TYPE OF TEST: PUMP
138) TYPE OF TEST: PUMP
139) TYPE OF TEST: PUMP
140) TYPE OF TEST: PUMP

Send original copy to:
Texas Water Development Board
P. O. Box 13087
Austin, Texas 78711

State of Texas
WATER WELL REPORT

FOR THIS USE ONLY
Well No. 3-46-10
Received 7/2/75

1) OWNER:
Person having well drilled: Kenneth Miller Address: Rt # 2, Stephenville, Texas (State) _____
Landowner: M.O. Frost (Name) Address: Weatherford, Texas (City) _____ (State) _____
2) LOCATION OF WELL:
County: Erath City: Stephenville Direction from: North (City) _____ (State) _____
Locate by sketch map showing landmarks, roads, creeks, highway number, etc.*
11 -- On Erath Co. Map
Map on 3-46-10 North
(Use reverse side if necessary)
3) TYPE OF WELL (Check):
a) DOMESTIC USE (Check):
Domestic ☒ Industrial _____
Refrigeration _____ Plugging _____ Irrigation _____ Test Well _____ Other _____
b) TYPE OF WELL (Check):
Cable _____ Jetted _____ Bored _____
4) PURPOSE OF WELL (Check):
Domestic ☒ Industrial _____
Refrigeration _____ Plugging _____ Irrigation _____ Test Well _____ Other _____
5) WELL LOG:
Diameter of bore: 3 1/2 in. Depth drilled: 385 ft. Date drilled: 6/21/75
All measurements made from 0 ft. above ground level.

From (ft.)	To (ft.)	Description and color of formation material	9) Casing: Type: <u>Old</u> New <input checked="" type="checkbox"/> Steel <input checked="" type="checkbox"/> Plastic Other _____ Commented from _____ ft. to _____ ft.
0	3	Yellow clay and rock	
3	20	Red bed	
20	40	Rock and shale	
40	60	Sandy clay	
60	95	Sandy clay	
95	110	Rock and sand	
110	125	Blue clay	
125	140	Rock, shale, clay	
140	185	Sandy clay and shale	
185	335	Shale, rock and clay	
335	350	Sandy clay, gravel, sandstone	
350	385	Sandstone, sandy gravel, clay	

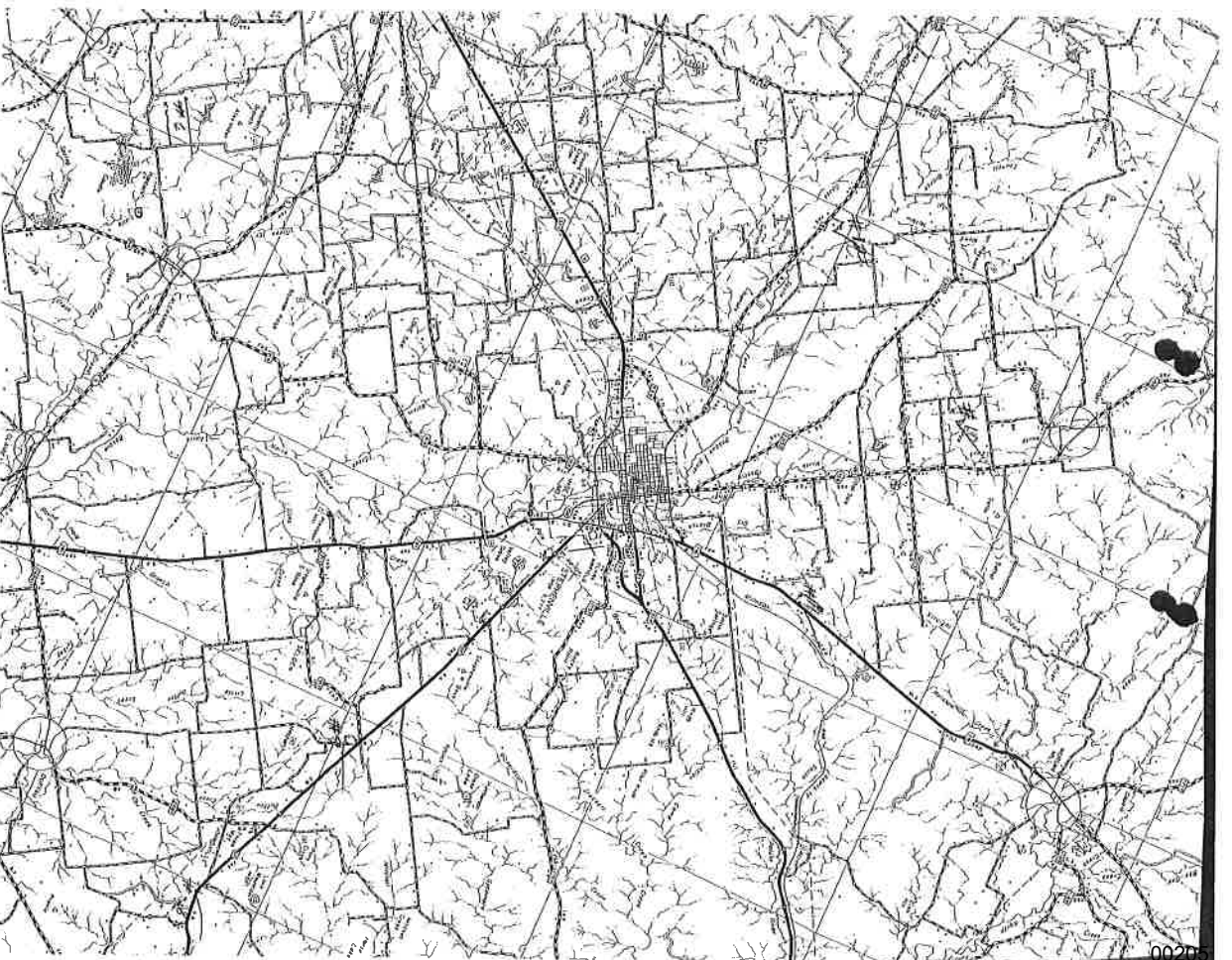
7) COMPLETION (Check):
(Use reverse side if necessary)
Straight well _____ Cased _____ Other _____
Under record _____ Open hole _____
8) WATER LEVEL:
Static level _____ ft. below land surface Date _____
Artesian pressure _____ lbs. per square inch Date _____
Depth to pump bowl, cylinder, jet, etc. _____ ft.
below land surface.

10) SCREEN:
Type: _____ Perforated _____ Slotted _____
Diameter _____ From (ft.) _____ To (ft.) _____
11) WELL TESTS:
Was a pump test made? Yes _____ No _____ If yes, by whom? _____
Yield: _____ gpm with _____ ft. drawdown after _____ hrs.
Batter rate _____ gpm with _____ ft. drawdown after _____ hrs.
Artesian flow _____ gpm
Temperature of water _____
12) WATER QUALITY:
Was a chemical analysis made? Yes _____ No _____
Did any streaks contain undesirable water? Yes _____ No _____
Type of water? _____ depth of water _____

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief.

NAME: C.W. Wolf (Type or Print)
ADDRESS: P.O. Box 16 (Street or RFD)
Stephenville, Texas (City)
(Signed) C.W. Wolf (Date Well Drilled)
WOLF DRILLING (Company Name)

Please attach electric log, chemical analysis, and other pertinent information, if available.
*Additional instructions on reverse side.



ATTENTION OWNER: Confidentiality
 Privilege Notice on reverse side
 of Well Owner's copy (back)

State of Texas WELL REPORT

Texas Department of Licensing &
 Regulation
 P.O. Box 12157
 Austin, TX 78711
 512-463-7880

1) OWNER: G.O. Backus ADDRESS: Box 4 Stephenville, TX 76401

2) ADDRESS: STEPHENVILLE COUNTY: RT (City) (County) (State) (Zip) (City) (State) (Zip)

3) TYPE OF WORK (Check): ☒ New Well ☐ Repairing ☐ Plugging ☐ Monitoring ☐ Drilling ☐ Completion ☐ Testing

4) PROPOSED USE (Check): ☐ Domestic ☐ Industrial ☐ Irrigation ☐ Injection ☐ Public Supply ☐ Decontamination ☐ Testwell

5) WELL LOG: Date Drilling: 4/19/99 From (ft.): 113 To (ft.): 30 Surface: 113 Depth: 141 Diameter of Hole: 30

6) DRILLING METHOD (Check): ☐ Open Hole ☐ Cased Hole ☐ Air Rotary ☐ Mud Rotary ☐ Bored ☐ Air Hammer ☐ Cable Tool ☐ Jetted ☐ Other: _____

7) CASING, BLANK PIPE, AND WELL SCREEN DATA: From (ft.) To (ft.) Description and color of formation material

0 - 36	Red Rock & Gravel
36 - 70	Red Rock & Yellow Clay
70 - 95	White Sand
95 - 141	Blue Shale

8) BACKSTOP Completion (Check): ☒ Cemented ☐ Gravel Packed ☐ Open Hole ☐ Stringer Well

9) CEMENTING DATA: Cementation: 4 lb. of cement per ft. of hole. Method of placement: Gravel Packed Method of verification of above: N/A

10) SURFACE COMPLETION: ☐ Specified Surface Substantiated ☐ Specified Surface Substantiated ☐ Piles Adapter Used ☐ Approved Alternative Pile/Adapter Used

11) WATER LEVEL: Static Level: 70 ft. below land surface. Date: 2-4-99

12) PACKERS: Type: _____ Depth: _____

13) WATER QUALITY: Did you know/observe any strata which contained undesirable constituents? ☐ Yes ☒ No. If yes, submit REPORT OF UNDESIRABLE WATER. Type of water: _____ Depth of strata: _____ Was a chemical analysis made? ☐ Yes ☒ No

14) TYPE/USE: ☒ Domestic ☐ Industrial ☐ Irrigation ☐ Injection ☐ Public Supply ☐ Decontamination ☐ Testwell

15) WELL TESTS: Type: ☐ Pump ☐ Jet ☐ Other ☐ Other. Depth to pump pack, cylinder, etc.: 116 ft.

16) WATER QUALITY: Did you know/observe any strata which contained undesirable constituents? ☐ Yes ☒ No. If yes, submit REPORT OF UNDESIRABLE WATER. Type of water: _____ Depth of strata: _____ Was a chemical analysis made? ☐ Yes ☒ No

17) ADDRESS: 1330 W. McNeil Stephenville, TX 76401

18) SIGNATURE: Gemma Backus (Owner) Stephenville (City) 76401 (Zip)

19) ADDITIONAL INFORMATION: Please attach electric log, chemical analysis, and other pertinent information, if available.

Send original copy by certified return receipt requested to: TOLR, P.O. Box 12157, Austin, TX 78711

ATTENTION OWNER: Confidentiality
 Privilege Notice on reverse side
 of Well Owner's copy (back)

State of Texas
 WELL REPORT

Texas Department of Licensing &
 Regulation
 P.O. Box 12157
 Austin, TX 78711
 512-463-7880

1) OWNER: Lloyd Dunsail ADDRESS: Box 3 Stephenville, TX 76401

2) ADDRESS: STEPHENVILLE COUNTY: RT (City) (County) (State) (Zip) (City) (State) (Zip)

3) TYPE OF WORK (Check): ☒ New Well ☐ Repairing ☐ Plugging ☐ Monitoring ☐ Drilling ☐ Completion ☐ Testing

4) PROPOSED USE (Check): ☐ Domestic ☐ Industrial ☐ Irrigation ☐ Injection ☐ Public Supply ☐ Decontamination ☐ Testwell

5) WELL LOG: Date Drilling: 4/19/99 From (ft.): 113 To (ft.): 30 Surface: 113 Depth: 141 Diameter of Hole: 30

6) DRILLING METHOD (Check): ☐ Open Hole ☐ Cased Hole ☐ Air Rotary ☐ Mud Rotary ☐ Bored ☐ Air Hammer ☐ Cable Tool ☐ Jetted ☐ Other: _____

7) CASING, BLANK PIPE, AND WELL SCREEN DATA: From (ft.) To (ft.) Description and color of formation material

0 - 36	Red Rock & Gravel
36 - 70	Red Rock & Yellow Clay
70 - 95	White Sand
95 - 141	Blue Shale

8) BACKSTOP Completion (Check): ☒ Cemented ☐ Gravel Packed ☐ Open Hole ☐ Stringer Well

9) CEMENTING DATA: Cementation: 4 lb. of cement per ft. of hole. Method of placement: Gravel Packed Method of verification of above: N/A

10) SURFACE COMPLETION: ☐ Specified Surface Substantiated ☐ Specified Surface Substantiated ☐ Piles Adapter Used ☐ Approved Alternative Pile/Adapter Used

11) WATER LEVEL: Static Level: 70 ft. below land surface. Date: 2-4-99

12) PACKERS: Type: _____ Depth: _____

13) WATER QUALITY: Did you know/observe any strata which contained undesirable constituents? ☐ Yes ☒ No. If yes, submit REPORT OF UNDESIRABLE WATER. Type of water: _____ Depth of strata: _____ Was a chemical analysis made? ☐ Yes ☒ No

14) TYPE/USE: ☒ Domestic ☐ Industrial ☐ Irrigation ☐ Injection ☐ Public Supply ☐ Decontamination ☐ Testwell

15) WELL TESTS: Type: ☐ Pump ☐ Jet ☐ Other ☐ Other. Depth to pump pack, cylinder, etc.: 116 ft.

16) WATER QUALITY: Did you know/observe any strata which contained undesirable constituents? ☐ Yes ☒ No. If yes, submit REPORT OF UNDESIRABLE WATER. Type of water: _____ Depth of strata: _____ Was a chemical analysis made? ☐ Yes ☒ No

17) ADDRESS: 1330 W. McNeil Stephenville, TX 76401

18) SIGNATURE: Gemma Backus (Owner) Stephenville (City) 76401 (Zip)

19) ADDITIONAL INFORMATION: Please attach electric log, chemical analysis, and other pertinent information, if available.

Texas Water Commission
P.O. Box 13078, Austin, Texas 78711

State Of Texas
Well Report

1) Owner: Levy Alexander
City: De Leon
State: Texas Zipcode: 76444

2) County: Erath
Location: See Map Attached.
Miles: 4 Direction: N From: Stephenville
31.62.1

3) Type of work: New Well
4) Proposed Use: Domestic
5) Drilling Method: Air Rotary

6) Date Drilled: 09-04-1993
Start: 09-04-1993 6-1/2 From: 0 To: 260
Finish: 09-04-1993 From: 0 To: 260
7) Bore Hole Completion: Gravel Packed
Gravel pack From: 15 To: 260

From	To	Formation	8) Casing:	Dia:	New, Used:	Type:	From:	To:	Gage:
0	5	Clay	4	"	New	PVC	0	260	Sch 40
5	10	Sand							
10	18	Clay							
18	150	Shale							
150	161	Sand							
161	170	Shale							
170	260	Sand							

Perforation: 4 New PVC 220 260 1/8

REGULATORY
FEB 28 1994
10) Surface Completion: 15
From To No. of Sacks
3

TEXAS WATER COMMISSION
11) Cementing Data: (Rule 287.44(1))
Water Level below ground surface: 200 Ft.
Date: 09-04-1993

12) Packers:
Type: None Depth:

13) Type Pump: Submersible

14) Well Test: Estimated Yield: 40 GPM

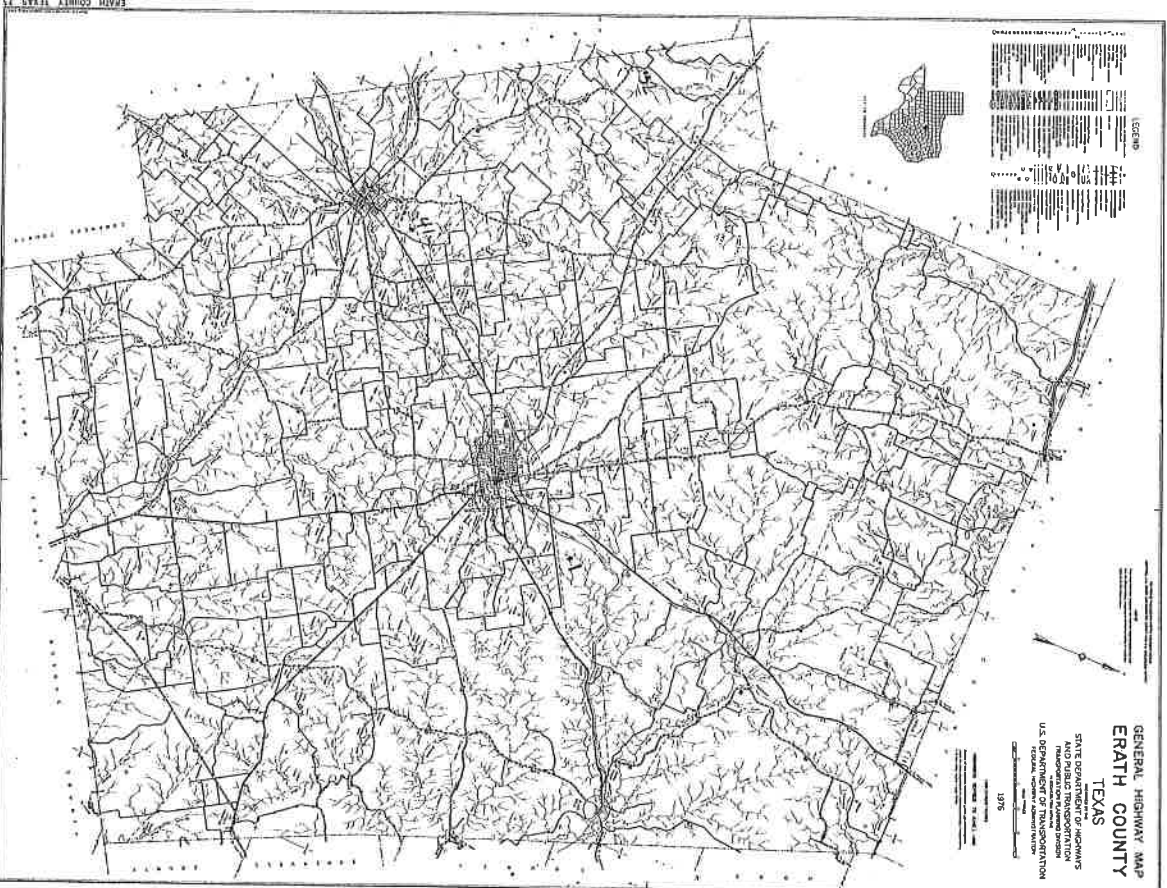
15) Water Quality: Good

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of knowledge and belief. I understand that failure to complete items 1 thru 15 will result in the log(s) being returned for completion and resubmittal.

Company Name: F & F Drilling Inc.
Address: Ft. 1 De Leon, Texas
Signed: *Fred F. Frazier* Well Driller's License No. 02317W
76444

driller
Signed: Trainee

Attention Owner:
Confidentiality privilege
on attached letter.
For TWC use only: Well No. 31.478
Located on map:



2) LOCATION OF WELL:

The sketch showing the well location must be as accurate as possible, showing landmarks, in sufficient detail so that the well may be located on a General Highway Map of the county in which the well is located.

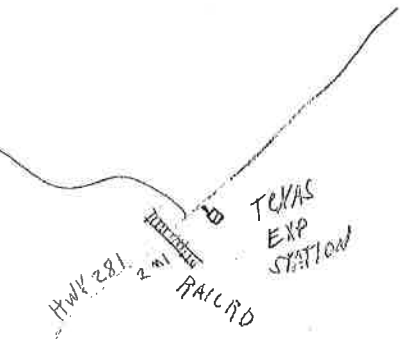
References, points from which distances are measured and directions given should be of a permanent nature (e.g., highway intersections, corner of town, river and creek bridges, railroad crossings). The distance and direction from the nearest town should always be indicated.

When giving a legal description include a sketch showing location of the well within the described area, a.s. survey abstract. Information furnished in Section 2) of the TONGUE-CLAY is very important. Unless the well can be accurately located on a map the value of the other data contained in the report is greatly reduced.

2

2

11/10/1975



STERLINGVILLE

RECEIVED
JAN 23 1975
COUNTY CLERK
TEXAS WATER COMMISSION

DEVELOPMENT BOARD
TEXAS WATER COMMISSION
AUG 22 1974

Please use black ink.
This report is to be filed with the Texas Water Commission.
Attention: Water Well Drilling Board
Austin, Texas 78711

WATER WELL REPORT

State of Texas
Austin, Texas 78711

1) OWNER: Gordon Taylor Address: 955 Charlotte Stephanieville Tex 76081
2) LOCATION OF WELL: ERBETH County: 4 miles in NE direction from STERLINGVILLE

Driller must complete the legal description in the right column with distance and direction from two intersecting sections of survey lines or he must locate and identify the well on a map of the section and attach the map to this form.
General Highway Map and attach the map to this form.

See attached map.

3) TYPE OF WORK (Check):
☒ New Well ☐ Deepening ☐ Domestic ☐ Industrial ☐ Monitor ☐ Public Supply
☐ Reconditioning ☐ Plugging ☒ Irrigation ☐ Test Well ☐ Injection ☐ Other

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

5) DRILLING METHOD (Check):
☐ Open Hole ☐ Straight Wall ☐ Underreamed
☒ Mud Rotary ☐ Air Hammer ☐ Jetted ☐ Bored
☐ Cable Tool ☐ Other

6) WELL LOG:
Date Drilling: 12-27-1983 Started: 12-28-1983 Completed: 12-28-1983
Diameter of Hole: 10 1/4 inches
From (ft.) 0 To (ft.) 430

7) BOREHOLE COMPLETION:
☐ Open Hole ☐ Straight Wall ☐ Underreamed
☒ Gravel Packed ☐ Other
If Gravel Packed give interval: from 310 ft. to 430 ft.

8) CASING, BLANK PIPE, AND WELL SCREEN DATA:
Dip (or) Unit: 134 N. Steel Slotted Setting (ft.) 0 to 430 ft.
Screen (ft.) 0 to 430 ft.

9) CEMENTING DATA (Rule 319.44(h))
Cemented from 0 ft. to 240 ft. No. of Sacks Used 7
Method used Pack
Cemented by Dewell Well Service Inc.

10) SURFACE COMPLETION
☒ Specified Surface Slab Installed (Rule 319.44(i))
☐ Pumps Adapter Used (Rule 319.44(i))
☐ Approved Alternative Procedure Used (Rule 319.271)

11) WATER LEVEL:
Static level 350 ft. below land surface Date May 23 1985
Artesian flow spm. Date May 23 1985

12) PACKERS:
Type None Depth None

13) TYPE PUMP:
☐ Turbine ☐ Jet ☒ Submersible ☐ Cylinder
Depth to pump bowl, cylinder, etc. None ft.

14) WELL TESTS:
Type Test ☐ Pump ☐ Baller ☐ Jetted ☐ Estimated
Yield None gpm with None ft. drawdown after None hrs.

15) WATER QUALITY:
Did you knowingly penetrate any strata which contained undesirable water? ☐ Yes ☒ No
Type of water? None
Depth of water? None
Was a chemical analysis made? ☐ Yes ☒ No

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

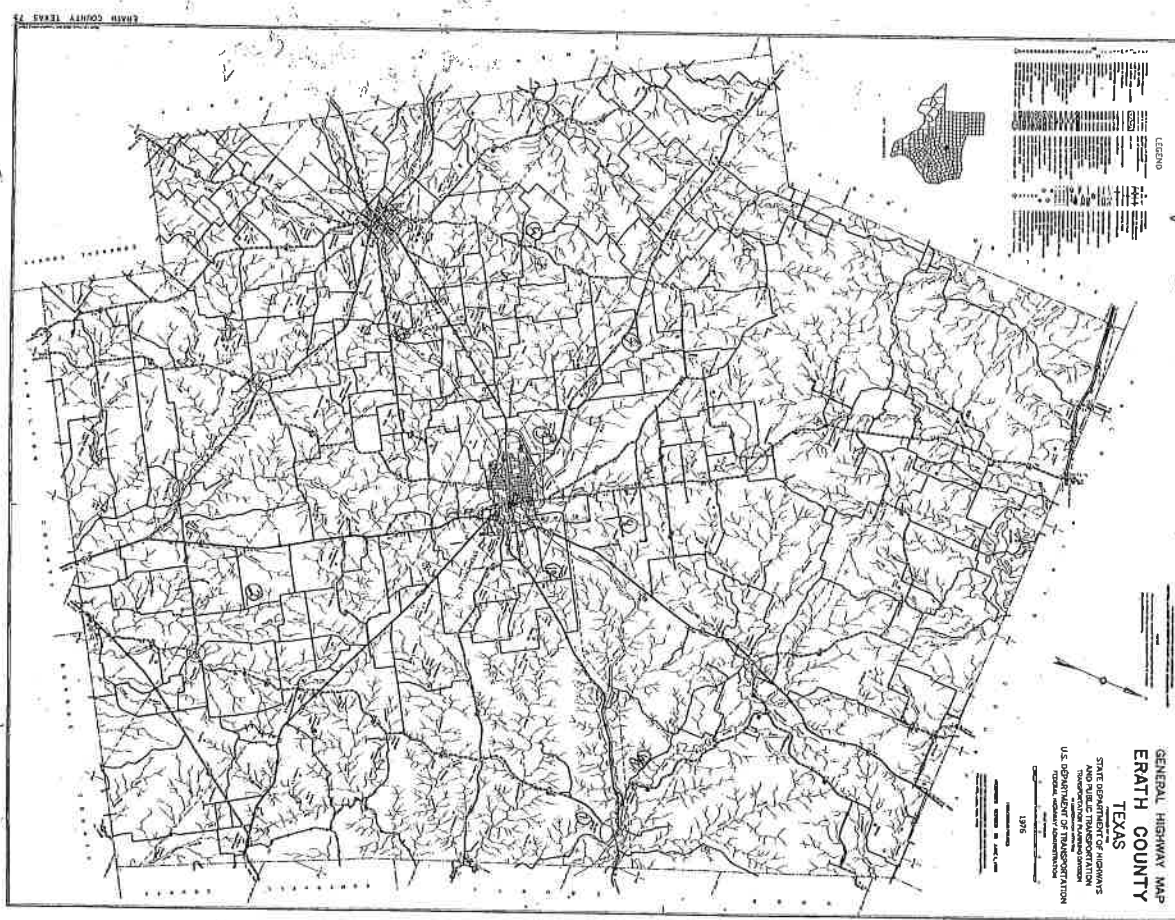
COMPANY NAME: Dewell Well Service Inc. License No. 1891
ADDRESS: P.O. Box 558 STERLINGVILLE TEX. 76081
(Type or Print) (County or City) (State) (Zip)

(Signed) Mar. Dewell (Typed) Mar. Dewell (Registered Driller's Name)
Please attach electric log, chemical analysis, and other pertinent information, if available.

Pay TWC fee only 3147-8
Well No. 3147-8
Located on map 3147-8

TWC-0382 (Rev. 06-10-83) TEXAS WATER COMMISSION COPY

- ① Mrs. E. S. Rutherford
 ② B. W. Rutherford
 ③ Harry Chandler
 ④ Harry Rutherford
 ⑤ R. W. Rutherford
 ⑥ G. H. Chandler
 ⑦ R. W. Chandler
 ⑧ M. L. Chandler
 ⑨ R. W. Rutherford
 ⑩ B. W. Rutherford



GENERAL HIGHWAY MAP
 ERATH COUNTY
 TEXAS

Amateur Owner
 Notice
 on reverse side of owner's copy.

Texas Department of License and Regulation
 Water Well Drilling Inspector Program
 P.O. Box 12157 Austin, Texas 78711-0157 FAX (512) 463-8916
 Email address: water.well@license.state.tx.us

This form must be completed
 and filed with the department
 and owner within 60 days
 upon completion of the well.

WELL REPORT

Name	1001 E Rock Cove	City	Round Rock	State	TX	Zip	78664
County	Erath	Physical Address	45 Hwy 201 N	City	Stephenville	State	TX
3) Type of Work	<input checked="" type="checkbox"/> New Well <input type="checkbox"/> Reconditioning <input type="checkbox"/> Replacement <input type="checkbox"/> Deepening	4) Proposed Use (check) <input type="checkbox"/> Industrial <input type="checkbox"/> Irrigation <input type="checkbox"/> Domestic <input type="checkbox"/> Public Supply <input type="checkbox"/> Environmental Soil Boring <input type="checkbox"/> Monitoring <input type="checkbox"/> De-watering <input type="checkbox"/> Test well	5) Grd #	31-49-8	NT		
6) Drilling Date	Started 1/1/10 Completed 10/3/10	7) Drilling Method (check) <input checked="" type="checkbox"/> Air Rotary <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Air Hammer <input type="checkbox"/> Cable Tool <input type="checkbox"/> Other					

From (ft)	To (ft)	Description and color of formation material
0	5	Topsoil
5	25	Caliche
25	30	Gray shale
30	310	Red clay
310	330	Red clay
330	350	Red clay
350	440	Red clay

8) Borehole Completion ☐ Open Hole ☐ Straight Wall
☐ Under-reamed ☐ Gravel Pack ☐ Other
 If other, describe: _____

From (ft)	To (ft)	From (ft)	To (ft)	Sample used

9) Cementing Data
 Cementing from _____ ft. to _____ ft. # of sacks used _____
 Method used _____
 Cementing by _____
 Distance to septic system field or other concentrated contamination _____ ft.
 Method of verification of above distance _____

10) Surface Completion
☐ Specific Surface Sleeve Installed
☐ Pile Adapter Used
☐ Approved Alternative Procedure Used

11) Water Level
 Sampled _____ Date _____
 Airflow _____ gpm
 Depth _____ ft.

12) Discharge
 _____ gpm
 _____ ft.

TDLR FORM 6001 WVD

White - TDLR

Yellow - Owner

Pink - Driller/Pump Installer

11/25/2001

State of Texas
WATER WELL REPORT
Attention Owner: Confidentiality Privilege Notice on Reverse Side
Austin, Texas 78711

1) OWNER: Don Crawford Address: Box 2000 Stephenville TX
2) LOCATION: Garrett County: WV direction from: Stephenville
(N.E., S.W., etc.)

Driller must complete the right description to the right with distance and direction from two intersecting sections of the well or the nearest corner and identify the corner by monumenting the well on the corner. The Driller must also attach the map to this form.

Section No. _____ Block No. _____ Township _____
Abstract No. _____ Survey Name _____
Distance and direction from two intersecting section or survey line _____

3) TYPE OF WORK (Check):
☒ New Well ☐ Deepening ☐ Reconditioning ☐ Plugging
4) PROPOSED USE (Check):
☐ Domestic ☐ Industrial ☐ Monitor ☐ Public Supply ☐ Other _____
5) DRILLING METHOD (Check):
☐ Hand Rotary ☐ Air Hammer ☐ Latent ☐ Bored ☐ Other _____
6) WELL LOG:
Date Drilling: 3-5-81 Dr. (in) 6 1/4 From (ft.) 419
Start: 3-7-81 End: 10-81 Surface 419
Completed: 10-81

7) BOREHOLE COMPLETION:
☐ Screen Hole ☐ Slight Well ☐ Underdrained
☐ Gravel Packed ☐ Other _____
If Gravel Packed give interval: from _____ ft. to _____ ft.

8) CASING, BLANK PIPE, AND WELL SCREEN DATA:
From (ft.) To (ft.) Description and color of formation (ft.)
0-4 Joy Soil
4-16 Caliche
16-46 Sand Rock
46-125 Blue Shale
125-275 Limestone
275-340 Blue Shale
340-375 Water Sand
375-382 Red Rock
382-414 Water Sand & Gravel
414-419 Blue Shale

9) CEMENTING DATA:
Generated from _____ ft. to _____ ft. No. of Sacks Used _____
Cemented by: 7 Bags of Cement
Method used: dry

10) SURFACE COMPLETION
☐ Specified Surface (Rule 319.44(c))
☐ Pits or Adapter Used (Rule 319.44(d))
☒ Approved Alternative Procedure Used (Rule 319.71)

11) WATER LEVEL
Static level: 372 ft. below land surface Date: 3-1-87
Artesian flow: _____ gpm. Date: _____
12) PACKERS: Type _____ Depth _____

13) TYPE PUMP:
☐ Turbine ☒ Jet ☐ Submersible ☐ Cylinder
Depth to pump bowl, cylinder, etc.: 399 ft.

14) WELL TESTS:
Type Test: ☐ Pump ☒ Latent ☐ Other _____
Yield: 12 gpm. with _____ ft. drawdown after _____ min.

15) WATER QUALITY:
(Use reverse side if necessary)
Did you visually perceive any signs which concerned undesirable water quality? ☐ Yes ☒ No
If yes, upon: THREAT TO UNDERGROUND WATER
Type of water? Surface Depth of (ft.) 419
Was a chemical analysis made? ☐ Yes ☒ No

16) COMPANY NAME: Reilly Drilling Water Well Driller's License No.: 1252
ADDRESS: 1330 W Mc Nell Stephenville TX 76401
(Signed) Therese Reilly (Signature of Driller)
Please attach electric log, chemical analysis, and other pertinent information, if available.

TEXAS WATER COMMISSION COPY

ATTENTION OWNER: Confidentiality
Drilling Notice on Reverse Side
1) OWNER: Garrett ADDRESS: 2408 CR 116 STATE: TX ZIP: 76401
CITY: STEPHENVILLE

2) ADDRESS OF WELL:
CONTRACT: Garrett
Sectors, or FID: SATTS SPRINGS RD
City, State, Zip Code: STEPHENVILLE, TX 76401
3) TYPE OF WORK: NEW WELL

5) WELL LOG: 00783
DATE DRILLING: 09/06/01
STARTED: 09/06/01
CLOSING: 09/06/01
DIA. NEW/USED: 6.75 DIA. OLD: 5.31
DIA. PLASTIC: 4.77 DIA. SCREW: 5.31
DIA. PLASTIC: 4.77 DIA. SCREW: 5.31

6) PROPOSED USE: DOMESTIC
7) DRILLING METHOD: AIR ROTARY
8) BOREHOLE COMPLETION:
Gravel Packed: FROM 387 FT. TO 517 FT.
IF GRAVEL... FROM _____ FT. TO _____ FT.

9) CEMENTING DATA:
Generated from _____ ft. to _____ ft. No. of Sacks Used _____
Cemented by: Garrett
Method used: CONCRETE-POURED
Distance to specific field lines: 100+ ft.
Method of verification of above distance: _____

10) SURFACE COMPLETION:
SPEC. STEEL SHANK
11) WATER LEVEL:
STATIC LEVEL: 330 FT. DATE: 09/06/01
ARTESIAN FLOW: _____ GPM. DATE: _____
12) PACKERS: TYPE _____ DEPTH _____

13) TYPE PUMP:
SUBMERSIBLE
DEPTH TO PUMP: 330
TYPE OF WATER: _____
DEPTH OF STRATA: _____
NO STRATA OF UNDERSATABLE WATER PENETRATED
COMPANY NAME: ASSOCIATED SERVICES WATER WELL DRILLER'S LICENSE NO.: 2404
ADDRESS: P.O. BOX 16 CITY: STEPHENVILLE STATE: TX ZIP CODE: 76401

14) WELL TEST:
I HEREBY CERTIFY THAT THIS WELL WAS DRILLED BY ME (OR UNDER MY SUPERVISION) AND THAT EACH AND ALL OF THE STATEMENTS HEREIN ARE TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I UNDERSTAND THAT FAILURE TO COMPLETE ITEMS 1 THRU 15 WILL RESULT IN THE WELL BEING CONSIDERED A DRY WELL.
(Signed) Garrett (Signature of Driller)
(SIGNED WATER WELL DRILLER)
(SIGNED WATER WELL DRILLER)

FILE NO. _____ DATE: OCT 09 2001

Please use black ink. Send original copy by registered mail to Texas Water Commission, Austin, Texas 78711.

State of Texas
WATER WELL REPORT
Texas Water Well Driller's Board
P. O. Box 13097
Austin, Texas 78711

1) OWNER: Bill & Julie (Name) Address: _____ (Street or R.M.D.) (City) (State) (Zip)
County: Coahuila 4 mile in 41 (N.E., S.W., etc.) direction from Guilleville (Town)

2) LOCATION OF WELL: _____ (Section No.) _____ (Block No.) _____ (Township)
_____ (Survey Name)
Distance and direction from two intersecting section or survey lines: _____
San attached map: ON 31-54-3

3) TYPE OF WORK (Check):
☒ New Well ☐ Deepening ☐ Proposed Use (Check):
☐ Rehabilitation ☐ Plugging ☐ Domestic ☐ Industrial ☐ Monitor ☐ Public Supply
☐ Irrigation ☐ Test Well ☐ Injection ☐ Other _____

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

5) WELL LOG:
Date Drilling: 10/13/87 Diameter of Hole: _____
Start: 10/13/87 O.D. (in.) From (ft.) To (ft.)
Completed: 10/13/87 Surface _____
From (ft.) To (ft.) Description and color of formation material: _____

6) CASING, BLANK PIPE, AND WELL SCREEN DATA:
Diameter (in.) _____ Screen Material: _____
Type: _____ Setting (ft.) _____
From _____ To _____
If Gravel Packed give interval: from _____ ft. to _____ ft.

7) BOREHOLE COMPLETION:
☒ Open Hole ☐ Straight Wall ☐ Undergrind
☒ Gravel Packed ☐ Other _____

8) CEMENTING DATA: (Rule 319.44(b))
Cemented from _____ ft. to _____ ft. No. of Sacks Used 4
Method used Pack
Cemented by Danell Well Services, Inc.

9) SURFACE COMPLETION:
☒ Specified Surface Slab Installed (Rule 319.44(d))
☐ Press Adapter Used (Rule 319.44(d))
☐ Approved Alternative Procedure Used (Rule 319.71)

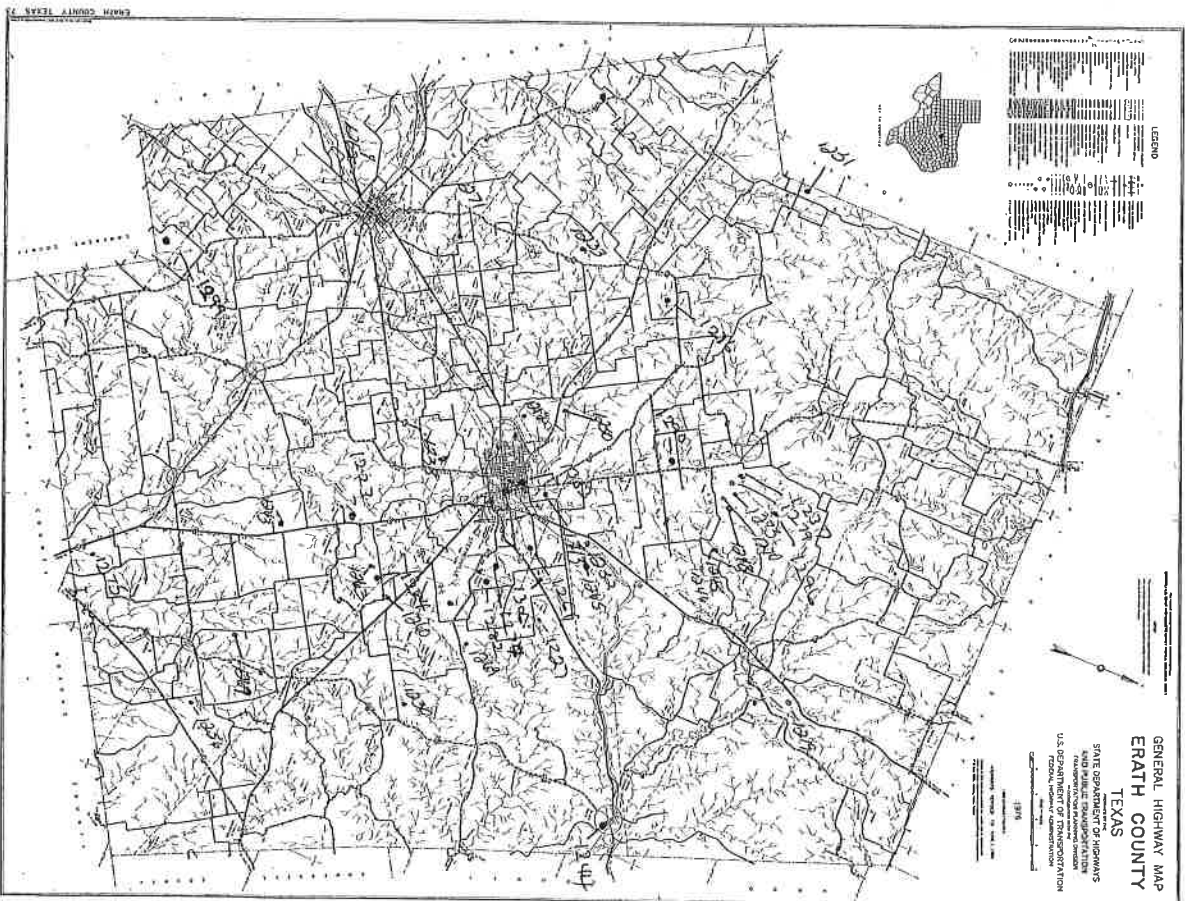
10) WATER LEVEL:
Static level 230 ft. below land surface Date _____
Artesian flow _____ gpm. Date _____
Type _____ Depth _____

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

12) WELL TESTS:
Type Test: ☐ Pump ☐ Shut ☒ Confined ☐ Estimated
Yield: _____ gpm with _____ ft. drawdown after _____ hrs.

13) WATER QUALITY:
Did you knowingly preserve any strain which contained undesirable water? ☒ Yes ☐ No
If yes, submit "REPORT OF UNSALEABLE WATER"
Type of water: _____
Was a chemical analysis made? ☐ Yes ☒ No

14) COMPANY NAME: Powell Well Service, Inc. (Type of person)
Address: P.O. Box 558 Stephenville (City) (State) (Zip)
ADDRESS: 1891 (Street or R.M.D.)
(Signed) Maureen Powell (Signature) (Registered Driller's Name) (City) (State) (Zip)
Please attach electric log, chemical analysis, and other pertinent information, if available.
For TWC use only: 17-8
WMD-012 (Rev. 07-25-87) TEXAS WATER COMMISSION COPY



No. & well log	Feet (±)	Feet (±)	
345 -	365		Gravel & Clay
365 -	375		Sand Stone, Sandy Clay
375 -	392		Gravel & Clay
392 -	400		Red Bed

RECEIVED
AUG 11 1976
TEXAS WATER
DEVELOPMENT BOARD

RECEIVED
NOV 18 1976
Central Records
Texas Water Development Board

ATTENTION OWNER: Confidentially
Private Notice on Reverse Side
STATE OF TEXAS
WATER WELL REPORT
1) OWNER: ROUSE, KEN ADDRESS: RT 2 BOX 281P CITY: STEPHENVILLE STATE: TX ZIP: 76401-
2) LOCATION OF WELL: COUNTY: GRANT DISTRICT: FROM STEPHENVILLE
LEGAL DESCRIPTION SEC. ATTACHED MAP

3) TYPE OF WORK: NEW WELL 4) PROPOSED USE: DOMESTIC 5) DRILLING METHOD: MUD ROTARY

6) WELL LOG: 00060 DIAMETER OF HOLE 7) SPOREHOLE METHOD:

DATE DRILLING: 07/05/93 D 6.75 FROM TO GRAVEL PACKED FROM 310 FT. TO 390 FT.
COMPLETED: 07/09/93 IF GRAVEL... FROM FT. TO FT.

8) CASING, ALUM. PIPE, AND WELL SCREEN DATA: FROM TO 11" SAGE CASING SCREEN
DIA NEW/USED DESCRIPTION 0 390 SCH 40
4 H PVC/ SLOTTED 560 390 SCH 40

9) CEMENTING DATA: Cemented from No. of Sacks Used
FROM TO 0 FT. TO 330 FT. 21
Method used: CEMENT - PUMPED
Cemented by: BILLY COLTON & GARY

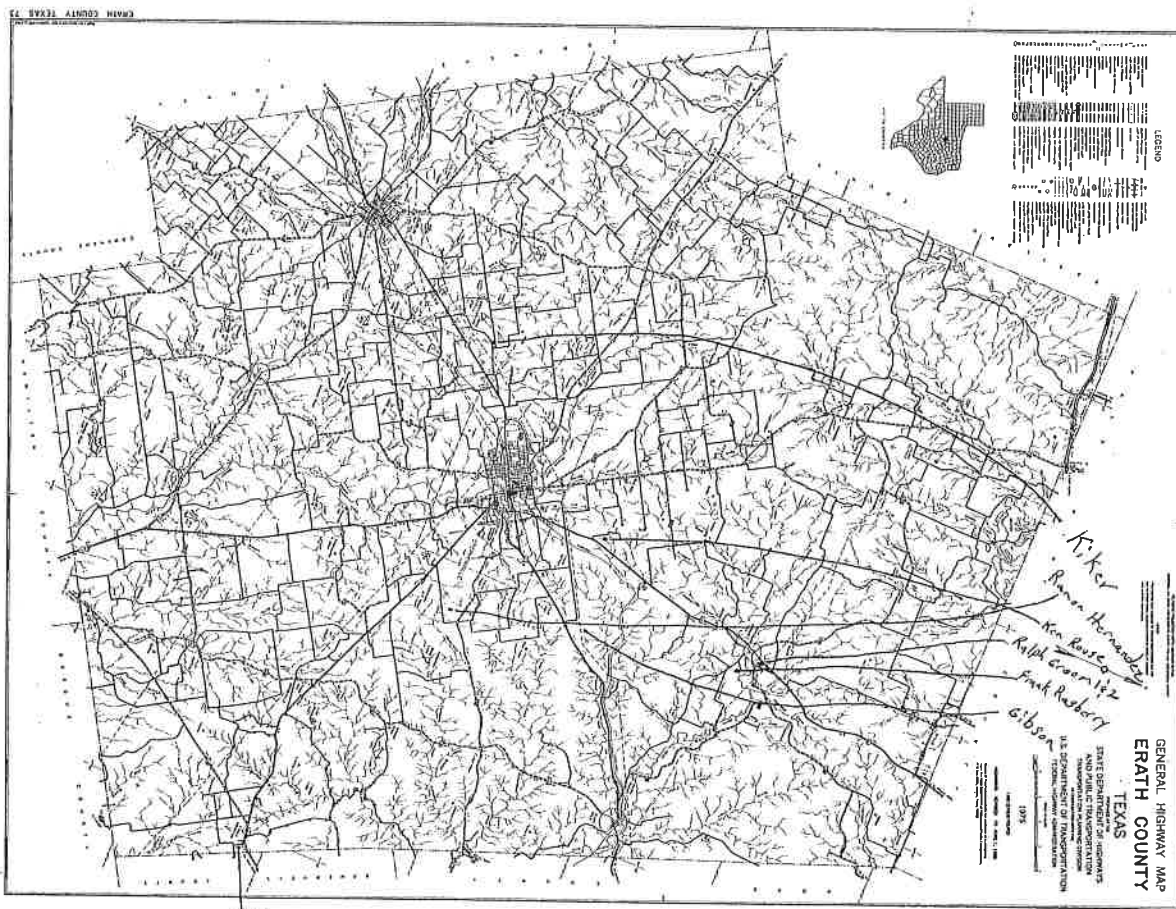
GEOLOGICAL DESCRIPTION:
FROM TO DESCRIPTION
0 2 TOP SOIL AND ROCK
2 3 RED CLAY
5 15 CLAY
15 70 SAND AND GREY CLAY
70 80 BLUE AND RED CLAY
80 240 SHALE AND GREY CLAY
240 280 SANDY CLAY AND SHALE
280 320 GREY CLAY AND SHALE
320 330 SAND-GRAVEL AND GREY CLAY
330 390 GREY AND RED CLAY

13) TYPE PUMP: 14) WELL TEST:
SUBMERSIBLE PUMP
DEPTH TO PUMP: 350 YIELD: 12 GPM WITH 1000 FT DRANDOM AFTER 24 HRS

15) WATER QUALITY: DEPTH OF STRATA: NO CHEMICAL ANALYSIS MADE
TYPE OF WATER: NO STRATA OF UNDESIRABLE WATER PENETRATED

COMPANY NAME: ASSOCIATED SERVICES WATER WELL DRILLER'S LICENSE NO.: 2404
ADDRESS: P.O. BOX 16 CITY: STEPHENVILLE STATE: TX ZIP CODE: 76401

I HEREBY CERTIFY THAT THIS WELL WAS DRILLED BY ME (OR UNDER MY SUPERVISION) AND THAT EACH AND ALL OF THE STATEMENTS HEREIN ARE TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I UNDERSTAND THAT FAILURE TO COMPLETE ITEMS 1 THRU 15 WILL RESULT IN THE LOG(S) BEING RETURNED FOR COMPLETION AND RESUBMITAL.
(signed) *[Signature]* (signed) (REGISTERED DRILLER TRAINEE)



**ATTENTION OWNER: Confidentiality
Privilege Notices on Reverse Side**

State of Texas
WELL REPORT

P.O. Box 13087
Austin, Texas 78711

1) OWNER Best overnight ADDRESS Box 2 Stephenville TX 79060
(Name) (City) (State) (Zip)
2) LOCATION 77 7 NE 8868000
(Well) (Count) (Section) (Twp)

Driller must complete the legal description below with distance and direction from two (inverse) Quarter- or Half-Section Towns County General Highway Map and attach the map to this form.

~~Distance and direction from two intersecting section or survey lines
ESEE ATTACHED MAP #10 - on 31-48-6~~

☒ New Wall ☐ Deepen

☐ Reconditioning ☐ Plugging

4) ~~PROPOSED USE (CITE)~~

<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Industrial
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Test

☐ Monitor ☐ Public Supply

☐ Injection ☐ De-Watering

5) DRINKING METHOD (CHECK):

<input checked="" type="checkbox"/> MOUTH POLARITY	<input type="checkbox"/> AIR HAMMER	<input type="checkbox"/> JETTED	<input type="checkbox"/> BACK
<input type="checkbox"/> AIR POLARITY	<input type="checkbox"/> CABLE TOOL	<input type="checkbox"/> OTHER	

Started	10-18	1983
Completed	10-23	1983

6/4	Surface
-----	---------

☒ OPEN HOLE
☐ GRAVEL PAD
IF GRAVEL PAD:

☐ Straight wall ☐ Undergarments

☐ Other _____

Approx. interval . . . from _____ to _____ ft.

30 700.00

New or Used	Steel, Plastic, etc	Sanding (ft.)		Gage
		From	To	
	Perf., Slotted, etc			Casting
	Screen Mfg. If commercial			Screen

8-314 Almond
11-314 Blue Ball
15-380 Water Sand

Shaded 404 429 5/5

85-427-14145 Sand + shale

10	10	No. of Sacks Used	10
11	11	No. of Sacks Used	11
12	12	No. of Sacks Used	12
13	13	No. of Sacks Used	13
14	14	No. of Sacks Used	14
15	15	No. of Sacks Used	15
16	16	No. of Sacks Used	16
17	17	No. of Sacks Used	17
18	18	No. of Sacks Used	18
19	19	No. of Sacks Used	19
20	20	No. of Sacks Used	20
21	21	No. of Sacks Used	21
22	22	No. of Sacks Used	22
23	23	No. of Sacks Used	23
24	24	No. of Sacks Used	24
25	25	No. of Sacks Used	25
26	26	No. of Sacks Used	26
27	27	No. of Sacks Used	27
28	28	No. of Sacks Used	28
29	29	No. of Sacks Used	29
30	30	No. of Sacks Used	30
31	31	No. of Sacks Used	31
32	32	No. of Sacks Used	32
33	33	No. of Sacks Used	33
34	34	No. of Sacks Used	34
35	35	No. of Sacks Used	35
36	36	No. of Sacks Used	36
37	37	No. of Sacks Used	37
38	38	No. of Sacks Used	38
39	39	No. of Sacks Used	39
40	40	No. of Sacks Used	40
41	41	No. of Sacks Used	41
42	42	No. of Sacks Used	42
43	43	No. of Sacks Used	43
44	44	No. of Sacks Used	44
45	45	No. of Sacks Used	45
46	46	No. of Sacks Used	46
47	47	No. of Sacks Used	47
48	48	No. of Sacks Used	48
49	49	No. of Sacks Used	49
50	50	No. of Sacks Used	50
51	51	No. of Sacks Used	51
52	52	No. of Sacks Used	52
53	53	No. of Sacks Used	53
54	54	No. of Sacks Used	54
55	55	No. of Sacks Used	55
56	56	No. of Sacks Used	56
57	57	No. of Sacks Used	57
58	58	No. of Sacks Used	58
59	59	No. of Sacks Used	59
60	60	No. of Sacks Used	60
61	61	No. of Sacks Used	61
62	62	No. of Sacks Used	62
63	63	No. of Sacks Used	63
64	64	No. of Sacks Used	64
65	65	No. of Sacks Used	65
66	66	No. of Sacks Used	66
67	67	No. of Sacks Used	67
68	68	No. of Sacks Used	68
69	69	No. of Sacks Used	69
70	70	No. of Sacks Used	70
71	71	No. of Sacks Used	71
72	72	No. of Sacks Used	72
73	73	No. of Sacks Used	73
74	74	No. of Sacks Used	74
75	75	No. of Sacks Used	75
76	76	No. of Sacks Used	76
77	77	No. of Sacks Used	77
78	78	No. of Sacks Used	78
79	79	No. of Sacks Used	79
80	80	No. of Sacks Used	80
81	81	No. of Sacks Used	81
82	82	No. of Sacks Used	82
83	83	No. of Sacks Used	83
84	84	No. of Sacks Used	84
85	85	No. of Sacks Used	85
86	86	No. of Sacks Used	86
87	87	No. of Sacks Used	87
88	88	No. of Sacks Used	88
89	89	No. of Sacks Used	89
90	90	No. of Sacks Used	90
91	91	No. of Sacks Used	91
92	92	No. of Sacks Used	92
93	93	No. of Sacks Used	93
94	94	No. of Sacks Used	94
95	95	No. of Sacks Used	95
96	96	No. of Sacks Used	96
97	97	No. of Sacks Used	97
98	98	No. of Sacks Used	98
99	99	No. of Sacks Used	99
100	100	No. of Sacks Used	100

☐ Turbine ☐ Jet ☒ Goldenwings ☒ Cylinder
☐ Other _____ 309 APR

990101 SURFACE COMPLETION

Type Test ☐ Pump ☒ Baller ☐ Jammed ☒ TEXAS WATER EXPLORATION
Yield: 15 gpm with 10 ft. drawdown after 4 hrs

10) WATER LEVEL: _____

Did the drilling penetrate any strata which contained undesirable constituents?

☐ Yes ☒ No If yes, permit: **REPORT OF UNDESIRABLE WATER**

Type of water? Groundwater Depth of strata _____

127	PACKERS:	Type	Depth

ably certify that this work was drilled by me (or under my supervision) and that such failure to complete item 3 thru 15 will result in the log(s) being returned for completion.

and all of the statements herein are true to the best of my knowledge and belief, understood and resonant.

1330 W Mc Clellan
(Street or P.O.)
Dumma, Md

Shenell A. 10/20/11

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

D-012 (Rev. 09/21/89)

TEXAS WATER

For TWC use only: Well No. 31-47-8 Located on map _____

GENERAL HIGHWAY MAP
ERATH COUNTY
TEXAS

STATE DEPARTMENT OF HIGHWAYS
TRANSPORTATION PLANNING DIVISION
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AID TO HIGHWAY CONSTRUCTION

1965

LEGEND

Scale: 1 inch = 10 miles

Inset map of Texas showing the location of Erath County.

① mis E. P. Number ⑤ Parisi Forest ⑥ 'Anton Reuber
② BU Grey ⑦ GH Cantrell ⑧ Dinstmeyer
③ Henry Chandler ④ Thomas Cantrell
④ Henry Froehner ⑤ M. de Kinto

ATTENTION OWNER: Confidentiality

STATE OF TEXAS

WATER WELL REPORT

1) OWNER'S NAME: STATE WELLS

2) ADDRESS: 2241 CHILTON

3) CITY: HOUSTON

4) STATE: TX

5) ZIP CODE: 77019

6) COUNTY: EL PASO

7) WELL NO.: 31-47-8

8) STREET OR RD: COLLEGE FARM RD.

9) CITY: HOUSTON

10) STATE: TX

11) ZIP CODE: 77019

12) TYPE OF WELL: WELL

13) PROPOSED USE: DOMESTIC

14) IF PUBLIC SUPPLY WELL, NAME PLANS SUBMITTED TO THE MUDCE:

15) DATE OF LOG: 04/19/96

16) DRAINAGE AREA: 295

17) DRAINAGE METHOD: NO ROTARY

18) GRAVEL PACKED: NO

19) IF GRAVEL... FROM 245 FT. TO 295 FT.

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

21) TYPE OF WORK (CHECK):

22) PROPOSED USE (CHECK):

23) TYPE OF WELL (CHECK):

24) LEGAL DESCRIPTION:

25) SURFACE COMPLETION:

26) WATER LEVEL:

27) PACKERS:

28) WATER QUALITY:

29) COMPANY NAME:

30) ADDRESS:

31) CITY:

32) STATE:

33) ZIP CODE:

34) WELL OWNER'S LICENSE NO.:

35) WELL OWNER'S SIGNATURE:

36) DATE:

37) SIGNATURE OF DRILLER:

38) DATE:

39) SIGNATURE OF SUPERVISOR:

40) DATE:

41) SIGNATURE OF OWNER:

42) DATE:

43) SIGNATURE OF MUDCE:

44) DATE:

45) SIGNATURE OF MUDCE:

46) DATE:

47) SIGNATURE OF MUDCE:

48) DATE:

49) SIGNATURE OF MUDCE:

50) DATE:

51) SIGNATURE OF MUDCE:

52) DATE:

53) SIGNATURE OF MUDCE:

54) DATE:

55) SIGNATURE OF MUDCE:

56) DATE:

57) SIGNATURE OF MUDCE:

58) DATE:

59) SIGNATURE OF MUDCE:

60) DATE:

61) SIGNATURE OF MUDCE:

62) DATE:

63) SIGNATURE OF MUDCE:

64) DATE:

65) SIGNATURE OF MUDCE:

66) DATE:

67) SIGNATURE OF MUDCE:

68) DATE:

69) SIGNATURE OF MUDCE:

70) DATE:

71) SIGNATURE OF MUDCE:

72) DATE:

73) SIGNATURE OF MUDCE:

74) DATE:

75) SIGNATURE OF MUDCE:

76) DATE:

77) SIGNATURE OF MUDCE:

78) DATE:

79) SIGNATURE OF MUDCE:

80) DATE:

81) SIGNATURE OF MUDCE:

82) DATE:

83) SIGNATURE OF MUDCE:

84) DATE:

85) SIGNATURE OF MUDCE:

86) DATE:

87) SIGNATURE OF MUDCE:

88) DATE:

89) SIGNATURE OF MUDCE:

90) DATE:

91) SIGNATURE OF MUDCE:

92) DATE:

93) SIGNATURE OF MUDCE:

94) DATE:

95) SIGNATURE OF MUDCE:

96) DATE:

97) SIGNATURE OF MUDCE:

98) DATE:

99) SIGNATURE OF MUDCE:

100) DATE:

101) SIGNATURE OF MUDCE:

102) DATE:

103) SIGNATURE OF MUDCE:

104) DATE:

105) SIGNATURE OF MUDCE:

106) DATE:

107) SIGNATURE OF MUDCE:

108) DATE:

109) SIGNATURE OF MUDCE:

110) DATE:

111) SIGNATURE OF MUDCE:

112) DATE:

113) SIGNATURE OF MUDCE:

114) DATE:

115) SIGNATURE OF MUDCE:

116) DATE:

117) SIGNATURE OF MUDCE:

118) DATE:

119) SIGNATURE OF MUDCE:

120) DATE:

121) SIGNATURE OF MUDCE:

122) DATE:

123) SIGNATURE OF MUDCE:

124) DATE:

125) SIGNATURE OF MUDCE:

126) DATE:

127) SIGNATURE OF MUDCE:

128) DATE:

129) SIGNATURE OF MUDCE:

130) DATE:

131) SIGNATURE OF MUDCE:

132) DATE:

133) SIGNATURE OF MUDCE:

134) DATE:

135) SIGNATURE OF MUDCE:

136) DATE:

137) SIGNATURE OF MUDCE:

138) DATE:

139) SIGNATURE OF MUDCE:

140) DATE:

141) SIGNATURE OF MUDCE:

142) DATE:

143) SIGNATURE OF MUDCE:

144) DATE:

145) SIGNATURE OF MUDCE:

146) DATE:

147) SIGNATURE OF MUDCE:

148) DATE:

149) SIGNATURE OF MUDCE:

150) DATE:

151) SIGNATURE OF MUDCE:

152) DATE:

153) SIGNATURE OF MUDCE:

154) DATE:

155) SIGNATURE OF MUDCE:

156) DATE:

157) SIGNATURE OF MUDCE:

158) DATE:

159) SIGNATURE OF MUDCE:

160) DATE:

161) SIGNATURE OF MUDCE:

162) DATE:

163) SIGNATURE OF MUDCE:

164) DATE:

165) SIGNATURE OF MUDCE:

166) DATE:

167) SIGNATURE OF MUDCE:

168) DATE:

169) SIGNATURE OF MUDCE:

170) DATE:

171) SIGNATURE OF MUDCE:

172) DATE:

173) SIGNATURE OF MUDCE:

174) DATE:

175) SIGNATURE OF MUDCE:

176) DATE:

177) SIGNATURE OF MUDCE:

178) DATE:

179) SIGNATURE OF MUDCE:

180) DATE:

181) SIGNATURE OF MUDCE:

182) DATE:

183) SIGNATURE OF MUDCE:

184) DATE:

185) SIGNATURE OF MUDCE:

186) DATE:

187) SIGNATURE OF MUDCE:

188) DATE:

189) SIGNATURE OF MUDCE:

190) DATE:

191) SIGNATURE OF MUDCE:

192) DATE:

193) SIGNATURE OF MUDCE:

194) DATE:

195) SIGNATURE OF MUDCE:

196) DATE:

197) SIGNATURE OF MUDCE:

198) DATE:

199) SIGNATURE OF MUDCE:

200) DATE:

201) SIGNATURE OF MUDCE:

202) DATE:

203) SIGNATURE OF MUDCE:

204) DATE:

205) SIGNATURE OF MUDCE:

206) DATE:

207) SIGNATURE OF MUDCE:

208) DATE:

209) SIGNATURE OF MUDCE:

210) DATE:

211) SIGNATURE OF MUDCE:

212) DATE:

213) SIGNATURE OF MUDCE:

214) DATE:

215) SIGNATURE OF MUDCE:

216) DATE:

217) SIGNATURE OF MUDCE:

218) DATE:

219) SIGNATURE OF MUDCE:

220) DATE:

221) SIGNATURE OF MUDCE:

222) DATE:

223) SIGNATURE OF MUDCE:

224) DATE:

225) SIGNATURE OF MUDCE:

226) DATE:

227) SIGNATURE OF MUDCE:

228) DATE:

229) SIGNATURE OF MUDCE:

230) DATE:

231) SIGNATURE OF MUDCE:

232) DATE:

233) SIGNATURE OF MUDCE:

234) DATE:

235) SIGNATURE OF MUDCE:

236) DATE:

237) SIGNATURE OF MUDCE:

238) DATE:

239) SIGNATURE OF MUDCE:

240) DATE:

241) SIGNATURE OF MUDCE:

242) DATE:

243) SIGNATURE OF MUDCE:

244) DATE:

245) SIGNATURE OF MUDCE:

246) DATE:

247) SIGNATURE OF MUDCE:

248) DATE:

249) SIGNATURE OF MUDCE:

250) DATE:

251) SIGNATURE OF MUDCE:

252) DATE:

253) SIGNATURE OF MUDCE:

254) DATE:

255) SIGNATURE OF MUDCE:

256) DATE:

257) SIGNATURE OF MUDCE:



Groundwater Monitoring Plan

Groundwater samples will be taken annually and submitted to a certified laboratory. Before samples are taken the wells shall be evacuated three well bore volumes.

Groundwater monitoring shall be sampled and analyzed from Site One monitor wells: MW-1, MW-2, MW-3, MW-4, and MW-5

Groundwater monitoring shall be sampled and analyzed from Site Two monitor wells: MW-1, MW-2, MW-3, MW-4, and MW-5

Constituents to be tested are:

Ammonia nitrate
Nitrate
Nitrite
Total kjeldhal nitrogen (TKN)
Chloride

Results are to be submitted to the TCEQ Water Quality Information Systems Team (MC-224), Groundwater Protection Team (MC-150), and Region 4 Office during September of each year.



ANALYTICAL REPORT

August 30, 2022

Schreiber Foods Inc.

Sample Delivery Group: L1525592

Samples Received: 08/16/2022

Project Number:

Description: Annual GW

Report To:

Gary McCaffity

823 CR 176

Stephenville, TX 76401

Entire Report Reviewed By:

T. Alan Harvill

Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

ACCOUNT:
Schreiber Foods Inc.

PROJECT:

SDG:
L1525592

DATE/TIME:
08/30/22 16:06

00219 PAGE:
1 of 18

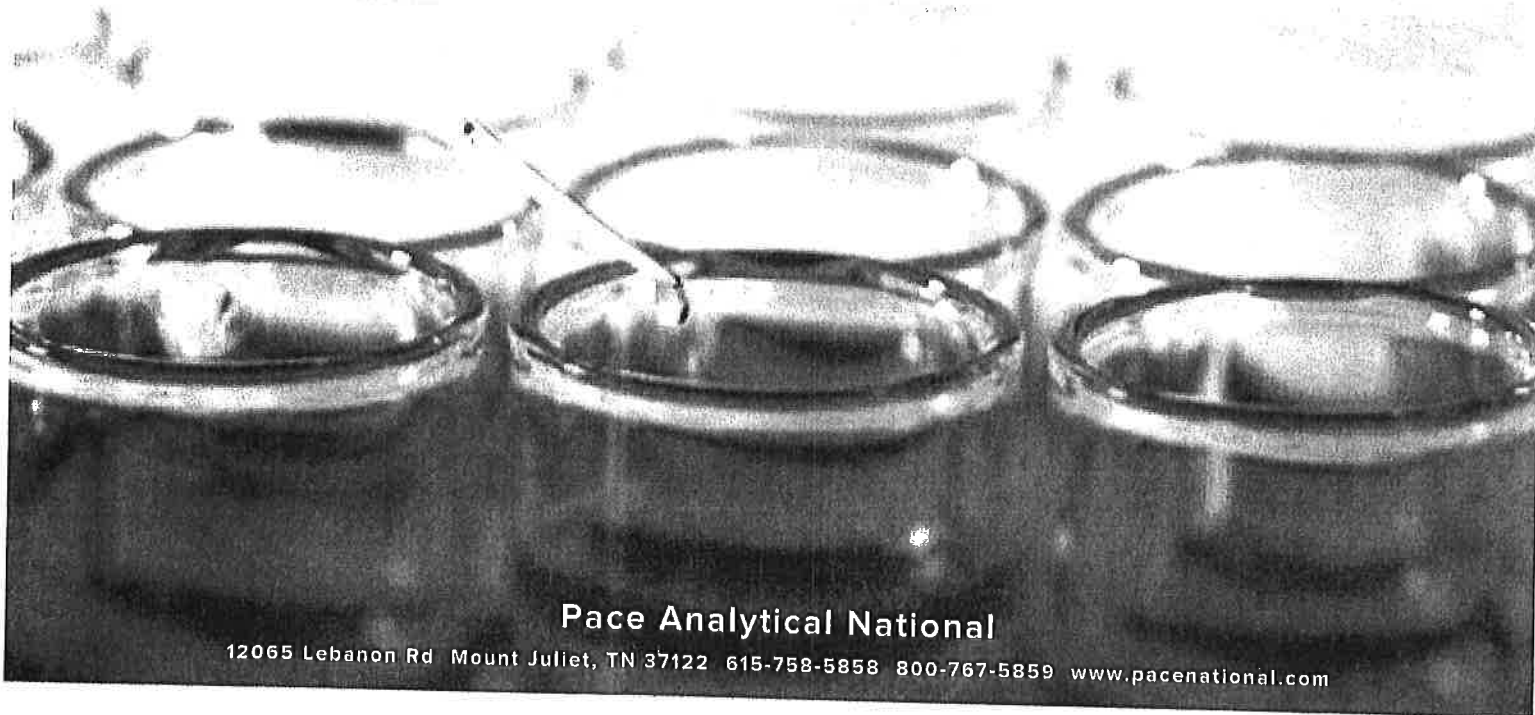
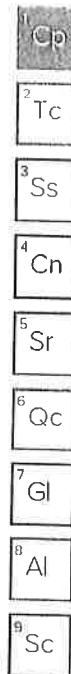


TABLE OF CONTENTS

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Sr: Sample Results	5	³ Ss
SITE 1 MW1 L1525592-01	5	
SITE 1 MW2 L1525592-02	6	⁴ Cn
SITE 1 MW3 L1525592-03	7	
SITE 1 MW4 L1525592-04	8	⁵ Sr
SITE 1 MW5 L1525592-05	9	⁶ Qc
Qc: Quality Control Summary	10	
Wet Chemistry by Method 300.0	10	⁷ Gl
Wet Chemistry by Method 351.2	11	
Wet Chemistry by Method 353.2	12	⁸ Al
Wet Chemistry by Method SM4500NH3H	13	⁹ Sc
Gl: Glossary of Terms	14	
Al: Accreditations & Locations	15	
Sc: Sample Chain of Custody	16	

SAMPLE SUMMARY

SITE 1 MW1 L1525592-01 GW

Collected by Justin Grote
Collected date/time 08/15/22 08:40
Received date/time 08/16/22 09:35

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1912190	1	08/25/22 21:31	08/25/22 21:31	LDT	Allen, TX
Wet Chemistry by Method 300.0	WG1912183	1	08/17/22 22:24	08/17/22 22:24	EIG	Allen, TX
Wet Chemistry by Method 351.2	WG1913125	1	08/25/22 08:19	08/25/22 21:31	LDT	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1912190	1	08/17/22 16:22	08/17/22 16:22	EIG	Allen, TX
Wet Chemistry by Method SM4500NH3H	WG1916459	1	08/25/22 14:35	08/25/22 14:35	EIG	Allen, TX

SITE 1 MW2 L1525592-02 GW

Collected by Justin Grote
Collected date/time 08/15/22 08:55
Received date/time 08/16/22 09:35

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1912190	1	08/25/22 21:33	08/25/22 21:33	LDT	Allen, TX
Wet Chemistry by Method 300.0	WG1912183	1	08/18/22 10:31	08/18/22 10:31	EIG	Allen, TX
Wet Chemistry by Method 351.2	WG1913125	1	08/25/22 08:19	08/25/22 21:33	LDT	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1912190	2	08/17/22 16:35	08/17/22 16:35	EIG	Allen, TX
Wet Chemistry by Method SM4500NH3H	WG1916459	1	08/25/22 14:37	08/25/22 14:37	EIG	Allen, TX

SITE 1 MW3 L1525592-03 GW

Collected by Justin Grote
Collected date/time 08/15/22 09:05
Received date/time 08/16/22 09:35

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1912190	1	08/25/22 21:34	08/25/22 21:34	LDT	Allen, TX
Wet Chemistry by Method 300.0	WG1912183	1	08/18/22 10:50	08/18/22 10:50	EIG	Allen, TX
Wet Chemistry by Method 351.2	WG1913125	1	08/25/22 08:19	08/25/22 21:34	LDT	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1912190	1	08/17/22 16:25	08/17/22 16:25	EIG	Allen, TX
Wet Chemistry by Method SM4500NH3H	WG1916459	1	08/25/22 14:38	08/25/22 14:38	EIG	Allen, TX

SITE 1 MW4 L1525592-04 GW

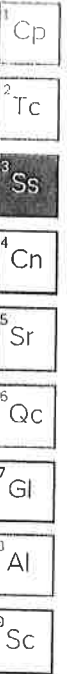
Collected by Justin Grote
Collected date/time 08/15/22 08:05
Received date/time 08/16/22 09:35

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1912190	1	08/25/22 21:36	08/25/22 21:36	LDT	Allen, TX
Wet Chemistry by Method 300.0	WG1912183	1	08/18/22 11:10	08/18/22 11:10	EIG	Allen, TX
Wet Chemistry by Method 351.2	WG1913125	2	08/25/22 08:19	08/25/22 21:36	LDT	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1912190	2	08/17/22 16:36	08/17/22 16:36	EIG	Allen, TX
Wet Chemistry by Method SM4500NH3H	WG1916459	1	08/25/22 14:40	08/25/22 14:40	EIG	Allen, TX

SITE 1 MW5 L1525592-05 GW

Collected by Justin Grote
Collected date/time 08/15/22 08:20
Received date/time 08/16/22 09:35

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1912190	1	08/25/22 21:37	08/25/22 21:37	LDT	Allen, TX
Wet Chemistry by Method 300.0	WG1912183	1	08/17/22 23:43	08/17/22 23:43	EIG	Allen, TX
Wet Chemistry by Method 351.2	WG1913125	1	08/25/22 08:19	08/25/22 21:37	LDT	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG1912190	1	08/17/22 16:27	08/17/22 16:27	EIG	Allen, TX
Wet Chemistry by Method SM4500NH3H	WG1916459	1	08/25/22 14:41	08/25/22 14:41	EIG	Allen, TX



CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



T. Alan Harvill
Project Manager

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

SITE 1 MW1

Collected date/time: 08/15/22 08:40

SAMPLE RESULTS - 01

L1525592

Calculated Results

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrogen	3.43		0.0500	1	08/25/2022 21:31	WG1912190

Wet Chemistry by Method 300.0

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	204		0.800	1	08/17/2022 22:24	WG1912183

Wet Chemistry by Method 351.2

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Kjeldahl Nitrogen, TKN	ND		0.250	1	08/25/2022 21:31	WG1913125

Sample Narrative:

L1525592-01 WG1913125: Dilution due to NO3 hit.

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	3.43		0.0500	1	08/17/2022 16:22	WG1912190

Wet Chemistry by Method SM4500NH3H

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	ND		0.100	1	08/25/2022 14:35	WG1916459

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 GI

8 AI

9 Sc

SITE 1 MW2

Collected date/time: 08/15/22 08:55

SAMPLE RESULTS - 02

L1525592

Calculated Results

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrogen	5.76		0.100	1	08/25/2022 21:33	WG1912190

Wet Chemistry by Method 300.0

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	884		0.800	1	08/18/2022 10:31	WG1912183

Wet Chemistry by Method 351.2

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Kjeldahl Nitrogen, TKN	ND		0.250	1	08/25/2022 21:33	WG1913125

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	5.52	J6	0.100	2	08/17/2022 16:35	WG1912190

Wet Chemistry by Method SM4500NH3H

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	ND		0.100	1	08/25/2022 14:37	WG1916459

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

SITE 1 MW3

Collected date/time: 08/15/22 09:05

SAMPLE RESULTS - 03

L1525592

Calculated Results

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrogen	1.89		0.0500	1	08/25/2022 21:34	WG1912190

Wet Chemistry by Method 300.0

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	315		0.800	1	08/18/2022 10:50	WG1912183

Wet Chemistry by Method 351.2

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Kjeldahl Nitrogen, TKN	ND		0.250	1	08/25/2022 21:34	WG1913125

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	1.89		0.0500	1	08/17/2022 16:25	WG1912190

Wet Chemistry by Method SM4500NH3H

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	ND		0.100	1	08/25/2022 14:38	WG1916459

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

SITE 1 MW4

Collected date/time: 08/15/22 08:05

SAMPLE RESULTS - 04

L1525592

Calculated Results

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrogen	7.90		0.100	1	08/25/2022 21:36	WG1912190

Wet Chemistry by Method 300.0

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	1540		0.800	1	08/18/2022 11:10	WG1912183

Wet Chemistry by Method 351.2

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Kjeldahl Nitrogen, TKN	ND		0.500	2	08/25/2022 21:36	WG1913125

Sample Narrative:

L1525592-04 WG1913125: Dilution due to NO3 hit.

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	7.48		0.100	2	08/17/2022 16:36	WG1912190

Wet Chemistry by Method SM4500NH3H

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	ND		0.100	1	08/25/2022 14:40	WG1916459

Cp

Tc

Ss

Cn

Sr

Qc

GI

AI

Sc

SITE 1 MW5

Collected date/time: 08/15/22 08:20

SAMPLE RESULTS - 05

L1525592

Calculated Results

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	1 Cp
Nitrogen	0.471		0.0500	1	08/25/2022 21:37	WG1912190	2 Tc

Wet Chemistry by Method 300.0

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	3 Ss
Chloride	61.6		0.800	1	08/17/2022 23:43	WG1912183	4 Cn

Wet Chemistry by Method 351.2

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	5 Sr
Kjeldahl Nitrogen, TKN	ND		0.250	1	08/25/2022 21:37	WG1913125	6 Qc

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	7 Gl
Nitrate-Nitrite	0.471		0.0500	1	08/17/2022 16:27	WG1912190	8 Al

Wet Chemistry by Method SM4500NH3H

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	9 Sc
Ammonia Nitrogen	ND		0.100	1	08/25/2022 14:41	WG1916459	

QUALITY CONTROL SUMMARY
L1525592-01.02.03.04.05

Method Blank (MB)

(MB) R3827801-1 08/17/22 18:26			
Analyte	MB Result	MB Qualifier	MB MDL
Chloride	U	mg/l	mg/l
		0.0541	0.800

Laboratory Control Sample (LCS)

(LCS) R3827801-2 08/17/22 18:45			
Analyte	Spike Amount	LCS Result	LCS Rec.
Chloride	mg/l	mg/l	%
	5.00	5.14	103

L1523791-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1523791-01 08/17/22 20:25 • (MS) R3827801-3 08/17/22 19:05 • (MSD) R3827801-4 08/17/22 19:25									
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier
Chloride	mg/l	mg/l	mg/l	mg/l	%	%		%	MSD Qualifier
	10.0	18.4	29.5	29.5	110	111	1	90.0-110	15

CP

00228

SS

Cn

Sr

Sc

GI

Al

Sc

Method Blank (MB)

(MB) R3830634-1 08/25/22 21:27			
	MB Result	MB Qualifier	MB MDL
Analyte	mg/l	mg/l	mg/l
Kjeldahl Nitrogen, TKN	U	0.140	0.250

L1526346-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1526346-01 08/25/22 21:40 • (DUP) R3830634-3 08/25/22 21:44			
	Original Result	DUP Result	Dilution
Analyte	mg/l	mg/l	%
Kjeldahl Nitrogen, TKN	8.53	8.37	1.89

L1526366-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1526366-01 08/25/22 21:49 • (DUP) R3830634-6 08/25/22 21:50			
	Original Result	DUP Result	Dilution
Analyte	mg/l	mg/l	%
Kjeldahl Nitrogen, TKN	1.27	1.48	15.3

Laboratory Control Sample (LCS)

(LCS) R3830634-2 08/25/22 21:29			
	Spike Amount	LCS Result	LCS Rec.
Analyte	mg/l	mg/l	%
Kjeldahl Nitrogen, TKN	12.7	12.0	94.5

L1526346-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1526346-01 08/25/22 21:40 • (MS) R3830634-4 08/25/22 21:45 • (MSD) R3830634-5 08/25/22 21:46			
	Spike Amount	Original Result	MS Result
Analyte	mg/l	mg/l	mg/l
Kjeldahl Nitrogen, TKN	5.00	8.53	13.2

L1526366-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1526366-01 08/25/22 21:49 • (MS) R3830634-7 08/25/22 21:52			
	Spike Amount	Original Result	MS Result
Analyte	mg/l	mg/l	mg/l
Kjeldahl Nitrogen, TKN	5.00	1.27	6.16

Method Blank (MB)

(MB) R3827599-1 08/17/22 16:07				
Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Nitrate-Nitrite	U		0.0300	0.0500

Laboratory Control Sample (LCS)

(LCS) R3827599-2 08/17/22 16:08				
Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits
Nitrate-Nitrite	2.50	2.52	101	90.0-110

L1525592-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1525592-01 08/17/22 16:22 • (MS) R3827599-3 08/17/22 16:28 • (MSD) R3827599-4 08/17/22 16:29									
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier
Nitrate-Nitrite	2.50	3.43	5.81	5.82	95.2	95.6	1	90.0-110	E

L1525592-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1525592-02 08/17/22 16:35 • (MS) R3827599-5 08/17/22 16:30 • (MSD) R3827599-6 08/17/22 16:34									
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier
Nitrate-Nitrite	2.50	5.52	7.62	7.66	84.0	85.6	2	90.0-110	J6

ACCOUNT:
Schreiber Foods Inc.

PROJECT:
SDG: L1525592

DATE/TIME:
08/30/22 16:06

PAGE:
12 of 18

Method Blank (MB)

(MB) R3831029-1 08/25/22 14:18			
Analyte	MB Result	MB Qualifier	MB MDL
Ammonia Nitrogen	mg/l	mg/l	mg/l
	U	0.0280	0.100

Laboratory Control Sample (LCS)

(LCS) R3831029-2 08/25/22 14:20			
Analyte	Spike Amount	LCS Result	LCS Rec.
Ammonia Nitrogen	mg/l	mg/l	%
	5.00	5.10	102

L1525387-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1525387-01 08/25/22 14:31 • (MS) R3831029-3 08/25/22 14:21 • (MSD) R3831029-4 08/25/22 14:22									
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier
Ammonia Nitrogen	mg/l	mg/l	mg/l	mg/l	%	%		%	MSD Qualifier
	5.00	ND	4.90	4.89	97.1	96.9	1	80.0-120	RPD
									%
									RPD Limits
									20

Cp

00231

SS

Cn

Sr

Qc

Gl

Al

Sc

L1525592-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1525592-01 08/25/22 14:35 • (MS) R3831029-5 08/25/22 14:24 • (MSD) R3831029-6 08/25/22 14:25									
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier
Ammonia Nitrogen	mg/l	mg/l	mg/l	mg/l	%	%		%	MSD Qualifier
	5.00	ND	4.87	4.88	97.4	97.6	1	80.0-120	RPD
									%
									RPD Limits
									20

ACCOUNT:
Schreiber Foods Inc.

PROJECT:
SDG:
L1525592

DATE/TIME:
08/30/22 16:06

PAGE:
13 of 18

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

1	Cp
2	Tc
3	Ss
4	Cn
5	Sr
6	Qc
7	Gl
8	Al
9	Sc

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

Pace Analytical Services, LLC -Dallas 400 W. Bethany Drive Suite 190 Allen, TX 75013

Arkansas	88-0647	Kansas	E10388
Florida	E871118	Texas	T104704232-22-37
Iowa	408	Oklahoma	8727
Louisiana	30586		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

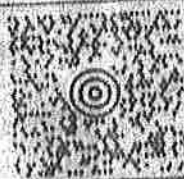
KIM HATTON
(254) 662-7710
SCHREIBER FOODS
923 COUNTRY RD 176
STEPHENVILLE TX 76403

41 LBS

1 OF 1

DWT: 23.13.13

SHIP TO:
PACE ANALYTICAL DALLAS
(972) 727-1123
STE 190
400 W BETHANY DR
ALLEN TX 75013-3714



TX 753 5-77



UPS GROUND

TRACKING #: 1Z Y49 8F8 03 6246 7609




BILLING: P/P

REF: 1-01430-640210
BFI Department to Charge: Stephenville

REF: 1-01430-640210



ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. DATE 08-04-2011 BY 60321/UC/LP

	Document Name:	Document Revised: 7/27/20
	Sample Condition Upon Receipt	Page 1 of 1
	Document No.: F-DAL-C-001 rev 14	Issuing Authority: Pace Dallas Quality Office

Sample Condition Upon Receipt

☒ Dallas
 ☐ Ft Worth
 ☐ Corpus Christi
 ☐ Austin

61525592

Client Name: Schreiber Foods Inc Project Work order (place label)
 Courier: FedEX ☐ UPS ☒ USPS ☒ LSO ☐ PACE ☐ Other
 Tracking #: 1Z 4Y 41 8FB 03 6246 7509
 Custody Seal on Cooler/Box: Yes ☐ No ☒
 Received on ice: Wet ☒ Blue ☐ No ice
 Receiving Lab 1 Thermometer Used: IR-17 Cooler Temp °C: 2.3 (Recorded) -0.5 (Correction Factor) 1.8 (Actual)
 Receiving Lab 2 Thermometer Used: Cooler Temp °C: (Recorded) (Correction Factor) (Actual)

Temperature should be above freezing to 6 °C unless collected same day as receipt in which evidence of cooling is acceptable

Triage Person: AR Date: 8/16/20

Chain of Custody relinquished	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Sampler name & signature on COC	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Short HT analyses (<72 hrs)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Login Person: _____ Date: _____

Sufficient Volume received	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Correct Container used	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Container Intact	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Sample pH Acceptable pH Strips: <u>6.11/6.05</u>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>
Residual Chlorine Present Cl Strips:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input type="checkbox"/>
Sulfide Present Lead Acetate Strips:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input type="checkbox"/>
Are soil samples (volatiles, TPH) received in 5035A Kits (not applicable to TCLP VOA or PST Program TPH)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input type="checkbox"/>
Unpreserved 5035A soil frozen within 48 hrs	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input type="checkbox"/>
Headspace in VOA (>6mm)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input type="checkbox"/>
Project sampled in USDA Regulated Area outside of Texas	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input type="checkbox"/>
State Sampled: _____	
Non-Conformance(s): _____	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

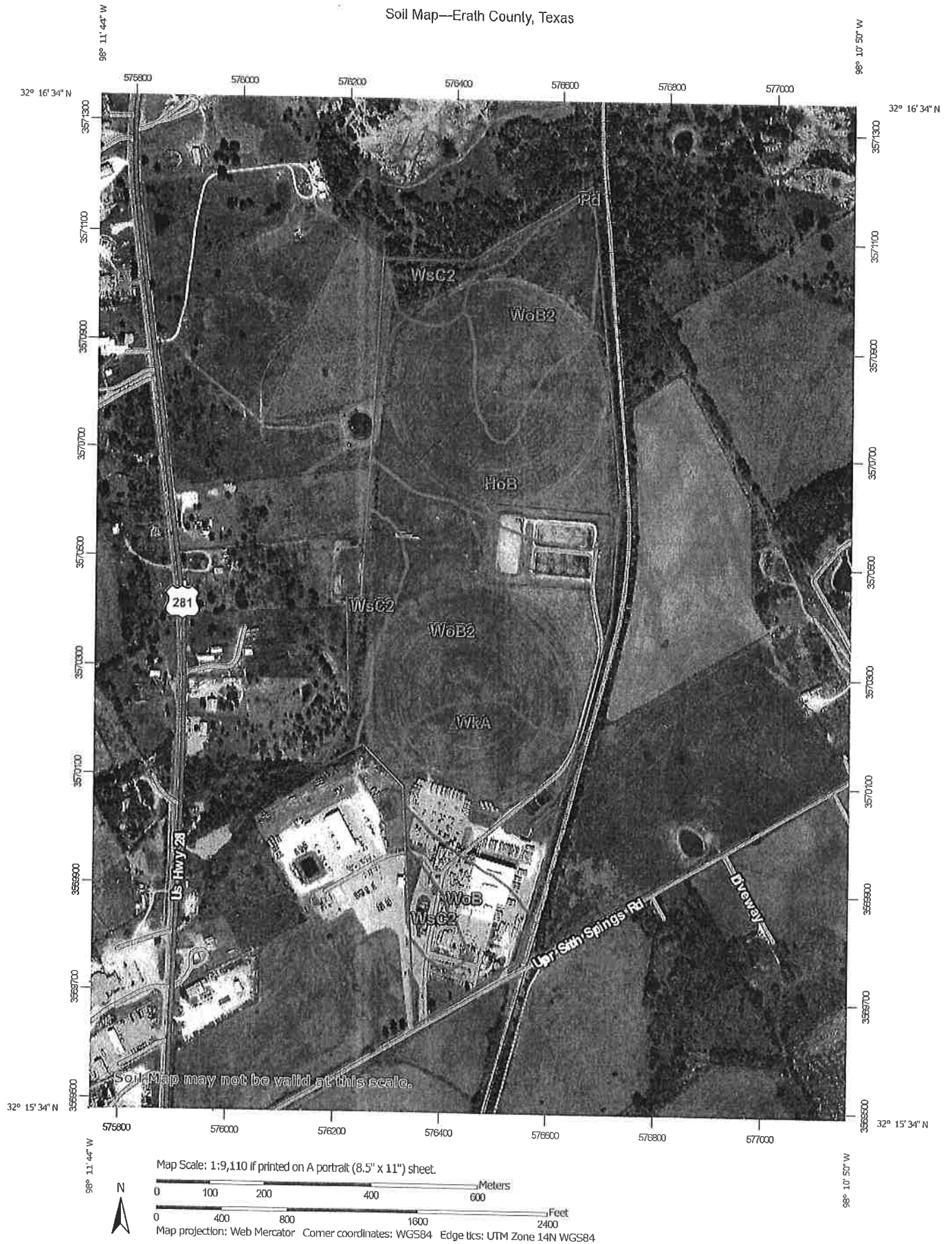
Labeling Person (if different than log-in) _____ Date: _____

ATTACHMENT 7 – SOILS INFORMATION

7.1 Soil Features

Soil mapping units included in this section for the production area and waste disposal area was taken from the electronic NRCS soil survey for Erath County. Soils descriptions are included in the supporting documentation and were taken from the most current version of the NRCS electronic soil information database for Erath County as obtained from the NRCS Soil Data Mart.

Soil Map—Erath County, Texas






































Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

6/5/2018
Page 1 of 1
00238

MAP LEGEND

Area of Interest (AOI)			Area of Interest (AOI)
Soils			Soil Map Unit Polygons
			Soil Map Unit Lines
			Soil Map Unit Points
Special Point Features			Blowout
			Borrow Pit
			Clay Spot
			Closed Depression
			Gravel Pit
			Gravelly Spot
			Landfill
			Lava Flow
			Marsh or swamp
			Mine or Quarry
			Miscellaneous Water
			Perennial Water
			Rock Outcrop
			Saline Spot
			Sandy Spot
			Severely Eroded Spot
			Sinkhole
			Slide or Slip
			Sodic Spot
Water Features			Streams and Canals
Transportation			Rails
			Interstate Highways
			US Routes
			Major Roads
			Local Roads
Background			Aerial Photography
Special Line Features			Other
			Very Stony Spot
			Wet Spot
			Stony Spot
			Spoil Area

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Erath County, Texas
Survey Area Data: Version 14, Nov 7, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 17, 2015—Dec 13, 2017

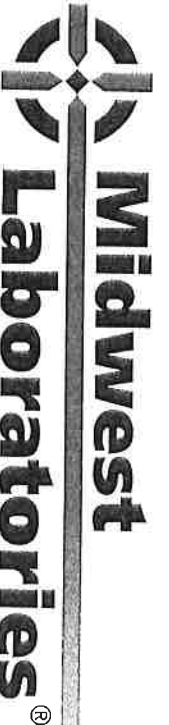
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HoB	Slidell clay, 1 to 3 percent slopes	34.2	25.4%
Pd	Purves-Dugout complex	0.1	0.1%
WkA	Hassee fine sandy loam, thick surface, 0 to 2 percent slopes	31.6	23.4%
WoB	Windthorst very fine sandy loam, 1 to 3 percent slopes	10.1	7.5%
WoB2	Windthorst fine sandy loam, 1 to 5 percent slopes, eroded	44.2	32.8%
WsC2	Windthorst fine sandy loam, 3 to 8 percent slopes, eroded	14.6	10.8%
Totals for Area of Interest		134.9	100.0%

REPORT NUMBER
22-104-0118
COMPLETED DATE
Apr 21, 2022
RECEIVED DATE
Apr 13, 2022

ACCOUNT
22923



13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770
www.midwestlabs.com

PAGE 1/10
TODAY'S DATE
Apr 21, 2022

00241

ENVIRO-AG ENGINEERING INC

IDENTIFICATION
SCHREIBER

SOIL/

4/4/22

**3404 AIRWAY BLVD
AMARILLO TX 79118**

SOIL ANALYSIS REPORT

LAB NUMBER	SAMPLE IDENTIFICATION	ORGANIC MATTER L.O.I.	PERCENT RATE	PHOSPHORUS				NEUTRAL AMMONIUM ACETATE/EXCHANGEABLE			pH		CATION EXCHANGE CAPACITY CEC. meq/100g	PERCENT BASE SATURATION (COMPUTED)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
				P (WEAK BRAY) L-7 ppm	P (STRONG BRAY) L-7 ppm	MEHLICH III ICP P ppm	K ppm	Mg ppm	Ca ppm	Na ppm	SOIL pH 1:2 SOLUTION	BUFFER INDEX		% K	% Mg	% Ca	% H	% Na																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
395																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							</

REV.12/03

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days. Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.

REPORT NUMBER
22-104-0118
COMPLETED DATE
Apr 21, 2022
RECEIVED DATE
Apr 13, 2022

ACCOUNT
22923



13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770
www.midwestlabs.com

PAGE 2/10
TODAY'S DATE
Apr 21, 2022

ENVIRO-AG ENGINEERING INC
3404 AIRWAY BLVD
AMARILLO TX 79118

IDENTIFICATION
SCHREIBER
SOIL/
4/4/22

SOIL ANALYSIS REPORT

LAB NUMBER	SAMPLE IDENTIFICATION	ORGANIC MATTER LOI	PHOSPHORUS				NEUTRAL AMMONIUM ACETATE (EXCHANGEABLE)						pH		CATION EXCHANGE CAPACITY CEC meq/100g	PERCENT BASE SATURATION (COMPUTED)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
			P ₁ (WEAK BRAY) ppm	P ₁ (STRONG BRAY) ppm	MEHLICH II P ppm	K ppm	Mg ppm	Ca ppm	Na ppm	SOIL pH 1-2 solution	BUFFER INDEX	%	%	%		%																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
																	Percent RATE	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A	Rate lb/A

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days. Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.

REPORT NUMBER
22-104-0118
COMPLETED DATE
Apr 21, 2022
RECEIVED DATE
Apr 13, 2022

ACCOUNT
22923



13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770
www.midwestlabs.com

PAGE 3/10
TODAY'S DATE
Apr 21, 2022

ENVIRO-AG ENGINEERING INC

3404 AIRWAY BLVD
AMARILLO TX 79118

IDENTIFICATION
SCHREIBER
SOIL/
4/4/22

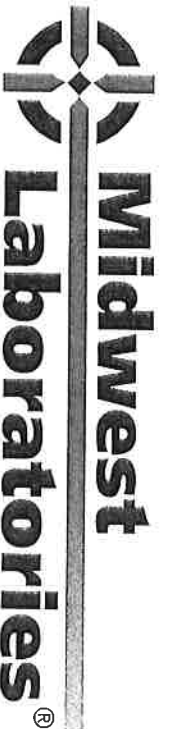
ADDITIONAL SOIL ANALYSIS

Labnum	Sample ID	Ammonia Nitrogen KCl extract ppm	E.C. EC electrode mmhos/cm	Total Kjeldahl Nitrogen ppm	Sulfur Calculation lbs/A	Total N (calc) Kjeldahl ppm
*395 *						
65299	N PVT FSL Depth: 0-6	3	6.9	1290	360.00	1299.00
65300	N PVT FSL Depth: 6-18	2	3.2	400	142.00	404.00
65301	N PVT FSL Depth: 18-30	1	4.0	360	184.00	363.00
65302	N PVT CLAY Depth: 0-6	1	3.2	450	126.00	453.00
65303	N PVT CLAY Depth: 6-18	1	5.7	1350	320.00	1355.00
65304	N PVT CLAY Depth: 18-30	2	5.6	500	322.00	503.00
65305	OUTSDPVT FSL Depth: 0-6	6	1.4	1140	70.00	1146.00
65306	OUTSDPVT FSL Depth: 6-18	2	1.3	590	42.00	592.00
65307	OUTSDPVT FSL Depth: 18-30	3	2.8	490	150.00	492.00
65308	OUTSDPVT CLY Depth: 0-6	5	2.2	1440	164.00	1448.00

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days. Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.

REPORT NUMBER
22-104-0118
COMPLETED DATE
Apr 21, 2022
RECEIVED DATE
Apr 13, 2022

ACCOUNT
22923



13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770
www.midwestlabs.com

ENVIRO-AG ENGINEERING INC
3404 AIRWAY BLVD
AMARILLO TX 79118

IDENTIFICATION
SCHREIBER
SOIL/
4/4/22

PAGE 4/10
TODAY'S DATE
Apr 21, 2022

00244

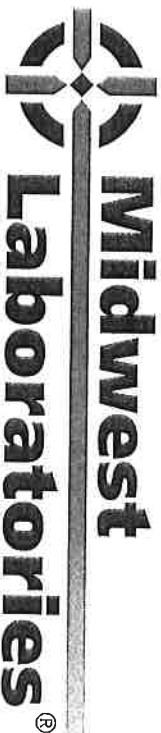
ADDITIONAL SOIL ANALYSIS

Labnum	Sample ID	Ammonia Nitrogen KCl extract ppm	E.C. EC electrode mmhos/cm	Total Kjeldahl Nitrogen Kjeldahl ppm	Sulfur Calculation lbs/A	Total N (calc) Calculated ppm
*395 *						
65309	OUTSDPVT CLY Depth: 6-18	4	1.3	840	36.00	845.00
65310	OUTSDPVT CLY Depth: 18-30	6	1.8	890	132.00	898.00
65311	S PIVOT Depth: 0-6	2	3.9	1300	232.00	1312.00
65312	S PIVOT Depth: 6-18	3	1.3	560	78.00	564.00
65313	S PIVOT Depth: 18-30	2	2.3	480	88.00	482.00

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days.
Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.

REPORT NUMBER
22-104-0118
COMPLETED DATE
Apr 21, 2022
RECEIVED DATE
Apr 13, 2022

ACCOUNT
22923



13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770
www.midwestlabs.com

PAGE 5/10
TODAY'S DATE
Apr 21, 2022

00245

ENVIRO-AG ENGINEERING INC
3404 AIRWAY BLVD
AMARILLO TX 79118

IDENTIFICATION
SCHREIBER
SOIL/
4/4/22

SODIUM ADSORPTION RATIO REPORT

Method Lab Number Units	Sample Id	CALCULATED Sodium Adsorption Ratio	SATURATED Sodium (Water Soluble) mg/L	PASTE Magnesium (Water Soluble) mg/L	EXTRACTION Calcium (Water Soluble) mg/L
39565299N	PVT FSL	35.5	1402	4	111
39565300N	PVT FSL	25.9	665	10	34
39565301N	PVT FSL	30.9	888	9	48
39565302N	PVT CLAY	24.2	652	16	29
39565303N	PVT CLAY	29.9	1188	27	75
39565304N	PVT CLAY	34.9	1237	11	77
39565305O	UTSDPVT FSL	5.6	220	12	95
39565306O	UTSDPVT FSL	4.6	179	10	96
39565307O	UTSDPVT FSL	6.4	370	20	220
39565308O	UTSDPVT CLY	1.3	104	34	403

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days.
Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.

REPORT NUMBER

22-104-0118

COMPLETED DATE

Apr 21, 2022

RECEIVED DATE

Apr 13, 2022

ACCOUNT

22923

13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770
www.midwestlabs.com

PAGE 6/10TODAY'S DATE
Apr 21, 2022

ENVIRO-AG ENGINEERING INC

3404 AIRWAY BLVD
AMARILLO TX 79118

IDENTIFICATION
SCHREIBER
SOIL/
4/4/22

SODIUM ADSORPTION RATIO REPORT

Method Lab Number Units	Sample Id	CALCULATED Sodium Adsorption Ratio	SATURATED Sodium (Water Soluble) mg/L	PASTE Magnesium (Water Soluble) mg/L	EXTRACTION Calcium (Water Soluble) mg/L
395653090UTSDPVT CLY		2.0	105	15	180
395653100UTSDPVT CLY		2.3	137	21	237
39565311S PIVOT		23.8	816	19	58
39565312S PIVOT		24.9	680	11	38
39565313S PIVOT		29.4	795	9	41

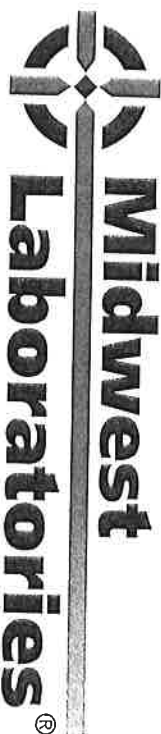
The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days.
Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.

22-104-0118

COMPLETED DATE

Apr 21, 2022

RECEIVED DATE

Apr 13, 2022ACCOUNT
2292313611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770
www.midwestlabs.com**PAGE 7/10**
TODAY'S DATE
Apr 21, 2022

00247

ENVIRO-AG ENGINEERING INC

3404 AIRWAY BLVD
AMARILLO TX 79118IDENTIFICATION
SCHREIBER
SOIL/
4/4/22**WATER SOLUBLE REPORT**

LAB NUMBER	SAMPLE ID	P ppm	K ppm	Cd ppm	Mg ppm	Na ppm	S ppm
39565299	N PVT FSL	35	146	188	68	1210	175
39565300	N PVT FSL	7	359	217	211	1357	68
39565301	N PVT FSL	5	63	109	46	1518	87
39565302	N PVT CLAY	9	94	151	77	889	59
39565303	N PVT CLAY	48	112	171	54	1357	152
39565304	N PVT CLAY	6	84	153	78	1402	154
39565305	OUTSDPVT FSL	12	64	156	36	267	32
39565306	OUTSDPVT FSL	3	28	114	26	235	19
39565307	OUTSDPVT FSL	2	20	267	39	448	73
39565308	OUTSDPVT CLY	8	57	370	48	93	79

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days.

Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.

REPORT NUMBER
22-104-0118
COMPLETED DATE
Apr 21, 2022
RECEIVED DATE
Apr 13, 2022
ACCOUNT
22923



13611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770
www.midwestlabs.com

PAGE 8/10
TODAY'S DATE
Apr 21, 2022

00248

ENVIRO-AG ENGINEERING INC
3404 AIRWAY BLVD
AMARILLO TX 79118

IDENTIFICATION
SCHREIBER
SOIL/
4/4/22

WATER SOLUBLE REPORT

LAB NUMBER	SAMPLE ID	P ppm	K ppm	Ca ppm	Mg ppm	Na ppm	S ppm
39565309	OUTSDPVT CLY	4	30	262	35	124	17
39565310	OUTSDPVT CLY	3	34	487	48	178	62
39565311	S PIVOT	47	92	124	41	936	112
39565312	S PIVOT	9	98	124	60	1071	34
39565313	S PIVOT	7	64	124	54	1161	41

The above analytical results apply only to the sample(s) submitted. Samples are retained a maximum of 30 days.
Our reports and letters are for the exclusive and confidential use of our clients and may not be reproduced in whole or in part, nor may any reference be made to the work, the results, or the company in any advertising, news release, or other public announcements without obtaining our prior written authorization.

Erath County Per history



Midwest Laboratories, Inc.
13611 B Street, Omaha, NE 68144
402-334-7770



15

1

Account Number/ Company Name: 22923 Chali

39565299 – 39565313

Purchase Order:

Samples for Regulatory Use: Yes ☐ No ☐

REPORTING	
Name:	Enviro-Ag Engineering
Address:	9855 FM 847
City, State:	Dublin, TX ZIP: 76446
Phone:	(254) 965-3500 FAX:
Email:	jnullin@enviroag.com

IDENTIFICATION	
Client Name:	Schreiber
Sample ID:	Soil
Sample Date:	4/4/02
Sample Time:	

COPY TO	
Name:	
Address:	
ZIP:	
Phone:	

PROJECT INFORMATION					BOTTLE ORDER INFO				TESTS REQUESTED				
PROJ. NO.	Project Name/ Company				No. of Containers	Proper Preservation (Y/N)	Matrix	Regulatory (Y/N)	Industrial + NH ₄	gypsum recommendation	See additional	NH ₄ ALL	Lab Number/ Order # (Internal Use)
COMPANY (Signature)	SAMPLE (Signature)												
SAMPLE ID/ LOCATION	DATE	TIME	COMP	GRAB									
North Pivot FSL 0-6	4/4/02				1	SO	Y	X	X	X		REMS 43235	REMS 43236
6-18												REMS 43237	REMS 43238
18-30												REMS 43239	REMS 43240
North Pivot clay 0-6												REMS 43241	REMS 43242
6-18												REMS 43243	REMS 43244
18-30												REMS 43245	REMS 43246
Outside Pivot FSL 0-6												REMS 43247	REMS 43248
6-18													
18-30													
Outside Pivot clay 0-6													
6-18													
18-30													
South Pivot 0-6													
6-18													
18-30													
Relinquished by (Signature)					Date/ Time	Received by (Signature)		Cooler arrived Intact:		Yes <input type="checkbox"/> No <input type="checkbox"/>			
Relinquished by (Signature)					Date/ Time	Received by (Signature)		Temperature on Arrival:		Yes <input type="checkbox"/> No <input type="checkbox"/>			
Relinquished by (Signature)					Date/ Time	Received by (Signature)		Preserved in Field:		Yes <input type="checkbox"/> No <input type="checkbox"/>			

SAR

REMS



Quality Assessment Team (MC-150), and Region 4 Office during the month of September of each calendar year.

- L. The permittee shall obtain representative soil samples from the root zones of the land-application area receiving wastewater. Composite sampling techniques shall be used. Each composite sample shall represent no more than 50 acres with no less than 15 subsamples representing each composite sample. Subsamples shall be composited by like sampling depth, type of crop, and soil type for analysis and reporting. Soil types are soils that have like topsoil or plow layer textures. These soils shall be sampled individually from 0 to 6 inches, 6 to 18 inches, and 18 to 30 inches below ground level. The permittee shall sample soils in December to February of each year. Soil samples shall be analyzed within 30 days of sample collection.

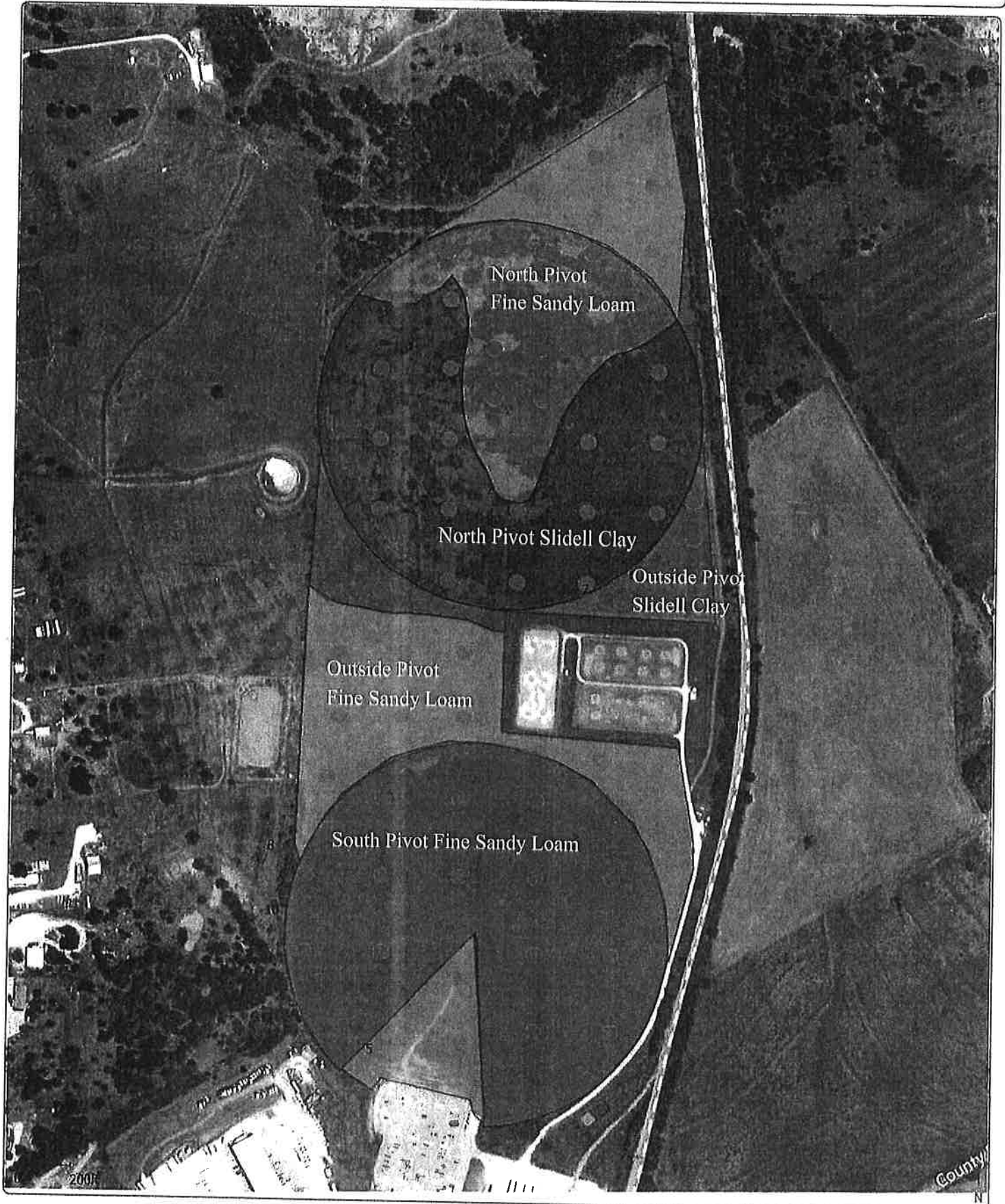
The permittee shall provide annual soil sample analyses of the land application area according to the following table:

Parameter	Method	MAL ⁴	Reporting units
pH	2:1 (v/v) water to soil mixture		Reported to 0.1 pH units after calibration of pH meter
Electrical Conductivity	Obtained from the SAR water-saturated paste extract	0.01	dS/m (same as mmho/cm)
Nitrate-nitrogen, ammonium-nitrogen	From a 1 N KCl soil extract	1	mg/kg (dry weight basis)
Total Kjeldahl Nitrogen (TKN)	For determination of Organic plus Ammonium Nitrogen. Procedures that use Mercury (Hg) are not acceptable.	20	mg/kg (dry weight basis)
Total Nitrogen	= TKN plus Nitrate-nitrogen		mg/kg (dry weight basis)
Plant-available: Phosphorus	Mehlich III with inductively coupled plasma	1 (P)	mg/kg (dry weight basis)
Plant-available: Potassium (K) Calcium (Ca) Magnesium (Mg) Sodium (Na) Sulfur (S)	May be determined in the same Mehlich III extract with inductively coupled plasma	5 (K) 10 (Ca) 5 (Mg) 10 (Na) 1 (S)	mg/kg (dry weight basis)
Water-soluble: Sodium (Na) Calcium (Ca) Magnesium (Mg)	Obtained from the SAR water saturated paste extract	1 (Na) 1 (Ca) 1 (Mg)	Water soluble constituents are reported in mg/L

⁴ Minimum analytical level.



Schreiber Foods



ATTACHMENT 8 – POLLUTANT ANALYSIS DATA

Jourdan Mullin
3404 Airway Blvd.
Amarillo, TX 79118

Cassandra Foster
Project Manager

[illegible]

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.aacenational.com

ACCOUNT:
Enviro-Ag Engineering

PROJECT: SOG: L1551018

DATE/TIME: 11/22/22 12:29

PAGE
1 of 3000253

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Sr: Sample Results	5
SCHREIBER SAMPLE #1	5
SCHREIBER SAMPLE #1	5
U1551018-01	5
U1551018-02	7
Oc: Quality Control Summary	3
Microbiology by Method 9222D	8
Gravimetric Analysis by Method 2540C	9
Gravimetric Analysis by Method 2540D	10
Wet Chemistry by Method 120.1	11
Wet Chemistry by Method 1664A	12
Wet Chemistry by Method 300.0	13
Wet Chemistry by Method 3500C-B	13
Wet Chemistry by Method 351.2	15
Wet Chemistry by Method 4500CI-G-2011	16
Wet Chemistry by Method 4500CN-E	17
Wet Chemistry by Method 4500P-E	18
Wet Chemistry by Method 5220D	19
Wet Chemistry by Method 5310C	20
Wet Chemistry by Method SM 4500-H-8	21
Wet Chemistry by Method SM4500NH3H	22
Wet Chemistry by Method SM52108	23
Mercury by Method 245.1	24
Metals (ICP) by Method 200.7	26
Metals (ICP) by Method 200.7	27
Gi: Glossary of Terms	31
Al: Accreditations & Locations	32
Sc: Sample Chain of Custody	33

CASE NARRATIVE

Collected by	Collected date/time	Received date/time
Zane Trotter	10/27/22 09:03	10/27/22 13:57

$^{+2}$ Ca $^{+3}$ Sc $^{+2}$ Ti $^{+3}$ V $^{+4}$ Cr $^{+3}$ Mn $^{+2}$ Fe $^{+3}$ Co $^{+2}$ Ni $^{+3}$ Cu $^{+2}$ Zn $^{+3}$ Ga $^{+2}$ Ge $^{+3}$ As $^{+2}$ Se $^{+3}$ Br $^{+2}$ Kr

Co Tc Ss Cn Sr Ca Gl Al Sc

Memoria Foster

PAGE:

SCHREIBER SAMPLE #1

SAMPLE RESULTS - 01

Collected date/time: 10/27/22 09:03

L1551010

Microbiology by Method 9222D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Coliform FC/100	1500		1	10/28/2022 15:10	WG9551668

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Sodium Azide/Carbon Ratio	22.6				10/27/2022 11:14	WG9553195

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Organic Nitrogen	9.37		0.250	1	10/28/2022 21:06	WG9595576

Gravimetric Analysis by Method 2540C

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Total Dissolved Solids	4020		25.0	1	10/28/2022 15:45	WG9551731

Gravimetric Analysis by Method 2540D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Suspended Solids	710		125		10/31/2022 12:14	WG9591824

Wet Chemistry by Method 120.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Sp-calc Conductance	5400		100		10/29/2022 13:21	WG9591221

Sample Narrative: L153018-01 WG9591221: at 35C

Wet Chemistry by Method 1664A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Chlorine Residue End	7.40		5.21		10/28/2022 15:51	WG9551757

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Chloride	1280		0.800	1	10/28/2022 14:28	WG9556087
Fluoride	ND		0.500	1	10/28/2022 02:04	WG9591262
Nitrate	ND		0.500	1	10/28/2022 02:04	WG9591268
Sulfate	191		0.700	1	10/28/2022 00:57	WG9592288

Wet Chemistry by Method 351.2

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Kjeldahl Nitrogen TKN	13.3		0.250	1	10/28/2022 21:05	WG9591432

Wet Chemistry by Method 4500CI-G-2017

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Chlorine (as dihal)	0.821	TS	0.200	1	10/27/2022 14:18	WG9551349

ACCOUNT: Enviro-Aq Engineering

PROJECT: L1551018

SDG: L1551018

DATE/TIME: 10/27/22 12:21

PAGE: 5 of 39

SCHREIBER SAMPLE #1

SAMPLE RESULTS - 01

Collected date/time: 10/27/22 09:03

L1551010

Wet Chemistry by Method 4500P-E

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Phosphorus Total	10.4		2.50	50	10/27/2022 7:32	WG9591709

Wet Chemistry by Method 5310C

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
COD	140		35.0		10/27/2022 15:01	WG9592229

Wet Chemistry by Method 5310C

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
TOC Total Organic Carbon	52.5		3.50	5	10/27/2022 20:09	WG9591435

Wet Chemistry by Method SM 4500-HB

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
pH	7.88	TS			10/28/2022 15:51	WG9590275

Sample Narrative: L153018-01 WG9590275: 8.58 at 21.2C

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Ammonia Nitrogen	3.73		100	10	10/28/2022 15:03	WG9591525

Wet Chemistry by Method SMS20B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
BOD	ND		30.0		10/27/2022 15:14	WG9590227
CBOD	ND		30.0	1	10/27/2022 15:19	WG9590932

Metals (ICP) by Method 200.7

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Calcium	68.8	1.CC	1.00	1	10/28/2022 16:48	WG9591558
Calcium Dissolved	63.6		1.00	1	10/28/2022 14:28	WG9591505
Magnesium	44.5	1.CC	1.00	1	10/28/2022 16:48	WG9591500
Magnesium Dissolved	42.9		1.00	1	10/28/2022 14:28	WG9591505
Sodium	1050		20.0	20	10/27/2022 11:14	WG9591392
Sodium Dissolved	1110	Y	20.0	20	10/28/2022 14:46	WG9591409

ACCOUNT: Enviro-Aq Engineering

PROJECT: L1551018

SDG: L1551018

DATE/TIME: 10/27/22 12:21

PAGE: 6 of 38

SCHREIBER SAMPLE #1
Collection date/time 10/27/22 09:03

SAMPLE RESULTS - 02

L1551010

Calculated Results

Analyte	Result	Qualifier	RL	Dilution	Analysis	Batch
Chromium, Trivalent	ND		0.00300	1	10/07/2022 22:01	WG195C455

Wet Chemistry by Method 3500C-B

Analyte	Result	Qualifier	RL	Dilution	Analysis	Batch
Chromium, Hexavalent	ND		0.00300	1	10/07/2022 18:24	WG195C455

Wet Chemistry by Method 4500C-E

Analyte	Result	Qualifier	RL	Dilution	Analysis	Batch
Cadmium	ND		0.0100	1	10/09/2022 15:58	WG195B192

Mercury by Method 245.1

Analyte	Result	Qualifier	RL	Dilution	Analysis	Batch
Mercury	ND		0.000200	1	10/07/2022 16:06	WG195C455

Metals (ICP) by Method 200.7

Analyte	Result	Qualifier	RL	Dilution	Analysis	Batch
Aluminum	3.30		0.503	1	10/07/2022 22:01	WG195B0455
Antimony	ND		0.0250	1	10/07/2022 22:01	WG195B0455
Arsenic	ND		0.0200	1	10/07/2022 22:01	WG195C455
Barium	0.0775		0.0100	1	10/07/2022 22:01	WG195C455
Beryllium	ND		0.00100	1	10/07/2022 22:01	WG195C455
Boron	ND		0.100	1	10/07/2022 22:01	WG195C455
Cadmium	ND		0.00500	1	10/07/2022 22:01	WG195C455
Copper	ND		0.00100	1	10/07/2022 22:01	WG195C455
Lead	ND		0.0200	1	10/07/2022 22:01	WG195B0455
Nickel	ND		0.0100	1	10/07/2022 22:01	WG195C455
Selenium	ND		0.0200	1	10/07/2022 22:01	WG195C455
Silver	ND		0.00500	1	10/07/2022 22:01	WG195C455
Thallium	ND		0.0200	1	10/07/2022 22:01	WG195C455
Zinc	0.017		0.0250	1	10/07/2022 22:01	WG195C455

ACCOUNT: Environmental Engineering PROJECT: L1551010 DATE/TIME: 10/27/22 12:21 PAGE: 7 of 28

WG1951668

QUALITY CONTROL SUMMARY

L1551010

Method Blank (MB)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB SCL	MB RL
Cadmium	0.0000			

Method Blank (MB)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB SCL	MB RL
Cadmium	0.0000			

L1551010 Original Sample (OS) - Duplicate (DUP)

L1551010

Analyte	OS Result	OS Qualifier	OS SCL	OS RL
Cadmium	0.0000			

ACCOUNT: Environmental Engineering PROJECT: L1551010 DATE/TIME: 10/27/22 12:21 PAGE: 7 of 28

WG1950781

Gravimetric Analysis by Method 2840C

Method Blank (MB)

QUALITY CONTROL SUMMARY

US51018-01

US51018-01 Original Sample (OS) - Duplicate (DUP)									
Analyte	mg/l	ME Result	ME Result	ME Result	ME Result	ME Result	ME Result	ME Result	ME Result
Total Dissolved Solids	U	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
US51018-01 Original Sample (OS) - Duplicate (DUP)									
Analyte	mg/l	ME Result	ME Result	ME Result	ME Result	ME Result	ME Result	ME Result	ME Result
Total Dissolved Solids	40.0	25.0	1	1.2	1.2	1.2	1.2	1.2	1.2
Laboratory Control Sample (LCS)									
LCS1950549-2 103022 16.45									
Analyte	mg/l	Scale Amount	LCS Result	LCS Result	Rec. Limit	LCS Result	LCS Result	LCS Result	LCS Result
Total Dissolved Solids	240	1	250	10	59.45	59.45	59.45	59.45	59.45

WG1951834

Gravimetric Analysis by Method 2840C

Method Blank (MB)

QUALITY CONTROL SUMMARY

US51018-01

US51018-01 Original Sample (OS) - Duplicate (DUP)									
Analyte	mg/l	ME Result	ME Result	ME Result	ME Result	ME Result	ME Result	ME Result	ME Result
Suspended Solids	U	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
US51018-01 Original Sample (OS) - Duplicate (DUP)									
Analyte	mg/l	ME Result	ME Result	ME Result	ME Result	ME Result	ME Result	ME Result	ME Result
Suspended Solids	70	65	1	72	72	72	72	72	72
Laboratory Control Sample (LCS)									
LCS1950549-2 103022 16.45									
Analyte	mg/l	Scale Amount	LCS Result	LCS Result	Rec. Limit	LCS Result	LCS Result	LCS Result	LCS Result
Suspended Solids	70	1	65	1	250	250	250	250	250

WG1950268

Wet Chemistry by Method 300.0

QUALITY CONTROL SUMMARY

L1551818.01

Method Blank (MS)

Sample	mg/L	mg/L	mg/L	mg/L
Blank	0	0.06	0.06	0.06
Blank	0	0.06	0.06	0.06
Blank	0	0.06	0.06	0.06

Laboratory Control Sample (LCS)

Sample	mg/L	mg/L	mg/L	mg/L
Blank	0	0.06	0.06	0.06
Blank	0	0.06	0.06	0.06
Blank	0	0.06	0.06	0.06

L1550923.01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Sample	mg/L	mg/L	mg/L	mg/L
Blank	0	0.06	0.06	0.06
Blank	0	0.06	0.06	0.06
Blank	0	0.06	0.06	0.06

Sc Al Si Ss Cn

WG1956087

Wet Chemistry by Method 300.0

QUALITY CONTROL SUMMARY

L1551818.01

Method Blank (MS)

Sample	mg/L	mg/L	mg/L	mg/L
Blank	0	0.06	0.06	0.06
Blank	0	0.06	0.06	0.06
Blank	0	0.06	0.06	0.06

Laboratory Control Sample (LCS)

Sample	mg/L	mg/L	mg/L	mg/L
Blank	0	0.06	0.06	0.06
Blank	0	0.06	0.06	0.06
Blank	0	0.06	0.06	0.06

L1552893.01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Sample	mg/L	mg/L	mg/L	mg/L
Blank	0	0.06	0.06	0.06
Blank	0	0.06	0.06	0.06
Blank	0	0.06	0.06	0.06

L1552893.01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Sample	mg/L	mg/L	mg/L	mg/L
Blank	0	0.06	0.06	0.06
Blank	0	0.06	0.06	0.06
Blank	0	0.06	0.06	0.06

Sc Al Si Ss Cn

WG1953149

Wet Chemistry by Method 4500-C1 P-2017

Method Blank (MS)

QUALITY CONTROL SUMMARY

LISTED

Method Blank (MS)									
Analyte	mg/L	MS Result	MS Qualifier	MS MDL	MS ROL				
Chloride (mg/L)	U	0.015	0.015	0.015	0.015				
L155472-01 Original Sample (CS) - Duplicate (DUP)									
Analyte	mg/L	Duplicate Result	Duplicate Result	Duplicate Result	Duplicate Result	Duplicate Result	Duplicate Result	Duplicate Result	Duplicate Result
Chloride (mg/L)	NO	NO	1	1.2					
Laboratory Control Sample (LCS)									
LCS#1 R25902-01 100922 15 55									
Analyte	mg/L	Spike Amount	LCS Result	LCS Rec	Rec Limit	LCS Qualifier			
Chloride (mg/L)	120	12	12	12	15.015				

Cl	Si	Ca	Fe	G	Al	S
----	----	----	----	---	----	---

WG1955592

Wet Chemistry by Method 4500-C1

Method Blank (MS)

QUALITY CONTROL SUMMARY

LISTED

Method Blank (MS)									
Analyte	mg/L	MS Result	MS Qualifier	MS MDL	MS ROL				
Chloride (mg/L)	U	0.015	0.015	0.015	0.015				
L155472-01 Original Sample (CS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)									
Analyte	mg/L	Spike Amount	LCS Result	LCS Rec	Rec Limit	LCS Qualifier			
Chloride (mg/L)	0.00	0.007	0.017	0.015	0.015				
L155472-02 Original Sample (CS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)									
Analyte	mg/L	Spike Amount	LCS Result	LCS Rec	Rec Limit	LCS Qualifier			
Chloride (mg/L)	0.00	0.010	0.007	0.005	0.015				
L155472-01 Original Sample (CS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)									
Analyte	mg/L	Spike Amount	LCS Result	LCS Rec	Rec Limit	LCS Qualifier			
Chloride (mg/L)	0.00	0.010	0.007	0.005	0.015				

Cl	Si	Ca	Fe	G	Al	S
----	----	----	----	---	----	---

WG1957019

QUALITY CONTROL SUMMARY

Wet Chemistry by Method 4500-P-4

Method Blank (MS)

MSB0309723-1 11/02/22 17:22

Analyte	mg/L Result	MS Duplicate	MS MDL	MS BDL
Phosphorus Total	0	0.082	0.082	0.0500

Laboratory Control Sample (LCS)

Analyte	mg/L Spike Amount	LCS Result	LCS Rec.	Rec. Limit	LCS Duplicate
Phosphorus Total	3.500	0.401	NA	20.0-220	

L1554316-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Analyte	mg/L Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limit	MS Duplicate	MSD Duplicate	RPO	RPO Limit
Phosphorus Total	0.500	0.217	0.207	0.207	90.0	90.0	1	20.0-220	2.300	2.300	20	20

GI SI Cn Ss

WG1952279

QUALITY CONTROL SUMMARY

Wet Chemistry by Method 82300

Method Blank (MS)

MSB03056323-1 11/02/22 17:00

Analyte	mg/L Result	MS Duplicate	MS MDL	MS BDL
COD	0	6.1	6.1	27.0

Laboratory Control Sample (LCS)

Analyte	mg/L Spike Amount	LCS Result	LCS Rec.	Rec. Limit	LCS Duplicate
COD	100	500	102	20.0-120	

L1550427-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Analyte	mg/L Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limit	MS Duplicate	MSD Duplicate	RPO	RPO Limit
COD	500	70.0	575	520	101	93.8	1	20.0-220	6.24	6.24	20	20

GI SI Cn Ss

L1557003-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Analyte	mg/L Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limit	MS Duplicate	MSD Duplicate	RPO	RPO Limit
COD	500	53.0	577	543	95	97.9	1	20.0-220	6.79	6.79	20	20

ACCOUNT PROJECT SQA DATE TIME PAGE
Dwayne B. Brown, Jr. 11/27/22 14:41 2 of 16

ACCOUNT PROJECT SQA DATE TIME PAGE
Dwayne B. Brown, Jr. 11/27/22 15:25 3 of 16

WG1955435

West Chemistry by Method 5110C

Method Blank (MS)

QUALITY CONTROL SUMMARY

1/3/2023

1/3/2023 11:10:12 AM

Analyte mg/L MS Result MS MDL
 TOC (Total Organic Carbon) U 0.20 0.100

Laboratory Control Sample (LCS)

(LCS) 80559213 1/3/23 4.51
 Analyte mg/L LCS Result LCS Rec. LCS Rec. LCS Rec.
 TOC (Total Organic Carbon) 2.0 2.1 100 100 100 100

1/3/2023 11:10:12 AM Original Sample (OS) - Main Sample (MS) - Main Sample Duplicate (MSD)

(OS) 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM
 Analyte mg/L Original Result MS Result MS Result MS Result MS Result MS Result MS Result MS Result
 TOC (Total Organic Carbon) 2.0 6.90 6.4 6.2 2.4 2.1 2.0 2.0 2.0 2.0 2.0 2.0

1/3/2023 11:10:12 AM Original Sample (OS) - Main Sample (MS) - Main Sample Duplicate (MSD)

(OS) 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM
 Analyte mg/L Original Result MS Result MS Result MS Result MS Result MS Result MS Result
 TOC (Total Organic Carbon) 2.0 6.27 6.4 6.2 2.4 2.1 2.0 2.0 2.0 2.0 2.0 2.0

Ca
 Sr
 Cd
 Cr
 Cu
 Fe
 Mn
 Ni
 Pb
 Se
 Si
 Zn

WG1950275

West Chemistry by Method 5M 4500-1148

QUALITY CONTROL SUMMARY

1/3/2023

1/3/2023 11:10:12 AM Original Sample (OS) - Duplicate (DUP)

(OS) 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM
 Analyte mg/L Original Result DUP Result DUP Result DUP Result
 pH 7.8 7.8 7.8 7.8 7.8 7.8

Laboratory Control Sample (LCS) - Duplicate (DUP)

(LCS) 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM
 Analyte mg/L Original Result DUP Result DUP Result DUP Result
 pH 7.8 7.8 7.8 7.8 7.8 7.8

1/3/2023 11:10:12 AM Original Sample (OS) - Duplicate (DUP)

(OS) 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM
 Analyte mg/L Original Result DUP Result DUP Result DUP Result
 pH 7.8 7.8 7.8 7.8 7.8 7.8

1/3/2023 11:10:12 AM Original Sample (OS) - Duplicate (DUP)

(OS) 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM 1/3/2023 11:10:12 AM
 Analyte mg/L Original Result DUP Result DUP Result DUP Result
 pH 7.8 7.8 7.8 7.8 7.8 7.8

Ca
 Sr
 Cd
 Cr
 Cu
 Fe
 Mn
 Ni
 Pb
 Se
 Si
 Zn

WG1950526

Wet Chemistry by Method SWS200NH

QUALITY CONTROL SUMMARY

LIBRARY

Method Blank (MS)

MS Result MS QCL MS RCL

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

Laboratory Control Sample (LCS)

LCS Result MS Result MS Result

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

L15500104 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

OS Result MS Result MS Result

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

L15500104 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

OS Result MS Result MS Result

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

L15500104 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

OS Result MS Result MS Result

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

WG1949892

Wet Chemistry by Method SWS210B

QUALITY CONTROL SUMMARY

LIBRARY

Method Blank (MS)

MS Result MS QCL MS RCL

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

L1550459-01 Original Sample (OS) - Duplicate (DUP)

OS Result MS Result MS Result

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

L1550459-01 Original Sample (OS) - Duplicate (DUP)

OS Result MS Result MS Result

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

L1550459-01 Original Sample (OS) - Duplicate (DUP)

OS Result MS Result MS Result

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

L1550459-01 Original Sample (OS) - Duplicate (DUP)

OS Result MS Result MS Result

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

ACCOUNT

WG1950227
Met Chemistry by Mettler SWS3708

QUALITY CONTROL SUMMARY

12/18/2016

Method Blank (MB)

MB Result MB MQL MB RQL
mg/L mg/L mg/L
0.200 0.200 0.200

L155095-01 Original Sample (OS) - Duplicate (DU)
Digest Result DU RPO
mg/L mg/L
2.1 2.0

L155095-01 Original Sample (OS) - Duplicate (DU)
Digest Result DU RPO
mg/L mg/L
2.1 2.0

Laboratory Control Sample (LCS)

LCS Result LCS RQL
mg/L mg/L
0.1 0.1

Spike Amount Original Result MB Result
mg/L mg/L mg/L
0.1 0.1 0.1

Recovery %
%

Sc

Al

Si

Cn

Fe

Ca

Na

Mg

K

P

S

Cl

Br

I

B

C

H

O

N

As

Sb

Bi

Pb

Ag

Cd

Co

Cu

Mn

Ni

Se

Ti

V

Zn

Mo

W

Y

La

Method Blank (MB)

MB Result MB MQL MB RQL
mg/L mg/L mg/L
0.00000 0.00000 0.00000

L155498-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)
Digest Result DU RPO
mg/L mg/L
0.00000 0.00000

L155498-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)
Digest Result DU RPO
mg/L mg/L
0.00000 0.00000

L155498-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)
Digest Result DU RPO
mg/L mg/L
0.00000 0.00000

L155498-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)
Digest Result DU RPO
mg/L mg/L
0.00000 0.00000

L155498-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)
Digest Result DU RPO
mg/L mg/L
0.00000 0.00000

L155498-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)
Digest Result DU RPO
mg/L mg/L
0.00000 0.00000

L155498-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)
Digest Result DU RPO
mg/L mg/L
0.00000 0.00000

L155498-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)
Digest Result DU RPO
mg/L mg/L
0.00000 0.00000

L155498-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)
Digest Result DU RPO
mg/L mg/L
0.00000 0.00000

L155498-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)
Digest Result DU RPO
mg/L mg/L
0.00000 0.00000

L155498-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)
Digest Result DU RPO
mg/L mg/L
0.00000 0.00000

L155498-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)
Digest Result DU RPO
mg/L mg/L
0.00000 0.00000

L155498-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)
Digest Result DU RPO
mg/L mg/L
0.00000 0.00000

L155498-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)
Digest Result DU RPO
mg/L mg/L
0.00000 0.00000

Sc

Al

Si

Cn

Fe

Ca

Na

Mg

K

P

S

Cl

Br

I

B

C

H

O

N

As

Sb

Bi

Pb

Ag

Cd

Co

Cu

Mn

Ni

Se

Ti

V

Zn

Mo

W

Y

Sc

Al

Si

Cn

Fe

Ca

Na

Mg

K

P

S

Cl

Br

I

B

C

H

O

N

As

Sb

Bi

Pb

Ag

Cd

Co

Cu

Mn

Ni

Se

Ti

V

Zn

Mo

W

Y

WG1953409

Matrix (CS) by Method 300.7

Matrix Spike (MS)

QUALITY CONTROL SUMMARY

L155701-01

Analyte	MS Result	MS Duplicate	MS ROL
Calcium Dissolved	U	0.09%	100
Sulfate Dissolved	U	0.02%	100
Sodium Dissolved	U	0.02%	100

Laboratory Control Sample (LCS)

Analyte	MS Result	LCS Result	Rec. Limit
Calcium Dissolved	0.0	0.1	25.0 mg/L
Sulfate Dissolved	0.0	0.1	25.0 mg/L
Sodium Dissolved	0.0	0.1	25.0 mg/L

L155701-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Analyte	MS Result	MS Duplicate	MS ROL
Calcium Dissolved	0.0	0.1	25.0 mg/L
Sulfate Dissolved	0.0	0.1	25.0 mg/L
Sodium Dissolved	0.0	0.1	25.0 mg/L

L155701-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Analyte	MS Result	MS Duplicate	MS ROL
Calcium Dissolved	0.0	0.1	25.0 mg/L
Sulfate Dissolved	0.0	0.1	25.0 mg/L
Sodium Dissolved	0.0	0.1	25.0 mg/L

ACCOUNT

PROJECT

SC

DATE/TIME

PAGE

WG1953998

Matrix (CS) by Method 300.7

Matrix Spike (MS)

QUALITY CONTROL SUMMARY

L155701-01

Analyte	MS Result	MS Duplicate	MS ROL
Calcium Dissolved	U	0.09%	100
Sulfate Dissolved	U	0.02%	100
Sodium Dissolved	U	0.02%	100

Laboratory Control Sample (LCS)

Analyte	MS Result	LCS Result	Rec. Limit
Calcium Dissolved	0.0	0.1	25.0 mg/L
Sulfate Dissolved	0.0	0.1	25.0 mg/L
Sodium Dissolved	0.0	0.1	25.0 mg/L

L155701-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Analyte	MS Result	MS Duplicate	MS ROL
Calcium Dissolved	0.0	0.1	25.0 mg/L
Sulfate Dissolved	0.0	0.1	25.0 mg/L
Sodium Dissolved	0.0	0.1	25.0 mg/L

L155701-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Analyte	MS Result	MS Duplicate	MS ROL
Calcium Dissolved	0.0	0.1	25.0 mg/L
Sulfate Dissolved	0.0	0.1	25.0 mg/L
Sodium Dissolved	0.0	0.1	25.0 mg/L

ACCOUNT

PROJECT

SC

DATE/TIME

PAGE

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the laboratory. This is not intended as a comprehensive explanation, and if you have additional questions, please contact your project representative.

Recovery, Duplicate: Information that may be provided by the customer and compared within the report, include: Permit Limits, Project Name, State, Sample Name, Preconcentration, and Blanks. Field Spikes, Field Duplicates, On-site Data, Sampling Collection Dates/Times, and Sampling Location. Analysis may be run, depending on the information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit
ND	Not detected at the Reporting Limit (or MDL where applicable)
RDL	Reported Detection Limit
Rec.	Recovery
RPD	Relative Percent Difference
SDG	Sample Delivery Group
U	Not detected at the Reporting Limit (or MDL where applicable)
Analyte	The name of the particular compound or analysis performed. Some analyses and methods will have multiple analytes reported.
Dilution	If dilution factor exists in the testing matrix, the sample preparation volume or weight values differ from the volume or weight of the sample. The dilution factor is used to correct the results of the analysis so that the laboratory can accurately report the sample may be diluted for analysis. It is a value different from 1 is cited in the field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful OC sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result. The column is optional. A letter and/or number designation that corresponds to additional information concerning the result is provided in the Case Narrative in the Case Narrative if applicable.
Result	The actual analytical result is reported by the laboratory. The result is the value that is reported for the analyte. The result is not a measure of the quality of the sample, but a measure of the quality of the sample. The result is the value that is reported for the analyte. The result is not a measure of the quality of the sample, but a measure of the quality of the sample.
Uncertainty (optional)	Confidence level of 2 sigma
Case Narrative (CN)	A brief discussion about the included sample would, including a discussion of any non-conformances to protocol and any other information that may be relevant to the analysis. The Case Narrative is a section of the report that provides a detailed description of the sample and the analysis. The Case Narrative is a section of the report that provides a detailed description of the sample and the analysis.
Quality Control Summary (QCS)	This section of the report includes the results of the laboratory quality control analysis. The results of the analysis are provided in the Case Narrative. The results of the analysis are provided in the Case Narrative.
Sample Chain of Custody (SCC)	This is the document created in the field with your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analysis from the laboratory. It is required to perform the analysis of the sample. The results of the analysis are provided in the Case Narrative.
Sample Results (SR)	The results of the analysis are provided in the Case Narrative. The results of the analysis are provided in the Case Narrative.
Sample Summary (SS)	This section of the Analytical Report defines the specific analysis performed for each sample ID, including the calls and times of preparation and/or analysis.

Qualifier

The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (CAL).

J	The identification of the analyte is acceptable; the reported value is an estimate.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
K2	The sample dilution set-up for the SOD/COD analysis did not meet the criteria of a random dissolved oxygen of at least 1 mg/L. Reported results are estimated values.
K9	Test replicates show more than 30% difference between high and low values.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T3	Sample(s) received past/bio class to holding time; excitation.
V	The sample concentration is too high to evaluate accurate spike recoveries.

CD	Al	Sc
Tc	Al	Sc
SS	Al	Sc
Cn	Al	Sc
Sr	Al	Sc
OC	Al	Sc
GI	Al	Sc

ACCREDITATIONS & LOCATIONS

Pace Analytical Services, LLC - Dallas		12065 Lebanon Rd Mount Juliet, TN 37122	
Alabama	46860	Michigan	NE-55-548
Alaska	7-026	Minnesota	TM00002021H
Arizona	A2682	Mississippi	2071
Arkansas	05-069	Montana	2072
California	3232	New Hampshire	2073
Colorado	TM000003	New Jersey	TM000003
Connecticut	PH-037	New Mexico	TM000003
Florida	ED-037	New York	TM000003
Georgia	NE-049	North Carolina	TM000003
Idaho	923	North Dakota	TM000003
Illinois	TM000003	Ohio	TM000003
Indiana	CN-041	Oklahoma	TM000003
Iowa	364	Oregon	TM000003
Kansas	E-0277	Pennsylvania	TM000003
Kentucky	KY00010	Rhode Island	TM000003
Kentucky *	18	South Carolina	TM000003
Louisiana	AJ0072	South Dakota	TM000003
Maine	LA0072	Tennessee	TM000003
Maryland	TM000003	Texas	TM000003
Massachusetts	328	Texas *	TM000003
Michigan	MA-0003	Utah	TM000003
Minnesota	9952	Vermont	TM000003
Mississippi	04-999-395	Virginia	TM000003
Missouri	TM000003	Washington	TM000003
Montana	340	West Virginia	TM000003
Nebraska	CERT005	Wisconsin	TM000003
Nevada	160-01	Wyoming	TM000003
NEW YORK	160-02		
NEW YORK	160-01		
NEW YORK	160-03		
NEW YORK	160-03		

Pace Analytical Services, LLC - Dallas 2657 Gravel Dr Ft. Worth, TX 76118

TM00002020-27

* Testing Note: * Underground Storage Tanks * Aquatic Toxicity * Chemical/Microbiological * Lead * Wastewater * Air Accreditation not applicable.

* Not all analytes listed by the laboratory are applicable to the specific reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Pace Analytical Services, LLC - Dallas 400 W. Beltway Drive Suite 100 Allen, TX 75013

Alabama	46860	Michigan	NE-55-548
Alaska	7-026	Minnesota	TM00002021H
Arizona	A2682	Mississippi	2071
Arkansas	05-069	Montana	2072
California	3232	New Hampshire	2073
Colorado	TM000003	New Jersey	TM000003
Connecticut	PH-037	New Mexico	TM000003
Florida	ED-037	New York	TM000003
Georgia	NE-049	North Carolina	TM000003
Idaho	923	North Dakota	TM000003
Illinois	TM000003	Ohio	TM000003
Indiana	CN-041	Oklahoma	TM000003
Iowa	364	Oregon	TM000003
Kansas	E-0277	Pennsylvania	TM000003
Kentucky	KY00010	Rhode Island	TM000003
Kentucky *	18	South Carolina	TM000003
Louisiana	AJ0072	South Dakota	TM000003
Maine	LA0072	Tennessee	TM000003
Maryland	TM000003	Texas	TM000003
Massachusetts	328	Texas *	TM000003
Michigan	MA-0003	Utah	TM000003
Minnesota	9952	Vermont	TM000003
Mississippi	04-999-395	Virginia	TM000003
Missouri	TM000003	Washington	TM000003
Montana	340	West Virginia	TM000003
Nebraska	CERT005	Wisconsin	TM000003
Nevada	160-01	Wyoming	TM000003
NEW YORK	160-02		
NEW YORK	160-01		
NEW YORK	160-03		
NEW YORK	160-03		

CD	Al	Sc
Tc	Al	Sc
SS	Al	Sc
Cn	Al	Sc
Sr	Al	Sc
OC	Al	Sc
GI	Al	Sc

134

part 2

Sample Condition Upon Receipt
☐ Dallas ☒ Ft Worth ☐ Corpus Christi ☐ Austin

Client Name: Envi-Ag Engineering Project Work order (place label):
 Coupler: FedEx UPS ☐ USPS ☐ Client ☐ LSO ☐ FedEx ☐ Other: _____
 Tracking #: _____

[illegible]

Custody Seal on Cooler/Box. Yes ☒ No ☐

Received on Ice: Wet: Blue: Name: _____
Receiving Lab 1 Thermometer Used: FW1105

Receiving Lab 2 Thermometer Used: 127 Cooler Temp °C: 0.6 (Recorded) 0.5 (Correction Factor) 0.1 (Actual)

Temperature should be above freezing (5°C) unless collected same day as receipt in which evidence of cooling is acceptable

Triage Person: CC Date: 10-27-12

Login Person: DW Date: 10/27/22

Labeling Person (if different than log-in): _____ Date: _____

00270

Jordan Mullin
3404 Airway Blvd.
Amarillo, TX 79118

Korgan John

Reagan Johnson
Project Manager

Quadrants might also be used to identify relevant evidence and are presented as detailed tables. This feature could not be reproduced exactly *in vivo*, without verbatim quotation of the abstracts. Where possible, periods controlled by the English National Grid and nearest grid guidance is provided in secondary literature searches (see ENAG-2007 and ENAG-2008). After searching conducted by the clinician, results shown in the accuracy of the information provided, and as the source of the information.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacernational.com

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

Sc: Sample Chain of Custody

SAMPLE SUMMARY

SCHREIBER SAMPLE 2 L1553075-01 WW

Collected by
Zone Troller

Collected date/time
11/07/22 09:35

Received date/time
11/07/22 14:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Microbiology by Method 9222D	WG954027	1	11/07/22 15:00	11/07/22 15:14	CNC	Fl. Worth, TX
Calculated Results	WG954027	1	11/07/22 14:12	11/07/22 14:12	EIS	Allen, TX
Calculated Results	WG953732	1	11/07/22 17:50	11/07/22 17:50	LOT	Allen, TX
Gravimetric Analysis by Method 2540C	WG953745	1	11/07/22 09:53	11/07/22 09:53	LOT	Allen, TX
Gravimetric Analysis by Method 2540D	WG953564	1	11/07/22 04:16	11/07/22 05:55	OOT	Allen, TX
Wet Chemistry by Method 120.1	WG953820	1	11/07/22 11:19	11/07/22 11:19	OOT	Allen, TX
Wet Chemistry by Method 1654A	WG953866	1	11/07/22 15:26	11/07/22 15:42	TX	Allen, TX
Wet Chemistry by Method 300.0	WG953866	1	11/07/22 09:19	11/07/22 09:19	SMC	Allen, TX
Wet Chemistry by Method 300.0	WG954027	1	11/07/22 23:28	11/07/22 23:28	EIG	Allen, TX
Wet Chemistry by Method 300.0	WG954027	1	11/07/22 22:15	11/07/22 22:15	EIG	Allen, TX
Wet Chemistry by Method 351.2	WG954027	5	11/07/22 07:59	11/07/22 07:50	LOT	NL, Lubec, TN
Wet Chemistry by Method 4500C G-2011	WG954442	1	11/07/22 12:38	11/07/22 12:38	ALS	NL, Lubec, TN
Wet Chemistry by Method 4500P-E	WG957241	1	11/07/22 18:37	11/07/22 18:37	KCM	Allen, TX
Wet Chemistry by Method 5210D	WG956528	2	11/07/22 09:07	11/07/22 12:45	SMC	Allen, TX
Wet Chemistry by Method 5310C	WG956837	5	11/07/22 17:44	11/07/22 17:44	EIG	Allen, TX
Wet Chemistry by Method 54500-H-8	WG955130	1	11/07/22 14:44	11/07/22 14:44	RJP	Allen, TX
Wet Chemistry by Method 54500-H-11	WG955130	1	11/07/22 14:44	11/07/22 14:44	EIG	Allen, TX
Wet Chemistry by Method 54520B	WG955055	1	11/07/22 17:18	11/07/22 17:18	RJP	Allen, TX
Wet Chemistry by Method 54520B	WG953060	1	11/07/22 16:03	11/07/22 16:03	RJP	Allen, TX
Metals (ICP) by Method 200.7	WG955373	1	11/08/22 17:17	11/08/22 17:17	EIS	Allen, TX
Metals (ICP) by Method 200.7	WG955373	12	11/08/22 17:17	11/08/22 17:17	EIS	Allen, TX
Metals (ICP) by Method 200.7	WG955373	2	11/09/22 17:17	11/09/22 17:17	EIS	Allen, TX
Metals (ICP) by Method 200.7	WG955373	1	11/09/22 17:17	11/09/22 17:17	EIS	Allen, TX
Metals (ICP) by Method 200.7	WG959919	20	11/05/22 12:06	11/05/22 12:06	EIS	Allen, TX

SCHREIBER SAMPLE 2 L1553075-02 WW

Collected by
Zone Troller

Collected date/time
11/07/22 09:35

Received date/time
11/07/22 14:40

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG955373	1	11/07/22 17:32	11/07/22 17:32	EIS	Allen, TX
Wet Chemistry by Method 3500C-8	WG954855	1	11/05/22 12:49	11/05/22 12:49	KCM	Allen, TX
Wet Chemistry by Method 4500C-E	WG953003	1	11/07/22 10:15	11/07/22 16:22	KCM	Allen, TX
Mercury by Method 245.1	WG953240	1	11/04/22 10:40	11/04/22 14:58	CLK	Allen, TX
Metals (ICP) by Method 200.7	WG955673	1	11/08/22 17:17	11/08/22 17:17	EIS	Allen, TX
Metals (ICP) by Method 200.7	WG955673	1	11/08/22 17:17	11/07/22 12:34	EIS	Allen, TX

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or noted within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative. Non-conformance from or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Reagan Johnson

Reagan Johnson
Project Manager

SCHREIBER SAMPLE 2
Collected date/time: 11/02/22 09:33

Microbiology by Method 9222D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Coliform Total	800		1	11/02/2022 15:14	WG9594037

Calculated Results	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	23.4			1	11/11/2022 14:12	WG959372

Calculated Results	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l					
Organic Nitrogen	26.4		0.100	1	11/10/2022 17:50	WG959728

Gravimetric Analysis by Method 2540C	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Total Dissolved Solids	3810		250	1	11/03/2022 10:30	WG9592745

Gravimetric Analysis by Method 2540D	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l					
Suspended Solids	1280		250	1	11/03/2022 05:55	WG9593564

Wet Chemistry by Method 120.1	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	umhos/cm					
Specific Conductance	5560		1.00	1	11/03/2022 11:19	WG9593820

Wet Chemistry by Method 1664A	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l					
Oil & Grease (Pneumatic Extr)	10.4		5.10	1	11/15/2022 15:12	WG9595248

Wet Chemistry by Method 300.0	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l					
Chloride	1320	JS	0.800	1	11/11/2022 22:15	WG9598408
Fluoride	ND		0.500	1	11/11/2022 23:28	WG9598403
Nitrate	194		0.500	1	11/04/2022 09:19	WG9593886
Sulfate	181		0.700	1	11/11/2022 22:15	WG9598408

Wet Chemistry by Method 3512	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l					
Kyocelin Nitrogen, TN	29.7		125	5	11/10/2022 17:50	WG9595753

Wet Chemistry by Method 4500Cl G-2011	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l					
Chlorine, residual	0.930	T8	0.100	1	11/04/2022 12:38	WG9594412

ACCOUNT: PROJECT: SDG: DATE/TIME: PAGE:

SCHREIBER SAMPLE 2
Collected date/time: 11/02/22 09:33

Wet Chemistry by Method 4500P-E

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Phosphorus, total	3.61	Y	5.00	100	11/02/2022 18:37	WG9595241

Wet Chemistry by Method 5220D	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l					
COD	699		70.0	2	11/09/2022 12:45	WG9596628

Wet Chemistry by Method 5310C	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l					
TOC (Total Organic Carbon)	67.2		3.50	5	11/03/2022 17:44	WG9595687

Sample Narrative: 1155075-01.WG155130.9.04 at 70.3C						
Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch	
pH	9.04	Q	1	11/07/2022 14:44	WG955130	25C

Wet Chemistry by Method SM4500NH3H	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l					
Ammonia Nitrogen	3.23		0.100	1	11/10/2022 14:15	WG9597372

Wet Chemistry by Method SM5210B	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l					
BOD	315		6.00	1	11/07/2022 10:57	WG9593055
CBOD	281		6.00	1	11/07/2022 13:29	WG9593090

Metals (ICP) by Method 200.7	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l					
Calcium	705		2.00	2	11/11/2022 12:29	WG9595372
Calcium Dissolved	55.4		1.00	1	11/21/2022 18:27	WG9595918
Magnesium	429		1.00	1	11/10/2022 17:26	WG9596372
Magnesium Dissolved	37.5		1.00	1	11/21/2022 19:27	WG9595918
Sodium	1130		12.0	12	11/11/2022 14:12	WG9595372
Sodium Dissolved	1000	Y	20.0	20	11/29/2022 10:58	WG9595919

Wet Chemistry by Method 200.7	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l					
Calcium	705		2.00	2	11/11/2022 12:29	WG9595372
Calcium Dissolved	55.4		1.00	1	11/21/2022 18:27	WG9595918
Magnesium	429		1.00	1	11/10/2022 17:26	WG9596372
Magnesium Dissolved	37.5		1.00	1	11/21/2022 19:27	WG9595918
Sodium	1130		12.0	12	11/11/2022 14:12	WG9595372
Sodium Dissolved	1000	Y	20.0	20	11/29/2022 10:58	WG9595919

Wet Chemistry by Method 200.7	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l					
Calcium	705		2.00	2	11/11/2022 12:29	WG9595372
Calcium Dissolved	55.4		1.00	1	11/21/2022 18:27	WG9595918
Magnesium	429		1.00	1	11/10/2022 17:26	WG9596372
Magnesium Dissolved	37.5		1.00	1	11/21/2022 19:27	WG9595918
Sodium	1130		12.0	12	11/11/2022 14:12	WG9595372
Sodium Dissolved	1000	Y	20.0	20	11/29/2022 10:58	WG9595919

ACCOUNT: PROJECT: SDG: DATE/TIME: PAGE:

SCHREIBER SAMPLE 2
Collected date/time: 11/02/22 09:33
SAMPLE RESULTS - 02
L1553075

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Chromium Trivalent	0.00350		0.00300	1	11/02/2022 17:32	WG1954372

Wet Chemistry by Method 3500C-B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Chromium Hexavalent	ND		0.00300	1	11/05/2022 12:49	WG1954355

Sample Narrative:

L1553075-02 WG1954355: Sample not field filtered within 15min of collection. Sample preserved in lab with 24hrs of collection.

Wet Chemistry by Method 4500CN-E

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Cyanide	ND		0.0700	1	11/17/2022 16:22	WG1958003

Mercury by Method 245.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Mercury	ND		0.000200	1	11/14/2022 14:58	WG1959240

Metals (ICP) by Method 200.7

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Aluminum	4.18		0.500	1	11/10/2022 12:24	WG1956372
Antimony	ND		0.0250	1	11/10/2022 17:32	WG1956372
Asenic	ND		0.0200	1	11/10/2022 17:32	WG1956372
Beryllium	0.0785		0.0100	1	11/17/2022 12:34	WG1956372
Boron	ND		0.00100	1	11/17/2022 12:34	WG1956372
Cadmium	ND		0.100	1	11/10/2022 17:32	WG1956372
Chromium	ND		0.00500	1	11/10/2022 17:32	WG1956372
Chromium	ND		0.00700	1	11/10/2022 17:32	WG1956372
Copper	ND		0.0200	1	11/10/2022 17:32	WG1956372
Lead	ND		0.0100	1	11/10/2022 17:32	WG1956372
Nickel	ND		0.0100	1	11/10/2022 17:32	WG1956372
Selenium	ND		0.0200	1	11/10/2022 17:32	WG1956372
Silver	ND		0.00500	1	11/10/2022 17:32	WG1956372
Thallium	ND		0.0200	1	11/10/2022 17:32	WG1956372
Zinc	0.119		0.0250	1	11/10/2022 17:32	WG1956372

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

WG1954037

Microbiology by Method 9222D

Method Blank (MB)

(MB) R3856958-1 11/03/22 15:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Coliform Fecal	<1		cfu/100 ml	cfu/100 ml

Method Blank (MB)

(MB) R3856958-2 11/03/22 15:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Coliform Fecal	<1		cfu/100 ml	cfu/100 ml

L1553075-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1553075-01 11/03/22 15:14 • (DUP) R3856958-3 11/03/22 15:14

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Coliform Fecal	800	900	1	11.8		20

QUALITY CONTROL SUMMARY

L1553075-01



WG1953745

Gravimetric Analysis by Method 2540C

QUALITY CONTROL SUMMARY

L1553075-01

Method Blank (MB)

(MB) R3857457-1 11/03/22 10:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Total Dissolved Solids	U		25.0	25.0

L1552203-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1552203-02 11/03/22 10:30 • (DUP) R3857457-3 11/03/22 10:30

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Total Dissolved Solids	723	799	1	9.99	JJ	5

Laboratory Control Sample (LCS)

(LCS) R3857457-2 11/03/22 10:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Dissolved Solids	2340	2590	111	85.0-115	

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

WG1953564

Gravimetric Analysis by Method 2540D

QUALITY CONTROL SUMMARY

L1553075-01

Method Blank (MB)

(MB) R3856538-1 11/03/22 05:55

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Suspended Solids	U		2.50	2.50

L1553086-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1553086-02 11/03/22 05:55 • (DUP) R3856538-3 11/03/22 05:55

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Suspended Solids	9680	9740	1	0.618		10

L1553086-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1553086-03 11/03/22 05:55 • (DUP) R3856538-4 11/03/22 05:55

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Suspended Solids	8000	7740	1	3.30		10

Laboratory Control Sample (LCS)

(LCS) R3856538-2 11/03/22 05:55

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Suspended Solids	828	850	103	85.0-115	

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

00276

Method Blank (MB)

(MB) R3856482-1 11/03/22 11:19

Analyte	MB Result umhos/cm	<u>MB Qualifier</u>	MB MDL umhos/cm	MB RDL umhos/cm
Specific Conductance	U		100	100

Sample Narrative:
BLANK: at 25C

L1552203-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1552203-02 11/03/22 11:19 • (DUP) R3856482-3 11/03/22 11:19

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Specific Conductance	1130	1130	1	0.000		20

Sample Narrative:
OS: at 25C
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3856482-2 11/03/22 11:19

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Specific Conductance	200	200	100	80.0-120	

Sample Narrative:
LCS: at 25C

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

WG1959248

Wel Chemistry by Method 1664A

QUALITY CONTROL SUMMARY
L1553075-01

Method Blank (MB)

(MB) R3861626-1 11/15/22 15:12

Analyte	MB Result mg/l	<u>MB Qualifier</u>	MB MDL mg/l	MB RDL mg/l
Oil & Grease (Hexano Extr)	U		0.350	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3861626-2 11/15/22 15:12 • (LCSD) R3861626-3 11/15/22 15:12

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Oil & Grease (Hexano Extr)	40.0	34.1	36.1	85.3	90.3	78.0-114			5.70	18

L1555129-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1555129-03 11/15/22 15:12 • (MS) R3861626-4 11/15/22 15:12

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Oil & Grease (Hexano Extr)	40.0	5.36	50.1	112	1	78.0-114	

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

00277

Method Blank (MB)

(MB) R3858017-1 11/04/22 08:43

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Nitrate	U		0.207	0.500

Laboratory Control Sample (LCS)

(LCS) R3858017-2 11/04/22 09:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Nitrate	5.00	4.93	98.5	90.0-110	

L1553331-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1553331-01 11/04/22 09:36 • (MS) R3858017-3 11/04/22 10:30 • (MSD) R3858017-4 11/04/22 10:48

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate	5.00	0.505	6.38	7.72	118	144	1	90.0-110	J5	J5	18.9	20

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

Method Blank (MB)

(MB) R3860526-1 11/11/22 20:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Fluoride	U		0.198	0.500

Laboratory Control Sample (LCS)

(LCS) R3860526-2 11/11/22 20:50

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluoride	5.00	5.46	109	90.0-110	

L1553075-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1553075-01 11/11/22 23:28 • (MS) R3860526-3 11/11/22 21:09 • (MSD) R3860526-4 11/11/22 21:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Fluoride	5.00	ND	4.75	4.84	95.1	96.8	1	90.0-110			1.83	20

L1554671-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1554671-01 11/12/22 03:27 • (MS) R3860526-5 11/11/22 21:49 • (MSD) R3860526-6 11/11/22 22:09

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Fluoride	5.00	1.82	5.76	5.92	78.8	82.0	1	90.0-110	J6	J6	2.74	20

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

Method Blank (MB)

(MB) R3860522-1 11/11/22 19:52

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	0.171	J	0.0541	0.800
Sulfate	U		0.393	0.700

Laboratory Control Sample (LCS)

(LCS) R3860522-2 11/11/22 20:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	5.00	5.02	100	90.0-110	
Sulfate	5.00	5.05	101	90.0-110	

L1553075-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1553075-01 11/11/22 22:15 • (MS) R3860522-3 11/11/22 20:28 • (MSD) R3860522-4 11/11/22 20:45

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	500	1320	1940	1900	123	116	1	90.0-110	E JS	E JS	171	20
Sulfate	500	181	700	689	104	102	1	90.0-110			159	20

L1553109-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1553109-01 11/11/22 22:33 • (MS) R3860522-5 11/11/22 21:03 • (MSD) R3860522-6 11/11/22 21:21

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	130	189	117	117		1	90.0-110	E JS	E JS	0.0811	20
Sulfate	50.0	66.5	119	119	105	106	1	90.0-110			0.190	20

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

WG1954855

Wet Chemistry by Method 3500Cr-6

QUALITY CONTROL SUMMARY
L1553075-02

Method Blank (MB)

(MB) R3857357-1 11/05/22 12:49

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chromium, Hexavalent	U		0.00200	0.00300

Laboratory Control Sample (LCS)

(LCS) R3857357-2 11/05/22 12:49

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chromium, Hexavalent	0.200	0.212	106	85.0-115	

L1552832-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1552832-01 11/05/22 12:49 • (MS) R3857357-3 11/05/22 12:50 • (MSD) R3857357-4 11/05/22 12:50

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chromium, Hexavalent	0.200	ND	0.192	0.193	95.8	96.6	1	10.0-120			0.875	20

Sample Narrative:

OS: Sample not field filtered w/in 15min of collection Sample preserved in lab w/in 24hrs of collection.

L1553075-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1553075-02 11/05/22 12:49 • (MS) R3857357-5 11/05/22 12:50 • (MSD) R3857357-6 11/05/22 12:50

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chromium, Hexavalent	0.200	ND	0.191	0.190	95.4	94.9	1	10.0-120			0.412	20

Sample Narrative:

OS: Sample not field filtered w/in 15min of collection Sample preserved in lab w/in 24hrs of collection.

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

Method Blank (MB)

(MB) R3859732-1 11/10/22 16:52

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Kjeldahl Nitrogen, TKN	U		0.140	0.250

L1554849-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1554849-01 11/10/22 17:01 • (DUP) R3859732-3 11/10/22 17:02

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Kjeldahl Nitrogen, TKN	6.81	7.60	1	11.0		20

L1554878-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1554878-01 11/10/22 17:09 • (DUP) R3859732-6 11/10/22 17:11

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Kjeldahl Nitrogen, TKN	0.977	0.990	1	1.32		20

Laboratory Control Sample (LCS)

(LCS) R3859732-2 11/10/22 16:53

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Kjeldahl Nitrogen, TKN	12.7	13.5	106	75.2-120	

L1554849-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1554849-01 11/10/22 17:01 • (MS) R3859732-4 11/10/22 17:04 • (MSD) R3859732-5 11/10/22 17:08

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Kjeldahl Nitrogen, TKN	5.00	6.81	12.5	11.9	114	102	1	90.0-110	25		4.92	20

Sample Narrative:

MS: Matrix spike failure due to matrix interference.

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

WG1956753

Wet Chemistry by Method 351.2

QUALITY CONTROL SUMMARY
L1553075-01

L1554878-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1554878-01 11/10/22 17:09 • (MS) R3859732-7 11/10/22 17:12

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Kjeldahl Nitrogen, TKN	5.00	0.977	6.30	106	1	90.0-110	

WG1954442

Wet Chemistry by Method 4500Cl G-2011

QUALITY CONTROL SUMMARY

L1553075-01

Method Blank (MB)

(MB) R3857035-1 11/04/22 12:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chlorine, residual	U		0.0250	0.100

L1553075-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1553075-01 11/04/22 12:38 • (DUP) R3857035-3 11/04/22 12:39

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Chlorine, residual	0.930	0.999	1	7.15		20

Laboratory Control Sample (LCS)

(LCS) R3857035-2 11/04/22 12:38

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chlorine, residual	1.00	1.04	104	85.0-115	

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

WG1958003

Wet Chemistry by Method 4500CN-E

QUALITY CONTROL SUMMARY

L1553075-02

Method Blank (MB)

(MB) R3860133-1 11/11/22 16:22

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Cyanide	U		0.00430	0.0100

Laboratory Control Sample (LCS)

(LCS) R3860133-2 11/11/22 16:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Cyanide	0.100	0.0901	90.1	85.0-115	

L1553100-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1553100-02 11/11/22 16:22 • (MS) R3860133-3 11/11/22 16:23 • (MSD) R3860133-4 11/11/22 16:23

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Cyanide	0.100	ND	0.0747	0.0707	74.7	70.7	1	85.0-115	J6	J6	5.53	20

L1554365-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1554365-01 11/11/22 16:22 • (MS) R3860133-5 11/11/22 16:23 • (MSD) R3860133-6 11/11/22 16:23

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Cyanide	0.100	1.11	1.17	1.17	67.0	67.0	100	85.0-115	V	V	0.000	20

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

00281

QUALITY CONTROL SUMMARY

L1553075-01

Method Blank (MB)

(MB) R3859736-1 11/10/22 18:37

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Phosphorus, Total	U		0.0152	0.0500

Laboratory Control Sample (LCS)

(LCS) R3859736-2 11/10/22 18:37

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Phosphorus, Total	0.500	0.482	96.4	80.0-120	

L1553075-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1553075-01 11/10/22 18:37 • (MS) R3859736-3 11/10/22 18:37 • (MSD) R3859736-4 11/10/22 18:37

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Phosphorus, Total	0.500	9.61	10.3	10.6	131	197	100	80.0-120	V	V	3.15	20

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

WG1956628

Wet Chemistry by Method 5220D

QUALITY CONTROL SUMMARY

L1554354-01

Method Blank (MB)

(MB) R3858838-1 11/09/22 12:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
COD	U		16.1	35.0

Laboratory Control Sample (LCS)

(LCS) R3858838-2 11/09/22 12:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
COD	500	521	104	80.0-120	

L1554354-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1554354-01 11/09/22 12:46 • (MS) R3858838-3 11/09/22 12:47 • (MSD) R3858838-4 11/09/22 12:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
COD	500	ND	536	551	104	107	1	80.0-120			2.79	20

L1554677-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1554677-01 11/09/22 12:46 • (MS) R3858838-5 11/09/22 12:47 • (MSD) R3858838-6 11/09/22 12:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
COD	500	94.1	616	621	104	105	1	80.0-120			0.701	20

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

Method Blank (MB)

(MB) R3859854-1 11/09/22 14:06

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TOC (Total Organic Carbon)	0.282	J	0.270	0.700

Laboratory Control Sample (LCS)

(LCS) R3859854-2 11/09/22 14:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	10.0	9.87	98.7	90.0-110	

L1554256-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1554256-01 11/09/22 19:51 • (MS) R3859854-3 11/09/22 15:37 • (MSD) R3859854-4 11/09/22 16:05

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	10.0	15.6	22.3	22.0	66.9	63.5	1	80.0-120	JG	JG	1.54	20

L1554256-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1554256-02 11/09/22 20:15 • (MS) R3859854-5 11/09/22 16:30 • (MSD) R3859854-6 11/09/22 16:57

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	10.0	15.8	21.9	22.5	60.2	67.0	1	80.0-120	JG	JG	3.06	20

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

WG1955130

Wei Chemistry by Method SM 4500-H+8

QUALITY CONTROL SUMMARY
L1553075-01

L1553133-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1553133-01 11/07/22 14:44 • (DUP) R3857989-2 11/07/22 14:44

Analyte	Original Result su	DUP Result su	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
pH	6.98	6.99	1	0.143		20

Sample Narrative:

OS: 6.98 at 20.5C

DUP: 6.99 at 20.8C

L1554351-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1554351-01 11/07/22 14:44 • (DUP) R3857989-3 11/07/22 14:44

Analyte	Original Result su	DUP Result su	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
pH	6.79	6.80	1	0.147		20

Sample Narrative:

OS: 6.79 at 20.6C

DUP: 6.8 at 20.4C

Laboratory Control Sample (LCS)

(LCS) R3857989-1 11/07/22 14:44

Analyte	Spike Amount su	LCS Result su	LCS Rec. %	Rec. Limits %	LCS Qualifier
pH	6.00	6.00	100	95.0-101	

Sample Narrative:

LCS: 6 at 20.9C

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

WG1957373

Wet Chemistry by Method SM4500NH3H

QUALITY CONTROL SUMMARY

L1553075-01

Method Blank (MB)

(MB) R3859669-1 11/10/22 13:36

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Ammonia Nitrogen	U		0.0280	0.100

Laboratory Control Sample (LCS)

(LCS) R3859669-2 11/10/22 13:37

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ammonia Nitrogen	5.00	5.12	107	80.0-120	

L1552331-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1552331-02 11/10/22 14:03 • (MS) R3859669-3 11/10/22 13:38 • (MSD) R3859669-4 11/10/22 13:40

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ammonia Nitrogen	5.00	0.177	5.24	5.24	101	101	1	80.0-120			0.000	20

L1552513-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1552513-01 11/10/22 14:04 • (MS) R3859669-5 11/10/22 13:41 • (MSD) R3859669-6 11/10/22 13:43

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ammonia Nitrogen	5.00	ND	5.05	5.07	100	101	1	80.0-120			0.395	20

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

WG1953055

Wet Chemistry by Method SM5210B

QUALITY CONTROL SUMMARY

L1553075-01

Method Blank (MB)

(MB) R3857762-1 11/07/22 09:52

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
BOD	U		0.200	0.200

L1552882-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1552882-02 11/07/22 10:33 • (DUP) R3857762-4 11/07/22 10:34

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
BOD	5.64	5.49	1	2.7		20

L1552764-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1552764-01 11/07/22 10:12 • (DUP) R3857762-3 11/07/22 11:38

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
BOD	1.37	1.07	1	24.6		20

Laboratory Control Sample (LCS)

(LCS) R3857762-2 11/07/22 09:57

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
BOD	198	200	101	85-115	

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

00284

Method Blank (MB)

(MB) R3857838-1 11/07/22 12:48

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
C800	U		0.200	0.200

L1552768-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1552768-01 11/07/22 13:05 • (DUP) R3857838-3 11/07/22 13:37

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
C800	ND	ND	1	0		20

L1552866-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1552866-01 11/07/22 13:52 • (DUP) R3857838-4 11/07/22 13:38

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
C800	1.37	1.33	1	2.96	ND	20

Laboratory Control Sample (LCS)

(LCS) R3857838-2 11/07/22 12:53

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
C800	199	204	103	85-115	

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

WG1959240

Mercury by Method 245.1

QUALITY CONTROL SUMMARY
L1553075-02

Method Blank (MB)

(MB) R3860864-1 11/14/22 14:34

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury	0.000114	J	0.0000450	0.000200

Laboratory Control Sample (LCS)

(LCS) R3860864-2 11/14/22 14:41

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury	0.00250	0.00235	94.0	85.0-115	

L1552825-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1552825-01 11/14/22 14:43 • (MS) R3860864-3 11/14/22 14:45 • (MSD) R3860864-4 11/14/22 14:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.00250	ND	0.00164	0.00145	62.2	54.6	1	70.0-130	JG	JG	12.3	20

L1552825-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1552825-02 11/14/22 14:49 • (MS) R3860864-5 11/14/22 14:52 • (MSD) R3860864-6 11/14/22 14:54

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.00250	ND	0.00246	0.00241	94.8	92.8	1	70.0-130			2.05	20

Method Blank (MB)

(MB) R3859632-1 11/10/22 15:33

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Aluminum	0.0563	J	0.0353	0.500
Antimony	U		0.00242	0.0250
Arsenic	U		0.00418	0.0200
Barium	U		0.000190	0.0100
Beryllium	0.000249	J	0.000180	0.00100
Boron	U		0.0186	0.100
Cadmium	U		0.000350	0.00500
Calcium	U		0.0496	1.00
Chromium	U		0.000710	0.00700
Copper	0.00425	J	0.00364	0.0200
Lead	U		0.00312	0.0100
Magnesium	U		0.0434	1.00
Nickel	U		0.00358	0.0100
Selenium	U		0.00500	0.0200
Silver	U		0.000990	0.00500
Sodium	U		0.178	1.00
Thallium	U		0.00775	0.0200
Zinc	U		0.0106	0.0250

Laboratory Control Sample (LCS)

(LCS) R3859632-2 11/10/22 15:38

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aluminum	10.0	9.88	98.8	85.0-115	
Antimony	1.00	0.966	96.6	85.0-115	
Arsenic	1.00	0.937	93.7	85.0-115	
Barium	1.00	0.973	97.3	85.0-115	
Beryllium	1.00	0.954	95.4	85.0-115	
Boron	1.00	0.932	93.2	85.0-115	
Cadmium	1.00	0.993	99.3	85.0-115	
Calcium	10.0	10.1	101	85.0-115	
Chromium	1.00	0.965	96.5	85.0-115	
Copper	1.00	0.970	97.0	85.0-115	
Lead	1.00	0.989	98.9	85.0-115	
Magnesium	10.0	9.87	98.7	85.0-115	
Nickel	1.00	1.01	101	85.0-115	
Selenium	1.00	0.943	94.3	85.0-115	
Silver	0.500	0.482	96.3	85.0-115	

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

WG1956373

Metals (ICP) by Method 200.7

QUALITY CONTROL SUMMARY
L1553075-01.02

Laboratory Control Sample (LCS)

(LCS) R3859632-2 11/10/22 15:38

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sodium	10.0	9.96	99.6	85.0-115	
Thallium	1.00	1.06	106	85.0-115	
Zinc	1.00	0.977	97.7	85.0-115	

L1554984-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1554984-01 11/10/22 15:43 • (MS) R3859632-3 11/10/22 15:48 • (MSD) R3859632-4 11/10/22 16:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum	10.0	135	13.4	14.0	120	127	1	70.0-130			4.82	20
Antimony	1.00	ND	1.01	0.985	101	98.5	1	70.0-130			2.95	20
Arsenic	1.00	ND	1.03	0.999	101	98.5	1	70.0-130			2.90	20
Barium	1.00	4.94	6.98	8.31	203	337	1	70.0-130	V	V	17.4	20
Boron	1.00	ND	1.05	1.11	97.1	103	1	70.0-130			5.73	20
Cadmium	1.00	ND	1.03	1.01	103	101	1	70.0-130			2.45	20
Calcium	10.0	113	133	144	208	311	1	70.0-130	V	V	7.43	20
Chromium	1.00	ND	0.978	0.958	97.5	95.6	1	70.0-130			2.04	20
Copper	1.00	0.0384	1.04	1.09	99.9	105	1	70.0-130			5.26	20
Lead	1.00	0.0729	0.907	0.889	83.4	81.6	1	70.0-130			2.08	20
Magnesium	10.0	33.8	46.3	50.4	125	165	1	70.0-130			8.36	20
Nickel	1.00	ND	1.01	0.986	101	98.1	1	70.0-130		J	2.46	20
Selenium	1.00	0.0254	1.03	0.985	100	96.0	1	70.0-130			3.95	20
Silver	0.500	ND	0.504	0.493	101	98.5	1	70.0-130			2.25	20
Thallium	1.00	ND	0.966	0.944	96.6	94.4	1	70.0-130			2.29	20
Zinc	1.00	0.0578	1.06	1.02	99.7	96.5	1	70.0-130			3.08	20

L1554984-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1554984-02 11/10/22 16:19 • (MS) R3859632-5 11/10/22 16:24 • (MSD) R3859632-6 11/10/22 16:30

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum	10.0	ND	11.7	10.6	113	102	1	70.0-130			9.34	20
Antimony	1.00	ND	1.00	0.964	100	96.4	1	70.0-130			3.87	20
Arsenic	1.00	ND	0.983	0.955	97.6	94.7	1	70.0-130			2.96	20
Barium	1.00	12.1	14.4	13.1	228	102	1	70.0-130	V		9.17	20
Boron	1.00	ND	1.03	0.943	103	94.3	1	70.0-130			8.54	20
Cadmium	1.00	ND	1.03	0.985	103	98.5	1	70.0-130			4.15	20
Calcium	10.0	13.6	26.1	23.5	126	99.5	1	70.0-130			10.5	20
Chromium	1.00	ND	0.947	1.09	94.5	109	1	70.0-130			14.3	20

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

00286

WG1956373

Metals (ICP) by Method 200.7

QUALITY CONTROL SUMMARY

L1553075-01.02

L1554984-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1554984-02 11/10/22 16:19 • (MS) R38599632-5 11/10/22 16:24 • (MSD) R38599632-6 11/10/22 16:30

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Copper	1.00	ND	1.08	0.994	106	97.5	1	70.0-130			8.35	20
Lead	1.00	0.0150	1.03	0.990	102	97.5	1	70.0-130			4.07	20
Magnesium	10.0	1.24	12.2	11.0	110	97.2	1	70.0-130			10.8	20
Nickel	1.00	ND	1.04	1.00	104	100	1	70.0-130			4.31	20
Selenium	1.00	0.0218	0.994	0.999	97.2	97.8	1	70.0-130			0.542	20
Silver	0.500	ND	0.471	0.547	94.2	109	1	70.0-130			14.9	20
Thallium	1.00	ND	1.10	1.06	110	106	1	70.0-130			4.18	20
Zinc	1.00	0.0517	1.05	1.01	100	95.7	1	70.0-130			4.36	20

L1554984-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1554984-01 11/11/22 11:22 • (MS) R3859968-3 11/11/22 11:28 • (MSD) R3859968-4 11/11/22 11:33

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Beryllium	1.00	ND	0.818	1.09	81.8	109	5	70.0-130		J3	28.9	20
Sodium	10.0	324	284	380	0.000	562	5	70.0-130	V	J3 V	29.1	20

L1554984-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1554984-02 11/11/22 11:38 • (MS) R3859968-5 11/11/22 11:43 • (MSD) R3859968-6 11/11/22 11:48

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Beryllium	1.00	ND	1.03	0.964	103	96.4	1	70.0-130			6.57	20
Sodium	10.0	3.19	14.6	13.6	114	104	1	70.0-130			7.39	20

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

WG1959919

Metals (ICP) by Method 200.7

QUALITY CONTROL SUMMARY

L1553075-01

Method Blank (MB)

(MB) R3863748-4 11/21/22 19:17

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Calcium, Dissolved	0.164	J	0.0496	1.00
Magnesium, Dissolved	0		0.0434	1.00
Sodium, Dissolved	0		0.178	1.00

Laboratory Control Sample (LCS)

(LCS) R3863748-2 11/21/22 19:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Calcium, Dissolved	10.0	10.2	102	85.0-115	
Magnesium, Dissolved	10.0	9.38	93.8	85.0-115	
Sodium, Dissolved	10.0	10.5	105	85.0-115	

L1553075-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1553075-01 11/21/22 19:27 • (MS) R3863748-3 11/21/22 19:32 • (MSD) R3863748-4 11/21/22 19:37

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Calcium, Dissolved	10.0	55.4	63.5	66.2	80.6	108	1	70.0-130			4.24	20
Magnesium, Dissolved	10.0	37.5	45.5	46.4	80.9	89.2	1	70.0-130			1.81	20

L1553075-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1553075-01 11/28/22 10:58 • (MS) R3865519-1 11/28/22 11:03 • (MSD) R3865519-2 11/28/22 11:09

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sodium, Dissolved	10.0	1000	1100	1090	940	820	20	70.0-130	V	V	110	20

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

00287

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Number, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blank, Field Spikes, Field Duplicate, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit
ND	Not detected at the Reporting Limit for MDL where applicable.
RDL	Reported Detection Limit
Rec.	Recovery
RPD	Relative Percent Difference
SDG	Sample Delivery Group
U	Not detected at the Reporting Limit for MDL where applicable.
Analyte	The name of the particular compound or analysis performed. Some Analytes and Methods will have multiple analyses reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the method can detect, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target recovery ranges or % difference value that the laboratory has historically determined as normal for the method used. If a sample is reported successfully QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, the result is not a Pass. See the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical (net) value corrected for any sample specific (matrix effects) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column should always be accompanied by either an MDL, Method Detection Limit or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Recovery/SD)	Confidence level of 2 Sigma.
Case Narrative (CN)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (QCS)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (SCC)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analysis that the laboratory is requested to perform. This document is used to track the samples from collection to delivery to the laboratory for analysis.
Sample Results (SR)	This section of your report will provide the results of all methods performed on your samples. These results are provided by sample ID and are separated by the analyses performed. Each header line of each analysis section for each sample will provide the name and method number for the analyses performed.
Sample Summary (SS)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICL).
J	The identification of the analyte is acceptable, the reported value is an estimate.
J5	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
K9	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	Test replicates show more than 30% difference between high and low values.
O	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T3	Sample was prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.
V	Sample(s) received past/due close to holding time expiration.

ACCOUNT:	PROJECT:	SDG:	DATE/TIME:	PAGE:
----------	----------	------	------------	-------

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Location	Address	Method	NEQS
Alaska	40860	17-026	NEQS-16-05
Arizona	42082	42082	TH00003202H
Arkansas	88-0469	88-0469	2975
California	2332	2332	TH00003
Colorado	TH00003	TH00003	TH00003
Connecticut	PH-0157	PH-0157	PH-0157
Florida	637487	637487	637487
Georgia	913	913	913
Idaho	TH00003	TH00003	TH00003
Illinois	200008	200008	200008
Indiana	CT-17-01	CT-17-01	CT-17-01
Iowa	364	364	364
Kansas	63-0277	63-0277	63-0277
Kentucky	0708010	0708010	0708010
Kentucky 1	16	16	16
Louisiana	A03792	A03792	A03792
Maine	U0018	U0018	U0018
Maine 1	TH00003	TH00003	TH00003
Massachusetts	324	324	324
Michigan	M-11003	M-11003	M-11003
Minnesota	9558	9558	9558
Mississippi	04-499-395	04-499-395	04-499-395
Mississippi 1	TH00003	TH00003	TH00003
Missouri	340	340	340
Montana	CER7006	CER7006	CER7006
Nebraska	146-01	146-01	146-01
Nebraska 1	TH00003	TH00003	TH00003
Nevada	146-01	146-01	146-01
New Hampshire	TH00003	TH00003	TH00003
New Jersey	TH00003	TH00003	TH00003
New Mexico	TH00003	TH00003	TH00003
New York	11742	11742	11742
North Carolina	EN0275	EN0275	EN0275
North Carolina 1	41	41	41
North Dakota	8-240	8-240	8-240
Ohio	CL0669	CL0669	CL0669
Oklahoma	9905	9905	9905
Oregon	TH00002	TH00002	TH00002
South Carolina	68-0279	68-0279	68-0279
South Dakota	L400035	L400035	L400035
Tennessee	8400002	8400002	8400002
Texas	46	46	46
Texas 1	TH00003	TH00003	TH00003
Utah	L48052	L48052	L48052
Vermont	V172068	V172068	V172068
Virginia	TH0003	TH0003	TH0003
Washington	2347	2347	2347
West Virginia	9989390	9989390	9989390
Wisconsin	AT14	AT14	AT14
Wyoming	100739	100739	100739
Wyoming 1	146-01	146-01	146-01
YSDA	P310-15-0234	P310-15-0234	P310-15-0234

Pace Analytical Services, LLC - Dallas 400 W. Beltway Drive Suite 190 Allen, TX 75013

Address	Address	Address	Address
Arkansas	88-0467	88-0467	88-0467
California	88-0469	88-0469	88-0469
Illinois	403	403	403
Iowa	30666	30666	30666
Louisiana	30666	30666	30666

Pace Analytical Services, LLC - Dallas 2657 Gravel Dr Ft. Worth, TX 76118

Test: TH00003223237

¹ Drinking Water ² Underground Storage Tanks ³ Aesthetic Toxicity ⁴ Chemical/Biochemical ⁵ Lead ⁶ Wastewater ⁷ Accreditations not applicable

⁸ Test certificates held by the laboratory are applicable to the results reported in the attached report.

⁹ Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

ACCOUNT:	PROJECT:	SDG:	DATE/TIME:	PAGE:
----------	----------	------	------------	-------

Company Name/Address:
Enviro-Ag Engineering
3404 Airway Blvd.
Amarillo, TX 79118

Billing Information:
Bryan Mullin
3404 Airway Blvd.
Amarillo, TX 79118

Report to:
Jourdan Mullin

Project Description:
City/State: _____
Client Project #: _____
Lab Project #: _____
P.O. #: _____
Quote #: _____
Date Results Needed: _____
No. of Containers: _____

Phone: 254-965-3500

Collected by (print): **Zane Trotter**
Collected by (signature): **Zane Trotter**
Immediately Packed on ice: **N Y**

Rush? (Lab MUST Be Notified)
____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day

Sample ID: _____ Comp/Grab: _____ Matrix: _____ Depth: _____ Date: _____ Time: _____ Entries: _____

Remarks: WetChem = Cl, F, "NO3", pH, SPCON, and SO4 "Nitrate = 48hr hold"
Total Metals = Ag, Al, As, Ba, Be, B, Cd, Cr, Cu, Ni, Pb, Sb, Se, Ti, and Zn by 200.7 pH _____ Temp _____
Flow _____ Other _____

Samples returned via: _____ Tracking #: _____

Relinquished by: (Signature) **Zane Trotter** Date: **11/02/2022** Time: **11:16**
Relinquished by: (Signature) **Alisa Humber/PA** Date: **11/2/22** Time: **1345**
Relinquished by: (Signature) **SCHAVAZ PA** Date: **11/2/22** Time: **1440**

Received by: (Signature) **Alisa Humber/PA**
Received by: (Signature) **SCHAVAZ PA**
Received for lab by: (Signature) **PA**

Trip Blank Received: Yes/No
HCL/MoH TBR
Temp: _____ °C Bottles Received: _____

Hold: _____ Condition: **NCF / OK**

Analysis / Container / Preservative

Analysis / Container / Preservative	ALL PHOS COD, NH3, 4500 500mLHDPE-Add H2	ALLBOD 1L-HDPE NoPres	ALLCBOB 1L-HDPE NoPres	ALLCN 250mLHDPE-NOH	ALLCR3, ALLCR6 500mLHDPE-NoPres	ALLOGEX 1L-Amb-Add HCl	ALLSAR 250mLHDPE-HNO3	ALLTDS 1L-HDPE NoPres	ALLTDC 250mL-H2SO4	ALLTSS 1L-HDPE-NoPres
Schreiber Sample 2	X	X	X	X	X	X	X	X	X	X
Schreiber Sample 2				X	X					

Chain of Custody Page 1 of 1

Pace Analytical
190 Allen, TX 75013

SDG # **L1593075**

Table #

Accnum: **DSENVIGDTX**
Template: **T218389**
Prelim: **P058060**
PM: 923 - Reagan Johnson
PB:

Shipped Via: **FedEx Priority**

Remarks Sample # (lab only)

Remarks: **-01**
02

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Sample Receiver Checklist
COC Seal Present/Intact: **Y**
COC signed/accurate: **Y**
Bottles arrive intact: **Y**
Correct bottles used: **Y**
Sufficient volume sent: **Y**
If Applicable
VOA Zero Headspace: **Y**
Preservation Correct/Checked: **Y**
RAD Screen <0.5 mB/hr: **Y**

Company Name/Address:
Enviro-Ag Engineering
3404 Airway Blvd.
Amarillo, TX 79118

Billing Information:
Bryan Mullin
3404 Airway Blvd.
Amarillo, TX 79118

Report to:
Jourdan Mullin

Project Description:
City/State: _____
Client Project #: _____
Lab Project #: _____
P.O. #: _____
Quote #: _____
Date Results Needed: _____
No. of Containers: _____

Phone: 254-965-3500

Collected by (print): **Zane Trotter**
Collected by (signature): **Zane Trotter**
Immediately Packed on ice: **N Y**

Rush? (Lab MUST Be Notified)
____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day

Sample ID: _____ Comp/Grab: _____ Matrix: _____ Depth: _____ Date: _____ Time: _____ Entries: _____

Remarks: WetChem = Cl, F, "NO3", pH, SPCON, and SO4 "Nitrate = 48hr hold"
Total Metals = Ag, Al, As, Ba, Be, B, Cd, Cr, Cu, Ni, Pb, Sb, Se, Ti, and Zn by 200.7 pH _____ Temp _____
Flow _____ Other _____

Samples returned via: _____ Tracking #: _____

Relinquished by: (Signature) **Zane Trotter** Date: **11/02/2022** Time: **11:15**
Relinquished by: (Signature) **Alisa Humber/PA** Date: **11/2/22** Time: **1345**
Relinquished by: (Signature) **SCHAVAZ PA** Date: **11/2/22** Time: **1440**

Received by: (Signature) **Alisa Humber/PA**
Received by: (Signature) **SCHAVAZ PA**
Received for lab by: (Signature) **PA**

Trip Blank Received: Yes/No
HCL/MoH TBR
Temp: _____ °C Bottles Received: _____

Hold: _____ Condition: **NCF / OK**

Analysis / Container / Preservative

Analysis / Container / Preservative	CHLORR 500mLHDPE-NoPres	Dissolved Ca, Mg, Na 250mLHDPE-NoPres	FTWFC Microbiological	TKN 250mLHDPE-H2SO4	Total Metals 250mLHDPE-HNO3	WetChem 500mLHDPE-NoPres
Schreiber Sample 2	X	X	X	X	X	X
Schreiber Sample 2					X	

Chain of Custody Page 1 of 1

Pace Analytical
190 Allen, TX 75013

SDG # **L1593075**

Table #

Accnum: **DSENVIGDTX**
Template: **T218389**
Prelim: **P058060**
PM: 923 - Reagan Johnson
PB:

Shipped Via: **FedEx Priority**

Remarks Sample # (lab only)

Remarks: **-01**
02

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Sample Receiver Checklist
COC Seal Present/Intact: **Y**
COC signed/accurate: **Y**
Bottles arrive intact: **Y**
Correct bottles used: **Y**
Sufficient volume sent: **Y**
If Applicable
VOA Zero Headspace: **Y**
Preservation Correct/Checked: **Y**
RAD Screen <0.5 mB/hr: **Y**

Company Name/Address: **Enviro-Ag Engineering**
3404 Airway Blvd.
Amarillo, TX 79118

Billing Information:
Bryan Mullin
3404 Airway Blvd.
Amarillo, TX 79118

Report to: **Jourdan Mullin**

Project Description: **Chlorine**

City/State: **TX**

Phone: **254-965-3800**

Client Project #

Lab Project #

Collected by (print): **Zane Trotter**

Collected by (signature): **Zane Trotter**

Immediately Packed on ice: **N**

Sample ID: **Schreiber Sample 2**

Comp/Grab: **WW**

Matrix: **WW**

Depth: **11/2/22 9:33**

Date: **11/2/22 9:33**

Time: **14**

Conc: **3**

Remarks: **Wet Chem = Cl, F, "NO3", pH, SPCON, and SO4 "Nitrate = 48hr hold"**
Total Metals = Ag, Al, As, Ba, Bi, Br, Cd, Cr, Cu, Ni, Pb, Sb, Se, Ti, and Zn by 200.7

Shipping Information:
Ship Via: **FedEx Priority**

Account: **DSENVIGDTX**

Template: **T218388**

Protocol: **P068060**

PM: **823 - Douglas Johnson**

Shipped Via: **FedEx Priority**

Revised: **11/3/22 1700**

Rec: **FedEx**

11/3/22 1700

Document Name: **Document Revised: 7/27/20**

Sample Condition Upon Receipt: **Page 1 of 1**

Document No.: **F-DAL-C-001-rev.14**

Issuing Authority: **Pace Dallas Quality Office**

Sample Condition Upon Receipt: **Sample Condition Upon Receipt**

□ Dallas □ Ft Worth □ Corpus Christi □ Austin

Client Name: **Enviro-Ag**

Project Work order (place label): **L1553075**

Courier: **FedEx** □ UPS □ Client □ ISO □ PACE □ Other

Tracking #: **11/2/22**

Received on ice: **Yes** □ No □

Receiving Lab 1 Thermometer Used: **FATM03**

Receiving Lab 2 Thermometer Used: **1212**

Cooler Temp °C: **1.3** (Recorded) **-0.5** (Corrected Factor) **1.3** (Actual)

Cooler Temp °C: **0.5** (Recorded) **-0.5** (Corrected Factor) **0.0** (Actual)

Temperature should be above freezing to 6°C unless collected same day as receipt in which evidence of cooling is acceptable

Triage Person: **AW** Date: **11/2/22**

Chain of Custody relinquished: **Yes** □ No □

Sampler name & signature on COC: **Yes** □ No □

Short RT analyses (<72 hrs): **Yes** □ No □

Login Person: **SW** Date: **11/2/22**

Sufficient Volume received: **Yes** □ No □

Correct Container used: **Yes** □ No □

Container Intact: **Yes** □ No □

Sample pH Acceptable: **Yes** □ No □

pH Strips: **11.005**

Residual Chlorine Present: **Yes** □ No □

Cl Strips: **14840**

Sulfide Present: **Yes** □ No □

Lead Acetate Strips: **14842**

Are soil samples (volatiles, TPH) received in 5035A kits (not applicable to TCLP VOA or PST Program TPH): **Yes** □ No □

Unpreserved 5035A soil frozen within 48 hrs: **Yes** □ No □

Headspace in VOA (>6mm): **Yes** □ No □

Project sampled in USDA Regulated Area outside of Texas: **Yes** □ No □

State Sampled: **Yes** □ No □

Non-Conformance(s): **Yes** □ No □

Labeling Person (if different than log-in): **SW** Date: **11/2/22**

00292

Amarillo, TX 79118

Karagam Thiruv

Reagan Johnson
Project Manager

© 2005 Blackwell Publishing Ltd, *Journal of Clinical Pharmacy and Therapeutics*, 30, 111–116

12055 Lebanon Rd Mount Juliet, TN 37122 615-756-5858 800-757-3859 www.pacenational.com

Pace Analytical National

ACCOUNT:
Enviro-Ag Engineering

PROJECT:

SDG 15

DATE/TIME: 04/12/23 11:02

PAGE
1 of 43

ACCOUNT: Enviro-Ag Engineering

PROJECT

SDG:
L1562688

DATE/TIME: 08/2/23 11:02

PAGE:
2 of 43

Ca ~~Tc~~ Ss Cn Sr Qc Gl Al Sc

SAMPLE SUMMARY

SCHREIBER 3 LIS62686-01 WW

Collected by
Zane Trotter

Collected date/time
12/07/22 09:10

Received date/time
12/07/22 10:47

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Microbiology by Method 822.02						
Calculated Result						
Calculated Result	WG196277	1	12/07/22 14:58	12/07/22 14:58	CNC	R. Work, TX
Grammatic Analysis by Method 3540C	WG197234	1	12/07/22 15:01	12/07/22 15:01	TJG	Allen, TX
Grammatic Analysis by Method 3540C	WG197247	1	12/07/22 11:45	12/07/22 11:45	CAG	Allen, TX
Grammatic Analysis by Method 3540C	WG1968709	1	12/07/22 07:28	12/07/22 09:35	OOT	Allen, TX
Grammatic Analysis by Method 3540C	WG1968703	1	12/04/22 14:08	12/04/22 15:22	OOT	Allen, TX
Wet Chemistry by Method 165.04	WG1968710	1	12/04/22 09:24	12/04/22 09:24	OOT	Allen, TX
Wet Chemistry by Method 300.0	WG197310	1	12/04/22 16:28	12/04/22 11:10	TK	Allen, TX
Wet Chemistry by Method 300.0	WG1968717	1	12/03/22 17:34	12/03/22 17:34	EG	Allen, TX
Wet Chemistry by Method 300.0	WG1968405	1	12/03/22 15:25	12/03/22 15:25	EG	Allen, TX
Wet Chemistry by Method 300.0	WG1968405	1	12/03/22 15:25	12/03/22 15:25	EG	Allen, TX
Wet Chemistry by Method 351.2	WG1972010	1	12/05/22 00:16	12/05/22 11:45	CLG	Allen, TX
Wet Chemistry by Method 4500C G-2011	WG1968668	1	12/03/22 23:10	12/03/22 23:10	TCF	Mc, Junc, TN
Wet Chemistry by Method 4500C-E	WG197319	50	12/04/22 17:22	12/04/22 17:22	KCM	Allen, TX
Wet Chemistry by Method 522.02	WG1970612	1	12/07/22 12:04	12/07/22 18:10	SMC	Allen, TX
Wet Chemistry by Method 5310C	WG1968812	5	12/04/22 13:26	12/04/22 13:26	EG	Allen, TX
Wet Chemistry by Method 5M 4500-H-B	WG1974607	1	12/04/22 20:00	12/04/22 20:00	SMC	Allen, TX
Wet Chemistry by Method 5M500NH3H	WG197247	10	12/08/22 13:55	12/08/22 13:55	EG	Allen, TX
Wet Chemistry by Method 5M5210S	WG1968513	1	12/03/22 12:10	12/07/22 08:56	SMC	Allen, TX
Metals (ICP) by Method 200.7	WG1968598	1	12/07/22 15:55	12/07/22 09:51	SMC	Allen, TX
Metals (ICP) by Method 200.7	WG197314	1	12/03/22 08:22	12/03/22 14:34	TJG	Allen, TX
Metals (ICP) by Method 200.7	WG197314	20	12/03/22 08:22	12/03/22 14:34	TJG	Allen, TX
Metals (ICP) by Method 200.7	WG197205	1	12/03/22 11:19	12/07/22 14:50	EJS	Allen, TX
Metals (ICP) by Method 200.7	WG197205	20	12/03/22 11:19	12/07/22 17:08	TJG	Allen, TX

SCHREIBER 3 LIS62686-02 WW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Result						
Wet Chemistry by Method 3500C-A	WG1968392	1	12/05/22 11:00	12/05/22 11:00	KCM	Allen, TX
Wet Chemistry by Method 4500C-A-E	WG1974881	1	12/05/22 11:00	12/05/22 11:00	KCM	Allen, TX
Metals (ICP) by Method 200.7	WG1970631	1	12/07/22 09:54	12/07/22 15:13	KCM	Allen, TX
Metals (ICP) by Method 200.7	WG1970134	1	12/05/22 15:34	12/07/22 14:45	CLX	Allen, TX
Metals (ICP) by Method 200.7	WG1968292	1	12/02/22 10:41	12/02/22 17:15	CLX	Allen, TX
Metals (ICP) by Method 200.7	WG1968292	1	12/02/22 10:41	12/02/22 12:24	TJG	Allen, TX
Metals (ICP) by Method 200.7	WG1968292	20	12/02/22 10:41	12/02/22 16:04	TJG	Allen, TX

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or noted within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to effect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Reagan Johnson

Reagan Johnson
Project Manager

CD
TC
SS
Cn
Sr
OC
GI
Al
Sc

CD
TC
SS
Cn
Sr
OC
GI
Al
Sc

SCHREIBER 3

Collected date/time: 12/01/22 09:10

SAMPLE RESULTS - 01

L1562666

Microbiology by Method 9222D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Coliform Fecal	300	2	1	12/02/2022 14:58	WG972727

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Sodium Azide/Phenol Ratio	20.2			1	12/22/2022 15:01	WG972314

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Organic Nitrogen	0.28		0.280	1	12/02/2022 11:45	WG972747

Gravimetric Analysis by Method 2540C

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Total Dissolved Solids	3780		250	1	12/02/2022 09:55	WG968709

Gravimetric Analysis by Method 2540D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Suspended Solids	750		250	1	12/04/2022 15:22	WG972972

Wet Chemistry by Method 1201

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Specific Conductance	5080		unh/5cm	1	12/04/2022 08:24	WG972970

Sample Narrative:

L1562886-01 WG972970: 4:25C

Wet Chemistry by Method 1664A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Oil & Grease (Heptane Ext)	11.2		5.00	1	12/05/2022 11:00	WG972420

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Chloride	1050		0.800	1	12/02/2022 18:36	WG972645
Fluoride	ND		0.500	1	12/02/2022 17:34	WG972722
Nitrate	0.587		0.500	1	12/02/2022 18:25	WG972645
Sulfate	171		0.700	1	12/02/2022 18:36	WG972645

Wet Chemistry by Method 351.2

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Kjeldahl Nitrogen (TKN)	16.4		0.250	1	12/05/2022 11:45	WG972020

Wet Chemistry by Method 4500CI-G-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Chlorophyll (chl a)	ND	1.8	0.100	1	12/02/2022 23:00	WG972660

ACCOUNT:

PROJECT:

SOP:

DATE/TIME:

PAGE:

5 of 43

SCHREIBER 3

Collected date/time: 12/01/22 08:10

SAMPLE RESULTS - 01

L1562666

Wet Chemistry by Method 4500P-E

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Phosphate Total	12.1		2.50	50	12/04/2022 12:22	WG972759

Wet Chemistry by Method 5220D

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
CO2	672		35.0	1	12/01/2022 16:00	WG972052

Wet Chemistry by Method 5310C

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
TOC (Total Organic Carbon)	117		3.50	5	12/06/2022 12:28	WG972822

Wet Chemistry by Method SM 4500-H+B

Analyte	Result	Qualifier	Dilution	Analysis	Batch
pH	8.52	12	1	12/04/2022 20:00	WG972672

Sample Narrative:

L1562886-01 WG972672: 8:52 at 25C

Wet Chemistry by Method SM4500NH3H

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Ammonia Nitrogen	3.02		1.00	10	12/08/2022 12:55	WG972747

Wet Chemistry by Method SMS210B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
BOD	37.0	2.53	5.00	1	12/07/2022 03:55	WG972632
CBD	48.5	11.83	1.00	1	12/07/2022 09:51	WG972632

Metals (ICP) by Method 200.7

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Cadmium	65.1		1.00	1	12/22/2022 14:34	WG972724
Cobalt	59.3		1.00	1	12/22/2022 14:30	WG972725
Magnesium	33.4		1.00	1	12/22/2022 14:34	WG972725
Magnesium/Dissolved	37.9		1.00	1	12/22/2022 14:30	WG972725
Sodium	899		20.0	20	12/22/2022 15:01	WG972725
Sodium/Dissolved	590		20.0	20	12/22/2022 17:08	WG972725

ACCOUNT:

PROJECT:

SOP:

DATE/TIME:

PAGE:

6 of 43

SCHREIBER 3
Collected date/time: 12/01/22 09:10

SAMPLE RESULTS - 02

11562586

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Chromium, Trivalent	ND	1	0.00300	1	12/05/2022 11:00	WG1966292

Wet Chemistry by Method 3500Cr-B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Chromium, Hexavalent	ND	TS	0.00300	1	12/05/2022 11:00	WG1974631

Sample Narrative:

11562586-02 WG1974631 Sample not field filtered within 15min of collection

Wet Chemistry by Method 4500Cn-E

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Cynide	ND		0.0100	1	12/07/2022 15:13	WG1974632

Mercury by Method 245.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Mercury	ND	2A	0.000200	1	12/07/2022 14:16	WG1970732

Metals (ICP) by Method 200.7

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
Aluminum	4.03		0.500	1	12/09/2022 17:15	WG1968292
Antimony	ND		0.0250	1	12/09/2022 17:15	WG1968292
Arsenic	ND		0.0200	1	12/09/2022 17:15	WG1968292
Boron	0.2847		0.0050	1	12/09/2022 17:15	WG1968292
Beryllium	ND		0.00100	1	12/09/2022 17:15	WG1968292
Bromine	ND		0.10	1	12/09/2022 17:15	WG1968292
Cadmium	37.4		0.00500	1	12/09/2022 17:15	WG1968292
Calcium	ND		1.00	1	12/09/2022 17:15	WG1968292
Chromium	ND		0.00700	1	12/09/2022 17:15	WG1968292
Copper	ND		0.0200	1	12/09/2022 17:15	WG1968292
Lead	ND		0.0100	1	12/09/2022 17:15	WG1968292
Magnesium	39.7		1.00	1	12/09/2022 17:15	WG1968292
Manganese	ND		0.0500	1	12/09/2022 17:15	WG1968292
Nickel	0.0146		0.0100	1	12/09/2022 17:15	WG1968292
Selenium	ND		0.0200	1	12/22/2022 12:24	WG1968292
Silver	ND		0.00500	1	12/09/2022 17:15	WG1968292
Sodium	946		20.0	20	12/22/2022 16:04	WG1968292
Thallium	ND		0.0200	1	12/09/2022 17:15	WG1968292
Zinc	0.173		0.0250	1	12/09/2022 17:15	WG1968292

ACCOUNT:
Environmental Engineering

PROJECT:

SECT:
L1562586

DATE/TIME:
07/02/23 11:02

PAGE:
7 of 13

00295

WG1969277

Method Blank (MB)

QUALITY CONTROL SUMMARY

11562586-01

Analyte	MB Result	MB Qualifier	MB RDL	MB Dilution	MB Analysis	MB Batch
Calcium, Total	ND		0.0100	1	12/02/22 14:50	WG1969277

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB RDL	MB Dilution	MB Analysis	MB Batch
Calcium, Total	ND		0.0100	1	12/02/22 14:50	WG1969277

11562586-01 Original Sample (OS) - Duplicate (DUP)

001 11562586-01 12/02/22 14:50 - DUP 11562586-02 12/02/22 14:50

Analyte	OS Result	OS Qualifier	OS RDL	OS Dilution	OS Analysis	OS Batch
Calcium, Total	210		20.0	1	12/02/22 14:50	WG1969277

ACCOUNT:
Environmental Engineering

PROJECT:

SECT:
L1562586

DATE/TIME:
12/02/22 11:02

PAGE:
4 of 4

WG1968709

Comprehensive Analysis by Method 3540C

QUALITY CONTROL SUMMARY

L156288.C1

Method Blank (MS)									
Analyte	MS Result	MS Duplicate	MS MDL	MS MDL	MS MDL	MS MDL	MS MDL	MS MDL	MS MDL
Test Duplicate Solid	U	15.9	25.0	25.0	25.0	25.0	25.0	25.0	25.0
L156285-C1 Original Sample (OS) - Duplicate (DUP)									
[OS] L156285-C1 10/09/22 09:55 [DUP] R156285-C1 10/09/22 09:55									
Analyte	Original Result	DUP Result	DUP %	DUP %	DUP %	DUP %	DUP %	DUP %	DUP %
Test Duplicate Solid	200	200	100	100	100	100	100	100	100
Laboratory Control Sample (LCS)									
[LCS] R156285-C1 10/09/22 09:55									
Analyte	Spiked Amount	LCS Result	LCS Rec	Rec Limit	LCS Duplicate	LCS Duplicate	LCS Duplicate	LCS Duplicate	LCS Duplicate
Test Duplicate Solid	250	250	100	15.0-15	250	250	100	100	100
[OS] L156285-C1 10/09/22 09:55 [DUP] R156285-C1 10/09/22 09:55									
Analyte	Original Result	DUP Result	DUP %	DUP %	DUP %	DUP %	DUP %	DUP %	DUP %
Test Duplicate Solid	200	200	100	100	100	100	100	100	100
Laboratory Control Sample (LCS)									
[LCS] R156285-C1 10/09/22 09:55									
Analyte	Spiked Amount	LCS Result	LCS Rec	Rec Limit	LCS Duplicate	LCS Duplicate	LCS Duplicate	LCS Duplicate	LCS Duplicate
Test Duplicate Solid	250	250	100	15.0-15	250	250	100	100	100

WG1969073

Comprehensive Analysis by Method 3540C

QUALITY CONTROL SUMMARY

L156288.C1

Method Blank (MS)									
Analyte	MS Result	MS Duplicate	MS MDL	MS MDL	MS MDL	MS MDL	MS MDL	MS MDL	MS MDL
Test Duplicate Solid	U	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
L156288-C1 Original Sample (OS) - Duplicate (DUP)									
[OS] L156288-C1 10/09/22 15:22 [DUP] R156288-C1 10/09/22 15:22									
Analyte	Original Result	DUP Result	DUP %	DUP %	DUP %	DUP %	DUP %	DUP %	DUP %
Test Duplicate Solid	750	770	100	100	100	100	100	100	100
L156284-C1 Original Sample (OS) - Duplicate (DUP)									
[OS] L156284-C1 10/09/22 15:22 [DUP] R156284-C1 10/09/22 15:22									
Analyte	Original Result	DUP Result	DUP %	DUP %	DUP %	DUP %	DUP %	DUP %	DUP %
Test Duplicate Solid	200	200	100	100	100	100	100	100	100
Laboratory Control Sample (LCS)									
[LCS] R156284-C1 10/09/22 15:22									
Analyte	Spiked Amount	LCS Result	LCS Rec	Rec Limit	LCS Duplicate	LCS Duplicate	LCS Duplicate	LCS Duplicate	LCS Duplicate
Test Duplicate Solid	250	250	100	15.0-15	250	250	100	100	100
[OS] L156284-C1 10/09/22 15:22 [DUP] R156284-C1 10/09/22 15:22									
Analyte	Original Result	DUP Result	DUP %	DUP %	DUP %	DUP %	DUP %	DUP %	DUP %
Test Duplicate Solid	200	200	100	100	100	100	100	100	100

WG1968970

Wet Chemistry by Method 130.1

Method Blank (MS)

QUALITY CONTROL SUMMARY

US128181-01

MSD 709075470-2 10/9/22 09:24

Analyte	MS Result	MS Duplicate	MS MDL	MS RPL
Specific Conductance	U	U	1000	1000

Sample Name	MS Result	MS Duplicate	MS MDL	MS RPL
Blank at 25C				

L1952242-01 Original Sample (OS) - Duplicate (DUP)

OS: US68134201 10/9/22 09:24 - DUP: R33975501-4 10/9/22 09:24

Analyte	OS Result	DUP Result	DUP RPL
Specific Conductance	470	470	0.000

Sample Name	OS Result	DUP Result	DUP RPL
OS at 25C			
DUP at 25C			

L1952355-01 Original Sample (OS) - Duplicate (DUP)

OS: US68586001 10/9/22 09:24 - DUP: R33975501-4 10/9/22 09:24

Analyte	OS Result	DUP Result	DUP RPL
Specific Conductance	5000	5000	0.000

Sample Name	OS Result	DUP Result	DUP RPL
OS at 25C			
DUP at 25C			

Laboratory Control Sample (LCS)

LCS: R33975501-2 10/9/22 09:24

Analyte	LCS Result	LCS RPL	Rec. Limit	LCS Duplicate
Specific Conductance	200	200	79.9	20.0-220

Sample Name	LCS Result	LCS RPL	Rec. Limit	LCS Duplicate
LCS at 25C				

ACCOUNT
Broward Expressions

PROJECT

SOC
US128181-01

DATE/TIME
10/09/22 09:24

PAGE
1 of 1

WG1974310

Wet Chemistry by Method 166.2a

Method Blank (MS)

QUALITY CONTROL SUMMARY

US128181-01

MSD 709075470-2 10/9/22 11:16

Analyte	MS Result	MS Duplicate	MS MDL	MS RPL
0.5 Grams Fluoride Bag	U	U	0.250	5.00

Laboratory Control Sample (LCS) - Laboratory Control Sample Duplicate (LCS2)

LCS: R33975501-2 10/9/22 11:00 - LCS2: R33975501-2 10/9/22 11:00

Analyte	Sample Amount	LCS Result	LCS2 Result	LCS RPL	Rec. Limit	LCS Duplicate	LCS2 Duplicate	RPL Limit
0.5 Grams Fluoride Bag	40.0	27.8	27.2	94.5	37.0	75.0-114	1.00	0

L1965432-03 Original Sample (OS) - Matrix Spike (MS)

OS: US6643203 10/9/22 11:00 - MS: R33975501-2 10/9/22 11:16

Analyte	OS Result	MS Result	MS RPL	Rec. Limit	MS Duplicate
0.5 Grams Fluoride Bag	20.0	44.5	111	72.0-111	

Laboratory Control Sample (LCS)

LCS: R33975501-2 10/9/22 11:16

Analyte	LCS Result	LCS RPL	Rec. Limit	LCS Duplicate
Specific Conductance	200	200	79.9	20.0-220

Sample Name	LCS Result	LCS RPL	Rec. Limit	LCS Duplicate
LCS at 25C				

ACCOUNT
Broward Expressions

PROJECT

SOC
US128181-01

DATE/TIME
10/09/22 11:16

PAGE
1 of 1

WG1967877

Met Chemistry by Method 300.0

Method Blank (MS)

QUALITY CONTROL SUMMARY

1/15/2023

1/15/2023 12:22

Analysis: mg/L
Fluoride: 0

MS Result: mg/L
MS Rec: 0.00

MS Rec: 0.00

Laboratory Control Sample (LCS)

1/15/2023 12:22

Analysis: mg/L
Fluoride: 5.00

MS Result: mg/L
MS Rec: 5.00

MS Rec: 5.00

L1551913-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

1/15/2023 12:22

Analysis: mg/L
Fluoride: 5.00

MS Result: mg/L
MS Rec: 5.00

MS Rec: 5.00

Analysis: mg/L
Fluoride: 5.00

MS Result: mg/L
MS Rec: 5.00

MS Rec: 5.00

Sc

Al

GI

Cc

Sn

Cn

Ss

Sc

WG1968405

Met Chemistry by Method 300.0

QUALITY CONTROL SUMMARY

1/15/2023

1/15/2023 12:22

Analysis: mg/L
Fluoride: 0.00

MS Result: mg/L
MS Rec: 0.00

MS Rec: 0.00

Laboratory Control Sample (LCS)

1/15/2023 12:22

Analysis: mg/L
Fluoride: 0.00

MS Result: mg/L
MS Rec: 0.00

MS Rec: 0.00

L1552385-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

1/15/2023 12:22

Analysis: mg/L
Fluoride: 0.00

MS Result: mg/L
MS Rec: 0.00

MS Rec: 0.00

Analysis: mg/L
Fluoride: 0.00

MS Result: mg/L
MS Rec: 0.00

MS Rec: 0.00

Sc

Al

GI

Cc

Sn

Cn

Ss

Sc

L1552385-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

1/15/2023 12:22

Analysis: mg/L
Fluoride: 0.00

MS Result: mg/L
MS Rec: 0.00

MS Rec: 0.00

Analysis: mg/L
Fluoride: 0.00

MS Result: mg/L
MS Rec: 0.00

MS Rec: 0.00

Sc

Al

GI

Cc

Sn

Cn

Ss

Sc

ACCOUNT:
Browns Bioscience

PROJECT:
1/15/2023

DATE TIME:
1/15/2023 12:22

ANALYST:
1/15/2023

ACCOUNT:
Browns Bioscience

PROJECT:
1/15/2023

DATE TIME:
1/15/2023 12:22

ANALYST:
1/15/2023

Wei Chemistry by Method 3500Cr-8

Method Blank (MB)

QUALITY CONTROL SUMMARY

11562606-07

	MS RDS	MS Coulter	MS MOL	MS RDL
Analyte	mg/l		mg/l	mg/l
Crystalline Hexachlor	U		0.00100	0.00300

Laboratory Control Sample (LCS)				
(LCS) R3J27116-2 12/15/13 NCO				
Active	Spk. Amount	LCS Result	LCS Rec.	Rec. Limit
Chromium (hexavalent)	mg/l	mg/l	±	±
	0.250	0.97	±0.3	35.0-15

[illegible][illegible][illegible]

ACCOUNT:
BANK OF AMERICA

Analyte	Wt Result	ME Quantities	ME MOL	ME ROL
KYNOLIN NITROGEN TON	mg/l		mg/l	mg/l
U			0.140	0.750

L153-9662 - Original Sample (OS) - Duplicate (DUP)			
Original Result	DUP Result	Dilution	DUP RPD
mg/L	mg/L		%

Analyte	Digested Soil	DUP Result	Dilution	DUP RPD
Expected Nitrogen TKN	mg/l	mg/l	%	%
	0.531	0.495	1	27.5

Analyte	Spiked Amount	LC5 Result	LC5 Rec.	Rec. Limit
Kyushu Nitrogen TDI	mg/l 20.5	mg/l 15.1	% 27.3	% 75.0/100

[illegible]

Account

Dup Quarter: Dup RFD
Lanka

DUP Qualifier	DUP Ref
Links	
23	

ICS Breaker

Date		Time		Location		Weather		Remarks	
1	10/10/19	12:30	13:30	1000m	1000m	1000m	1000m	1000m	1000m
2	10/10/19	14:30	15:30	1000m	1000m	1000m	1000m	1000m	1000m
3	10/10/19	16:30	17:30	1000m	1000m	1000m	1000m	1000m	1000m
4	10/10/19	18:30	19:30	1000m	1000m	1000m	1000m	1000m	1000m
5	10/10/19	20:30	21:30	1000m	1000m	1000m	1000m	1000m	1000m
6	10/10/19	22:30	23:30	1000m	1000m	1000m	1000m	1000m	1000m
7	10/10/19	00:30	01:30	1000m	1000m	1000m	1000m	1000m	1000m
8	10/10/19	02:30	03:30	1000m	1000m	1000m	1000m	1000m	1000m
9	10/10/19	04:30	05:30	1000m	1000m	1000m	1000m	1000m	1000m
10	10/10/19	06:30	07:30	1000m	1000m	1000m	1000m	1000m	1000m
11	10/10/19	08:30	09:30	1000m	1000m	1000m	1000m	1000m	1000m
12	10/10/19	10:30	11:30	1000m	1000m	1000m	1000m	1000m	1000m
13	10/10/19	12:30	13:30	1000m	1000m	1000m	1000m	1000m	1000m
14	10/10/19	14:30	15:30	1000m	1000m	1000m	1000m	1000m	1000m
15	10/10/19	16:30	17:30	1000m	1000m	1000m	1000m	1000m	1000m
16	10/10/19	18:30	19:30	1000m	1000m	1000m	1000m	1000m	1000m
17	10/10/19	20:30	21:30	1000m	1000m	1000m	1000m	1000m	1000m
18	10/10/19	22:30	23:30	1000m	1000m	1000m	1000m	1000m	1000m
19	10/10/19	00:30	01:30	1000m	1000m	1000m	1000m	1000m	1000m
20	10/10/19	02:30	03:30	1000m	1000m	1000m	1000m	1000m	1000m
21	10/10/19	04:30	05:30	1000m	1000m	1000m	1000m	1000m	1000m
22	10/10/19	06:30	07:30	1000m	1000m	1000m	1000m	1000m	1000m
23	10/10/19	08:30	09:30	1000m	1000m	1000m	1000m	1000m	1000m
24	10/10/19	10:30	11:30	1000m	1000m	1000m	1000m	1000m	1000m
25	10/10/19	12:30	13:30	1000m	1000m	1000m	1000m	1000m	1000m
26	10/10/19	14:30	15:30	1000m	1000m	1000m	1000m	1000m	1000m
27	10/10/19	16:30	17:30	1000m	1000m	1000m	1000m	1000m	1000m
28	10/10/19	18:30	19:30	1000m	1000m	1000m	1000m	1000m	1000m
29	10/10/19	20:30	21:30	1000m	1000m	1000m	1000m	1000m	1000m
30	10/10/19	22:30	23:30	1000m	1000m	1000m	1000m	1000m	1000m
31	10/10/19	00:30	01:30	1000m	1000m	1000m	1000m	1000m	1000m
32	10/10/19	02:30	03:30	1000m	1000m	1000m	1000m	1000m	1000m
33	10/10/19	04:30	05:30	1000m	1000m	1000m	1000m	1000m	1000m
34	10/10/19	06:30	07:30	1000m	1000m	1000m	1000m	1000m	1000m
35	10/10/19	08:30	09:30	1000m	1000m	1000m	1000m	1000m	1000m

PROJECT

SOC.

D

WG1969822

Wet Chemistry by Athena 3310C

Method Blank (MB)

181819080706-1 120622 1301

QUALITY CONTROL SUMMARY

LISTED-CL

Analyte	mg/L	MB Result	MB Unit	MB RSL
TOC (Total Organic Carbon)	0.200	0.270	0.270	0.700

Laboratory Control Sample (LCS)

Specimen	mg/L	LCS Result	LCS Rec.	Rec. Units	LCS Qualifier
TOC (Total Organic Carbon)	10.0	100	99.970		

L156702-03 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Analyte	mg/L	MS Result	MS Rec.	MSD Result	MSD Rec.	Dilution	Rec. Units	MS Qualifier	MSD Qualifier
TOC (Total Organic Carbon)	10.0	10.2	10.2	10.2	10.2	1	20.0-100	99.9	99.9

L156702-04 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Analyte	mg/L	MS Result	MS Rec.	MSD Result	MSD Rec.	Dilution	Rec. Units	MS Qualifier	MSD Qualifier
TOC (Total Organic Carbon)	10.0	10.2	10.2	10.2	10.2	1	20.0-100	99.9	99.9

GL SI CH SA T

WG1974607

Wet Chemistry by Athena SM 4500-MB

L156405-15 Original Sample (OS) - Duplicate (DUP)

181819080706-1 120622 1300 (DUP) 181819080706-1 120622 1300

QUALITY CONTROL SUMMARY

LISTED-CL

Analyte	mg/L	OS Result	OS Rec.	DUP Result	DUP Rec.	DUP Qualifier
TOC (Total Organic Carbon)	10.0	10.2	10.2	10.2	10.2	99.9

Sample Name: L156405-15

Laboratory Control Sample (LCS)

Specimen	mg/L	LCS Result	LCS Rec.	Rec. Units	LCS Qualifier
TOC (Total Organic Carbon)	10.0	100	99.970		

GL SI CH SA T

W61971247

Wet Chemistry by Method SW4500NH4

Method Blank (MB)

QUALITY CONTROL SUMMARY

11/23/2013

Lab: P20890231 12/02/13 48

Sample	mg Result	ME Qualifier	ME MDL	ME RL
Ammonia Nitrogen	0.044	2	0.030	0.000

Laboratory Control Sample (LCS)

Lab: P20890231 12/02/13 48

Sample	mg Result	LCS Result	LCS Rec	Rec Limit	LCS Qualifier
Ammonia Nitrogen	5.00	5.09	5%	10.0-5.0	

L155281402 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Lab: P20890231 12/02/13 48

Sample	mg Result	Original Result	MS Result	MSD Result	Dilution	Rec Limit	MSD Qualifier	MSD RL	MSD Rec
Ammonia Nitrogen	5.00	ND	5.10	5.22	102	102	1	20.0-5.0	

L15528275-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Lab: P20890231 12/02/13 48

Sample	mg Result	Original Result	MS Result	MSD Result	Dilution	Rec Limit	MSD Qualifier	MSD RL	MSD Rec
Ammonia Nitrogen	5.00	0.01	5.0	5.0	101	101	1	20.0-5.0	

GI
Sr
Sc

W61968313

Wet Chemistry by Method SW5108

Method Blank (MB)

QUALITY CONTROL SUMMARY

11/23/2013

Lab: P20890231 12/02/13 48

Sample	mg Result	ME Qualifier	ME MDL	ME RL
BOD	U	0.250	0.100	

L1552839-01 Original Sample (OS) - Duplicate (DP)

Lab: P20890231 12/02/13 48

Sample	mg Result	Original Result	DP Result	Dilution	DP RL	DP Qualifier
BOD	112	104	111	211	20	

Laboratory Control Sample (LCS)

Lab: P20890231 12/02/13 48

Sample	mg Result	LCS Result	Rec Limit	LCS Qualifier
BOD	ND	ND	0.0-15	2

GI
Sr
Sc

ACCOUNT
C:\msdcs\blm\work\p1

PROJECT

ZOC
11/23/2013

DATE/TIME
11/23/2013

PAGE
24 of 40

ACCOUNT
Sawyer's Environmental

PROJECT

ZOC
11/23/2013

DATE/TIME
11/23/2013

PAGE
24 of 40

WG1968398

Wet Chemistry by Method 565708

Method Blank (MS)

QUALITY CONTROL SUMMARY

L155158-51

L1563533-02 Original Sample (CS) - Duplicate (DUP)									
ID: L1563533-02 - 12/07/21 09:32 - 02/01/2020 09:32 MS									
Analyte	mg/l	Digested Result	DUP Result	Duplicate	DUP RPD	DUP Duplicate	DUP RPD		
Chloride	16.5	11.1	1	39.3	22.8%	20			
Laboratory Control Sample (LCS)									
ID: L1563533-02 - 12/07/21 09:45									
Analyte	mg/l	Spiked Amount	LCS Result	LCS Rec	Rec Limit	LCS Duplicate			
Chloride	62	354	100	05-05	22				

Sc

AI

GI

Ch

Sr

Sc

WG1970134

Wet Chemistry by Method 245

Method Blank (MS)

QUALITY CONTROL SUMMARY

L155158-52

L155158-52: Original Sample (CS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)									
ID: L155158-52: 12/07/21 10:30 - 12/07/21 10:30 - 12/07/21 10:30 - 12/07/21 10:30									
Analyte	mg/l	Spiked Amount	LCS Result	LCS Rec.	Rec. Limit	LCS Duplicate			
Barium	0.000100	0.000550	22.4	10.0-05	22				
L155158-52: Original Sample (CS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)									
ID: L155158-52: 12/07/21 10:30 - 12/07/21 10:30 - 12/07/21 10:30 - 12/07/21 10:30									
Analyte	mg/l	Spiked Amount	Digested Result	MS Result	MS Rec.	MS Duplicate	MS RPD	MS Duplicate	MS RPD
Barium	0.000100	NO	0.000550	0.000550	22.2	22.7	1	70.0-100	22

Sc

AI

GI

Ch

Sr

Sc

WG1968292

QUALITY CONTROL SUMMARY

Method (ICP) by Method 200.7

US62702-02 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Analyte	Spiked Amount	Original Result	MS Result	MS Rec.	MS Rec. %	MSD Result	MSD Rec.	MSD Rec. %	MSD Rec. Limit	MSD Rec. Limit %	MSD Rec. Limit %
As	100	ND	101	0.99	99.2	ND	ND	ND	ND	ND	ND
Se	100	ND	101	0.99	99.2	ND	ND	ND	ND	ND	ND

Sc	Al	Cl	Cr	Fe	Co	Cu	Pb	Ag	Cd	Ca	K	Mg	Mn	Ni	Sr	Zn
----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----

WG1973314

QUALITY CONTROL SUMMARY

Method (ICP) by Method 200.7

US62702-02 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Analyte	Spiked Amount	Original Result	MS Result	MS Rec.	MS Rec. %	MSD Result	MSD Rec.	MSD Rec. %	MSD Rec. Limit	MSD Rec. Limit %	MSD Rec. Limit %
As	100	ND	101	0.99	99.2	ND	ND	ND	ND	ND	ND
Se	100	ND	101	0.99	99.2	ND	ND	ND	ND	ND	ND

Sc	Al	Cl	Cr	Fe	Co	Cu	Pb	Ag	Cd	Ca	K	Mg	Mn	Ni	Sr	Zn
----	----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----

ANALYST
Cynthia Burrows

PROJECT

DOE

DATE/TIME
11/02/2012 11:00

LAB

ANALYST
Cynthia Burrows

PROJECT

DOE

DATE/TIME
11/02/2012

PAGE
10/11

WG1973314

Model 11CPI by Monroe 7057

QUALITY CONTROL SUMMARY

1552686-01

Controlled Sample (CS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD),

Analyte	Spigot (Rec'd)	MF Rec'd	MSD Rec'd	MS Rec'd	MSD Rec'd	Chlorine	Rec'd limits	MS Qualifier	MSD Qualifier	PRO Items
mpg	mpg	mpg	mpg	mpg	mpg					
4.1	29.0	50.7	60.4	52.5	70.0-90.0			0.561	35	
11.4	21.0	20.2	95.2	97.5	70.0-90.0	1		1.52	29	

L1566573-C1 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

[illegible]

US54952-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

[illegible]

L1564492-02 Original Sample (DS) • Matrix Spike (MS)

Sample	Spiked solvent	Original solvent	MS Error	Detection	Rec. Limit	MS Quality
mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
10.0	5.0	4.91	0.008	10	70.0-170	7

ACCOUNT
Firmly by Business

PROJECT

506

DATE/TIME
22/02/2022

Macij
2018

WG1977205
Metal-1100 50 Meters

Metal-ICM; by Mennel 2007

QUALITY CONTROL SUMMARY
11563606-01

19-90979519

Method Blank (MB)

MR Results		MR Diln	MR 50L
Analyte	mg/l	mg/l	
Citric Acid/Na Cit	U	0.00%	100
Uppercase Diluted	U	0.00%	100

Method Blank (MB;

[illegible]

Laboratory Control Sample (LCS)

Sample	Splice Percent		US Rec		Rec Limit		US Quality	
	ngl	US Rec'd	ngl	US Rec'd	ngl	US Rec'd	ngl	US Rec'd
Clean, Dissolved	10.0	99.1	10.0	99.1	10.0	99.1	10.0	99.1
Marine, Dissolved	10.0	99.1	10.0	99.1	10.0	99.1	10.0	99.1

Laboratory Control Sample (LCS)

	CS Total	CS Prod.	Rec. Lenses	CS Quality
Spare amount				
Module				
mgpt	±			
to 0		35	0.18	
Random Dashed	10.1			

1356-107-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Sample	Spk factor	Optical band	M-Ratio	H ₂ O peak	MSI peak	Dimer	Frc. limit	% Dimer	M/D dimer	R/P
Alkyne	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Alum treated	30.5	58.6	77.2	10.9	19	20.5	10-20	1	1.8	1.5
Unexposed	30.0	46.1	41.5	11	919	10-100	190	2.0	1.5	1.5

ACCOUNT

PROJECT

2006
2007

DATE/TIME
12/26/2012

2000

1

1

11

5

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
---	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

11

1

1

L

ACCREDITATIONS & LOCATIONS

Page Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

State	City	Address	Phone	Fax
Alabama	Montgomery	10000000000	205-261-1111	205-261-1111
Alaska	Juneau	10000000000	907-586-1111	907-586-1111
Arizona	Phoenix	10000000000	602-955-1111	602-955-1111
Arkansas	Fayetteville	10000000000	479-781-1111	479-781-1111
California	San Diego	10000000000	619-444-1111	619-444-1111
Colorado	Denver	10000000000	303-733-1111	303-733-1111
Connecticut	Hartford	10000000000	860-524-1111	860-524-1111
Delaware	Dover	10000000000	302-671-1111	302-671-1111
Florida	Miami	10000000000	305-551-1111	305-551-1111
Georgia	Atlanta	10000000000	404-525-1111	404-525-1111
Hawaii	Honolulu	10000000000	808-531-1111	808-531-1111
Illinois	Chicago	10000000000	773-555-1111	773-555-1111
Indiana	Indianapolis	10000000000	317-555-1111	317-555-1111
Iowa	Des Moines	10000000000	515-281-1111	515-281-1111
Kansas	Topeka	10000000000	781-234-1111	781-234-1111
Kentucky	Louisville	10000000000	502-261-1111	502-261-1111
Kentucky	Louisville	10000000000	502-261-1111	502-261-1111
Louisiana	New Orleans	10000000000	504-581-1111	504-581-1111
Maine	Bangor	10000000000	207-691-1111	207-691-1111
Maryland	Baltimore	10000000000	410-527-1111	410-527-1111
Massachusetts	Boston	10000000000	617-552-1111	617-552-1111
Michigan	Ann Arbor	10000000000	734-769-1111	734-769-1111
Minnesota	Minneapolis	10000000000	612-339-1111	612-339-1111
Mississippi	Jackson	10000000000	601-951-1111	601-951-1111
Missouri	St. Louis	10000000000	314-436-1111	314-436-1111
Montana	Billings	10000000000	406-243-1111	406-243-1111
Nebraska	Omaha	10000000000	402-441-1111	402-441-1111
Nevada	Las Vegas	10000000000	702-735-1111	702-735-1111
New Hampshire	Manchester	10000000000	603-861-1111	603-861-1111
New Jersey	Jersey City	10000000000	201-962-1111	201-962-1111
New Mexico	Albuquerque	10000000000	505-242-1111	505-242-1111
New York	New York	10000000000	212-692-1111	212-692-1111
North Carolina	Raleigh	10000000000	919-876-1111	919-876-1111
North Carolina	Raleigh	10000000000	919-876-1111	919-876-1111
North Dakota	Bismarck	10000000000	701-224-1111	701-224-1111
Ohio	Columbus	10000000000	614-266-1111	614-266-1111
Oklahoma	Oklahoma City	10000000000	405-241-1111	405-241-1111
Oregon	Portland	10000000000	503-255-1111	503-255-1111
Pennsylvania	Philadelphia	10000000000	215-561-1111	215-561-1111
Rhode Island	Providence	10000000000	401-846-1111	401-846-1111
South Carolina	Columbia	10000000000	803-799-1111	803-799-1111
South Dakota	Spearhead	10000000000	605-271-1111	605-271-1111
Tennessee	Memphis	10000000000	901-527-1111	901-527-1111
Texas	Houston	10000000000	281-555-1111	281-555-1111
Texas	Houston	10000000000	281-555-1111	281-555-1111
Utah	Salt Lake City	10000000000	801-462-1111	801-462-1111
Vermont	Winooski	10000000000	802-235-1111	802-235-1111
Virginia	Richmond	10000000000	804-644-1111	804-644-1111
Washington	Seattle	10000000000	206-461-1111	206-461-1111
West Virginia	Charleston	10000000000	800-541-1111	800-541-1111
Wisconsin	Madison	10000000000	608-261-1111	608-261-1111
Wyoming	Cheyenne	10000000000	307-234-1111	307-234-1111

Sc Al Gl Oc Cr Sr

Page Analytical Services, LLC - Dallas 400 W. Battery Drive Suite 150 Allen, TX 75013
 Texas 75013-2337

* Pending Water * Background Storage Tanks * Aquatic Toxicity * Chemical/Biological * Wild * Wastewater * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical

ACCOUNT: PROJECT: SOC: DATE/TIME: PAGE: 35 of 43

Enviroware Engineering
 1464 Spring Blvd
 Austin, TX 78718

Project: 254-455-3500
 Project Description:
 Location:
 Date: 12/11/2012

Client:
 Project:
 Date: 12/11/2012

Analyst:
 Date: 12/11/2012

Method:
 Date: 12/11/2012

Sample ID:
 Date: 12/11/2012

Sample Description:
 Date: 12/11/2012

Sample Location:
 Date: 12/11/2012

Sample Date:
 Date: 12/11/2012

Sample Time:
 Date: 12/11/2012

Sample Depth:
 Date: 12/11/2012

Sample Volume:
 Date: 12/11/2012

Sample Weight:
 Date: 12/11/2012

Sample Temperature:
 Date: 12/11/2012

Sample pH:
 Date: 12/11/2012

Sample Conductivity:
 Date: 12/11/2012

Sample Dissolved Oxygen:
 Date: 12/11/2012

Sample Total Solids:
 Date: 12/11/2012

Sample Total Suspended Solids:
 Date: 12/11/2012

Sample Total Dissolved Solids:
 Date: 12/11/2012

Sample Total Hardness:
 Date: 12/11/2012

Sample Total Alkalinity:
 Date: 12/11/2012

Sample Total Acidity:
 Date: 12/11/2012

Sample Total Chloride:
 Date: 12/11/2012

Sample Total Sulfate:
 Date: 12/11/2012

Sample Total Nitrate:
 Date: 12/11/2012

Sample Total Nitrite:
 Date: 12/11/2012

Sample Total Ammonia:
 Date: 12/11/2012

Sample Total Phosphate:
 Date: 12/11/2012

Sample Total Silica:
 Date: 12/11/2012

Sample Total Iron:
 Date: 12/11/2012

Sample Total Copper:
 Date: 12/11/2012

Sample Total Lead:
 Date: 12/11/2012

Sample Total Cadmium:
 Date: 12/11/2012

Sample Total Chromium:
 Date: 12/11/2012

Sample Total Manganese:
 Date: 12/11/2012

Sample Total Zinc:
 Date: 12/11/2012

Sample Total Barium:
 Date: 12/11/2012

Sample Total Strontium:
 Date: 12/11/2012

Sample Total Bismuth:
 Date: 12/11/2012

Sample Total Antimony:
 Date: 12/11/2012

Sample Total Arsenic:
 Date: 12/11/2012

Sample Total Selenium:
 Date: 12/11/2012

Sample Total Tellurium:
 Date: 12/11/2012

Sample Total Vanadium:
 Date: 12/11/2012

Sample Total Molybdenum:
 Date: 12/11/2012

Sample Total Niobium:
 Date: 12/11/2012

Sample Total Tantalum:
 Date: 12/11/2012

Sample Total Zirconium:
 Date: 12/11/2012

Sample Total Hafnium:
 Date: 12/11/2012

Sample Total Thorium:
 Date: 12/11/2012

Sample Total Uranium:
 Date: 12/11/2012

Sample Total Plutonium:
 Date: 12/11/2012

Sample Total Americium:
 Date: 12/11/2012

Sample Total Curium:
 Date: 12/11/2012

Sample Total Berkelium:
 Date: 12/11/2012

Sample Total Californium:
 Date: 12/11/2012

Sample Total Einsteinium:
 Date: 12/11/2012

Sample Total Fermium:
 Date: 12/11/2012

Sample Total Mendelevium:
 Date: 12/11/2012

Sample Total Nobelium:
 Date: 12/11/2012

Sample Total Lawrencium:
 Date: 12/11/2012

Sample Total Rutherfordium:
 Date: 12/11/2012

Sample Total Dubnium:
 Date: 12/11/2012

Sample Total Seaborgium:
 Date: 12/11/2012

Sample Total Bohrium:
 Date: 12/11/2012

Sample Total Hassium:
 Date: 12/11/2012

Sample Total Meitnerium:
 Date: 12/11/2012

Sample Total Darmstadtium:
 Date: 12/11/2012

Sample Total Roentgenium:
 Date: 12/11/2012

Sample Total Copernicium:
 Date: 12/11/2012

Sample Total Nihonium:
 Date: 12/11/2012

Sample Total Flerovium:
 Date: 12/11/2012

Sample Total Tennessine:
 Date: 12/11/2012

Sample Total Oganesson:
 Date: 12/11/2012

FD-100-C-11 rev. 06/3/16/19

Sample Receiving Non-Conformance Form (NCF)

Date: <u>12/11/22</u>	Evaluated by: <u>ACH</u>
Client: <u>Envo-Ag</u>	

Affix Workorder/Login Label Here or List Pace
Workorder Number or MTJL Log-In Number
Here

1. If Chain-of-Custody (COC) is not received: contact client and if necessary, fill out a COC and indicate that it was filled out by lab personnel. Note issues on this NCF.

2. If COC is incomplete, check applicable issues below and add details where appropriate:

Contaminant date/time missing or incorrect	Analyzes or analytes missing or clarification needed	<input checked="" type="checkbox"/> Samples listed on COC do not match samples received (missing, additional, etc.)
Sample IDs on COC do not match sample labels	Required by clients were not received	Requires signatures are missing

Comments/Details/Other issues not listed above:

Looks like client forgot send pgs of purchase COC, able to label all containers correctly due to Template # for buying - client cannot send sheet of COC to lab a couple of hours after receiving samples

3. Sample Integrity Issues: check applicable issues below and add details where appropriate:

Samples: Past holding time	Samples: Container needs to be brought to lab personnel's attention (details below)	Preservation: Improper
Samples: Not field filtered	Containers: Broken or compromised	Temperature: not within acceptance criteria (typical < 25)
Samples: Insufficient volume received	Containers: Incorrect	Temperature: Samples arrived frozen
Samples: Cooler damaged or compromised	Cooling: Scale: Missing or compromised on samples, top valve or cap/cover	Hours received with Improper headspace
Samples contain chime or solids	Packing: Material: Insufficient/Improper	Other

Comments/Details:

4. If Samples not preserved properly and Sample Receiving adjusts pH, add details below:

Sample ID:	Date/Time	Amount/pH pres added
Preserved by:	Initial and Final pH	Lot # of pres added
Sample ID:	Date/Time	Amount/pH pres added
Preserved by:	Initial and Final pH	Lot # of pres added
Sample ID:	Date/Time	Amount/pH pres added
Preserved by:	Initial and Final pH	Lot # of pres added

5. Client Contact: If client is contacted for any issue listed above, fill in details below:

Client	Contacted per:
PM Initials	Date/Time

Client Comments/Instructions:

Sample Condition Upon Receipt
☐ Dallas ☒ Ft Worth ☐ Corpus Christi ☐ Austin

Trip/ago Person: Ali Date: 12/1/22

Login Person: At Date: _____

Labelling Person (if different than log-in): _____ Date: _____

00311



Sample Receiving Non-Conformance Form (NCF)

Date: 11/11/19
Client: Penwin, VA
Reviewed by: AGL

Affix Workorder/Log-In Label Here or List Pace
Workorder Number or MT-JL Log-In Number
Here

1. If Chain-of-Custody (COC) is not received: contact client and if necessary, fill out a COC and indicate that it was filled out by lab personnel. Note issues on this NCF.

2. If COC is incomplete, check applicable issues below and add details where appropriate:

Collection date/time missing or incorrect	Analysis or analysis, mixing or clarification needed	✓ Samples listed on COC do not match samples received (mislabeled, mislabeled, etc.)
Sample IDs on COC do not match sample labels	Required trip blanks were not received	Required signatures are missing

Comments/Details/Other issues not listed above:

Looks like client kept second page of provided COC, able to label all containers correctly the to Template # for labeling - client scanned a copy of second page after filling it out a copy of this after receiving samples.

3. Sample integrity issues: check applicable issues below and add details where appropriate:

Samples: Past holding time	Samples: Condition needs to be brought to lab personnel's attention (details below)	Preservation: Improper
Samples: Not field labeled	Containers: Broken or compromised	Temperature: not within acceptance criteria (typically 0-6°C)
Samples: Insufficient volume received	Containers: Improper	Temperature: Samples arrived frozen
Samples: Cooler damaged or compromised	Custody Seals: Missing or compromised on samples, trip blanks or coolers	Labels: Labels received with improper headspace
Samples: contain chains of custody	Packing material: Insufficient/Improper	Other:

Comments/Details:

4. If Samples not preserved properly and Sample Receiving adjusts pH, add details below:

Sample ID:	Date/Time:	Amount/type pres added:
Preserved by:	Initial and Final pH:	Lot # of pres added:
Sample ID:	Date/Time:	Amount/type pres added:
Preserved by:	Initial and Final pH:	Lot # of pres added:
Sample ID:	Date/Time:	Amount/type pres added:
Preserved by:	Initial and Final pH:	Lot # of pres added:

5. Client Contact: If client is contacted for any issue listed above, fill in details below:

Client:	Contacted per:
PM initials:	Date/Time:

Client Comments/Instructions:

Pace Analytical
ANALYTICAL REPORT
January 19, 2023

Enviro-Ag Engineering

Sample Delivery Group: L1564107
Samples Received: 12/06/2022
Project Number:
Description:

Report To: Jourdan Mullin
3404 Airway Blvd.
Amarillo, TX 79118

Entire Report Reviewed By:

Cassandra Foster

Cassandra Foster
Project Manager

Results listed only for the items tested or analyzed and are not intended as a comprehensive list. This report shall not be used for legal or regulatory purposes without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical is performed in accordance with the applicable standard operating procedures (SOPs) and is performed in accordance with the applicable standard operating procedures (SOPs) and is performed in accordance with the applicable standard operating procedures (SOPs).

Pace Analytical National

12055 Lebanon Rd Maun: Juliet, TN 37122 615-752-5252 800-757-5659 www.paceanalytical.com

ACCOUNT:
Enviro-Ag Engineering

PROJECT:

SOS:
L1564107

DATE/TIME:
01/19/23 10:23

PAGE:
1 of 35

TABLE OF CONTENTS

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Sr: Sample Results	5
SCHREIBER 4 L1564107-01	5
SCHREIBER 4 L1564107-02	7
Qc: Quality Control Summary	8
Microbiology by Method 9222D	8
Gravimetric Analysis by Method 2540C	9
Gravimetric Analysis by Method 2540D	10
Wet Chemistry by Method 120.1	11
Wet Chemistry by Method 1664A	12
Wet Chemistry by Method 300.0	13
Wet Chemistry by Method 3500C1-B	14
Wet Chemistry by Method 351.2	15
Wet Chemistry by Method 4500C1 G-2011	16
Wet Chemistry by Method 4500CN-E	17
Wet Chemistry by Method 4500P-E	18
Wet Chemistry by Method 5220D	19
Wet Chemistry by Method 5310C	20
Wet Chemistry by Method 5M 4500-H-B	21
Wet Chemistry by Method 5M4500NH3H	22
Wet Chemistry by Method 5M5210B	23
Mercury by Method 245.1	25
Metals (ICP) by Method 200.7	26
GI: Glossary of Terms	32
Alt: Accreditations & Locations	33
Sc: Sample Chain of Custody	34

SAMPLE SUMMARY

CASE NARRATIVE

SCHREIBER 4 LIS6407-01 WW

Collected by
Zane Tordella

Collected date/time
12/06/22 08:54

Received date/time
12/06/22 10:23

Method	Batch	Dilution	Collection date/time	Analysis date/time	Analysis	Location
Metals (ICP) by Method 32220	WG1970761	1	12/06/22 14:58	12/07/22 15:02	CIC	Allen, TX
Calculated Results	WG197140	1	12/06/22 17:08	12/06/22 17:09	LDT	Allen, TX
Calculated Results	WG197448	1	12/06/22 17:09	12/06/22 17:11	T/G	Allen, TX
Geometric Analysis by Method 2500C	WG1970676	1	12/06/22 17:34	12/07/22 16:07	OOT	Allen, TX
Geometric Analysis by Method 2500D	WG1972272	1	12/06/22 08:38	12/06/22 07:32	OOT	Allen, TX
Wet Chemistry by Method 120.1	WG1970709	1	12/07/22 14:19	12/07/22 14:19	OOT	Allen, TX
Wet Chemistry by Method 1856A	WG1976033	1	12/07/22 09:34	12/09/22 12:00	TK	Allen, TX
Wet Chemistry by Method 300.0	WG1970015	1	12/07/22 16:42	12/07/22 16:42	BIG	Allen, TX
Wet Chemistry by Method 300.0	WG1970015	1	12/07/22 17:00	12/07/22 17:00	BIG	Allen, TX
Wet Chemistry by Method 300.0	WG1970015	1	12/06/22 08:17	12/06/22 08:17	BIG	Allen, TX
Wet Chemistry by Method 300.2	WG1974348	1	12/06/22 09:32	12/06/22 09:39	LOT	Allen, TX
Wet Chemistry by Method 4500C (C-2011)	WG1973914	1	12/06/22 15:17	12/06/22 15:17	RLS	Allen, TX
Wet Chemistry by Method 4500P-E	WG1973914	1	12/06/22 17:17	12/06/22 17:17	KCM	Allen, TX
Wet Chemistry by Method 5220D	WG1975552	1	12/06/22 11:39	12/06/22 15:34	SMC	Allen, TX
Wet Chemistry by Method 5300C	WG1973936	1	12/06/22 16:13	12/06/22 16:13	ELG	Allen, TX
Wet Chemistry by Method 5M 4500-14-9	WG1975552	1	12/06/22 19:18	12/06/22 19:18	T/G	Allen, TX
Wet Chemistry by Method 5M5200B	WG1971247	1	12/06/22 14:12	12/06/22 14:12	BIG	Allen, TX
Wet Chemistry by Method 5M5200B	WG1970702	1	12/07/22 15:51	12/06/22 10:14	T/G	Allen, TX
Wet Chemistry by Method 5M5200B	WG1970708	1	12/07/22 17:29	12/07/22 17:51	T/G	Allen, TX
Metals (ICP) by Method 200.7	WG1974488	1	12/09/22 12:54	12/09/22 14:58	ELG	Allen, TX
Metals (ICP) by Method 200.7	WG1974488	1	12/09/22 12:54	12/07/22 13:11	T/G	Allen, TX
Metals (ICP) by Method 200.7	WG1977205	1	12/06/22 11:19	12/06/22 14:14	ELG	Allen, TX
Metals (ICP) by Method 200.7	WG1977205	1	12/06/22 11:19	12/07/22 18:02	ELG	Allen, TX

SCHREIBER 4 LIS6407-02 WW

Collected by
Zane Tordella

Collected date/time
12/05/22 08:54

Received date/time
12/05/22 10:23

Method	Batch	Dilution	Collection date/time	Analysis date/time	Analysis	Location
Calculated Results	WG1974488	1	12/06/22 15:04	12/09/22 15:04	T/G	Allen, TX
Wet Chemistry by Method 35300C-3	WG1974881	1	12/05/22 11:00	12/05/22 11:00	KCM	Allen, TX
Wet Chemistry by Method 4500C-E	WG1971115	1	12/09/22 09:46	12/09/22 15:19	KCM	Allen, TX
Accuracy by Method 285.1	WG1974201	1	12/04/22 10:45	12/04/22 14:27	CIC	Allen, TX
Metals (ICP) by Method 200.7	WG1974488	1	12/09/22 12:54	12/09/22 15:04	ELG	Allen, TX
Metals (ICP) by Method 200.7	WG1974488	1	12/09/22 12:54	12/06/22 13:28	ELG	Allen, TX
Metals (ICP) by Method 200.7	WG1974488	1	12/06/22 12:54	12/02/22 13:27	T/G	Allen, TX
Metals (ICP) by Method 200.7	WG1974488	1	01/07/22 11:35	01/07/22 11:03	ELG	Allen, TX

All sample aliquots were received at the correct temperature. In the report contained with the appropriate preservatives, and within method specified holding times, unless qualified or noted within the report. Where applicable, all MDL (LOD) and PDL (LOD) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative. A non-conformance from or property qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information of data have been knowingly withheld that would affect the quality of the data.

Cassandra Foster

Project Manager

SCHREIBER 4

Collected date/time: 12/05/22 02:34

SAMPLE RESULTS - 01

L1564107

Microbiology by Method 9222D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Coliform Fecal	500		1	12/07/2022 15:42	WG972087

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Optical Nitrogen	7.85		0.250	12/09/2022 07:09	WG972057

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Sodium Adsorption Ratio	21.6		1	12/22/2022 03:11	WG972468

Gravimetric Analysis by Method 2540C

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Dissolved Solids	3000		71.5	12/07/2022 14:07	WG970675

Gravimetric Analysis by Method 2540D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Suspended Solids	753		87	12/07/2022 07:12	WG972272

Wet Chemistry by Method 120.1

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Specific Conductance	4930		100	12/07/2022 14:19	WG970709

Sample Narrative: L156407-01WG970709-X-75C

Wet Chemistry by Method 1664A

Analyte	Result	Qualifier	Dilution	Analysis	Batch
O-1 Gaseous Hydrogen Ekv	6.02		5.00	12/19/2022 12:00	WG971633

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Chloride	1050		1	12/09/2022 08:17	WG972015
Fluoride	ND		0.500	12/07/2022 18:42	WG972015
Nitrate	0.578		1	12/07/2022 18:42	WG972015
Sulfate	123		1	12/07/2022 17:00	WG972015

Wet Chemistry by Method 351.2

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Ketohal Nitrogen, TN	12.9		0.250	12/16/2022 17:09	WG972348

Wet Chemistry by Method 4500CI-G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Chlorophyll-a	0.823		1	12/09/2022 15:17	WG972914

ACCOUNT: Enviro-Ag Engineering

PROJECT:

SPC: L156407

DATE/TIME: 07/09/23 10:28

PAGE: 5 of 36

SCHREIBER 4

Collected date/time: 12/05/22 02:34

SAMPLE RESULTS - 01

L1564107

Wet Chemistry by Method 4500-P-E

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Phosphorus Total	12.0		0.500	12/14/2022 11:17	WG973142

Wet Chemistry by Method 5220D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
ICDP	73		35.0	12/09/2022 05:24	WG973562

Wet Chemistry by Method 5310C

Analyte	Result	Qualifier	Dilution	Analysis	Batch
TOC (Total Organic Carbon)	64.5		3.50	12/14/2022 16:13	WG973318

Wet Chemistry by Method SM 4500-H+8

Analyte	Result	Qualifier	Dilution	Analysis	Batch
pH	8.40		1	12/16/2022 15:18	WG973582

Sample Narrative: L156407-01WG973582-8.4-H-15-SC

Wet Chemistry by Method SM4500NH3H

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Ammonia Nitrogen	5.05		0.500	12/08/2022 14:12	WG972747

Wet Chemistry by Method SM5210B

Analyte	Result	Qualifier	Dilution	Analysis	Batch
BOD	13.5		3.00	12/17/2022 10:14	WG972012
C800	851		30.0	12/12/2022 11:51	WG972012

Metals (ICP) by Method 200.7

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Calcium	69.0		1.00	12/19/2022 14:58	WG972468
Cadmium	51.5		1.00	12/27/2022 14:14	WG972705
Copper Dissolved	39.7		1.00	12/19/2022 14:58	WG972468
Magnesium	38.2		1.00	12/27/2022 14:14	WG972705
Magnesium Dissolved	871		100	12/22/2022 13:11	WG972468
Sodium	1020		20.0	12/27/2022 18:02	WG972705

ACCOUNT: Enviro-Ag Engineering

PROJECT:

SPC: L156407

DATE/TIME: 07/09/23 10:28

PAGE: 6 of 36

Calculated Results

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chromium/Trivalent	ND		0.00300	1	12/09/2022 15:04	WG974488

Wet Chemistry by Method 3500C-B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Chromium/Hexavalent	ND	T2	0.00300	1	12/05/2022 11:00	WG974487

Sample Narrative:
L1564107-02 WG974487: Sample not fluid filtered within 15min of collection

Wet Chemistry by Method 4500CN-E

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Cyanide	ND		0.0100	1	12/09/2022 15:09	WG974485

Mercury by Method 245.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Mercury	ND		0.005400	1	12/14/2022 14:27	WG974201

Metals (ICP) by Method 200.7

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Aluminum	4.31		0.500	1	12/09/2022 15:04	WG974488
Antimony	ND		0.0250	1	12/09/2022 15:04	WG974488
Arsenic	ND		0.0200	1	12/09/2022 15:04	WG974488
Boron	0.0835		0.0100	1	12/09/2022 15:04	WG974488
Bromine	ND		0.00300	1	12/09/2022 15:04	WG974488
Calcium	ND		0.00500	1	12/09/2022 15:04	WG974488
Chromium	ND		0.00700	1	12/09/2022 15:04	WG974488
Copper	ND		0.0200	1	12/09/2022 15:04	WG974488
Lead	ND		0.0100	1	12/09/2022 15:04	WG974488
Nickel	0.0115		0.0100	1	12/09/2022 15:04	WG974488
Selenium	ND		0.0200	1	12/22/2022 13:27	WG974488
Silver	ND		0.0500	1	01/06/2023 17:02	WG974488
Thallium	ND		0.0200	1	12/09/2022 15:04	WG974488
Zinc	0.154		0.0250	1	12/09/2022 15:04	WG974488

QUALITY CONTROL SUMMARY

L1564107-02

WG970787
Microbiology by Method 9222D

Method Blank (MB)

MB 23070559-2 12/07/22 15:02

Analyte	MB Result	MB RDL	MB RDL	MB RDL
Calcium Fecal	du/100 ml	du/100 ml	du/100 ml	du/100 ml

Method Blank (MB)

MB 23070559-2 12/07/22 15:02

Analyte	MB Result	MB RDL	MB RDL	MB RDL
Calcium Fecal	du/100 ml	du/100 ml	du/100 ml	du/100 ml

L1564107-01 Original Sample (OS) - Duplicate (DUP)

OS 12/07/22 15:02 - DUP 12/07/22 15:02

Analyte	Original Result	DUP Result	DUP RDL	DUP RDL
Calcium Fecal	du/100 ml	du/100 ml	du/100 ml	du/100 ml

QUALITY CONTROL SUMMARY

Gravimetric Analysis by Method 2540C

Method Blank (MB)

Analyte	M6 Crystals	M6 MDL	M6 SCL
M6 Peckill	mg/L	mg/L	mg/L
M6 Residual Solids	mg/L	mg/L	mg/L

U15640/401 Original Sample (CS) • Duplicate (DUP)

Sample	Original fluid	DUF Residue	Oilton	DUF-PPD	DUF Quarter	DUF 890
	mg/l				mg/l	units
Total Dissolved Solids	463	442		3.72		

Laboratory Control Sample (LCS)

[illegible]

Sc Al Ga Ge Sr Cu Ss

QUALITY CONTROL SUMMARY

Gravimetric Analysis by Method 2540D

Master Blank (MB)

[a] _D ²⁰ (23.971 × 26.1 × 27.0/27.7) 3.2	
Asoligne	MS Result
Asoligne	MS WCL
Asoligne	MS 90L
Asoligne	MS 150
Asoligne	MS 200
Asoligne	MS 250
Asoligne	MS 300
Asoligne	MS 350
Asoligne	MS 400
Asoligne	MS 450
Asoligne	MS 500
Asoligne	MS 550
Asoligne	MS 600
Asoligne	MS 650
Asoligne	MS 700
Asoligne	MS 750
Asoligne	MS 800
Asoligne	MS 850
Asoligne	MS 900
Asoligne	MS 950
Asoligne	MS 1000
Asoligne	MS 1050
Asoligne	MS 1100
Asoligne	MS 1150
Asoligne	MS 1200
Asoligne	MS 1250
Asoligne	MS 1300
Asoligne	MS 1350
Asoligne	MS 1400
Asoligne	MS 1450
Asoligne	MS 1500
Asoligne	MS 1550
Asoligne	MS 1600
Asoligne	MS 1650
Asoligne	MS 1700
Asoligne	MS 1750
Asoligne	MS 1800
Asoligne	MS 1850
Asoligne	MS 1900
Asoligne	MS 1950
Asoligne	MS 2000
Asoligne	MS 2050
Asoligne	MS 2100
Asoligne	MS 2150
Asoligne	MS 2200
Asoligne	MS 2250
Asoligne	MS 2300
Asoligne	MS 2350
Asoligne	MS 2400
Asoligne	MS 2450
Asoligne	MS 2500
Asoligne	MS 2550
Asoligne	MS 2600
Asoligne	MS 2650
Asoligne	MS 2700
Asoligne	MS 2750
Asoligne	MS 2800
Asoligne	MS 2850
Asoligne	MS 2900
Asoligne	MS 2950
Asoligne	MS 3000
Asoligne	MS 3050
Asoligne	MS 3100
Asoligne	MS 3150
Asoligne	MS 3200
Asoligne	MS 3250
Asoligne	MS 3300
Asoligne	MS 3350
Asoligne	MS 3400
Asoligne	MS 3450
Asoligne	MS 3500
Asoligne	MS 3550
Asoligne	MS 3600
Asoligne	MS 3650
Asoligne	MS 3700
Asoligne	MS 3750
Asoligne	MS 3800
Asoligne	MS 3850
Asoligne	MS 3900
Asoligne	MS 3950
Asoligne	MS 4000
Asoligne	MS 4050
Asoligne	MS 4100
Asoligne	MS 4150
Asoligne	MS 4200
Asoligne	MS 4250
Asoligne	MS 4300
Asoligne	MS 4350
Asoligne	MS 4400
Asoligne	MS 4450
Asoligne	MS 4500
Asoligne	MS 4550
Asoligne	MS 4600
Asoligne	MS 4650
Asoligne	MS 4700
Asoligne	MS 4750
Asoligne	MS 4800
Asoligne	MS 4850
Asoligne	MS 4900
Asoligne	MS 4950
Asoligne	MS 5000
Asoligne	MS 5050
Asoligne	MS 5100
Asoligne	MS 5150
Asoligne	MS 5200
Asoligne	MS 5250
Asoligne	MS 5300
Asoligne	MS 5350
Asoligne	MS 5400
Asoligne	MS 5450
Asoligne	MS 5500
Asoligne	MS 5550
Asoligne	MS 5600
Asoligne	MS 5650
Asoligne	MS 5700
Asoligne	MS 5750
Asoligne	MS 5800
Asoligne	MS 5850
Asoligne	MS 5900
Asoligne	MS 5950
Asoligne	MS 6000
Asoligne	MS 6050
Asoligne	MS 6100
Asoligne	MS 6150
Asoligne	MS 6200
Asoligne	MS 6250
Asoligne	MS 6300
Asoligne	MS 6350
Asoligne	MS 6400
Asoligne	MS 6450
Asoligne	MS 6500
Asoligne	MS 6550
Asoligne	MS 6600
Asoligne	MS 6650
Asoligne	MS 6700
Asoligne	MS 6750
Asoligne	MS 6800
Asoligne	MS 6850
Asoligne	MS 6900
Asoligne	MS 6950
Asoligne	MS 7000
Asoligne	MS 7050
Asoligne	MS 7100
Asoligne	MS 7150
Asoligne	MS 7200
Asoligne	MS 7250
Asoligne	MS 7300
Asoligne	MS 7350
Asoligne	MS 7400
Asoligne	MS 7450
Asoligne	MS 7500
Asoligne	MS 7550
Asoligne	MS 7600
Asoligne	MS 7650
Asoligne	MS 7700
Asoligne	MS 7750
Asoligne	MS 7800
Asoligne	MS 7850
Asoligne	MS 7900
Asoligne	MS 7950
Asoligne	MS 8000
Asoligne	MS 8050
Asoligne	MS 8100
Asoligne	MS 8150
Asoligne	MS 8200
Asoligne	MS 8250
Asoligne	MS 8300
Asoligne	MS 8350
Asoligne	MS 8400
Asoligne	MS 8450
Asoligne	MS 8500
Asoligne	MS 8550
Asoligne	MS 8600
Asoligne	MS 8650
Asoligne	MS 8700
Asoligne	MS 8750
Asoligne	MS 8800
Asoligne	MS 8850
Asoligne	MS 8900
Asoligne	MS 8950
Asoligne	MS 9000
Asoligne	MS 9050
Asoligne	MS 9100
Asoligne	MS 9150
Asoligne	MS 9200
Asoligne	MS 9250
Asoligne	MS 9300
Asoligne	MS 9350
Asoligne	MS 9400
Asoligne	MS 9450
Asoligne	MS 9500
Asoligne	MS 9550
Asoligne	MS 9600
Asoligne	MS 9650
Asoligne	MS 9700
Asoligne	MS 9750
Asoligne	MS 9800
Asoligne	MS 9850
Asoligne	MS 9900
Asoligne	MS 9950
Asoligne	MS 10000

L1554107-01 Original Sample (OS) • Duplicate (DUP)

Analyte	Original Result		DUP Result		DUP Ratio	
	mg/l	%	mg/l	%	mg/l	%
Expanded Cobalt	753	140	1	172	0.0013	100

L1564281.05 Original Sample (OS) - Duplicate (DUP)

ID: 161434-1509 2010-11-17 12:00 PM 13-10-11 07:12			
Sample	Original Result	Dilution	DUV PPO
Conc	ngl		DUV Doublet
			Label
Sample 1	2100	1	6.5
Sample 2	2100	1	6.5

Ca Sc ³⁺ Ss ⁴⁺ Cu ⁵⁺ Sr ⁶⁺  ⁷⁺ Gl ⁸⁺ Al Sc

Laboratory Control Sample (LCS)

	US 20-46	US 1st	Rec. limits	G/Squidex
Spike Amount	mg/L	mg/L		
benzyls	725	101	95-115	
spectroscopic Solids				

Ca Sc ³⁺ Ss ⁴⁺ Cu ⁵⁺ Sr ⁶⁺  ⁷⁺ Gl ⁸⁺ Al Sc

ACCOUNT.

0900167

506

DATE/TIME:

五

Statistical Engineering

PROJECT

3

DATE/TIME

PAGE

QUALITY CONTROL SUMMARY

L1564107-01

Method Blank (MB)

Answer	MS Question	MS Key
Kendall Morgan TCU	0.46	0.78
U	0.49	0.78

L1564107-01 Original Sample (OS); - Duplicate (DUP)

[illegible]

L1556528-02 Original Sample (OS) - Duplicate (DUP)

Analysis	Original Studies		Distance		DUP 870	
	npt	n	%	DUP 870 Limits	n	%
Global Nitrogen TKN	0.152	1	7.5	2	25	

Laboratory Control Sample: (LCS)

System Response	LCS Result	LCS Rec.	Rec. Limit	LCS Overlay
Identify:				
mgl	mgl	"	"	
W 0	75.5	75.5 (20)	"	
School/Hospital	TKN	20.6	"	

- 554(07.01) [714.99] 547.026 (DS) • 547.016 547.016 (MS) • 547.016 547.016 (MS2)

[illegible]

-156628102 Original Sample (OS) • Matrix Spike (MS)

Sample Amount	Original Result	MS Result	MS Rec	Dilution	Rec. Limit	MS Certificate
mg/L	mg/L	mg/L	%		%	
5.00	0.555	5.52	99.2	1	30 ± 10	

Гимназия Бискупска

Products

100
1000000

Patient name:

PAGE

WG197115

Method Blank (MS)

West Chemistry by Method 4500C-E

QUALITY CONTROL SUMMARY

11/5/2012

Method Blank (MS)

West Chemistry by Method 4500C-E

Laboratory Control Sample (LCS)

11/5/2012 13:00:22.33

MS Result MS MDL MS BOL

Analyte mg/l 0.0040 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

WG1973142

Method Blank (MS)

West Chemistry by Method 4500C-E

QUALITY CONTROL SUMMARY

11/5/2012

Method Blank (MS)

West Chemistry by Method 4500C-E

Laboratory Control Sample (LCS)

11/5/2012 13:00:22.33

MS Result MS MDL MS BOL

Analyte mg/l 0.0040 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

QC mg/l 0.000

00322

WG1975652

Web Chemistry by Method S1200

QUALITY CONTROL SUMMARY

LISTED

Method Blank (MS)

Analyte	MS Result	MS Qual	MS Rec
CO	U	161	20.0

Laboratory Control Sample (LCS)

LCS 1975652-12 DUW22 15.24

Analyte	Spike Amount	LCS Result	LCS Rec	Rec Units	LCS Qualifier
CO	500	511	601	20.0-20.0	

L1569567-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

LCS 1975652-01 DUW22 15.24 - MS 1975652-01 DUW22 15.24 - MSD 1975652-01 DUW22 15.24

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec	MSD Rec	Dilution	Rec Units	MS Qualifier	MSD Qualifier	RPO	RPO Units
CO	500	500	523	522	606	602	1	20.0-20.0		LS4	20	

G S Cn Si Al Si

ACCOUNT
Greenleaf Dynamics

PROJECT

SQA
USNAVYDATE/TIME
10/26/23 10:00PAGE
5 of 5

WG1972936

Web Chemistry by Method S1200

QUALITY CONTROL SUMMARY

LISTED

Method Blank (MS)

Analyte	MS Result	MS Qualifier	MS MDL	MS RPL
TOT (Total Organic Carbon)	0.10	0.20	0.20	0.700

Laboratory Control Sample (LCS)

LCS 1972936-13 DUW22 11.48

Analyte	Spike Amount	LCS Result	LCS Rec	Rec Units	LCS Qualifier
TOT (Total Organic Carbon)	10.0	9.96	99.8	50.0-10.0	

L1564530-01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

LCS 1972936-01 DUW22 11.48 - MS 1972936-01 DUW22 11.48 - MSD 1972936-01 DUW22 11.48

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec	MSD Rec	Dilution	Rec Units	MS Qualifier	MSD Qualifier	RPO	RPO Units
TOT (Total Organic Carbon)	10.0	20.2	22.2	25.3	26.3	81.7	1	20.0-10.0		LS	10.7	20

G S Cn Si Al Si

ACCOUNT
Greenleaf Dynamics

PROJECT

SQA
USNAVYDATE/TIME
10/26/23 10:00PAGE
5 of 5

WG1975963

Wet Chemistry by Method SW-4500-H-8

QUALITY CONTROL SUMMARY

LIB590345

LIB59587-03 Original Sample (CS) - Duplicate (DUP)

CS1 US86867-23 12/06/22 10:13 - DUP1 R237237-2 12/06/22 10:18

Analysis	Original Result	DUP Result	DUP Result	DUP Result
pH	7.72	7.72	1	0.25
Sample Name:	CS 172.4 17.0C			
DUP 172.4 17.0C				

Sample Name:

DUP 172.4 17.0C

Laboratory Control Sample (CS)

Analysis	Result	CS Result	CS Result	CS Result
pH	8.07	5.97	99.5	99.5
Sample Name:	CS 5.97 4.22C			

CS

WG1971247

Wet Chemistry by Method SW-4500-H-8

QUALITY CONTROL SUMMARY

LIB591347

LIB59294-03 Original Sample (CS) - Matrix Spike Duplicate (MSD)

MS1 R238000-1 12/06/22 13:46

Analysis	MS Result	MS Result	MS Result	MS Result
pH	0.044	0.020	0.100	0.100
Sample Name:	MS 172.4 17.0C			
DUP 172.4 17.0C				

Laboratory Control Sample (CS)

Analysis	Result	CS Result	CS Result	CS Result
pH	8.07	5.97	99.5	99.5
Sample Name:	CS 5.97 4.22C			

CS

LIB59294-03 Original Sample (CS) - Matrix Spike Duplicate (MSD)

CS1 US86867-23 12/06/22 10:13 - DUP1 R237237-2 12/06/22 10:18

Analysis	Original Result	DUP Result	DUP Result	DUP Result
pH	7.72	7.72	1	0.25
Sample Name:	CS 172.4 17.0C			
DUP 172.4 17.0C				

Analysis	Result	CS Result	CS Result	CS Result
pH	8.07	5.97	99.5	99.5
Sample Name:	CS 5.97 4.22C			

ACCOUNT

PROJECT

DATE

DATE TIME

DATE

ACCOUNT

PROJECT

DATE

DATE TIME

DATE

WG1970702

QUALITY CONTROL SUMMARY

Wet Chemistry by Method 8253108
Method Blank (MB)

11/24/2021

Analyte	MB Result	MB Duplicate	MB MDL	MB BOL
BOD	U	0.100	0.100	0.200

L1564103-01 Original Sample (OS) - Duplicate (DUP)

OS1 US64103-01 12/02/21 12:35 - DUP1 8253108 12/02/21 11:05

Analyte	Original Result	DUP Result	DUP MDL	DUP BOL
BOD	14.1	12.7	10.1	20

L1564356-01 Original Sample (OS) - Duplicate (DUP)

OS1 US64356-01 12/02/21 12:35 - DUP1 8253108 12/02/21 11:07

Analyte	Original Result	DUP Result	DUP MDL	DUP BOL
BOD	150	2.21	1	20

Laboratory Control Sample (LCS)

Analyte	Spiked Amount	LCS Result	LCS MDL	LCS BOL
BOD	50	NT	21	35-45

ACCOUNT:
Biomax Engineering

PROJECT

REQ
11/24/21

DATE/TIME
01/02/21 12:35

PLACE
12-419

WG1970708

QUALITY CONTROL SUMMARY

Wet Chemistry by Method 8253108
Method Blank (MB)

11/24/2021

Analyte	MB Result	MB Duplicate	MB MDL	MB BOL
CRDO	U	0.100	0.100	0.200

L1564153-01 Original Sample (OS) - Duplicate (DUP)

OS1 US64153-01 12/02/21 12:32 - DUP1 8253108 12/02/21 12:39

Analyte	Original Result	DUP Result	DUP MDL	DUP BOL
CRDO	9.15	14.5	1	20

L1564181-01 Original Sample (OS) - Duplicate (DUP)

OS1 US64181-01 12/02/21 12:35 - DUP1 8253108 12/02/21 12:51

Analyte	Original Result	DUP Result	DUP MDL	DUP BOL
CRDO	71.0	23.5	1	20

Laboratory Control Sample (LCS)

Analyte	Spiked Amount	LCS Result	LCS MDL	LCS BOL
CRDO	90	122	69.7	54-15

ACCOUNT:
Biomax Engineering

PROJECT

REQ
11/24/21

DATE/TIME
01/02/21 12:35

PLACE
12-419

WG1974201

QUALITY CONTROL SUMMARY

Method Blank (MS)

L156407.02

Date: 2019/07/24 10:42:23

Analyte	MS Result	MS MDL	MS SOL
Acetone	U	0.000050	0.000200

Laboratory Control Sample (LCS)

Spikes Amount	LCS Result	LCS Rec	Rec Limit	LCS Duplicate
Acetone	0.00230	91.2	85.5-95	

L156407.02 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Spikes Amount	MS Result	MS Rec	Rec Limit	MSD Result	MSD Rec	MSD Duplicate	MSD Limit
Acetone	0.00230	91.2	85.5-95	95.0	90.2	0.210	20

L156407.01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Spikes Amount	MS Result	MS Rec	Rec Limit	MSD Result	MSD Rec	MSD Duplicate	MSD Limit
Acetone	0.00230	91.2	85.5-95	95.0	90.2	0.210	20

ScAlGlSrCe

WG1974488

QUALITY CONTROL SUMMARY

Method Blank (MS)

L156407.02

Date: 2019/07/24 10:42:23

Analyte	MS Result	MS MDL	MS SOL
Acetone	U	0.000050	0.000200

Spikes Amount	MS Result	MS Rec	Rec Limit	MSD Result	MSD Rec	MSD Duplicate	MSD Limit
Acetone	0.00230	91.2	85.5-95	95.0	90.2	0.210	20

L156407.02 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Spikes Amount	MS Result	MS Rec	Rec Limit	MSD Result	MSD Rec	MSD Duplicate	MSD Limit
Acetone	0.00230	91.2	85.5-95	95.0	90.2	0.210	20

ScAlGlSrCe

W61974488

Matrix (ICP) by Matrix 300.7

Laboratory Control Sample (ICP)

QUALITY CONTROL SUMMARY

L156477402

Analyte	mg/L	ICP Result	ICP Rec.	Rec. Limit	ICP Quality
Boron	100	0.030	0.10	35.0-105	
Bromine	100	0.277	0.77	25.0-115	
Calcium	100	0.333	0.33	35.0-115	
Chromium	100	0.233	0.23	35.0-115	
Copper	100	0.955	0.95	35.0-115	
Lead	100	0.942	0.94	35.0-115	
Magnesium	100	0.859	0.86	35.0-115	
Manganese	100	0.843	0.84	35.0-115	
Nickel	100	0.843	0.84	35.0-115	
Selenium	100	0.843	0.84	35.0-115	
Zinc	100	0.843	0.84	35.0-115	

Laboratory Control Sample (ICP)

ICP 156477402 12/22/22 14.3

Analyte	mg/L	ICP Result	ICP Rec.	Rec. Limit	ICP Quality
Copper	100	0.941	0.94	35.0-115	

Laboratory Control Sample (ICP)

ICP 156477402 12/22/22 14.3

Analyte	mg/L	ICP Result	ICP Rec.	Rec. Limit	ICP Quality
Selenium	100	0.942	0.94	35.0-115	

L156477402 Original Sample (ICP) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Analyte	mg/L	ICP Result	ICP Rec.	Rec. Limit	ICP Quality
Aluminum	100	0.039	0.10	35.0-115	
Boron	100	0.039	0.10	35.0-115	
Bromine	100	0.277	0.77	25.0-115	
Calcium	100	0.333	0.33	35.0-115	
Chromium	100	0.233	0.23	35.0-115	
Copper	100	0.955	0.95	35.0-115	
Lead	100	0.942	0.94	35.0-115	
Magnesium	100	0.859	0.86	35.0-115	
Manganese	100	0.843	0.84	35.0-115	
Nickel	100	0.843	0.84	35.0-115	
Selenium	100	0.843	0.84	35.0-115	
Zinc	100	0.843	0.84	35.0-115	

Account: Borealis Bioscience

PROJECT:

L156477402

DATE/TIME: 12/22/22 14.3

PAGE: 20 of 25

W61974488

Matrix (ICP) by Matrix 300.7

QUALITY CONTROL SUMMARY

L156477402

Analyte	mg/L	ICP Result	ICP Rec.	Rec. Limit	ICP Quality
Boron	100	0.030	0.10	35.0-115	
Bromine	100	0.277	0.77	25.0-115	
Calcium	100	0.333	0.33	35.0-115	
Chromium	100	0.233	0.23	35.0-115	
Copper	100	0.955	0.95	35.0-115	
Lead	100	0.942	0.94	35.0-115	
Magnesium	100	0.859	0.86	35.0-115	
Manganese	100	0.843	0.84	35.0-115	
Nickel	100	0.843	0.84	35.0-115	
Selenium	100	0.843	0.84	35.0-115	
Zinc	100	0.843	0.84	35.0-115	

Laboratory Control Sample (ICP)

ICP 156477402 12/22/22 14.3

Analyte	mg/L	ICP Result	ICP Rec.	Rec. Limit	ICP Quality
Copper	100	0.941	0.94	35.0-115	

Laboratory Control Sample (ICP)

ICP 156477402 12/22/22 14.3

Analyte	mg/L	ICP Result	ICP Rec.	Rec. Limit	ICP Quality
Selenium	100	0.942	0.94	35.0-115	

L156477402 Original Sample (ICP) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Analyte	mg/L	ICP Result	ICP Rec.	Rec. Limit	ICP Quality
Aluminum	100	0.039	0.10	35.0-115	
Boron	100	0.039	0.10	35.0-115	
Bromine	100	0.277	0.77	25.0-115	
Calcium	100	0.333	0.33	35.0-115	
Chromium	100	0.233	0.23	35.0-115	
Copper	100	0.955	0.95	35.0-115	
Lead	100	0.942	0.94	35.0-115	
Magnesium	100	0.859	0.86	35.0-115	
Manganese	100	0.843	0.84	35.0-115	
Nickel	100	0.843	0.84	35.0-115	
Selenium	100	0.843	0.84	35.0-115	
Zinc	100	0.843	0.84	35.0-115	

Account: Borealis Bioscience

PROJECT:

L156477402

DATE/TIME: 12/22/22 14.3

PAGE: 20 of 25

WG1977205

Matrix (ICP) by Method 200.7

QUALITY CONTROL SUMMARY

L15S4107.01

Method Blank (MB)

Analyte	MB Result	MB MDL	MB MDL	MB MDL
Chromium	U	0.0026	100	
Lead	U	0.0024	100	

Method Blank (MB)

Analyte	MB Result	MB MDL	MB MDL	MB MDL
Chromium	U	0.0026	100	
Lead	U	0.0024	100	

Laboratory Control Sample (LCS)

Analyte	Spk Amt	LCS Result	LCS Rec	Rec Limit	LCS Quality
Chromium	9.91	9.91	95.0-105		
Lead	9.99	9.99	95.0-105		

Laboratory Control Sample (LCS)

Analyte	Spk Amt	LCS Result	LCS Rec	Rec Limit	LCS Quality
Chromium	9.91	9.91	95.0-105		
Lead	9.99	9.99	95.0-105		

L15S4107.01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Analyte	Spk Amt	OS Result	OS Rec	Rec Limit	OS Quality
Chromium	9.91	9.91	95.0-105		
Lead	9.99	9.99	95.0-105		

ACCOUNT
Brownsburg Environmental

PROJECT

200
01/20/2019

DATE/TIME
01/20/2019 11:24

NAME
J. J. J.

ACCOUNT
Brownsburg Environmental

PROJECT

200
01/20/2019

DATE/TIME
01/20/2019 11:24

NAME
J. J. J.

WG1977205

Matrix (ICP) by Method 200.7

QUALITY CONTROL SUMMARY

L15S4107.01

Method Blank (MB)

Analyte	MB Result	MB MDL	MB MDL	MB MDL
Chromium	U	0.0026	100	
Lead	U	0.0024	100	

Method Blank (MB)

Analyte	MB Result	MB MDL	MB MDL	MB MDL
Chromium	U	0.0026	100	
Lead	U	0.0024	100	

Laboratory Control Sample (LCS)

Analyte	Spk Amt	LCS Result	LCS Rec	Rec Limit	LCS Quality
Chromium	9.91	9.91	95.0-105		
Lead	9.99	9.99	95.0-105		

Laboratory Control Sample (LCS)

Analyte	Spk Amt	LCS Result	LCS Rec	Rec Limit	LCS Quality
Chromium	9.91	9.91	95.0-105		
Lead	9.99	9.99	95.0-105		

L15S4107.01 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Analyte	Spk Amt	OS Result	OS Rec	Rec Limit	OS Quality
Chromium	9.91	9.91	95.0-105		
Lead	9.99	9.99	95.0-105		

ACCOUNT
Brownsburg Environmental

PROJECT

200
01/20/2019

DATE/TIME
01/20/2019 11:24

NAME
J. J. J.

Ca
Sr
Al
Fe
Si
Mn
Zn
Cu
Pb
Cd
Cr
Ni
Co
V
Mg
K
Na
S
C
H
O
N
P
Cl
Br
I
F
B
Be
Ba
Ca
Sr
Al
Fe
Si
Mn
Zn
Cu
Pb
Cd
Cr
Ni
Co
V
Mg
K
Na
S
C
H
O
N
P
Cl
Br
I
F
B
Be
Ba

C

00330

Sc Al Ga In Sn Sb Te

[illegible]

Envi-Ag Engineering
304 Avery Blvd
Arlington, TX 76010

Project Information:
Project Name: Envi-Ag Engineering
Project Location: 304 Avery Blvd, Arlington, TX 76010
Project Description: Envi-Ag Engineering

Client Information:
Client Name: Envi-Ag Engineering
Client Address: 304 Avery Blvd, Arlington, TX 76010
Client Phone: 254-965-3000

Sampling Information:
Sampling Date: 12/12/2012
Sampling Time: 10:00 AM
Sampling Location: 304 Avery Blvd, Arlington, TX 76010
Sampling Method: Hand-Dug
Sampling Depth: 0-12 inches
Sampling Equipment: Shovel

Analysis Information:
Analysis Name: Envi-Ag Engineering
Analysis Location: 304 Avery Blvd, Arlington, TX 76010
Analysis Date: 12/12/2012
Analysis Time: 10:00 AM
Analysis Method: Hand-Dug
Analysis Depth: 0-12 inches
Analysis Equipment: Shovel

Chain of Custody:
Sampler Name: Envi-Ag Engineering
Sampler Address: 304 Avery Blvd, Arlington, TX 76010
Sampler Phone: 254-965-3000
Sampler Email: Envi-Ag Engineering
Sampler Signature: [Signature]
Sampler Date: 12/12/2012
Sampler Time: 10:00 AM
Sampler Location: 304 Avery Blvd, Arlington, TX 76010
Sampler Method: Hand-Dug
Sampler Depth: 0-12 inches
Sampler Equipment: Shovel

Analysis Results:
Analysis Name: Envi-Ag Engineering
Analysis Location: 304 Avery Blvd, Arlington, TX 76010
Analysis Date: 12/12/2012
Analysis Time: 10:00 AM
Analysis Method: Hand-Dug
Analysis Depth: 0-12 inches
Analysis Equipment: Shovel

Paco Analytical

Document Name: Sample Condition Upon Receipt
Document Revision: 7/27/2012
Page 1 of 1

Document No.: F-DAL-C-001-rev.14
Issuing Authority: Paco Dallas Quality Office

Sample Condition Upon Receipt
☐ Dallas ☐ Ft Worth ☐ Corpus Christi ☐ Austin

Client Name: Envi-Ag Engineering **Project Work order (place label):** 1564107
Counter: Fertex ☐ UPS ☐ USPS ☐ Client ☐ ISO ☐ PAC ☐ Other: None

Tracking #: 1564107

Custody Seal on Cooler/Box: Yes ☐ No ☒
Received on Ice: Wet ☐ Blue ☐ None ☐
Receiving Lab 1 Thermometer Used: Fertex **Coaster Temp °C:** 10.2 (Recorded) 0.2 (Correction Factor) 10.0 (Actual)
Receiving Lab 2 Thermometer Used: LR19 **Coaster Temp °C:** 2.6 (Recorded) 10.5 (Correction Factor) 2.1 (Actual)

Temperature should be above freezing to 6°C unless collected same day as receipt in which evidence of cooling is acceptable

Trage Person: CC **Date:** 12-6-2012

Chain of Custody relinquished: Yes ☐ No ☐
Sampler name & signature on COC: Yes ☐ No ☐
Short HT analysis (<72 hrs): Yes ☐ No ☐

Log-In Person: CC **Date:** 12/6

Sufficient Volume received: Yes ☐ No ☐
Correct Container used: Yes ☐ No ☐
Container Intact: Yes ☐ No ☐
Sample pH Acceptable: Yes ☐ No ☐ NA ☐
pH Strips: 6.0/6.5
Residual Chlorine Present: Yes ☐ No ☐ NA ☐
Cl Strips: 14862
Sulfide Present: Yes ☐ No ☐ NA ☐
Lead Acetate Strips: 14862
Are soil samples (volatiles, TPH) received in 5035A Kits (not applicable to TCLP VOA or PST Program TPH): Yes ☐ No ☐ NA ☐
Unpreserved 5035A soil frozen within 48 hrs: Yes ☐ No ☐ NA ☐
Headspace in VOA (>6mm): Yes ☐ No ☐ NA ☐
Project sampled in USDA Regulated Area outside of Texas: Yes ☐ No ☐ NA ☐
State Sampled: TX
Non-Conformance(s): Yes ☐ No ☐

Labeling Person (if different than log-in): CC **Date:** 12/6

ATTACHMENT 9 – ENGINEERING REPORT

9.1 Purpose

This report is prepared as part of the application for Schreiber Foods, Inc. for a Texas Land Application Permit (TLAP) through the Texas Commission on Environmental Quality (TCEQ). Water balance models have been developed to illustrate the function of the impoundment system and the hydraulic and nutrient demands of the planned crops.

9.2 Background

Schreiber Foods, Inc. is applying for a major amendment to its TCEQ Industrial Water Quality TLAP Permit No. WQ0003074000 to increase the application acres, permitted average daily flow and amend the organic and nitrogen loading rates. The effluent from the plant site will be treated/stored in four existing earthen impoundments at the site prior to land application. The entire process will generate an average of 192,000 gallons per day (GPD) of effluent for land application to sixty-one acres of improved grasses.

9.3 Impoundment Facility

The effluent treatment/storage and irrigation system at the facility consists of four impoundments. The Impoundments will contain the process-generated effluent from the plant area.

9.4 Water Balance Calculations

Figure 9.1, Water Balance Calculations, is designed to evaluate the maximum application rate (hydraulic loading rate) for the land application area, estimates the inflows and withdrawals from the direct rainfall, process-generated wastewater, evaporation, and irrigation withdrawal based on crop demand.

9.5 Storage Calculations

Figure 9.2, Storage Calculations, is designed to evaluate the storage capacity and surface area of the storage ponds. The ponds must have enough surface area to evaporate all the flow to the pond under low-net evaporation and corresponding annual rainfall conditions.

Figure 9.1 WATER BALANCE CALCULATIONS

Permittee: **Schreiber Foods, Inc.**
 Permit No.: **WQ0003074000**

TWDB Data Quadrangle:
509

The water balance calculations are designed to evaluate the maximum application rate (hydraulic loading rate) for the land area where irrigation is to occur. The applicant's proposed application rate must not exceed the maximum calculated application rate or the maximum application rate based on agronomic analysis.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9a)	(9b)	(10)	(11)
Month	Avg Rain	Avg Runoff	Avg Infiltration	Evapotrans.	Required Leach	Total Water Needs	Effluent Needed in Root Zone	Raw Net Evap. from Reservoir	Reservoir Net Evap. (as inches on plot acres)	Effluent Needed Based on Irrigation Efficiency	Reservoir Consumption (as inches on plot acres)
<i>Units →</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>
January	1.60	0.13	1.47	0.99	0.00	0.99	0.00	0.93	0.09	0.00	0.09
February	2.11	0.31	1.80	1.35	0.00	1.35	0.00	0.54	0.05	0.00	0.05
March	2.81	0.66	2.16	3.33	0.17	3.50	1.34	1.27	0.13	1.57	1.70
April	2.76	0.62	2.13	4.05	0.27	4.32	2.19	2.33	0.24	2.57	2.81
May	4.15	1.50	2.65	7.20	0.64	7.84	5.19	1.09	0.11	6.10	6.22
June	3.64	1.15	2.49	8.10	0.79	8.89	6.41	3.32	0.34	7.54	7.87
July	1.94	0.24	1.69	8.37	0.94	9.31	7.62	6.00	0.61	8.96	9.57
August	2.22	0.36	1.86	5.31	0.49	5.80	3.93	5.41	0.55	4.63	5.18
September	2.81	0.65	2.15	6.03	0.55	6.58	4.42	3.03	0.31	5.20	5.51
October	3.16	0.85	2.31	4.68	0.33	5.01	2.71	1.69	0.17	3.19	3.36
November	1.89	0.22	1.67	1.89	0.03	1.92	0.25	1.40	0.14	0.30	0.44
December	1.46	0.09	1.37	0.81	0.00	0.81	0.00	0.97	0.10	0.00	0.10
Totals	30.54	6.78	23.76	52.11	4.21	56.32	34.05	27.99	2.84	40.06	42.90

Crop is	Grasses		
CN	71.00	dimensionless	Maximum calculated application rate = 3.57 ac-in/ac/month OR ac-ft/ac/year
Ce	1.05	mmhos/cm	Applicant's proposed application rate = ac-in/ac/month OR ac-ft/ac/year
Cl	8.50	mmhos/cm	Maximum rate from agronomic analysis = N/A ac-in/ac/month OR ac-ft/ac/year
Pond area	6.18	acres	
Irrigation area	61.00	acres	

Irrigation Efficiency, K	0.85	dimensionless
Design Flow	0.192	MGD

Recommended rate for permit = 3.57 ac-in/ac/month OR ac-ft/ac/year
Limiting factor = Click this cell to choose from list.
Gross rate check (from flow, acres) = 3.53 OK

- (2) Average rainfall – Data source: Texas Water Development Board (see Quadrangle above)
 (3) Average runoff = $\frac{((\text{average rainfall} - (0.2 * ((1000 / \text{CN}) - 10))))^2}{((\text{average rainfall} + (0.8 * ((1000 / \text{CN}) - 10))))}$
 (4) Average infiltrated rainfall = (average rainfall – average runoff)
 (5) Evapotranspiration – Data Source: Borelli, Bulletin 6019
 (6) Required leaching =
 If: $\text{evapotranspiration} - \text{average infiltrated rainfall} \leq 0$, then 0;
 If: $\text{evapotranspiration} - \text{average infiltrated rainfall} > 0$, $C_e / (C_l - C_e) * (\text{evapotranspiration} - \text{avg infiltrated rainfall})$
 (7) Total water needs = $\text{evapotranspiration} + \text{required leaching}$
 (8) Effluent needed in root zone = $\text{total water needs} - \text{average infiltrated rainfall}$
 (9a) Net evaporation – Data source: Texas Water Development Board (see Quadrangle above)
 (9b) Raw net evaporation from reservoir surface = $(\text{net evaporation from reservoir}) * ((\text{pond area}) / (\text{irrigation area}))$
 (10) Effluent needed based on irrigation efficiency = $(\text{effluent needed in root zone}) / (\text{irrigation efficiency})$
 (11) Consumption from reservoir = $\text{net evaporation from reservoir surface} + \text{effluent needed based on irrigation efficiency}$

Figure 9.2 STORAGE CALCULATIONS

Permittee: Schreiber Foods, Inc.

Permit No.: WQ0003074000

The storage calculations are designed to evaluate the storage capacity and surface area of the applicant's storage pond (or multiple ponds). The pond must have enough surface area to evaporate all the flow to the pond under low-net evaporation and corresponding annual rainfall conditions. The pond is considered adequately sized when the additional storage required is equal to zero (or "none"). If the additional storage required is greater than zero, then:

(1) the pond's storage capacity must be increase, (2) the pond's surface area must be increased, (3) the effluent flow must be reduced, or (4) other approved measures must be taken to ensure that no accumulation occurs during low-net evaporation and corresponding annual rainfall conditions.

(12)	(13)	(14a)	(14b)	(15)	(16)	(17)	(18a)	(18b)	(19)	(20)
Month	Effluent Available (as inches on plot acres)	Average Rainfall Distrib. (%)	Rain Worst Year	Field Runoff Worst Year	Infiltrated Rain	Avail Water	Average Net Evap. Distrib. (%)	Low Net Evap. from Reservoir Surface	Effluent to Storage (as inches on plot acres)	Accum Storage (as inches on plot acres)
<i>Units →</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>
January	3.53	5.23%	2.39	0.44	1.95	5.48	3.31%	0.01	3.52	11.48
February	3.53	6.91%	3.16	0.85	2.31	5.83	1.92%	0.00	3.52	15.00
March	3.53	9.21%	4.22	1.54	2.67	6.20	4.55%	0.01	2.55	17.55
April	3.53	9.02%	4.13	1.48	2.65	6.17	8.32%	0.02	1.54	19.08
May	3.53	13.59%	6.22	3.08	3.14	6.67	3.91%	0.01	-2.01	0
June	3.53	11.92%	5.45	2.47	2.99	6.51	11.86%	0.03	-3.45	0
July	3.53	6.34%	2.90	0.70	2.20	5.72	21.45%	0.05	-4.89	0
August	3.53	7.27%	3.33	0.96	2.37	5.90	19.34%	0.04	-0.55	0
September	3.53	9.19%	4.21	1.54	2.67	6.19	10.84%	0.02	-1.10	0
October	3.53	10.35%	4.74	1.92	2.82	6.34	6.04%	0.01	0.93	0.93
November	3.53	6.20%	2.84	0.67	2.17	5.69	5.00%	0.01	3.51	4.44
December	3.53	4.78%	2.19	0.34	1.84	5.37	3.47%	0.01	3.52	7.96
Totals	42.31	100%	45.77	15.99	29.78	72.09	100%	0.23	—	19.08

Worst (low) net evap. = 2.27 inches

Corresponding rain = 45.77 inches

Worst-case net year = 2007

Storage required = 97.01 ac-ft

Actual storage = 70.55 ac-ft

Additional storage required = 26.46 ac-ft

Storage days = 165 days

(13) Effluent available for irrigation (assumes design flow is applied to entire acreage unless different flow values are justified).

(14a) Average rainfall distribution - Data source: Texas Water Development Board (see Quadrangle in Water Balance Calculations above)

(14b) Rainfall worst year = (rainfall distribution as fraction or %/100) * maximum annual rainfall

(15) Field runoff worst year = $\left[\frac{(\text{rainfall worst year} - (0.2 * ((1000 / \text{CN}) - 10)))^2}{(\text{rainfall worst year} + (0.8 * ((1000 / \text{CN}) - 10)))} \right]$

(16) Infiltrated rainfall = (rainfall worst year - field runoff worst year)

(17) Available water = (effluent available for land application + infiltrated rainfall check)

(18a) Average net evaporation distribution - Data source: Texas Water Development Board (see Quadrangle in Water Balance Calculations above)

(18b) Net low evaporation from reservoir surface = $\left[\frac{(\text{low net evaporation}) * (\text{net low evaporation avg. dist})}{(\text{pond area}) / (\text{irrigation area})} \right]$

(19) Storage =

If: (total water needs - infiltrated rainfall) < 0, (effluent available for land application - net low evaporation from reservoir surface);

If: (total water needs - infiltrated rainfall) ≥ 0,

(effluent available for land application - net low evaporation from reservoir surface) * [(total water needs - infiltrated rainfall) / (irrigation efficiency)]

(20) Accumulated storage =

If: net low evaporation from reservoir surface + storage ≤ 0, 0

If: net low evaporation from reservoir surface + storage > 0, enter value

Figure 9.1 WATER BALANCE CALCULATIONS

Permittee: **Schreiber Foods, Inc**
 Permit No.: **WQ0003074000**

TWDB Data Quadrangle:
509

The water balance calculations are designed to evaluate the maximum application rate (hydraulic loading rate) for the land area where irrigation is to occur. The applicant's proposed application rate must not exceed the maximum calculated application rate or the maximum application rate based on agronomic analysis.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9a)	(9b)	(10)	(11)
Month	Avg Rain	Avg Runoff	Avg Infiltrated Rainfall	Evapo-trans.	Required Leach	Total Water Needs	Effluent Needed in Root Zone	Raw Net Evap. from Reservoir	Reservoir Net Evap. (as inches on plot acres)	Effluent Needed Based on Irrigation Efficiency	Reservoir Consumption (as inches on plot acres)
<i>Units →</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>
January	1.59	0.12	1.46	2.74	4.06	6.80	5.34	0.93	0.09	6.28	6.37
February	1.87	0.22	1.65	3.11	4.63	7.74	6.09	0.81	0.08	7.16	7.25
March	2.75	0.62	2.13	4.97	9.03	14.00	11.87	1.40	0.14	13.97	14.11
April	2.66	0.57	2.09	5.74	11.62	17.36	15.27	2.54	0.26	17.97	18.23
May	4.10	1.46	2.64	8.31	18.05	26.36	23.73	1.24	0.13	27.91	28.04
June	3.53	1.08	2.45	9.32	21.87	31.19	28.74	3.44	0.35	33.81	34.16
July	1.96	0.25	1.71	8.38	21.23	29.61	27.90	6.01	0.61	32.82	33.43
August	2.22	0.36	1.86	8.59	21.41	30.00	28.14	5.55	0.56	33.10	33.67
September	2.89	0.70	2.19	6.03	12.21	18.24	16.05	3.00	0.30	18.88	19.19
October	3.13	0.83	2.29	3.80	4.80	8.60	6.31	1.79	0.18	7.42	7.60
November	1.92	0.23	1.69	1.70	0.04	1.74	0.06	1.44	0.15	0.07	0.22
December	1.38	0.07	1.31	2.33	3.25	5.58	4.27	1.09	0.11	5.03	5.14
Totals	29.99	6.52	23.47	65.02	132.21	197.23	173.77	29.24	2.96	204.43	207.40

Crop is	Forage Sorghum & Small Grains	
CN	71.00	<i>dimensionless</i>
Ce	5.25	<i>mmhos/cm</i>
Cl	6.90	<i>mmhos/cm</i>
Pond area	6.18	<i>acres</i>
Irrigation area	61.00	<i>acres</i>

Maximum calculated application rate = 17.04 *ac-in/ac/month* **OR** *ac-ft/ac/year*
 Applicant's proposed application rate = *ac-in/ac/month* **OR** *ac-ft/ac/year*
 Maximum rate from agronomic analysis = N/A *ac-in/ac/month* **OR** *ac-ft/ac/year*

Irrigation Efficiency, K 0.85 *dimensionless*
 Design Flow 0.192 *MGD*

Recommended rate for permit = 17.04 *ac-in/ac/month* **OR** *ac-ft/ac/year*
Limiting factor = Click this cell to choose from list.
Gross rate check (from flow, acres) = 3.53 **OK**

- (2) Average rainfall – Data source: Texas Water Development Board (see Quadrangle above)
 (3) Average runoff = $\frac{[(\text{average rainfall} - (0.2 * ((1000 / CN) - 10)))]^2}{(\text{average rainfall} + (0.8 * ((1000 / CN) - 10)))}$
 (4) Average infiltrated rainfall = (average rainfall – average runoff)
 (5) Evapotranspiration – Data Source: Mean Crop Consumptive Use and Free-Water Evaporation for Texas (Table 16 Stephenville).
 (6) Required leaching = ← Edit
 If: *evapotranspiration* – *average infiltrated rainfall* ≤ 0, then 0;
 If: *evapotranspiration* – *average infiltrated rainfall* > 0, $Ce / (Cl - Ce) * (\text{evapotranspiration} - \text{avg infiltrated rainfall})$
 (7) Total water needs = *evapotranspiration* + *required leaching*
 (8) Effluent needed in root zone = *total water needs* – *average infiltrated rainfall*
 (9a) Net evaporation – Data source: Texas Water Development Board (see Quadrangle above)
 (9b) Raw net evaporation from reservoir surface = (*net evaporation from reservoir*) * ((*pond area*) / (*irrigation area*))
 (10) Effluent needed based on irrigation efficiency = (*effluent needed in root zone*) / (*irrigation efficiency*)
 (11) Consumption from reservoir = *net evaporation from reservoir surface* + *effluent needed based on irrigation efficiency*

STORAGE CALCULATIONS, all units in inches (unless otherwise specified)

Permittee: **Schreiber Foods, Inc**
 Permit No.: **WQ0003074000**

... storage calculations are designed to evaluate the storage capacity and surface area

(12)	(13)	(14a)	(14b)	(15)	(16)	(17)	(18a)	(18b)	(19)	(20)
Month	Effluent Available (as inches on plot acres)	Average Rainfall Distrib. (%)	Rain Worst Year	Field Runoff Worst Year	Infiltrated Rain	Avail Water	Average Net Evap. Distrib. (%)	Low Net Evap. from Reservoir Surface	Effluent to Storage (as inches on plot acres)	Accum Storage (as inches on plot acres)
<i>Units →</i>	<i>inches</i>	<i>Inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>
January	3.53	5.29%	2.42	0.45	1.97	5.49	3.20%	0.01	-2.16	0
February	3.53	6.24%	2.85	0.68	2.18	5.70	2.76%	0.01	-3.03	0
March	3.53	9.18%	4.20	1.53	2.67	6.19	4.79%	0.01	-9.82	0
April	3.53	8.87%	4.06	1.44	2.63	6.15	8.67%	0.02	-13.83	0
May	3.53	13.66%	6.25	3.10	3.15	6.68	4.24%	0.01	-23.79	0
June	3.53	11.77%	5.39	2.41	2.97	6.50	11.75%	0.03	-29.70	0
July	3.53	6.53%	2.99	0.75	2.23	5.76	20.54%	0.05	-28.73	0
August	3.53	7.41%	3.39	0.99	2.40	5.92	18.99%	0.04	-28.99	0
September	3.53	9.64%	4.41	1.68	2.73	6.25	10.27%	0.02	-14.75	0
October	3.53	10.42%	4.77	1.94	2.83	6.35	6.12%	0.01	-3.28	0
November	3.53	6.41%	2.93	0.72	2.21	5.74	4.93%	0.01	3.51	3.51
December	3.53	4.59%	2.10	0.31	1.79	5.32	3.74%	0.01	-0.94	0
Totals	42.31	100%	45.77	16.02	29.75	72.06	100%	0.23	—	3.51

Worst (low) net evap. = 2.27 inches
 Corresponding rain = 45.77 inches
 Worst-case net year = 2007

Storage required = 17.87 ac-ft
 Actual storage = ac-ft
 Additional storage required = 17.87 ac-ft
 Storage days = 30 days

(13) Effluent available for irrigation (assumes design flow is applied to entire acreage unless different flow values are justified).

(14a) Average rainfall distribution - Data source: Texas Water Development Board (see Quadrangle in Water Balance Calculations above)

(14b) Rainfall worst year = (rainfall distribution as fraction or %/100) * maximum annual rainfall

(15) Field runoff worst year = $\left[\frac{(\text{rainfall worst year} - (0.2 * ((1000/CN) - 10)))^2}{(\text{rainfall worst year} + (0.8 * ((1000/CN) - 10)))} \right]$

(16) Infiltrated rainfall = (rainfall worst year - field runoff worst year)

(17) Available water = (effluent available for land application + infiltrated rainfall check)

(18a) Average net evaporation distribution - Data source: Texas Water Development Board (see Quadrangle in Water Balance Calculations above)

(18b) Net low evaporation from reservoir surface = $[(\text{low net evaporation}) * (\text{net low evaporation avg. dist})] * [(\text{pond area}) / (\text{irrigation area})]$

(19) Storage =

If: (total water needs - infiltrated rainfall) < 0, (effluent available for land application - net low evaporation from reservoir surface);

If: (total water needs - infiltrated rainfall) ≥ 0,

(effluent available for land application - net low evaporation from reservoir surface) * [(total water needs - infiltrated rainfall) / (irrigation efficiency)]

(20) Accumulated storage =

If: net low evaporation from reservoir surface + storage ≤ 0, 0

If: net low evaporation from reservoir surface + storage > 0, enter value

Figure 9.1 WATER BALANCE CALCULATIONS

Permittee: **Schreiber Foods, Inc**
 Permit No.: **WQ0003074000**

TWDB Data Quadrangle:
509

The water balance calculations are designed to evaluate the maximum application rate (hydraulic loading rate) for the land area where irrigation is to occur. The applicant's proposed application rate must not exceed the maximum calculated application rate or the maximum application rate based on agronomic analysis.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9a)	(9b)	(10)	(11)
Month	Avg Rain	Avg Runoff	Avg Infiltrated Rainfall	Evapo-trans.	Required Leach	Total Water Needs	Effluent Needed in Root Zone	Raw Net Evap. from Reservoir	Reservoir Net Evap. (as inches on plot acres)	Effluent Needed Based on Irrigation Efficiency	Reservoir Consumption (as inches on plot acres)
<i>Units →</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>	<i>inches</i>
January	1.59	0.12	1.46	2.74	4.06	6.80	5.34	0.93	0.09	6.28	6.37
February	1.87	0.22	1.65	3.11	4.63	7.74	6.09	0.81	0.08	7.16	7.25
March	2.75	0.62	2.13	4.97	9.03	14.00	11.87	1.40	0.14	13.97	14.11
April	2.66	0.57	2.09	5.74	11.62	17.36	15.27	2.54	0.26	17.97	18.23
May	4.10	1.46	2.64	8.38	18.28	26.66	24.02	1.24	0.13	28.26	28.38
June	3.53	1.08	2.45	9.62	22.82	32.44	30.00	3.44	0.35	35.29	35.64
July	1.96	0.25	1.71	8.48	21.55	30.03	28.32	6.01	0.61	33.32	33.92
August	2.22	0.36	1.86	7.51	17.97	25.48	23.62	5.55	0.56	27.79	28.35
September	2.89	0.70	2.19	0.74	0.00	0.74	0.00	3.00	0.30	0.00	0.30
October	3.13	0.83	2.29	2.15	0.00	2.15	0.00	1.79	0.18	0.00	0.18
November	1.92	0.23	1.69	1.70	0.04	1.74	0.06	1.44	0.15	0.07	0.22
December	1.38	0.07	1.31	2.33	3.25	5.58	4.27	1.09	0.11	5.03	5.14
Totals	29.99	6.52	23.47	57.47	113.26	170.73	148.86	29.24	2.96	175.13	178.09

Crop is	Soybeans & Small Grains	
CN	71.00	<i>dimensionless</i>
Ce	5.25	<i>mmhos/cm</i>
Cl	6.90	<i>mmhos/cm</i>
Pond area	6.18	<i>acres</i>
Irrigation area	61.00	<i>acres</i>

Maximum calculated application rate = 14.59 *ac-in/ac/month OR ac-ft/ac/year*
 Applicant's proposed application rate = *ac-in/ac/month OR ac-ft/ac/year*
 Maximum rate from agronomic analysis = N/A *ac-in/ac/month OR ac-ft/ac/year*

Irrigation Efficiency, K	0.85	<i>dimensionless</i>
Design Flow	0.192	<i>MGD</i>

Recommended rate for permit = 14.59 ac-in/ac/month OR ac-ft/ac/year

Limiting factor = Click this cell to choose from list.

Gross rate check (from flow, acres) = 3.53 OK

- (2) Average rainfall – Data source: Texas Water Development Board (see Quadrangle above)
- (3) Average runoff = $\frac{[(average\ rainfall - (0.2*((1000/CN) - 10)))]^2}{(average\ rainfall + (0.8*((1000/CN) - 10)))}$
- (4) Average infiltrated rainfall = (average rainfall – average runoff)
- (5) Evapotranspiration – Data Source: Mean Crop Consumptive Use and Free-Water Evaporation for Texas (Table 16).
- (6) Required leaching = ← Edit
- If: $evapotranspiration - average\ infiltrated\ rainfall \leq 0$, then 0;
- If: $evapotranspiration - average\ infiltrated\ rainfall > 0$, $Ce / (Cl - Ce) * (evapotranspiration - avg\ infiltrated\ rainfall)$
- (7) Total water needs = $evapotranspiration + required\ leaching$
- (8) Effluent needed in root zone = $total\ water\ needs - average\ infiltrated\ rainfall$
- (9a) Net evaporation – Data source: Texas Water Development Board (see Quadrangle above)
- (9b) Raw net evaporation from reservoir surface = $(net\ evaporation\ from\ reservoir) * ((pond\ area) / (irrigation\ area))$
- (10) Effluent needed based on irrigation efficiency = $(effluent\ needed\ in\ root\ zone) / (irrigation\ efficiency)$
- (11) Consumption from reservoir = $net\ evaporation\ from\ reservoir\ surface + effluent\ needed\ based\ on\ irrigation\ efficiency$

STORAGE CALCULATIONS, all units in inches (unless otherwise specified)

Permittee: **Schreiber Foods, Inc**
 Permit No.: **WQ0003074000**

These calculations are designed to evaluate the storage capacity and surface area

(12)	(13)	(14a)	(14b)	(15)	(16)	(17)	(18a)	(18b)	(19)	(20)
Month	Effluent Available (as inches on plot acres)	Average Rainfall Distrib. (%)	Rain Worst Year	Field Runoff Worst Year	Infiltrated Rain	Avail Water	Average Net Evap. Distrib. (%)	Low Net Evap. from Reservoir Surface	Effluent to Storage (as inches on plot acres)	Accum Storage (as inches on plot acres)
Units →	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches
January	3.53	5.29%	2.42	0.45	1.97	5.49	3.20%	0.01	-2.16	0
February	3.53	6.24%	2.85	0.68	2.18	5.70	2.76%	0.01	-3.03	0
March	3.53	9.18%	4.20	1.53	2.67	6.19	4.79%	0.01	-9.82	0
April	3.53	8.87%	4.06	1.44	2.63	6.15	8.67%	0.02	-13.83	0
May	3.53	13.66%	6.25	3.10	3.15	6.68	4.24%	0.01	-24.14	0
June	3.53	11.77%	5.39	2.41	2.97	6.50	11.75%	0.03	-31.17	0
July	3.53	6.53%	2.99	0.75	2.23	5.76	20.54%	0.05	-29.22	0
August	3.53	7.41%	3.39	0.99	2.40	5.92	18.99%	0.04	-23.68	0
September	3.53	9.64%	4.41	1.68	2.73	6.25	10.27%	0.02	3.50	3.50
October	3.53	10.42%	4.77	1.94	2.83	6.35	6.12%	0.01	3.51	7.01
November	3.53	6.41%	2.93	0.72	2.21	5.74	4.93%	0.01	3.51	10.53
December	3.53	4.59%	2.10	0.31	1.79	5.32	3.74%	0.01	-0.94	0
Totals	42.31	100%	45.77	16.02	29.75	72.06	100%	0.23	—	10.53

Worst (low) net evap. = 2.27 inches
 Corresponding rain = 45.77 inches
 Worst-case net year = 2007

Storage required = 53.52 ac-ft
 Actual storage = ac-ft
 Additional storage required = 53.52 ac-ft
 Storage days = 91 days

(13) Effluent available for irrigation (assumes design flow is applied to entire acreage unless different flow values are justified).

(14a) Average rainfall distribution - Data source: Texas Water Development Board (see Quadrangle in Water Balance Calculations above)

(14b) Rainfall worst year = (rainfall distribution as fraction or %/100)*maximum annual rainfall

(15) Field runoff worst year = $\left[\left(\text{rainfall worst year} - (0.2 * ((1000/CN) - 10)) \right) \right]^2 / ((\text{rainfall worst year} + (0.8 * ((1000/CN) - 10))))$

(16) Infiltrated rainfall = (rainfall worst year- field runoff worst year)

(17) Available water = (effluent available for land application + infiltrated rainfall check)

(18a) Average net evaporation distribution - Data source: Texas Water Development Board (see Quadrangle in Water Balance Calculations above)

(18b) Net low evaporation from reservoir surface = $[(\text{low net evaporation}) * (\text{net low evaporation avg. dist.})] * [(\text{pond area}) / (\text{irrigation area})]$

(19) Storage =

If: (total water needs – infiltrated rainfall) < 0, (effluent available for land application – net low evaporation from reservoir surface);

If: (total water needs – infiltrated rainfall) ≥ 0,
 (effluent available for land application – net low evaporation from reservoir surface) * [(total water needs – infiltrated rainfall)/(irrigation efficiency)]

(20) Accumulated storage =

If: net low evaporation from reservoir surface + storage ≤ 0, 0

If: net low evaporation from reservoir surface + storage > 0, enter value

ATTACHMENT 10 – STORAGE LAGOON CONTINGENCY PLAN

SCHREIBER FOODS, INC.

STORAGE LAGOON CONTINGENCY PLAN

Purpose

Schreiber Foods, Inc. ("Schreiber") is executing a production expansion that will increase the amount of wastewater effluent generated at the facility. This permit application is being submitted to request an effluent increase equal to that of the hydraulic capacity of the fields Schreiber irrigates (192,000 gpd monthly average). As part of our permit application, Schreiber has prepared the below noted contingency procedure that shall go into effect should the facility find that it is not able to consistently stay within the current lagoon capacity monthly average limit of 154,000 gpd.

Current engineering predictions that incorporate the planned expansion indicate that wastewater effluent will remain below a monthly average limit of 154,000 gpd, with much of the year being far below this limit. Schreiber recognizes that actual wastewater flow can be difficult to predict in a food manufacturing facility as several variables can cause increased wastewater effluent. Due to this fact, Schreiber wishes to be prepared with a contingency plan should actual effluent numbers indicate an inability to maintain an average monthly flow below 154,000 gpd.

Procedure

The facility will monitor daily wastewater production and trend this data to fine tune our engineered predictions for future months. Should the facility's actual average daily discharge, or its future effluent predictions indicate an inability to remain below the monthly average limit of 154,000 gpd, Schreiber will develop a schedule, as well as take appropriate steps to reduce plant effluent, increase the capacity of the lagoon system or a combination of the two.

ATTACHMENT 11 – PUBLIC INVOLVEMENT PLAN



Texas Commission on Environmental Quality

Public Involvement Plan Form for Permit and Registration Applications

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

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

Section 1. Preliminary Screening

New Permit or Registration Application

☒ New Activity - modification, registration, amendment, facility, etc. (see instructions)

If neither of the above boxes are checked, a Public Involvement Plan is not necessary. Completion of the remaining sections not required.

Section 2. Secondary Screening

☒ Requires public notice,

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

☐ Located within any of the following geographical locations:

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

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

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

Section 3. Application Information

Type of Application (check all that apply):

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

Waste ☐ Municipal Solid Waste ☐ Industrial and Hazardous Waste
 ☐ Radioactive Materials Licensing ☐ Underground Injection Controls

Water Quality

- ☒ Texas Pollutant Discharge Elimination System (TPDES)
- ☒ Texas Land Application Permit (TLAP)
- ☐ State Only Concentrated Animal Feeding Operation (CAFO)
- ☐ Water Treatment Plant Residuals Disposal Permit
 - ☐ Class B Biosolids Land Application Permit
 - ☐ Domestic Septage Land Application Registration

Water Rights New Permit

- ☐ New Appropriation of Water
- ☐ New or existing reservoir

Amendment to an Existing Water Right

- ☐ Add a New Appropriation of Water
- ☐ Add a New or Existing Reservoir
- ☐ Major Amendment that could affect other water rights or the environment

Section 4. Plain Language Summary

Provide a brief description of planned activities.

Schreiber Foods, Inc. is a specialty dairy food manufacturer, producing a variety of cheeses.

Section 5. Community and Demographic Information

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

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

Stephenville

(City)

Erath

(County)

<p>(Census Tract)</p> <p>Please indicate which of these three is the level used for gathering the following information.</p> <p><input type="checkbox"/> City</p> <p><input type="checkbox"/> County</p> <p><input checked="" type="checkbox"/> Census Tract</p>
<p>(a) Percent of people over 25 years of age who at least graduated from high school</p> <p>88.9%</p>
<p>(b) Per capita income for population near the specified location</p> <p>\$24,810</p>
<p>(c) Percent of minority population and percent of population by race within the specified location</p> <p>White = 75.6%, Black or African American = 3.29%, Hispanic = 12.7%, Two or More Races = 2.11% Other (Hispanic) = 2.68%, Asian = 1.3%, Indian = 1.6%, Multiracial = 0.72%</p>
<p>(d) Percent of Linguistically Isolated Households by language within the specified location</p> <p>0%</p>
<p>(e) Languages commonly spoken in area by percentage</p> <p>English = 89.4%, Spanish = 10.6%</p>
<p>(f) Community and/or Stakeholder Groups</p> <p>N/A</p>
<p>(g) Historic public interest or involvement</p> <p>N/A</p>

<p>Section 6. Planned Public Outreach Activities</p>
<p>(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, please describe.</p>
<p>If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.</p>
<p>(c) Will you provide notice of this application in alternative languages?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Please refer to Section 5. If more than 5% of the population potentially affected by your application is Limited English Proficient, then you are required to provide notice in the alternative language.</p> <p>If yes, how will you provide notice in alternative languages?</p> <p><input type="checkbox"/> Publish in alternative language newspaper</p> <p><input type="checkbox"/> Posted on Commissioner's Integrated Database Website</p>

ATTACHMENT 12 – GROUNDWATER TECHNICAL REPORT

12.1 Purpose

The purpose of this section is to provide information on the geologic features and groundwater resources in the area of the Schreiber Foods, Inc. property, and to identify Best Management Practices (BMP)s that will be used to protect these resources.

12.2 Geologic Atlas Map

Figure 12.1, Geologic Atlas Map, shows the geologic formations located at the property.

12.3 Geomorphologic/Geologic Features

The Windthorst-Duffau and Maloterre-Purves-Dugout soils in this area of Erath County are immediately underlain by the Paluxy and Glen Rose Formations as shown in Figure 12.1, Geologic Atlas Map. The Paluxy Formation consists of sandstone interbedded with claystone and siltstone, up to 100 feet thick, thinning southward. The Glen Rose Formation of Cretaceous age consists of alternating limestone and claystone with some sandstone, up to 250 feet thick in the southeastern area of the formation. (Geologic Atlas, 1976).

Forming the upper unit of the Trinity Group, the Paluxy Formation consists 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 from 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).

A water well driller's log for a neighboring well drilled in 2010 indicates the subsurface geology to consist of clay and rock from 0-182 feet below the surface, followed by sand and clay stripes and shale from 182-470 feet, with a total well depth of 470 feet.

12.4 Aquifer Information

The Trinity Aquifer consists 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 County, water might flow laterally into the Trinity aquifer from the adjacent Edwards-Trinity aquifer. The aquifer discharges by evapotranspiration, spring discharge, diffuse lateral or upward leakage into shallow aquifers, and withdrawals from wells.

12.5 Water Wells

All water wells within the 500-ft radius of the property boundary are identified in attachment 6.

12.6 Best Management Practices

The existing irrigation system is designed to irrigate the hayland areas at a designed application rate that will not exceed the infiltration rate of the soils. Due to the low application rates, no pooling, ponding or tailwater is anticipated in the sprinkler irrigated areas. The surface irrigation system is also designed to minimize the creation of tailwater. All treatment/irrigation storage ponds are lined in accordance with the TCEQ rules.

12.7 References

Ashworth and Hopkins, November 1995. Aquifers of Texas. Report 345, Texas Water Development Board.

Bureau of Economic Geology, The University of Texas at Austin, Geologic Atlas of Texas – Abilene Sheet. 1976.

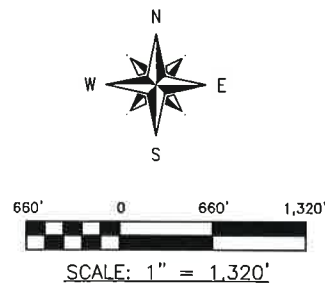


Map Generated 2/16/2023

Legend:

Kpa Cretaceous Paluxy Formation
Kgr Cretaceous Glen Rose Formation

Source: United States Geological Survey. Available at:
<http://txpub.usgs.gov>.



Schreiber Foods, Inc.
Stephenville, TX
Erath County

Geologic Atlas Map
Figure 12.1
Page 34

ENVIRO-AG
EAT
ENGINEERING, INC.

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