



BOARD MEETING

JANUARY, 09, 2024

LSGCD



**NOTICE OF HEARINGS AND MEETINGS
OF THE BOARD OF DIRECTORS OF THE
LONE STAR GROUNDWATER CONSERVATION DISTRICT**

*To be held on Tuesday, January 9, 2024
Lone Star GCD – James B. "Jim" Wesley Board Room
655 Conroe Park North Drive
Conroe, Texas 77303*

**NOTICE OF PUBLIC HEARING ON
PERMIT AND PERMIT AMENDMENT APPLICATIONS**

TUESDAY, JANUARY 9, 2024, AT 6:00 P.M.

*Held In Person with the option for Public Comment
Remotely by Publicly Accessible Videoconference
(The videoconference opens at 5:45 P.M.)*

1. Call to Order and Declare Hearing Open to the Public
2. Roll Call
3. Prayer and Pledges of Allegiance
4. Any Public Comments or Requests to Contest and General Manager Permit Hearing Report for the following applications:
 - i. Waters Edge RV, LLC, for a proposed amendment to OP-10060901A-JSPR, Jasper aquifer well to be drilled at 12922 Longstreet Rd., Willis, increase of 9 mg annually, Public Supply (PWS) use, (Driller of Record: TBD);
 - ii. Ellison Collections, LLC (McCrorey Trails), for a proposed Jasper aquifer well to be drilled at 12866 McCrorey Rd., Conroe, not to exceed 37.668 mg annually, Public Supply (PWS) use, (Driller of Record: TBD);
 - iii. Porter Special Utility District, for a proposed amendment to OP03-0006G-CHEV, Evangeline aquifer well to be drilled at 18669 Ferne Dr., Porter, Public Supply (PWS) and Commercial use, request for spacing exception for District Rule 3.3, hydrogeological report submitted with application, (Driller of Record: TBD);
 - iv. Blair Warehouse Park LLC, for a proposed amendment to OP-20102101-CHEV, increase of 0.16 mg annually, 21219 Blair Rd, Conroe, Commercial use;
 - v. Entergy Texas Inc (LC Rec Area), for 1 proposed new Jasper aquifer well to be drilled at 11970 West FM 1097, Willis and 1 existing Jasper aquifer well not registered with the District, not to exceed 0.438 mg annually, Public Supply (PWS) use, (Driller of Record: Weisinger Incorporated);
 - vi. Far Hills Utility District (AWS Production Well) for a proposed amendment to AWS-15120101C-CAT, increase of 40 mg annually, 10320 Cude Cemetery Rd, Willis, Public Supply (PWS) use; and



- vii. Ross Forward, for a proposed Evangeline aquifer well to be drilled at 5435 Old Hwy 105 W, Conroe, not to exceed 0.5 mg annually, Commercial use, (Driller of Record: AAA Water Well Services, LLC).
5. Discussion, consideration, and possible action on the following applications:
- i. Waters Edge RV, LLC, for a proposed amendment to OP-10060901A-JSPR, Jasper aquifer well to be drilled at 12922 Longstreet Rd., Willis, increase of 9 mg annually, Public Supply (PWS) use, (Driller of Record: TBD);
 - ii. Ellison Collections, LLC (McCrorey Trails), for a proposed Jasper aquifer well to be drilled at 12866 McCrorey Rd., Conroe, not to exceed 37.668 mg annually, Public Supply (PWS) use, (Driller of Record: TBD);
 - iii. Porter Special Utility District, for a proposed amendment to OP03-0006G-CHEV, Evangeline aquifer well to be drilled at 18669 Ferne Dr., Porter, Public Supply (PWS) and Commercial use, request for spacing exception for District Rule 3.3, hydrogeological report submitted with application, (Driller of Record: TBD);
 - iv. Blair Warehouse Park LLC, for a proposed amendment to OP-20102101-CHEV, increase of 0.16 mg annually, 21219 Blair Rd, Conroe, Commercial use;
 - v. Entergy Texas Inc (LC Rec Area), for 1 proposed new Jasper aquifer well to be drilled at 11970 West FM 1097, Willis and 1 existing Jasper aquifer well not registered with the District, not to exceed 0.438 mg annually, Public Supply (PWS) use, (Driller of Record: Weisinger Incorporated);
 - vi. Far Hills Utility District (AWS Production Well) for a proposed amendment to AWS-15120101C-CAT, increase of 40 mg annually, 10320 Cude Cemetery Rd, Willis, Public Supply (PWS) use; and
 - vii. Ross Forward, for a proposed Evangeline aquifer well to be drilled at 5435 Old Hwy 105 W, Conroe, not to exceed 0.5 mg annually, Commercial use, (Driller of Record: AAA Water Well Services, LLC).
6. Adjourn or continue permit hearing in whole or in part.

The above agenda schedules for the meetings and hearings of the District represent an estimate of the order for the indicated items and are subject to change at any time.

These public hearings and meetings are available to all persons regardless of disability. If you require special assistance to attend the meeting or hearing, please contact the Lone Star GCD at 936/494-3436 at least 24 hours in advance of the meeting.

At any time during one the above meetings or hearings and in compliance with the Texas Open Meetings Act, Chapter 551, Government Code, Vernon's Texas Codes, Annotated, the Lone Star Groundwater Conservation District Board may meet in executive session on any of the above agenda items for consultation concerning attorney-client matters (§551.071); deliberation regarding real property (§551.072); deliberation regarding prospective gift (§551.073); personnel matters (§551.074); deliberation regarding security devices (§551.076); and deliberation regarding cybersecurity (§551.089). Any subject discussed in executive session may be subject to action during an open meeting.



Certification

I, the undersigned authority, do hereby certify that on January 5 2024, at or before 5:00 p.m., I posted and filed the above notices of meeting(s) and hearing(s) with the Montgomery County Clerk's office and also posted a copy in the front window of the Lone Star GCD office in a place convenient and readily accessible to the general public all times and that it will remain so posted continuously for at least 72 hours preceding the scheduled time of said meeting in accordance with the Texas Government Code, Chapter 551.

/s/ Sarah Kouba

Sarah Kouba, General Manager
Lone Star Groundwater Conservation District



***NOTICE OF REGULAR MEETING
OF THE BOARD OF DIRECTORS***

TUESDAY, JANUARY 9, 2024, AT 6:00 P.M.
(TO BEGIN UPON ADJOURNMENT OF THE ABOVE LISTED PUBLIC HEARINGS)

***Held In Person with the option for Public Comment
Remotely by Publicly Accessible Videoconference
(The videoconference opens at 5:45 P.M.)***

The Board of Directors may discuss, consider, and take action, including expenditure of funds, on any item or subject matter posted in this agenda.

1. Call to Order and Declare Regular Meeting Open to the Public
2. Roll Call
3. Public Comment on any agenda item or any other matter (Public comment is limited to a maximum of 3 minutes per speaker); *See Comment Card for Other Guidelines and Procedures.*
4. Executive Session - The Board will recess for a closed Executive Session pursuant to Texas Government Code, section § 551.074 and section §551.071, to consult with the District's attorney regarding pending or contemplated litigation, settlement offers; or on matters in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the Texas Open Meetings Act, Chapter 551, Government Code regarding any agenda item on any of the board meetings or hearings posted for today.

No action will be taken in Executive Session.

5. Re-convene in Open Session.
6. Discuss, consider, and take action as necessary concerning approval of Meeting Minutes:
 - a) November 14, 2023, Rulemaking Hearing
 - b) December 12, 2023, Public Hearing on Permit and Permit Amendment Applications
 - c) December 12, 2023, Regular Meeting of the Board of Directors
7. Committee Reports:
 - A. Executive Committee – Jim Spigener, Chair
 - 1) Brief the Board on the Committee's activities since the last regular Board meeting.
 - B. Budget & Finance Committee – Jonathan Prykryl, Chair
 - 1) Brief the Board on the Committee's activities since the last regular Board meeting.
 - 2) Review of unaudited financials for the month of December 2023 – Sarah Kouba, General Manager.
 - 3) Review of 4th Quarter Investment Report 2023 – Sarah Kouba, General Manager.



- 4) Discuss, consider, and possible action regarding approval of Resolution #23-007 adopting FY 2024 Operating and Capital Outlay Budgets
- C. External Affairs Committee – Jim Spigener, Chair
 - 1) Brief the Board on the Committee’s activities since the last regular Board meeting.
- D. DFC & Technical Committee – Stuart Traylor, Chair
 - 1) Brief the Board on the Committee’s activities since the last regular Board meeting
- E. Rules, Bylaws & Policies Committee – Jim Spigener, Chair
 - 1) Brief the Board on the Committee’s activities since the last regular Board meeting
8. Presentation by United States Geological Survey (USGS) regarding groundwater studies and programs for Montgomery County – Jason Ramage/Michael Lee, USGS
9. Receive information from District’s technical consultants regarding subsidence studies and/or discussion regarding the same – Sarah Kouba, General Manager, and/or District’s technical consultant(s).
10. Groundwater Management Area 14 – update the board on the issues related to joint planning activities and development of desired future conditions in GMA 14 – Jim Spigener, Board President and/or District’s technical consultant(s).
11. General Manager’s Report – The General Manager will brief the Board on pertinent operational and management issues that the District, its employees, or consultants have encountered since the last regular Board meeting. – Sarah Kouba, General Manager.
12. General Counsel’s Report – The District's legal counsel will brief the Board on any pertinent legal issues and developments impacting the District since the last regular Board meeting, and legal counsel's activities on behalf of the District, including without limitation: waste injection well monitoring activities and injection well applications filed at the Railroad Commission of Texas or the Texas Commission on Environmental Quality, including District protests or other actions regarding same; District Rules enforcement activities; District Rules and regulations, permitting and District Management Plan development or implementation issues; groundwater-related legislative activities; joint planning and desired future conditions development activities; contemplated and/or pending litigation involving the District; developments in groundwater case law and submission of legal briefs; legislation or legislative activities; contractual issues related to the District; open government, open records requests, policy, personnel, election matters and financial issues of the District; and other legal activities on behalf of the District. – Stacey V. Reese.
13. New Business.
14. Adjourn.

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/s/ Sarah Kouba

Sarah Kouba, General Manager
Lone Star Groundwater Conservation District

Waters Edge RV, LLC

Attn: Scott Roberts
8350 E. Raintree Dr., Ste. 220
Scottsdale, AR 85260

Permit No. OP-10060901B-JSPR

Amend Operating Permit

Date of Hearing: 1/9/2024
Request (MG): 9.000
GM Recommendation (MG): 9.000
Water use: Public Supply (PWS)
Location: 12922 Longstreet Rd., Willis
Well Registration: 2023032305
Depth (ft): 580.0
Diameter (in): 6.0

Information

1. **Amend permit** - add well to aggregate system and increase allocation. Permit Term: commencing January 9, 2024 in perpetuity (unless amended or revoked).
2. No written opposition was received regarding the proposed permit.
3. The permit application is administratively complete.
4. Applicant requests to increase allocation by 9,000,000 gallons in Jasper.
5. Applicant currently has an HUP in the amount of 11,082,000 gallons in the Jasper and an OP in the amount of 10,918,000 gallons in the Jasper. Amount available pending approval of this application equals 31,000,000 gallons in Jasper.
6. Applicant's reported pumpage for 2023 equals 24,654,000 gallons.
7. **District Staff Technical Review and Recommendation:** Applicant is requesting registration and authorization to drill one new well in the Jasper aquifer and increase of 9,000,000 gallons in the Jasper. Applicant currently holds HUP194-JSPR and OP-10060901A-JSPR with an aggregate allocation of 22,000,000 gallons for the Jasper. If approved the revised aggregate allocation will be 31,000,000 gallons in the Jasper annually. Water from this well to supply water for additional RV and tiny home connections. Applicant is requesting the construction of a new Jasper well to sever existing 176 residential, 175 RV connections, 16 condos and community irrigation. Applicant plans to add 177 RV and 65 tiny home connections. Staff recommends to the General Manager that she recommend the Board approve the registration and construction of the proposed wells, and further approve the requested allocation increase of 9,000,000 gallons in the Jasper annually.
8. Based on technical review, staff recommends to the General Manager that she recommend approval of that which is being requested.

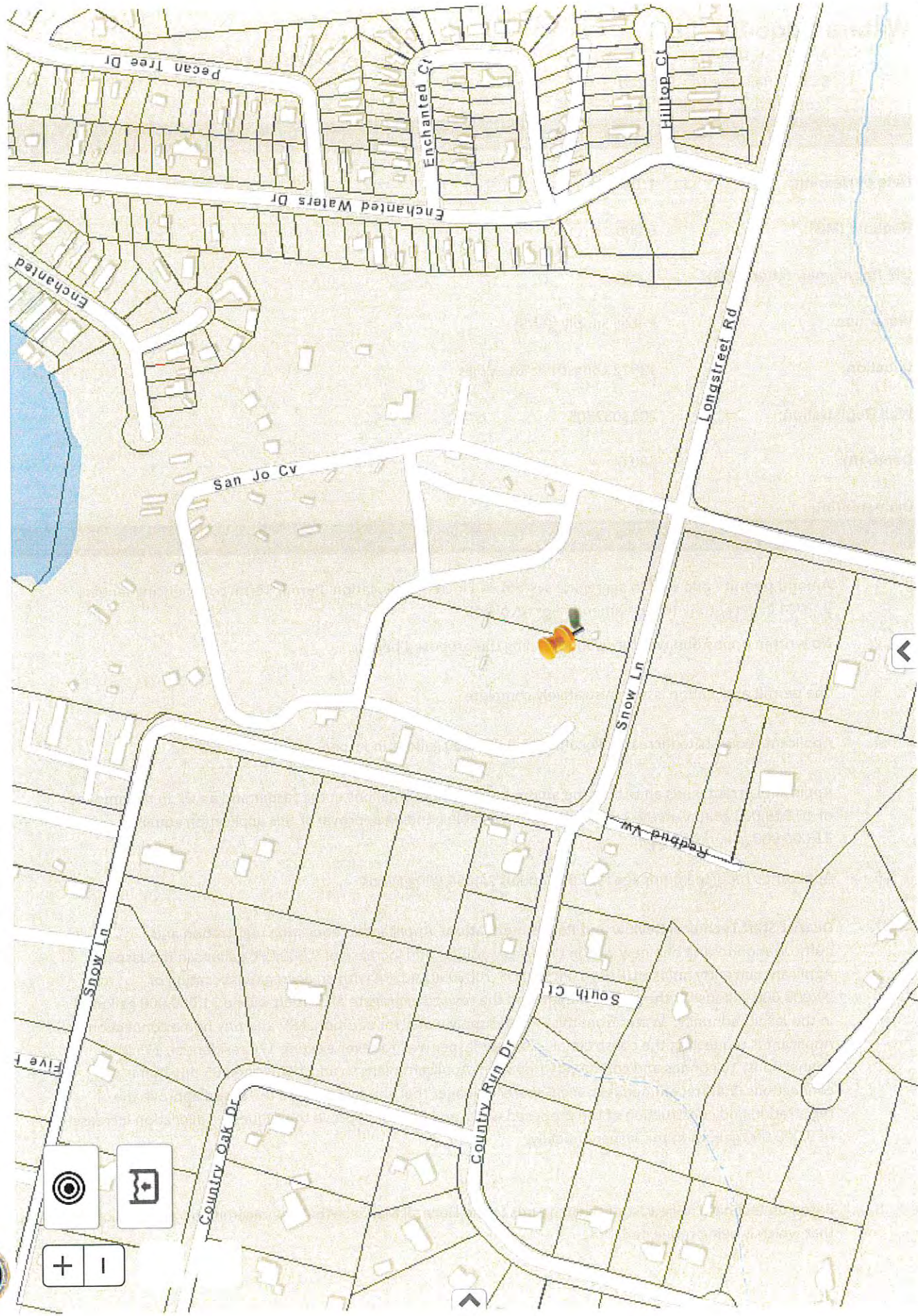


Lone Star Groundwater Conservation District
655 Conroe Park North Drive, Conroe, TX 77303

Lonestar GCD

Waters Edge RV, LLC OP-10060901B
12922 Longstreet Rd, Willis

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Ellison Collections, LLC (McCrorey Trails)

Attn: Bill Ellison
2111 N. Frazier
Conroe, TX 77301

Permit No. OP-23121502-JSPR

Operating Permit

Date of Hearing: 1/9/2024
Request (MG): 37.668
GM Recommendation (MG): 37.668
Water use: Public Supply (PWS)
Location: 12866 McCrorey Rd., Conroe
Well Registration: 2023121502
Depth (ft): 750.0
Diameter (in): 10.0

Information

1. Issue a permit commencing January 9, 2024 in perpetuity (unless amended or revoked).
2. No written opposition was received regarding the proposed permit.
3. The permit application is administratively complete.
4. Applicant provides water for the McCrorey Trails subdivision.
5. Applicant requests 37,668,000 gallons in the Jasper for 2023 and annually thereafter.
6. **District Staff Technical Review and Recommendation:** Applicant is requesting registration of and authorization to begin construction on one new Jasper aquifer well which will serve a newly developing area. Applicant is further requesting the issuance of OP-23121502-JSPR with an allocation of 37,668,000 gallons in the Jasper for 2024 and annually thereafter. Applicant will use allocation during the pump test, step test, construction of water lines, utilities and developing residential. Applicant is estimating construction of 569 homes. Staff recommends to the General Manager that she recommend the Board approve the registration and construction of the proposed wells, and further approve the requested allocation of 37,668,000 gallons in the Jasper for 2024 and annually thereafter.
7. Based on technical review, staff recommends to the General Manager that she recommend approval of that which is being requested.

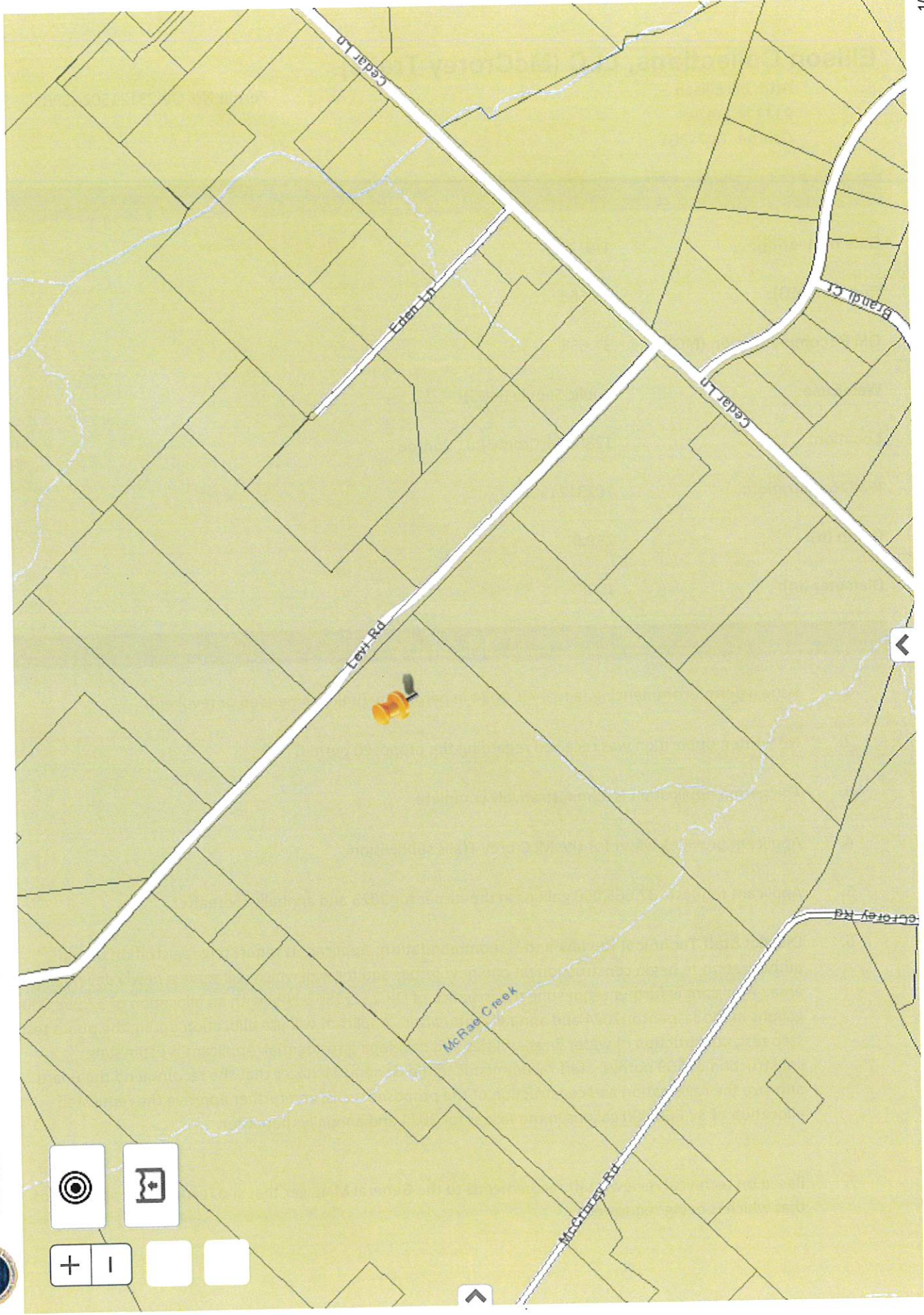


Lone Star Groundwater Conservation District
655 Conroe Park North Drive, Conroe, TX 77303

Lonestar GCD

Ellison Collections LLC OP-23121502-JSPR
12866 McCrorey Rd

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Blair Warehouse Park LLC

Attn: Michael Capstick
11 Shiloh Arbor Dr
Tomball, TX 77377

Permit No. OP-20102101A-CHEV

Amend Operating Permit

Date of Hearing:	1/9/2024
Request (MG):	0.160
GM Recommendation (MG):	0.160
Water use:	Commercial
Location:	21219 Blair Rd, Conroe
Well Registration:	N/A
Depth (ft):	N/A
Diameter (in):	N/A

Information

1. **Amend permit** - increase allocation. Permit Terms: commencing January 9, 2024 in perpetuity (unless amended or revoked).
2. No written opposition was received regarding the proposed permit.
3. The permit application is administratively complete.
4. Applicant requests to increase allocation by 160,000 gallons for the Evangeline.
5. Applicant currently has an OP-2010201-CHEV in the amount of 500,000 gallons. Amount available pending approval of this application equals 160,000 gallons.
6. Applicant's reported pumpage for 2023 equals 520,700 gallons in the Evangeline.
7. **District Staff Technical Review and Recommendation:** Applicant currently holds OP-20102101-CHEV with an allocation of 500,000 gallons for the Evangeline. Applicant is requesting an additional 160,000 gallons for the Evangeline annually. If approved the annual allocation will be 660,000 gallons for the Evangeline annually. Applicant provides for 24 warehouse/office building connections with 100 plus employees. District staff have reviewed the information supplied and recommend to the General Manager that she recommend the Board approve the requested increase of 160,000 gallons for the Evangeline annually.
8. Based on technical review, staff recommends to the General Manager that she recommend approval of that which is being requested.

Entergy Texas Inc (LC Rec Area)

Attn: Dustin Lorange
11190 Longstreet Rd
Willis, TX 77318

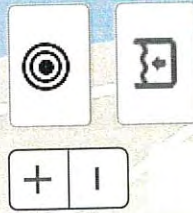
Permit No. OP-23122101-JSPR

Operating Permit

Date of Hearing:	1/9/2024	
Request (MG):	0.438	
GM Recommendation (MG):	0.438	
Water use:	Public Supply (PWS)	
Location:	11970 West FM 1097, Willis	11970 West FM 1097, Willis
Well Registration:	2023122103	2023122104
Depth (ft):	400.0	Unknown
Diameter (in):	4.0	4.0

Information

1. Issue a permit commencing January 9, 2024 in perpetuity (unless amended or revoked).
2. No written opposition was received regarding the proposed permit.
3. The permit application is administratively complete.
4. Applicant provides water for the Lewis Creek Rec. Area.
5. Applicant requests 438,000 gallons for 2024 and annually thereafter.
6. **District Staff Technical Review and Recommendation:** Applicant is requesting registration of and authorization to begin construction on one new Jasper aquifer well and an existing Jasper well not previously registered which will serve an employee RV and recreational area. Applicant is further requesting the issuance of OP-23122101-JSPR with an allocation of 438,000 gallons in the Jasper for 2024 and annually thereafter. Applicant states they have a RV capacity of 21 connections, a cabin and pavilion utilized by out of state employees working at the plant and for employees and former employees for recreational purposes. Staff recommends to the General Manager that she recommend the Board approve the registration and construction of the proposed well, and further approve the registration of the existing well and requested allocation of 438,000 gallons in the Jasper for 2024 and annually thereafter.
7. Based on technical review, staff recommends to the General Manager that she recommend approval of that which is being requested.



Far Hills Utility District (AWS Production Well)

Attn: Josh Maas
P.O. Box 9
Spring, TX 77383

Permit No. AWS-15120101C-CAT

Amend Operating Permit

Date of Hearing:	1/9/2024
Request (MG):	40.000
GM Recommendation (MG):	40.000
Water use:	Public Supply (PWS)
Location:	10320 Cude Cemetery Road, Willis
Well Registration:	N/A
Depth (ft):	N/A
Diameter (in):	N/A

Information

1. **Amend permit** - increase allocation. Permit Terms: commencing January 9, 2024 in perpetuity (unless amended or revoked).
2. No written opposition was received regarding the proposed permit.
3. The permit application is administratively complete.
4. Applicant requests to increase allocation by 40,000,000 gallons.
5. Applicant currently has an AWS-15120101B-CAT in the amount of 110,000,000 gallons in the Catahoula. Amount available pending approval of this application equals 150,000,000 gallons in the Catahoula.
6. Applicant's reported pumpage for 2023 equals 81,737,000 gallons.
7. **District Staff Technical Review and Recommendation:** Applicant currently holds AWS-15120101B-CAT with an allocation of 110,000,000 gallons for the Catahoula annually. Applicant is requesting an increase in the permit allocation of 40,000,000 gallons for the Catahoula. If approved the revised allocation will be 150,000,000 gallons for the Catahoula annually. Applicant serves as a public supply for a residential area with an estimated 952 single family dwellings. Applicant states there is new development within the District of 160 new connections. Applicant also states there is construction and rehabilitation of the distribution system. District staff have reviewed the information submitted by applicant. Staff recommends to the General Manager that she recommend the Board authorize the requested increase of 40,000,000 gallons for the Catahoula annually.
8. Based on technical review, staff recommends to the General Manager that she recommend approval of that which is being requested.

Ross Forward

Attn: Ross Forward
5435 Old Hwy 105 W
Conroe, TX 77304

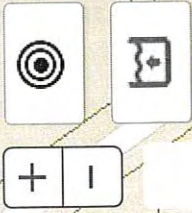
Permit No. OP-23060201-CHEV

Operating Permit

Date of Hearing: 1/9/2024
Request (MG): 0.500
GM Recommendation (MG): 0.500
Water use: Commercial
Location: 5435 Old Hwy 105 W, Conroe
Well Registration: 2023060201
Depth (ft): 350.0
Diameter (in): 4.0

Information

1. Issue a permit commencing January 9, 2024 in perpetuity (unless amended or revoked).
2. No written opposition was received regarding the proposed permit.
3. The permit application is administratively complete.
4. Applicant provides water a warehouse/office building.
5. Applicant requests 500,000 gallons in the Evangeline for 2024 and annually thereafter.
6. **District Staff Technical Review and Recommendation:** Applicant is requesting registration of and authorization to begin construction on one new Evangeline aquifer well. Applicant is further requesting the issuance of OP-23060201-CHEV with an allocation of 500,000 gallons in the Evangeline for 2024 and annually thereafter. Applicant will provide for a warehouse/office building connection with 5 employees. District staff have reviewed the information supplied and recommend to the General Manager that she recommend the Board approve the requested increase of 500,000 gallons for the Evangeline annually.
7. Based on technical review, staff recommends to the General Manager that she recommend approval of that which is being requested.



Porter Special Utility District

Attn: Jonathon Smith
22162 Water Well Rd.
Porter, TX 77365

Permit No. OP03-0006-CHEV

Operating Permit

Date of Hearing:	1/9/2024	SPACING EXCEPTION REQUIRED
Request:	Amend permit - add new well to aggregate system	
Total Allocation (MG):	1171.564	
Water use:	Public Supply (PWS)	
Location:	18669 Ferne Dr., Porter	
Well Registration:	2023101704	Hydrogeological Report Required
Depth (ft):	1200.0	>700 GPM
Aquifer:	Evangeline	3.3 Spacing
Diameter (In):	24.0	

Summary

1. Amend permit - add new well to aggregate system. Permit Term: commencing January 9 2024, in perpetuity (unless amended or revoked).
2. No written opposition was received regarding the proposed permit.
3. Applicant does not request an increase at this time.
4. Applicant currently has an HUP177 in the amount of 471,564,000 gallons in the Evangeline, an OP03-0006G in the amount of 700,000,000 gallons in the Evangeline and an OP03-0006G in the amount of 35,000,000 gallons in the Jasper. Amount available pending approval of this application equals 1,171,564,000 gallons in the Evangeline and 35,000,000 gallons in the Jasper.
5. Applicant's reported pumpage for 2023 equals 826,392,000 gallons.
6. A hydrogeological report is required due to the maximum GPM of the proposed well system will be greater than 700 GPM. District consultants have reviewed the submitted hydrogeological report and found it to meet the requirements as detailed in the Hydrogeological Report Guidelines.
7. A hydrogeological report is required due to requesting exemption as stated in District Rule 3.3: "Non-exempt wells will be spaced from all registered and permitted wells a distance not less than 2.0 feet multiplied by the Maximum Allowable Pumping Rate in the Chico/Evangeline aquifers". District consultants have reviewed the submitted hydrogeological report and found it to meet the requirements as detailed in the Hydrogeological Report Guidelines.
8. **SPACING EXCEPTION IS REQUESTED:** Due to the location and total requested GPM of the well, there are 10 wells within the spacing requirements of District Rule 3.3. Of those ten wells, 1 is owned and/or operated by Porter SUD (Spacing Granted under District Rule 3.4(b)), two received a waiver for spacing under District Rule 3.4(c). The applicant is requesting the Board of Directors grant an exception under District Rule 3.4(d) for the remaining 7 wells. The District is missing completion information on one well due to the age of the well or missing reports. District staff have made multiple attempts to obtain the missing information, but have been unsuccessful. Due to the construction of the well and estimated onsite geology based on available data, there is anticipated hydraulic separation between the existing wells and the proposed well which should limit impacts on existing wells from the proposed well.

10/18/23, 11:25 AM

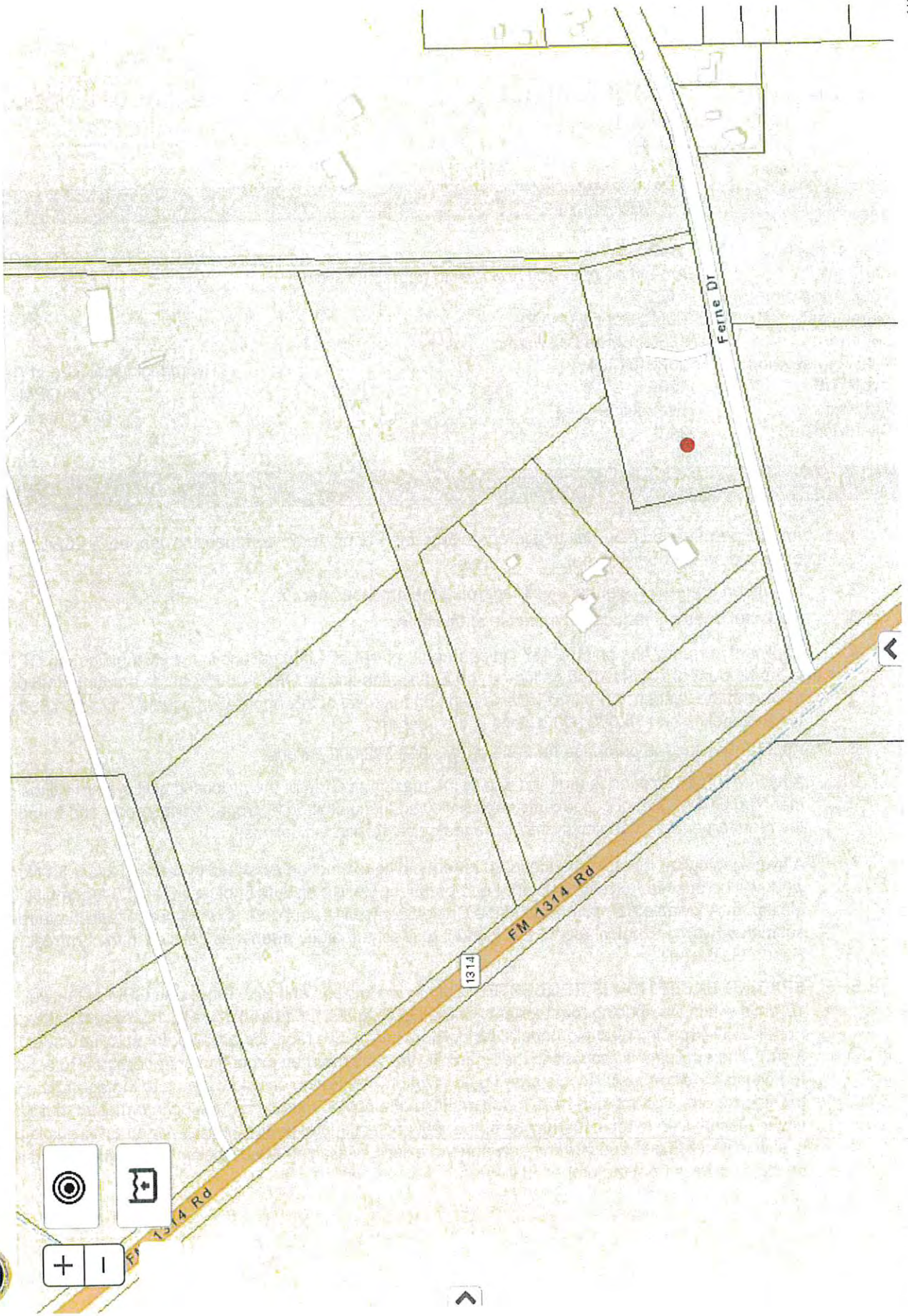


Lone Star Groundwater Conservation District
655 Conroe Park North Drive, Conroe, TX 77303

Lonestar GCD

Porter Special Utility District OP03-0006H
18669 Ferme Dr, Porter

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Memorandum

TO: Ms. Sarah Kouba and Ms. Kirstin Hein, P.G.
Lone Star Groundwater Conservation District

FROM: Mr. Christopher Drabek, P.G. and Mr. James Beach, P.G.

SUBJECT: Porter Special Utility District Well 10 Hydrogeological
Report Review

DATE: December 15, 2023

Introduction

On behalf of the Lone Star Groundwater Conservation District (LSGCD, District), Advanced Groundwater Solutions, LLC (AGS) has reviewed the September 2023 Hydrogeological Report prepared by the Thornhill Group, Inc. (TGI) in support of an application for proposed Porter Special Utility District (SUD) Well 10 (Proposed Well 10). Proposed Well 10 is planned to be located at the Porter SUD Ferne Water Plant at 18669 Ferne Drive. Proposed Well 10 is anticipated to screen sands of the Evangeline Aquifer in the depth interval from 800 to 1,200 feet below land surface (bls). The proposed well has an estimated maximum instantaneous pumping rate of 2,000 gallons per minute (gpm). There is not a request to increase the annual permitted allocation or increase the maximum production rate for any of the existing Porter SUD wells.

AGS has evaluated the hydrogeologic setting, water quality, well spacing, well construction details interference analysis presented in the TGI Hydrogeological Report.

Hydrogeological Setting Review

AGS has evaluated the hydrogeologic setting discussion included in the Hydrogeological Report and generally agrees with the information presented in this section. The Hydrogeological Report includes the Porter SUD Well 4 (LSGCD ID: 2004072804) geophysical log, which is attached to this memorandum. The Porter SUD Well 4 geophysical log is labeled 'Well 2'; However, it is not uncommon for water systems to renumber wells from the time in which they were logged. A copy of the Well 4 material settings sheet from the time of construction is also attached. The same total depth is noted on the Well 2 geophysical log and the Well 4 material settings sheet and there is a reasonable correlation between the Well 4 material settings and formation log and the subsurface geology shown on the Well 2 geophysical log.

The Chicot and Evangeline Aquifers consist of unconsolidated and discontinuous layers of sand and clay that are hydraulically connected and are considered a leaky artesian aquifer system. The base of the Chicot Aquifer is estimated to occur at a depth of about 228 feet, which is shallower than the regional trend of the depth of the base of the Chicot Aquifer (which would be about 370 feet). However, the Well 4 geophysical log shows more clay and sands with lower resistivity

values in the depth interval of about 228 to 360 feet than what is typically associated with the Chicot Aquifer.

Based on the Porter SUD Well 4 geophysical log, AGS estimates that there is about 240 feet of clay or other low permeability sediments in the depth interval of about 548 to 790 feet. The occurrence of this thick layer of clay and other low permeability sediments that are positioned between the sands of the upper and lower Evangeline Aquifer are shown on an excerpt from the Porter SUD Well 4 geophysical log on Figure 1 below.

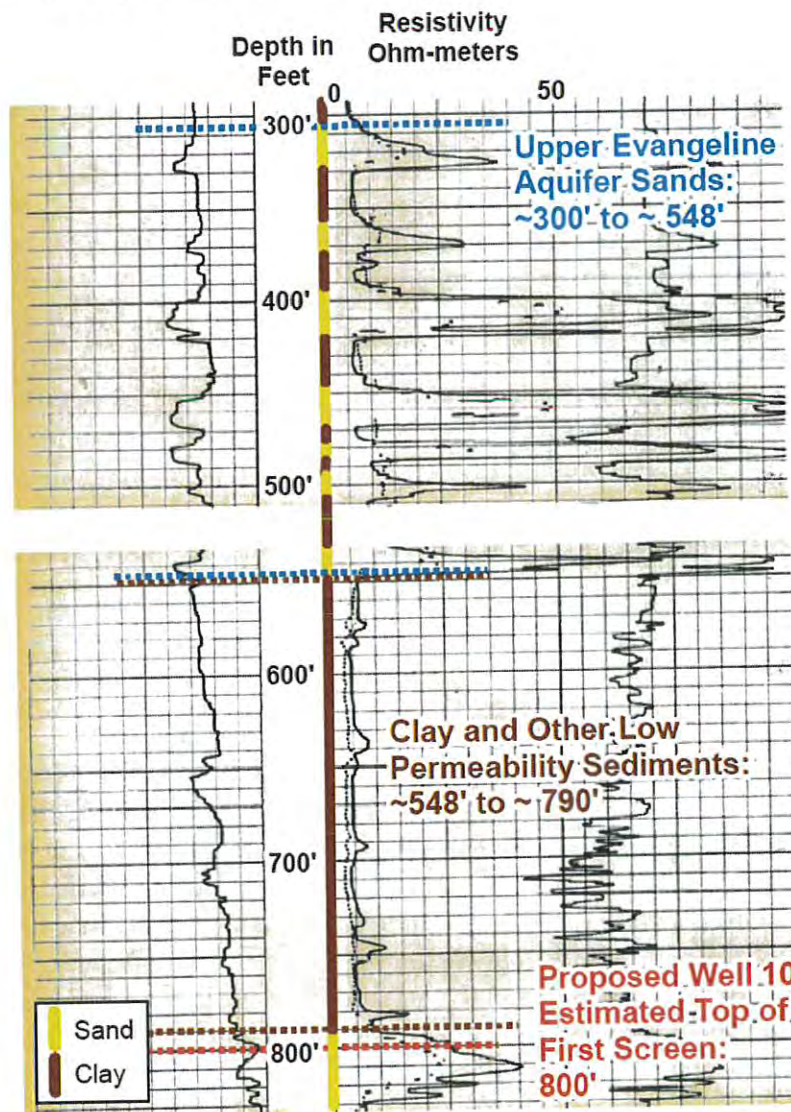


Figure 1. Excerpt from Porter SUD Well 4 Geophysical Log

The estimated 240 feet of clay and other low permeability sediments in the depth interval of about 548 to 790 feet should serve to provide a degree of hydraulic separation between the sands of the



Advanced Groundwater Solutions, LLC

upper and lower Evangeline Aquifer that should help to limit the effects of pumping from the sands below 800 feet on the overlying sands of the Evangeline Aquifer and Chicot Aquifer.

For comparison, the average thickness of the Burkeville Confining Unit in Montgomery County is estimated to be about 240 feet based on work performed by AGS as part of the LSGCD Phase 2 Subsidence Study. The Burkeville Confining Unit is an aquitard that separates the Evangeline and Jasper Aquifers in the Gulf Coast Aquifer System. There are many locations in the south part of Montgomery County that have two water wells constructed at the same site with one well screening sands of the Evangeline Aquifer and one well screening sands of the Jasper Aquifer.

Well Spacing

LSGCD Rule 3.2(a)

LSGCD Rule 3.2(a) states that all new wells (Exempt and Non-Exempt) for which a registration or permit application is filed after the Effective Date may not be drilled within 50 feet of the nearest adjacent property line. Proposed Well 10 is located more than 50 feet from the nearest property line.

LSGCD Rule 3.3(a)(1)

LSGCD Rule 3.3(a)(1) states that for the Chicot/Evangeline Aquifer, new, non-exempt wells shall be spaced from all registered and permitted wells a distance not less than 2 feet multiplied by the maximum allowable pumping rate. The application for Proposed Well 10 includes a request for a maximum instantaneous pumping rate of 2,000 gpm, which requires a well spacing of 4,000 feet from all LSGCD registered and permitted wells in the Chicot / Evangeline Aquifer.

The TGI Hydrogeological Report and a letter dated September 15, 2023 from Bleyl Engineering acknowledge that Proposed Well 10 will not comply with the current LSGCD well spacing rules under LSGCD Rule 3.3 and states that the letter and Hydrogeological Report serve as the certified statement detailing the circumstances justifying an exception to the spacing requirements as well as grounds for the spacing exception. It is our understanding that Bleyl Engineering has reached out and provided a letter that would serve as a waiver to the LSGCD well spacing requirements to owners of LSGCD permitted and registered wells that are located within the Proposed Well 10 4,000-foot well spacing radius. Crystal Spring Water Company has returned a signed copy of the waiver, which is attached to this memorandum.

Lone Star Groundwater Conservation District Permitted and Registered Wells

There are 10 LSGCD permitted or registered wells within a radius of 4,000 feet from Proposed Well 10. All 10 wells are permitted / registered in the Chicot / Evangeline Aquifer. Available water well reports, records and data for each well is attached to this memorandum.

The LSGCD Board would be granting an exception to well spacing rules for seven LSGCD permitted and registered wells that are located within the 4,000-foot well spacing radius from Proposed Well 10. Of the seven wells requiring a well spacing exemption, two wells are completed in the Chicot Aquifer, four are completed in the upper part of the Evangeline Aquifer and one well

has an unknown completion interval / aquifer. Porter SUD Well 4 (LSGCD ID: 2004072804) has been plugged and abandoned and the Crystal Springs Water Company has signed a well spacing exemption waiver, which applies to wells with LSGCD IDs of 2004072033 and 2016061704. These three wells would not require a well spacing exemption from the LSGCD Board.

Figure 2 shows the locations of the LSGCD permitted and registered wells that are within 4,000-feet of Proposed Well 10. A red asterisk (*) on the map below denotes the location of a well that would require the LSGCD Board to grant an exception to the well spacing rules.

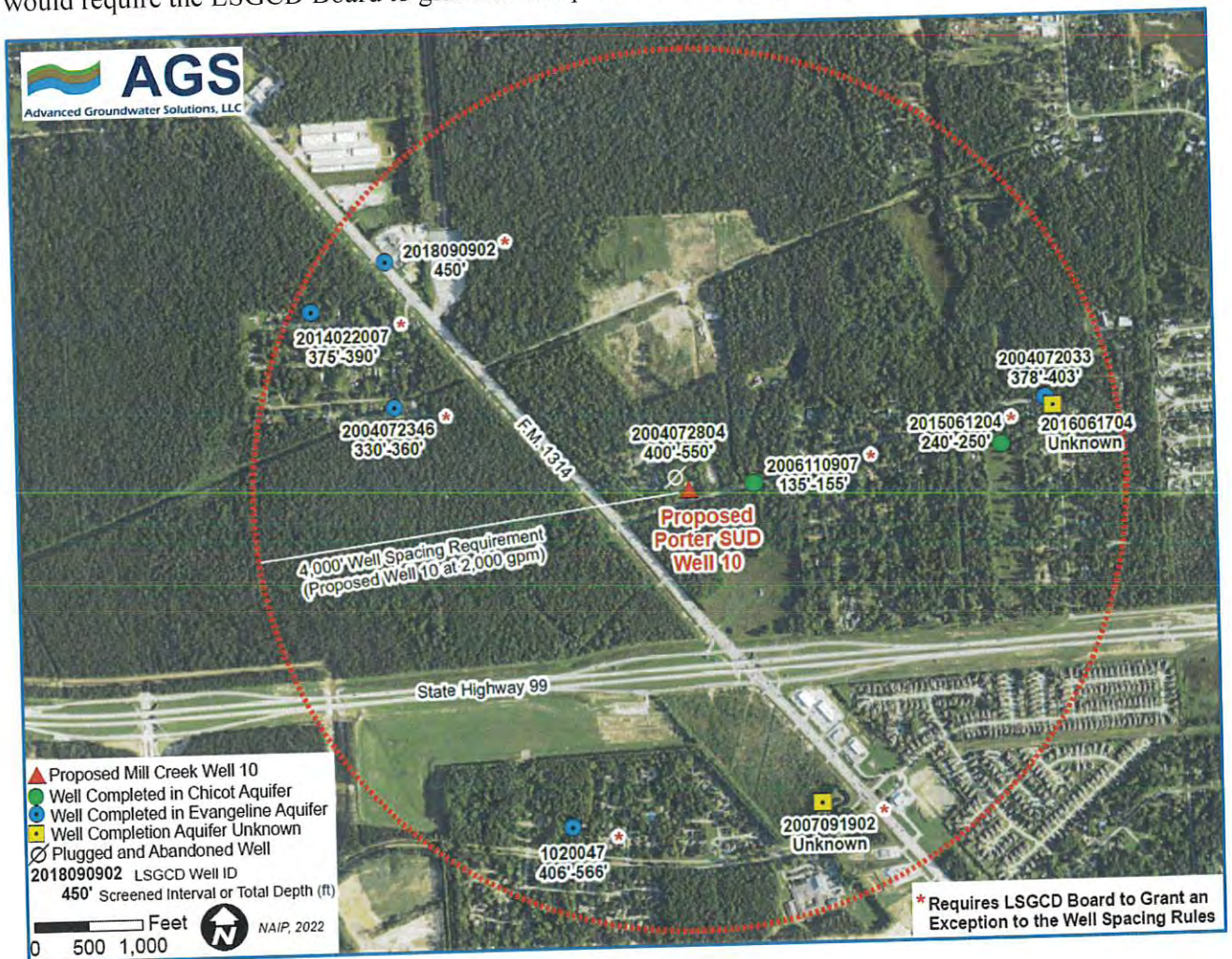


Figure 2. Well Location Map

A summary of available well data for the 10 LSGCD permitted and registered wells that are identified within 4,000-feet of Proposed Well 10 is shown in Table 1.

LSGCD ID, TWDB Number, Well Name/Number	Approximate Distance & [Direction] from Proposed Well 10 (feet)	Aquifer	Total Depth of Well (feet)	Screened Interval & Total Screen (feet)	Casing & [Screen] Diameter/s (inches)	Use of Water
2023101704 -- Porter SUD Well 10	-- --	Evangeline	1,200	800-1,200 (estimate)	24,18 [18]	Public Supply
2004072804 176287 (plugging) Porter SUD Well 4	On Site at Ferme Water Plant	Evangeline	560	400-550	12,8 [8]	Plugged
2006110907 98862 Isom	590-610 [East]	Chicot	165	135-155 20	4 [4]	Domestic
2004072346 -- Undine Texas, LLC Consumers Water	2,790-2,810 [West-Northwest]	Evangeline	360	330-360 --	4 [4]	Unknown
2015061204 400540 Marguina	2,874-2,894 [East-Northeast]	Chicot	260	240-250 10	4 [4]	Domestic
2007091902 -- Cumberland Community Association	3,065-3,085 [South-Southeast]	Unknown	--	-- --	2 --	Irrigation
1020047 101621 Montgomery County MUD 56	3,230-3,250 [South-Southwest]	Evangeline	569	406-566 70	12,8 [8]	Public Supply
2004072033 60-54-906 Crystal Springs Winchester Place Well 1	3,350-3,370 [East-Northeast]	Evangeline	403	378-403 25	5 [3]	Public Supply
2016061704 -- Crystal Springs Winchester Place Well	3,350-3,370 [East-Northeast]	Unknown	--	-- --	4 --	Emergency
2018090902 -- Texcon Ready Mix	3,475-3,495 [Northwest]	Evangeline	450	-- --	5 --	Industrial
2014022007 360139 Gregory	3,820-3,840 [Northwest]	Evangeline	390	375-390 15	4 [2]	Domestic

A highlighted and bold LSGCD Well ID indicates that an exception to the well spacing rules is required

Table 1. Lone Star Groundwater Conservation District Permitted and Registered Wells within 4,000 feet of Proposed Porter SUD Well 10



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The seven highlighted and bold LSGCD Well IDs shown in Table 1 denote the LSGCD permitted and registered wells that would require the LSGCD Board to grant an exception to the well spacing rules. Table 1 shows that most of the wells have a well screened interval and / or total well depth that is less than the top depth of the thick clay shown of the Porter SUD Well 4 geophysical log.

LSGCD does not have the well construction records for the Cumberland Community Association irrigation well (LSGCD ID: 2007091902) that is located about 3,065 to 3,085 feet to the south-southeast of Proposed Well 10. The September 17, 2007 Application for Existing Well Registration for the Cumberland Community Association indicates that the well was existing on the property when the property was purchased in 1995. The limited well information provided in Part VI of the Application for Existing Well Registration for the Cumberland Community Association well includes an inside diameter of the well casing at 2-inches in diameter, a well use of irrigation and lists the total amount of groundwater to be used on an annual basis at 1,000,000 gallons. LSGCD has made multiple requests for the well record or confirmation of the well's material settings. Based on the limited information provided, it is unlikely that the Cumberland Community Association well screens the deeper lower Evangeline Aquifer similar to Proposed Well 10. The Porter SUD Well 4 geophysical log shows several sands in depth intervals that are shallower than about 550 feet that could provide the permitted irrigation water supply.

The Montgomery County MUD 56 public supply well (State of Texas Tracking #101621, LSGCD ID: 1020047) is located about 3,230 to 3,250 feet to the south-southwest of Proposed Well 10 and has 70 feet of 8-inch diameter screen set in the depth interval of about 406 to 566 feet. The bottom depth of the well screen is listed at 566 feet at this well, which is slightly deeper than the top of the thick clay layer noted at a depth of about 548 feet on the Porter SUD Well 4 geophysical log. A geophysical log for the Montgomery County MUD 56 public supply well is not available. However, the formations within the Gulf Coast Aquifer system generally dip and increase in thickness towards the Gulf of Mexico. Since the Montgomery County MUD 56 public supply well is located to the south-southwest of Proposed Well 10, it is possible that a thicker clay unit similar to that noted on the Porter SUD Well 4 geophysical log could potentially start at a slightly deeper depth than at the Proposed Well 10 site.

Porter SUD Well 10 and LSGCD Registered Wells and Proposed Wells Hydraulic Separation

Geophysical Log Review

As previously discussed in the Hydrogeological Setting Review section of this memorandum, AGS estimates that there is about 240 feet of clay or other low permeability sediments in the depth interval of about 548 to 790 feet at the Proposed Well 10 site based on the Porter SUD Well 4 geophysical log.

AGS also reviewed the Humble Oil & Refining Company, W.M. Wickizer #1 (OG-1) geophysical log from an oil and / or gas well or test hole that is located about 1,975 to 2,025 feet north of Proposed Well 10. The location of OG-1 is shown on Figure 3 of this memorandum. This 1940's



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era geophysical log shows the base of the Chicot Aquifer at a depth of about 245 feet and the base of the Evangeline Aquifer at a depth of about 1,190 feet. OG-1 shows a thick clay in the depth interval of about 555 to 750 feet, which is similar to the clay noted on the Porter SUD Well 4 geophysical log. OG-1 supports a degree of lateral extent to the thick clay identified on the Porter SUD Well 4 geophysical log.

The lateral extent of the clay noted on the Porter SUD Well 4 geophysical log and OG-1 helps to support a degree hydraulic separation on a local level between the deeper Evangeline Aquifer sands that are proposed to be screened by Proposed Well 10 in the depth interval of about 800 to 1,200 feet and the shallower sands of the upper Evangeline that occur above a depth of about 550 feet.

Regional Water Level Review

Review of available water level data can help illustrate the differences in the hydraulic heads or pressures of sands screened by water wells in the vicinity of Proposed Well 10. Figure 3 shows the locations of water wells with available water level data in the vicinity of Proposed Well 10. The wells are labeled with the Texas Water Development Board (TWDB) State Well or Tracking Number and the approximate screened interval of each well.

The Porter SUD Ferne Drive water plant has had various wells completed in unique depth intervals that have served as historical water level observation wells, included plugged Well 4 and a trio of shallow piezometers that once provided continuous monitoring of the water levels in the shallower sands of the Chicot Aquifer. Historical data from two of the three piezometers (State Well Number: 60-54-807 (Porter Piezometer 6-C) and State Well Number: 60-54-805 (Porter Piezometer 6-A)) were reviewed for this memorandum. The current status of the Porter piezometers is unknown.

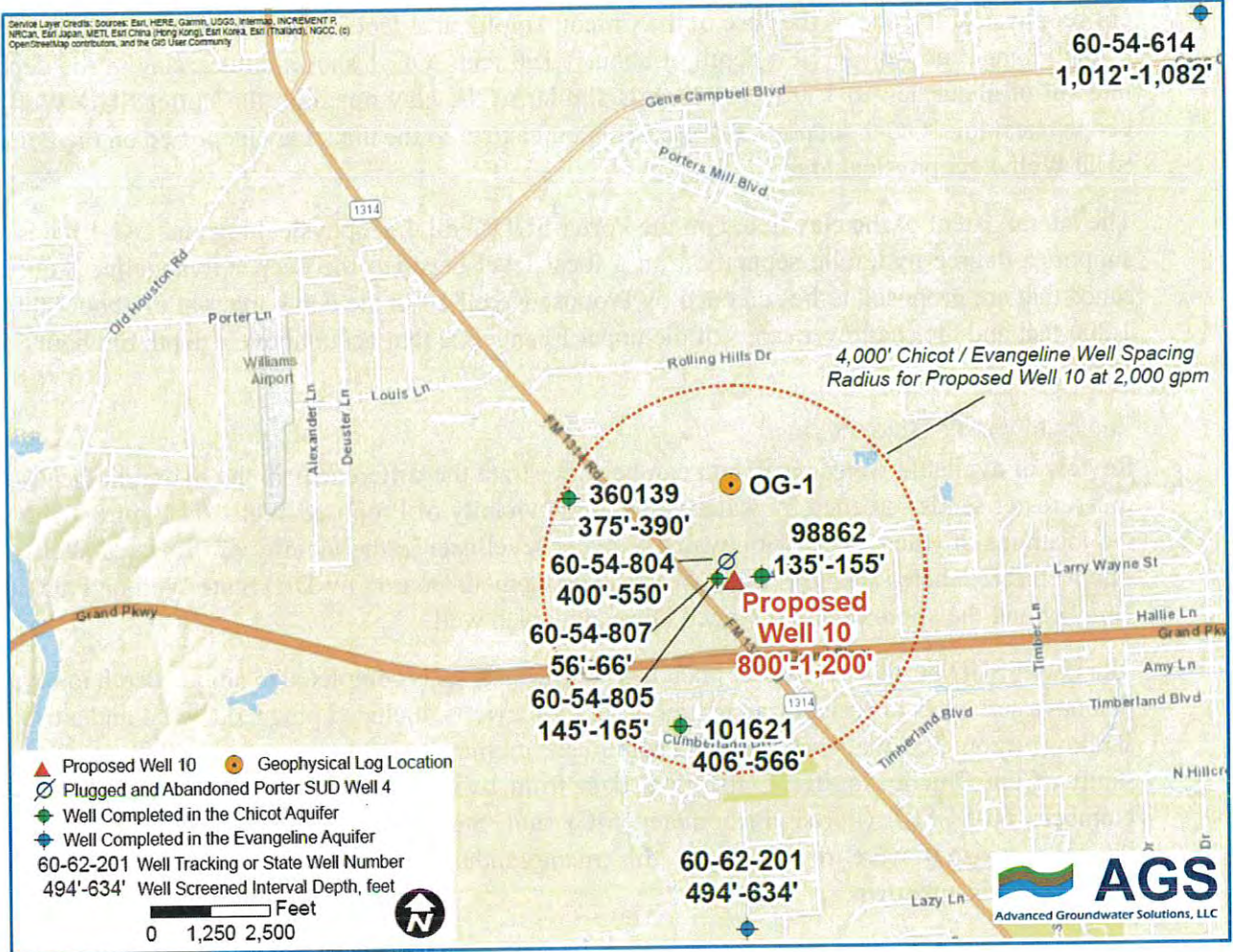


Figure 3. Map of Select Regional Wells with Static Water Level Data in the Vicinity of Proposed Well 10

Available historical water level data for the wells shown on Figure 3 is included in the Figure 4 graph below. Data sources for the historical water level data include the TWDB Groundwater Database (GWDB), TWDB Submitted Driller's Report Database (SDRDB) / State of Texas Well Report and the United States Geological Survey (USGS).

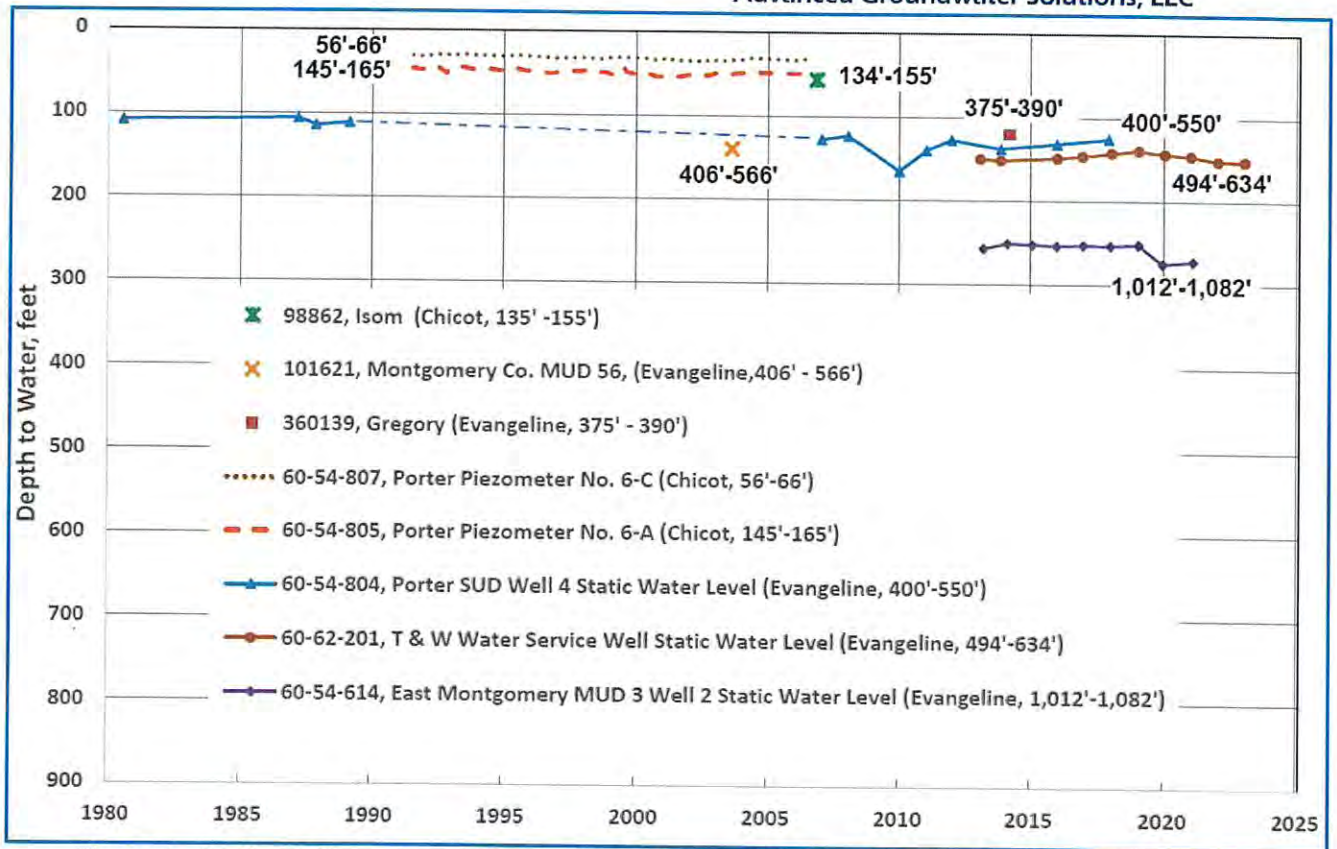


Figure 4. Regional Water Level Data in the Vicinity of Proposed Porter SUD Well 10

The well screened interval is shown near the corresponding water level plot on Figure 4 above. The figure shows water level depths increasing with the depth of the well screened interval. A separation of hydraulic head or pressure can be noted when comparing the water level trends for wells that are completed in a similar depth interval of each aquifer.

The reported water levels in the wells that are completed screening sands of the Chicot Aquifer (Porter Piezometer 6-A, Porter Piezometer 6-C and the Isom domestic well) have historically been in the depth range of about 30 to 60 feet below land surface. Water levels measured in the wells completed in the upper to intermediate Evangeline Aquifer (Porter SUD Well 4, T & W Water Service, Montgomery County MUD 56 and the Gregory domestic well) have historically been measured in the range of about 120 to 152 feet below land surface.

East Montgomery County MUD 3 Well 2 (LSGCD ID: 2012011901, State Well Number: 60-54-614) is located about 2.9 miles to the northeast of Proposed Well 10 and is completed screening the sands in the lower part of the Evangeline Aquifer. This is the closest well to Proposed Well 10 that is completed screening sands of the lower Evangeline Aquifer and has historical water level data. Reported East Montgomery County MUD 3 Well 2 water levels have ranged from about 250 to 274 feet below land surface.



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The difference between the measured water levels in the Chicot Aquifer, the upper / intermediate Evangeline Aquifer and the lower Evangeline Aquifer in the vicinity of Proposed Well 10 support a hydraulic disconnect between the various intervals of aquifer sands in this area.

Porter SUD Water System Evangeline Aquifer Wells

It is our understanding that at the time that the Proposed Well 10 Hydrogeological Report was submitted, Porter SUD had five water system wells that were completed in the Evangeline Aquifer. Table 2 provides a summary of the Porter SUD water system wells that are completed in the Evangeline Aquifer.

LSGCD ID	Porter SUD Well Number	Screen Interval (feet)	Motor Horsepower (HP)	Maximum Instantaneous Pumping Rate (gpm)
Proposed Well	Well 10	800'-1,200'	–	2,000
2004072805	Well 5	574'-770'	200	1,250
2004072806	Well 6	355'-516'	125	837
2004072802	Well 1	670'-750'	75	600
2004102204	Well 7	591'-758'	300	2,000
2018122101	Well 9	630'-894'	300	2,000

Table 2. Porter SUD Water System Wells Completed in the Evangeline Aquifer

It was noted that Porter SUD Well 6 was recently plugged and the September 15, 2023 letter from Bleyl Engineering states that Proposed Well 10 is intended to replace the production from Porter SUD Wells 4 and 6, both of which have been plugged and abandoned.

Impact Analysis

TGI used an analytical modeling program developed within Microsoft Excel to estimate projected pumping impacts of the Proposed Well 10 and the Porter SUD water system wells that are completed in the Evangeline Aquifer.

TGI used an estimated transmissivity value for the sands of the lower Evangeline Aquifer of 10,000 gallons per day per foot (gpd/ft) and a storage value of 0.000382 for the Porter SUD analytical simulations. Review of the current Texas Water Development Board (TWDB) approved GAM for the north part of the Gulf Coast Aquifer System, the HAGM ((Version 1.1, Kasmarek, 2012), shows a transmissivity value 107,606 gpd/ft in the Layer 2 (Evangeline) model cell where Proposed Well 10 is located (Row: 55; Column: 120). This transmissivity value could be considered high for the transmissivity of the Evangeline Aquifer in the vicinity of Proposed Well 10. For comparison, AGS is familiar with test data from the Porter SUD Well 7 (LSGCD ID: 2004072804) 36-hour continuous pumping test that shows a transmissivity value of about 56,000 gpd/ft. Well 7 is located about 2.8 miles to the southeast of Proposed Well 10 and screens the



Evangeline Aquifer in the depth interval of about 591 to 758 feet. The transmissivity value of 10,000 gpd/ft can be considered a conservative estimate for the other Porter SUD water system wells completed in the Evangeline Aquifer.

The storage value of 0.000382 used by TGI approximates the storage value of 0.00036 included in the HAGM at the Proposed Well 10 location.

Proposed Well 10 was simulated at a maximum instantaneous pumping rate of 2,000 gpm for the 24-hour simulation and the length of the TGI Well 5 simulated maximum production scenario was 365 days. It should be noted that the Proposed Well 10 maximum production scenario would be pumped for 408 days, based on the Evangeline allocation of 1,171,564,000 gallons and a well production rate of 2,000 gpm. TGI simulated Proposed Well 10 pumping the maximum proposed rate for 1 day and 365 days as Proposed Well 10 cannot pump the entire annual allocation within a year at the rate of 200 gpm. AGS agrees with this approach.

For the water system well simulations, the Porter SUD Evangeline Aquifer wells were simulated at the maximum instantaneous pumping rate of each well for the 24-hour and maximum production scenarios. The length of the maximum production scenario is about 94 days, which is based on the Evangeline allocation of 1,171,564,000 gallons and a combined water system well production rate of 8,687 gpm. It should be noted that Porter SUD Well 6 was included in water system well simulations and has recently been plugged and abandoned.

Impact Analysis Results

AGS was able to verify the model simulation results provided by TGI using the production rate and aquifer parameter data discussed in the Hydrogeological Report and obtained similar drawdown estimates to those included in the Hydrogeological Report.

AGS recognizes the assumptions and limitations of using an analytical model to simulate the pumping effects of Proposed Well 10 and Porter SUD water system simulations as described in the TGI Hydrogeological Report. The simulated drawdown values shown in Tables 1 and 2 of the TGI Hydrogeological Report can be very large in both the Proposed Well 10 and Porter SUD water system well simulations, particularly with extended periods of pumping. Analytical models do not incorporate all hydrogeological components (leakage, recharge) and simulate aquifer systems as being homogeneous without taking into account the unconsolidated and discontinuous layers of sand and clay common in the Gulf Coast Aquifer System.

It should be noted that the simulated drawdown values in the Proposed Well 10 24-hour and maximum production scenario simulations do not reflect the presence of the thick clay that was noted on the Porter SUD Well 4 geophysical log. Thus, the simulated drawdown estimates at locations of shallower wells completed in the Chicot Aquifer and upper part of the Evangeline Aquifer are overestimated in the analytical simulations.

TGI estimated the transmissivity value of the lower Evangeline Aquifer at 10,000 gpd/ft. This transmissivity estimate was also applied to the Porter SUD water system well simulation. This could be considered a conservative estimate for the other Porter SUD water system wells



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completed in the Evangeline Aquifer. As previously discussed, data from the Porter SUD Well 7 36-hour continuous pumping test shows a transmissivity value of about 56,000 gpd/ft. Use of this transmissivity value in the water system well simulations would result in less simulated drawdown compared to the drawdown estimated using a transmissivity of 10,000 gpd/ft. Using the transmissivity value of 107,606 gpd/ft found in Layer 2 (Evangeline) at the location of Proposed Well 10 in the HAGM would result in substantially less drawdown than what is shown in TGI Tables 1 and 2 from the Hydrogeological Report.

Estimated Long-term Impacts at Proposed Porter SUD Well 10 Based on the GMA 14 2021 DFC Run

As a way of evaluating potential long-term estimated water level decline at the proposed well, AGS plotted the simulated water level decline at the proposed well location based on results from the 2021 Groundwater Management Area (GMA) 14 Desired Future Conditions (DFC) water level projections for the Evangeline Aquifer. It is important to remember that these impacts are the regional impacts expected at the site, and do not represent the local impacts simulated with the analytical model discussed in the previous section. The water level projections shown on Figure 5 below are from the TWDB approved DFC run. The DFC run includes projected pumping estimates in GMA 14 used by the TWDB to estimate the Modeled Available Groundwater (MAG). The detailed assumptions for the DFC simulation can be found in the GMA 14 Explanatory Report (GMA 14 and Oliver, 2022) and documentation of the TWDB MAG run can be found in GAM Run 21-019 MAG: Modeled Available Groundwater for the Aquifers in Groundwater Management Area 14 (Wade, 2022).

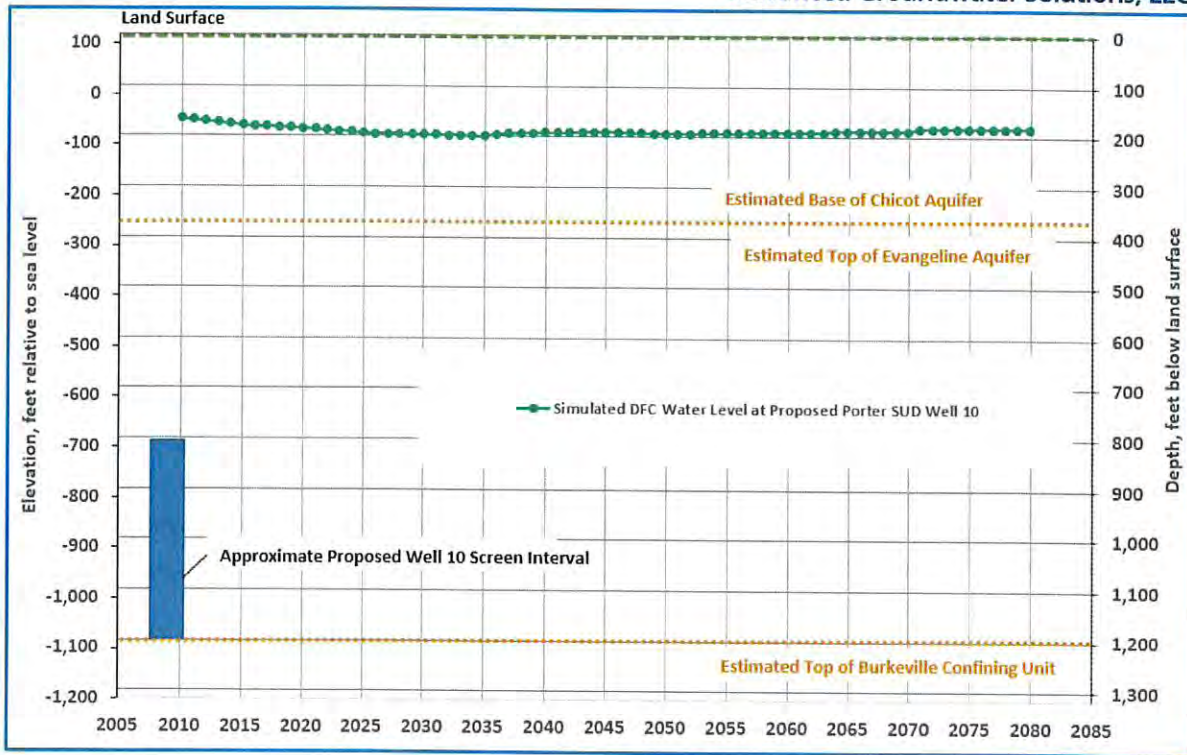


Figure 5. Projected DFC Water Level Change at Proposed Porter SUD Well 10

The graph illustrates the relationship between the land surface, DFC estimated static water levels through time, estimated proposed well screened interval and the approximate base of the Chicot Aquifer and Evangeline Aquifer at the proposed well. Available drawdown in the Evangeline Aquifer will generally decline and slowly recover with time based on the DFC simulation. It should be noted that the projected DFC water levels are influenced by the increased availability of surface water in Montgomery County.

Conclusions

AGS concludes that the modeling approach and assumptions are reasonable and that the submitted Hydrogeological Report generally addresses the requirements defined by the Hydrogeological Report Guidelines.

LSGCD Rule 3.3(a)(1) states that for the Chicot/Evangeline Aquifer, new, non-exempt wells shall be spaced from all registered and permitted wells a distance not less than 2 feet multiplied by the maximum allowable pumping rate. The proposed Porter SUD Well 10 application includes a maximum instantaneous pumping rate of 2,000 gpm, which requires a well spacing of 4,000 feet from all LSGCD registered and permitted wells permitted in the Chicot / Evangeline Aquifer.

There are 10 LSGCD Chicot / Evangeline Aquifer permitted or registered wells within the 4,000 foot well spacing radius of Proposed Well 10. Seven of the 10 LSGCD permitted and registered wells would require the LSGCD Board to grant an exception to the well spacing rules. Three of



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the 10 wells would not require an exception since the wells have either been plugged and abandoned or are included in a signed waiver to the well spacing rules.

The Proposed Well 10 anticipated well construction shown in the TGI Hydrogeological Report shows a proposed surface casing setting depth of about 800 feet and a proposed screen interval depth of 800 to 1,200 feet. A geophysical log from Porter SUD Well 4, which has been plugged and abandoned at the Porter SUD Ferne Drive water plant, shows approximately 240 feet of thick clay and other low permeability sediments in the depth interval of 548 to 790 feet.

Based on available data, the presence of the very thick, subsurface clay(s) in the depth interval from about 548 to 790 feet and the anticipated construction of Proposed Well 10 with steel conductor casing that will be set and pressure cemented to an estimated depth of 800 feet should provide a degree of hydraulic separation and limit the hydraulic communication between the deeper sands of the Evangeline Aquifer that are anticipated to be screened by Proposed Well 10 and the LSGCD permitted and registered wells that completed in the shallow Chicot Aquifer and upper part of the Evangeline Aquifer.

References

Groundwater Conservation Districts in Groundwater Management Area 14 (GMA 14), and Oliver, W., 2022, INTERA Inc., 2022, Desired Future Conditions Explanatory Report (Groundwater Management Area 14), March 2022, 98+ p.

Kasmarek, M.C., 2012, Hydrogeology and simulation of groundwater flow and land-surface subsidence in the northern part of the Gulf Coast aquifer system, Texas, 1891–2009 (ver. 1.1, December 2013): U.S. Geological Survey Scientific Investigations Report 2012–5154, 55 p.

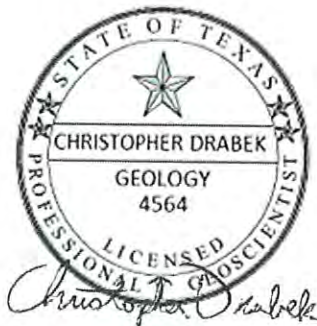
Texas Water Development Board, 2023, Groundwater Database Reports, <http://www.twdb.texas.gov/groundwater/data/gwdb rpt.asp>

United States Department of Agriculture (USDA). Texas NAIP Imagery, 2020-04-01.

United States Geological Survey, 2023, Groundwater Levels for Texas, <https://nwis.waterdata.usgs.gov/tx/nwis/gwlevels>

Wade, S., 2022, GAM RUN 21-019 MAG: Modeled Available Groundwater for the Aquifers in Groundwater Management Area 14, 30 p.

Geoscientist's Seal:



The seal appearing on this document was authorized by Christopher Drabek, P.G. 4564 on 12/15/2023. Advanced Groundwater Solutions, LLC (TBPB Firm Registration No. 50639)

Electric Log

COMPANY LANFORD DRILLING COMPANY, INC.
 WELL PORTER WATER SUPPLY CORPORATION
 NO. - 2
 FIELD WATER WELL
 COUNTY MONTGOMERY STATE TEXAS

Location
4 MILES N/W - PORTER
 Sec. _____ Twp. _____ Rge. _____

Type Log

E.S.

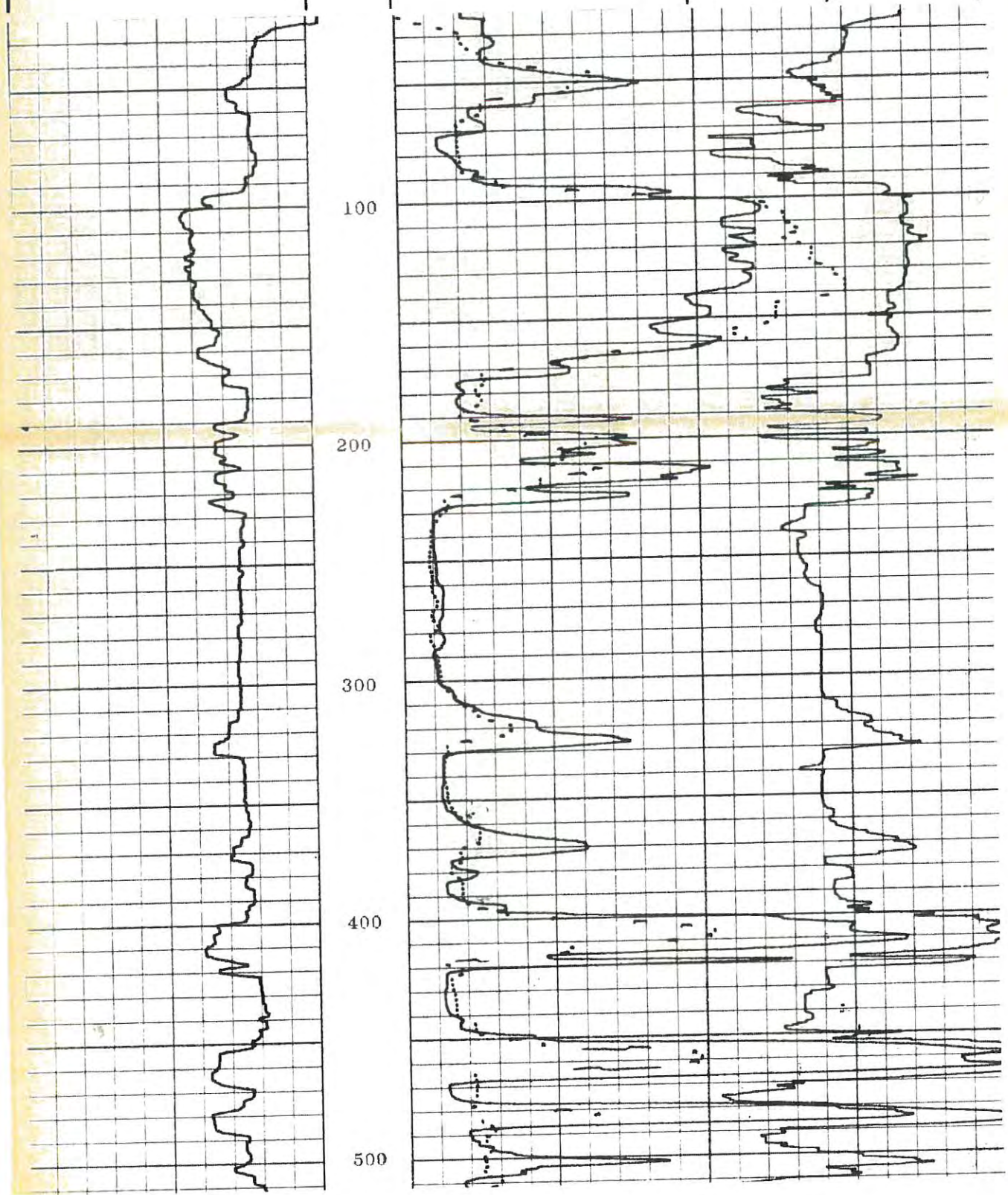
Permanent Datum G.L. Elev _____
 Log Measured From R.T. 5' Ft. Above Perm. Datum
 Drilling Measured From R.T. 5'

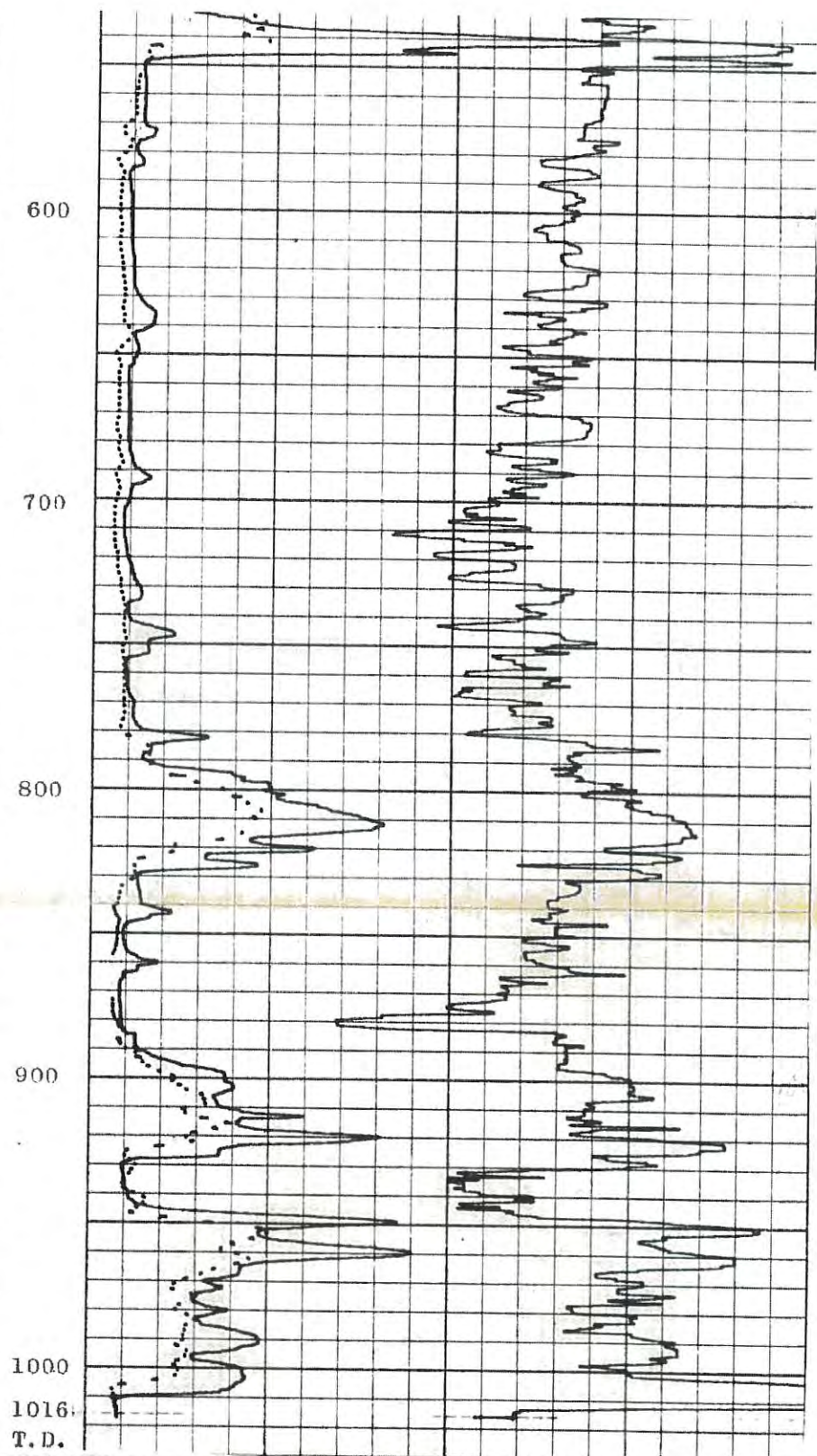
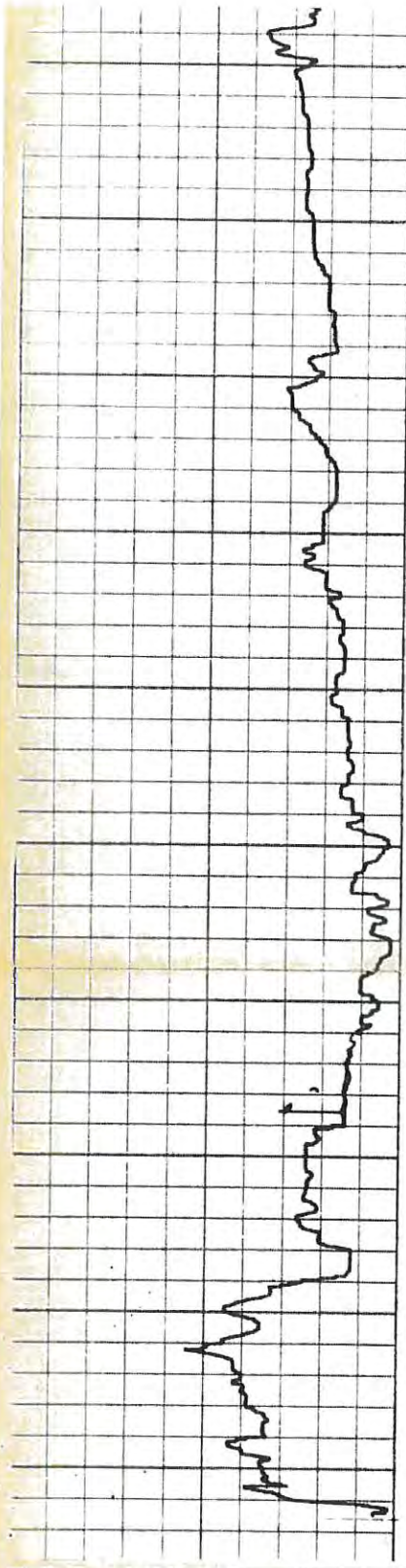
Elev K B _____
 D F _____
 G.L. _____

Date	6-27-80				
Run No.	ONE				
Depth - Driller	1017'				
Depth - Logger	1016'				
Btm. Log Inter.	1016'				
Top Log Inter.	SURFACE				
Casing - Driller	⊙			⊙	⊙
Casing - Logger				⊙	⊙
Bit Size	7-7/8"				
Type Fluid in Hole	NATIVE				
Dens.	Visc.				
pH	Fluid Loss			ml	ml
Source of Sample					
Rm. a Meas. Temp.	⊙	°F	⊙	⊙	⊙
Rmf. a Meas. Temp.	⊙	°F	⊙	⊙	⊙
Rmc. a Meas. Temp.	⊙	°F	⊙	⊙	⊙
Source Rmf. Rmc.					
Rm. a BHT	⊙	°F	⊙	⊙	⊙
Time Since Circ.					
Max. Rec. Temp.				°F	°F
Equip. Location					
Recorded By	M. A. LARGENT				
Witnessed By	B. FURR				

REMARKS

SELF-POTENTIAL millivolts		RESISTIVITY ohms m ² /m	
-	100	0	50
	+	0	50
			50 OHMS





SELF-POTENTIAL millivolts		RESISTIVITY ohms m ² /m	
-	100	+	
		0	50
		16" AM	50
		64" AMN	50
		SPR	
		50 OHMS	



LANFORD DRILLING COMPANY, INC.

Shreveport, Louisiana 71161

Tel. 869-2519

P.O. Box 98

WELL LOG and MATERIAL REPORT

CUSTOMER Porter Water Supply Corp. WELL NO. 4
 LOCATION 4 1/2 miles west of Porter off Hiway #1314 COMPLETED Aug. 1980
 ADDRESS Porter, Texas P.O. Box 1056 CONTRACT NO. _____

DIMENSIONS:

A — 560'
 B — 400'
 C — 350'
 D — 50'
 E — 0'
 * F — see below
 G — 10'
 H — 17 1/2" Diam.
 I — 24" Diam.
 J — 109'

PUMP DATA:

Bowl Assembly 16 Stage, Size 8 Type RH
 Discharge Column — Setting 260 Feet
 Size — 6" Pipe Tubing 1 3/16" Shaft
 Head-Type 17 AC 10 Size Discharge _____
 Suction, Length 10' Size 6"
 Design Conditions: — 400 USGPM 350 TDH

MOTOR DATA:

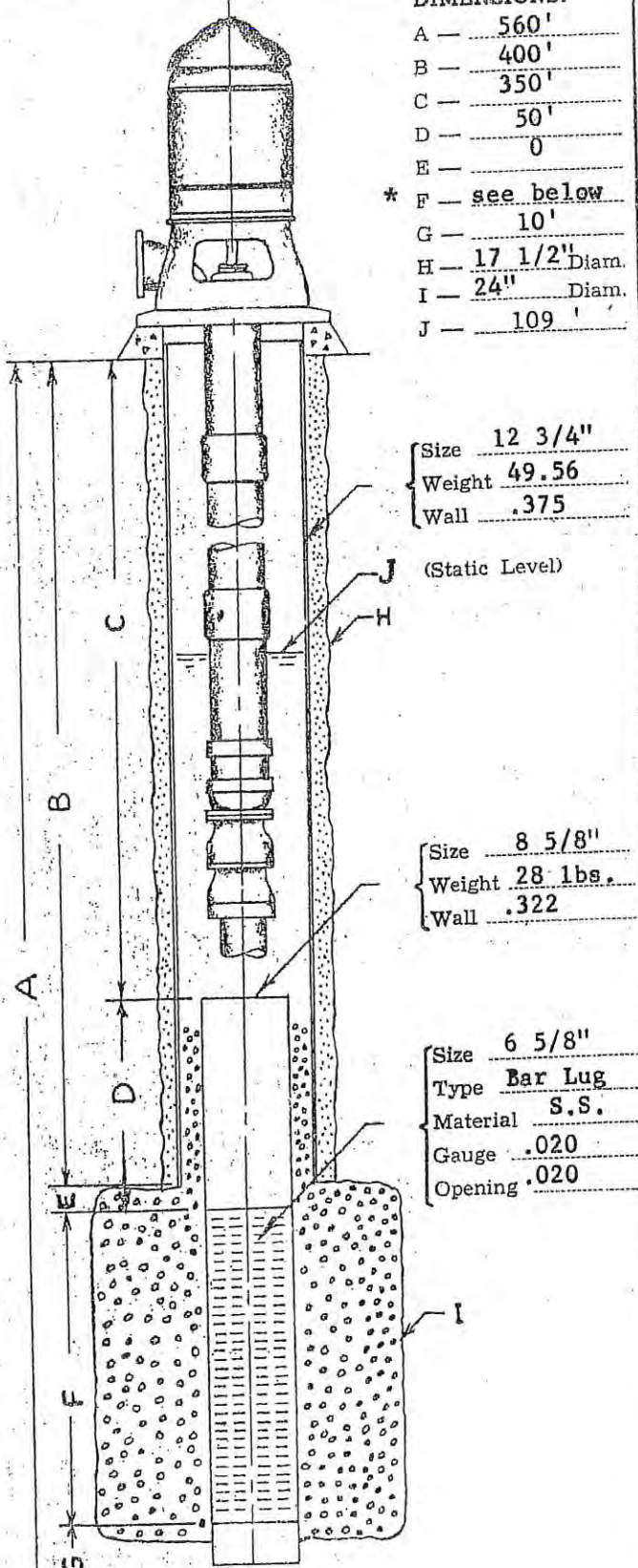
HP 50 Make US Speed 1800
 Voltage 230/460 Type V.H.S.

REMARKS: Serial No. 3637

FORMATION LOG:

0- 2 Sand
 2- 11 Clay
 11- 13 Rock
 13- 50 Clay
 50- 70 Sand
 70- 100 Clay
 100- 235 Sand
 235- 330 Shale
 330- 335 Lignite & Sand
 335- 400 Shale
 400- 425 Sand
 425- 450 Shale
 450- 550 Sand
 550- 800 Shale
 800- 840 Sand-fine
 840- 900 Shale
 900- 930 Sand & Silt
 930- 950 Shale
 950-1016 Sandy shale

* Stainless Steel screen 400'-420'
 Blank pipe 420'-450'
 Stainless Steel screen 450'-550'
 Blank pipe & B P Valve 550'-560'



STATE OF TEXAS PLUGGING REPORT for Tracking #176287

Owner: **PORTER SUD** Owner Well #: **4**
Address: **22162 WATER WELL ROAD** Grid #: **60-54-8**
PORTER, TX 77365
Well Location: **18669 FERNE DRIVE** Latitude: **30° 08' 31" N**
PORTER, TX 77365 Longitude: **095° 17' 30" W**
Well County: **Montgomery** Elevation: **No Data**

Well Type: **Public Supply**

Drilling Information

Company: **LANFORD DRILLING COMPANY, INC.** Date Drilled: **8/1/1980**
Driller: **CHARLES BARNWELL** License Number: **311**

	<i>Diameter (in.)</i>	<i>Top Depth (ft.)</i>	<i>Bottom Depth (ft.)</i>
Borehole:	24	400	560
	17.5	0	400

Plugging Information

Date Plugged: **3/30/2018** Plugger: **BJ ALLDREDGE**
Plug Method: **Tremmie pipe bentonite from bottom to 2 feet from surface, cement top 2 feet**
Variance Number: **N/A**

Casing Left in Well:

<i>Dia (in.)</i>	<i>Top (ft.)</i>	<i>Bottom (ft.)</i>
12.75	2	400
8.625	350	400
6.625	400	560

Plug(s) Placed in Well:

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description (number of sacks & material)</i>
0	5	Cement 2 Bags/Sacks
5	560	Bentonite 61 Bags/Sacks

Certification Data: The driller certified that the driller plugged this well (or the well was plugged under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the reports(s) being returned for completion and resubmittal.

Company Information: **Weisinger Incorporated**

**PO Box 2848
Conroe, TX 77305**

Driller Name: **BJ ALLDREDGE**

License Number: **54930**

Comments: **LSGCD#2004072804**

STATE OF TEXAS WELL REPORT for Tracking #98862

Owner: FRANK ISOM Address: 18763 FERNE DRIVE PORTER, TX 77365 Well Location: 18763 FERNE DRIVE PORTER, TX 77365 Well County: Montgomery	Owner Well #: No Data Grid #: 60-54-9 Latitude: 30° 08' 32" N Longitude: 095° 17' 24" W Elevation: No Data
Type of Work: New Well Proposed Use: Domestic	

Drilling Start Date: **11/20/2006** Drilling End Date: **11/21/2006**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	4	0	156

Drilling Method: **Mud (Hydraulic) Rotary**

Borehole Completion: **Straight Wall**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	135	10 SACKS CEMENT

Seal Method: **PRESSURE TREMMIE PIPE**

Sealed By: **BALLARD**

Distance to Property Line (ft.): **50**

Distance to Septic Field or other concentrated contamination (ft.): **100**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **CUSTOMER**

Surface Completion: **Surface Sleeve Installed**

Water Level: 57 ft. below land surface on 2006-11-21	Measurement Method: Unknown
Packers: FORMATION PACKER 135	
Type of Pump: Submersible	Pump Depth (ft.): 120
Well Tests: Jetted	Yield: 40 GPM with 10 ft. drawdown after 2 hours

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
92-156	GOOD

Chemical Analysis Made: **No**

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **BALLARD WATER WELL**
PO BOX 970
WILLIS, TX 77378

Driller Name: **CHARLES BALLARD**

License Number: **2384**

Apprentice Name: **PATRICK WINTERS**

Apprentice Number: **3135**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	2	TOP SOIL
2	33	CLAY
33	63	SAND
63	84	CLAY
84	88	SAND
88	92	CLAY
92	156	SAND

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
4	NEW	PVC CASING	0/135 SCH 40
4	NEW	PVC SLOTTED	135/155 .008
4	NEW	BLANK PVC CASING	155/165 SCH 40

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540

Water Well Information Sheet

Lone Star Groundwater Conservation District

PO Box 2467, 332 N Main
 Conroe, Texas 77305
 (936) 494-3436 Fax: (936) 494-3438
 lsgcd@txucom.net

District Use Only
Permit No. _____
Well No. <u>2004012346</u>
State Well # _____

Instructions: Fill out this form for each well (type or print). Submit along with an application for Declaration of Historic Use. Additional information or explanations may be attached.

GENERAL (Please note that the address supplied below will be the only address kept on file at the District.)

Well Owner: CONSUMERS WATER COMPANY

Correspondent: _____

(Fill in this box only if you wish someone other than the well owner to receive all correspondence.)

Address: PO BOX 1383

City, State, Zip: SPRING TX 77383 - 1383

Attention: _____

(If correspondence is being sent to a large organization, insert the specific person's name to whom you wish it directed.)

Phone No.: 281 444 7747 Ext. _____

WELL DATA

Location of Well: Address SOUTH RIDGE

Latitude: Degrees 30 Minutes 08 Seconds 41

Longitude: Degrees 95 Minutes 18 Seconds 01

If you are unable to supply latitude and longitude, an accurate sketch of the well location and a map showing the location must be attached.

Total Depth: 0360 Ft. {Estimated}

Depth to First Screen: 0330 Ft. {Est.} } If well not yet drilled, please have driller estimate.

Inside Diameter of Casing 04 In.

Expected Production During Next Twelve Months: _____ . 5 Million Gallons

Use of Water Produced: Industrial Livestock Pond
 (Mark one with X) Irrigation Public Supply (Includes Commercial) Other (explain)

Status of this well as of application date: (Mark one with X)

Operating (Give year drilled 1969) Being Drilled
 Completed but not being operated (Year drilled _____) Awaiting permit to begin drilling

Aggregation: If this well is to be placed in aggregate with other permitted wells, give lead well number of aggregation: _____

Mitchell M. Martin, Sr.

12-01-02
 Date

Signature of well owner or agent
Mitchell M. Martin, Sr.
 Print Name Above

STATE OF TEXAS WELL REPORT for Tracking #400540

Owner: Santos Elvira Marguina	Owner Well #: 1
Address: 18994 Ferne Dr. Porter, TX 77365	Grid #: 60-54-9
Well Location: 18994 Ferne Dr. Porter, TX 77365	Latitude: 30° 08' 34" N
Well County: Montgomery	Longitude: 095° 16' 58" W
	Elevation: 112 ft. above sea level

Type of Work: New Well	Proposed Use: Domestic
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Drilling Start Date: **7/21/2015** Drilling End Date: **7/23/2015**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	7	0	260

Drilling Method: **Mud (Hydraulic) Rotary**

Borehole Completion: **Straight Wall**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	25 cement

Seal Method: **Tremie**

Sealed By: **CWW**

Distance to Property Line (ft.): **200**

Distance to Septic Field or other concentrated contamination (ft.): **100**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **Owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: 60 ft. below land surface, and 0 GPM artesian flow on 2015-07-23	Measurement Method: Unknown
--	------------------------------------

Packers: **Formation 100'**

Type of Pump: Submersible	Pump Depth (ft.): 200
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Well Tests: **Pump** **Yield: 25 GPM with 0 ft. drawdown after 1 hours**

Water Quality:

Strata Depth (ft.)	Water Type
179-255	Potable

Chemical Analysis Made: **No**

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Coastal Waterwell Services Inc.**

**P.O. Box 745
Porter, TX 77365**

Driller Name: **Melvin Gehrels**

License Number: **54857**

Apprentice Name: **Aaron Gehrels**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	41	clay
41	122	sand
122	179	clay
179	255	sand
255	260	clay

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4 N	Plastic	0-240	40
4 N	Slotted	240-250	6
4 N	Plastic	250-260	40

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Please include the report's Tracking Number on your written request.

**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540**



LONE STAR
GROUNDWATER CONSERVATION DISTRICT

Lone Star Groundwater Conservation District
PO Box 2467
Conroe, Texas 77305
Phone: (936) 494-3436 Metro: (936) 441-3437 Fax: (936) 494-3438
Email: lsgcd@consolidated.net Web Site: www.lonestarged.org

APPLICATION FOR WELL REGISTRATION
- EXISTING WELL -

District to Complete _____
Permit No. OP-07091902
Well Registration No. 2007091902

Complete one application for each well.

Application Date: 9-17-07

-This form may be faxed or mailed-

Part I - Well Owner and Driller Information:

Well Owner: CUMBERLAND COMMUNITY ASSN Phone: 713-686-4692

Contact: Lee WALDHEIM E-mail: APM@ACTIONPROPERTY.NET Fax: 713-686-4692

Mailing address: 5201 MITCHELLEDALE #A12 City: HOUSTON State: TX Zip: 77092

Registrant: (if other than owner or driller) _____ Phone: _____

Address: _____ City: _____ State: _____ Zip: _____ Fax: _____

If Registrant is other than the owner of the property where the proposed well is to be located, documentation establishing the applicable authority to construct and operate a well for the proposed use.

Date/Year Drilled: Per Golene Daniel @ Action Property well was on (Please note if date has been estimated.)

Drilling Company: Property will developer purchase bankrupt Property Bad is Phone: _____

Driller Name: 1995. DJ 10-3-07 License #: _____ Fax: _____

Address: _____ City: _____ State: _____ Zip: _____

Part II - Well Location:

Well Site Address: CUMBERLAND Blvd + FM 1314 (NW CORNER)

City: PORTER State: TX Zip: 77365

Latitude: 30 8-02 Longitude: 95-17-18 (Required for non-exempt wells.)

Is the groundwater withdrawn from the well used in a location different from the well site? No If yes, explain: _____

Will the groundwater produced be transported out of Montgomery County? No If yes, explain: _____

Part III - Purpose for Water Use:

Mark (x) all appropriate boxes:

- Solely one single-family home (includes lawn irrigation) If not built, when will construction begin? _____
- Livestock (Producing less than 25,000 gallons a day or 9,125,000 gallons on an annualized basis.)
- Public Supply (PWS) ("Public Water System" means a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, which includes all uses described under the definition for drinking water in 30 Texas Administrative Code, Section 290.38. Such a system must have at least 15 service connections or serve at least 25 individuals at least 60 days out of the year, or utilize 9,125,000 or more gallons of water per year. This term includes any collection, treatment, storage, and distribution facilities under the control of the operator of such system and used primarily in connection with such system, and any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Two or more systems with each having a potential to serve less than 15 connections or less than 25 individuals but owned by the same person, firm, or corporation and located on adjacent land will be considered a public water system when the total potential service connections in the combined systems are 15 or greater or if the total number of individuals served by the combined systems total 25 or greater at least 60 days out of the year, or utilize 9,125,000 or more gallons of water per year. Without excluding other meanings of the terms "individual" or "served," an

Golene Daniel

pond. 1995

MU P 56 Ron Young 713-951-0800

Well Owner CUMBERLAND CA

Individual shall be deemed to be served by a water system if he lives in, uses as his place of employment, or works in a place to which drinking water is supplied from the system.)

- Public Supply _____
- Commercial _____
- Industrial _____
- Irrigation (Agricultural) _____
- Irrigation _____
- Other (explain) _____

Part IV - Well Information (if known)

Total Depth: _____ Ft. Rel. Matt Depth to First Screen: _____ Ft.

Inside Diameter of Casing: 2 in. Rel. Matt Pump Size: _____ hp

Maximum pumping capacity of pump: _____ gpm

No. of Service Connections: 2 Rel. Matt Well will service approximately _____ individuals for _____ days out of the year.

Total amount of groundwater to be used on an annual basis: 1,000,000 gallons/year. (Note: If the amount stated is less than 9,125,000 gallons per year and the district determines the well exempt under Rule 2.9 as domestic or livestock use - exceeding or pumping water for non-exempt purposes is a violation under the District Rules.)

List Proposed Usage of Water Produced from Well and the Amount of Usage (if known):

Use IRRIGATION Amount Used ?? 2739 970 gallons/day

Use _____ Amount Used _____ gallons/day

Is a Water Well Closure Plan attached in the case that this well would ever fail or become inactive? Yes No, sign below as a declaration that the applicant will comply with Administrative Rules of the Texas Department of Licensing and Regulation (TDLR) 16, Texas Administrative Code, Chapter 76 well plugging guidelines and report closure to the District:

Lee F Waldheim AGENT
Signature



Part V - Certification:

Amount of groundwater withdrawn the last full calendar year: _____ gallons for year _____

Date well began beneficially using water, for the stated use, without waste: _____

Has well been equipped with a flow measurement device? Yes No

Is a copy the original drillers log available? No Yes If yes, please attach.

Applicant agrees that water produced/withdrawn from the proposed well will be put to beneficial use at all times. No Yes

I hereby certify that the information given herewith is true and accurate to the best of my knowledge and belief.

Lee Waldheim

Print Name

Lee F Waldheim AGENT

Signature

9-17-07

Date

District to Complete	Well Registration No. <u>2007091902</u>
Permit required: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes, Type: _____	
Reviewed by: <u>[Signature]</u>	Date: <u>9-18-07</u>

LONE STAR
GROUNDWATER CONSERVATION DISTRICT

Lone Star Groundwater Conservation District
Well Registration: Existing Well
Revised 2/28/05
Page 2 of 2

STATE OF TEXAS WELL REPORT for Tracking #101621

Owner: Montgomery County MUD #56/Pate Engrs. Address: 13333 NW Freeway, Ste. 300 Houston, TX 77040 Well Location: 18299 Cumberland Porter, TX 77465 Well County: Montgomery	Owner Well #: No Data Grid #: 60-54-8 Latitude: 30° 08' 02" N Longitude: 095° 17' 45" W Elevation: No Data
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Type of Work: New Well	Proposed Use: Public Supply
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Drilling Start Date: 8/18/2003

Drilling End Date: 9/3/2003

Plans Approved by TCEQ - YES

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	18	0	571

Drilling Method: Mud (Hydraulic) Rotary

Borehole Completion: Filter Packed; Under-reamed

	Top Depth (ft.)	Bottom Depth (ft.)	Filter Material	Size
Filter Pack Intervals:	358	569	Gravel	

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	406	140

Seal Method: Positive Displacement

Sealed By: Driller

Distance to Property Line (ft.): No Data

Distance to Septic Field or other concentrated contamination (ft.): No Data

Distance to Septic Tank (ft.): No Data

Method of Verification: No Data

Surface Completion: Surface Slab Installed

Water Level: 140 ft. below land surface on 2003-09-03 **Measurement Method:** Unknown

Packers: No Data

Type of Pump: Submersible **Pump Depth (ft.):** 310

Well Tests: Jetted **Yield:** 300 GPM

Water Quality:

Strata Depth (ft.)	Water Type
No Data	No Data

Chemical Analysis Made: **Yes**

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Bussell & Sons, LLC**
P. O. Box 874
Tomball, TX 77377

Driller Name: **Johnny R. Williams**

License Number: **2854**

Comments: **\$dfs**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	30	Clay
30	200	Sand
200	245	Clay
245	270	Sand
270	300	Clay
300	347	Sand
347	406	Clay
406	422	Sand
422	428	Clay
428	436	Sand
436	466	Clay
466	482	Sand
482	528	Clay
528	550	Sand
550	558	Clay
558	566	Sand
566	571	Clay

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia. (In.)	New/Used	Type	Setting From/To (ft.)
12	New	Black Steel	0 406
8	New	Black Steel	358 406
8	New	S/S Pipe Base	406 422
8	New	Blank	422 428
8	New	S/S Pipe Base	428 436 .020
8	New	Blank	436 466
8	New	S/S Pipe Base	466 482 .020
8	New	Blank	482 528
8	New	S/S Pipe Base	528 550 .020
8	New	Blank	550 558
8	New	S/S Pipe Base	558 566 .020
8	New	Shoe	566 569

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Please include the report's Tracking Number on your written request.

**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540**

GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	6054906
County	Montgomery
River Basin	San Jacinto
Groundwater Management Area	14
Regional Water Planning Area	H - Region H
Groundwater Conservation District	Lone Star GCD
Latitude (decimal degrees)	30.144722
Latitude (degrees minutes seconds)	30° 08' 41" N
Longitude (decimal degrees)	-95.2825
Longitude (degrees minutes seconds)	095° 16' 57" W
Coordinate Source	+/- 1 Second
Aquifer Code	121EVGL - Evangeline Aquifer
Aquifer	Gulf Coast
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	116
Land Surface Elevation Method	Interpolated From Topo Map
Well Depth (feet below land surface)	403
Well Depth Source	Driller's Log
Drilling Start Date	
Drilling End Date	9/14/1987
Drilling Method	Mud (Hydraulic) Rotary
Borehole Completion	Screened

Well Type	Withdrawal of Water
Well Use	Public Supply
Water Level Observation	Miscellaneous Measurements
Water Quality Available	No
Pump	Submersible
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	
Surface Completion	
Owner	Crystal Springs Water Winchester Place No. 1
Driller	Lowe Water Wells
Other Data Available	Drillers Log
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	G1700466B
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	Texas Water Development Board
Created Date	7/7/1998
Last Update Date	7/7/1998

Remarks Reported yield 64 GPM January 17, 1990.

Casing

Diameter (in.)	Casing Type	Casing Material	Schedule	Gauge	Top Depth (ft.)	Bottom Depth (ft.)
5	Blank	Plastic (PVC)			0	378
3	Screen	Plastic (PVC)			378	403

Well Tests - No Data

Lithology - No Data

Annular Seal Range - No Data

Borehole - No Data

Plugged Back - No Data

Filter Pack - No Data

Packers - No Data

10/16/2023

Crystal Springs Water Company, Inc.
23449 US-59
Porter, Texas 77365

RE: Request for Certified Waiver Under (District Rule 3.4(c))

Dear Crystal Springs Water:

Porter SUD is requesting to install a water well on their property located at 18525 Ferne Dr. In accordance with Rule 3.4 of the Lone Star Groundwater Conservation District's (Lone Star GCD) 2022 Rules and Regulations (amended June 8, 2022), the proposed placement of the well will require an exception to the well spacing requirements. **You are receiving this notice as your property and/or well is located within the minimum required distance from the proposed well site as determined by Rule 3.2 and/or 3.3.** Per Rule 3.4, we are requesting your cooperation in granting a certified waiver to the Lone Star GCD's spacing requirement for the proposed well.

If you do not consent to the waiver, you are not required to return this form. If you would like to notify us that you object to this well being drilled and/or operated based on the proposed location, please contact the District via email at info@lonestargcd.org or khein@lonestargcd.org.

We ask that you please assist us in consenting to a waiver of the District's spacing rules. If you consent to this waiver, please check and sign below.

I hereby certify that I waive the Lone Star GCD's spacing requirements as to the well-referenced above and consent to the well being drilled in the proposed location, even though the well does not comply with the District spacing requirements. My signature below consents to this waiver.

James Mada [Signature]
Name Signature

President/CEO 10/16/2022
Title Date

If you do not consent to provide the certified waiver, please indicate so below.

If you have any questions, please feel free to contact me at (936) 520-0811 or carl@bicylengineering.com. Or you can contact the Lone Star GCD at (936) 494-3436 or info@lonestargcd.org.

Sincerely,

[Signature]

Carl Rushing, P.E.
Project Manager

Proposed Well Location

- Legend**
- Crystal Springs Water Well
 - Proposed Ferme Well



NORTH HOUSTON TX 773

20 OCT 2023 PM 1 L



Bleyl Engineering
100 Nugent
Conroe, TX 77301

77301-251000



Attn: Carl Rushing



Lone Star Groundwater Conservation District
655 Conroe Park North Dr.
Conroe, Texas 77303

Phone: (936) 494-3436 Metro: (936) 441-3437 Fax: (936) 494-3438
Email: info@lonestargcd.org Web Site: www.lonestargcd.org

APPLICATION FOR WELL REGISTRATION
- NEW WELL -

RECEIVED
OCT 23 2018
BY: *Revised copy at*

District to Complete

Permit No. OP-18090902

Well Registration No. 2018090902

Instructions & Rules for Registering and/or Permitting of New Wells Required Prior to Drilling or Alteration:
(For a complete list of District Rules and Regulations please reference the District's website.)

- Pursuant to Rule 3.10 - for all wells except replacement wells proposed to be drilled after August 26, 2002, a landowner or water well driller, or any other person acting on their behalf, must submit an application for well registration with the District, and must receive specific authorization from the District to commence the proposed drilling, before any well, except leachate wells, monitoring wells, dewatering wells, and wells described under Rule 3.8(a)(7), may be drilled, equipped, completed, or substantially altered with respect to size or capacity after the effective date of these Rules, except as set forth under Rule 3.14. The District staff shall review the registration and make a preliminary determination on whether the well meets the exemptions from permitting provided in Rule 3.8, and shall inform the registrant of their determination within five business days of receipt of the completed application. If the preliminary determination is that the well is exempt, the registrant may begin drilling or other activity immediately upon receiving the approved registration.
- If the preliminary determination is that the well is not exempt, the District staff shall inform the registrant of any further application information set forth under Rule 3.3 or fees required to process the registration application as a permit application.
- If the preliminary determination is that the well is not exempt, per Rule 3.11 - no person shall drill, equip, complete, or substantially alter, operate, or produce groundwater from a well without first obtaining the appropriate permit or amendment thereto from the District. A violation of this Rule occurs on the first day the unauthorized activity occurs and continues each day thereafter until the appropriate registration or permit is issued.

Complete one application for each well.

-This form may be faxed or mailed-

Application Date: 9/9/2018

Permit Name: Texcon Ready Mix

Part I - Well Owner and Driller Information:

Well Owner: Texcon Ready Mix Phone: 281-330-8572

Contact: Meng Zhang E-mail: luis@texconstruction.com Fax: luis@texconconstruction.com
and jasonzm5@gmail.com

Luis Sobrano

Mailing address: 23005 Janell Dr

City: Porter State: TX Zip: 77365

Registrant: (if other than owner) Irasema Salinas Phone: 979-525-6128

Address: 37544 FM 1736 City: Hempstead State: TX Zip: 77445 Fax: 956-782-1670

If Registrant is other than the owner of the property where the proposed well is to be located, documentation establishing the applicable authority to construct and operate a well for the proposed use.

Drilling Company: maral Drilling Phone: 979-525-6128

Driller: Martin Almazan License #/Expire Date: 52001 06/17/18 Fax: 956-782-1670

Address: 2621 S. Gardenia City: Pharr State: TX Zip: 78577

E-mail: maraldrilling@sbcglobal.net

Part II - Well Location:

Well Site Address: 20783 FM 1314

City: Porter State: TX Zip: 77365

Latitude: 30.14831406 Longitude: -95.30018883

10/22/18 Karla Sobrano 713/576-6846 5/16 Karla Texcon Ready Mix @ gmail.com Dr

Well Registration No.: 2018090902

Well Owner: Meng Zhang

Is the groundwater withdrawn from the well used in a location different from the well site? No If yes, explain: _____

Is a public water system available in this area? Yes No Will the well(s) to be located within city limits? Yes No
9/19/18 Spoke to Mr. Solorcano and he stated he has already talked to Porter SUD.
Will the groundwater produced be transported out of Montgomery County? No If yes, explain: _____

Is this a replacement well? No If yes, what will be the status of the old well? Capped Plugged In use
(explain) _____ If plugged, District will need copy of plugging report.

Part III - Purpose for Water Use:

Mark (x) all appropriate boxes:

- Solely one single-family home (includes lawn irrigation) If not built, when will construction begin? _____
- Livestock (Producing less than 25,000 gallons a day or 9,125,000 gallons on an annualized basis.)
- Public Supply (PWS) ("Public Water System" means a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, which includes all uses described under the definition for drinking water in 30 Texas Administrative Code, Section 290.38. Such a system must have at least 15 service connections or serve at least 25 individuals at least 60 days out of the year, or utilize 9,125,000 or more gallons of water per year. This term includes any collection, treatment, storage, and distribution facilities under the control of the operator of such system and used primarily in connection with such system, and any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Two or more systems with each having a potential to serve less than 15 connections or less than 25 individuals but owned by the same person, firm, or corporation and located on adjacent land will be considered a public water system when the total potential service connections in the combined systems are 15 or greater or if the total number of individuals served by the combined systems total 25 or greater at least 60 days out of the year, or utilize 9,125,000 or more gallons of water per year. Without excluding other meanings of the terms "individual" or "served," an individual shall be deemed to be served by a water system if he lives in, uses as his place of employment, or works in a place to which drinking water is supplied from the system.)
- Public Supply _____
- Commercial _____
- Industrial primary _____
- Irrigation (Agricultural) _____
- Irrigation _____
- Other (explain) _____

Part IV - Well Information:

Estimated Depth: 450 Ft. Estimated Depth to First Screen: 200 Ft.

Inside Diameter of Casing: 5 In. Estimated Pump Size: 5 hp

Maximum pumping capacity of pump: 50 gpm.

No. of Service Connections: 2 Well will service approximately 5 individuals for 261 days out of the year.

Total amount of groundwater to be used on an annual basis: 8,000,000.00 gallons/year. (Note: If the district determines the well is exempt under Rule 3.8 as domestic or livestock use - exceeding or pumping water for non-exempt purposes is a violation under the District Rules.)

List Proposed Usage of Water Produced from Well and the Amount of Usage (if known):

Use Production and office Amount Used 30,000 gallons/day

Use _____ Amount Used _____ gallons/day

Will this well be placed in aggregate with an existing well permitted with an OP or HUP? No If yes, list permits: _____

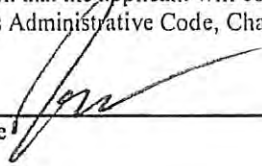


* 9/19/18 Spoke w/ Richard Tramm w/ Porter SUD to inform him about the pending application in their case. OK

Well Registration No.: _____

Well Owner: Meng Zhang

Is a Water Well Closure Plan attached in the case that this well would ever fail or become inactive? Yes If no, sign below as a declaration that the applicant will comply with Administrative Rules of the Texas Department of Licensing and Regulation (TDLR) 16, Texas Administrative Code, Chapter 76 well plugging guidelines and report closure to the District:


Signature

Part V – Certification:

Applicant agrees that water produced/withdrawn from the proposed well will be put to beneficial use at all times. Yes No


Applicant agrees that if well is located in a flood prone area well will comply with District Rule 5.3 and Administrative Rules of the TDLR 16, Texas Administrative Code, Chapter 76 Rule 76.1000. Yes No

Applicant agrees to follow well spacing requirements in District Rule 5.3 and Administrative Rules of the TDLR 16, Texas Administrative Code, Chapter 76 Rule 76.1000. Yes No

Applicant agrees that if well is to be drilled on less than 1 1/2 acres well owner or driller will contact the Montgomery County Health Department at (936) 539-7839. Yes No

Applicant agrees that if well is classified as a Public Supply (PWS) well, owner or driller will comply with TCEQ Chapter 290, Public Drinking Water, including Rule 290.38(d), submission of engineering plans. Yes No

I hereby certify that the information given herewith is true and accurate to the best of my knowledge and belief.

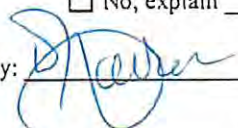

Print Name Meng Zhang

Signature



OTHER AGENCIES YOU MAY NEED TO CONTACT PRIOR TO DRILLING WELL:

- Texas Commission on Environmental Quality (TCEQ)
- Montgomery County Health Department
- Texas Department of Licensing and Regulation (TDLR)
- Local City Municipality (If well is to be located with-in the city limits or the ETJ)
- Local Utility Company (MUD, UD, etc.)

District to Complete	Well Registration No. <u>2018090902</u>
Permit required prior to drilling: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes, Type: <u>OP</u>	
Drilling approved: <input type="checkbox"/> Yes, by _____ <input checked="" type="checkbox"/> No, Requires Board Approval <input type="checkbox"/> No, explain _____	
Reviewed by: 	Date: <u>10/28/18</u>
<i>This approval is good for 120 days from date of approval.</i>	

Lone Star Groundwater Conservation District

655 Conroe Park North Drive
Conroe, Texas 77303

Phone: (936) 494-3436 Metro: (936) 441-3437 Fax: (936) 494-3438
Email: info@lonestargcd.org Web Site: www.lonestargcd.org

OPERATING PERMIT
PERMIT NO.: #OP-18090902A-CHEV

I. PERMITTEE:

Texcon Ready Mix
Attn: Mario Palacios
20783 FM 1314
Porter, TX 77365



II. NUMBER OF WELLS COVERED BY PERMIT: 1

III. WELL DETAILS:

Well Registration Number	Well Address	Well Latitude	Well Longitude	Aquifer Designation	Diameter of Well (Inches)	Well Depth (Feet)	Maximum Allowable Pumping Rate (GPM)	Well Pump Horsepower (HP)
2018090902	20783 FM 1314	30.14833	-95.30028	Evangeline	5	450	50	5

IV. TERMS:

Date of Issuance: August 8, 2023
Term: Perpetual unless amended, revoked; or modified per rule
Deadline to drill well: 365 days from date of issuance unless extension is granted

V. PURPOSE OF USE:

Industrial (primary)
Commercial (secondary)

VI. ANNUAL PRODUCTION LIMITATIONS:

Beginning on August 8, 2023, only that which is required without being wasteful during the permit term, but not to exceed **6,400,000 gallons annually**.

VII. PLACE OF USE: (indicate if water will be transported out of the district)

Montgomery County
Amount Authorized for Transport Outside of District (if any): _____

VIII. PROVISIONS:


- This permit is issued in accordance with District Rules, and acceptance of this permit constitutes an acknowledgement and agreement that the permittee will comply with the District Rules, the terms and conditions of this permit, orders of the Board and the District Management Plan and that the permittee is bound by such Rules, terms and conditions, orders of the Board and the District

- Management Plan; such acknowledgement and agreement by the permittee is a condition precedent to the granting and issuance of this permit.
2. This permit confers only the right to use the permit in accordance with the terms of the permit, and the Rules of the District. The issuance of this permit does not grant to the permittee the right to use private property, or public property, for the production or conveyance of water. Neither does this permit authorize the invasion of any personal rights nor the violation of federal, state, or local laws, or any regulations.
 3. All water withdrawn under this permit must be put to beneficial use at all times.
 4. The site of any well covered by this permit must be accessible to District representatives for inspection, and the permittee agrees to cooperate fully in any reasonable inspection of any well or well site by District representatives.
 5. The application pursuant to which this permit has been issued is incorporated in this permit, and this permit is issued on the basis of and contingent upon the accuracy of the information supplied in that application. A finding that false information has been supplied in the application is grounds for immediate revocation of this permit.
 6. A substantial change to this permit may be made only after application to and approval by the District to so amend.
 7. The permittee of this permit shall equip the well or wells covered by this permit with a meter or meters prior to producing from the well after December 31, 2002 and shall pay to the District fees in accordance with the fee schedule of the District and the requirements of the District's Rules.
 8. The validity of this permit is contingent upon payment by the permittee of all applicable fees as set forth under the District's Rules.
 9. No later than February 15 of each year, the permittee of this permit must submit a report to the District in accordance with District Rule 11.3. Permittee may choose to complete twelve (12) months of online reporting by way of the District's online reporting system, in place of the paper form.
 10. The permit holder will use reasonable diligence to protect groundwater quality.
 11. The permit holder will follow well plugging guidelines at the time of well closure.
 12. The permit holder or new well owner shall provide written notice of change of ownership.
 13. This permit is issued subject to: (1) the proportional adjustment regulations of the District; (2) any management zone(s); (3) the District's management plan; (4) the District's Rules as they exist now or as they may be amended in the future; (5) the Annual Production Limitations; (6) the Maximum Allowable Pumping Rate; and (7) the continuing right of the District to supervise and regulate groundwater production from the aquifers within the District's boundaries, as authorized by Chapter 36, Texas Water Code, as amended, and the enabling legislation of the District, as amended.
 14. The permit holder shall reduce water production as required by the District Rules and orders of the Board, including without limitation Proportional Adjustment Orders issued based on achievement of the District's Desired Future Conditions, other adjustments or a Management Zone.
 15. All other matters requested in the application, which are not specifically granted by this permit, are denied.
 16. The District makes no representations and shall have no responsibility with respect to the availability or quality of water authorized to be produced under this permit.
 17. The District reserves the right to amend the District's Rules to allocate within the District or within a management zone water that is available for production under permits or classes or permits, including reducing the amount of water that may be available for production under such a permits or classes of permits, including this permit.
 18. No person shall drill, equip, complete, substantially alter, operate, or produce groundwater from a well in violation of District Rule 2.1. A violation of Rule 2.1 occurs on the first day the unauthorized activity occurs and continues each day thereafter until the permit or amendment is issued, if any.
 19. This permit is issued subject to any future production limits adopted by the District under the District rules or Board orders that apply within the District or within the applicable management zone.
 20. Permits issued that authorize drilling, equipping, completing, or substantially altering the size or capacity of a well shall be valid for a term not to 120 days from the date of issuance to complete those activities and begin producing in accordance with the terms of the permit, unless the applicant has applied for and been granted an extension. Such extension shall only be granted once and shall not be valid for more than an additional one-year period. Thereafter, the applicant must file a new

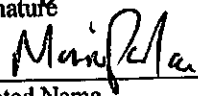
- Operating Permit application. A driller's log, well report, and well completion report must be filed with the District within 60 days of completion as required by Rule 11.2.
21. In the event of a conflict between the terms of the permit and the application and information pursuant to which the permit was granted, the terms of the permit shall prevail.

ISSUED AND EFFECTIVE THIS 8th day of August 2023.

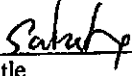
PERMITTEE:



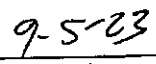
Signature



Printed Name

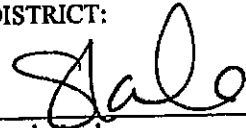


Title



Date Executed

DISTRICT:



Sarah Kouba
General Manager
Lone Star Groundwater Conservation District

STATE OF TEXAS WELL REPORT for Tracking #360139

Owner: James Gregory	Owner Well #: 1
Address: 17829 Lakeview Dr. Porter, TX 77365	Grid #: 60-54-8
Well Location: 17829 Lakeview Dr. Porter, TX 77365	Latitude: 30° 08' 50" N
Well County: Montgomery	Longitude: 095° 18' 09" W
	Elevation: 95 ft. above sea level
Type of Work: New Well	Proposed Use: Domestic

Drilling Start Date: **3/12/2014** Drilling End Date: **3/15/2014**

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	7	0	375
	3.5	375	390

Drilling Method: **Mud (Hydraulic) Rotary**

Borehole Completion: **Two-String**

	Top Depth (ft.)	Bottom Depth (ft.)	Description (number of sacks & material)
Annular Seal Data:	0	100	13 cement
	365	375	15 cement

Seal Method: **Haliburton / Tremie**

Sealed By: **CWW**

Distance to Property Line (ft.): **50**

Distance to Septic Field or other concentrated contamination (ft.): **100**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **Owner**

Surface Completion: **Surface Sleeve Installed**

Water Level: **120 ft. below land surface, and 0 GPM artesian flow on 2014-04-15** Measurement Method: **Unknown**

Packers: **Formation 100'
K-packer 365'**

Type of Pump: **Submersible** Pump Depth (ft.): **220**

Well Tests: **Estimated** Yield: **20 GPM with 0 ft. drawdown after 1 hours**

Water Quality:

<i>Strata Depth (ft.)</i>	<i>Water Type</i>
375-390	Potable

Chemical Analysis Made: **No**

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

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Coastal Waterwell Services Inc.**

**P.O. Box 745
Porter, TX 77365**

Driller Name: **Melvin Gehrels**

License Number: **54857**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing:
BLANK PIPE & WELL SCREEN DATA

<i>Top (ft.)</i>	<i>Bottom (ft.)</i>	<i>Description</i>
0	42	clay
42	88	sand
88	96	clay
96	133	sand
133	136	clay
136	223	sand
223	375	clay
375	390	sand

<i>Dia. (in.)</i>	<i>New/Used</i>	<i>Type</i>	<i>Setting From/To (ft.)</i>
4	N	Plastic	0-375 40
2.5	N	Slotted	375-390 6

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

**Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540**



THORNHILL GROUP, INC.

Professional Hydrogeologists • Water Resources Specialists

September 12, 2023

Ms. Sarah Kouba
Lone Star Groundwater Conservation District
655 Conroe Park, North Drive
Conroe, Texas 77303

Re: Hydrogeologic Report for a New Proposed Public Water Supply Well for
Porter Special Utility District, Porter, Montgomery County, Texas

Dear Ms. Kouba:

Thornhill Group, Inc. (TGI) provides this Phase 1 Hydrogeologic Report on behalf of the Porter Special Utility District (Porter SUD), as required by Lone Star Groundwater Conservation District (LSGCD) Rule 2.6(b)(15) (Rules of the Lone Star Groundwater Conservation District adopted and effective September 8, 2020) and the standards set forth in the **Lone Star GCD's Hydrogeological Report Guidelines** (LSGCD November 11 08, 2022). Specifically, this hydrogeologic report is in support of one (1) new Non-Exempt Water Well Drilling Permit Application and Operating Permit Application for Porter SUD to develop one (1) new public supply production well (Well No. 10) located on the premises of the Ferne Water Plant in Montgomery County, Texas. The subject well site is approximately 4 miles northwest of Porter along FM 1314, in Montgomery County.

This is an application to construct and operate a new public supply well and production allocation under the existing operating permit for Porter SUD permit number OP03-0006G-CHEV. Additionally, Porter SUD has a historic use permit for existing wells (HUP177-CHEV). The production capacity for the well is greater than 700 gallons per minute. Therefore, per the LSGCD Rules and Guidelines, a hydrogeologic report is required in support of the proposed non-exempt well; this report provides the required information. TGI provides herein a description of the geologic setting and a summary of the hydrogeologic parameters at the subject site and a summary of the existing wells within the subject operating permit. Additionally, TGI provides estimates of the primary impacts and the anticipated effects of the proposed pumping on nearby users. This Hydrogeologic Report is provided to satisfy the requirements of the **Lone Star GCD's Hydrogeological Report Guidelines, LSGCD Rule 2.6(b)(15) Requirements of Hydrogeological Reports:**



Guideline II. Requirements of Hydrogeological Reports

A. Hydrogeologic Report for New Well(s) or Increased Maximum Production Rate per Well (Prior to Drilling)

1. Confirm that well spacing complies with the Rules or that you are requesting an exception from spacing. If requesting an exception to spacing, also provide supporting documentation of impacts at the proposed spacing.

All known wells within a 4,000 foot buffer (proposed 2,000 gpm well) with a known depth are completed in either the Chicot aquifer or the upper sands of the Evangeline aquifer. The proposed well is to be completed in the lower sands of the Evangeline aquifer which are likely hydraulically separated locally by about 250 feet of mostly clay. There is a well (District ID 2004072346) with an unknown depth and therefore, unknown aquifer completion. However, the estimated depth indicates it is possibly completed in shallower sands than the proposed well is to be completed in. Three (3) wells (District IDs 2005022413, 2005022801, 2013040802) reportedly completed in the Evangeline aquifer are likely mislocated and likely are not located within the 4,000-foot buffer.

2. Anticipated specific details of well construction must include the following:

- (a) Schematic well construction diagram including completion (i.e., screened) intervals and screen diameter, filter pack setting (if applicable), casing diameter and setting, cemented intervals or other seals;

See well diagram in Attachment 1.

- (b) Lithologic description of geology anticipated during well drilling; and,

The surface geology mapped on the Texas Beaumont Sheet, published in 1968 by the Bureau of Economic Geology (BEG), indicates the proposed well site is located atop the outcrop of the Lissie Formation of the Chicot aquifer. The Lissie Formation is underlain by the Willis Formation of the Chicot aquifer.

According to a geophysical log (Attachment 1) provided by Bleyl Engineering for the plugged well at Ferne Plant (Well 4), the Chicot aquifer is found at the surface to a depth of approximately 230 feet below ground level (bgl) which is composed of alternating layers of sand, silt, and clay. Below the Chicot aquifer is the Evangeline aquifer which is composed of alternating layers of sand, silt, and clay. Based on the geophysical, there is approximately a



70-foot clay section between the base of the Chicot aquifer and the first sandy unit of the Evangeline aquifer. The geophysical log likely does not show the bottom of the Evangeline aquifer, but the log does indicate that there are potentially productive sand zones between 800 and 1,000 feet. According to USGS OFR 03-298 the base of the Evangeline aquifer is approximately 1,200 feet bgl.

- (c) Location: Provide map(s) showing location of property relative to county level and location of water system well(s) relative to property boundaries and other relevant features.

Figure 1 provides a general location map within Montgomery County and Figure 2 is a site map providing details of the well sites and surrounding features.

3. Discussion of hydrogeologic setting must include the following:

- (a) Identification of aquifer: Applicant is advised to work with District Staff to properly identify the aquifer for the proposed well;

The aquifer that the proposed well will produce from is the Evangeline aquifer, specifically the lower portion of the Evangeline aquifer.

- (b) Surface and subsurface geology, including, as applicable, occurrence of any significant groundwater recharge features such as outcrop, surface water bodies, sinkholes, faults or other geologic features;

As stated above, the surface geology mapped on the Texas Beaumont Sheet, published in 1968 by the Bureau of Economic Geology (BEG), indicates the proposed well site is located atop the outcrop of the Lissie Formation of the Chicot aquifer (see Figure 3). The Lissie Formation is underlain by the Willis Formation which is underlain by the Goliad Sand of the Evangeline aquifer. There are numerous surface water bodies (streams, creeks, and small ponds) within 1 mile of the proposed site. The closest occurrence of the Evangeline outcrop is approximately 20 miles to the northwest updip from the proposed site. There are no mapped faults nearby or other significant geologic features. There are multiple streams, rivers, and ponds within one (1) mile of the proposed well site and San Jacinto River is approximately 2 miles west southwest of the proposed well site.

- (c) Depth interval of proposed water bearing zone; identify target production zone; and anticipated screen interval(s);

The well will be designed to be completed in the lower portion of the Evangeline aquifer. There are multiple productive sands zones within the Evangeline aquifer. Based on the



geophysical log provided in Attachment 1, the first screen would be approximately 800 feet bgl and the base of lowest screen would be approximately 1,010 feet bgl. Note that the log likely does not show the entire Evangeline aquifer and there may be more productive sand intervals below 1,010 feet bgl that would be utilized in the proposed well. Actual well design and screen placement will be based on the results of drilling and logging the pilot hole.

- (d) Anticipated thickness of water bearing zone and well screen(s);

The Evangeline aquifer locally is about 1,000 feet thick, but the proposed well will be designed to produce from the lower water-bearing sands of the Evangeline aquifer starting approximately 800 feet bgl. Based on the geophysical log and USGS OFR 03-298, the Evangeline aquifer likely has 100 to 150 feet of potential water-bearing sands from 800 to 1,200 feet bgl. Porter SUD would likely utilize all available water-bearing sands between these depths to screen for the proposed well.

- (e) Whether the target production zone is anticipated to be confined or unconfined;

The target production zone is anticipated to be confined.

- (f) Estimates of thickness of confining layer at well site location, if applicable;

Between the base of the Chicot aquifer and the first water-bearing sand of the Evangeline aquifer there is approximately 70 foot of clay. Additionally, there is approximately 250 feet of mostly clay and silty or sandy clay between the upper water-bearing sands of the Evangeline aquifer and the lower water-bearing sands of the Evangeline aquifer.

- (g) Aquifer parameters at the well site, including transmissivity, hydraulic conductivity and storativity based on the Texas Water Development Board (TWDB)'s Houston Area Groundwater Model (HAGM) for the aquifer or other site-specific data if available; A table should be included specifying the transmissivity, hydraulic conductivity and storativity used at each water system well location for the simulations if multiple transmissivity, hydraulic conductivity and/or storativity values are used;

The current approved Groundwater Availability Model (GAM) for the Evangeline aquifer is the Houston Area Groundwater Model (HAGM). According to the HAGM, the hydraulic conductivity, transmissivity, and storativity for the Evangeline aquifer at the subject is about



15 feet per day (ft/d), 14,385 feet squared per day (ft²/d) (or 107,599 gpd/ft) and 0.000382 (unitless), respectively. The transmissivity is based on the entire thickness of the Evangeline aquifer (layer 2), using the saturated thickness (382 feet) of the Evangeline aquifer from USGS 03-298, the estimated transmissivity for the Evangeline aquifer is approximately 42,000 gpd/ft. The estimated transmissivity from USGS OFR 03-298 is 31,400 gpd/ft and the calculated hydraulic conductivity using the saturated thickness is 82 gpd/ft². Rounding the hydraulic conductivity to 100 gpd/ft² and using a range of saturated thickness of 100 to 150 feet for the lower Evangeline sands, the estimated transmissivity is 10,000 to 15,000 gpd/ft.

- (h) Identify at a minimum, all District registered and permitted wells based on the greater distance of the following: a ½-mile radius of the proposed well or the required well spacing radius of the aquifer based on the maximum production rate of the proposed well; Upon request, the District will provide well location and available screened interval, total depth and aquifer information for the registered and permitted wells; Available well data from the Texas Water Development Board Groundwater Database and Submitted Driller's Report Database can be used to supplement the District well data; and,

Table 2 provides a list of all wells within 4,000 feet of the proposed well. Additionally, Figure 4 shows all wells within a 4,000-foot buffer of the proposed well.

- (i) Include streams and springs within a 1-mile radius.

See Figure 3 for a map showing all known streams and springs within 1 mile of the proposed well.

4. Water Quality

- (a) Discussion of known quality in the area based on literature, well reports.

The Evangeline aquifer is known to produce water of good quality that is suitable for public consumption with little to no treatment other than chlorination as required. Total dissolved solids for water produced from the Evangeline aquifer is typically around 500 mg/l.

5. Interference Analysis

- (a) Provide quantitative analysis that shows the projected impacts from i) the proposed production from the well or well system (if applicable) and ii) the well or well system (if applicable) running 100% of the



simulation periods. NOTE: Applicant is advised to work with District Staff to settle on proposed production volume and aquifer prior to performing the analysis.

- (i) The maximum pumping capacity shown on the Application for Well Registration should be used as the production rate for existing water system well(s) 24-hour and maximum production well simulations. For water system well simulations, the simulated pumping rate of each permitted and registered water system well that is listed on the Application for Well Registration for water system wells that are completed in the same Aquifer of the District should be the maximum production rate for the 24-hour and maximum production well simulations; The maximum production simulation should simulate drawdown for the number of days required for the well(s) pumping at the maximum allowed rate (gpm) to reach the anticipated annual permitted volume of the water system well(s) for that aquifer. Potential simulated groundwater production rates for special case scenarios can be discussed with District Staff as needed.

The total current permit is for an annual allocation of 1,171,564,000 gallons per year. There is no request to increase the total allocation or maximum pumping rate for any of the existing wells. Operating permit OP03-0006G-CHEV has a current annual allocation of 700,000,000 gallons per year and Porter SUD's historic use permit HUP177-CHEV has an annual allocation of 471,564,000 gallons per year for a total permitted annual allocation of 1,171,564,000 gallons per year (1.171 billion gallons per year or 3,595 acre-feet per year) from the Evangeline aquifer.

Table 1 provides the existing wells and the maximum pumping rate as described in the Porter SUD's operating permit and historic use permit.

A copy of the District's registered and permitted well database was provided to TGI on January 19, 2023 by Kirstin Hein of LSGCD. All wells within a 4,000-foot radius of the proposed Evangeline well were identified and are provided in Table 2. Also, all wells within one-half mile of the existing Porter SUD Evangeline wells were identified and provided in Table 2.



Porter SUD is seeking an operating permit for the proposed well with a maximum instantaneous pumping rate of 2,000 gpm. To fulfill the requirements of this report, TGI modeled the proposed well operating at 2,000 gpm for a full 24 hours (1 day) and 365 days. TGI used a transmissivity of 10,000 gpd/ft and a storativity of 0.000382.

Additionally, TGI modeled the Porter SUD's well field and proposed well for the time frames of 1 day and 94 days, the time it would take to produce the entire annual allocation, totaling 1,171,564,000 gallons per year (or 3,595 acre-feet per year), with each well pumping continuously at the permitted maximum rate. See Table 1 for the individual pumping rates used for both scenarios. Note that most of the existing wells within Porter SUD's well field have been operating for several years and the effects of the well field operations have likely already occurred and that the modeled drawdown is not a prediction of additional drawdown from current conditions.

- (ii) Simulation results showing drawdown at 24 hours and maximum production scenario.

See Table 2 for the simulated drawdown at the point of existing wells if they were completed within the same production interval as the proposed well.

- (iii) discussion of the methodology used for estimating drawdown, including software that was used, the assumptions and/or solution method employed.

TGI used an analytical modeling program, developed within *Microsoft Excel*, based on the Theis non-equilibrium equation to calculate theoretical potentiometric head declines (drawdown) at and surrounding the existing production wells. The Theis model incorporates many assumptions, most of which are sufficiently satisfied in the local Evangeline aquifer. However, the Theis model assumes an aquifer that is uniform over an infinite area and does not account for recharge. Additionally, the well is pumped continuously for the duration of the pumping period.

- (iv) Illustration and/or maps showing the estimated cone of depression; if there is more than one well in the group, tow maps should be included demonstrating:

- i. contours for impacts from pumping the proposed well only, and

Figures 5 and 6 provide maps with contours of modeled drawdown as described above.



- ii. contours for impacts from all wells in the system.

Figures 7 and 8 provide maps with contours of modeled drawdown as described above.

- (b) For well systems, a discussion of the amount or degree of interference that each of the system wells may exert on other system wells.

Again, the wells within Porter SUD's well field have been in operation for many years and the initial interference from the operation of the existing wells has likely already occurred. The wells within Porter SUD's well field are spread out over several miles which helps to reduce the degree of interference. Based on the 94-day simulation, the interference drawdown within the well field can range from about 305 feet to more than 650 feet.

- (c) Discussion of the estimated 24-hour and maximum production scenario well and water system well impacts on existing District registered and permitted wells based on the greater distance of the following: a ½-mile radius of the proposed well or the required well spacing radius of the aquifer based on the maximum production rate of the proposed well and water system wells;

- (i) Results of the impact analysis should be presented in tabular form and include District well registration number, distance from the proposed well, well screened interval, well depth (total), aquifer, drawdown estimate at well based on proposed well pumping for 24 hours and 30 days and drawdown estimate at well based on proposed water system well pumping for 24 hours and 30 days.

There will be a reduction in the artesian pressure (i.e., decline in the local water level) due to proposed Well No. 10, but the aquifer will remain full and under artesian pressure. Table 2 provides an estimated interference drawdown due to the proposed pumpage. Note, that noticeable or measurable reduction in artesian pressure due to the proposed pumping is likely to only occur in the Evangeline aquifer (specifically the lower water-bearing sands of the Evangeline aquifer that are screened as it is hydraulically separated from the upper Evangeline aquifer water-bearing sands, locally) and any effect in overlying aquifers due to leakage will likely be negligible. Therefore, the proposed well is likely to have no effect (e.g., interference drawdown) for any well completed to produce from the Chicot aquifer or wells solely completed in the upper water-bearing sands of the Evangeline aquifer. Also, the modeled drawdown is likely over estimated. As stated earlier, the analytical model does not



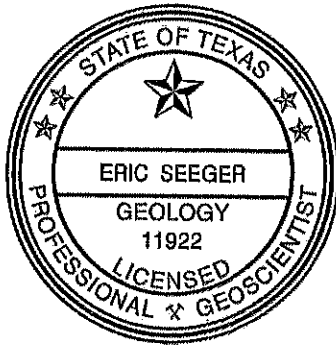
account for recharge to the aquifer, leakage from other formations, or intermittent pumping allowing the water level to recover between pumping periods.

We very much appreciate the opportunity to serve you in our specialty and we look forward to assisting you as this project progresses.

If you have any questions, please call.

Sincerely,
THORNHILL GROUP, INC.

Eric Seeger, P.G.
Senior Hydrogeologist



The seal appearing on this document was authorized by Eric Seeger, P.G. on September 12, 2023.



Attachment 1

Table 2. LSGCD Registered and Permitted Wells within 4,000 Feet of Proposed Well No. and 1/2 Mile of Porter SUD Evangeline Wells

LSGCD ID	Owner Name	Latitude	Longitude	Well (feet)	Distance to		Screen Interval (feet BGL)	Total Depth (feet BGL)	Aquifer	Modeled Drawdown within			Aquifer (feet)	
					Nearest Porter SUD	Top				Bottom	Proposed Well 10			
											1 Day	365 Days		94 Days
2004072805	Porter Special Utility District	30.142133	-95.291872	5,875	TBD	TBD	770	777	Evangeline	363.84	499.05	364.09	556.60	
2004072806	Porter Special Utility District	30.101394	-95.248886	5,249	574	770	777	777	Evangeline	0.00	46.67	229.84	490.59	
2004072802	Porter Special Utility District	30.152225	-95.306386	85	Unkn	Unkn	516	516	Evangeline	0.60	101.44	152.86	302.78	
2004102204	Porter Special Utility District	30.094725	-95.233606	177	670	750	762	762	Evangeline	0.00	37.25	236.40	483.32	
2018122101	Porter Special Utility District	30.116114	-95.251664	5,425	Unkn	Unkn	914	914	Evangeline	0.00	56.92	364.45	614.99	
2015022303	Porter Special Utility District	30.094725	-95.234164	177	630	894	914	914	Evangeline	0.00	37.46	402.56	650.88	
2004072346	Crystal Springs Water (Winchester Place)	30.143889	-95.281389	3,376	378	403	403	403	Evangeline	6.93	126.72	6.94	187.65	
1020047	Montgomery County Mud	30.133969	-95.295876	3,229	406	566	571	571	Evangeline	7.87	128.76	7.91	185.79	
2013040802	Wilson*	30.136944	-95.302500	3,853	Unkn	Unkn	Unkn	Unkn	Unkn*	4.54	120.69	4.85	171.64	
2004072346	Undine Texas, LLC (Lakewood Colony)	30.144722	-95.300278	2,819	330	360	360**	360**	Evangeline	11.11	134.97	14.10	191.64	
2007091902	Cumberland Community Assn	30.134167	-95.288611	3,075	Unkn	Unkn	Unkn	Unkn	Unkn	8.97	130.99	8.98	195.77	
2004041207	Hodges*	30.140000	-95.300000	2,684	Unkn	Unkn	Unkn	Unkn	Unkn*	12.42	137.22	13.13	191.20	
2014031801	Jaramillo*	30.140000	-95.300000	2,684	170	190	190	190	Chicot*	12.42	137.22	13.13	191.20	
2015061204	Marguina	30.142778	-95.282778	2,884	240	250	260	260	Chicot	10.53	133.93	10.54	195.43	
2006110907	Isom	30.142221	-95.290001	594	135	155	165	165	Chicot	71.66	206.30	71.81	264.56	
2005022413	Christlich*	30.144834	-95.297117	1,924	Unkn	Unkn	320**	320**	Evangeline*	22.92	152.45	24.61	208.81	
2013102101	GRAY*	30.141111	-95.298889	2,247	170	190	190	190	Chicot*	17.70	145.35	18.57	200.31	
2005022801	Christlich*	30.145000	-95.296944	1,910	210	220	220	220	Evangeline*	23.19	152.80	24.88	209.17	
2011050502	Gutierrez (La Panza Feliz Meat Market)	30.105278	-95.244722	1,933	Plugged	Plugged	Plugged	Plugged	Evangeline	0.00	46.79	18.43	284.20	
2007030102	Campbell Concrete & Materials, LP (Porter)	30.103948	-95.243752	1,873	Unkn	Unkn	Unkn	Unkn	Chicot	0.00	45.64	19.39	285.44	
2007021304	Campbell Concrete & Materials, LP (Porter)	30.104432	-95.243666	1,989	Unkn	Unkn	Unkn	Unkn	Chicot	0.00	45.84	17.96	283.72	
2009101302	perez	30.104723	-95.250275	1,286	80	100	100	100	Chicot	0.00	49.25	27.84	289.92	
2009090802	Schwendeman	30.092222	-95.231667	1,100	165	175	210	210	Chicot	0.00	35.58	54.56	288.38	
2005101702	Hernandez	30.088333	-95.231392	2,429	240	250	250	250	Chicot	0.00	34.01	19.26	235.07	
2014022007	Gregory	30.147222	-95.302500	2,197	375	390	390	390	Chicot	4.63	120.92	12.34	181.47	
2012040903	Lozano	30.152222	-95.309722	966	190	200	200	200	Chicot	0.22	95.27	19.78	160.92	
2004090301	Chavarria	30.155278	-95.312222	2,078	Unkn	Unkn	Unkn	Unkn	Chicot	0.04	87.35	8.05	135.94	
2005080908	Koehler	30.151944	-95.306111	136	256	266	266	266	Chicot	0.69	102.49	58.69	209.94	
2012030901	Martinez	30.152778	-95.308333	564	200	210	210	210	Chicot	0.30	96.96	28.78	172.55	
2007031201	Luce	30.154167	-95.305832	728	200	220	220	220	Chicot	0.41	98.90	26.61	172.87	
2011051006	Danley	30.152222	-95.307222	176	160	180	180	180	Chicot	0.47	99.87	46.06	193.92	
2009020401	Wind	30.107779	-95.251389	2,452	Unkn	Unkn	Unkn	Unkn	Unkn	0.00	51.66	18.83	280.21	
2013030402	Currier	30.156667	-95.306667	1,616	360	380	380	380	Chicot	0.15	93.12	12.41	149.61	

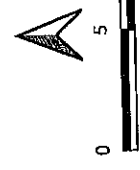
Table 2. LSGCD Registered and Permitted Wells within 4,000 Feet of Proposed Well No. and 1/2 Mile of Porter SUD Evangeline Wells

LSGCD ID	Owner Name	Latitude	Longitude	Distance to Nearest Porter SUD Well (feet)	Screen Interval (feet BGL)		Total Depth (feet BGL)	Aquifer	Modeled Drawdown within Proposed Well 10			Aquifer (feet)	
					Top	Bottom			1 Day	365 Days	1 Day		34 Days
					Unkn	Unkn			0.00	35.80	60.71		296.33
2005082201	Johnson	30.093333	-95.231111	940	200	210	210	Chicot	0.00	35.80	60.71	296.33	
2005080909	Koehler	30.154444	-95.310278	1,399	256	274	274	Chicot	0.10	91.33	13.93	148.85	
2005031518	Luce*	30.154167	-95.305278	790	Unkn	Unkn	Unkn	Chicot	0.47	99.81	25.19	172.60	
2010120901	Allison	30.152222	-95.308889	702	130	140	140	Chicot	0.29	96.78	25.06	168.50	
2014072102	Mayoral Trucking LLC/Otoniel	30.097778	-95.227222	2,307	Unkn	Unkn	Unkn	Chicot	0.00	35.98	20.03	245.69	
2015071302	Hester	30.154444	-95.311389	1,697	183	189	191	Chicot	0.07	89.62	10.90	142.87	
2015102603	Ahmed	30.156389	-95.313056	2,525	205	225	225	Chicot	0.02	84.86	5.63	128.80	
2015121401	Fuller	30.154444	-95.308333	965	Never Drilled			Chicot	0.19	94.38	20.40	160.23	
2016022202	Gutierrez	30.153889	-95.299167	2,364	200	210	210	Chicot	1.75	110.13	8.49	166.43	
2018013005	Fuller	30.154444	-95.309444	1,193	Void - Withdrawn			Chicot	0.14	92.63	16.57	153.65	
2018022201	Acacia Originals	30.154444	-95.308889	1,071	Unkn	Unkn	Unkn	Chicot	0.16	93.50	18.47	156.94	
2018090902	Texcon Ready Mix	30.148333	-95.300278	2,397	Unkn	Unkn	Unkn	Evangeline	6.32	125.31	12.89	185.18	
2019012403	Luce	30.153611	-95.310556	1,329	Void - Withdrawn			Chicot	0.12	92.01	14.64	150.67	
2019030501	Rawls	30.152778	-95.311389	1,506	180	200	200	Chicot	0.11	91.69	12.64	147.98	
2020042201	Walker	30.111389	-95.250278	1,775	280	300	300	Chicot	0.00	53.20	29.25	289.70	
2021032603	Olvera	30.158333	-95.307500	2,238	170	190	190	Chicot	0.07	89.23	7.47	137.88	
2021040902	Figueroa	30.153611	-95.313056	2,082	120	160	160	Chicot	0.05	88.06	7.97	136.96	
2021041205	Mendez Delgado	30.153611	-95.310556	1,329	120	160	160	Chicot	0.12	92.01	14.64	150.67	
2021112401	Ramirez	30.158056	-95.306667	2,122	165	175	175	Evangeline	0.09	90.70	8.28	141.11	
2022081607	Bowman	30.157222	-95.305833	1,826	Plugged			Chicot	0.15	93.22	10.53	147.53	

Notes: TBD is To Be Determined; Unkn is Unknown; Asterisk (*) indicates the well is likely mislocated and therefore the aquifer may be misidentified; Double Asterisk (**) indicates depth is estimated by LSGCD; Modeled drawdown is the interference drawdown within the Evangeline aquifer (specifically hydraulically, locally connected water-bearing sands) at that point and does NOT indicate the interference drawdown that a well completed in a different aquifer (e.g., Jasper or Chicot) will experience; See Table 1 for pumping rates.

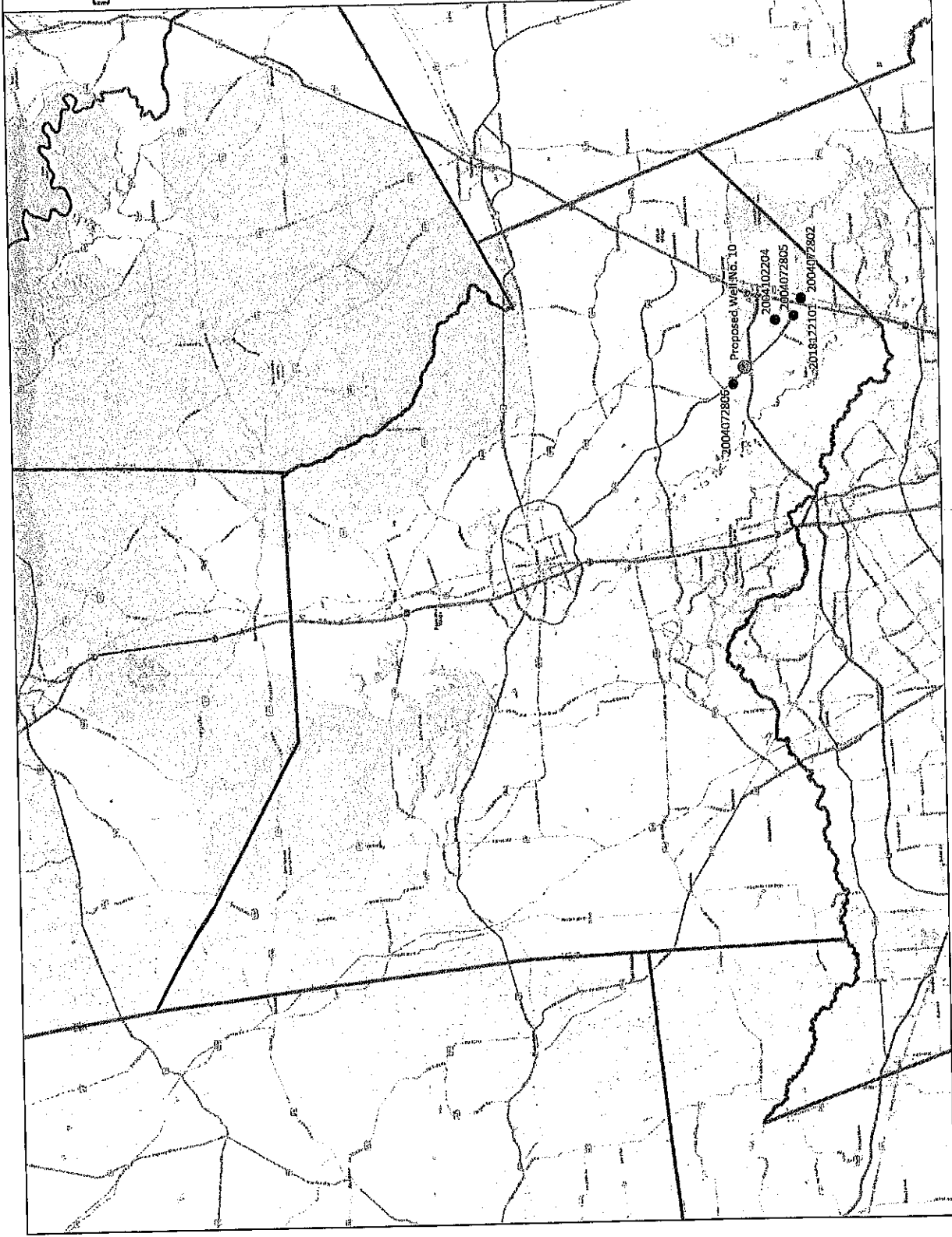
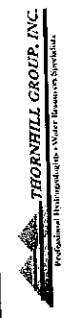
Explanation

- Porter SUD Well
- ⊙ Proposed Well No. 10
- ▭ County Boundary



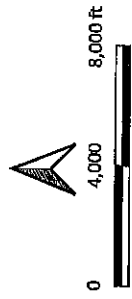
Porter SUD

Figure 1:
Location Map



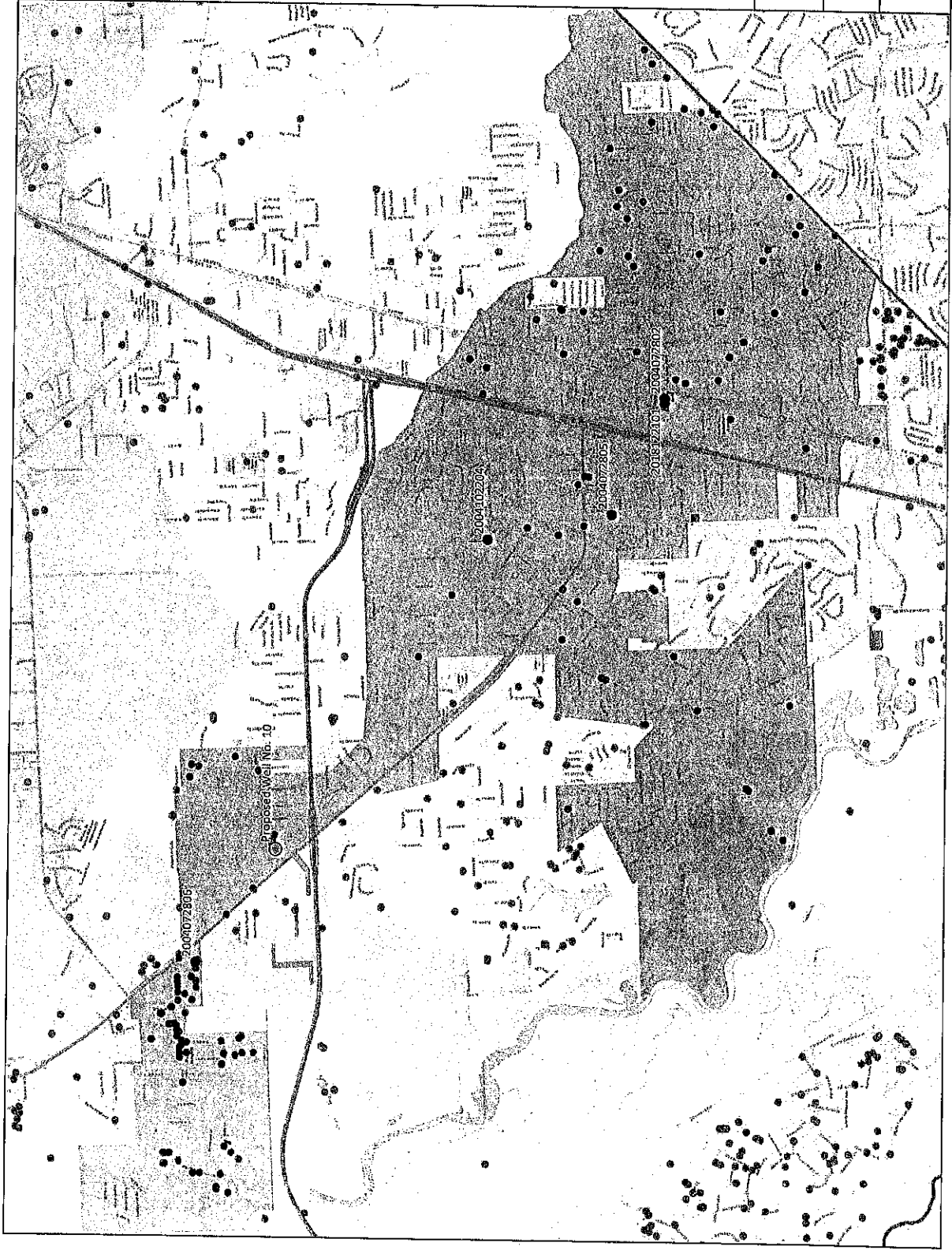
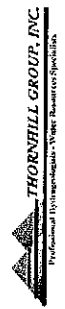
Explanation

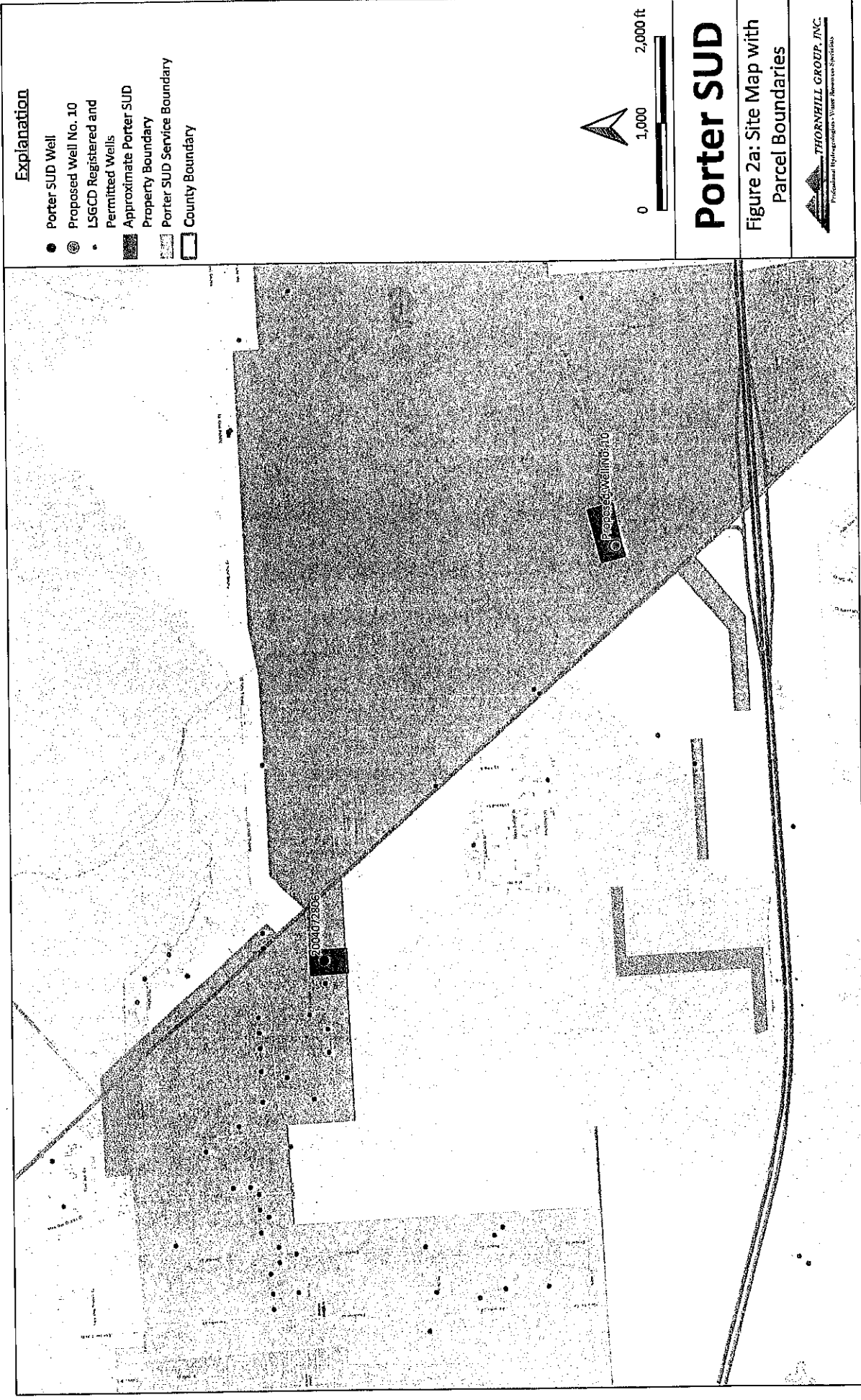
- Porter SUD Well
- ⊙ Proposed Well No. 10
- LSGCD Registered and Permitted Wells
- ▨ Porter SUD Property Boundary
- ▨ Porter SUD Service Boundary
- ▭ County Boundary



Porter SUD

Figure 2:
Site Map





Explanation

- Porter SUD Well
- ⊙ Proposed Well No. 10
- LSGCD Registered and Permitted Wells
- Approximate Porter SUD Property Boundary
- ▨ Porter SUD Service Boundary
- County Boundary



0 1,000 2,000 ft

Porter SUD

Figure 2a: Site Map with Parcel Boundaries



Legend

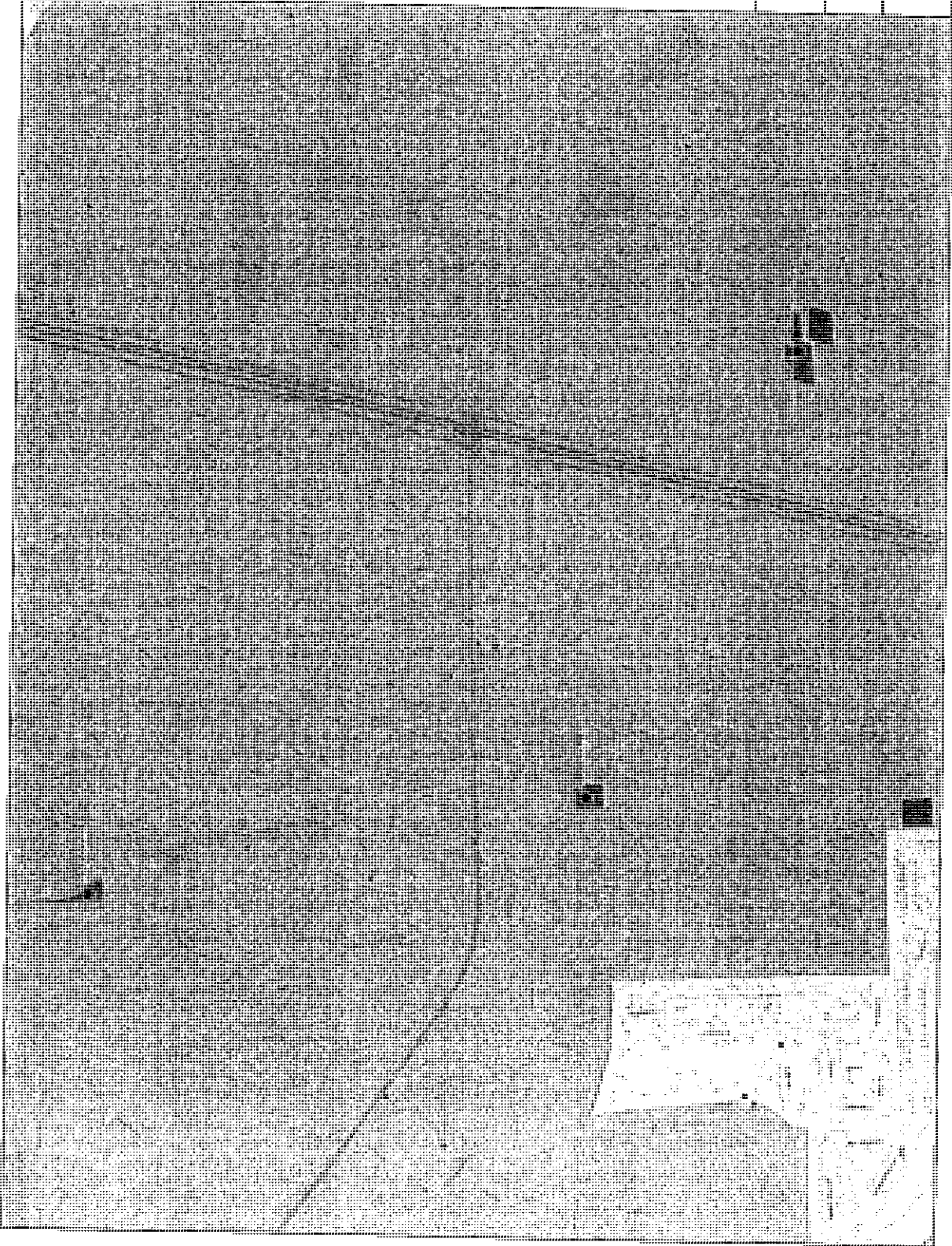
- Porter SUDs Unit
- USACE Regulated Area
- Proposed Wetlands
- Proposed Reservoir
- Proposed Boundary
- Porter SUD Service Boundary
- County Boundary



0 1,000 2,000
Feet

Porter SUD

Figure 2b: Site Maps with
Proposed Boundaries



Explanation

- Proposed Feme Well
- Porter SUD Well

Surface Geology

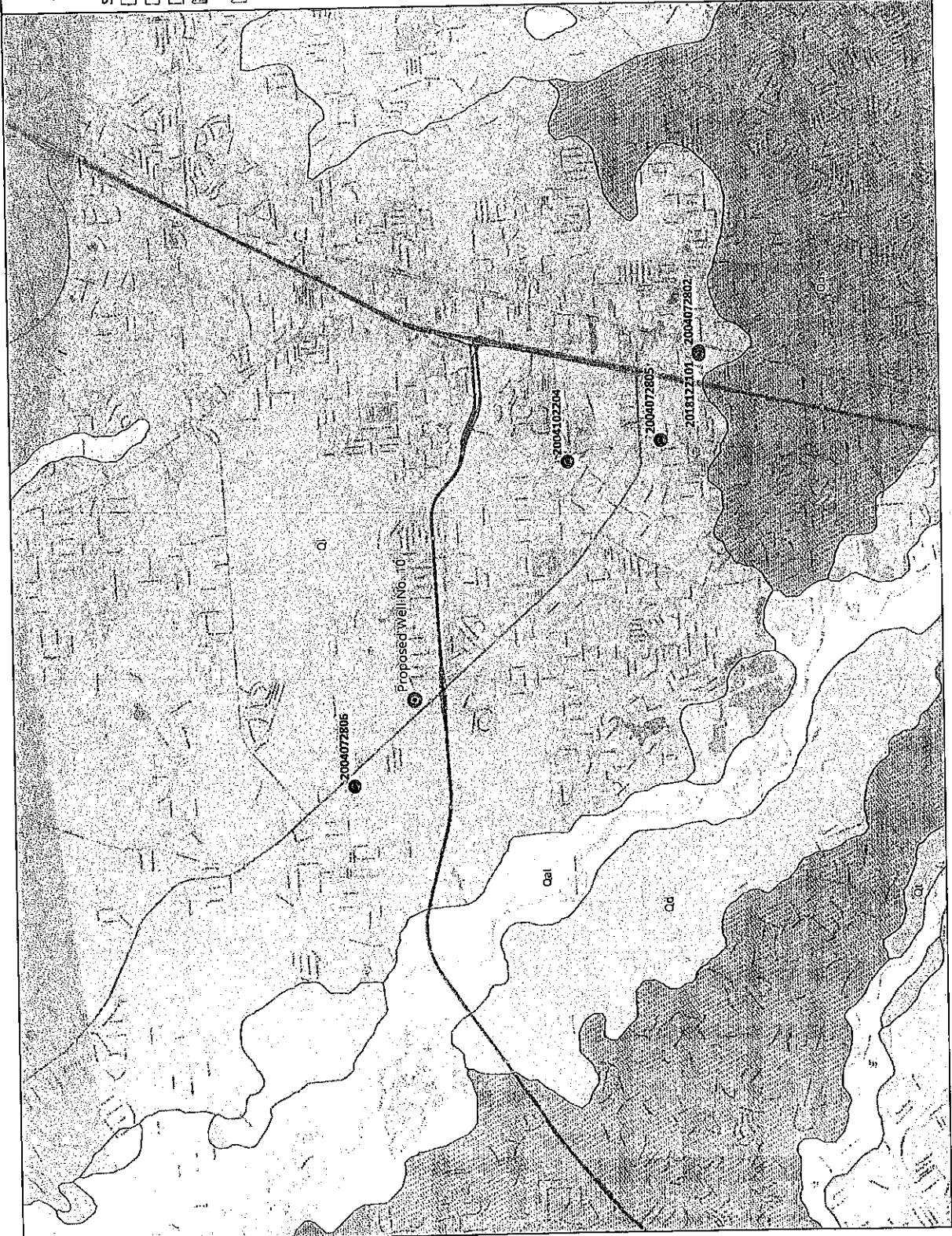
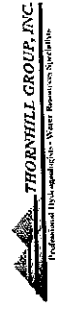
- Qal - Alluvium
- Qd - Deweyville Formation
- Qt - Fluvial/Terrace Deposits
- Obs - Beaumont Formation (Dominantly Sand)
- Ql - Lissie Formation



0 1 2 mi

Porter SUD

Figure 3: Surface Geology



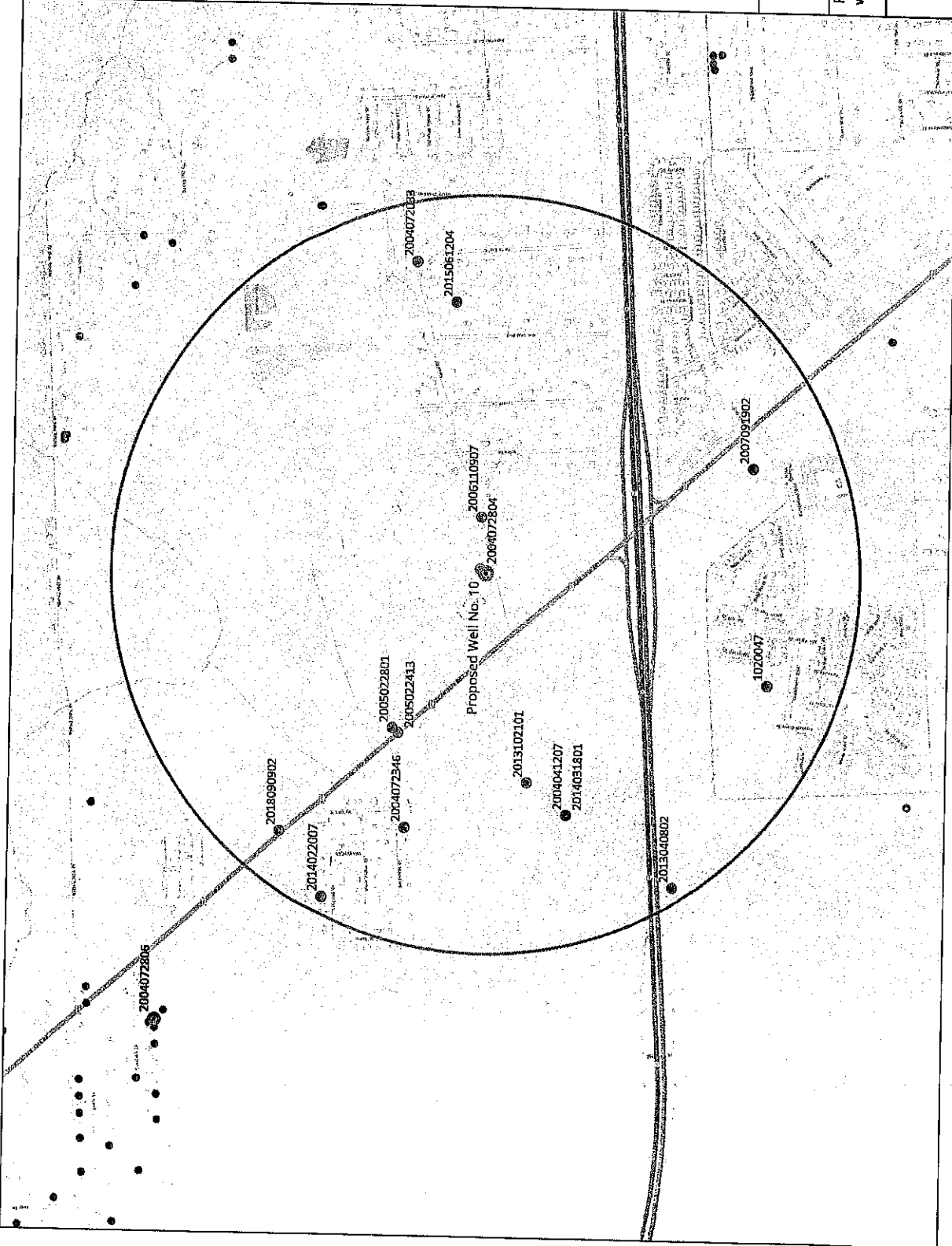
Explanation

- Proposed Feme Well
- System_Wells
- LSGCD Registered Wells
- Operating
- Plugged
- LSGCD Registered and Permitted Wells
- 4,000-Foot Buffer



Porter SUD

Figure 4: Registered and Permitted Wells within a 4,000-Foot Radius of Porter SUD Proposed Evangeline Well No. 10



Explanation

- Proposed Ferme Well
- System Wells
- LSGCD Registered and Permitted Wells
- Modeled Drawdown in Feet
- Contour Interval = 10 Feet

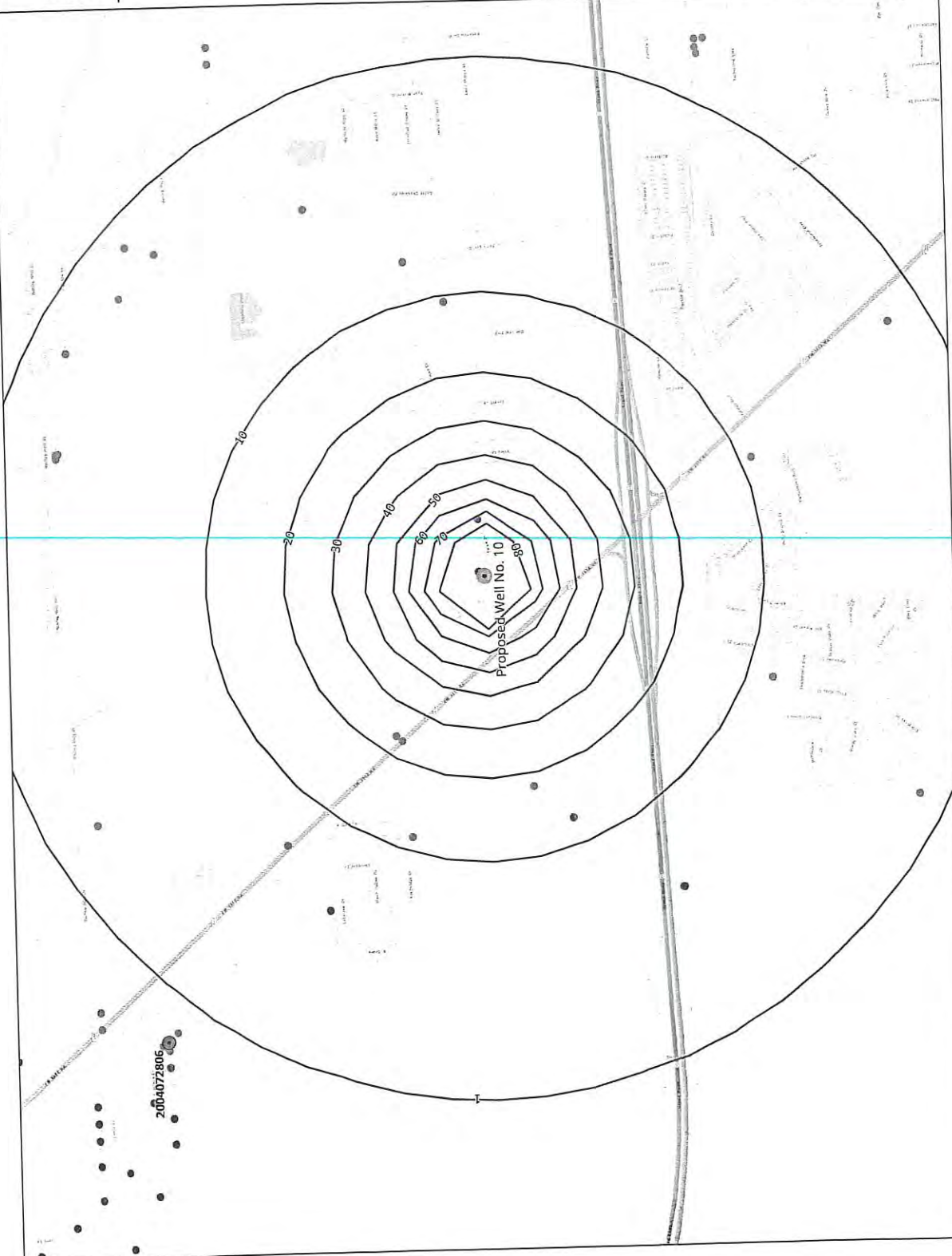


0 1,000 2,000 ft

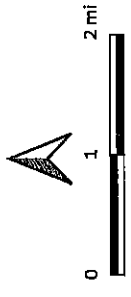


Porter SUD

Figure 5: Modeled Drawdown
Well No. 10, 1 Day

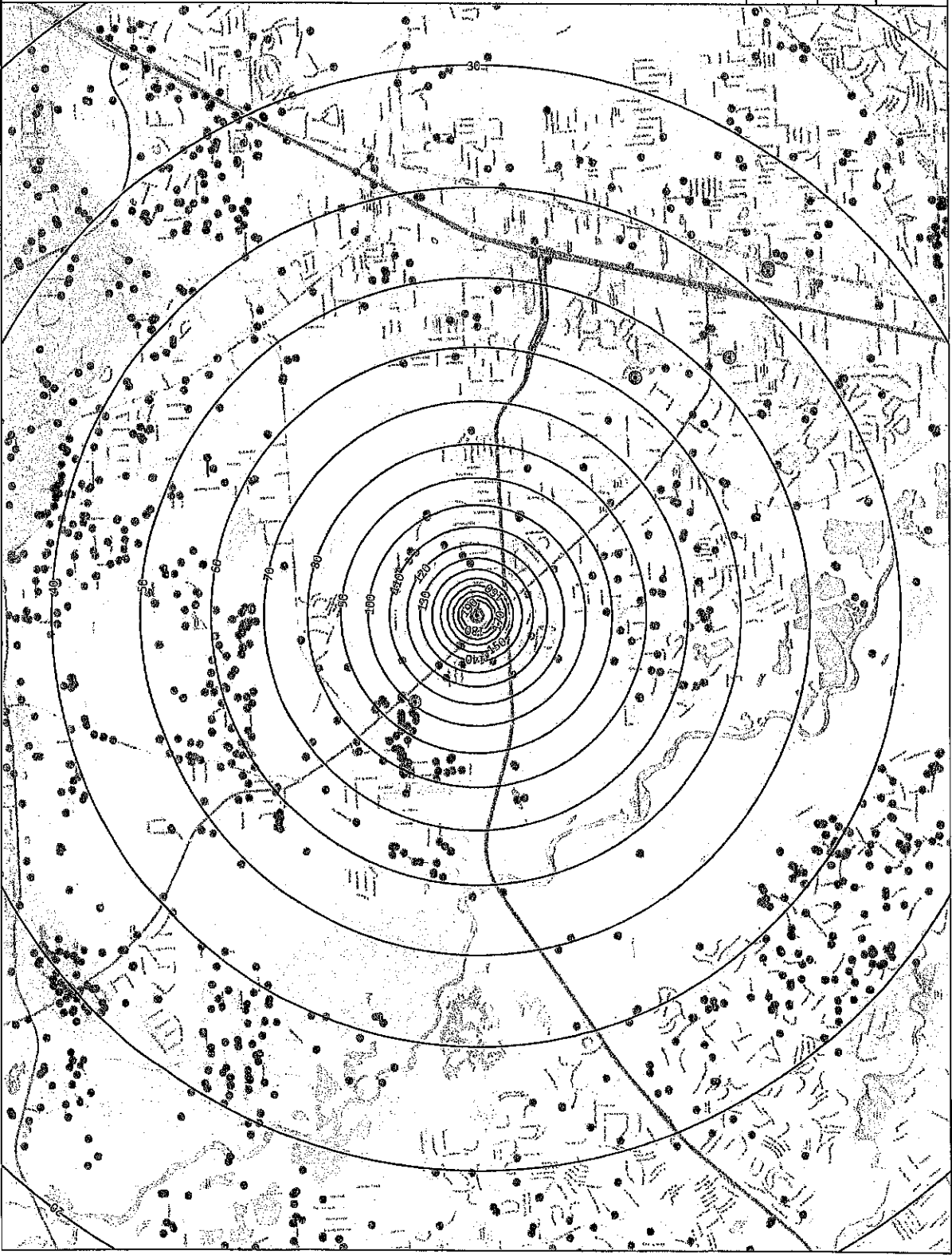


- Explanation**
- Proposed Ferne Well
 - System_Wells
 - LSGCD Registered and Permitted Wells
 - Modeled Drawdown in Feet
 - Contour Interval = 10 Feet



Porter SUD

Figure 6: Modeled Drawdown
Well No. 10, 365 Day





Explanation

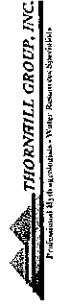
- Proposed Ferns Well
- System Wells
- LSGCD Registered and Permitted Wells
- Modeled Drawdown in Feet
- Contour Interval = 10 Feet



0 4,000 8,000 ft

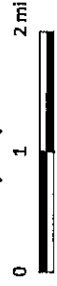
Porter SUD

Figure 7: Modeled Drawdown
Well Field, 1 Day



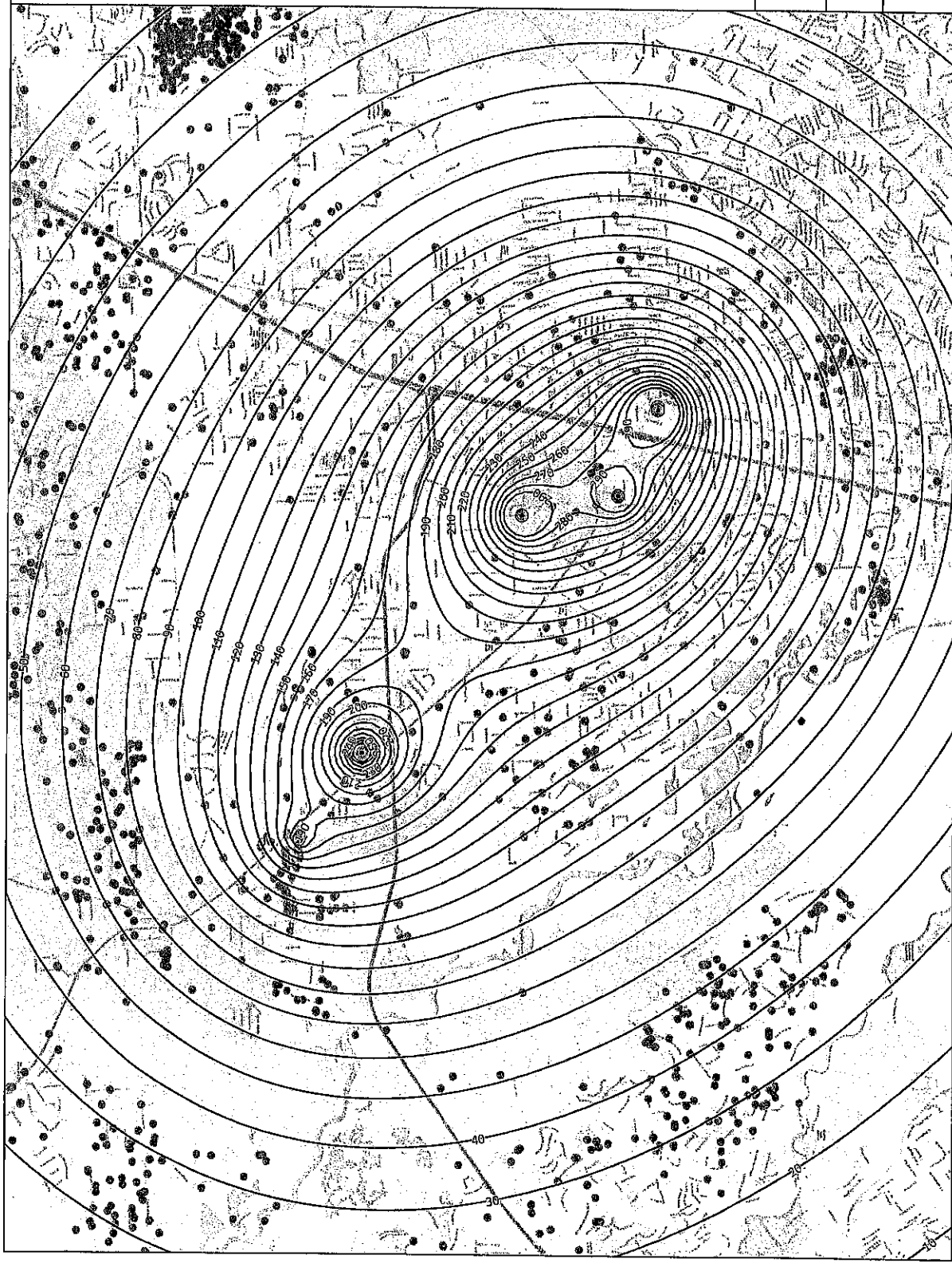
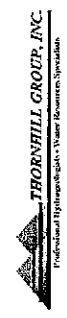
Explanation

- Proposed Feme Well
- System Wells
- LSGCD Registered and Permitted Wells
- Modeled Drawdown in Feet
- Contour Interval = 10 Feet

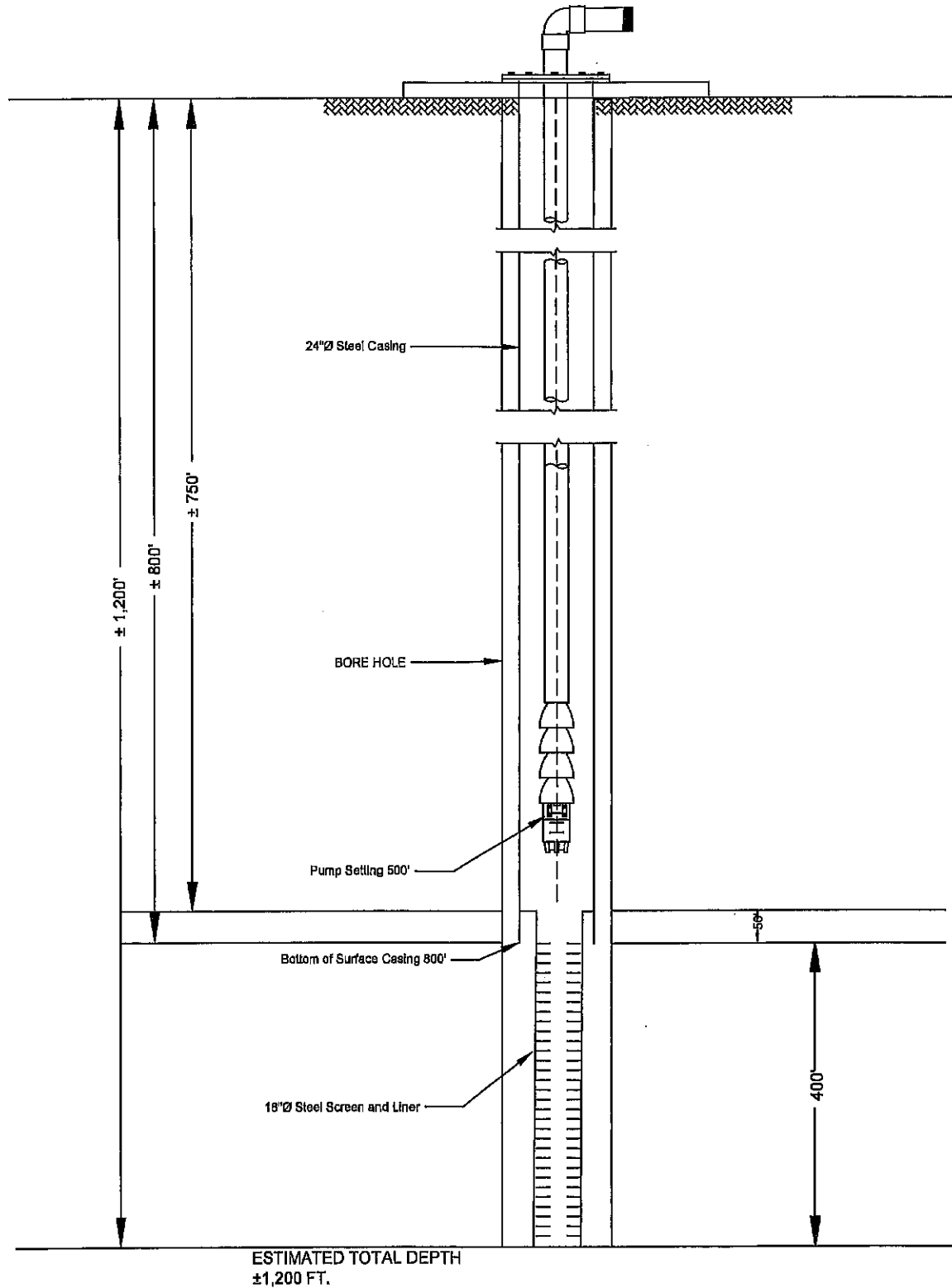


Porter SUD

Figure 8: Modeled Drawdown
Well Field, 94 Day



Porter SUD Well No. 10 Schematic Well Diagram





Well Logging Service

Electric Log

COMPANY LANFORD DRILLING COMPANY, INC.
 WELL PORTER WATER SUPPLY CORPORATION
 NO. - 2
 FIELD WATER WELL
 COUNTY MONTGOMERY STATE TEXAS

Location
4 MILES N/W - PORTIER
 Sec. _____ Twp. _____ Rge. _____

Type Log
E. S.

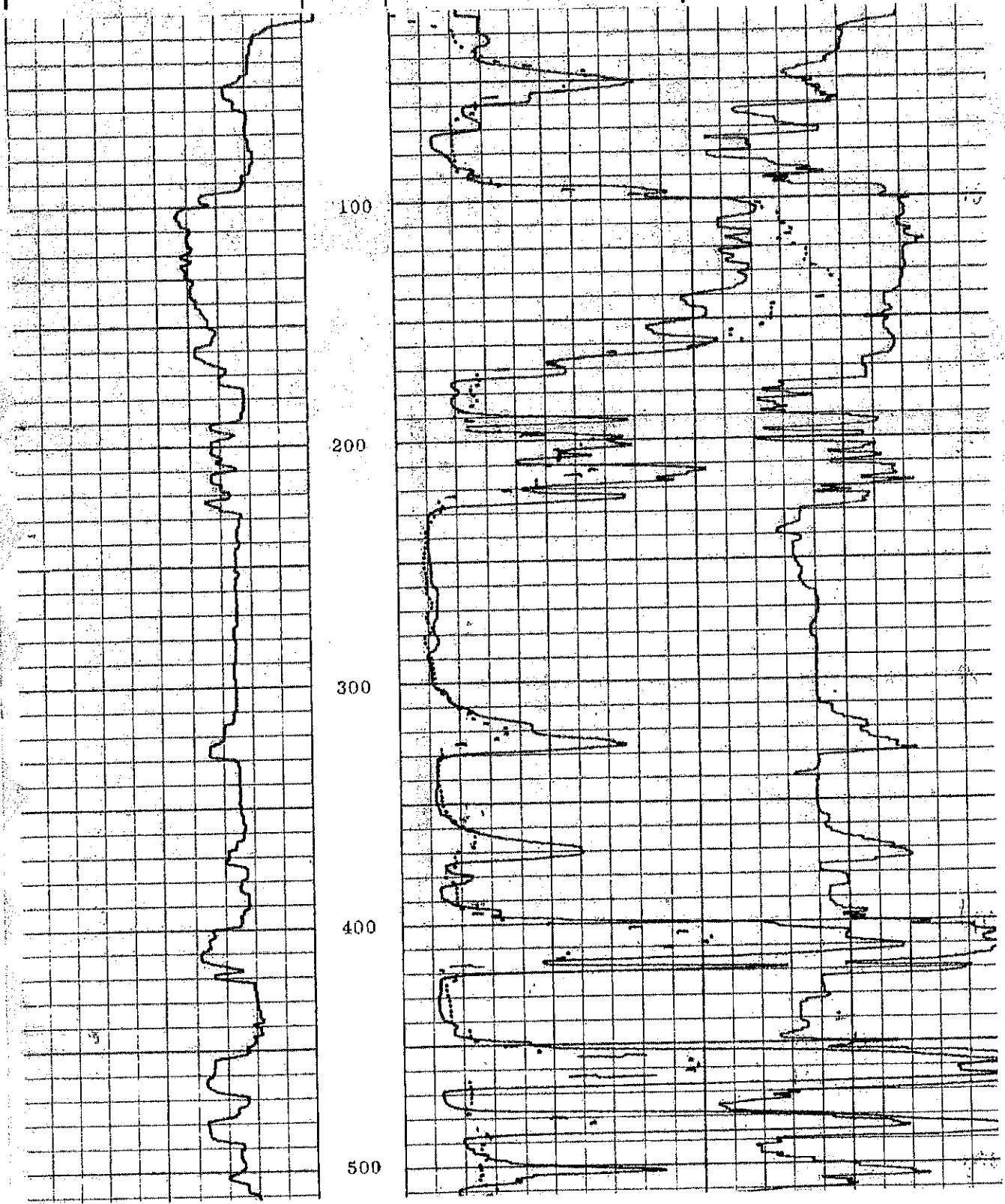
Permanent Datum G. L. Elev. _____
 Log Measured From B. T. 5' Ft. Above Perm. Datum
 Drilling Measured From B. T. 5'

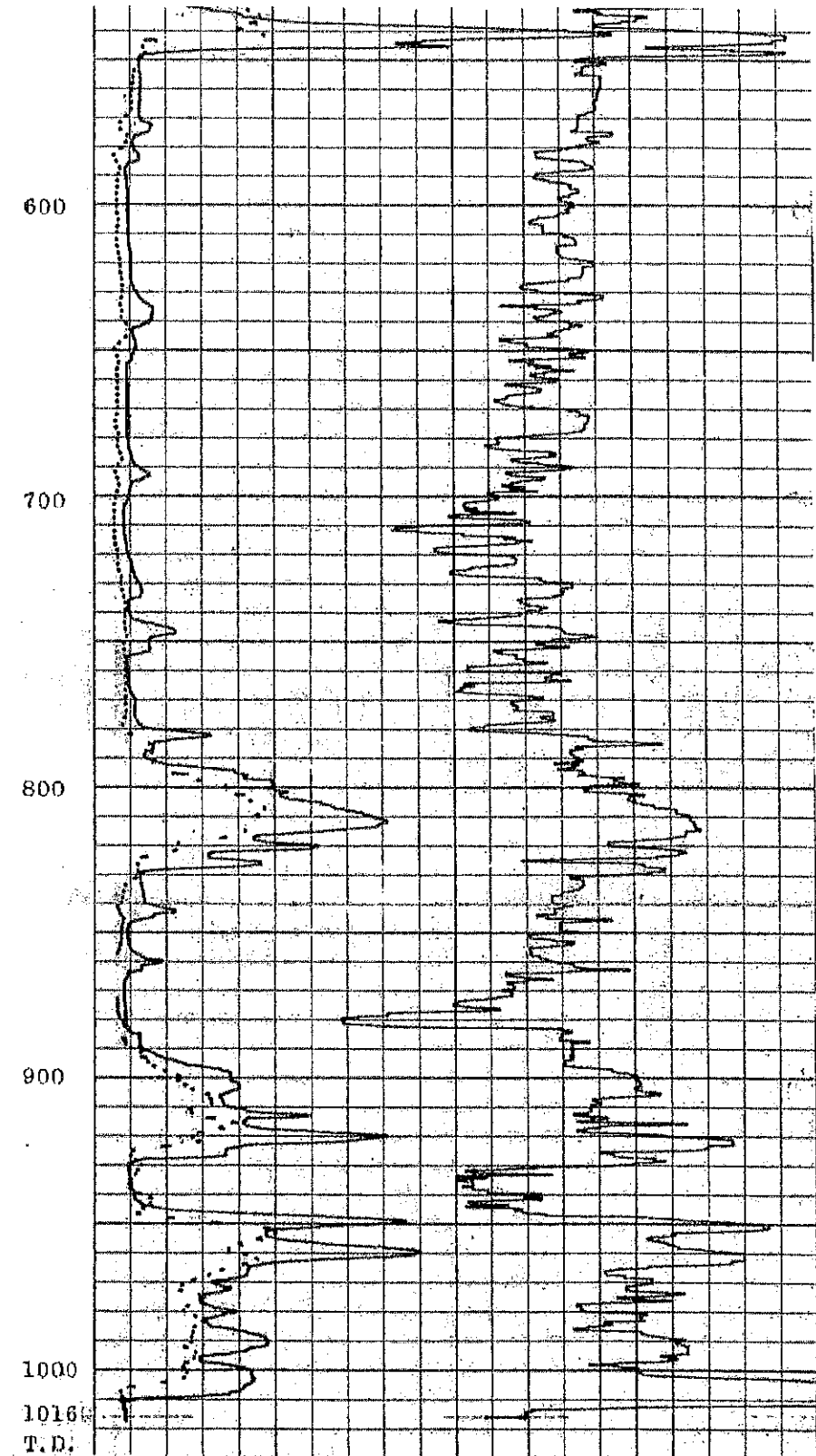
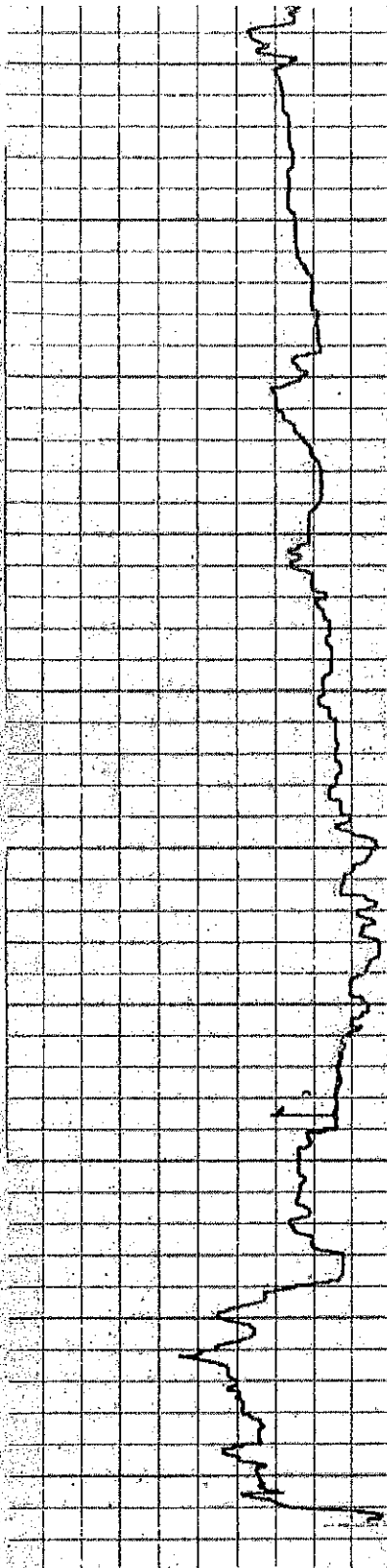
Elev. K. B.
D. F.
G. L.

Date	6-27-80				
Run No.	ONE				
Depth - Driller	1017'				
Depth - Logger	1016'				
Btm. Log Inter.	1016'				
Top Log Inter.	SURFACE				
Casing - Driller	⊙			⊙	⊙
Casing - Logger				⊙	⊙
Bit Size	7-7/8"				
Type Fluid in Hole	NATIVE				
Dens.	Visc.				
pH	Fluid Loss			ml	ml
Source of Sample					
Rm. a Meas. Temp.	⊙	°F	⊙	°F	⊙
Rmf a Meas. Temp.	⊙	°F	⊙	°F	⊙
Rmc a Meas. Temp.	⊙	°F	⊙	°F	⊙
Source Rmf	Rmc				
Rm. a BHT	⊙	°F	⊙	°F	⊙
Time Since Circ.					
Max. Rec. Temp.					
Equip. Location					
Recorded By <u>M. A. LARGENT</u>					
Witnessed By <u>B. FURR</u>					

REMARKS

SELF-POTENTIAL millivolts		RESISTIVITY ohms m ² /m	
-	100	+	
		0	16" AM 50
		0	64" AMN 50
			SPR
			50 OHMS





600

700

800

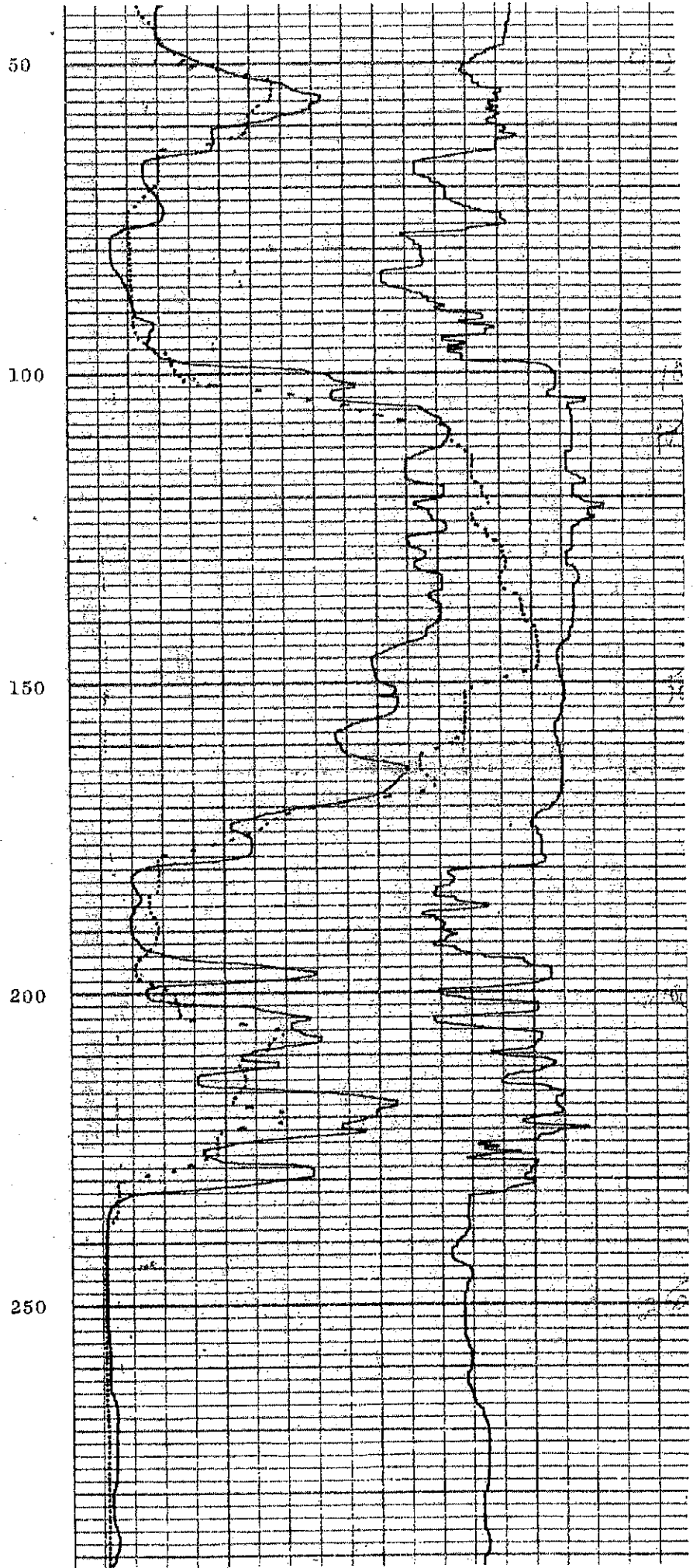
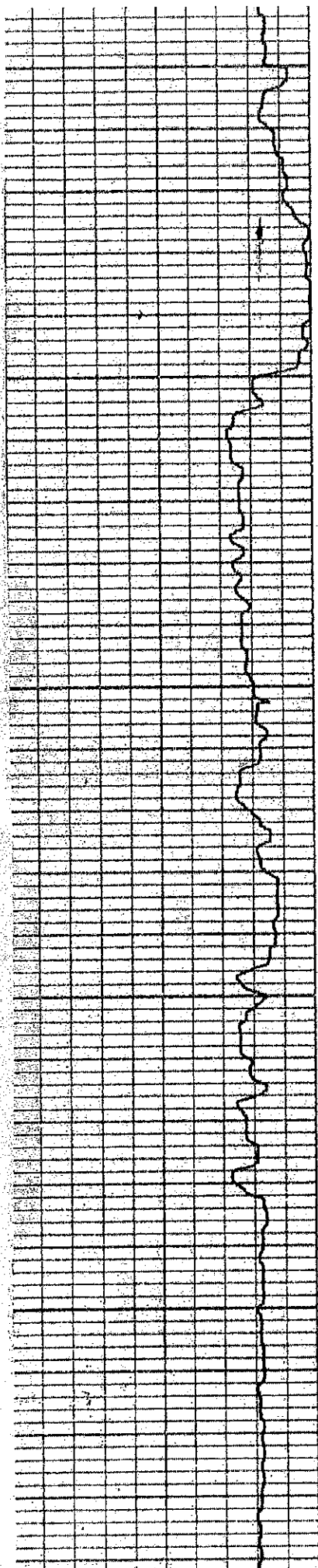
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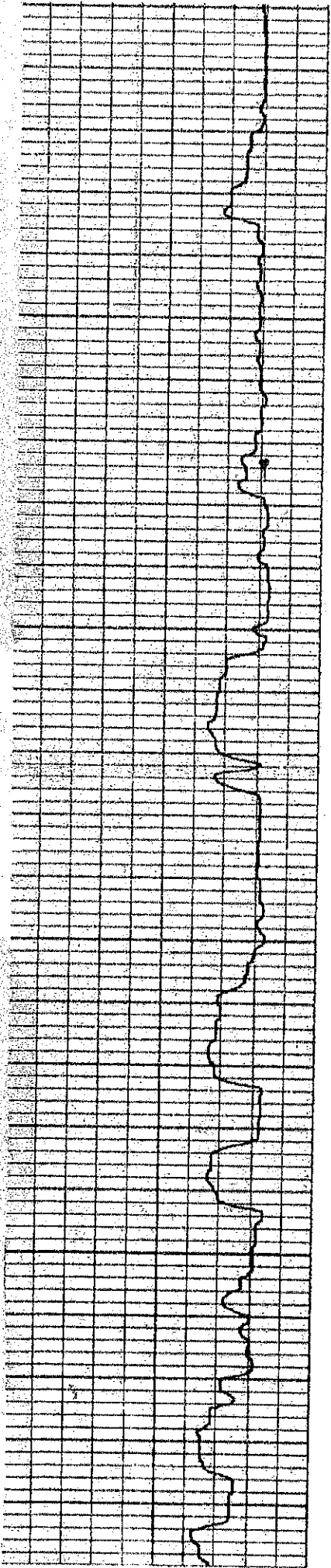
1000

1016

T.D.

SELF-POTENTIAL millivolts		RESISTIVITY ohms m ² /m	
-	100	0	50
	+	16" AM	SPR
		64" AMN	50 OHMS





300

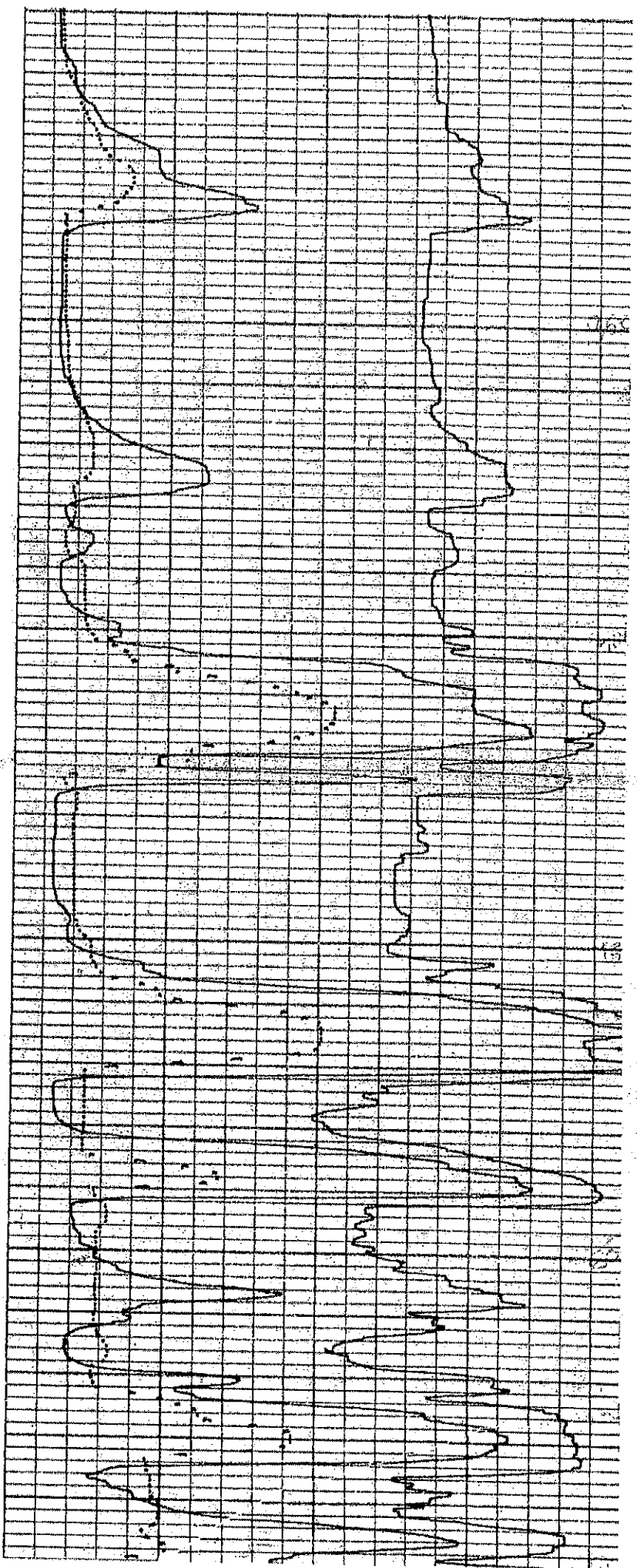
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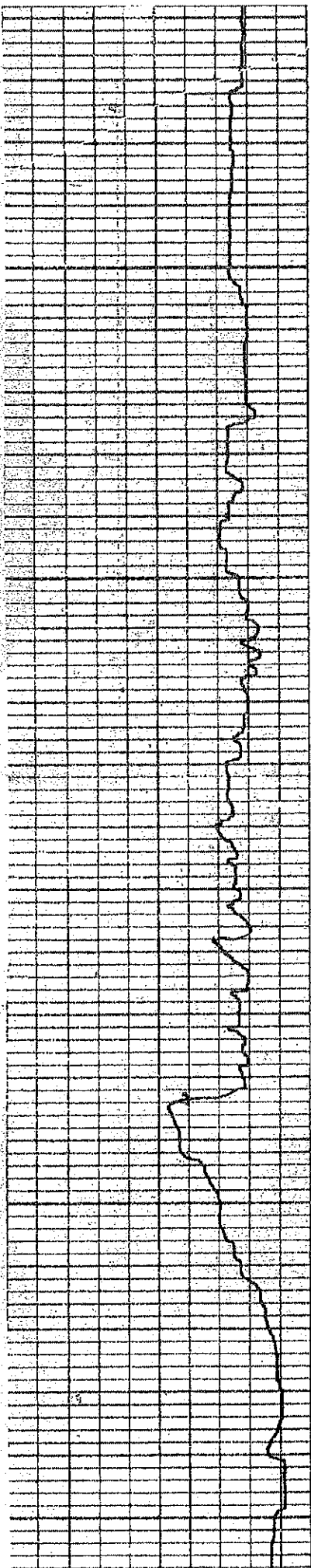
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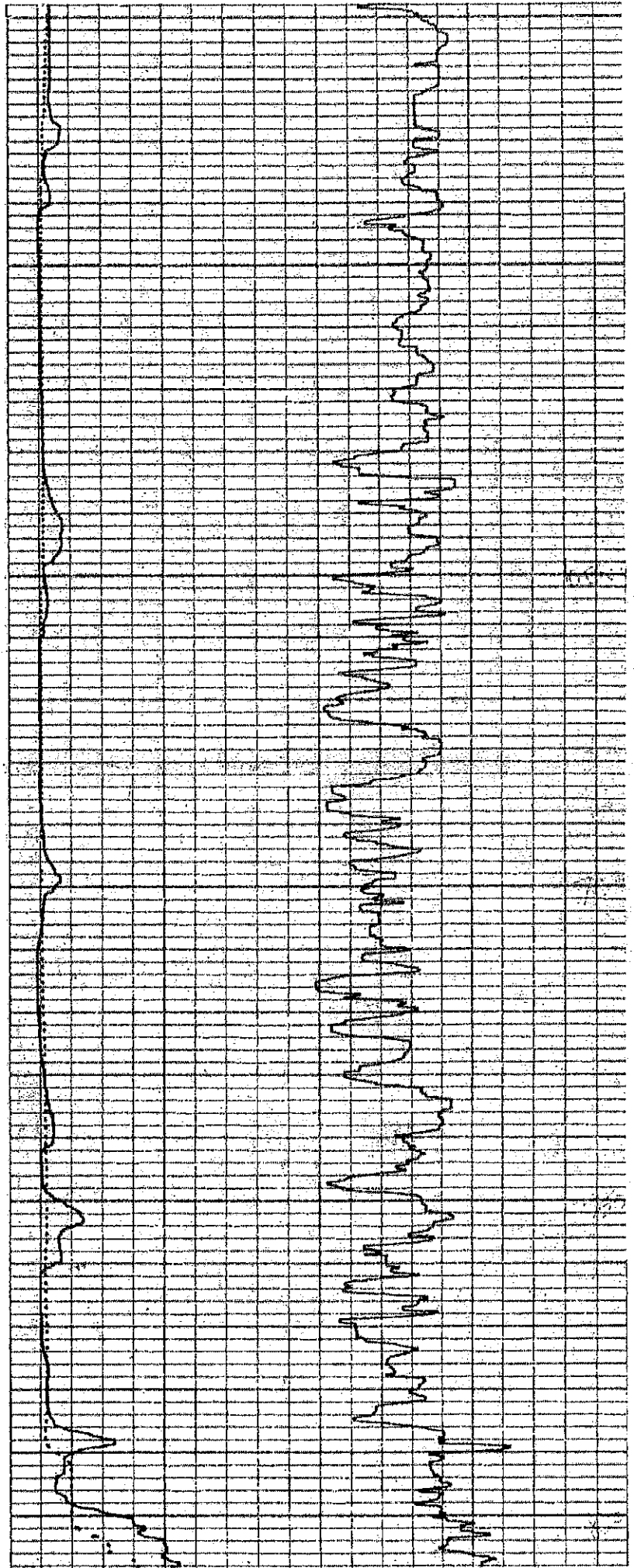
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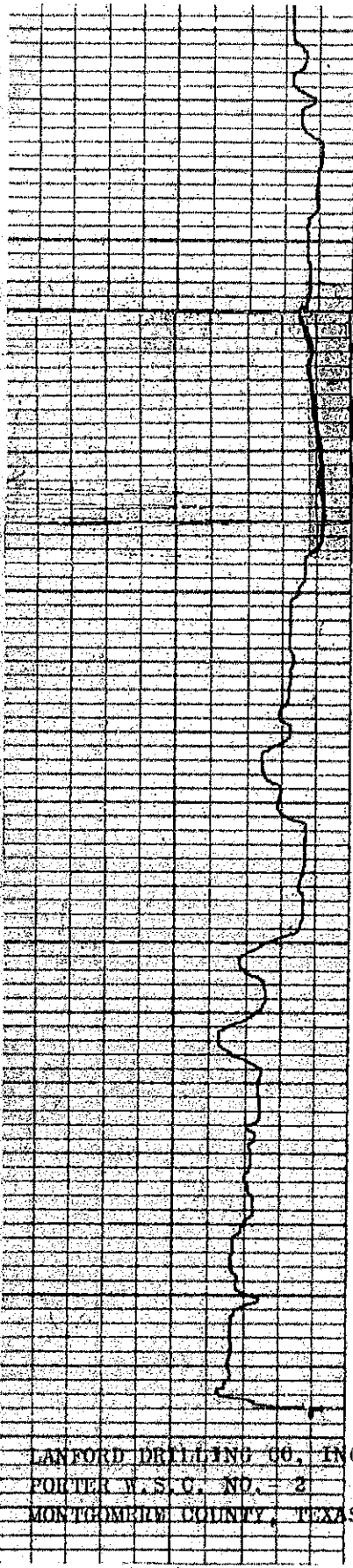
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700

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800





850

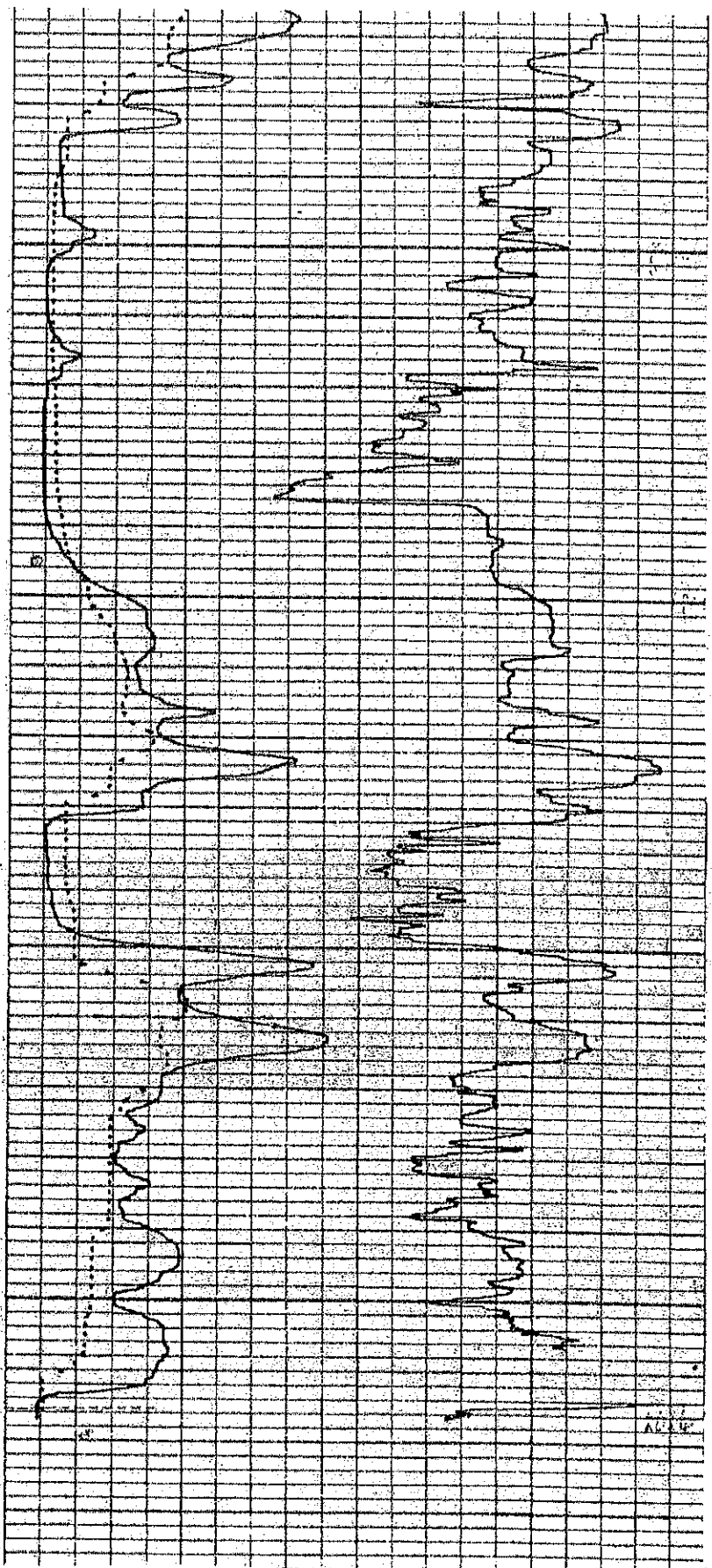
900

950

1000

1016
T.D.

LANFORD DRILLING CO., INC.
FOURIER W.S.C. NO. - 2
MONTGOMERY COUNTY, TEXAS



ALUE

**LONE STAR
GROUNDWATER CONSERVATION DISTRICT
November 14, 2023
MINUTES OF NOTICE OF RULEMAKING HEARING**

The Board of Directors of the Lone Star Groundwater Conservation District ("District") met in regular session, open to the public and held in person in the Lone Star GCD – James B. "Jim" Wesley Board Room located at 655 Conroe Park North Drive, Conroe, Texas, and remotely via the publicly accessible webinar/telephone conference call within the boundaries of the District on December 1, 2023

1. Call to Order:

President Spigner presided and called to order the Notice of Rulemaking Hearing at 6:04 PM, announcing that it was open to the public.

2. Roll Call:

The roll was called of the members of the Board of Directors, to wit:

Jim Spigner
Stuart Traylor
Janice Thigpen
Jonathan Prykryl
Jon Paul Bouché
Garry Dent

Six members of the Board were present, thus constituting a quorum of the Board of Directors. In attendance at said meeting were Sarah Kouba, Kirstin Hein, Justin Saenz and Stacey V. Reese, District Counsel, and members of the public. *Copies of the public sign-in sheets and comment cards received are attached hereto as Exhibit "A".*

3. Discussion of proposed amendment to the District Rules

Ms. Reese explained that the district received one comment on the rule for allowing someone to petition for rule changes, which the board approved for publication at the last meeting. The comment suggested removing the requirement for individuals to explain why they want a rule and how it will affect them if the rule is not adopted. However, Ms. Reese recommended not making any changes in response to this comment, as she believed that the reasons for wanting a rule and the potential impact were important information for the board to consider when deciding whether to adopt the proposed rule. She also noted the December 1st deadline for adopting the rule to comply with the legislative mandate.

4. Public comment on proposed changes to the District Rules

No public comment was given.

5. Discussion, consideration, and possible action approving amendments to the District Rules

Vice President Traylor moved to adopt the proposed rule as is, Treasurer Prykryl seconded the motion. No discussion, President Spigner called for a voice vote, motion carried to adopt the proposed rule as is.

6. Adjourn:

Vice President Traylor moved to adjourn, Director Bouché seconded the motion, President Spigner called for a vote to adjourn, motion carried. The Notice of Rulemaking hearing adjourned at 6:07 PM

PASSED, APPROVED, AND ADOPTED THIS 9th DAY OF JANUARY 2024.

Janice Thigpen, Board Secretary

LONE STAR GROUNDWATER CONSERVATION DISTRICT

December 12, 2023

MINUTES OF REGULAR MEETING

The Board of Directors of the Lone Star Groundwater Conservation District (“District”) met in regular session, open to the public and held in person in the Lone Star GCD – James B. “Jim” Wesley Board Room located at 655 Conroe Park North Drive, Conroe, Texas, and remotely via the publicly accessible webinar/telephone conference call within the boundaries of the District on December 12, 2023.

CALL TO ORDER:

President Spigener presided and called to order the regular Board of Directors meeting at 6:07 PM, announcing that it was open to the public.

ROLL CALL:

The roll was called of the members of the Board of Directors, to wit:

Jim Spigener
Janice Thigpen
Jonathan Prykryl
Kennith Earnest
Garry Dent

Five members of the Board were present, thus constituting a quorum of the Board of Directors. In attendance at said meeting were Sarah Kouba, General Manager; Kirstin Hein Permitting Director, Justin Saenz, Education & Conservation Coordinator; Stacey V. Reese, District Counsel via Zoom; and members of the public. *Copies of the public sign-in sheets and comment cards received are attached hereto as Exhibit "A".*

PUBLIC COMMENTS:

No public comments were made, one public comment was submitted via email and placed in the Board’s packet.

APPROVAL OF THE MINUTES:

President Spigener stated the Board would consider the meeting minutes as listed for approval on today’s agenda. Without further discussion, Treasurer Prykryl moved to approve the

meeting as presented, Director Dent seconded the motion. President Spigner called for a voice vote, motion passed to approve the meeting minutes as presented.

- November 14, 2023, Hearing on Permit and Permit Amendment Applications
- November 14, 2023, Regular Meeting
- December 1, 2023 Special Meeting

COMMITTEE REPORTS:

A. Executive Committee

- 1) Brief the Board on the Committee's activities since the last regular Board meeting. Nothing to report.

A. Budget & Finance Committee

- 1) Brief the Board on the Committee's activities since the last regular Board meeting. Treasurer Prykryl stated the budget committee has prepared a budget for FY 24. Ms. Kouba gave the unaudited financial report:
 - i. Total income for November 2023: \$295,147.15
 - ii. 2024 invoice amount: \$1,618,404.10
 - iii. Gross profit: \$1,913,551.25
 - iv. November 2023 expenses: \$143,638.72
 - v. Net ordinary income: \$1,769,912.53
 - vi. Net income for November 2023: \$151,508.43
 - vii. Year-to-date net income as of November 30th: \$1,968,196.72
 - viii. Total cash as of November 30th: \$6,500,371.55

- 2) Discuss, consider, and possible action regarding approval of Resolution #23-007 adopting FY 2024 Operating and Capital Outlay Budgets. The recommendation is to table Resolution 23-007, which adopts the fiscal year 2024 budget as is. The Budget Committee has been unable to meet and discuss proposed suggestions for the budget due to illness and external circumstances. The proposed budget amendments will be reviewed with the Budget Committee, and a recommendation for budget amendment will be made at the January meeting.

Treasurer Prykryl Moved to table Resolution #23-007 until the January regular meeting, Director Dent seconded the motion. President Spigner called for a voice vote and the motion passed.

B. External Affairs Committee

- 1) Brief the Board on the Committee's activities since the last regular Board meeting. President Spigner gave an update on the Montgomery County Water Symposium held on December 6th. The event aimed to discuss the county's water future, focusing on groundwater and surface water issues. Approximately 75 attendees and five speakers participated in the

symposium, generating positive feedback. It was not related to the work of Hank Vat's company for the District.

C. DFC & Technical Committee

- 1) Brief the Board on the Committee's activities since the last regular Board meeting
Director Earnest provided an update on the Land Committee's recent meeting. They are finalizing the contract with the awarded bidder, Alsay, for the drilling project. They are also coordinating with SJRA on the second site in The Woodlands

- 2) Discuss, consider, and possible action as necessary concerning approval of joint-funding agreement with USGS for the period of 01.01.24 through 12.31.24.
Ms. Kouba presented an update on the annual contract with USGS for water level monitoring in Montgomery County. The technical team and DC committee have reviewed the proposed contract, and there are no changes to the number of sites, and the cost has remained the same as the previous year. Ms. Kouba recommended that the board approve the contract with USGS.

Director Earnest moved to approve the contract with USGS, Treasurer Prykryl second the motion. Discussion was held: President Spigner mentioned that the District had reduced its contract with USGS several years ago. Ms. Kouba added that the technical team had reviewed the contract and had discussions with USGS to ensure confidence in the number of wells they were monitoring and the quality of the data provided. President Spigner acknowledged that the data received from USGS can be used by Lone Star GCD.

President Spigner called for a voice vote, motion passed to approve the contract with USGS.

D. Rules, Bylaws & Policies Committee

- 1) Brief the Board on the Committee's activities since the last regular Board meeting
President Spigner provided an update on the rule revisions, stating that the District is still working on them and will likely have them finalized in early 2024. He mentioned that they wanted to take their time and consider all the feedback they received to ensure the rules are well-crafted. Ms. Reese added that they are aiming to have draft rules rolled out by March but will have a better idea of the timeline at the beginning of the year.

DISCUSS, CONSIDER AND POSSIBLE ACTION AS NECESSARY REGARDING YEAR-END PROFESSIONAL SERVICES REVIEW

MCB Technologies: Ms. Kouba informed the board that MCB Technologies, the District's IT provider, has requested a contract price increase, which is the first increase in 11 years. She recommended that the board approve the contract price increase and allow Legal to continue negotiating the contract details. President Spigner asked if the increase was significant, to which Ms. Kouba responded that it was a very reasonable change and fair, given the long timeline without any

increases. Secretary Thigpen moved to approve the contract, Treasurer Prykryl second. No discussion, President Spigner called for a voice vote, motion passed.

- 1) KT Groundwater. Ms. Kouba stated that RW Harden informed Ms. Reese that Mike Keester, who is currently with RW Harden, is leaving the firm to start his own company called KT Groundwater. She recommended that the board approve a contract with KT Groundwater, as their rates are confirmed to be the same or less than RW Harden's. Additionally, she recommended terminating the contract with RW Harden and initiating a 30-day notice for them to cease work and billing for any remaining work completed but not yet paid. President Spigner emphasized Mike Keester's importance as their primary contact for subsidence issues.

Director Dent moved to approve the contract with KT Groundwater and terminate the contract with RW Harden. Director Earnest Seconded the motion. President Spigner called for a voice vote. Motion passed.

- 2) Brooks & Watson: Ms. Kouba informed the board that Brooks Watson and Company have updated their contract price for 2024, marking the second price increase in two years. The increase for 2024 is an additional \$2,500. Ms. Kouba stated that she will be researching comparable services for the 2025 budget. Despite the increases, she recommended approving the contract for 2024 and conducting further research for future years. The reasoning provided for the price increase was inflation, though Ms. Kouba expressed a desire for more detailed explanations in the future.

Treasurer Prykryl moved to approve the contact with the increase for 2024. Secretary Thigpen seconded the motion. Not discussion, President Spigner called for a voice vote, motion passed.

- 3) Update on Halff & Hydros: Ms. Kouba provided an update on the district's software contracts. The long-term contract with Halff has been terminated, and a short-term contract with Halff will be in effect until April 1, 2024, to facilitate the transition to the new software programming with HYDROS. The pricing for the HYDROS contract has already been approved by the board, and the contract is in the term agreement stage, currently under review by Legal and Ms. Kouba. President Spigner expressed gratitude to the team for their hard work on this software upgrade. He mentioned that the upgrade is essential for the district and will improve efficiency, save time, and benefit customers by enabling more online and automated processes.

- 4) Following contracts are continuing and have no changes, Fancher PLLC, Jay Brown, Phoenix and signs Stacy Reese, Law, Advanced Groundwater Solutions and Studio One Three Media. No changes to those contracts

Receive information from District's technical consultants regarding subsidence studies and/or discussion regarding the same

- 1) Update the Board on status of proposed sites for Phase III of the Subsidence Study and public request for bid for Site 1 in collaboration with Porter Special Utility District. Ms. Reese provided an update on the contract with Alsay, the awarded bidder, stating that the contract has been submitted to them, and they are expecting them to sign it soon. President Spigner inquired about the likelihood of having a drilling rig on site in January, to which Ms. Kouba explained that the mobilization date is set for February, which is an ambitious timeline, but they are excited about it. President Spigner praised the DFC committee, Sarah, Stacy, and Porter SUD for their cooperation and partnership in working towards the project's goals.

GROUNDWATER MANAGEMENT AREA 14 - UPDATE THE BOARD ON THE ISSUES RELATED TO JOINT PLANNING ACTIVITIES AND DEVELOPMENT OF DESIRED FUTURE CONDITIONS IN GMA 14:

Ms. Kouba state the next GMA Meeting will be host by Lone Star GCD in February.

GENERAL MANAGER'S REPORT:

Ms. Kouba provided a Drought Monitor update, indicating that the December 7th report showed significant improvement in drought conditions, with only 2.09% of the county in abnormally dry conditions and the majority, approximately 97%, not experiencing drought. She mentioned that she might not provide further Drought Monitor updates unless there is a need for it.

She also mentioned ongoing activities related to software updates, website improvements, application consolidation, and open positions for Director of Operations and Permitting Technician. Ms. Kouba shared that the district was approached by Keith Ellison from the Aquifer Conservation Alliance regarding the costs of elections in Montgomery County and the potential for future participation or advocacy. President Spigner discussed the topic of funding for elections and how it impacts various entities, including groundwater districts. He explained that elections in some counties are funded by a set price, which can be burdensome for smaller districts with limited budgets. The Aquifer Conservation Alliance is exploring the possibility of funding elections as a percentage of an entity's budget, which could reduce costs for some districts. President Spigner emphasized that this is still in the research phase and that there is no commitment or obligation to participate at this time. The goal is to explore ways to make election funding more equitable and cost-effective for all entities involved.

Ms. Kouba provided a field ops report for November, sharing that there were a total of 110 field inspections conducted across various locations in Montgomery County. She also highlighted the mobile lab's outreach efforts, where approximately 107 people were reached at an event hosted by Agrilife Extension.

Ms. Kouba mentioned that there are currently 22 permit applications under review, with 20 applications scheduled for the December permit hearing. She expressed appreciation for the permitting team's efforts in managing the workload efficiently.

She provided statistics on well registrations, well reports, and travel activities for November, including attending meetings and events related to the district's work and outreach.

President Spigner read a thank you note form the Texas 4-H Water Ambassador that expressed gratitude for the district's sponsorship of the 4-H Water Ambassador Program, which has supported aspiring young water leaders for several years. He mentioned that 30 young people were able to participate in the program thanks to the district's sponsorship. Mr. Saenz added that they are working on bringing the Water Ambassadors to Montgomery County in the summer of 2024 for Tier 2 of the program.

GENERAL COUNSEL'S REPORT:

Ms. Reese stated she had nothing to report at this time.

EXECUTIVE SESSION:

The Board recessed at 6:43 PM into a closed Executive Session pursuant to Texas Government Code, Sections 551.074 to discuss personnel matters and annual review of the General Manager, and 551.071 to consult with the District's attorney regarding pending or contemplated litigation, settlement offers, or on matters in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the Texas Open Meetings Act, Chapter 551, Government Code regarding any agenda item on any of the Board meetings or hearing posted for today.

RECONVENE IN OPEN SESSION:

Following Executive Session, the Board reconvened in Open Session and President Spigener declared it open to the public at 7:37 PM

NEW BUSINESS:

Nothing to report on currently.

ADJOURN:

There being no further business Treasurer Prykryl moved to adjourn the meeting and Director Dent seconded the motion. President Spigner called for a voice vote, motion carried. The meeting was adjourned at 7:39 PM.

PASSED, APPROVED, AND ADOPTED THIS 9th DAY OF JANUARY 2024.

Janice Thigpen, Board Secretary

LONE STAR GROUNDWATER CONSERVATION DISTRICT

December 12, 2023

MINUTES OF PUBLIC HEARING ON PERMIT APPLICATIONS

The Board of Directors of the Lone Star Groundwater Conservation District (“District”) met in regular session, open to the public and held in person in the Lone Star GCD – James B. “Jim” Wesley Board Room located at 655 Conroe Park North Drive, Conroe, Texas, and remotely via the publicly accessible webinar/telephone conference call within the boundaries of the District on December 12, 2023.

CALL TO ORDER:

President Spigener called to order the Public Hearing on Permit Applications at 6:00 PM announcing the meeting open to the public.

ROLL CALL:

The roll was called of the members of the Board of Directors, to wit:

Jim Spigener
Janice Thigpen
Jonathan Prykryl
Kenneth Earnest
Garry Dent

Five members of the Board were present, thus constituting a quorum of the Board of Directors. In attendance at said meeting were Sarah Kouba, General Manager; Kirstin Hein Permitting Director, Justin Saenz, Education & Conservation Coordinator; Stacey V. Reese, District Counsel via Zoom; and members of the public. *Copies of the public sign-in sheets and comment cards received are attached hereto as Exhibit "A".*

Director Earnest lead prayer and Secretary Thigpen lead the US and Texas pledges.

PUBLIC COMMENTS:

No comments were received.

DISCUSSION, CONSIDERATION, AND POSSIBLE ACTION ON THE FOLLOWING OPERATING PERMITS and/or METER EXEMPTIONS:

Ms. Hein provided an overview of the 20 permits before the board for consideration. Among them, 15 are requests for amendments to existing permits, and 5 are requests for new operating permits. Additionally, 13 proposed new wells are included in the applications. She highlighted item number seven, which involves a request for a spacing exemption under District rule 3.2 because the proposed well is less than 50 feet from the nearest property boundary. Ms. Hein recommended approval for the spacing exemption in this instance, as the adjacent lots affected are an HOA park rather than individual homes. The General Manager reviewed all the applications and recommended that the board grant the requests as presented.

Treasurer Prykryl moved to approve item #1-20, as recommended by the General Manager and Secretary Thigpen seconded the motion. Motion passed.

- I. REBTX Properties, for a proposed amendment to OP14050701B-CHEV, increase of 0.15 mg annually, 14069 W. Horseshoe Bend, Conroe Commercial & Irrigation use;
- II. Midway Water Utilities, Inc., for a proposed amendment to OP-07100402B-CHEV, increase of 2 mg annually, 179 feet from intersection of Lacey Wood and Winding Hill Dr., Magnolia, (Lat. 30/14/25 and Long. 95/42/2) Public Supply (PWS) and Commercial use;
- III. Krish Development LLC, for 1 proposed Evangeline well to be drilled at 14366 FM 1314, Conroe, and 1 existing Evangline well at 14366 FM 1314, Conroe, not to exceed 0.75 mg annually, Commercial use, (Driller of Record: R & D Water Wells);
- IV. James Adams, for a proposed operating permit for existing Evangeline well not previously permitted, not to exceed 0.3 mg annually, 12445 Thompson Rd, Willis, Public Supply use;
- V. Quadvest, LP. (Pine Acre Trails), for a proposed amendment to OP20031001A-CHEV, well to be drilled at 1102 E Xavier, Conroe, Public Supply (PWS) use, (Driller of Record: Johnston Water Wells);
- VI. The Highlands Water Plant - Wells 1&2 / West Fork Utility Co, LLC, for a proposed amendment to OP-20062601A-CHEV, increase of 70 mg annually, Approx 1.65 miles west of intersection of FM 1314 and Grand Parkway (SH 99), (Lat 30/8/14 Long 95/19/6), Porter, Public Supply (PWS) use, hydrogeological report submitted with application;
- VII. Aqua Texas, Inc. (Frontier, Arrowhead), for a proposed amendment to OP-06112801E-JSPR, well to be drilled at intersection of Bill Cody Trail and Short Road, (Lat. 30/27/28, Long -95/28/9), Willis, and increase of 80.375 mg annually, Public Supply (PWS) use; hydrogeological report submitted with application; request for spacing exception for District Rule 3.2; (Driller of record: Johnson Water Well Service and Drilling);

- VIII. City of Conroe, for a proposed amendment to OP02-001P-JSPR, 2 wells to be drilled at 11798 Interstate 45 N Willis, and 10289 Ferrell Rd., Willis, increase of 1051.2 mg annually, Public Supply (PWS) use, hydrogeological report submitted with application; (Driller of record: TBD);
- IX. 3083 Investments, LLC (Leisure Lane RV Park), for a proposed amendment to OP-16111801B-CHEV, well to be drilled at 15406 FM 3083, Grangerland, increase of 3.2 mg annually, Public Supply (PWS) and Irrigation use, (Driller of Record: To Be Determined);
- X. HWY 105 Asset LLC, for a proposed Evangeline well to be drilled at Approx. 1,100 feet east from intersection of Hwy 105 and Goode City Lane, Cleveland (Lat 30/1830 Long 95/11/29), not to exceed 18.25 mg annually, Public Supply (PWS) use, Driller of record: TBD);
- XI. Quadvest, LP. (Benders Landing), for a proposed amendment to OP04030801K-CHEV, well to be drilled at 27219 W Balsam Fir Cir, Spring, Public Supply (PWS) & Irrigation use, hydrogeological report submitted with application, (Driller of Record: Johnston Water Wells);
- XII. Quadvest, LP. (Decker Farms), for a proposed amendment to OP-21110301A-CHEV, well to be drilled at 26511 1/2 Gertrudis Dr, Magnolia, Public Supply (PWS) use, (Driller of Record: Johnston Water Wells);
- XIII. Greater Harris County 911 Emergency Network, for a proposed well to be drilled at 22419 Inwood Forest Drive, Montgomery, not to exceed 0.1 mg annually, Commercial use (Driller of record: B&R Water Well Drilling LLC);
- XIV. LHC Development, LLC, for a proposed amendment to OP-22031501-JSPR, increase of 0.1 mg annually, 17965 Hwy 75 N, Willis, Commercial & Irrigation use;
- XV. East Montgomery County MUD #5, for a proposed amendment to OP-14061303G-CHEV, increase of 300 mg annually, 1875 Ft West of intersection of Roman Forest Blvd and I69, (lat. 30/10/20 Long 95/12/37), New Caney, Public Supply (PWS) use, hydrogeological report submitted with application;
- XVI. Forestar (USA) Real Estate Group, Inc. (Future EMCMUD 13), for 2 proposed Evangeline wells to be drilled at intersection of Bowdoin/Champion Rd: East 2,531 feet, then south 212 feet, (Lat 30/14/11) and intersection of Bowdoin/Champion Rd, East 2531 feet, then south 160 feet (Lat 30/14/12 Long 95/13/35), Splendor, not to exceed 433.475 mg annually, Public Supply (PWS) use, hydrogeological report submitted with application; (Driller of record: Bussell & Sons, LLC);
- XVII. East Montgomery County Mud 3, for a proposed amendment to OP03-0020F-JSPR, increase of 32.5 mg annually, 20135 Gene Campbell Blvd, New Caney, Public Supply (PWS) use, hydrogeological report submitted with application;

- XVIII. East Montgomery County Mud 3, for a proposed amendment to OP03-0020F-CHEV, increase of 32.5 mg annually, East of Nichols Rd at East Third of Gene Campbell Rd, (Lat 30/10/16 Long 95/16/55), New Caney, Public Supply (PWS) use, hydrogeological report submitted with application;
- XIX. Church of God - 7th Day The Way, for a proposed amendment to OP-15062401C-JSPR, increase of 0.1 mg annually, 11429 FM 830 Rd, Willis, Public Supply use; and
- XX. Tri-County Behavioral Healthcare, for a proposed amendment to OP-16101901-CHEV, increase of 0.88 mg annually, 233 Sgt. Ed Holcomb Blvd. S., Conroe, Irrigation and Impoundment Irrigation use.

ADJOURN:

Director Dent moved to adjourn the December 12, 2023 Public Hearing on Permit Applications and Treasurer Prykryl seconded the motion. Motion passed. The meeting was adjourned at 6:07 pm.

PASSED, APPROVED, AND ADOPTED THIS 9th DAY OF JANUARY, 2024.

Janice Thigpen, Board Secretary

Lone Star Groundwater Conservation District
Balance Sheet
As of December 31, 2023

Accrual Basis

	Dec 31, 23
ASSETS	
Current Assets	
Checking/Savings	
First Bank (Money Market)	6,743,952.14
First Bank (Operating)	80,265.61
TexPool	49,946.13
Total Checking/Savings	6,874,163.88
Accounts Receivable	
Accounts Receivable	1,013,833.13
Total Accounts Receivable	1,013,833.13
Other Current Assets	
Allow for Bad Debts	-9,717.13
Prepaid Insurance	
TWCA premium	6,456.14
Prepaid Dishonesty & Public Bond	1,124.11
Total Prepaid Insurance	7,580.25
Total Other Current Assets	-2,136.88
Total Current Assets	7,885,860.13
Fixed Assets	
Bldg & Land	
Conroe Park - Land	260,187.00
Conroe Park - Building & Design	1,593,552.27
Accumulated Depr - Bldg	-462,212.04
Total Bldg & Land	1,391,527.23
Furniture & Equipment	
Furniture/Fixture/Equipment	353,692.94
Accumulated Depreciation	-293,184.09
Total Furniture & Equipment	60,508.85
Total Fixed Assets	1,452,036.08
TOTAL ASSETS	9,337,896.21
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
Accounts Payable	23,062.07
Total Accounts Payable	23,062.07
Other Current Liabilities	
Deposits Payable	54.00
Accrued Expenses	
Accrued Expenses	67,171.53
Accrued Expenses - Other	-68,400.46
Total Accrued Expenses	-1,228.93
Accrued Vacation Time	22,339.97
Deferred Revenue	-2,127.44

Lone Star Groundwater Conservation District
Balance Sheet
As of December 31, 2023

Accrual Basis

	Dec 31, 23
Direct Deposit Liabilities	
AFLAC-EE portion	-306.78
Mission Sq 401(a)-EE portion	0.05
Mission Sq-401(a) - ER portion	-0.03
Total Direct Deposit Liabilities	-306.76
Payroll Liabilities	2,475.49
Total Other Current Liabilities	21,206.33
Total Current Liabilities	44,268.40
Total Liabilities	44,268.40
Equity	
Invested in Capital Assets, net	1,518,850.65
Opening Bal Equity	-189.25
Retained Earnings	3,646,107.98
Net Income	4,128,858.43
Total Equity	9,293,627.81
TOTAL LIABILITIES & EQUITY	9,337,896.21

**Lone Star Groundwater Conservation District
Statement of Revenues and Expenditures - Budget vs. Actual
December 2023**

	Dec 23	Budget	Jan - Dec 23	YTD Budget	Annual Budget
Ordinary Income/Expense					
Income					
Administrative Fee					
Application Fee					
AWS Production Permit	0.00	250.00	0.00	3,000.00	3,000.00
AWS Groundwater Test Well	0.00	125.00	0.00	1,500.00	1,500.00
Early Conversion Credits	0.00		-5,395.50		
Emergency Permit	0.00		1,500.00		
Existing Well Application	0.00	125.00	625.00	1,500.00	1,500.00
Operating Permit	5,850.00	1,833.37	73,476.52	22,000.00	22,000.00
Temporary Permit	0.00		750.00		
Application Fee - Other	0.00	412.50	450.00	4,950.00	4,950.00
Total Application Fee	5,850.00	2,745.87	71,406.02	32,950.00	32,950.00
Change of Ownership/Type					
Record Request	750.00	333.37	8,100.00	4,000.00	4,000.00
Returned Check Fee	0.00	125.00	0.00	1,500.00	1,500.00
Well/Meter Re-inspection Fees	0.00	4.24	50.00	50.00	50.00
	0.00	166.74	0.00	2,000.00	2,000.00
Total Administrative Fee	6,600.00	3,375.22	79,556.02	40,500.00	40,500.00
Interest Income					
Lone Star GCD Fees	782.15	416.74	7,961.47	5,000.00	5,000.00
Agricultural Permits					
Agricultural OP 2024	0.00		932.82		
Agricultural HUP 2024	0.00		672.73		
Agricultural HUP 2023	62.05	95.39	787.30	1,144.57	1,144.57
Agricultural OP 2023	76.33	112.98	932.83	1,355.43	1,355.43
Total Agricultural Permits	138.38	208.37	3,325.68	2,500.00	2,500.00
Export Fees					
Historic Use Fee	0.00	50.00	0.00	600.00	600.00
Historic Use Fee 2024			528,666.69		
Historic Use Fee 2023	96,570.42	125,000.00	1,156,925.56	1,500,000.00	1,500,000.00
Total Historic Use Fee	96,570.42	125,000.00	1,685,592.25	1,500,000.00	1,500,000.00

Lone Star Groundwater Conservation District Statement of Revenues and Expenditures - Budget vs. Actual December 2023

	Dec 23	Budget	Jan - Dec 23	YTD Budget	Annual Budget
Operating Permit Fees					
Operating Permit 2024	391,983.56		1,429,884.02		
Operating Permit 2023	290,731.02	116,666.74	1,955,180.15	1,400,000.00	1,400,000.00
Operating Permit 2022	0.00		1,072.23		
Operating Permit 2021	0.00		10.00		
Operating Permit 2020	0.00		10.00		
Operating Permit 2019	0.00		10.00		
Total Operating Permit Fees	682,714.58	116,666.74	3,386,166.40	1,400,000.00	1,400,000.00
AWS Production fees					
AWS Production Fees - 2024	0.00		88,659.60		
AWS Production Fees - 2023	14,473.20	16,666.74	176,438.40	200,000.00	200,000.00
Total AWS Production fees	14,473.20	16,666.74	265,098.00	200,000.00	200,000.00
Overpumpage of a Permit	0.00	4,166.74	889,485.06	50,000.00	50,000.00
Penalty/ Interest	0.00	833.37	27,997.15	10,000.00	10,000.00
Total Lone Star GCD Fees	793,896.58	263,591.96	6,257,684.54	3,163,100.00	3,163,100.00
Total Income	801,278.73	267,383.92	6,345,182.03	3,208,600.00	3,208,600.00
Gross Profit	801,278.73	267,383.92	6,345,182.03	3,208,600.00	3,208,600.00
Expense					
Election Expense	0.00	8,333.37	3,094.00	100,000.00	100,000.00
Litigation	0.00	4,166.74	0.00	50,000.00	50,000.00
Legal-DFC Appeal	0.00				
Total Litigation	0.00	4,166.74	0.00	50,000.00	50,000.00
Educate/Public Aware Coordinate					
Community Aware/Public Relation		416.74	0.00	5,000.00	5,000.00
Scholarship/Sponsorship	415.87	8,166.74	415.87	98,000.00	98,000.00
Strategic Communications	0.00		777.00		
PAM Units	0.00		77,091.81	50,000.00	50,000.00
Educational Curriculum Schools	0.00	4,166.74	0.00	750.00	750.00
Rainwater Collection Expansion	0.00	62.50	0.00	5,000.00	5,000.00
Website Modification	0.00	416.74	0.00	2,500.00	2,500.00
ET Weather Station Network	40.13	208.37	514.46	20,000.00	20,000.00
Communication/Public Awareness	141.76	1,666.74	4,581.63	8,000.00	8,000.00
Conservation Products	0.00	666.74	0.00		
Total Community Aware/Public Relation	597.76	15,771.31	83,380.77	189,250.00	189,250.00
Total Educate/Public Aware Coordinate	597.76	15,771.31	83,380.77	189,250.00	189,250.00

Lone Star Groundwater Conservation District Statement of Revenues and Expenditures - Budget vs. Actual December 2023

	Dec 23	Budget	Jan - Dec 23	YTD Budget	Annual Budget
Attorney Fees					
Legislative Consulting	9,000.00	12,500.00	132,000.00	150,000.00	150,000.00
PIA Legal Work	0.00	416.74	4,434.50	5,000.00	5,000.00
General Counsel Work	22,872.50	31,250.00	300,553.53	375,000.00	375,000.00
Legal Work - Additional	235.00	2,500.00	20,530.85	30,000.00	30,000.00
Total Attorney Fees	32,107.50	46,666.74	457,618.88	560,000.00	560,000.00
Board Expense					
Meeting/Conference	68.12	833.48	8,316.96	10,000.00	10,000.00
Per Diem	750.00	5,250.00	46,750.00	63,000.00	63,000.00
Payroll Tax Liability - Board	58.13	458.37	3,494.76	5,500.00	5,500.00
Board Meeting Expense	146.50	583.37	7,240.29	7,000.00	7,000.00
Total Board Expense	1,022.75	7,125.22	65,802.01	85,500.00	85,500.00
Advertising/Public Notices					
Audit Fees	42.00	500.00	1,382.20	6,000.00	6,000.00
Building Expense	0.00	812.50	9,750.00	9,750.00	9,750.00
Building Maintenance	- 955.00	4,166.74	41,509.91	50,000.00	50,000.00
Utilities & Housekeeping	2,593.43	4,333.37	57,489.00	52,000.00	52,000.00
Total Building Expense	3,548.43	8,500.11	98,998.91	102,000.00	102,000.00
Computer Support					
Well Permitting Database Mgmt	100,000.00	8,333.37	116,631.21	100,000.00	100,000.00
Hosting/Internet/Backup	600.10	2,333.37	7,682.72	28,000.00	28,000.00
Repair & Support	1,945.00	2,166.74	23,122.81	26,000.00	26,000.00
Software	184.00	833.48	8,860.07	10,000.00	10,000.00
Total Computer Support	102,729.10	13,666.96	156,296.81	164,000.00	164,000.00
Technical Consultant Services					
Technical Consulting	0.00	12,500.00	147,860.50	150,000.00	150,000.00
Permitting Consulting Services	0.00	23,333.37	172,114.29	280,000.00	280,000.00
GMA 14 Planning	0.00	6,250.00	21,123.92	75,000.00	75,000.00
Total Technical Consultant Services	0.00	42,083.37	341,098.71	505,000.00	505,000.00
Field/Technical Expense					
PAM Units	0.00	1,250.00	0.00	15,000.00	15,000.00
Field Supplies	0.00	291.74	1,401.93	3,500.00	3,500.00
Vehicle Fuel Expense	0.00	541.74	4,879.10	6,500.00	6,500.00
Vehicle/Mobile/Lab Repair & Maint	0.00	250.00	2,384.58	3,000.00	3,000.00
Vehicle -Capital expense	0.00	3,750.00	42,531.95	45,000.00	45,000.00
Total Field/Technical Expense	0.00	6,083.48	51,197.56	73,000.00	73,000.00

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Accrual Basis

Lone Star Groundwater Conservation District Statement of Revenues and Expenditures - Budget vs. Actual December 2023

	Dec 23	Budget	Jan - Dec 23	YTD Budget	Annual Budget
Insurance					
Bonds	54.19	83.37	560.67	1,000.00	1,000.00
Building & Property Insurance	402.83	416.74	5,080.98	5,000.00	5,000.00
Errors and Omissions	188.00	216.75	2,166.00	2,601.00	2,601.00
Liability	70.42	98.24	947.52	1,178.00	1,178.00
Vehicle Insurance	420.55	426.25	3,486.70	5,115.00	5,115.00
Total Insurance	1,135.99	1,241.35	12,241.87	14,894.00	14,894.00
Manager					
Travel/Edu/Training	75.00	666.74	2,878.27	8,000.00	8,000.00
Vehicle Allowance	600.00	600.00	6,030.00	7,200.00	7,200.00
Total Manager	675.00	1,266.74	8,908.27	15,200.00	15,200.00
Memberships Dues /Subscriptions					
Miscellaneous	1,210.00	833.37	11,888.00	10,000.00	10,000.00
Miscellaneous Expense					
Miscellaneous	0.00	416.74	37.49	5,000.00	5,000.00
Total Miscellaneous	0.00	416.74	37.49	5,000.00	5,000.00
Office Expenses					
Equipment Lease - Copier	175.00	188.96	1,664.50	1,700.00	1,700.00
Office Equipment	3,190.57	708.37	9,458.89	8,500.00	8,500.00
Office Supplies	0.00	541.74	5,691.10	6,500.00	6,500.00
Total Office Expenses	3,365.57	1,439.07	16,814.49	16,700.00	16,700.00
Payroll Expenses					
Salaries	65,664.58	65,833.37	579,605.60	790,000.00	790,000.00
Payroll Tax Liability	4,842.76	3,875.00	43,095.08	46,500.00	46,500.00
Retirement	3,939.86	3,750.00	34,508.63	45,000.00	45,000.00
Medical/Life	5,995.77	5,833.37	64,984.50	70,000.00	70,000.00
SUI	0.75	208.37	121.44	2,500.00	2,500.00
Workman's Comp	88.59	183.37	1,348.15	2,200.00	2,200.00
Payroll Service Fees	628.00	83.37	2,159.95	1,000.00	1,000.00
Total Payroll Expenses	81,160.31	79,766.85	725,823.35	957,200.00	957,200.00
Postage Expense					
Postage Meter & Supplies	0.00	83.37	827.08	1,000.00	1,000.00
Postage/Shipping/Delivery Ser	0.00	500.00	532.56	6,000.00	6,000.00
Total Postage Expense	0.00	583.37	1,359.64	7,000.00	7,000.00
Printing					
Printing	189.57	750.00	4,694.59	9,000.00	9,000.00

Lone Star Groundwater Conservation District Statement of Revenues and Expenditures - Budget vs. Actual December 2023

	Dec 23	Budget	Jan - Dec 23	YTD Budget	Annual Budget
Programs					
Subsidence Study - Phase III	273.75	12,500.00	88,025.82	150,000.00	150,000.00
Additional Scientific Programs	0.00	2,083.37	0.00	25,000.00	25,000.00
Hydrogeological Modeling/Protec	0.00	83.37	500.00	1,000.00	1,000.00
USGS Joint Funding Agreement					
USGS - Groundwater Level Data	3,837.67	1,279.24	15,350.00	15,350.00	15,350.00
USGS - Water Level chg/subside	14,213.33	4,738.00	56,855.84	56,856.00	56,856.00
Total USGS Joint Funding Agreement	18,051.00	6,017.24	72,205.84	72,206.00	72,206.00
Total Programs	18,324.75	20,683.98	160,731.66	248,206.00	248,206.00
Rebate Water Use Fees	0.00	1,250.00	0.00	15,000.00	15,000.00
Travel/Training Staff	29.95	666.74	5,204.39	8,000.00	8,000.00
Depreciation	0.00	4,166.74	0.00	50,000.00	50,000.00
Total Expense	246,138.68	266,774.75	2,216,323.60	3,200,700.00	3,200,700.00
Net Ordinary Income	555,140.05	609.17	4,128,858.43	7,900.00	7,900.00
Net Income	555,140.05	609.17	4,128,858.43	7,900.00	7,900.00

**LONE STAR GROUNDWATER DISTRICT
INVESTMENT REPORT, AUTHORIZATION AND REVIEW
OPERATING FUND**

PREPARED FOR THE REPORTING PERIOD FROM OCTOBER 1, TO DECEMBER 31, 2023

INVESTMENT POOLS	BEGINNING VALUE FOR PERIOD				ENDING VALUE FOR PERIOD				DATE OF MATURITY	
	RATE	BOOK	N.A.V.	MARKET	GAIN (LOSS) TO MARKET VALUE	DEPOSITS	WITHDRAWALS	BOOK		N.A.V.
FBOC MM *	0.100%	\$ 5,918,585.33	100%	\$ 5,918,585.33	\$ 1,541.92	\$ 1,523,851.34	\$ (610,026.45)	\$ 6,833,952.14	100%	\$ 6,833,952.14
TEX POOL	0.342%	\$ 49,276.49	100%	\$ 49,276.49	\$ 669.64	\$ -	\$ -	\$ 49,946.13	100%	\$ 49,946.13
				\$ 5,967,861.82	\$ 2,211.56	\$ 1,523,851.34	\$ (610,026.45)	\$ 6,883,898.27		\$ 6,883,898.27
* Rate for FBOC MM IS 0.1000000%										
FEDERAL OBLIGATIONS	SIMPLE APR/COUPON	PURCHASE VALUE/PRINCIPAL PAID (MINUS INT)	FACE VALUE	TERMS IN DAYS (Purch to Curr)	BEGIN PERIOD MARKET VALUE	YIELD THIS PERIOD	DEPOSITS OR WITHDRAWALS	ENDING PERIOD MARKET VALUE	DATE PURCHASED	DATE OF MATURITY
912828YE4	1.250%	\$ 500,946.40	\$ 500,000.00	704	\$ 480,546.90	\$ 6,171.85	\$ -	\$ 486,718.75	01/26/22	08/31/24
9128286R6	2.250%	\$ 1,000,000.00	\$ 1,000,000.00	633	\$ 980,468.80	\$ 8,593.70	\$ -	\$ 989,062.50	04/07/22	04/30/24
9128284Z0	2.750%	\$ 1,000,000.00	\$ 1,000,000.00	731	\$ 955,468.80	\$ 16,562.50	\$ -	\$ 972,031.30	12/30/21	08/31/25
9128283D0	2.250%	\$ 494,849.21	\$ 500,000.00	633	\$ 482,734.40	\$ 5,859.35	\$ -	\$ 488,593.75	04/07/22	10/31/24
613681J71	4.350%	\$ 250,000.00	\$ 250,000.00	4849	\$ 246,397.50	\$ 1,200.00	\$ -	\$ 249,697.50	09/21/10	03/01/24
346766WR5	5.000%	\$ 1,724,933.64	\$ 1,500,000.00	760	\$ 1,495,845.00	\$ 34,380.00	\$ -	\$ 1,530,225.00	12/01/21	03/01/27
3140LY6E8	2.000%	\$ 1,215,819.07	\$ 1,500,000.00	803	\$ -	\$ 12,070.08	\$ 1,031,366.44	\$ 1,043,436.52	10/19/21	10/01/36
3140QHMK8	2.500%	\$ 1,000,000.00	\$ 1,000,000.00	1741	\$ 659,459.13	\$ 13,199.88	\$ -	\$ 672,659.01	03/26/19	03/01/41
3133L8ED3	2.000%	\$ 765,670.44	\$ 1,000,000.00	2985	\$ 614,534.49	\$ (5,275.73)	\$ -	\$ 609,258.76	10/29/15	09/01/31
TOTALS		\$ 7,952,218.76	\$ 8,250,000.00		\$ 5,917,455.02	\$ 92,761.63	\$ 1,031,366.44	\$ 7,041,583.09		

Must change date below to end of the quarter
12/31/2023

Sarah Kouba, General Manager

Jonathan Prykryl, Treasurer



The Woodlands Water Agency

January 1 at 12:48 PM · 🌐



The WaterLog: Where does our drinking water come from?

The simple answer is that 50% of our water comes from aquifers (groundwater) and 50% from surface water from Lake Conroe. Here's how we got there..

For most of our history, 100% of Montgomery County's drinking water came from aquifers. Given that groundwater was accessible and cheap to supply, that worked well. But, as the County's population expanded so did demand on the water supply, increasing the need to lower water well levels and making it harder and more expensive to access the water. Overpumping can also lead to subsidence of the land surface which intensifies flooding.

Understanding the significant and growing demand on our aquifers, the 77th Texas Legislature (2001) created the [Lone Star Groundwater Conservation District](#) to preserve, conserve, and protect Montgomery County's groundwater supplies, ensuring their sustainable use for current and future generations.

To meet groundwater reduction requirements set by Lone Star and to ensure a reliable, long-term alternative water supply, the [San Jacinto River Authority SJRA](#), our wholesale water provider, created a Groundwater Reduction Plan (GRP). The GRP reduces the use of groundwater by supplementing it with surface water from Lake Conroe.

Woodlands Water, along with over 140 water utilities, contracted to share a portion of the cost of implementing, operating, and maintaining the GRP. Since 2010, this cost has been listed on your water bill as the Surface Water Conversion (SWC) Fee. The SWC fee is a pass-through fee, meaning customers are charged only what Woodlands Water is charged by SJRA to supply treated surface water.

The Woodlands began receiving treated surface water in 2015. At first, the "blend" was 35% surface and 65% ground. In 2022 we increased to a 50/50 blend.

Check out this video from SJRA on the Groundwater Reduction Plan:

