

Administrative Package Cover Page

This file contains the following documents:

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

PLAIN LANGUAGE SUMMARY CYPRESS RANCH WCID No. 1 TCEQ WQ PERMIT No. WQ0014368001

Cypress Ranch Water Control and Improvement District (WCID) No. 1 (CN601661085) operates the Cypress Ranch WCID No. 1 wastewater treatment plant (RN103177556), an activated sludge process plant operated in the extended aeration mode. The facility is located at 5116 Cypress Ranch Boulevard, near the City of Spicewood, Travis County, Texas 78669.

This application is for a renewal to dispose a daily average flow not to exceed 66,000 gallons per day of treated domestic wastewater via public access subsurface drip irrigation system with a minimum area of 15.15 acres in the Interim I phase, 135,000 gallons per day of treated domestic wastewater via public access subsurface drip irrigation system with a minimum area of 30.99 acres in the Interim II phase, and 200,000 gallons per day of treated domestic wastewater via public access subsurface drip irrigation system with a minimum area of 42.47 acres in the Final phase. This permit will not authorize a discharge of pollutants into water in the state.

Land application of domestic wastewater from the facility are expected to contain fiveday biochemical oxygen demand (BOD₅), total suspended solids (TSS), and *Escherichia coli*. Additional potential pollutants are included in the Domestic Technical Report 1.0, Section 7. Pollutant Analysis of Treated Effluent in the permit application package. Domestic wastewater is treated by an activated sludge process plant and the treatment units include a bar screen, an aeration basin, a final clarifier, an aerobic sludge digester, tertiary filters, and a chlorine contact chamber. In addition, the facility includes a temporary storage that equals to at least three days of the daily average flow.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



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

PERMIT NO. WQ0014368001

APPLICATION. Cypress Ranch Water Control and Improvement District No. 1, 102 North Railroad Avenue, Pflugerville, Texas 78660, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Land Application Permit (TLAP) No. WO0014368001 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 200,000 gallons per day via public access subsurface area drip dispersal system with a minimum area of 42.47 acres and via surface irrigation on 12 acres of public access land. The domestic wastewater treatment facility and disposal area are located at 5116 Cypress Ranch Boulevard, in Travis County, Texas 78669. TCEQ received this application on June 4, 2024. The permit application will be available for viewing and copying at TCEQ Region 11 Office, Building A, Room 179, 12100 Park 35 Circle, Austin, in Travis County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.

https://gisweb.tceq.texas.gov/LocationMapper/?marker=-98.079553,30.361805&level=18

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

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

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

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

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

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

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

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

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

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

AGENCY CONTACTS AND INFORMATION. All public comments and requests must be submitted either electronically at <u>https://www14.tceq.texas.gov/epic/eComment/</u>, or in

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

Further information may also be obtained from Cypress Ranch Water Control and Improvement District No. 1 at the address stated above or by calling Mr. Hank Smith, P.E., Atwell, LLC, at 512-904-0505.

Issuance Date: June 21, 2024



CONSULTING. ENGINEERING. CONSTRUCTION.

June 3, 2024

Texas Commission on Environmental Quality Applications Review and Processing Team Building F, Room 2101 12100 Park 35 Circle, Building F Austin, TX 78753

RE: Application to Renew Existing Wastewater Permit Cypress Ranch WCID No. 1 TCEQ WQ Permit No. WQ0014368-001 CN # 601495393 RN # 103177556

Applications Review and Processing Team:

On behalf of Cypress Ranch Water Control and Improvement District (WCID) No. 1, Atwell, LLC has enclosed one (1) original and two (2) copies of a Domestic Wastewater Permit Application.

The submitted documents include the Administrative and Technical Applications, related Worksheets, required attachments, and TCEQ ePay receipt for the renewal application. A list of the included attachments is shown on the following page.

If you should have any questions pertaining to this application or if you need further information, please feel free to contact me at (512) 925-6691 or <u>dfusilier@atwell-group.com</u>.

Sincerely, Atwell, LLC

BT:1:

David Fusilier, PE Senior Project Engineer TBPE Firm #12242

2024 TCEQ WQ PERMIT RENEWAL APPLICATION ATTACHMENT LIST

PERMIT NO. WQ0014368001

June 2024

NUMBER	ATTACHMENT TCEQ DOCUMENT REFERENCE		PAGE		
ADMINIST	ADMINISTRATIVE REPORT 1.0 (10053)				
1	CORE DATA FORM	ADMIN REPORT 1.0 - 3(c)	4 of 17		
2	USGS MAP - ORIGINAL SHINGLE HILLS	ADMIN REPORT 1.0 - 13	10 of 17		
TECHNICA	L REPORT 1.0 (10054)				
3	TREATMENT PROCESS DESCRIPTION & UNIT DIMENSIONS	TECHNICAL REPORT 1.0 - 2(a), (b)	1, 2 of 66		
4	PROCESS FLOW DIAGRAMS	TECHNICAL REPORT 1.0 - 2(c)	2 of 66		
5	SITE DRAWING	TECHNICAL REPORT 1.0 - 3	2 of 66		
6	TCEQ APPROVAL LETTERS - EACH PHASE	TECHNICAL REPORT - 6(a)	4 of 66		
7	POLLUTANT ANALYSIS	TECHNICAL REPORT 1.0 - 7	9, 10 of 66		
8	TABLE 3.0(1) - LAND APPLICATION SITE CROPS	WORKSHEET 3.0 - 2	31 of 66		
9	CROPPING PLAN	WORKSHEET 3.0 - 5	33 of 66		
10	GROUNDWATER WELL MAP	WORKSHEET 3.0-6	33 of 66		
11	WELL INFORMATION	WORKSHEET 3.0 - 6 WORKSHEET 7.0 - 27 & 29??	33, 34 of 66		
12	GROUNDWATER QUALITY REPORT	WORKSHEET 3.0 - 7	34 of 66		
13	SOILS MAP	WORKSHEET 3.0 - 8(a)	34 of 66		
14	SOIL ANALYSIS	WORKSHEET 3.0 - 8(b)	34 of 66		
15	EFFLUENT MONITORING DATA	WORKSHEET 3.0 - 9	35 of 66		
16	SERVICE AREA MAP	WORKSHEET 6.0 - 1(E)	59 of 66		

ATTACHMENTS_2024 RENEWAL [Path]_ATTACHMENT LIST_2024 TCEQ WQ PERMIT RENEWAL APPLICATION.xlsx

TCEQ ePay Receipt

– Transaction Information -

Trace Number:	582EA000612652
Date:	06/03/2024 04:48 PM
Payment Method:	CC - Authorization 0000040412
ePay Actor:	DAVID FUSILIER
TCEQ Amount:	\$815.00
Texas.gov Price::	\$833.59*

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

- Payment Contact Information -

Name:	DAVID FUSILIER
Company:	ATWELL LLC
Address:	805 LAS CIMAS PARKWAY BUILDIN, AUSTIN, TX 78746
Phone:	512-925-6691
r none:	512-925-0091

– Cart Items –

Voucher 707913	Fee Description WW PERMIT - FACILITY WITH FLOW >= .10 & < .25 MGD - RENEWAL	AR Number	Amount \$800.00
707914	30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE	TCEQ Amount:	\$15.00 \$815.00

RENEWAL FEE FOR CYPRESS RANCH WCID No. 1 TCEQ WASTEWATER PERMIT RENEWAL APPLICATION TCEQ PERMIT NO. WQ0014368001

ATWELL PROJECT NO. 18009012

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: <u>Cypress Ranch Water Control and Improvement District No. 1</u> PERMIT NUMBER (If new, leave blank): WQ00 <u>14368001</u> **Indicate if each of the following items is included in your application.**

Ν

Y

	_	
Administrative Report 1.0	\boxtimes	
Administrative Report 1.1		\boxtimes
SPIF		\boxtimes
Core Data Form	\boxtimes	
Public Involvement Plan Form		\boxtimes
Technical Report 1.0	\boxtimes	
Technical Report 1.1		\boxtimes
Worksheet 2.0		\boxtimes
Worksheet 2.1		\boxtimes
Worksheet 3.0	\boxtimes	
Worksheet 3.1		\boxtimes
Worksheet 3.2		\boxtimes
Worksheet 3.3	\boxtimes	
Worksheet 4.0		\boxtimes
Worksheet 5.0		\boxtimes
Worksheet 6.0	\boxtimes	
Worksheet 7.0		\boxtimes

	Y	Ν
Original USGS Map	\boxtimes	
Affected Landowners Map		\boxtimes
Landowner Disk or Labels		\boxtimes
Buffer Zone Map		\boxtimes
Flow Diagram	\boxtimes	
Site Drawing	\boxtimes	
Original Photographs		\boxtimes
Design Calculations		\boxtimes
Solids Management Plan		\boxtimes
Water Balance		\boxtimes

For TCEQ Use Only

Segment Number	County
Expiration Date	Region
Permit Number	

ADMINISTRATIVE REPORT 1.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

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

Section 1. Application Fees (Instructions Page 26)

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

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

Minor Amendment (for any flow) 150.00

Payment Information:

Mailed	Check/Money Order Number: Click to enter text.	
	Check/Money Order Amount: Click to enter text.	
	Name Printed on Check: Click to enter text.	SEE TCEQ ePAY
EPAY	Voucher Number: <u>582EA000612652</u>	RECEIPT ON THE NEXT
Copy of Payr	nent Voucher enclosed? Yes ⊠	PAGE

Section 2. Type of Application (Instructions Page 26)

- **a.** Check the box next to the appropriate authorization type.
 - ☑ Publicly-Owned Domestic Wastewater
 - □ Privately-Owned Domestic Wastewater
 - Conventional Wastewater Treatment
- **b.** Check the box next to the appropriate facility status.
 - \boxtimes Active \square Inactive

TCEQ ePay Receipt

– Transaction Information -

Trace Number:	582EA000612652
Date:	06/03/2024 04:48 PM
Payment Method:	CC - Authorization 0000040412
ePay Actor:	DAVID FUSILIER
TCEQ Amount:	\$815.00
Texas.gov Price::	\$833.59*

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

- Payment Contact Information -

Name:	DAVID FUSILIER
Company:	ATWELL LLC
Address:	805 LAS CIMAS PARKWAY BUILDIN, AUSTIN, TX 78746
Phone:	512-925-6691
r none:	512-925-0091

– Cart Items –

Voucher 707913	Fee Description WW PERMIT - FACILITY WITH FLOW >= .10 & < .25 MGD - RENEWAL	AR Number	Amount \$800.00
707914	30 TAC 305.53B WQ RENEWAL NOTIFICATION FEE	TCEQ Amount:	\$15.00 \$815.00

RENEWAL FEE FOR CYPRESS RANCH WCID No. 1 TCEQ WASTEWATER PERMIT RENEWAL APPLICATION TCEQ PERMIT NO. WQ0014368001

ATWELL PROJECT NO. 18009012

- **c.** Check the box next to the appropriate permit type.
 - □ TPDES Permit
 - □ TLAP
 - □ TPDES Permit with TLAP component
 - Subsurface Area Drip Dispersal System (SADDS)
- **d.** Check the box next to the appropriate application type
 - □ New
 - Major Amendment <u>with</u> Renewal
 Minor Amendment <u>with</u> Renewal
 - □ Major Amendment <u>without</u> Renewal
 - al D Minor Amendment <u>without</u> Renewal
 - Renewal without changes

 Minor Modification of permit
- **e.** For amendments or modifications, describe the proposed changes: $\underline{N/A}$
- f. For existing permits:

Permit Number: WQ00 <u>14368001</u> EPA I.D. (TPDES only): TX <u>N/A</u> Expiration Date: <u>December 1, 2024</u>

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

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

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

Cypress Ranch Water Control and Improvement District No. 1

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

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

CN: <u>601661085</u>

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

Prefix: <u>Mr.</u>	Last Name, First Name:	Tony	/ Salinas

Title: <u>President</u> Credential: Click to enter text.

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

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

<u>N/A</u>

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

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

CN: Click to enter text.

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

Prefix: Click to enter text.	Last Name, First Name: Click to enter text.
Title: Click to enter text.	Credential: Click to enter text.

Provide a brief description of the need for a co-permittee: Click to enter text.

C. Core Data Form

Complete the Core Data Form for each customer and include as an attachment. If the customer type selected on the Core Data Form is **Individual**, complete **Attachment 1** of Administrative Report 1.0. <u>Core Data Form is attached (ATTACHMENT 1)</u>

Section 4. Application Contact Information (Instructions Page 27)

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

Prefix: <u>Mr.</u>	Last Name, First Name: <u>Hamala, Richard</u>			
Title: <u>Attorney</u>	Credential: Click to enter text.			
Organization Name: Tiemann, Sha	<u>ıhady & Hamala, PC</u>			
Mailing Address: <u>102 N. Railroad A</u>	Ave. City, State, Zip Cod	e: <u>Pflu</u>	<u>igerville, TX_78660</u>	
Phone No.: <u>512-251-1920</u>	E-mail Address: <u>rhamala@tie</u>	mannl	<u>aw.com</u>	
Check one or both: \square Adr	ninistrative Contact		Technical Contact	
B. Prefix: <u>Mr.</u> Last Name, First Name: <u>Smith, Hank</u>				
Title: <u>District Engineer</u> Credential: <u>P.E.</u>				
Organization Name: <u>Atwell, LLC</u>				
Mailing Address: <u>805 Las Cimas Pkwy, Building III, Suite 310</u> City, State, Zip Code: <u>Aus</u> <u>TX 78746</u>				
Phone No.: <u>512-904-0505</u> E-mail Address: <u>hsmith@atwell-group.com</u>				
Check one or both: \Box Adn	ninistrative Contact	\boxtimes	Technical Contact	
	Prefix: Mr.Title: AttorneyOrganization Name: Tiemann, ShaMailing Address: 102 N. Railroad APhone No.: 512-251-1920Check one or both:☑ AdmPrefix: Mr.Title: District EngineerOrganization Name: Atwell, LLCMailing Address: 805 Las Cimas PTX 78746Phone No.: 512-904-0505Check one or both:□ Adm	Prefix: Mr.Last Name, First Name: HamaTitle: AttorneyCredential: Click to enter textOrganization Name: Tiemann, Shahady & Hamala, PCMailing Address: 102 N. Railroad Ave.City, State, Zip CodPhone No.: 512-251-1920E-mail Address: rhamala@tierCheck one or both:Image: Administrative ContactPrefix: Mr.Last Name, First Name: SmithTitle: District EngineerCredential: P.E.Organization Name: Atwell, LLCMailing Address: 805 Las Cimas Pkwy, Building III, Suite 310Mailing Address: 805 Las Cimas Pkwy, Building III, Suite 310TX 78746Phone No.: 512-904-0505E-mail Address: hsmith@atweeCheck one or both:Image: Administrative Contact	Prefix: Mr.Last Name, First Name: Hamala, RiceTitle: AttorneyCredential: Click to enter text.Organization Name: Tiemann, Shahady & Hamala, PCMailing Address: 102 N. Railroad Ave.City, State, Zip Code: PflyPhone No.: 512-251-1920E-mail Address: rhamala@tiemannlCheck one or both:Image: Administrative ContactPrefix: Mr.Last Name, First Name: Smith, HankTitle: District EngineerCredential: P.E.Organization Name: Atwell, LLCCredential: P.E.Mailing Address: 805 Las Cimas Pkwy, Building III, Suite 310City, City, City	

Section 5. Permit Contact Information (Instructions Page 27)

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

A.	Prefix: <u>Mr.</u>	Last Name, First Name: <u>Hamala, Richard</u>
	Title: <u>Attorney</u>	Credential: Click to enter text.
	Organization Name: <u>Tiemann, Sha</u>	<u>hady & Hamala, PC</u>
	Mailing Address: <u>102 N. Railroad A</u>	<u>ve.</u> City, State, Zip Code: <u>Pflugerville, TX 78660</u>

	Phone No.: <u>512-251-1920</u>	E-mail Address: <u>rhamala@tie</u>	mannlaw.com
B.	Prefix: <u>Mr.</u>	Last Name, First Name: <u>Hank</u>	<u>Smith</u>
	Title: <u>District Engineer</u>	Credential: <u>P.E.</u>	
	Organization Name: <u>Atwell, LLC</u>		
	Mailing Address: <u>805 Las Cimas Pa TX 78746</u>	arkway, Bldg. III, Suite 310	City, State, Zip Code: <u>Austin</u> ,
	Phone No.: <u>512-904-0505</u>	E-mail Address: <u>hsmith@atwe</u>	ell-group.com

Section 6. Billing Contact Information (Instructions Page 27)

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

Prefix: <u>Mr.</u>	Last Name, First Name: <u>Hamala, Richard</u>		
Title: <u>Attorney</u>	Credential: Click to enter text.		
Organization Name: <u>Tiemann, Shahady & Hamala, PC</u>			
Mailing Address: 102 N. Railroad	Ave. City, State, Zip Code: <u>Pflugerville, TX 78660</u>		
Phone No.: 512-251-1920	E-mail Address: rhamala@tiemannlaw.com		

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

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

Prefix: <u>Mr.</u>	Last Name, First Name: <u>Lanham, Hal</u>			
Title: <u>Operator</u>	Credential: Click to enter text.			
Organization Name: <u>AWR Services</u>	, Inc.			
Mailing Address: <u>500 N. Capital of</u> <u>TX 78746</u>	<u>Texas Hwy, Bldg 1, Suite 125</u>	City, State, Zip Code: <u>Austin</u> ,		
Phone No.: 512-784-6544	E-mail Address: hlanham@aw	rservices.net		

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Mr.Last Name, First Name: Smith, HankTitle: District EngineerCredential: P.E.Organization Name: Atwell, LLCMailing Address: 805 Las Cimas Pkwy, Bldg III, Suite 310City, State, Zip Code: Austin, TX78746Phone No.: 512-904-0505E-mail Address: hsmith@atwell-group.com

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

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

- ⊠ E-mail Address
- □ Fax
- □ Regular Mail

C. Contact permit to be listed in the Notices

Prefix: <u>Mr.</u>

Last Name, First Name: <u>Smith, Hank</u> Credential: P.E.

Title:District EngineerCreden

Organization Name: <u>Atwell, LLC</u>

Mailing Address: <u>805 Las Cimas Pkwy, Bldg III, Suite 310</u> City, State, Zip Code: <u>Austin, TX</u> <u>78746</u>

Phone No.: <u>512-904-0505</u> E-mail Address: <u>hsmith@atwell-group.com</u>

D. Public Viewing Information

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

Public building name: Building A, TCEQ Region II Office

Location within the building: <u>Room 179</u>

Physical Address of Building: <u>12100 Park 35 Circle</u>

City: <u>Austin</u>

County: <u>Travis</u>

Contact (Last Name, First Name): Region 11, Water Program

Phone No.: <u>512-339-2929</u> Ext.: Click to enter text.

E. Bilingual Notice Requirements

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

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

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

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

🗆 Yes 🖾 No

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

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

🗆 Yes 🖾 No

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

🗆 Yes 🖾 No

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

🗆 Yes 🗆 No

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

F. Plain Language Summary Template

Complete the Plain Language Summary (TCEQ Form 20972) and include as an attachment.

Attachment: <u>N/A</u>

G. Public Involvement Plan Form

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

Attachment: <u>N/A</u>

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

A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. **RN** <u>103177556</u>

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

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

Cypress Ranch Wastewater Treatment Plant

C.	Owner of treatment fac	cility:	<u>Cypress</u>	Ranch	Water Cor	<u>ntrol and</u>	Improve	ement Di	<u>strict No. 1</u>
	Ownership of Facility:	\boxtimes	Public		Private		Both		Federal

- **D.** Owner of land where treatment facility is or will be:
 - Prefix: <u>Mr.</u> Last Name, First Name: <u>Salinas, Tony</u>

Title: <u>President</u> Credential: Click to enter text.

Organization Name: <u>Cypress Ranch Water Control and Improvement District No. 1</u>

Mailing Address: <u>102 N. Railroad Ave.</u> City, State, Zip Code: <u>Pflugerville, TX 78660</u>

Phone No.: <u>512-251-1920</u> E-mail Address: <u>rhamala@tiemannlaw.com</u>

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

Attachment: Click to enter text.

E. Owner of effluent disposal site:

Prefix: Mr.Last Name, First Name: Salinas, TonyTitle: PresidentCredential: Click to enter text.Organization Name: Cypress Ranch Water Control and Improvement District No. 1Mailing Address: 102 N. Railroad Ave.City, State, Zip Code: Pflugerville, TX 78660

Phone No.: 512-251-1920 E-mail Address: rhamala@tiemannlaw.com

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

Attachment: Landowner is the same as the facility owner - Cypress Ranch WCID No. 1

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

Title: Click to enter text. Credential: Click to enter text.

Organization Name: Click to enter text.

Mailing Address: Click to enter text. City, State, Zip Code: Click to enter text.

Phone No.: Click to enter text. E-mail Address: Click to enter text.

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

Attachment: <u>N/A</u>

Section 10. TPDES Discharge Information (Instructions Page 31)

- A. Is the wastewater treatment facility location in the existing permit accurate?
 - 🖾 Yes 🗆 No

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

The existing permit is a no-discharge permit (combination drip irrigation and spray irrigation).

- **B.** Are the point(s) of discharge and the discharge route(s) in the existing permit correct?
 - 🖾 Yes 🗆 No

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

The existing permit is a no-discharge permit (combination drip irrigation and spray irrigation).

City nearest the outfall(s): <u>N/A – no outfalls</u>

County in which the outfalls(s) is/are located: N/A – no outfalls

- **C.** Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?
 - 🗆 Yes 🖾 No

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

□ Authorization granted □ Authorization pending

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

Attachment: Click to enter text.

D. For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: <u>N/A</u>

Section 11. TLAP Disposal Information (Instructions Page 32)

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

\boxtimes	Yes	No

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

Click to enter text.

- B. City nearest the disposal site: <u>Village of Briarcliff (78669</u>)
- **C.** County in which the disposal site is located: <u>Travis</u>
- **D.** For **TLAPs**, describe the routing of effluent from the treatment facility to the disposal site:

The effluent flows from the treatment chambers to the irrigation dosing tanks. It is then routed via a suction line through a filtration system and finally to the drip irrigation lines and spray areas.

E. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: <u>Tributaries of Lick Creek</u>

Section 12. Miscellaneous Information (Instructions Page 32)

- A. Is the facility located on or does the treated effluent cross American Indian Land?
 - 🗆 Yes 🖾 No
- **B.** If the existing permit contains an onsite sludge disposal authorization, is the location of the sewage sludge disposal site in the existing permit accurate?

□ Yes

 \square No \square Not Applicable

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

Click to enter text.

- **C.** Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?
 - 🗆 Yes 🖾 No

If yes, list each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application: Click to enter text.

D. Do you owe any fees to the TCEQ?

🗆 Yes 🖾 No

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

Account number: Click to enter text.

Amount past due: Click to enter text.

E. Do you owe any penalties to the TCEQ?

🗆 Yes 🖾 No

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

Enforcement order number: Click to enter text.

Amount past due: Click to enter text.

Section 13. Attachments (Instructions Page 33)

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

□ Lease agreement or deed recorded easement, if the land where the treatment facility is located or the effluent disposal site are not owned by the applicant or co-applicant.

Original full-size USGS Topographic Map with the following information:

- Applicant's property boundary
- Treatment facility boundary
- Labeled point of discharge for each discharge point (TPDES only)
- Highlighted discharge route for each discharge point (TPDES only)
- Onsite sewage sludge disposal site (if applicable)
- Effluent disposal site boundaries (TLAP only)
- New and future construction (if applicable)
- 1 mile radius information
- 3 miles downstream information (TPDES only)
- All ponds.
- □ Attachment 1 for Individuals as co-applicants
- □ Other Attachments. Please specify: <u>N/A</u>

Section 14. Signature Page (Instructions Page 34)

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

Permit Number: WQ0014368001

Applicant: Cypress Ranch Water Control and Improvement District No. 1

Certification:

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

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

Signatory name (typed or printed): <u>Tony Salinas</u>

Signatory title: Board President

Signature: And the	Date: 4-18-2024
(Use blue ink)	

Subscribed and Sworn to before n	ne by the	said	presiden	<i>f</i>
on this <i>18</i>	_day of	April	/	, 20_24.
My commission expires on the	01	_day of	August	, 20 27.

<u>leresa</u> Hullin's Notary Public

County. Texas





ADMINISTRATIVE REPORT 1.1

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0 N/A -RENEWAL APPLICATION

The following information is required for new and amendment applications.

Section 1. Affected Landowner Information (Instructions Page 36)

- **A.** Indicate by a check mark that the landowners map or drawing, with scale, includes the following information, as applicable:
 - □ The applicant's property boundaries
 - □ The facility site boundaries within the applicant's property boundaries
 - □ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
 - □ The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
 - □ The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
 - The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
 - The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
 - □ The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
 - □ The property boundaries of all landowners surrounding the effluent disposal site
 - □ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
 - □ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located
- **B.** Indicate by a check mark that a separate list with the landowners' names and mailing addresses cross-referenced to the landowner's map has been provided.
- **C.** Indicate by a check mark in which format the landowners list is submitted:
 - \Box USB Drive \Box Four sets of labels
- D. Provide the source of the landowners' names and mailing addresses: Click to enter text.
- **E.** As required by *Texas Water Code § 5.115*, is any permanent school fund land affected by this application?
 - 🗆 Yes 🗆 No

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

Click to enter text.

Section 2. Original Photographs (Instructions Page 38)

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

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

Section 3. Buffer Zone Map (Instructions Page 38)

- **A.** Buffer zone map. Provide a buffer zone map on 8.5 x 11-inch paper with all of the following information. The applicant's property line and the buffer zone line may be distinguished by using dashes or symbols and appropriate labels.
 - The applicant's property boundary;
 - The required buffer zone; and
 - Each treatment unit; and
 - The distance from each treatment unit to the property boundaries.
- **B.** Buffer zone compliance method. Indicate how the buffer zone requirements will be met. Check all that apply.
 - □ Ownership
 - □ Restrictive easement
 - □ Nuisance odor control
 - □ Variance
- **C.** Unsuitable site characteristics. Does the facility comply with the requirements regarding unsuitable site characteristic found in 30 TAC § 309.13(a) through (d)?



DOMESTIC WASTEWATER PERMIT APPLICATION SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

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

Attachment: <u>N/A - SADDS with a Surface Irrigation Component</u>

ATTACHMENT 1

INDIVIDUAL INFORMATION

N/A

Section 1. Individual Information (Instructions Page 41)

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

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

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

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

Date of Birth: Click to enter text.

Mailing Address: Click to enter text.

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

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

E-mail Address: Click to enter text.

CN: Click to enter text.

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

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

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

Core Data Form (TCEQ Form No. 10400) (<i>Required for all application types. Must be completed in its entirety a</i> <i>Note: Form may be signed by applicant representative.</i>)	nd s	igned.	\boxtimes	Yes
Correct and Current Industrial Wastewater Permit Application Forms (<i>TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or late</i>	5 r.)	N/A		Yes
Water Quality Permit Payment Submittal Form (Page 19) (Original payment sent to TCEQ Revenue Section. See instructions for	mai	iling add	⊠ dress	Yes .)
7.5 Minute USGS Quadrangle Topographic Map Attached (Full–size map if seeking "New" permit. 8 ½ x 11 acceptable for Renewals and Amendments)			\boxtimes	Yes
Current/Non-Expired, Executed Lease Agreement or Easement	\boxtimes	N/A		Yes
Landowners Map (See instructions for landowner requirements)	\boxtimes	N/A		Yes

Things to Know:

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

Landowners Cross Reference List (See instructions for landowner requirements)	\boxtimes	N/A		Yes
Landowners Labels or USB Drive attached (See instructions for landowner requirements)	\boxtimes	N/A		Yes
Original signature per 30 TAC § 305.44 – Blue Ink Preferred (<i>If signature page is not signed by an elected official or principle exect a copy of signature authority/delegation letter must be attached</i>)	utive	officer	\boxtimes	Yes
Plain Language Summary	Ν	/ A		Yes

Cypress Ranch Water Control and Improvement District No. 1 (CN601661085) Wastewater Treatment Plant (RN103177556) TCEQ Permit No. WQ0014368001 Amendment Application June 2024

TECHNICAL REPORT 1.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

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

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

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

A. Existing/Interim I Phase

Design Flow (MGD): <u>0.066</u> 2-Hr Peak Flow (MGD): <u>N/A</u> Estimated construction start date: <u>Existing Phase</u> Estimated waste disposal start date: <u>Existing Phase</u>

B. Interim II Phase

Design Flow (MGD): <u>0.135</u> 2-Hr Peak Flow (MGD): <u>N/A</u> Estimated construction start date: <u>Summer 2023</u> Estimated waste disposal start date: <u>Late 2024</u>

C. Final Phase

Design Flow (MGD): <u>0.20</u> 2-Hr Peak Flow (MGD): <u>N/A</u> Estimated construction start date: <u>To Be Determined</u> Estimated waste disposal start date: <u>To Be Determined</u>

D. Current Operating Phase

Provide the startup date of the facility: Interim I - 2010

Section 2. Treatment Process (Instructions Page 43)

A. Current Operating Phase

Provide a detailed description of the treatment process. **Include the type of treatment plant, mode of operation, and all treatment units.** Start with the plant's head works and

THE CURRENT PERMIT INCLUDES INTERIM PHASES I (0.066 MGD), INTERIM PHASE II (0.10 MGD), INTERIM PHASE III (0.135 MGD), AND FINAL PHASE (0.20 MGD).

IT IS REQUESTED THAT THE INTERIM PHASE II (0.10 MGD) BE DELETED.

CYPRESS RANCH WCID NO. 1 IS CURRENTLY CONSTRUCTING IMPROVEMENTS TO THE WWTP FOR INTERIM PHASE III (0.135 MGD), SO THE 0.10 MGD PHASE IS NOT NEEDED. finish with the point of discharge. Include all sludge processing and drying units. **If more than one phase exists or is proposed, a description of** *each phase* **must be provided**.

SEE ATTACHMENT #3 FOR TREATMENT DESCRIPTION.

B. Treatment Units

In Table 1.0(1), provide the treatment unit type, the number of units, and dimensions (length, width, depth) **of each treatment unit, accounting for** *all* **phases of operation.**

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
SEE ATTACHMENT #3 FOR TREATMENT UNIT INFORMATION		

C. Process Flow Diagram

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

Attachment: SEE ATTACHMENT #4 FOR PROCESS FLOW DIAGRAM.

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

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

- Latitude: <u>N/A</u>
- Longitude: <u>N/A</u>

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

- Latitude: <u>30.3596</u>
- Longitude: <u>-98.0783</u>

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

- The boundaries of the treatment facility;
- The boundaries of the area served by the treatment facility;
- If land disposal of effluent, the boundaries of the disposal site and all storage/holding ponds; and
- If sludge disposal is authorized in the permit, the boundaries of the land application or

disposal site.

Attachment: <u>SEE ATTACHMENT #5 - SITE DRAWING</u>

Provide the name **and** a description of the area served by the treatment facility.

The West Cypress Hills Subdivision. The subdivision is comprised of single-family homes.

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

Collection System Information

Collection System Name	Owner Name	Owner Type	Population Served
West Cypress Hills	Cypress Ranch WCID No. 1	Publicly Owned	
		Choose an item.	
		Choose an item.	
		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 45)

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

🛛 Yes 🗆 No

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

🖾 Yes 🗆 No

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

The development continues to grow as the planned phases are constructed, which will require the unbuilt phase (the Final Phase).

Section 5. Closure Plans (Instructions Page 45)

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

🗆 Yes 🖾 No

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

🗆 Yes 🗆 No

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

Click to enter text.

Section 6. Permit Specific Requirements (Instructions Page 45)

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

A. Summary transmittal

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

🖾 Yes 🗆 No

If yes, provide the date(s) of approval for each phase: <u>March 2010 (0.066 MGD, Interim</u> Phase I), July 2023 (0.135 MGD, Current Permit Interim Phase III).

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

Copies of the approval letters are attached to this application: **ATTACHMENT 6** <u>Interim Phase I – March 2010</u> <u>Interim Phase III – July 2023 << WE ARE PROPOSING THAT THIS WOULD BECOME</u> <u>INTERIM PHASE II (and the current Interim Phase II, 0.10 MGD, would be deleted).</u>

B. Buffer zones

Have the buffer zone requirements been met?

🖾 Yes 🗆 No

Provide information below, including dates, on any actions taken to meet the conditions of the buffer zone. If available, provide any new documentation relevant to maintaining the buffer zones.

N/A

C. Other actions required by the current permit

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

🛛 Yes 🗆 No

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

Special Provisions: #7 – Submittal of Summ

#7 – Submittal of Summary Transmittal Letter for proposed construction.

#8 – Engineering Report for each Drip Irrigation System Being Constructed.

#18 – Notify Region 11 prior to start up of Interim II, III, and Final Phases.

#26 – Soil Sampling Results.

D. Grit and grease treatment

1. Acceptance of grit and grease waste

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

🗆 Yes 🖂 No

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

2. Grit and grease processing

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

Click to enter text.

3. Grit disposal

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

🗆 Yes 🗆 No

If No, contact the TCEQ Municipal Solid Waste team at 512-239-2335. Note: A registration or permit is required for grit disposal. Grit shall not be combined with

treatment plant sludge. See the instruction booklet for additional information on grit disposal requirements and restrictions.

Describe the method of grit disposal.

Click to enter text.

4. Grease and decanted liquid disposal

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

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

Click to enter text.

E. Stormwater management

1. Applicability

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

🗆 Yes 🖾 No

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

🗆 Yes 🖂 No

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

2. MSGP coverage

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

🗆 Yes 🗆 No

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

TXR05 <u>Click to enter text.</u> or TXRNE <u>Click to enter text.</u>

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

🗆 Yes 🗆 No

3. Conditional exclusion

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

🗆 Yes 🗆 No

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

4. Existing coverage in individual permit

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

🗆 Yes 🗆 No

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

Click to enter text.

5. Zero stormwater discharge

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

🗆 Yes 🗆 No

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

Click to enter text.

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

6. Request for coverage in individual permit

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

□ Yes □ No

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

Click to enter text.

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

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

🗆 Yes 🖾 No

If yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions. <u>Click to enter text.</u>

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

1. Acceptance of sludge from other WWTPs

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

🗆 Yes 🖂 No

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

In addition, provide the date the plant started or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an

estimate of the BOD₅ concentration of the sludge, and the design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

Click to enter text.

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

2. Acceptance of septic waste

Is the facility accepting or will it accept septic waste?

🗆 Yes 🖾 No

If yes, does the facility have a Type V processing unit?

🗆 Yes 🗆 No

If yes, does the unit have a Municipal Solid Waste permit?

🗆 Yes 🗆 No
If yes to any of the above, provide the date the plant started or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the BOD_5 concentration of the septic waste, and the

design BOD₅ concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

Click to enter text.

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

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

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

🗆 Yes 🖾 No

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

Click to enter text.

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

Is the facility in operation?

🛛 Yes 🗆 No

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

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

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

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

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

*TPDES permits only

†TLAP permits only

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

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

Section 8. Facility Operator (Instructions Page 50)

Facility Operator Name: <u>AWR Services, Inc.</u>

Facility Operator's License Classification and Level: <u>Mike Bamer, Primary Operator</u> Facility Operator's License Number: <u>WW0016750</u>

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

A. WWTP's Biosolids Management Facility Type

Check all that apply. See instructions for guidance

 $\Box \quad \text{Design flow} = 1 \text{ MGD}$

- \Box Serves >= 10,000 people
- □ Class I Sludge Management Facility (per 40 CFR § 503.9)
- ⊠ Biosolids generator
- □ Biosolids end user land application (onsite)
- Biosolids end user surface disposal (onsite)
- □ Biosolids end user incinerator (onsite)

B. WWTP's Biosolids Treatment Process

Check all that apply. See instructions for guidance.

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

C. Biosolids Management

Provide information on the *intended* biosolids management practice. Do not enter every management practice that you want authorized in the permit, as the permit will authorize all biosolids management practices listed in the instructions. Rather indicate the management practice the facility plans to use.

Biosolids Management

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Other	Off-site Third-Party Handler or Preparer	Not Applicable		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): <u>TRANSPORT TO ANOTHER, TCEQ AUTHORIZED WASTEWATER</u> <u>TREATMENT PLANT FOR PROCESSING</u>

D. Disposal site

Disposal site name: <u>Wilbarger</u>

TCEQ permit or registration number: <u>WQ0012900001</u>

County where disposal site is located: Travis

E. Transportation method

Method of transportation (truck, train, pipe, other): <u>Truck</u>

Name of the hauler: <u>Waste Transport Services, LLC</u>

Hauler registration number: <u>24343</u>

Sludge is transported as a:

Liquid 🖂 🛛 semi-

semi-liquid 🗆 🤅 semi-solid 🗆

solid 🗆

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

A. Beneficial use authorization

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

🗆 Yes 🖾 No

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

🗆 Yes 🗆 No

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

□ Yes □ No

B. Sludge processing authorization

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

Sludge Composting	Yes	\boxtimes	No
Marketing and Distribution of sludge	Yes	\boxtimes	No
Sludge Surface Disposal or Sludge Monofill	Yes	\boxtimes	No
Temporary storage in sludge lagoons	Yes	\boxtimes	No

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

□ Yes □ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

🗆 Yes 🖾 No

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

A. Location information

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

• Original General Highway (County) Map:

Attachment: Click to enter text.

• USDA Natural Resources Conservation Service Soil Map:

Attachment: Click to enter text.

• Federal Emergency Management Map:

Attachment: Click to enter text.

• Site map:

Attachment: Click to enter text.

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

- Overlap a designated 100-year frequency flood plain
- □ Soils with flooding classification
- □ Overlap an unstable area
- □ Wetlands
- □ Located less than 60 meters from a fault
- \Box None of the above

Attachment: Click to enter text.

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

Click to enter text.

B. Temporary storage information

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

Nitrate Nitrogen, mg/kg: Click to enter text. Total Kjeldahl Nitrogen, mg/kg: <u>Click to enter text.</u> Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: Click to enter text. Phosphorus, mg/kg: Click to enter text. Potassium, mg/kg: <u>Click to enter text.</u> pH, standard units: Click to enter text. Ammonia Nitrogen mg/kg: Click to enter text. Arsenic: Click to enter text. Cadmium: Click to enter text. Chromium: Click to enter text. Copper: Click to enter text. Lead: Click to enter text. Mercury: Click to enter text. Molybdenum: Click to enter text. Nickel: Click to enter text. Selenium: Click to enter text. Zinc: Click to enter text. Total PCBs: Click to enter text.

Provide the following information:

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

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

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

C. Liner information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of 1×10^{-7} cm/sec?

□ Yes □ No

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

D. Site development plan

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

Click to enter text.			

Attach the following documents to the application.

- Plan view and cross-section of the sludge lagoon(s)
 Attachment: <u>Click to enter text.</u>
- Copy of the closure plan
 Attachment: <u>Click to enter text.</u>
- Copy of deed recordation for the site Attachment: <u>Click to enter text.</u>
- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons Attachment: <u>Click to enter text.</u>
- Description of the method of controlling infiltration of groundwater and surface water from entering the site

Attachment: Click to enter text.

• Procedures to prevent the occurrence of nuisance conditions

Attachment: Click to enter text.

E. Groundwater monitoring

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

□ Yes □ No

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

Attachment: Click to enter text.

Section 12. Authorizations/Compliance/Enforcement (Instructions

Page 55)

A. Additional authorizations

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

🖾 Yes 🗆 No

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

Reuse Authorization No. R14368-001. Type 1 reclaimed water from wastewater treatment facility is to be used for irrigation of landscapes, public parks, roadway right of ways, athletic fields, golf courses, greenbelts, and soil compaction or dust control in construction areas.

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

🗆 Yes 🖾 No

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

🗆 Yes 🖂 No

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

Click to enter text.

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

A. RCRA hazardous wastes

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

🗆 Yes 🖾 No

B. Remediation activity wastewater

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

🗆 Yes 🖂 No

C. Details about wastes received

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

Attachment: Click to enter text.

Cypress Ranch Water Control and Improvement District No. 1 (CN601661085) Wastewater Treatment Plant (RN103177556) TCEQ Permit No. WQ0014368001 Amendment Application June 2024

TECHNICAL REPORT 1.1

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.1

The following information is required for new and amendment major applications.

Section 1. Justification for Permit (Instructions Page 57)

A. Justification of permit need

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

Click to enter text.

B. Regionalization of facilities

For additional guidance, please review <u>TCEQ's Regionalization Policy for Wastewater</u> <u>Treatment</u>¹.

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

1. Municipally incorporated areas

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

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

□ Yes □ No □ Not Applicable

If yes, within the city limits of: <u>Click to enter text.</u>

If yes, attach correspondence from the city.

Attachment: Click to enter text.

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

Attachment: Click to enter text.

2. Utility CCN areas

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

🗆 Yes 🗆 No

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

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

Attachment: Click to enter text.

3. Nearby WWTPs or collection systems

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

🗆 Yes 🗆 No

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

Attachment: Click to enter text.

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

Attachment: Click to enter text.

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

Attachment: Click to enter text.

Section 2. Proposed Organic Loading (Instructions Page 59)

Is this facility in operation?

□ Yes □ No

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

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

A. Current organic loading

Facility Design Flow (flow being requested in application): Click to enter text.

Average Influent Organic Strength or BOD₅ Concentration in mg/l: Click to enter text.

Average Influent Loading (lbs/day = total average flow X average BOD₅ conc. X 8.34): <u>Click</u> to enter text.

Provide the source of the average organic strength or BOD₅ concentration.

Click to enter text.

B. Proposed organic loading

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

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

Table 1.1(1) – Design Organic Loading

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

A. Existing/Interim I Phase Design Effluent Quality

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

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

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

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

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

Other: Click to enter text.

B. Interim II Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: <u>Click to enter text.</u> Total Suspended Solids, mg/l: <u>Click to enter text.</u> Ammonia Nitrogen, mg/l: <u>Click to enter text.</u> Total Phosphorus, mg/l: <u>Click to enter text.</u> Dissolved Oxygen, mg/l: <u>Click to enter text.</u> Other: <u>Click to enter text.</u>

C. Final Phase Design Effluent Quality

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

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

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

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

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

Other: Click to enter text.

D. Disinfection Method

Identify the proposed method of disinfection.

□ Chlorine: <u>Click to enter text.</u> mg/l after <u>Click to enter text.</u> minutes detention time at peak flow

Dechlorination process: Click to enter text.

- □ Ultraviolet Light: <u>Click to enter text.</u> seconds contact time at peak flow
- □ Other: <u>Click to enter text</u>.

Section 4. Design Calculations (Instructions Page 59)

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

Attachment: Click to enter text.

Section 5. Facility Site (Instructions Page 60)

A. 100-year floodplain

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

🗆 Yes 🗆 No

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

Click to enter text.

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

Click to enter text.

For a new or expansion of a facility, will a wetland or part of a wetland be filled?

🗆 Yes 🗆 No

If yes, has the applicant applied for a US Corps of Engineers 404 Dredge and Fill Permit?

🗆 Yes 🗆 No

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

If no, provide the approximate date you anticipate submitting your application to the Corps: <u>Click to enter text.</u>

B. Wind rose

Attach a wind rose: <u>Click to enter text.</u>

Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 60)

A. Beneficial use authorization

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

□ Yes □ No

If yes, attach the completed **Application for Permit for Beneficial Land Use of Sewage** Sludge (TCEQ Form No. 10451): <u>Click to enter text.</u>

B. Sludge processing authorization

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

- □ Sludge Composting
- □ Marketing and Distribution of sludge
- □ Sludge Surface Disposal or Sludge Monofill

If any of the above, sludge options are selected, attach the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)**: <u>Click to enter text.</u>

Section 7. Sewage Sludge Solids Management Plan (Instructions Page 61)

Attach a solids management plan to the application.

```
Attachment: Click to enter text.
```

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

• Treatment units and processes dimensions and capacities

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

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

WORKSHEET 2.0

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

Section 1. Domestic Drinking Water Supply (Instructions Page 64)

Is there a surface water intake for domestic drinking water supply located within 5 miles downstream from the point or proposed point of discharge?

□ Yes □ No

If **no**, proceed it Section 2. **If yes**, provide the following:

Owner of the drinking water supply: <u>Click to enter text.</u>

Distance and direction to the intake: <u>Click to enter text</u>.

Attach a USGS map that identifies the location of the intake.

Attachment: Click to enter text.

Section 2. Discharge into Tidally Affected Waters (Instructions Page 64)

Does the facility discharge into tidally affected waters?

□ Yes □ No

If **no**, proceed to Section 3. **If yes**, complete the remainder of this section. If no, proceed to Section 3.

A. Receiving water outfall

Width of the receiving water at the outfall, in feet: <u>Click to enter text.</u>

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

□ Yes □ No

If yes, provide the distance and direction from outfall(s).

Click to enter text.

C. Sea grasses

Are there any sea grasses within the vicinity of the point of discharge?

🗆 Yes 🗆 No

If yes, provide the distance and direction from the outfall(s).

Click to enter text.



Section 3. Classified Segments (Instructions Page 64)

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

🗆 Yes 🗆 No

If yes, this Worksheet is complete.

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

Section 4. Description of Immediate Receiving Waters (Instructions Page 65)

Name of the immediate receiving waters: Click to enter text.

A. Receiving water type

Identify the appropriate description of the receiving waters.

- □ Stream
- □ Freshwater Swamp or Marsh
- □ Lake or Pond

Surface area, in acres: <u>Click to enter text.</u>

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

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

- □ Man-made Channel or Ditch
- Open Bay
- 🗆 🛛 Tidal Stream, Bayou, or Marsh
- □ Other, specify: <u>Click to enter text.</u>

B. Flow characteristics

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

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

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

□ Perennial - normally flowing

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

- \Box USGS flow records
- □ Historical observation by adjacent landowners
- □ Personal observation
- □ Other, specify: <u>Click to enter text.</u>

C. Downstream perennial confluences

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

Click to enter text.

D. Downstream characteristics

Do the receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.)?

🗆 Yes 🗆 No

If yes, discuss how.

Click to enter text.

E. Normal dry weather characteristics

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

Click to enter text.

Date and time of observation: Click to enter text.

Was the water body influenced by stormwater runoff during observations?

□ Yes □ No

Section 5. General Characteristics of the Waterbody (Instructions Page 66)

A. Upstream influences

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

- \Box Oil field activities \Box Urban runoff
- Upstream discharges
 Agricultural runoff
 Septic tanks
 Other(s), specify: <u>Click to enter text.</u>

B. Waterbody uses

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

- Livestock watering
- □ Irrigation withdrawal
- □ Fishing
- Domestic water supply
- □ Contact recreation
- □ Non-contact recreation
- □ Navigation
- Industrial water supply

C. Waterbody aesthetics

Check one of the following that best describes the aesthetics of the receiving water and the surrounding area.

- Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional
- Natural Area: trees and/or native vegetation; some development evident (from fields, pastures, dwellings); water clarity discolored
- Common Setting: not offensive; developed but uncluttered; water may be colored or turbid
- Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

Cypress Ranch Water Control and Improvement District No. 1 (CN601661085) Wastewater Treatment Plant (RN103177556) TCEQ Permit No. WQ0014368001 Amendment Application June 2024

WORKSHEET 2.1

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.1: STREAM PHYSICAL CHARACTERISTICS

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

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

Section 1. General Information (Instructions Page 66)

Date of study: <u>Click to enter text.</u> Time of study: <u>Click to enter text.</u>

Stream name: Click to enter text.

Location: Click to enter text.

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

Perennial	Intermittent with perennial pools
 i ci ciiiinui	 interimittent with pereima poolo

Section 2. Data Collection (Instructions Page 66)

Number of stream bends that are well defined: Click to enter text.

Number of stream bends that are moderately defined: Click to enter text.

Number of stream bends that are poorly defined: Click to enter text.

Number of riffles: Click to enter text.

Evidence of flow fluctuations (check one):

L Minor L moderate L seve	
---------------------------	--

Indicate the observed stream uses and if there is evidence of flow fluctuations or channel obstruction/modification.

Click to enter text.





Stream transects

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

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

 Table 2.1(1) - Stream Transect Records

Section 3. Summarize Measurements (Instructions Page 66)

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

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

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

Number of lateral transects made: Click to enter text.

Average stream width, in feet: <u>Click to enter text.</u>

Average stream depth, in feet: <u>Click to enter text.</u>

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

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

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

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

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

Cypress Ranch Water Control and Improvement District No. 1 (CN601661085) Wastewater Treatment Plant (RN103177556) TCEQ Permit No. WQ0014368001 Amendment Application June 2024

WORKSHEET 3.0

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.0: LAND DISPOSAL OF EFFLUENT

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

Section 1. Type of Disposal System (Instructions Page 68)

Identify the method of land disposal:

Drip irrigation system

 \boxtimes

 \boxtimes

	Surface application		Subsurface application
--	---------------------	--	------------------------

- Irrigation 🗆 Subsurface soils absorption
 - Subsurface area drip dispersal system
- □ Evaporation □ Evapotranspiration beds
- □ Other (describe in detail): <u>Click to enter text.</u>

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

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

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

In table 3.0(1), provide the requested information for the land application sites. Include the agricultural or cover crop type (wheat, cotton, alfalfa, bermuda grass, native grasses, etc.), land use (golf course, hayland, pastureland, park, row crop, etc.), irrigation area, amount of effluent applied, and whether or not the public has access to the area. Specify the amount of land area and the amount of effluent that will be allotted to each agricultural or cover crop, if more than one crop will be used.

Table 3.0(1) – Land Application Site Crops

Crop Type & Land Use	Irrigation Area (acres)	Effluent Application (GPD)	Public Access? Y/N
SEE ATTACHMENT 8 – TABLE 3.0(1) LAND APPLICATION OF SITE CROPS			

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

Table 3.0(2) – Storage and Evaporation Ponds

Pond Number	Surface Area (acres)	Storage Volume (acre-feet)	Dimensions	Liner Type
N/A - NO PONDS				

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

Attachment: <u>N/A – NO PONDS</u>

Section 4. Flood and Runoff Protection (Instructions Page 68)

Is the land application site <u>within</u> the 100-year frequency flood level?

🗆 Yes 🖾 No

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

Click to enter text.

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

FEMA FIRM Panel 48453C0380H

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

Diversion berms/swales are located upgradient of the irrigation sites and run on will be directed away from the irrigation area.

Section 5. Annual Cropping Plan (Instructions Page 68)

Attach an Annual Cropping Plan which includes a discussion of each of the following items. If not applicable, provide a detailed explanation indicating why. **Attachment**: <u>ATTACHMENT 9</u>

- Soils map with crops
- Cool and warm season plant species
- Crop yield goals
- Crop growing season
- Crop nutrient requirements
- Additional fertilizer requirements
- Minimum/maximum harvest height (for grass crops)
- Supplemental watering requirements
- Crop salt tolerances
- Harvesting method/number of harvests
- Justification for not removing existing vegetation to be irrigated

Section 6. Well and Map Information (Instructions Page 69)

Attach a USGS map with the following information shown and labeled. If not applicable, provide a detailed explanation indicating why. **Attachment**: <u>ATTACHMENT 10</u>

- The boundaries of the land application site(s)
- Waste disposal or treatment facility site(s)
- On-site buildings
- Buffer zones
- Effluent storage and tailwater control facilities
- All water wells within 1-mile radius of the disposal site or property boundaries
- All springs and seeps onsite and within 500 feet of the property boundaries
- All surface waters in the state onsite and within 500 feet of the property boundaries
- All faults and sinkholes onsite and within 500 feet of the property

List and cross reference all water wells located within a half-mile radius of the disposal site or property boundaries shown on the USGS map in the following table. Attach additional pages as necessary to include all of the wells.

Table 3.0(3) -	Water Well Data
----------------	-----------------

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
		SEE AT	TACHMENT 11	

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?Proposed Best Managem Practice	
			Choose an item.	
			Choose an item.	
			Choose an item.	
			Choose an item.	

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

Attachment: ATTACHMENT 11

Section 7. Groundwater Quality (Instructions Page 69)

Attach a Groundwater Quality Technical Report which assesses the impact of the wastewater disposal system on groundwater. This report shall include an evaluation of the water wells (including the information in the well table provided in Item 6. above), the wastewater application rate, and pond liners. Indicate by a check mark that this report is provided.

Attachment: ATTACHMENT 12

Are groundwater monitoring wells available onsite? \Box Yes \boxtimes No

Do you plan to in	stall	ground	water	monitoring w	ells or lysimeters	s around the land
application site?		Yes	\boxtimes	No		

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

Attachment: <u>N/A</u>

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

A. Soil map

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

Attachment: <u>ATTACHMENT 13</u>

B. Soil analyses

Attach the laboratory results sheets from the soil analyses. **Note**: for renewal applications, the current annual soil analyses required by the permit are acceptable as long as the test date is less than one year prior to the submission of the application.

Attachment: ATTACHMENT 14

List all USDA designated soil series on the proposed land application site. Attach additional pages as necessary.

Table 3.0(4) – Soil Data

Soil Series	Depth from Surface	Permeability	Available Water Capacity	Curve Number

Section 9. Effluent Monitoring Data (Instructions Page 71)

Is the facility in operation?

🖾 Yes 🗆 No

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

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

Table 3.0(5) – Effluent Monitoring Data

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

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

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

SEE ATTACHMENT 15 FOR LABORATORY ANALYSIS REPORTS.

Cypress Ranch Water Control and Improvement District No. 1 (CN601661085) Wastewater Treatment Plant (RN103177556) TCEQ Permit No. WQ0014368001 Amendment Application June 2024

WORKSHEET 3.1

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

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

Section 1. Surface Disposal (Instructions Page 72)

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

A. Irrigation

Area under irrigation, in acres: <u>Click to enter text.</u>

Design application frequency:

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

Land grade (slope):

average percent (%): <u>Click to enter text.</u>

maximum percent (%): <u>Click to enter text.</u>

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

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

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

Method of application: Click to enter text.

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

Attachment: Click to enter text.

B. Evaporation ponds

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

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

Attachment: Click to enter text.

C. Evapotranspiration beds

Number of beds: <u>Click to enter text.</u>

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

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

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

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

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

Attachment: Click to enter text.



D. Overland flow

Area used for application, in acres: <u>Click to enter text.</u> Slopes for application area, percent (%): <u>Click to enter text.</u> Design application rate, in gpm/foot of slope width: <u>Click to enter text.</u> Slope length, in feet: <u>Click to enter text.</u>

Design BOD₅ loading rate, in lbs BOD₅/acre/day: <u>Click to enter text.</u>

Design application frequency:

hours/day: <u>Click to enter text.</u> And days/week: <u>Click to enter text.</u>

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

Attachment: Click to enter text.

Section 2. Edwards Aquifer (Instructions Page 73)

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

□ Yes □ No

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

🗆 Yes 🗆 No

If yes, attach a geological report addressing potential recharge features. Attachment: <u>Click to enter text.</u> Cypress Ranch Water Control and Improvement District No. 1 (CN601661085) Wastewater Treatment Plant (RN103177556) TCEQ Permit No. WQ0014368001 Amendment Application June 2024

WORKSHEET 3.2

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

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

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

Section 1. Subsurface Application (Instructions Page 74)

Identify the type of system:

- Conventional Gravity Drainfield, Beds, or Trenches (new systems must be less than 5,000 GPD)
- □ Low Pressure Dosing
- □ Other, specify: <u>Click to enter text</u>.

Application area, in acres: <u>Click to enter text.</u>

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

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

Depth to groundwater, in feet: <u>Click to enter text.</u>

Area of trench, in square feet: <u>Click to enter text.</u>

Dosing duration per area, in hours: <u>Click to enter text.</u>

Number of beds: Click to enter text.

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

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

Storage volume, in gallons: <u>Click to enter text.</u>

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

Soil Classification: Click to enter text.

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

Attachment: Click to enter text.

Section 2. Edwards Aquifer (Instructions Page 74)

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

🗆 Yes 🗆 No

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

□ Yes □ No

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


Cypress Ranch Water Control and Improvement District No. 1 (CN601661085) Wastewater Treatment Plant (RN103177556) TCEQ Permit No. WQ0014368001 Amendment Application June 2024

WORKSHEET 3.3

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

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

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

Section 1. Administrative Information (Instructions Page 75)

- **A.** Provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the treatment facility:
- **B.** <u>Click to enter text</u>. Is the owner of the land where the treatment facility is located the same as the owner of the treatment facility?

□ Yes □ No

If **no**, provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the land where the treatment facility is located.

Click to enter text.

- C. Owner of the subsurface area drip dispersal system: Click to enter text.
- **D.** Is the owner of the subsurface area drip dispersal system the same as the owner of the wastewater treatment facility or the site where the wastewater treatment facility is located?

□ Yes □ No

If **no**, identify the names of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in Item 1.C.

Click to enter text.

- **E.** Owner of the land where the subsurface area drip dispersal system is located: <u>Click to</u> <u>enter text.</u>
- **F.** Is the owner of the land where the subsurface area drip dispersal system is located the same as owner of the wastewater treatment facility, the site where the wastewater treatment facility is located, or the owner of the subsurface area drip dispersal system?

□ Yes □ No

If **no**, identify the name of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in item 1.E.

Click to enter text.

Section 2. Subsurface Area Drip Dispersal System (Instructions Page 75)

A. Type of system

- □ Subsurface Drip Irrigation
- □ Surface Drip Irrigation
- □ Other, specify: <u>Click to enter text</u>.

B. Irrigation operations

Application area, in acres: <u>Click to enter text.</u>

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

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

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

Storage volume, in gallons: <u>Click to enter text.</u>

Major soil series: Click to enter text.

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

C. Application rate

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

🗆 Yes 🗆 No

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

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

□ Yes □ No

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

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

🗆 Yes 🗆 No

Hydraulic application rate, in gal/square foot/day: <u>Click to enter text.</u> Nitrogen application rate, in lbs/gal/day: <u>Click to enter text.</u>

D. Dosing information

Number of doses per day: <u>Click to enter text.</u>

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

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

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

Number of zones: Click to enter text.

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

🗆 Yes 🗆 No

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

Attachment: Click to enter text.

Section 3. Required Plans (Instructions Page 75)

A. Recharge feature plan

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

Attachment: <u>Click to enter text.</u>

B. Soil evaluation

Attach a Soil Evaluation with all information required in *30 TAC §222.73*. Attachment: <u>Click to enter text.</u>

C. Site preparation plan

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

Attachment: Click to enter text.

D. Soil sampling/testing

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

Attachment: Click to enter text.

Section 4. Floodway Designation (Instructions Page 76)

A. Site location

Is the existing/proposed land application site within a designated floodway?

□ Yes □ No

B. Flood map

Attach either the FEMA flood map or alternate information used to determine the floodway.

Attachment: Click to enter text.

Section 5. Surface Waters in the State (Instructions Page 76)

A. Buffer Map

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

Attachment: Click to enter text.

B. Buffer variance request

Do you plan to request a buffer variance from water wells or waters in the state?

□ Yes □ No

If yes, then attach the additional information required in 30 TAC § 222.81(c).

Attachment: Click to enter text.

Section 6. Edwards Aquifer (Instructions Page 76)

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

🗆 Yes 🗆 No

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

🗆 Yes 🗆 No

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

Cypress Ranch Water Control and Improvement District No. 1 (CN601661085) Wastewater Treatment Plant (RN103177556) TCEQ Permit No. WQ0014368001 Amendment Application June 2024

WORKSHEET 4.0

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: POLLUTANT ANALYSIS REQUIREMENTS

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

This worksheet is not required minor amendments without renewal.

Section 1. Toxic Pollutants (Instructions Page 78)

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

Grab 🗆 Composite 🗆

Date and time sample(s) collected: <u>Click to enter text.</u>

Table 4.0(1) – Toxics Analysis

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



Pollutant	AVG Effluent Conc. (ug/l)	MAX Effluent Conc. (ug/l)	Number of Samples	MAL (µg/l)
Chloroform	4.07 /			10
Chlorpyrifos				0.05
Chromium (Total)				3
Chromium (Tri) (*1)				N/A
Chromium (Hex)				3
Copper				2
Chrysene				5
p-Chloro-m-Cresol				10
4,6-Dinitro-o-Cresol				50
p-Cresol				10
Cyanide (*2)				10
4,4'- DDD				0.1
4,4'- DDE				0.1
4,4'- DDT				0.02
2,4-D				0.7
Demeton (O and S)				0.20
Diazinon				0.5/0.1
1,2-Dibromoethane				10
m-Dichlorobenzene				10
o-Dichlorobenzene				10
p-Dichlorobenzene				10
3,3'-Dichlorobenzidine				5
1,2-Dichloroethane				10
1,1-Dichloroethylene				10
Dichloromethane				20
1,2-Dichloropropane				10
1,3-Dichloropropene				10
Dicofol				1
Dieldrin				0.02
2,4-Dimethylphenol				10
Di-n-Butyl Phthalate				10
Diuron				0.09
Endosulfan I (alpha)				0.01

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

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

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

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

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

Section 2. Priority Pollutants

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

Grab 🗆 Composite 🗆

Date and time sample(s) collected: <u>Click to enter text.</u>

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

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

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

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

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

Table 4.0(2)B – Volatile Compounds

Table 4.0(2)C – Acid Compounds

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

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

Table 4.0(2)D – Base/Neutral Compounds

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

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

Table 4.0(2)E - Pesticides

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

Section 3. Dioxin/Furan Compounds

A. Indicate which of the following compounds from may be present in the influent from a contributing industrial user or significant industrial user. Check all that apply.

2,4,5-trichlorophenoxy acetic acid
Common Name 2,4,5-T, CASRN 93-76-5
2-(2,4,5-trichlorophenoxy) propanoic acid
Common Name Silvex or 2,4,5-TP, CASRN 93-72-1
2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate
Common Name Erbon, CASRN 136-25-4
0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate
Common Name Ronnel, CASRN 299-84-3
2,4,5-trichlorophenol
Common Name TCP, CASRN 95-95-4
hexachlorophene
Common Name HCP, CASRN 70-30-4

For each compound identified, provide a brief description of the conditions of its/their presence at the facility.

Click to enter text.

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

🗆 Yes 🗆 No

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

Click to enter text.

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

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

Grab \Box Composite \Box

Date and time sample(s) collected: <u>Click to enter text.</u>

Table 4.0(2)F – Dioxin/Furan Compounds

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

Cypress Ranch Water Control and Improvement District No. 1 (CN601661085) Wastewater Treatment Plant (RN103177556) TCEQ Permit No. WQ0014368001 Amendment Application June 2024

WORKSHEET 5.0

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 5.0: TOXICITY TESTING REQUIREMENTS

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

This worksheet is not required minor amendments without renewal.



Section 1. Required Tests (Instructions Page 88)

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

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

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

Section 2. Toxicity Reduction Evaluations (TREs)

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

🗆 Yes 🗆 No

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

Click to enter text.

Section 3. Summary of WET Tests

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

Table 5.0(1) Summary of WET Tests

Test Date	Test Species	NOEC Survival	NOEC Sub-lethal

Cypress Ranch Water Control and Improvement District No. 1 (CN601661085) Wastewater Treatment Plant (RN103177556) TCEQ Permit No. WQ0014368001 Amendment Application June 2024

WORKSHEET 6.0

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

The following is required for all publicly owned treatment works.

Section 1. All POTWs (Instructions Page 89)

A. Industrial users (IUs)

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

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

Categorical IUs: Number of IUs: <u>o</u> Average Daily Flows, in MGD: <u>o</u> Significant IUs – non-categorical: Number of IUs: <u>o</u> Average Daily Flows, in MGD: <u>o</u> Other IUs: Number of IUs: o

Average Daily Flows, in MGD: o

B. Treatment plant interference

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

🗆 Yes 🖾 No

If yes, identify the dates, duration, description of interference, and probable cause(s) and possible source(s) of each interference event. Include the names of the IUs that may have caused the interference.

Click to enter text.

C. Treatment plant pass through

In the past three years, has your POTW experienced pass through (see instructions)?

🗆 Yes 🖾 No

If yes, identify the dates, duration, a description of the pollutants passing through the treatment plant, and probable cause(s) and possible source(s) of each pass through event. Include the names of the IUs that may have caused pass through.

Click to enter text.			

D. Pretreatment program

Does your POTW have an approved pretreatment program?

🗆 Yes 🖾 No

If yes, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

🗆 Yes 🖂 No

If yes, complete Section 2.c. and 2.d. only, and skip Section 3.

If no to either question above, skip Section 2 and complete Section 3 for each significant industrial user and categorical industrial user.

E. Service Area Map

Attach a map indicating the service area of the POTW. The map should include the applicant's service area boundaries and the location of any known industrial users discharging to the POTW. Please see the instructions for guidance.

Attachment: <u>Attachment 16</u>

Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 90)

A. Substantial modifications

Have there been any **substantial modifications** to the approved pretreatment program that have not been submitted to the TCEQ for approval according to *40 CFR §403.18*?

🗆 Yes 🗆 No

If yes, identify the modifications that have not been submitted to TCEQ, including the purpose of the modification.

Click to enter text.

B. Non-substantial modifications

Have there been any **non-substantial modifications** to the approved pretreatment program that have not been submitted to TCEQ for review and acceptance?

🗆 Yes 🗆 No

If yes, identify all non-substantial modifications that have not been submitted to TCEQ, including the purpose of the modification.

Click to enter text.

C. Effluent parameters above the MAL

In Table 6.0(1), list all parameters measured above the MAL in the POTW's effluent monitoring during the last three years. Submit an attachment if necessary.

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date

D. Industrial user interruptions

Has any SIU, CIU, or other IU caused or contributed to any problems (excluding interferences or pass throughs) at your POTW in the past three years?

🗆 Yes 🗆 No

If yes, identify the industry, describe each episode, including dates, duration, description of the problems, and probable pollutants.

Click to enter text.

Section 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 90)

A. General information

Company Name: No SIU's or CIU's are within the wastewater collection system.

SIC Code: Click to enter text.

Contact name: Click to enter text.

Address: <u>Click to enter text.</u>

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

Telephone number: <u>Click to enter text.</u>

Email address: Click to enter text.

B. Process information

Describe the industrial processes or other activities that affect or contribute to the SIU(s) or CIU(s) discharge (i.e., process and non-process wastewater).

Click to enter text.

C. Product and service information

Provide a description of the principal product(s) or services performed.

Click to enter text.

D. Flow rate information

See the Instructions for definitions of "process" and "non-process wastewater."

Process Wastewater:

Discharge, in gallon	s/day: <u>Click to</u>	<u>enter text.</u>	
Discharge Type: 🗆	Continuous	□ Batch	Intermittent
Non-Process Wastewate	er:		
Discharge, in gallon	s/day: <u>Click to</u>	<u>enter text.</u>	
Discharge Type: 🗆	Continuous	□ Batch	Intermittent

E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the *instructions*?

□ Yes □ No

Is the SIU or CIU subject to categorical pretreatment standards found in *40 CFR Parts 405–471*?

🗆 Yes 🗆 No

If subject to categorical pretreatment standards, indicate the applicable category and subcategory for each categorical process.

Category: Subcategories: Click to enter text.

Click or tap here to enter text. Click to enter text.

Category: <u>Click to enter text.</u>

Subcategories: <u>Click to enter text.</u>

Category: Click to enter text.

Subcategories: Click to enter text.

Category: Click to enter text.

Subcategories: Click to enter text.

Category: <u>Click to enter text.</u>

Subcategories: Click to enter text.

F. Industrial user interruptions

Has the SIU or CIU caused or contributed to any problems (e.g., interferences, pass through, odors, corrosion, blockages) at your POTW in the past three years?

□ Yes □ No

If yes, identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants.

Click to enter text.

Cypress Ranch Water Control and Improvement District No. 1 (CN601661085) Wastewater Treatment Plant (RN103177556) TCEQ Permit No. WQ0014368001 Amendment Application June 2024

WORKSHEET 7.0

WORKSHEET 7.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CLASS V INJECTION WELL INVENTORY/AUTHORIZATION FORM

Submit the completed form to:

TCEQ IUC Permits Team Radioactive Materials Division MC-233 PO Box 13087 Austin, Texas 78711-3087 512-239-6466 For TCEQ Use Only Reg. No._____ Date Received______ Date Authorized_____



Section 1. General Information (Instructions Page 92)

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

Program Area (PST, VCP, IHW, etc.): <u>Click to enter text.</u>
Program ID: <u>Click to enter text.</u>
Contact Name: <u>Click to enter text.</u>
Phone Number: Click to enter text.

2. Agent/Consultant Contact Information

Contact Name: <u>Click to enter text.</u> Address: <u>Click to enter text.</u> City, State, and Zip Code: <u>Click to enter text.</u> Phone Number: <u>Click to enter text.</u>

3. Owner/Operator Contact Information

Owner Operator
 Owner/Operator Name: <u>Click to enter text.</u>
 Contact Name: <u>Click to enter text.</u>
 Address: <u>Click to enter text.</u>
 City, State, and Zip Code: <u>Click to enter text.</u>

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

- 4. Facility Contact Information
 - Facility Name: <u>Click to enter text.</u>

Address: Click to enter text.

City, State, and Zip Code: <u>Click to enter text.</u>

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

Facility Contact Person: <u>Click to enter text.</u>

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

5. Latitude and Longitude, in degrees-minutes-seconds

Latitude: <u>Click to enter text.</u> Longitude: <u>Click to enter text.</u> Method of determination (GPS, TOPO, etc.): <u>Click to enter text.</u> Attach topographic quadrangle map as attachment A.

6. Well Information

Type of Well Construction, select one:

- Vertical Injection
- □ Subsurface Fluid Distribution System
- □ Infiltration Gallery
- □ Temporary Injection Points
- □ Other, Specify: <u>Click to enter text.</u>

Number of Injection Wells: <u>Click to enter text.</u>

7. Purpose

Detailed Description regarding purpose of Injection System:

Click to enter text.

Attach a Site Map as Attachment B (Attach the Approved Remediation Plan, if appropriate.)

8. Water Well Driller/Installer

Water Well Driller/Installer Name: Click to enter text.

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

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

License Number: Click to enter text.

Section 2. Proposed Down Hole Design

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

Table 7.0(1) – Down Hole Design Table

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

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

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

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

System(s) Construction: Click to enter text.

Section 4. Site Hydrogeological and Injection Zone Data

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

Thickness: <u>Click to enter text.</u>

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

Section 5. Site History

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

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

Class V Injection Well Designations

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

Attachment 1: CORE DATA FORM



TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission (<i>If other is checked please desc</i>	ribe in space provided.)				
New Permit, Registration or Authorization (<i>Core Data F</i>	Form should be submitted with	the program application.)			
Renewal (Core Data Form should be submitted with the	Renewal (Core Data Form should be submitted with the renewal form)				
2. Customer Reference Number (if issued)	Follow this link to search	3. Regulated Entity Reference Number (if issued)			
N 601661085		RN 103177556			

SECTION II: Customer Information

4. General Cu	. General Customer Information 5. Effective Date for Custome			er Information Updates (mm/dd/yyyy)									
New Custor	ner		Μu	pdate to Custo	mer Informa	tion		Char	ige in R	egulated Ent	ity Owne	ership	
	agal Name (Verifiable	with the Tex	' as Secretary o	f State or Tex	as Com	ntroll	er of Public	Accou	nts)			
	-Bai Manne (vermable	with the re,	as secretary s	otate of ter					,			
The Custome	r Name su	bmitted	here may l	be updated a	utomatical	ly base	ed on	what is c	urrent	and active	with th	ne Texas Secr	etary of State
(SOS) or Texa	s Comptro	oller of P	ublic Accou	nts (CPA).									
6. Customer I	Legal Nam	e (If an in	ndividual, prii	nt last name fir	st: eg: Doe, J	lohn)			<u>If nev</u>	w Customer, d	enter pre	evious Custom	er below:
Cypress Ranch	Water Cont	rol and In	nprovement	District No. 1									
7. TX SOS/CP	A Filing Nu	umber		8. TX State	Tax ID (11 d	igits)			9. Fe	deral Tax II)	10. DUNS I	Number (if
N/A				N/A					(9 dig	gits)		appricasicy	
									20-04	47554			
11. Type of Customer:							rship: 🗌 Gen	eral 🗌 Limited					
Government:	City 🗌 C	County 🗌	Federal	Local 🗌 State	🛛 Other		Sole Proprietorship Other:						
12. Number o	of Employe	ees				1.9.8		13. Independently Owned and Operated?				rated?	
⊠ 0-20 □ 2	21-100] 101-250	0 251-	500 🗌 501	and higher		🛛 Yes 🗌 No						
14. Customer	Role (Prop	posed or A	Actual) – as in	t relates to the	Regulated Ei	ntity list	ed on	this form.	Please (check one of	the follo	wing	
Owner	llicensee	Oper	rator		ner & Opera	ator				Other:			
	II LICEIISEE		sponsible i di		ver/borripp	meane							
15 Mailing	102 North	n Railroad	Avenue					×					
15. Maning													
Address:													
	City	Pflugerv	ville		State	TX		ZIP	7866	0		ZIP + 4	
16. Country N	Aailing Inf	ormatio	n (if outside	USA)			17.	E-Mail Ad	dress	(if applicable	2)		
18. Telephon	e Number			1	9. Extensio	on or C	ode			20. Fax N	umber ((if applicable)	

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity" is selected, a new permit application is also required.)

🗌 New Regulated Entity 🔲 Update to Regulated Entity Name 🛛 Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings	such
as Inc, LP, or LLC).	

22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)

Cypress Ranch WWTP

23. Street Address of the Regulated Entity:	22141 Rose Grass Lane							
<u>(No PO Boxes)</u>	City	Spicewood	State	ТХ	ZIP	78669	ZIP + 4	
24. County								

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

25. Description to Physical Location:	End of Rose	Grass Lane, On the N	lorth Side of Cypr	ess Ranch B	lvd, Approx. 0.	5 miles west of Highwa	y 71.	
26. Nearest City						State	Nea	rest ZIP Code
Spicewood						ТХ	7866	59
Latitude/Longitude are r used to supply coordinat	equired and es where no	may be added/up ne have been prov	dated to meet ided or to gain	TCEQ Core accuracy).	Data Stando	ards. (Geocoding of t	the Physical	Address may be
27. Latitude (N) In Decim	al:	30.361826		28.	Longitude (V	V) In Decimal:	98.07951	5
Degrees	Minutes	Sec	conds	Deg	rees	Minutes		Seconds
			<u></u>		.7			
29. Primary SIC Code (4 digits)	30. (4 d	Secondary SIC Cod	le	31. Prim (5 or 6 di	ary NAICS Co gits)	32. Sec (5 or 6 d	ondary NAI igits)	CS Code
4952				221320				
33. What is the Primary I	Business of t	his entity? (Do no	t repeat the SIC c	or NAICS des	cription.)			
Treatment of Domestic Wast	ewater							
	102 North	Railroad Avenue						-
34. Mailing								
Address:	City	Pflugerville	State	тх	ZIP	78660	ZIP + 4	
	City	ringervine	State			10000		
35. E-Mail Address:								
36. Telephone Number		3	7. Extension or	Code	38. F	ax Number (if applice	ible)	
(512) 251-1920					(512) 251-8540		

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

512) 251-1920

(

Dam Safety	Districts	Edwards Aquifer	Emissions Inventory Air	Industrial Hazardous Waste
Municipal Solid Waste	New Source Review Air	OSSF	Petroleum Storage Tank	D PWS
Sludge	Storm Water	Title V Air	Tires	Used Oil
Voluntary Cleanup	Wastewater	Wastewater Agriculture	Water Rights	Other:
	R14368001			

SECTION IV: Preparer Information

40. Name:	DAVID FUSILIE	R		41. Title:	PROJECT ENGINEER	
42. Telephone Number 43. Ext./Code		43. Ext./Code	44. Fax Number	45. E-Mail Address		
(512) 925-6691			() -	dfusilier@atwell-group.com		

SECTION V: Authorized Signature

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

Company:	Cypress Ranch WCID No. 1 (ATWELL LLC)	Job Title:	DISTRICT ENGINEER (DIRECTOR)		
Name (In Print):	HANK SMITH			Phone:	(512) 904- 505
Signature:	MAA			Date:	5/21/24
Attachment 2: USGS MAP – ORIGINAL SHINGLE HILLS



Attachment 3: TREATMENT PROCESS DESCRIPTION & UNIT DIMENSIONS

ATTACHMENT 3 – TREATMENT PROCESS DESCRIPTION & UNIT DIMENSIONS CYPRESS RANCH WCID No. 1 TCEQ WQ PERMIT No. WQ0014368001

Interim I Phase Treatment Process:

System Type:Activated SludgeMode of Operation:Extended Aeration

The Interim I Phase (current operating phase) is treating 66,000 GPD. The raw wastewater from the West Cypress Hills subdivision flows by gravity to a Lift Station on the WWTP site where it is conveyed by a force main into the aeration basin. The blowers providing air to the aeration basin are sized to meet TCEQ Air Requirements for mixing and aeration. The volume of the aeration basin meets the Organic Loading Rate requirements for the Extended Aeration operating mode of less than 15 lb BOD per 1,000 cubic feet of aeration volume. From the aeration basin the wastewater flows to the clarifier. Waste Activated Sludge (WAS) from the clarifier is sent to the Aerobic Digester for eventual disposal, and the clarified effluent flow to the chlorine contact chamber for disinfection. After disinfection, the wastewater is routed to an aerated storage tank. A suction line conveys the stored, treated effluent to the irrigation management system where it is filtered. Filtration by-product is sent back to the head of the treatment works. The filtered water is pumped to various, off-site irrigation zones which consists mostly of a drip irrigation system (shallow-buried tubing with pressure compensating emitters). There are also a limited number of above ground spray irrigation zones. The irrigation system is managed by a computer with sensors to detect abnormalities in flow and notify the plant operator by modem. The management system will also discontinue irrigation of a zone with flow abnormality and continue irrigating the other zones in sequential fashion.

Interim I Phase List of Components								
Type of Unit	# of Units	Size (LxWxH) feet	Volume (cubic feet)					
Aeration Basin*	1	48.06x 22.34 x 15.0	16,105					
Aerobic Digester*	1	4.85 x 22.34 x 15.0	1,625					
Chlorine Contact Tank	1	1.2 x 21 x 15	378					
Effluent Storage Tank*	1	87.45 x 22.34 x 15.0	29,304					
Clarifier	1	21.0 Dia. x 15.0 SWD	5,190					
		CLARIFIER = 346 sq ft						

 Aeration Basin, Aerobic Digester, and Effluent Storage Tank are included within the above ground circular steel tank. Length are based on average arc length around the tank for the particular unit.

ATTACHMENT 3 – TREATMENT PROCESS DESCRIPTION & UNIT DIMENSIONS CYPRESS RANCH WCID No. 1 TCEQ WQ PERMIT No. WQ0014368001

Interim II Phase Treatment Process:

System Type:Activated SludgeMode of Operation:Extended Aeration

The Interim II Phase will treat 135,000 GPD. The treatment capacity will be a combination of the original treatment system sized at 66,000 GPD (Interim Phase I), and a new treatment system sized at 69,000 GPD (currently under construction at the time of this application submittal, June 2024). The new treatment system is similar in design to the existing, Interim Phase I treatment system, consisting of an above ground steel circular tank that contains the aeration basin, clarifier, aerobic digester, and effluent storage tank. With the two systems in operation, the treatment process will be the same for each system, extended aeration activated sludge. The raw wastewater from the West Cypress Hills subdivision will flow by gravity to a Lift Station on the WWTP site where it is conveyed by a force main into the aeration basins. The blowers providing air to the aeration basins are sized to meet TCEQ Air Requirements for mixing and aeration. The volume of the aeration basin meets the Organic Loading Rate requirements for the Extended Aeration operating mode of less than 15 lb BOD per 1,000 cubic feet of aeration volume. From the aeration basin the wastewater flows to the clarifier. Waste Activated Sludge (WAS) from the clarifier is sent to the Aerobic Digester for eventual disposal, and the clarified effluent flow to the chlorine contact chamber for disinfection. After disinfection, the wastewater is routed to an aerated storage tank. A suction line conveys the stored, treated effluent to the irrigation management system where it is filtered. Filtration by-product is sent back to the head of the treatment works. The filtered water is pumped to various, off-site irrigation zones which consists mostly of a drip irrigation system (shallow-buried tubing with pressure compensating emitters). There are also a limited number of above ground spray irrigation zones. The irrigation system is managed by a computer with sensors to detect abnormalities in flow and notify the plant operator by modem. The management system will also discontinue irrigation of a zone with flow abnormality and continue irrigating the other zones in sequential fashion.

Interim II Phase List of Components								
Type of Unit # of Units Size (LxWxH) feet Volume (cubic feet)								
TANK 1 (Original)								
Aeration Basin*	1	48.06x 22.34 x 15.0	16,105					
Aerobic Digester*	1	4.85 x 22.34 x 15.0	1,625					
Effluent Storage Tank*	1	87.45 x 22.34 x 15.0	29,304					
Clarifier	1	21.0 Dia. x 15.0 SWD	5,190					
		CLARIFIER = 346 sq ft						

TANK 2 (New)			
Aeration Basin*	1	48.14x 22.34 x 15.0	16,132
Aerobic Digester*	1	6.98 x 22.34 x 15.0	2,340
Effluent Storage Tank*	1	85.25 x 22.34 x 15.0	28,567
Clarifier	1	21.0 Dia. x 15.0 SWD	5,190
		CLARIFIER = 346 sq ft	

Chlorine Contact Tank	1	64.16 x 4.0 x 4.0	1,027
(serves entire facility)			

 Aeration Basin, Aerobic Digester, and Effluent Storage Tank are included within the above ground circular steel tank. Length are based on average arc length around the tank for the particular unit.

ATTACHMENT 3 – TREATMENT PROCESS DESCRIPTION & UNIT DIMENSIONS CYPRESS RANCH WCID No. 1 TCEQ WQ PERMIT No. WQ0014368001

Final Phase Treatment Process:

System Type:Activated SludgeMode of Operation:Complete Mix

The Final Phase will treat 200,000 GPD. The treatment capacity will be a combination of the original treatment system (Interim Phase I), and the additional treatment system that is being constructed to allow the facility to operate in Interim Phase II (at 135,000 GPD). To operate in the Final Phase at 200,000 GPD, no new construction is planned. Instead, the mode of operation of the plant will be changed from extended aeration to complete mix and the plant will be re-rated based on the new operating mode. The complete mix mode of operation allows an aeration basin organic load of up to 45 lbs of BOD per 1,000 cubic feet of aeration volume. The treatment facility will have enough aeration basin volume to . Other treatment system components including clarifiers, aerobic digesters, effluent storage basins, piping, and transfer pumps, are sized to allow the facility to operate at the 200,000 GPD daily average flow. The chlorine contact chamber may require expansion or modification in order to maintain the required minimum 20 minute detention time. Note that prior to changing the operating mode, a Summary Transmittal Letter will be submitted to the TCEQ and approval will be obtained to allow this switch. An necessary improvements to the treatment facility to meet the Final Phase permit requirements will be completed prior to operating in the final phase.

With the exception of the operating modes, the Final Phase treatment system will be similar to the Interim Phase II treatment system. The treatment facility consist of two treatment trains in separate above ground steel circular tanks that contain the aeration basin, clarifier, aerobic digester, and effluent storage tank. The raw wastewater from the West Cypress Hills subdivision will flow by gravity to a Lift Station on the WWTP site where it is conveyed by a force main into the aeration basins. The blowers providing air to the aeration basins are sized to meet TCEQ Air Requirements for mixing and aeration. The volume of the aeration basin meets the Organic Loading Rate requirements for the Extended Aeration operating mode of less than 45 lb BOD per 1,000 cubic feet of aeration volume. From the aeration basin the wastewater flows to the clarifier. Waste Activated Sludge (WAS) from the clarifier is sent to the Aerobic Digester for eventual disposal, and the clarified effluent flow to the chlorine contact chamber for disinfection. After disinfection, the wastewater is routed to an aerated storage tank. A suction line conveys the stored, treated effluent to the irrigation management system where it is filtered. Filtration by-product is sent back to the head of the treatment works. The filtered water is pumped to various, off-site irrigation zones which consists mostly of a drip irrigation system (shallow-buried tubing with pressure compensating emitters). There are also a limited number of above ground spray irrigation zones. The irrigation system is managed by a computer with sensors to detect abnormalities in flow and notify the plant operator by modem. The management system will also discontinue irrigation of a zone with flow abnormality and continue irrigating the other zones in sequential fashion.

ATTACHMENT 3 – TREATMENT PROCESS DESCRIPTION & UNIT DIMENSIONS CYPRESS RANCH WCID No. 1 TCEQ WQ PERMIT No. WQ0014368001

FINAL Phase List of Components							
Type of Unit	Volume (cubic feet)						
TANK 1 (Original)							
Aeration Basin*	1	48.06x 22.34 x 15.0	16,105				
Aerobic Digester*	1	4.85 x 22.34 x 15.0	1,625				
Effluent Storage Tank*	1	87.45 x 22.34 x 15.0	29,304				
Clarifier	1	21.0 Dia. x 15.0 SWD	5,190				
		CLARIFIER = 346 sq ft					
		-					
TANK 2 (New)							
Aeration Basin*	1	48.14x 22.34 x 15.0	16,132				
Aerobic Digester*	1	6.98 x 22.34 x 15.0	2,340				
Effluent Storage Tank*	1	85.25 x 22.34 x 15.0	28,567				
Clarifier	1	21.0 Dia. x 15.0 SWD	5,190				
		CLARIFIER = 346 sq ft					
	-						
Chlorine Contact Tank	1	93 x 4.0 x 4.0	1,488				

(serves entire facility)

 Aeration Basin, Aerobic Digester, and Effluent Storage Tank are included within the above ground circular steel tank. Length are based on average arc length around the tank for the particular unit.

Attachment 4: PROCESS FLOW DIAGRAMS







Attachment 5: SITE DRAWING



Attachment 6: TCEQ APPROVAL LETTERS

Bryan W. Shaw, Ph.D., *Chairman* Buddy Garcia, *Commissioner* Carlos Rubinstein, *Commissioner* Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 16, 2010

MR HENRY B SMITH PE TEXAS ENGINEERING SOLUTIONS LLC 5000 BEE CAVES RD STE 206 AUSTIN TX 78746

Re: CYPRESS RANCH LTD WEST CYPRESS RANCH WWTP AND LIFT STATION 1 TEXAS COMMISSION ON ENVIRONMENTAL QUALITY PERMIT NO 14368-001 WWPR LOG NO 0310/016 CN601495393 RN103177556 TRAVIS COUNTY

Dear Mr. Smith:

We have received the project summary transmittal letter dated March 8, 2010.

The rules which regulate the design, installation and testing of domestic wastewater projects are found in 30 TAC, Chapter 217, of the Texas Commission on Environmental Quality (TCEQ) rules titled, <u>Design Criteria</u> for Sewerage Systems.

Section 217.6(d), relating to case-by-case reviews, states in part that upon submittal of a summary transmittal letter, the executive director may approve of the project without reviewing a complete set of plans and specifications.

Under the authority of §217.6(e) a technical review of complete plans and specifications is not required. However, the project proposed in the summary transmittal letter is approved for construction. Please note, that this conditional approval does not relieve the applicant of any responsibilities to obtain all other necessary permits or authorizations, such as wastewater treatment permit or other authorization as required by Chapter 26 of the Texas Water Code. Below are provisions of the Chapter 217 regulations, which must be met as a condition of approval. These items are provided as a reminder. If you have already met these requirements, please disregard this additional notice.

1. You must keep certain materials on file for the life of the project and provide them to TCEQ upon request. These materials include an engineering report, test results, a summary transmittal letter, and the final version of the project plans and specifications. These materials shall be prepared and sealed by a Professional Engineer licensed in the State of Texas and must show substantial compliance with Chapter 217. All plans and specifications must conform to any waste discharge requirements authorized in a permit by the TCEQ. Certain specific items which shall be addressed in the engineering report are discussed in §217.6(c). Additionally, the engineering report must include all constants, graphs, equations, and calculations needed to show substantial compliance with Chapter 217. The items which shall be included in the summary transmittal letter are addressed in §217.6(c)(1)-(10).

Mr. Henry B. Smith, P.E. Page 2 March 16, 2010

- 2. Any deviations from Chapter 217 shall be disclosed in the summary transmittal letter and the technical justifications for those deviations shall be provided in the engineering report. Any deviations from Chapter 217 shall be based on the best professional judgement of the licensed professional engineer sealing the materials and the engineer's judgement that the design would not result in a threat to public health or the environment.
- 3. Any variance from a Chapter 217 requirement disclosed in your summary transmittal letter is approved. If in the future, additional variances from the Chapter 217 requirements are desired for the project, each variance must be requested in writing by the design engineer. Then, the TCEQ will consider granting a written approval to the variance from the rules for the specific project and the specific circumstances.
- 4. Within 60 days of the completion of construction, an appointed engineer shall notify both the Wastewater Permits Section of the TCEQ and the appropriate Region Office of the date of completion. The engineer shall also provide written certification that all construction, materials, and equipment were substantially in accordance with the approved project, the rules of the TCEQ, and any change orders filed with the TCEQ. All notifications, certifications, and change orders must include the signed and dated seal of a Professional Engineer licensed in the State of Texas.

This approval does not mean that future projects will be approved without a complete plans and specifications review. The TCEQ will provide a notification of intent to review whenever a project is to undergo a complete plans and specifications review. Please be reminded of §217.5 of the rules which states, "Approval given by the executive director...shall not relieve the sewerage system owner or the design engineer of any liabilities or responsibilities with respect to the proper design, construction, or authorized operation of the project in accordance with applicable commission rules."

If you have any questions or if we can be of any further assistance, please call me at (512) 239-4552.

Sincerely, CIL

Louis C. Herrin, III, P.E. Wastewater Permits Section (MC 148) Water Quality Division Texas Commission on Environmental Quality

LCH/ms

cc: TCEQ, Region 11 Office

Bryan W. Shaw, Ph.D., *Chairman* Buddy Garcia, *Commissioner* Carlos Rubinstein, *Commissioner* Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 12, 2012

Justin Lang, P.E. Texas Engineering Solutions, LLC 5000 Bee Caves Rd, Suite 206 Austin, Texas 78711-3087

Re: Cypress Ranch Wastewater Treatment Facilities - Rerate Waste Treatment Plant Texas Commission on Environmental Quality, Permit No WQ0014368-001 Travis County, Texas

Dear Mr. Lang:

On February 24, 2012, The Texas Commission on Environmental Quality (TCEQ) received an Engineering Summary Letter from you dated February 24, 2012, requesting to rerate the WWTP based on a lower flow rate of 215 gpd per connection. Then on March 8, 2012, the TCEQ received an email from you containing a historical summary of BOD readings of the WWTP.

This letter is your notice that the proposed rerate is acceptable; based on the following assumptions: (1) The approved/current Interim I Phase is for a 0.033 MGD flow, as sized with a flow factor of 350 gpd; while (2) The existing or as-constructed treatment plant is sized for a 0.10 MGD flow, and (3) The WWTP has historical flow rates of 215 gpd per connection.

It appears that this rerated flow should allow for the existing irrigation area to support more connections, but will need to be increased before Interim II Phase, and then the Final phase of 0.10 and 0.20 MGD, respectively.

Please be reminded §217.7(a) of the rules which states, "Approval given by executive director or other authorized review authority does not relieve an owner of any liability or responsibility with respect to designing, constructing, or operating a collection system or treatment facility in accordance with applicable commission rules and the associated wastewater permit."

If you have any comments or questions, please contact me at (512) 239-0486, or email at *Ron.Crane@TCEQ.texas.gov*; or Louis C. Herrin III, P.E. at (512) 239-4552.

Sincerely,

Ron Crane, P.E., CFM Municipal Permits Team Water Quality Division (MC 148) Texas Commission on Environmental Quality

RC/evm

P.O. Box 13087 • Austin, Texas 78711-3087 • 512-239-1000 • www.lceq.texas.gov

Jon Niermann, *Chairman* Emily Lindley, *Commissioner* Bobby Janecka, *Commissioner* Erin Chancellor, *Interim Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

June 8, 2023

Protecting Texas by Reducing and Preventing Pollution

James Miertschin, P.E. James Miertschin & Associates, Inc. PO Box 162305 Austin, Texas 78716

Re: Cypress Ranch Water Control Improvement District 1 Wastewater Treatment Plant Expansion Permit No. WQ0014368-001 WWPR Log No. 0323/015 CN601661085, RN103177556 Travis County

Dear Mr. Miertschin:

On March 1, 2023, TCEQ received the project summary transmittal letter dated March 1, 2023 which provided details on a 69,000 gpd plant expansion of the Cypress Ranch WCID 1 wastewater treatment plant. This project will expand the plant's treatable capacity from 66,000 gpd to 135,000 gpd; the current Water Quality Texas Land Application Permit interim III flow phase. The plant must produce an effluent to meet the daily average permit allowable concentration limits of 10 mg/l for BOD₅ and 15 mg/l for TSS, and single grab sample limits of 35 mg/l and 60 mg/l for the same two parameters respective. The plant effluent must also meet a single grab sample limit of 126 cfu/100 ml for E. coli. The details of the expansion project for the extended aeration activated sludge treatment plant are listed below.

The rules which regulate the design, installation and testing of domestic wastewater projects are found in 30 TAC, Chapter 217, of the Texas Commission on Environmental Quality (TCEQ) rules titled, <u>Design Criteria for Wastewater Systems</u>.

This expansion project's scope of work consists of placement of the following treatment units and ancillary equipment:

- Placement of a 69,000 gpd steel concentric circle treatment plant, 64 ft. diameter
 - o 12,468 ft³ aeration basin, 15 ft. SWD
 - o 21 ft. diameter center secondary clarifier, 15 ft. SWD
 - o 1,155 ft³ aerobic sludge digester, surface area of 77 ft², 15 ft. SWD
 - o 1002.7 ft³ chlorine contact basin, 12 ft. x 21.5 ft. x5.5 ft.
 - o Tertiary filter basin sized at 375 gpm; Aqua Aerobics minidisk six disk unit,
 - New headworks unit with Duperon dual auger screen system
- Expansion will use one of the existing 30-hp blowers,
- Additional effluent storage will use a portion of the outer ring volume,
- Continued use of sodium hypochlorite solution for disinfection

James Miertschin, P.E. Page 2 June 8, 2023

TCEQ understands that this expansion project will work in parallel with the existing 66,000 gpd concentric circle plant to produce the interim III 135,000 gpd treatment plant.

The TCEQ review of the submitted project summary transmittal letter and supplemental engineering report seem to indicate that as designed the expansion project for 135,000 gpd treatable capacity meets at least the minimum requirements of 30 TAC Chapter 217: <u>Design Requirements for Wastewater Systems</u>. The review allows TCEQ to conditionally approve the expansion project for completion.

You must keep certain materials on file for the life of the project and provide them to TCEQ upon request. These materials include an engineering report, test results, a summary transmittal letter, and the final version of the project plans and specifications. These materials shall be prepared and sealed by a Professional Engineer licensed in the State of Texas and must show substantial compliance with Chapter 217. All plans and specifications must conform to any waste discharge requirements authorized in a permit by the TCEQ. Certain specific items which shall be addressed in the engineering report are discussed in §217.10. Additionally, the engineering report must include all constants, graphs, equations, and calculations needed to show substantial compliance with Chapter 217.

No variances of any 30 TAC Chapter 217 requirements were requested or granted as part of this project review. If in the future, any variances from the Chapter 217 requirements are desired for the project, each variance must be requested in writing by the design engineer. Then, the TCEQ will consider granting a written approval to the variance from the rules for the specific project and the specific circumstances.

Within 60 days of the completion of construction, an appointed engineer shall notify both the Wastewater Permits Section of the TCEQ and the appropriate Region Office of the date of completion. The engineer shall also provide written certification that all construction, materials, and equipment were substantially in accordance with the approved project, the rules of the TCEQ, and any change orders filed with the TCEQ. All notifications, certifications, and change orders must include the signed and dated seal of a Professional Engineer licensed in the State of Texas.

The TCEQ will provide a notification of intent to review whenever a project is to undergo a complete plans and specifications review. Please be reminded of 30 TAC §217.7(a) of the rules which states, "Approval given by the executive director or other authorized review authority does not relieve an owner of any liability or responsibility with respect to designing, constructing, or operating a collection system or treatment facility in accordance with applicable commission rules and the associated wastewater permit".

James Miertschin, P.E. Page 3 June 8, 2023

If you have any questions, or if we can be of any further assistance, please call me at (512) 239-1372.

Grock-Sincerely

Paul A. Brochi, P.E. Wastewater Permits Section (MC 148) Water Quality Division Texas Commission on Environmental Quality

PAB/tc

Attachment 7: POLLUTANT ANALYSIS

P.O. BOX 13087 •AUSTIN, TEXAS 78711-3087

MONTHLY EFFLUENT REPORT

OWNER, CN601661085, CYPRESS RANCH WCID 1

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AREA CODE

Page 1 of 1

R14368001	2023/01	TYPE I-1	13598	33804
PERMIT NUMBER	YYYY/MM	BD	MONT ID	REQ SET

THIS REPORT TO BE USED FOR OUTFALL.

PLEASE RETAIN A PHOTOCOPY FOR YOUR RECORDS.

402-1990

NUMBER

TCEQ COPY

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Parameter		Effluent Condition		No. Ex	Frequency of Analysis	Sample Type	
		Value	Units				
316164024-	Permitted	20:000	#/100 ML		2/WEEK	GRAB	
COLIFORM	Reported	1	#/100 ML	0	2/week	ARab	
4006030-PH	Permitted		STANDARD UNITS		2/WEEK	GRAB	
	Reported	7.1	standard units	ð	2/ week	April .	
820796624-	Permitted	B.000	NTU		2/WEEK	GRAB	
1.01.01010111	Reported	1.9	NTU	0	2/ week .	Grab	
500507124-FLOW	Permitted		MGD		2/WEEK	INSTANT	
	Reported	0.090	MGD	0	2/ Week	ARab	
316164030- RECAT	Permitted	75/000	#/100 ML		2/WEEK	GRAB	
COLIFORM	Reported	2	#/100 ML	0	2/week	Arab	
800821024- CARBONACEOUS	Permitted	5/000	MG/L		2/WEEK	GRAB	
BOD5	Reported	3.4	MG/L	0	2/week	Land	
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EXECUTIVE OFFICER

P.O. BOX 13087 •AUSTIN, TEXAS 78711-3087

MONTHLY EFFLUENT REPORT

OWNER, CN601661085, CYPRESS RANCH WCID 1

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Page 1 of 1

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Parameter	Effluent Condition				Frequency of	Sample Type	
		Válue	Units				
500507124-FLOW	Permitted		MGD		2/WEEK	INSTANT	
	Reported	0.098	MGD	0	2/week	Instant	
316164024-	Permitted	20,000	#/100 ML		2/WEEK	GRAB	
COLIFORM	Reported	1.8	#/100 ML	0	2/ week	ARab	
юобозо-РН	Permitted		STANDARD		2/WEEK	GRAB	
	Reported	7.1	Standard Units	0	2/week	YRAb	
20796624-	Permitted	3.000	NTU		2/WEEK	GRAB	
UNDID111	Reported	4.6	NTU	7	2/week	Aleab.	
16164030- ECAL	Permitted	75.000	#/100 ML		2/WEEK	GRAB	
OLIFORM	Reported	, 8	#/100 ML	0	2/week	Arab	
00821024-	Permitted	5.000	MG/L		2/WEEK	GRAB	
BOD5	Reported	3.6	MG/L	0	2/week	Licab	
OMMENTS AN	ND EXPLANAT	TONS (Reference all atta	chments here)				

I CERTIFY THAT I AM FA	MILIAR WITH THE INFORMATION	NAN	AE	SIGNA	TURE	DATE	
CONTAINED IN THIS REI KNOWLEDGE AND BELLI COMPLETE AND ACCURA	SE SUCH INFORMATION IS TRUE AND ATE.	Michael	Bemer	Michar	bamen	2023/03/ 20	6
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P.O. BOX 13087 AUSTIN, TEXAS 78711-3087

MONTHLY EFFLUENT REPORT

OWNER, CN601661085, CYPRESS RANCH WCID 1

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Page 1 of 1

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Parameter		Effluent Cor	ndition		No. Ex	Frequency of	Sample Type
			Value	Units			
4006030-PH	Permitted			STANDARD UNITS		2/WĘEK	GRAB
	Reported	7.02	-	standard Units	0	2/Week	Sento
316164030- FEGAL	Permitted		75.000	#/100 ML		2/WEEK	GRAB
COLIFORM	Reported	60.		#/100 ML	Ò	2/week	Deab
316164024- FECAL	Permitted		20.000	#/100 ML		2/WEEK	GRAB
ĊŎĹIFORM	Reported	7.6		#/100 Mh	0	2/week	Strab
820796624- 0118810017Y	Permitted		3.000	NTU		2/WEEK	GRAB
	Reported	2.4		NTU	0	2/Week	Leab
00821024-	Permitted		5.000	MG/L	2	/week	GRAB
OD5	Reported	2.2		mb/L	0	2/Week	GRAb
00507124-FLOW	Permitted		[MGD	2	/WEEK	ÎNSTANT
	Reported	0.097		MGD	0	2/ Week	Y Rab
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MONTHLY EFFLUENT REPORT

OWNER, CN601661085, CYPRESS RANCH WCID 1

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Parameter		Efficient Condition			No. Ex.	Frequency of Analysis	Sample Type
			Valu	e Units			
4006030-PH	Permitted			STANDARD UNITS		2/WEEK	GRAB
	Reported	7.0		STANdard Units	0	2/Weelc	ARab
316164030- FECAL	Permitted		75.000	#/100 ML		2/WEEK	GRAB
COLIFORM	Reported	3		#/100 ML	0	2/week	Arab
316164024-	Permitted		20.000	#/100 ML		2/WEEK	GRAB
COLIFORM	Reported	1.3	3.	# 100 ML	Ø	2/WREK	HRAB
820796624- 7117810197	Permitted	 	3.000	NTU		2/WEEK	GRAB
	Reported	· 11		NTU	0	2/week	ARab
800821024-	Permitted		5.000	MG/L	2	/WEEK	GRAB
BOD5	Reported	1.5		m6/1	0	2/week	Leab
500507124-FLOW	Permitted		· ·	MGD	- 2	/week	INSTANT
	Reported	0.99		MED	0 :	2/WERK	ARab
COMMENTS AN	ND EXPLANAT	IONS (Referen	ce all attac	chments here)	1		· ·
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Page 1 of 1

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MONTHLY EFFLUENT REPORT

OWNER, CN601661085, CYPRESS RANCH WCID 1

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Page 1 of 1

R14368001	2023/05	TYPE I-1	13598	33804
PERMIT NUMBER	YYYY/MM	EID	MONT ID	REQ SET

THIS REPORT TO BE USED FOR **OUTFALL**.

PLEASE RETAIN A PHOTOCOPY FOR YOUR RECORDS.

TCEQ COPY

	Effluent Condition				Frequency of	Sample Type	
		Value	Units	£12.8.9			
820796624- P	Permitted	3.000	NTU		2/WEEK	GRAB	
R	Reported	1.4	NTU	0	2/WREK	Likolo	
500507124-FLOW P	ermitted		MGD		2/WEEK	INSTANT	
R	eported	0.093	Standard Units	0	2/Week	LIRab	
4006030-PH Pe	ermitted		STANDARD UNITS		2/WEEK	ĢRAB	
Re	eported	7,03	MJ/L	0	2/WEEK	LIRAD	
800821024- Pe	ermitted	5.000	MG/L		2/WEEK	GRAB	
BOD5 Re	eported	1.9	MG/L	0	2/week	Strab.	
316164024- Pe	ermitted	20,000	#/100 ML		2/WEEK	GRAB	
COLIFORM Re	eported	10	#/100 ML	D	2/week	Heab	
16164030- Per	rmitted	75.000	#/100 ML		2/WEEK	GRAB	
OLIFORM Re	ported	1.0	#/100 ML	0	2/week	ARab	

I CERTIFY THAT I AM FAMILIAR WITH THE INFORMATION		NAME	SIGNATURE	DATE
COMPLETE AND ACCURATE.		Michael Bamer	Michael Barren	2023/05/14
TELE	PHONE NUMBER	PLANT OPERATOR	PLANT OPERATØR 🛛 🖉	YEAR MO DAY
5/2	402-1990	Tammy Hargett	Janny Hersell	2023/06/14
AREA CODE	NUMBER	EXECÚTIVE OFFICER	EXECUTIVE OFFICER	YEAR MO DAY

P.O. BOX 13087 •AUSTIN, TEXAS 78711-3087

MONTHLY EFFLUENT REPORT

OWNER, CN601661085, CYPRESS RANCH WCID 1

null

AREA CODE

R14368001	2023/06	TYPE I-1	13598	33804
PERMIT NUMBER	YYYY/MM	EID	MONT ID	REQ SET

THIS REPORT TO BE USED FOR **OUTFALL**.

PLEASE RETAIN A PHOTOCOPY FOR YOUR RECORDS.

NUMBER

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YEAR MO DAY

EXECUTIVE OFFICER

Parameter		Effluent Condition		No. Ex	Frequency of Analysis	Sample Type
		Value	e Units	-	7.11019313	
800821024- CARBONACEOUS	Permitted	5.000	MG/L		2/WEEK	GRAB
BOD ₅	Reported	1,8	MG/L	0	2/week	Genb
500507124-FLOW	Permitted		MGD		2/WEEK	INSTANT
	Reported	0.094	MGO	0	2)week	Leab
4006030-PH	Permitted		STANDARD UNITS		2/WEEK	GRAB
	Reported	7,0	Standard Unit	0	2/ Neek	HRAB
316164030- FECAL	Permitted	75.000	#/100 ML		2/WEEK	GRAB
COLIFORM	Reported	1.0	#/100 ML	0	2/Week	HRab
316164024- FECAL	Permitted	20.000	#/100 ML		2/WEEK	GRAB
COLIFORM	Reported	1.D	#/ 100 ML	0	2/Weck	Arab
820796624- TURBIDITY	Permitted	3.000	NTU		2/WEEK	GRAB
	Reported	1-1	NTU	0	2/week	Areb
COMMENTS AN	ID EXPLANAT	TONS (Reference all atta	achments here)			
CERTIFY THAT I AM FA	MILIAR WITH THE IN	FORMATION	NAME	· · · · · ·	SIGNATURE	DATE
CONTAINED IN THIS RE CNOWLEDGE AND BELL COMPLETE AND ACCUR	EF SUCH INFORMATIO	ON IS TRUE AND Micha	& BAMER	MI	la Pramen	2023/7/14
TELF	PHONE NUMB	ER PLAN	TT OPERATOR	P	LANT OPERATOR	YEAR MO DAY
512	402-10	790 Tamm.	1 Hargett	1	army Chrol	2023/7/14

EXECUTIVE OFFICER

Page 1 of 1

P.O. BOX 13087 AUSTIN, TEXAS 78711-3087

MONTHLY EFFLUENT REPORT

OWNER, CN601661085, CYPRESS RANCH WCID 1

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R14368001	2023/07	TYPE I-1	3598	33804
PERMIT NUMBER	YYYY/MM	EID	MONTID	REQ SET

THIS REPORT TO BE USED FOR OUTFALL.

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Parameter	• 	Effluent (Condition	127일 - 날카와 이상 - 이가 맞춰 등 12 - 동안이가 맞춰 등 12 - 동안이가	No. Ex.	Frequency of Analysis	Sample Type
				Value Units			
4006030-PH	Permitted			STANDARD		2/WEEK	GRAB
	Reported.	7.0		standard Units	0	2/Week	Grab
316164030- FECAT	Permitted		75.000	#/100 ML		2/WEEK	GRAB
COLIFORM	Reported	2.9	,	#/100 ML	0	2/ Week	Seals
316164024-	Permitted		20.000	#/100 ML	1	2/WEEK	GRAB
COLIFORM	Reported	16.0		#/100 ML	Ø	2/WPek	ZIRab
320796624~	Permitted		3.000	NTÚ	ÍÍ	2/WEEK	GRAB
IURDIDIT I	Reported	. 1.0		NTU	0	2/Week	Grab
00821024-	Permițted		5.000	MG/L		/WEEK	GRAB
OD5	Reported	1.9		MG-1L	0	2/week	Arab
00507124-FLOW	Permitted			MGD	2	/WEEK	INSTANT
	Reported	0.080	4	MGD	0	2/week	Arab
OMMENTS AN	VD EXPLANAT	IONS (Referen	ce all attac	hments here)		í	· ·
	• •			۰.			
GRTIFY THAT I AM FA NTAINED IN THIS REI	MILIAR WITH THE IN PORT AND THAT TO T	FORMATION HE BEST OF MY])	NAME		SIGNATURE	DATE
WLEDGE AND BELIT	BF SUCH INFORMATIC ATE.	IN IS TRUE AND	Micha	El Bamer	M	ilas Bamer	2023/08/11
TELE	PHONE NUMB	ER	PLANT	OPERATOR	PL	ANTOPERATOR	YEAR MO DAY
512	402-19	190	Tammy	1 Hargett	Jai	my thought	2023/08/11
AREA CODE	NIIM	BER	EXECUT	VE OFFICER	EXE	UTIVE OFFICER	YEAR MO DAY

Page 1 of 1

P.O. BOX 13087 AUSTIN, TEXAS 78711-3087

MONTHLY EFFLUENT REPORT

OWNER, CN601661085, CYPRESS RANCH WCID 1

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R14368001	2023/08	TYPE I-1	3598	33804 .
PERMIT NUMBER	YYYY/MM	EID	MONT ID	REQ SET

THIS REPORT TO BE USED FOR OUTFALL. PLEASE RETAIN A PHOTOCOPY FOR YOUR RECORDS.

Sample Type **Effluent** Condition **Frequency** of No. Parameter Ex, Analysis Units Value 2/WEEK GRAB STANDARD 4006030-PH Permitted UNITS Standard Units Heah Reported \mathcal{O} 7.0 2/WeeK GRAB 316164030-FECAL COLIFORM 2/WEEK Permitted 75.000 #/100 ML Stab Reported #/100 ML 2/WECK 1080 2 GRAB #/100 ML 2/WEEK Permitted 20.000 316164024-FECAL COLIFORM #/100 ML HRAL Reported 2 2/week 129.9 GRAB 2/WEEK NTU 820796624-Permitted 3.000 TURBIDITY Grab Reported Ð 2/Week NTU 1, D 2/WEEK GRAB MG/L 800821024-Permitted 5.000 CARBONACEOUS HRab BOD5 Reported 1.2 \mathcal{O} 2/WPEK MGTZ INSTANT MGD 2/WEEK 500507124-FLOW Permitted Reported. 0.086 Ó 2/WEE/C Lleah MGD

COMMENTS AND EXPLANATIONS (Reference all attachments here) Experienced 2 sample Days OF High Fecal (1080 of 153) which Drove our average above Limits: Turned OFF I Brigation until Levels gre within Range. Possible Sample contamination?

I CERTIEY THAT I AM FAMILIAR WITH THE INFORMATION CONTAINED IN THIS REPORT AND THAT TO THE BEST OF MY KNOWLEDGE AND BELLEE SUCH INFORMATION IS TRUE AND COMPLETE AND ACQURATE.		NAME	SIGNATURE	DATE
		Michael Bamer	Mital Barnen	2023/09/13
TELE	PHONE NUMBER	PLANT OPERATOR	PLANT OPERATOR	YEAR MO DAY
512	402-1990	Tammy Hargett	Juny physet	2023/09/13
AREA CODE	NUMBER	EXECUTIVE OFFICER	EXECUTIVE OFFICER	YEAR MO DAY

Page 1 of 1

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MONTHLY EFFLUENT REPORT

OWNER, CN601661085, CYPRESS RANCH WCID 1

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 R14368001
 2623/09
 TYPE I-1
 13598
 33804

 PERMIT NUMBER
 YYYY/MM
 EID
 MONT ID
 REQ SET

THIS REPORT TO BE USED FOR **OUTFALL**. PLEASE RETAIN A PHOTOCOPY FOR YOUR RECORDS.

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Parameter		Effluent Condition				Sample Type
		Value			Analysis	
500507124-FLOW	Permitted		MGD		2/WEEK	INSTANT
	Reported	0.092	MG-D	Ø	2/Week	Instant
4006030-PH	Permitted		STANDARD		2/WEEK	GRAB
	Reported	6.95	standard Units	0	2/week	GRAG
316164030-	Permitted	75,000	#/100 ML		2/WEEK	GRAB
COLIFORM	Reported	2.0	#/100 ML	Õ	21 Week	ZIRab
316164024 -	Permitted	20.000	#/100 ML		2/WEEK	GRAB
COLIFORM	Reported	1.1	#/100 ML	0	2/ week	Heab
820796624-	Permitted	3,000	NTU		2/WEEK	GRAB
IURDIDITT	Reported	1.0	NTU	D	2/week	ARAb
300821024-	Permitted	5.000	MG/L		2/WEEK	GRAB
BOD5	Reported	1.0	MG/L	0	2/week	ARab
COMMENTS AI	ND EXPLANAJ	TIONS (Reference all att	achments here)			
CERTIFY THAT I AM F. ONTAINED IN THIS RI	AMILIAR WITH THE IN EPORT AND THAT TO J	FORMATION THE BEST OF MY	NAME		SIGNATURE	DATIE

OMPLETE AND BELIEF SUCH INFORMATION IS TRUE AND OMPLETE AND ACCURATE.		Michael Bamen	Muchael Bernen	2023/10/13
TELI	CPHONE NUMBER	PLANT OPERATOR	PLANT OPERATOR	YEAR MO DAY
512	402-1990	Tammy Hargett	Jamy bright	2023/10/13
AREA CODE	NUMBER	EXECUTIVE OFFICER	EXECUTIVE OFFICER	YEAR MO DAY

Page 1 of 1

P.O. BOX 13087 •AUSTIN, TEXAS 78711-3087

MONTHLY EFFLUENT REPORT

OWNER, CN601661085, CYPRESS RANCH WCID 1

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R14368001	2023:110	TYPE I-1	13598	33804
PERMIT NUMBER	YYYY/MM	EID	MONT ID	REQ SET

THIS REPORT TO BE USED FOR OUTFALL.

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Page 1 of 1

Parameter	Effluent Condition			No. Ex	Frequency of Analysis	Sample Type	
		Value	Units			1	
820796624- TURBIDITY	Permitted	3.000	NTU		2/WEEK	GRAB	
	Reported	1.1	NTU	ð	2/week	HRab	
4006030-PH	Permitted		STANDARD UNITS		2/WEEK	GRAB	
	Reported	7.1	Standard Units	0	2/ week	LIRAD	
800821024- CARBONACEOUS	Permitted	5:000	MG/L	v	2/WEEK	GRAB	
BOD5	Reported	1.2	#/100 ML	D	2/week	Grab	
316164030- FECAL	Permitted	75:000	#/100 ML		2/WEEK	GRAB	
COLIFORM	Reported	1.0	#/100 ML	0	2/week	Grab	
316164024- FECAL	Permitted	20.000	#/100 ML		2/WEEK	GRAB	
COLIFORM	Reported	1.0	#/100 ML	0	2/Week	Arab	
500507124-FLOW	Permitted		MGD		2/WEEK	INSTANT	
	Reported	0.086	MAD	Ø	21 week	LIRA 6	
COMMENTS AI	ND EXPLANAT	TIONS (Reference all atta	achments here)				

I CERTIFY THAT I AM FAI	MILLAR WITH THE INFORMATION	NAME	SIGNATURE	DATE
CONTAINED IN THIS REPORT AND THAT TO THE BEST OF MY KNOWLEDGE AND BELLEF SUCH INFORMATION IS TRUE AND COMPLETE AND ACCURATE.		Michael Bamer	Michael Baner	2023/11/15
TELE	PHONE NUMBER	PLANT OPERATOR	PLANT OPERATOR	YEAR MO DAY
512	402-1990	Tammy Hargett	Janny berget	2023/11/15
AREA CODE	NUMBER	EXECUTIVE OFFICER	EXECUTIVE OFFICER	YEAR MO DAY

P.O. BOX 13087 •AUSTIN, TEXAS 78711-3087

MONTHLY EFFLUENT REPORT

OWNER, CN601661085, CYPRESS RANCH WCID 1

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R14368001	2023/11	TYPE I-1	3598	33804 .	•
PERMITNUMBER	YYYY/MM	EID	MONTID	REQ SET	

THIS REPORT TO BE USED FOR **OUTFALL**. PLEASE RETAIN A PHOTOCOPY FOR YOUR RECORDS.

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Parameter		Effluent Condition			No. Ex.	. Frequency of Sample Lyp Analysis	
			Valu	e Dnits			
400б030-РН	Permitted			STANDARD UNITS		2/WEEK	GRAB
	Reported	7.1		standard Units	0	2/week	ARab
316164030- RECAL	Permitted		75.000	#/100 ML		2/WEEK	GRAB
COLIFORM	Reported	1		#/100 ML	Ö	2/week	LIRA 6
316164024- FECAL	Permitted		20.000	#/100 ML		2/WEEK	GRAB
COLIFORM	Reported	1		#/100 ML	0	2/ WPCK	HRab
820796624-	Permitted		3.000	NTU		2/WEEK	GRAB
TO KDIDIT I	Reported	· 1.1		NTU	0	2/Neek	GRab
800821024-	Permitted		5.000	MG/L	2	/WEEK	GRAB
3OD5	Reported	1.4		MG/L	Û,	2/Week	MRab
00507124-FLOW	Permitted			MGD	2	/week	NSTANT
	Reported	0.105		MGD	0	2/WEEK e	Arab
OMMENTS AN	ID EXPLANAT	IONS (Referen	ice all attac	chments here)		}	
	• •		,	۰,			
ERTIET THAT I AM FA NTAINED IN THIS RE	MILLAR WITH THE IN PORT AND THAT TO T	ORMATION IE BEST OF MY		NAME		SIGNATURE	DATE
OWLEDGE AND BELD MPLETE AND ACCUR	SESUCH INFORMATIO ATE	N IS TRUE AND	Micha	El Bamer	Mie	huf Bomen	2023/12/12
TELF	PHONE NUMBI	R	PLANT	OPERATOR	PL4 	VINT OBERATOR	TEAR MU DAI
512	402-19	90	Tammy	Hargett	d	my deneer	2023/12/12
AREA CODE	NUM	BER.	EXECUT	IVE OFFICER	EXE(UTIVE OFFICER	YEAR MO DAY

P.O. BOX 13087 AUSTIN, TEXAS 78711-3087

MONTHLY EFFLUENT REPORT

OWNER, CN601661085, CYPRESS RANCH WCID 1

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R14368001 /2/3//2 TYPE1-1 3598 33804	
PERMIT NUMBER YYYY/MM EID MONT ID REQ.SET	

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Parameter		Effluent Condition		No.	Frequency of	Sample Type	
	11	🕐 - Valu	e Units				
400 60 30 - PH	Permitted		STANDARD UNITS		2/WEEK	GRAE	
	Reported	7.05	Standard Units	0	2/WeeK	LRab	
316164030- FECAL	Permitted	75:000	#/100 ML		2/WEEC	GRAB	
COLUCIEN	Reported	1.0	#/100 ML	0	2/weeK	GRab	
316164024- FECAL	Permitted	20.000	#/100 ML		2/WEEK	GRAB	
COLIFORM	Reported	1.0	#/100 ML	0	2/week	GRAD	
820796624- FURBIDITY	Permitted	g.ooo	NTU		2/WEEK	GRAB	
	Reported	1.0	NTH	01	2/week	<u> H</u> RAb	
00821024-	Permitted	5.000	MG/L	2	WEEK	GRAB	
OD5	Reported	1.1	MG/L	0	2/week	Herb	
00507124-FLOW	Permitted		MGD	2,	/WEEK	INSTANT	
	Reported	0,100	MAD	0 2	Iweek	Instant	
OMMENTS AND EXPLANATIONS (Reference all attachments here)							
ERTIFY THAT I AM FA NTAINED IN THIS REI OWLEDGE AND BELLI	MILIAR WITH THE INFO PORT AND THAT TO TH SESUCH INFORMATION	DRMATION E REST OF MY ISTRUEAND	NAME	CAM	SIGNATURE	DATE	

COMPLETE AND ACCUR	ATE,	FINCHAEL MAMER	Mundy Marker	2027/01/10
TELE	PHONE NUMBER	PLANT OPERATOR	PLANT OPERATOR	YEAR MO DAY
· 512	402-1990	Tammy Hargelt	Tammy Hargett	01.16.2024
AREA CODE	NUMBER	EXECUTIVE OFFICER	EXECUTIVE OFFICER	YEAR MO DAY

Page 1 of 1

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P.O. BOX 13087 •AUSTIN, TEXAS 78711-3087

MONTHLY EFFLUENT REPORT

OWNER, CN601661085, CYPRESS RANCH WCID 1

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R14368001	2024/01	TYPE I-1	13598	33804
PERMIT NUMBER	YYYY/MM	EID	MONT ID	REQ SET

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Parameter		Effluent Condition		No. Ex.	Frequency of Analysis	Sample Type	
		Value	Units]			
4006030-PH	Permitted		STANDARD UNITS		2/WEEK	GRAB	
	Reported	7.08	STandard Units	Ø	2/week	Grab	
316164030- FECAL	Permitted	75.000	#/100 ML		2/WEEK	GRAB	
COLIFORM	Reported	33.0	#/100 ML	0	2/week	Grab	
316164024- FECAL	Permitted	20.000	#/100 ML		2/WEEK	GRAB	
COLIFORM	Reported	4.2	#/100 ML	D	2/WCEK	ERAb	
820796624- TURBIDITY	Permitted	3.000	NTU		2/WEEK	GRAB	
	Reported	1.1	NTU	ð	2/week	LIRab	
800821024- CARBONACEOUS	Permitted	5.000	MG/L		2/WEEK	GRAB	
BOD5	Reported	1.6	mG/L	0	2/Weele	<u>Heab</u>	
500507124-FLOW	Permitted		MGD		2/WEEK	INSTANT	
	Reported	.103	MED	0	2/week	Fustant	
COMMENTS AND EXPLANATIONS (Reference all attachments here)							
CERTIFY THAT I AM PA	MILIAR WITH THE IN	FORMATION	NAME		SIGNATURE	DATE	

KNOWLEDGE AND BELIEF SUCH INFORMATION IS TRUE AND COMPLETE AND ACCURATE.		Michael Bamer	Muchael Gamen	2024/02/12
TELE	PHONE NUMBER	PLANT OPERATOR	PLANT OPERATOR	YEAR MO DAY
512	402-1990	Tammy Hangett	- any farett	2024/02/12
AREA CODE	NUMBER	EXECUTIVE OFFICER	EXECUTIVE OFFICER	YEAR MO DAY

Page 1 of 1

P.O. BOX 13087 •AUSTIN, TEXAS 78711-3087

MONTHLY EFFLUENT REPORT

OWNER, CN601661085, CYPRESS RANCH WCID 1

Page 1 of 1

R14368001	2024/02	TYPE I-1	3598	33804 .
PERMIT NUMBER	YYYY/MM	EID	MONT ID	REQ SET

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PLEASE RETAIN A PHOTOCOPY FOR YOUR RECORDS.

402-1990

NUMBER

512

AREA CODE

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<u>2024/03/13</u> YEAR MO DAY

Parameter	Effluent Condition				Frequency of Analysis	Sample Type	
		Valu	e Únits				
4006030-PH	Permitted		STANDARD UNITS		2/WEEK	GRAB	
	Reported	2.1	Standard Units	0	2/Week	Arab	
316164030- FECAL COLIFORM	Permitted	75.000) #/100 ML		2/WEEK	GRAB	
	Reported 4	1.0	#/100 ML	0	2/week	Leub	
316164024- FECAL COLIFORM	Permitted	20.000	#/100 ML		2/WEEK	GRAB	
	Reported	1.D .	#*/100 ML	0	2/Week	Grab	
820796624- TURBIDITY	Permitted	3.000	NTU		2/WEEK	GRAB	
	Reported	the filler of	NTU	0	2/week	Spab	
800821024- CARBONACEOUS BOD5	Permitted	5.000	MG/L		2/WEEK	GRAB	
	Reported	2.0	mb/L	0	2/week	Leab	
00507124-ELOW	Permitted		MGD		2/WEEK	INSTANT	
	Reported	0.093	MGD	D	2/weel<	Instant	
OMMENTS AN	ID EXPLANAT	IONS (Reference all atta	ichments here)	:			
					•		
ERTIFY THAT I AM FA NTAINED IN THIS REI IOWLEDGE AND BELLI	MILIAR WITH THE IN PORT AND THAT TO TH SE SUCH INFORMATIO	FORMATION TE BEST OF MY N IS TRUE AND	NAME	YNI	SIGNATURE	DATE DATE	
MPLETEAND ACCUR	PHONE NUMBI	IR PLAN	T OPERATOR	PI	ANT OPERATOR ,	YEAR MO DAY	

Tammy Hargett

EXECUTIVE OFF

EXECUTIVE OFFICER

P.O. BOX 13087 AUSTIN, TEXAS 78711-3087

MONTHLY EFFLUENT REPORT

OWNER, CN601661085, CYPRESS RANCH WCID 1

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R14368001	2024 / 03 TYPE	-1	3598	33804 .
PERMIT NUMBER	YYYY/MM	EID	MONT ID	REQ SET

THIS REPORT TO BE USED FOR **OUTFALL**. PLEASE RETAIN A PHOTOCOPY FOR YOUR RECORDS.

Effluent Condition				No, Ex.	Frequency of Analysis	Sample Type	
		Value	units				
Permitted	T	<u></u>	STANDARD UNETS	1	2/WEEK	GRAB	
Reported	7.1		Standard Units	0	2/Week	Arab	
Permitted		75.000	#/100 ML		2/WEEK	GRAB	
Reported	1.4		#/100 ML	Ø	2/WEEK	Grab	
Permitted		20.000	#/100 ML		2/WEEK	GRAB	
Reported	1.1		#/100 ML	0	2/week	Arab	
Permitted		3.000	NTU		2/WEEK	GRAB	
Reported	• 1.1		NTU	0	2/wrek	ARab	
Permitted		5.000	MG/L	2	/WEEK	GRAB	
Reported	1.8		MG/L	0	2/week	Llab	
Permitted	· · · · · · · · · · · · · · · · · · ·		MGD	2/	/WEEK	INSTANT	
Reported	0.086		MGD	0	2/wrek	Yeab	
	Permitted Reported Permitted Reported	Effluent C Permitted Reported 7.1 Permitted Reported 1.4 Reported 1.4 Reported 1.1 Permitted 1.1 Permitted 1.1 Permitted 1.8 Permitted 1.8 Permitted 0.086	Effluent Condition Value Permitted Reported 7.1 Permitted 75.000 Reported 1.4 Permitted 20.000 Reported 1.4 Permitted 20.000 Reported 1.1 Permitted 3.000 Reported 1.1 Permitted 5.000 Reported 1.8 Permitted 5.000 Reported 1.8 Permitted 5.000 Reported 1.8	Effluent Condition Value Units Permitted STANDARD UNITS Reported 7.1 STANDARD UNITS Permitted 75.000 #/100 ML Reported 1.4 #/100 ML Permitted 20.000 #/100 ML Reported 1.4 #/100 ML Permitted 20.000 #/100 ML Reported 1.1 #/100 ML Permitted 20.000 #/100 ML Reported 1.1 #/100 ML Permitted 3.000 NTU Reported 1.1 MTU Permitted 5.000 MG/L Permitted 1.8 MGD Reported 1.8 MGD Reported 0.086 MG D	Efficient ConditionNo. Ex.ValueUnitsValueUnitsPermittedSTANDARD UNITSReported7.1 \mathcal{T}_{100} MLPermitted75.000#/100 MLReported1.4 \mathcal{I}_{100} MLPermitted \mathcal{I}_{100} Reported1.4 \mathcal{I}_{100} Permitted \mathcal{I}_{100} Permitted \mathcal{I}_{100} <td>Effluent ConditionNo. Ex.Frequency of AnalysisValueUnitsNo. Ex.Frequency of AnalysisPermittedSTANDARD Units2/WEEKReported7.1STain dand Units0Permitted75.000#/100 ML2/WEEKPermitted75.000#/100 ML2/WEEKReported1.4#/100 ML0Reported1.4#/100 ML0Permitted20.000#/100 ML2/WEEKReported1.4#/100 ML0Reported1.1#/100 ML0Reported1.1NTU0Permitted5.000MG/L2/WEEKReported1.8MG/L0Permitted02/WEEKReported1.8MG/L02/WEEKMGD2/WEEK</td>	Effluent ConditionNo. Ex.Frequency of AnalysisValueUnitsNo. Ex.Frequency of AnalysisPermittedSTANDARD Units2/WEEKReported7.1STain dand Units0Permitted75.000#/100 ML2/WEEKPermitted75.000#/100 ML2/WEEKReported1.4#/100 ML0Reported1.4#/100 ML0Permitted20.000#/100 ML2/WEEKReported1.4#/100 ML0Reported1.1#/100 ML0Reported1.1NTU0Permitted5.000MG/L2/WEEKReported1.8MG/L0Permitted02/WEEKReported1.8MG/L02/WEEKMGD2/WEEK	

RTIPL THATT AM FAMILIAR WITH THE INFORMATION TIZINED IN THIS REPORT AND THAT TO THE BEST OF MY WIEDGE AND BELIEF SUCH INFORMATION IS TRUE AND AFLETPAND ACCURATE. DATE SIGNATURE NAME 2024/04/15 amen Michael Ramer YEAR MO DAY PLANT OPERATOR PLANT OPERATOR TELEPHONE NUMBER 512 2024/04/15 1990 702 Tammy Hargett YEAR MO DAY EXECUTIVE OFFICE FХ AREA CODE NUMBER

Page 1 of 1

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			FRESS R			/ I F 		JAN	2022	WAOTE	
DATE	TIME	OPER	MASTER	FLOW	Ct.2	Alum in Inches	SBD	SV30	CL2 Daytank	TIME	TAIN IN INCH
1	330	MP	729718	2	36	28 0	152 .		25/3		HIR OFF
<u>'</u>	345	ins	731.0534	1.063	41	25 3/1	10"		2013	1	recontest
	13:30	Ci	74201.6	1 050	25	24"	15.4		16112	20 min	
	10.00		7470554	019	29	77 5"	17"		17"	20 min	4
	10.00	10	7540157	064	2.	19.5"	144	1~	7"		1
	10.00		71,03934		27	175	14"	280	35%	20min	-
7	G.100	m	7609134	117	2.0	15 -	1411	200	27	20 mil	
- <u>, -</u>	100 .	7444	7001101	695	21	120	1211		210	-	- -
<u>, o</u>	Hon.	1000	7871272	1019	50	9751	18"	300	11. ="	25 m	i
2	io ins	CC	TOLILIC TOPILAD	0.50	2.9	U. 0	11.17	-100	13.0	2.5 m	Decar
10	9.50		7 <u>857 7%</u> 1 701 7771	010	27	1.5"	14"		95"	15min	<i>41</i>
40	1.30		7000110	019	21	2:5"/22	14"		45 /22	2000	
12	10:00	10	Anuqiqu	081	31	29.5"	12"	200	175"	25	
13	14.00	C	017675	070	33	210	10"	1500	21.()	asau	
14	EIC.	440	621020200	DCT	27	77311	111		110		
10	213 1 Jr	hin?	\$29 A 411	1021	2	20 5	$14^{\prime\prime}$		N.U		
10	0.30	CL	432(302	01	21	190	1.24.11		90	25 min	Decon
10	Q.15	10	8207313	000	21	רב/יידו	17''	310	45"/25	20.00	4.
10	9:20		8425302	A26	22	78	12"	-	<u>יי ואן אין אין אין אין אין אין אין א</u> דר (15	
20	9:20		8471717	1030	24	215	14"	300	22 5'	15min	
20	2:05		8507300	051	37	23'	17"		17.5"	15min	Decant
	60		86587 A3	1056	2.	20 - 11			5 2 ¹	<u> </u>	lowered
	530	ILAND I	8=98852	<u>041</u>	2,D 7,1	19.9	1411		<u>, 14</u>	<u> </u>	-12 543
	2 20	CI	U 16721		<u> </u>	$\frac{78.0}{11.0}$	10 13		si j si'	(Con ai	0
4 r (2.15		Q119550	.070	77	125"	14	370	12"	20.	ordered
	1.7)		2705820	,000	21	15.7	17 11"	320	<u>G"</u>	20,00	more chemical
, (2.115			.0.0	10	<u>0"/27"</u>	17:	7 QIN	15"/27	20110	Mowere
	2-21	$\frac{1}{0}$	1789c21	0.075	1.0 2 1	1106	12	<u>LOU</u>	21 5		H(UM)
	h		× 1 2 1 2 3 0	0.050	<u></u>	~ 3/1 ~ 3/1	17 ."		202	12 min	AIR OFE TO
3 2	170		SUV LLI.	1 100		$\frac{1}{2}$ - $\frac{9}{1}$	16.0		61/2		DIGOSTER.
	<u>00 11</u>		1000000		22	<u>19 /4</u> 2 5"	120		<u>674</u>	l	NUM
		<u>~</u> -{	010 13 2		<u>J</u> (J	~/	12				
	Т	OTALD	RIP FIELD FLOW	#NAME?				ן ד	YPE 1		÷.,
		. R <u>O</u>	CK WREN TOTA					1			·
			TOTAL USED:	******							
			GPD AVERAGE:	#######							

		~ ``		i nat							
_		CY	PRESS R	ANCH	<u>I WW</u>	TP		FEB	2022		
DATE	TIME	OPER	MASTER METER	FLOW	CL2	Alum in Inches	SBD	SV30	CL2 Daytank	TIME	RAIN IN INCH
1	9:30	LC	8928500	2.024	2.9	23"	12"		10:1/32	20min	1
2	9:40	10	8962895	.046	3.2	215	12"	300	27.5	25min	
3	10:30	MB	9009386	.032	2.8	· ·					
4	10:00	LC	9041154	1062	2.6	17.5"	14"	320	21.5	20min	
5	700	ner	9103113	.009	3:0	17.0"	12"	<u> </u>	13.5		
6	1000	un	9112762	059	2.7	16.0"	13-14	300	11.5"	2.5 min	Decont
7	8.00	CC	9171497	.026	2.6	15"	14''		7'		21
8	9:40	LC	9197685	.037	2.7	14"/32	14"	280	35 ⁵ /32	20min	-
9	9:30	LC	9234405	1.039	2.9	30	14"		27.5	20 min	BINWERS
10	10:30	LC	9273381	.040	3.5	28"	X	200	23.5	15min	down
11	10:30	CL	6313593	.043	3.0	25.	13	·	17.5		TIX CO #1
12	500	an	9356704	,017	2,6	22.12	10''		12.0"		
13	1000	Mm.	9373344	1612		21/2	16''		9.0		Blower
14	7:45	00	934545 E	.067	3.3	19112	14.		5,0/39	" ZUMIN	1
15	9:30	LC	9452767	.016	2.9	17.5	14"	210	23.5	25min	
16	9:15	LC	9468834	.050	3.2	15"	12"	1	19"	15min	
17	9:45	LC	951 8769	.037	3.3	12.5	12"	320	14"	25min	· ·
18	14;00	CL	9555552	1032	3.2	11"/33"	10''	-	9"/30"	15 Mir)
19	530	MR	9586869	1026	3.4	29/4	16"		25		
20	600	un	1612932	022	4.3	27.0"	12''		20''	<u> </u>	
21	10,01	CL	9634446	.041	3.3	25	13'		16		
22	9;45	LC	9675304	.054	3.0	22.5	12"	300	13	15min	
23	9:40	IC	9729618	0	3.1	20"	12"	_	8.5	25min	
24	<u>10:00</u>	LC	9729618	,094	3.3	18"	12	280	5"	20min	. *
25	13:20	cc	9823264	.023	3.0	16"	12	-	14/19	15	
26	200	<u>m</u> . (<u>1845803</u>	1037	3.6	15 34	16."	_	121/2		BIONIOF
27	DU M	m	882184	.092	3,2	14.0	12		7,0"	·	
28	9:00 7	W3	9974520	.080	2.9		16'		28	30	
29											
30											
31										· .	
1			53345								
	T.		RIP FIELD FLOW	#NAME?				1	TYPE 1		
		RO	CK WREN TOTAL					1	YPE 2		_
			TOTAL USED:	******							
]	ł	ł	COD AVEDAGE		I	1	1	j.	i	· 1	.:

		<u> </u>	PRESS R	<u>ANCH</u>		112		MARCH	2022		
DATE	TIME	OPER	MASTER	TOTAL FLOW	CL2	Alum in Inches	SBD	SV30	CL2 Davtank	WASTE TIME	RAIN IN II
1	9:25	1 C.	53345	0	31	10"	14"		24"	25min	
2	9:30	10	53345	<u> • •</u>	3.0	7"	12"	~	19"	20min	1
3	10:30	AAC	69971	.007	3./	2/33	14"	-	14/33	20 min.]
4	11:00	CL	59971.2		3,6	29	12"		32.5	ZUMin	
5	200	un	186637		3.3	23/2	10"	-	27 3/4		
6	215	n	219607	. 034	2.6	1912	12	-	24		
7	11:05	Ci	258522	.031	•	1812	12'	-	161/2		Turb.
8	9:40	LC	289833	0	2.2	13"	12'	330	18"	15min	1.37
9	9:45	LC	289833	.066	2.5	10"	12"		14"	20min	0.99
10	9:35	LC	355470	,000.	2.7	6.5	12"	260	10.5"	20min	\$ 5% on Alum
11	10:00	CL	355470	X	2.8	21	12"		65 10	20min	+ Brennt Comin
12	500	'nne	3554703	1090	3.2	29"	10"	-	25 3/4		
13	400	MR_	4457534	.028	2.3	27/4	12	\leq	22/4	25min	
14	980	CC	4730,62	.031	2.6	25,3/4	12"		20	20 min	Turbic
15	9:35	LC	505080	0	3.0	23.5"	10	_	16.5	15min	2.18
16	9:40	LC	505080	.011	2.8	21"	12"	-	13"	20 min	2.09
17	9:30	LC	516383	.068	3.1	18"	12:	200	<u>q</u> "	25min	
18	12:50	LC	584385	044	3.0	15"/32"	12		<u>4.5°/32°</u>	10min	
19	670	M	628412	1031	3,4	32	12	_	28/2		
20	600	am	59025	.027	4.6	25 74	10	-	24"		Stor
21	9:30	LC	686373	.056	3.3	24	12	230	22	10 min	Turbid
22	7:30	LC	742540	.020	3.0	21-7	14"	170	18.	<u>25min</u>	40.9 .
23	9:40	LC	763025	.055	3.4	17.5	.12"		14.5	<u>20min</u>	2.31 N
24	10:00	IC	817878	0	3.6	14.5	12	190	<u> ``</u>	20min	ND- coot
25	7:35		817878	<i>.013</i>	3.5	<u>11.5°/32°</u>	12		7.5 /32	0 7	Pecan (
26	100	ms	8312026	037	3.8	26.12	10"		25.0	0	
27		¥	36833388	. 095		24.0"			2412		STAN
28	8.20		96.2049	.024	3,0	2)	12.		20.0	decant	yp
29	1:30	LC	141600	.002	33	10	12		7	20min	2.38+
30	1:40	LC	444063	.061	5.1	14.5			13.5	<u>20min</u>	2.45
31	1:45		061077		<u>う.つ</u>	10.5	IU	200	4.5	20min	
_1	<u> </u>										
	Ţ	OTALD	RIP FIELD FLOW	#NAME?		•		1	YPE 1		
		RO	CK WREN TOTAL	#########				,			
	I	I	GPD AVERAGE	####### !	I	1	1	· .	1	1	•

		CY	PRESS RA	NCH	. WW	TP		APRIL	2022		
	TIME		MASTER	TOTAL	CL2	Alum in	SBD	SV30	CL2	WASTE	Turbidity
		OFER	METER	FLOW		Inches	10"	2110	Daytarik	Decout	212
_1	9:35	LC	1095835	.053	3.4	1152	10	240	6/32	Decuni	L'IL NTI
2		m	1148581	.039	3.0	27_	14		2614		·
3	19:45	LC.	1187640	.023	3.2	24"	12"		123		
4	8:00	CL	1210936	.036	3,0	22.5	14	<u> </u>	20,5		
5	9:35	LC	1247118	.030	3.4	19"	12			20min	0.9 NTL
6	9140	LC	1276905	.031	3.1	16.5"	12"		13.5	20min	1.16 NTU
7	9:30	LC	1307550	.055	3.4	13"	12"	250	10"	20 min	
8	2:00	CL	1363334	0,0 85	3.6	5" /35	10/23.5		12		
9	1.00	uril	1448547	069	3.1	119 1/2"	16"		21. 3/4		
10	700	Im	1518364	,046	3.5	16/4"	16"	<u> </u>	12/4		
	8.30	11	1564515	.056	3.1	1414	17	-	2112		
42	9:30	1 C	1620621	059	34	12.5	12"	260	17.5"	20min	1.5100
<u>12</u> 42	9.30	10	11-79150	.672	3.2	9.5	14"		14"	20min	1.48 NTU
<u> </u>	a:50	1°	1750894	056	34	7"	12"	280	10"	30min	
14	0.20	10	1207049	. 102	36	35"/79"	12.		7"/32	Decant	
15	1.30 1.70	am	1910471	<u> </u>	310	24/4"	12	370	21/2	15 MIN	
16	630	0.0	109 070 1	075	<u></u>	210"	14		27/2	ZAMIN	_
17	400	1 ON	71011	04	22	10 5	14"	50	205	Decant	Dozat
18	9.30	LLC_	2012-11	000	3.5	19.5	111"		<u>, , , , , , , , , , , , , , , , , , , </u>	25min	1 87
19	9:45	LC	2082066	.049	<u> </u>	10.7	17		14"	30000	1 27 1
20	9:50	<u>LC</u>	2131189	.004	2.2		12"			Decant	1.21,010
21	<u>4:30</u>		2140524	,021	3.1	0.5	14	200	110	612 1	
22	1,30		216108	079	6.1	5/0	12		6 32		~
23	500	r1	2245 424	041	2.9	2" Z	14		2574	30	
24	700	w	1.286646	.016	30	a	10	0110	220	Decant	GIR OFT-
25	9:30	LC	2303052	.025	2.1	0	12	250	20	20 min was	4. L1.1C
26	9:00	LC	2328428	.069	2.9	0	10	. —		htr.	1.21070
27	8:30	MB	2397019	.039	20		12			15 min	<u> </u>
28	9:15	LC	2435528	.030	2.6	0	12"	230	10"	air off	Huks ordere
29	9:30	LC	2465896	.058	2.8	0``	10`	230	6/31	35min	chemical Stor
30	800	me	2524327		3.0	0	12''	/	26		
31		•			•						
1			•							• *	
		TOTAL		#NAME2					TYPE 1		
		R	OCK WREN TOTA	ana an	l				TYPE 2		
			TOTAL USED:	#########	1				,	1	•
]			GPD AVERAGE:	############							

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			CY	PRESS	RA		4 WM	VTP	5 \$_6	- BRAY	2022	,	
		5	PER	MASTER		TOTAL	GI 2	Alum li	n seo	SV30	CL2	WASTE	Turbidity
		<u></u>		METER		FLOW		Inches	366	3030	Daytan	k TIME	
	, A	s an		254976	25	, 020	13.4	123	16	280	23 .0	2 30	
1	<u>(a)</u>	<u>391</u>	<u> </u>	257841	1_	,038	3.0	N	12"	230	19.5	10min	
3	<u> 9:3</u>	<u>0 L</u>		261686	2	.032	3.2	32	12."		16.5	15min	1.04NT
4	9:1	0 11	2	264864	7	,036	2.0	31.5"	14"	·	14.5	35min	1909.1
5	9:2	OL	<u> </u>	26848	19	0-041	1.7	31"	12'	240	12	20min	Air off
6	9:0	xo C	C	27257	85	,045	1.9	29"	13"		10 73	2 40mi	
7	33	OM	p	217095	5	DHH	2,2	2.8			21/3		
8	63	s Ø	12	781445	8	,020	2.4	26.30	12"		22"		
9	12	0 VC	U	28317	72	.018	2.6	26	14"		19"		2hrs
10	9:3	24	2	285465	50	.029	2.8	25"	14"		15.5	75-1-	202
11	9:3	DL		288351	,8	0	29	24"	12	1	11.5	30.	164.00
12	8:0	o La		288356	8	0.0.57	29	23	14"	220	Q.	D	
13	9:1	SCC		294025	:0]	178	27	71"	14"		2"12		
14	45	no	2	501847	8	071	3.0	20'	17/		21"		· ····
15	700	non	12	n 89 (2)	2	007	24	11"	17"		180		
16	9:00			3096547		044	2.0	18"	12	1200	HE IS"	30	11% C1z
17	9:30			3140136		0	28	175"	10"	1200	115"	20	1 11/
18	9:30) c		3140136		014	29	1.5	10		Q''	Dmin 25	1.4000
19	9:10	210		315453	- †	120	20	15 /21	12	220	1 5 /2."	LJMIN 15	Filled
20	7.45	CL		32,757 1		200	<u>).</u>) (30'	10"	440	211	1 Junio	chems.
21	200	NI		28291	81	089	2.0	28 3/1			27/2		ULECAN
22	200	Can	2	2 79 70	Arin	.045	95	2017	12"		212		
23	500	CC		3417-77	2	037	2.1	<u>יי</u> ר <u>ר</u>			272 272	30.	
24	9:30	1C	12	149511	/ `	074	28	21"	12"			20.	- 12
25	9:30	$\frac{1}{1}$	3	52570	3	nal	$\frac{2.0}{27}$	<u>75'</u>	12		10	20min	2.12.NTU
26	9:30		17	5777576		077	$\frac{2}{2}9$	<u>с</u> ј 7Ц''	12	100	1.12×	20min	1.714 NTU
27	11:00	Ī	12	605851		N -1'	<u>2.1</u>	ム7 ク2"	14		4/21	10min	
28	えての	MP	2	72711		200 (ns ⁻ 7	2.0	21/2	17		20		
29	400	M	3	724923	2 0	$\frac{3}{3}$	29	20	/ <u>//</u>		9 18		
30	11:30	CL	12.	751751		165 -		19''	10		10		Shut A
31	لين 11	ic .	R	1,21411	- ``		2.3	<u>، رون</u>	17		10	0.0.n.v	upert d
1	1) '	<u>_</u>	ŕ		+		<u>~_/</u>	10	12			20mil	
				· · · · · · · · · · · · · · · · · · ·	-	 				<u> </u>		· · · · ·	
			UR	P FIELD FLO	WI #N.	AME?				T T	YPE 1 YPE 2		
		R		WREN TOTAL	4 ###	HHHH							
			GI	PD AVERAGE	: ###	+++++++++			· .		[1	

		\							-		
) c		RANC	HIWV	VTP	1.200 a.200 a.2	IINF	2022		
			R	TOTAL	CL2	Alum in	SBD	SV30	CL2	WASTE	Turbidity
			METER	FLOW		Inches			Daytan		
	230		30 3986	7 106		60			6 /32	30 m -	1.2.6
1-2			372514	1 05		192	+		28	derant	1,20
3	$\frac{10}{10}$		3490340	1062	1.9	14.5	↓ ~ ,		24"	30 min dound	· ·
4	100	MR	- 4042395	034	2.6	13/4	20		18 3/4		
5	400	nn	- 4077219	.032	2.9	12/4	13	180	15 4	15 min	>
6	9:00	» Cl	410950	3 035	52,4	11 3/4			10.12	2 1 mm	\$
7	332) <u>C</u> C	4144495	· 042	220	101/2		240	y 5	30min	
8	y.u		4896609	.030	121	16731"	14	-	4 26	YSm N	
9	9:3	cu	45,8695	0.00	2.4	30"	1.4	-	18.0	1. 62	decon
10	7:30	60	4219695	1.045	124	291)	14	-	7 3	30 100 10	CLT. PAN
11	14:00	Cu	4304552	, \$31	3.0	27 11.	14:		21		
12	4:30	00	4535514	02/2	170	2611	14"		23	Z1. *	
12	2:00	CL	4351.567	623	2.9	24	1 7/2	·	1/2	30 mm	1
	19.00	icc	(143484)	527	1.9	7316	140		14.	7442	
14	7:00		4107070	1.74		2211	11		0.0	1 6 4 40	
15		100	4915015	1.327	100	2014	19		9	1000	
16	1300		4309215	031	1.9	20.	19.		6113,5	USAN	
17	9,00		4596929	054	2.3	20	19.		4738	30 min	
18	300	MR	4600221	1053	2.7	18.5	18	<u> </u>	28"		·
19	1030	me	4652243	,053	1.6	17"	16'		21/2		
20	200	100	4704844	,v27	21	14.5	19		18.	Bound	aecan
21	430	CL	4731906	1.027	1.4	15,5	14		161"	+	
22	10.00	cc	4758722	1.625	1.8	B.5	14''	·	10"	lhr	
23	4:30	a	4783469	,UED	2,0	13.0	14"	_	5'/27.	30mm	
24	7:00	Ü	4783864	-6	3.2	10 /2	15000	-	30"	301-12	dens A
25	215	w	4783819	A50	2.0	2011	100		24		
26	330	UAN .	4818919	ALOSE	18	51-2	11"		2.2		
27	9:1m	MA	4910412	0.000	11	17 5	1411	100	63	20	n. v
<u>41</u> 20	س 8	<u>()</u>	492827,	092	19/1	21.3		<u>~0U</u>		20	bein
~0	7:20	\overline{C}	50 1100	152	22	10 <	7		13	Thi	
28	1-7		5 787.1	, c s J	77	17.0		110		1~~	3.
30	600	<u> </u>	50 15 106		d. 1	+7,0	16	180	<u>ā /32</u>	15 m~	dun
31			5020634								80,1,08
1								.			<u> </u>
,			DRIP FIELD FLOW	#NAME?	Ι,	169818	-	T	YPE 1		
	-	Ď			(543,000		T	YPE 2 C	natrustan	102,000
		R <u>i</u>	TOTAL USED:	#############	1	102,00			; u> .		
]	ľ	- 1	GPD AVERAGE	###### \$	· 1/1	805,00	v	I	•1	1	
			AVENAGE.	annann	L,	nnl			<u>Ľ</u>	•	

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2			CYPR	ESS	RAN	CH W	NTP	· . Tu	lv 2n2	12	
DATE	TIME	OPER	MASTER	total	CL2	Alum	SBD	SV30	CL2	WAS	
			METER	flow					Daytank	TIME	De.
1	7:00	Cu	5120684	052	23	22	14"		26.5	30 min	"CA
2	1:00	CL	5172853	1020	1.7	20	14"		21,5		
3	2.49	CC	5253649	,657	2.2	15:0	12"		17:0		
4	9.30	cl	5310649	,063	1.9	17'0	12	_	130		Deci
5	700	CL	5374642	.049	3.0	15:00	14"		10,0	30 m N	4
6	10:30	MB	5423950	.019	3.9	15	12	\sim	FULL	30 min	
7	8:00	mB	5443600	,075	3.2	13	13'		//	45 m	Deco
8	8.30	mB	5519532	084	2.9	12	10	250		45 mi	
9	200	ner	5603504	070	1,25	13/2	14"	~	24/2	-	
 10	215 -	non	5670478	1039	2.3	12"	12"		20/2		
11	910	MR	57/0015	,058	1.9	11'	14"	220	12/2	45	Deca
12	8: m	MR	5768286	033	1.8	12.95	10"	200	13 /2		•
13	10.00	cl	5801109	,084	20	2 33	10-"		25 32	30 m.2	
14	9:15	CL	58,4517-5	.071	3.5	31"	12~		29~	30 ~ ~	
 15	7.30	[v	5855939	0.071	3,0	253	14 5		220	30000	0.00
16	330	nn	1.027220	0.049	2.61	24/2	12"	~	2212		1.1
17	300	nie	6076679	0,54	2.3	25/4	11."		19.0'	15 min	
18	11:15	MB	6130238	,06	21	24.0	124	\angle	16.5'	45mm	0-
19	700	CL	6191188	.054	1.6	22'0	12"		110	30m.i	CAN
20	7:15	ĈĹ	6745329	1055	1.4	20	14~		6.5	30m N	
21	930	CL	1,301273	.053	1.9	26	12''		32"	300.0	0
22	7:30	MR	6354663	.014	2.0	23	14	220	26.		PCA
23	11.03	Cı	6418314	.069	1.0	21	14"		21.5	·	
24	12:30	er	6497157	, 077	2.1	19:5	しつご		16:5		_
25	7:00	N	6563705	.000	3.2	17.0) 4	_	13:0	30 m.	<i>.</i>
26	7.00	CL	4572587	.042	2,6	16:0	12"		12".0	30mm	
27	8,15	ĈL	1/4 145 16	.041	1.5	28	12	-	49/260		
28	9.00	ũ	1,655297	,043	2.2	25:5	14"	\sim	17:0	30m.N	\$
29	8,00	CI.	1.698669	NHO	4.3	24".0	14.10	/	10 /24.0	BOWIN	/
30	1720	MA	6739075	041	1.9.8	22 1/4"	20"	160	19 1/3"	30 mil	ļ
31	220	HAM-	1.184900	.0105	2.40	20	18"	/	14		
1	_1°,~~	VVIC	6848951								/
		ΤΟΤΑΙ	\			• <u>3</u> •					
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CYPRESS RANCH WWTP

DATE	TIME	OPER	MASTER	total	CL2	Ałum	SBD	SV30	CL2	WAS	
			METER	flow		<u> </u>			Daytank	TIME	ļ
1	8:30	cu	6848851	.0000	2,30	197	19"		1:566	15204	
2	9.00	ci	6957039	. 121	1,54	16	14.,	/	62	3000	ľ
3	1:30	ci	6978321	.042	1,01	15	12"		2"/ 70"	Dochnt	Record
4	7:30	ci	7026762	.056	1.50	15"	12''		24.5	30mn	Decart
5	7:30	10	7043249	NO	1.68	14'	14'			Bunn	
6	400	MA	7143689	044	1.50	11/2	13		13/2		
7	1200	ny	7/87.533	.06%	1.82	10.0"	12"		10.0		
8	900	CL	7255954	.046	1.37	9.5/3L	12"		6" /32		
9	930	CL	7302295	.043	170	25"	14"		26		
10	2:30	CL	77 45551	.054	1,40	18	141		20"		
11	9,30	CL	7399847	,026	1.67	15"	14"		16"	thu	
12	0;0	el	7425673	082	1.33	11.	10/32"	. /	14	30mis	
13	115	nor	7507899	074	1.69	ø	16"	/	12'14		
14	500	uns	7581563	.054	1.85	Ą	12	1			- - -
15	13:30	Cl	7637523	.049	1.77	Ð	14"		17,5		
16	8:15	Cc.	7686004	.054	170	29" /	17		14.0	30 min	
17	830	CC	7729598	,055	190	200	19 "		10.00	301-2	,
18	13 00	10	1794464	.058	2,20	28.5	14"		6 / 35		
19	ي زر	CU	7352156	,032	1.70	27	12"		21	lhr	
20	13:30	CU	78839456	,015	155	25,0	12"		17'0	30m	
21	13:00	·CĹ	7949797	.066	174	23'"	12:0		15"0	JOWIN	
22	9:15	el	4016244	,053	1,87	いない	120		1000	jumn	
23	7.30	a	8069453	.663	2,20	H.	1400	/	5 1/22	3000	41
24	2100	CV	8132407	.042	1.44	24,5	1200		26"	30.22	Docast
25	425	CL	0174073	,075	1,90	23:0	12:"		22:0	Inn	N.T.U.
26	8:15	CL	8207695	,040	270	22: 130	14"	/	19"/35	30 ~ 2	
27	Sor	MNU	8247836	.090	2.0	/	10"	/			•
28	500	mix	8338245	,073	1.69	26"	14 21	/	21/2		
29	QUU'	CL	8381092	,069	1.80	25'	12.		18.0	30~~~	
30	045	Cr	4449957	,060	1.37	241	12	/	13.0	30 m	1
31	9:00	CL	8510169	054	211	23 35	14"	1	\$124	30~~~	1.84
'n	2 W	ei	2564575		1.90	30''	14"		19:00	300 -	Decorot
		TOTAL				.*					
	-				I			۰.			

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		C١	PRESS R	ANCH	WW	TP		SEPT	2022		
ΓE	TIME	OPER	MASTER	TOTAL	CL2	Alum in	SBD	SV30	CL2	WASTE	Turbidity
	טוט	CI	151,4576	FLOW	1.40	36	14.0	-	24	30mi	1.76
<u>1 </u>	aut		U615530	<u>a</u>	7.24	123 5	14'0		16/25	20 mil	
2	100	00	\$1.76.11	672	133	21 1	11. "		26		
<u>3</u> A	in a	W AM	8709784	067	20	71/2	12"	-	20		
<u> </u>	910	re	810,120	106	21	21	13"		19""	JUNIN	2.16
<u>с</u> 6	9710	le	3342368	.043	2.3	207	14~	-	17:0	30mN	2.04
<u> </u>	9700	00	4425403	.847	2.5	11:30	12"	-	1.1/30	the	
<u>.</u>	PID	(N	9972546	,044	2.1	24.0	14"		24	JUN.	
<u> </u>	90J	CC	9014365	1951	2.4	20"	140	/	20.0	30 min	
10	1230	ci	9069855	.013	2.0	18,0	12"	·	18:0	<u> </u>	
11_ (14:00	er	9083034	.109	2,2	16-0	14.		16.0	decant	1
12	8:00	er	9,92045.1	.069	1.7	15/32	16"		13 /25	45min	accant
13	7:00	CC	9260546	,071	1.1	ກ"	13		26	1hr	1,85
14	700	CL	9331731	,051	1.6	25	(2**		22	1hr	
5	9:30	a	9382610	.046	1,2	23"	12-	· ·	18	30~,	
16	1032	a	9448722	010	1,4	201/20	120		13/24,5	30m	
17	300	m	9459279	,056	2,0	25"	16"	/	18 12		
18	500-	<u>m_</u>	9515702	<u>,</u> v35	1.6		16''		15.5		al a soft
19	10:00	or	9550340	1019	1.9	21'	14.		12	30Mn	deem
20	9:30	u	9633012	.049	1.3	14.55	14"		0/30	140	NTU
21	930	06	9401736	.058	1.7	22.0	12"		24	166	1.30
2	7:30	Cu	9739526	، محود	1.9	170	180		19.5	166	CONT
3	7:30	Cc	9795519	,088	1.5	15/28	15 133		17 /28	100	
4	300	inn	9883596	063	1.9		16"	\leq			
25	445	m,	9946943	,061	1.3	221/2	12	\leq	11/2	No.	diesinst.
6	עורצי	CC	1723	.046	2.0	<u>کور</u> بر در د	12		15	16.00	I ST THE ARM
7	230	CC m	25825	105 2	2,0	10	12		1~ ~	The	
8	7150		111812	.067	11.2	13). N	12		1/32	ILAN	decient
9	9.01 G		176131	054	21	dil activ	12-		21	the	
0	4:3~	<u>"(</u>	232307	, 042	2,0	27	100		150	unar	
1	(,3)	cu	277197			de	12		10		
				· · · · ·		l		(A)			
<u> </u>	ŀ	OTAL	DRIP FIELD FLOW	#NAME?				- -	TYPE 1 TYPE 2	•	
		R	OCK WREN TOTAL TOTAL USED:	#########		·					
			GPD AVERAGE:	#########			L	l			

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		<u>_C</u>	PRESS R	ANCT	I VVV			OCT	2022		
DATE	TIME	OPER	MASTER METER	TOTAL FLOW	CL2	Alum in Inches	SBD	SV30	CL2 Daytank	WASTE TIME	RAIN IN INCHES
1	133	CL	274194	1076	2.0	22"	140		19	/	lan an that same and the second second second second
2	TX. R	Cu	350673	1.071	1.7	21"	28'		14 10		allande fer ten genten internationen
3	2:00	CL	420976	064	1.3	180	15'	17	24"	1-1	CANT
4	7'30	CC	485440	,034	2,2	16"	12''	17	20'"	Jom~t	died die gesternen und die gesternen.
5	7:30	58	521591	075	1.6	15:24	" 22"		18"	10 run	and and a substantian
6	12:BL	CL	597196		1.9	21	14"	/	14"/	30	anna deta ternaria anazzaz
7	GN	64	134771	037	/	1900			10"		
8	1/30	an	1.7/10/0 D	150	1.1		16"		\$2'4	/	a na filin dan ang kang kang ting na
9	40.10	Rem	171986	1075	1.4	23/2	14'1	~	20	~	\$1,21,21,21,21,21,22,22,22,23,23,249,49,75%,4309,857,224
10	7:15	SP	796943.5	.031	1.6	22"	14"		/8"	Thu	Automotica en grag anticipation anticipation de la serie
11	2:15	30	828324.5	,026	1.4	18 "	14"		15"	1h~	an a
12	7:30	JP.	8557051.4	.037	1.0	17"	14)		12 "	Ø lhr	42 (9) (9) (9) (9) (9) (9) (9) (9) (9) (9)
13	7:30	50	892 450 . 7	,122	1.0	iz.5"	16"		un 19. ⁴⁴		LITERATION CONTRACTOR CONTRACTOR
14	7:50	51	101542.5.5	184	2.0	23 "	(4"	300	26"	45 mm	
15	630	Im	1101880	. 162	251	26''	16"		13''		
16	300	m	1163934	:018	0,85	19.0"	12''	/	15/2	1	a li fa a a sector de construir de construir de construir de la construir de la construir de la construir de la
17	7100	SP	1182076	,069	2.6	14.00	16"		15"	Decant	and contraction of the second second second
18	7:15	51	1251657 0	1073	2.5	11"		350	71."	·	1.7.2.8.1.1.9.8.1.9.1.1.9.1.8.8.2.2.9.4.7.2.4.
19	7:05	JP.	1325425.1	1081	1.2	10 "	18"	350	24"	unste 1hr	un international de la constant de l La constant de la const
20	710	96	1406 445 3	.0355	2.8	17"	14'	350	18"	WASTE	- DECANT
21	7:10	SP	144 2000.8	,641	2.4	15-23	13"	320	11 - 23		a de la maria de la construir de la construire de la construire de la construire de la construire de la constru
22	14.00		148361,0	041	1.9	2,0,5	14"		BB	·	and a subscription of the second s
23	21:00	,	15252200	,040	2,0	18.5	14	-	6/24"	30min	
24	5:30		1589175.5	.040	1.2	18.0	14"		21-"	Deck	£
25	7:30	mB	1629794	,022	2.8	13	12"	-	30	30 min	
26	8:30	mB	1651536	,032	1.4	6"	14."	\langle	27	45 MIN	
27	210	1008	1683522	,008	1.5	33	14"	-	24/33	30mm	Decoart
28	7:15	JP	1691721	,046	1.8	84 1/2	12"	1	22		
29	100	nn	1738510	034	4.8	20'20	20 20	/	(2,0	-	
30	230	Dm-	177 2050	.017	5.4	11/2	16"	1	8"	1	
31 (50	5P	78 9884			15"	24ª	400	32.22	20 min	, CP
1											
				#NAME?					TYPE 1	0-29-2	Ozz Total
		RC	OCK WREN TOTAL TOTAL USED:	######################################	V	Ch ² E	5/2 118	1/25 8	1975 2 10 10	-30-202 =514 C	2 10% - 70
			GPD AVERAGE:								C

			CY	PRESS R	ANCH	I WW	TP 🚲		NOV	2022			
n	ΔTF	TIME	OPER	MASTER	TOTAL	CL2	Alum in	SBD	SV30	CL2	WASTE	Turbidity	_
				METER	FLOW		Incres			Daytank		121	
-	1	715	50	1867840	.087	1.6		13	400	2212	28 mm	<u> </u>	
-	2	715	SP	1955631	* 043	7.2	8	18	400	20	30 mm		
	3	700	50	2018829	050	1:3	<u> "</u>	16	400	17	lhr		4
·	4	700	JP	2069575	057	1.6	<u>1"</u>	15"	400	15	30 mm		
	5	330	mr	2126551	p.013	1.5	21_	12"	<u> </u>	25/2		· · · · · · · · · · · · · · · · · · ·	
	6	430	up	2139254	,014	1.7	16/2	<u>Z0"</u>		22 2			_
	7:	715	SP	215 3818	, 551	1.6	14"	16"		21"	30,00	Decent	_
-	8	715	٩٤.	2205128	1033	1.0	111/2"	12"	400	16"		1.56	
	9	700	sp	2238420	. 036	1.8	241/2			16"		0.76	_
	10	700	JP	2275246	.051	2.0	22/2	13	450	121/2"	112h-		
	11	120	R	2327085	275	1.2	16 ¹¹	111	<u>`</u>	29%-	11~~	1'HE/De	<u>د</u>
Γ.	12	14:10		2402250	1004	1.4	21	14"		20		-	
	13	12:00		2407153	,013		19.	14 **	/	23.5		·	
Γ.	14	945	38	742 0293	.043	1.6	17"	16 "		20 "	30 un		
<u> </u>	15	7 <u>~15</u>	TO	2463928	1063	1.5	14 ^u	134	550	18"	So min	1.1	
	46	·····	TP	3572477	.028	1.5	L3 "	8 u	550	15."	Beach	0.74	
	47	200	3	2556149	1081	1.6	10 1/2"	10 "	550	11 1/2 "	45 m		7
H		100	5	21.38102	n Ril	17	25"	16~	500	271/2"	45mz		1
	18	825 8 1.71	JIM	2030102	015	19		הי'מי		21/2	~		
	19	770	nan	2012001		11	19/2	X		193/1	/	<u> </u>	1
1	20	350	(VVIC	2131080	.010	6.1	1112	<u>y</u>	900	18"	10		-
2	21	100	بر در	2755814	1049		1712	171	1.40	+/\ ¹	15/14 wL	A.(-
12	22	Fac D	50	2804952	,036 37 19	4.3	15	12	0.70	14	301UM	/) 1e	
2	23	100	JP	2841184	046	4.4 · 1	137	12	590	11 2014	30 min	2.07	1
2	24	<u>10°</u>		2869239	10:19	1.7	- 2'7	10 %		λ^{ψ}	115 00 0	De L	-
2	25	020		28 281	042	22	25	100		20	75 11012	Can	-
2	26 2	pm	MP-	2476762	,134	2.6'2	20	18		$\frac{2174}{23}$			-1
2	7	pm	mn	3105723	,030	2.6	16/2	22		1114			ľ
2	8	700	58	3136023	1033	2.4	15 12"	<u>4"</u>		16"	30 Min		-
2	9	700	58	31642 73	.087	1.5	<u>rs"</u> '	12"	580	13 "	30 min	0.80	
3	0	700	JP	3256792		1.7	<u>u</u> "	10"	5Pc	10"	30 mil	0.75	-
3	1								·			·	4
1	1												4
				DRIP FIELD FLOW	#NAME?					TYPE 1			
										TYPE 2			
	<u> </u>		R	TOTAL USED:	##########						·		
]	1	. 1			1	I	53. 	I	ł	1		
•	—Ï-			OF D AVERAUE:]

DATE																	
DATE	CYPRESS RANCH WWIP																
UMILI	TIME	OPER	MASTER	TOTAL	CL2	30 MIN SET	SBD	Alum Daytank	CL2 Davtank	WASTE TIME	Turbidity						
		TP	METER	.0 18	2.0	650	12"	22"	27 1/- "	30 mm							
	710	62	3501111	.071-	1.1	700	1211	20 "	24"	45° Min							
2	<u>12-10</u>	<u>Jr</u>	24117 2471	12,5	1.4		15'	145	20,5								
3	172.1		34133109	. 174	19	-		11"	12								
4	20	102	2002600	044	7.1	1.00	10 12 "	101/2"	15 "	US NIM							
	700	<u> </u>	3523 100	3064	17	670	JØ ¹	5"	fs ¹⁷	Benen	6.82						
7	200	JP JP	3653285	. 0.50	1.8	560	12"	27"	27"	30 mm	0.95						
	7.50	RP .	270 3810	. 062	1.6	550	8"	24"	23'/5"	BOINT							
-	12000	50	371.1.1.04	. 016	1.5	325 500	16"	Z1"	31	30 min							
10	Unn	H.I.A	275 3022	145	1.2		16"	16	26"	-							
11	100	has	2878199	. 624	1.0		24	13'	23/2	/.							
12	200	5	3952530	069	15	550	-	11"	21 "	45mm							
13	9:N	mr	4022216	.045	2.8	-	18"	{	1	45 mm							
14	8:00	MB	4067079	1046	1.4	-	15"		Ì	45 mm							
15	7:30	MB	4013829	.050	1.0		16"	1	Full	45							
16	Joe	TC	4163925	1051	1-5	560	10"	12 "	27"	ZOmm							
17	945	me	4215036	,065	3.9		18.0"	24.0	23.0"								
18	200	Mr	4280617	.054	2,04		14.0'	21.0	21.0"								
19	700	JI2	4335279	1054	2.0	640	18"	194	19"	Bomm							
20	700	SP	4344567	.038	1.9	620	10 "	14.5*	17"	45mm	.087						
21	fou	JP	4433314	,045	4.5	630	12 "	14"	15"	45 mm	.064						
22	200	P	4499064	.076	2.6	<u>600</u>	6 "	14 *	14	Henn							
23	745	ſſ	4575889	076	1.8	~	·	23	24"								
24	a il o	Ċ	4591363	204	1.0		2	2/"	22								
25	113-	6 -	48010304	,063	1,3		3'	19"	21''		<u> </u>						
26	700	JP .	4864805	1087	1.5		0"	16	1 0"	Decont							
27	700	JP	4951992	.071	2.1	730	10*	12"	18"	30 mm	0.95						
28	630	3 P	5023220	.096	2.9	640	12"	10 1/2	16"	45 mm	0.81						
29	For	JP	5119791		2.6	<u> </u>	12"	28"	28"	BONER							
30		·	5229354	,098	2,0		12"	24"	27	zon							
31	130	un	5327082	1301	,50	370	14.0"	22/2	23"								
1 6	cop,	ary	54575K		1.69	~	16.0'	141/2	20	-							
		TOTAL	DRIP FIELD FLOW	#NAME?					TYPE 1								
	•	R	OCK WREN TOTA	######## #					TYPE 2								
	ł	1	GPD AVERAGE	####### #			i										
			GFD AVLINAGE:		i												

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JAI	NUARY		2023							<u> </u>	
				CYP	RES	5 KAN			Tan	MARTE	Turbidity
DATE	E TIME	OPE	MASTER METER	TOTAL FLOW	CL2	30 MIN SET	SBD	Alum Daytank	Daytank	TIME	Turblaty
	-		645 757 B	.045	1.69		16 "	19.5"	20 "		
	7.		375 7510	1010	7.07	-	1404	13"	19 "	15mm	
	700		3503507	101	2.0	1.10	17	11.11	18"	46	0.51
3	100	136	5612561	.075	3.6	610	12	10	10	75 MIM	0.79
4	720	JP.	5706414	.105	2.3	620	10.	12		soun	
5	700	JP_	5811992	,044	2.6	650	8-10"	20	27	30 um	
6	700	SP	5906154	122	2.4	560	12."	16"	25	45min	
7	1775	19	6028699	-04B	2.3	·	14"-	22	22		
8	2:00	· .	6126735	.071				21"	19"	,	<u> </u>
9	700	JP	6197802	.094	7.1		12"	18/2	18.,	30min	ļ
10	700	30	6291435	.114	1.4	540	12"	14".	15"	80 Min	0.15
11	7.0	51	6405955	.057	1.2		10	12"	13"	30m	2-65
12	700	50	6463480	. 077	1.5		10 "	29 "	23 1/2"	30 mm	
13	700	r	6541318	097	1.6		12"	22 "	21"	Bunn	
14	100	inn	6638480	0107	1.89		16''	213/4"	18'14"	-	
15	500	m	157451004	. 037	2.1	/	22"	17.0	15 12	decent	V.NUTLA = 5.
16	100	TP	6783007	120	1.9	650	1/2 "	15 "	14"	Decont	hinste
17	240	JP	690 3883	.0(8	<u>ر ،</u>		12~	10"	124	30 m. i	1.75
18	1020	SP.	1091.7 747-	1081	2.0	\$30	NA !!	7.5"	10"	20.41.1	0.92
10	Lovi	ire	704 264	62-6	1.9	5(2)	e u	25 "	23.5 "	Zowin	
20	100	10	3/33/22		21	350	17 "	17.4	710	20 14/14	Dred
20	300	10	7123439	<u>, 11 8</u>	19	550	14"	1.7.1	1.24		JELAM
<u>21</u>	7 10	20	73:4013		<u> </u>	-	1 14	11. Wing		19.01	
22	2.00	<i>a</i>	1-771)	1062	6,7		12.	<i>iy 6</i> *	1960	10 m /	
23	pu	jr bo	7387 184	094	1.9		(2"	"	14'	15 min	• • •
24	700	JP	7482037	.087	1,4	600	14	30.	20	30 mm	. 0.92
25	655	SP	7569280	.084	3.2	590	12"	29	29"	30 min	0.96
26	645	JP	7653731	.087	2.8		12"	Z9 "	21/2"	DMin	
27	635	ſP	7740905	,102	2.6	450	12"	27"	19"	Busin	
28	1.00		7843437	1077	2.0		14"	24"*	17		
29			7920605	.079	17		12~	22	19~		
30	6:45	SP	7999760	.088.	2.0	460	12"	21"	ทั	Bonin	<u></u>
31	650	5P	8088276	.086	1.9		14	201/2"	10"		
1	(3)		1175123				12"	20	2.		
		TOTAL	DRIP FIELD FLOW	#NAME?							740
		R	DCK WREN TOTAL TOTAL USED:								
	i	1	GPD AVERAGE:		1		t.	1	1		í

FE	UARY		2023	Τ					1				
				CYP	RESS	RAN	CH W	WTP			• . <u></u>		
DATE	TIME	OPER	MASTER	TOTAL	CL2	30 MIN SET	SBD	Alum	CL2	WASTE	Turbidity		
	170		Cincin7	/c/	1.0		12'	20 "	B"	FRAZER			
	10	TO	8721218	1116	91	-	14"	10			0.96		
2	7	20	8393 000	.124	<u>2.</u> 81.	410	12"	20 "	27"	15 min	0.97		
	1170		VT 17/101	,121	16		200	1 4 7	245	15m			
4 5	330		41.34167	.067	2,5		12.	16,5	22	13100			
- 0 - 6	700	10	8701300	.097	Z.1	640	14"	15"	20.5"	30 min			
7	700	te	8799089	1081	2.3	Hup	8*	13 **	/8 *	30 14 14	0.87		
8	200	57 57	8880671	,020	2.1	410	120	<u> </u>	15"	BOMIN	0.98		
9	700	ΠP	8971475	, 072	2.0		12 "	30 "	30 ''	30 mm			
10	655	op	9044176	,131	2.1	/	16 *	29 "	28 "	Decemt			
11	100	an	9175448	1059	2.5	~	16"	24/2	26"				
12	1200	an	9234802	.018	2,9	1	12''	25.	2212	/			
13	11:45		9333612	.071	2,4		140	235	21.5	Decane 20m	: wastel		
14	\$ 700	50	9405 492	.144	2.5	450	12"	22'	18"	30 min	0. 78		
15	0715	R	9550166	.084	1.5	490	12"	20 "	16 "	Зоты	1.05		
16	700	3P	9134466	:060	1.6	430	12"	19 *	14"	30 min			
17	700	JP .	9694516	1070	1.5		104	19 u	11 "	30 mm			
18	9:30		9765214	.v70	1.7		12 "	10	25				
19	ລະແ		9235771	.094	2.0	/	12	17~	25				
20	700	JP	99.30412	,096	1.8		12"	16"	24"	SOMM			
21	700	vt	12026591	.092	1.0	440	14"	15"	21*	Barin	1.25		
22	700	JP	118623	,176	1.6	450	12 "	14"	19"	SOMM	0.74		
23	700	JP	202730	1078	1.7	430	j2 "	13 "	171/2"	30 min	Fill Day TANKS		
24	700	JP	281071	128	مارار		10"	27"	27"				
25	445	rix	408699	065	1,9	/	12".	26/4	23'				
26	130	MAR 1	473 654.	.096	1.14	/	18"	26	21	8.1			
27	100	N	5700 64	,126	1.4	Soc	14"	25"	18.5"	50/Decont			
28	900	<u>cc</u>	6967230	.055	1.9		14"	23.5	14.5	3ª Wastro	2.75		
1	1035	50 1.	752671	· _	2.1	430	12"	22"	14"	30 min	1.03		
											·····		
•	Ŀ		RIP FIELD FLOW	#NAME?				-	TYPE 1				
		RO	CK WREN TOTA						TPE 2				
	TOTAL USED: ########												
	····		GPD AVERAGE:						.				
	·····		TOTAL USED:	**************************************			I	l	·				

	\									· 	
	4	<u></u>	2023						, <u> </u>		<u> </u>
	1 /	, 			KE23			VVIP			
	TIME		MASTER	FLOW	CL2	30 MIN SET	SBD	Alum Daytank	CL2 Daytank	TURBIDITY	TIME
1	635	JP	752671	,095	2.1	430	12"	22'	14"	1.05	30 min
2	645	50	848558	.078	2.0	400	10"	20"	13"		30min
3	645	Je	926857	.114	2.8		10"	1:7"	28 "		
4			10 466520	.105	2.0		18.	15	25"		30 m
5	3.04	/	11 536404	.045	2.6		16	10 ~~	22"		
6	645	JO	1198042	. 088	2.3	410	184	11"	21.5"		Jonn
7	645	T	1286381	. 120	1.6	410	12'	10 "	19.5	1.79	
8	925	TP	1407043	.071	2.5	480	8"	29.5'	175"	1.67	
9	tou	58	1478997	.079	2,3	420	10*	27 "	28.5 ^u		
10	730	SP	1557665	125	2.1	400	12"	25"	26.5"		
11	HODP	" MO	1683222	1067	1.61		10"	23	24.0		
12	130	MIN	1750089	1073	135	~	10	22/4	22		
13	630	J#	1823445	1971	1.87		10"	21"	19.5"		38 cin
14	645	sp	1894685	1058	25	430	10"	19 *	17"	1.57	45 mm
15	630	57	1953541	·068	3.8	320	6"	1.8 "	13.5"	1.52	Somin
16	6.95	Jr	2021710	1061	30	350/250	81	165	и"		30 mm
17	700	SP	2082926	,120	2.9	380	12"	27"	24"		45 mm
18	1430	er	2203670	.109	3.0	/	12.	23.5	201	•	
19	1500		2312709	.059	27	\sim	14.11	20	17"		
20	630	59	2372074	.081	24	420	12"	19"	15"	50 min	
21	700	JP	2461629	.093	1.6	420	12"	18"	12"	30min	1.14
22	645	JP .	2554906	> D	2.1	430	12'	17"	28"	SONIN	1.01
23	700	510	2656420	.088	20		12"	z8"	Z4"		Some
24	830	56	2745335	,139	2.3		104	Z7"	27 "	30 mm	
25	100	m	2884796	,124	2.5	/	12"	24/2	22"		
26	130	m	30/1098	.054	2.0		M "	2212	19"		
27	700	TP	3065433	,094	21	500	16"	21 1/2"	17"	2	Bern
28	645	SP	311 2423	.084	1.8	560	12"	la "	14 °	1.04	30 mm
29	645	50	3247013	.088	1.2	530	12"	18"	13"	1.61	Boinn
30	700	50	3335680	.074	1.4		12"	16 "	28.5"		30 min
31	for	<u>51 :</u>	3410623	. 129	1.5		12"	14"	26"		
1			3540474		22		16	245	265"		15 Min
TOTAL DRIP FIELD FLOW #NAME?											
TYPE 2											
**			TOTAL USED:								
··		1	GPD AVERAGE		1	1	1	1	1	1	

								Alum	CI 2	, 	WASTE
DATE	TIME	OPER	MASTER	FLOW	CL2	30 MIN SET	SBD	Daytank	Daytank	TURBIDITY	TIME
1	12:00		2540476	.119	2.2		16"	24'h	26'12		15 mm
2	500		3654673	.521	2(1)		14"	25	23112		15m "
3	645	ſſ	3715792	. 116	1.9	550	14"	21 "	21.5"		30 Min
<u>, с</u>	hue	TP	38 32179	,07/	2.5	L10/530	1/0 "	20"	19 "	1.02	30 rin
5		70	20 + 8262	088	1.8		12"	18"	18"	0.90	Bernin
	Inc	30	NO12068	077	1.8		10"	16"	1k"		30 ium
7	1.	TP	4094350	N49	2.1		10"	13."	(4*	<u></u>	30 mm
. / Q	11/100	11.114	4133046	.157	1.1.		14 "	24"	27''		30 MIN
0	pon.	IAM I	11785614	.041	1.2	520	11.4	2/0"	25/2		ZOMIN
	315	in	4377291	103	2.0		10"	18 "	23 1/2"		30 min
10	165 In	TP	110 17 0 1	. 1987	1.4	54/2	13"	15%	27."	0.93	40 mm
11	200	10	4400043	1083	1.3	520	12"	12"	20 *	0 72	40 min
14	120	<u>л</u>	1541233	6.24	18	620	10"	28	18"		40 mm
13	105	50	1111050	100	1.	Kini	100	25 "	29"		40 min
14	3. (1)	<u> </u>	477038	023	15	300	12''	21"	771/2		300.2
15	1.15	00 -	4810471	,00,	1.3		24"	10"	25	<u>,</u>	DECAN
16	<u>[/[)</u>	20	4947771	091	1.4		1."	10 11 ¹⁴	77.5"		Ð
17	715	Sr.	01035 71	000	11	E'LID	12 4	16 111 ⁴	19"	1.32	40 min
18	645	50	50 10178	.084	["La	570	107	10	<u> </u>	0.70	
<u>19</u>	720	<u>J</u> P	5154384	.042 m 25	1.5	<u>510</u>	11	27'	14"	0:10	Se Nix
20	130	<u> </u>	524 (24)		1.0	UZU .	<u>, u</u> 8 v	77"	29%		30 mm
21	730	<u> </u>	5323018	121:	1.8		ia"	211	211		20M (A)
22	4 pm 201	NR	59999033	1079	1,6		10	11/2	7-12		20 Min)
23	SIST.	nir-	5523368	,064	10		12	161	21%		Deemis
24	bas	3P	5589581	.079	1.5	520	14	1116	164.	114	2000
25	730	36	5669245	,070	21	550	12	<u>, 5 Jz</u>	<u>10-R</u>		20 Min
26	ter	JP	5759358	030.	<u>].9</u>	010	10	17 19 ¹¹	17 11.	1.07	20 MML
27	Tou	JP	5840247	1083	20	5,00	10	76"	10 10		30 144.00
28	100	<u>rr</u>	5925824	136	1.0		1.71	25"	13/2		ZOMIAN
29	5 <i>P</i>	WR	6157457	016	1186		16	20	20/2		BOMA
<u>30 </u>	pm f	up	6131371	1071	116		10	64	<u>1.12</u>		Junuc
31					10		10. 4	<u>`</u>			
1	100	55	4203327	οΉ	10 P		w			l	
	l	TOTAL	DRIP FIELD FLOW	#NAME?	Sec.			.			•
	and the second s	R	OCK WREN TOTAL TOTAL USED:	#######	and the second	S 1			11552		
	(Aria)				1	. 1	1	1	1	1	

N		<u></u>	2023	CYPI	RESS	RAN	CHW	WTP	<u></u>		L		
	[1	MASTER					Alum	CL2		WASTE		
DATE	TIME	OPER	METER	FLOW	CL2	30 MIN SET	SBD	Daytank	Daytank	TURBIDITY	TIME		
1	645	SP	620 8327	,081	1.7	500	16 "	22 %."	20 "		30 mm		
2	700	JP	6290746	.001	1.5	450	10"	20.5"	19 "	1.0	30 num		
3	700	sr	6300899		2.6		10"	18"	17"	1.4	30 mm		
4	700	sr	6300 899		2.0	430	12"	15.5"	14 "		Down		
5	Tou	SP	6300 884	0.142	2.3	410	12"	28"	30 "		Bonin		
6	1:00	CL	6493624	0.070	2.0	440	24''	25"	24,5		30 min		
7 '	11:30	CL	6503821	,083	1.8	450	15	23"	24"		30 m.N		
8	.700	JP	6446958	;018	2.1		12"	21"	23"		30 mm		
9	7200	9°L	6665084	.077	2.5	340	12'	19 *	20.5"	1.76	30 Min		
10	Tor	r	6742324	1065	1.4	320	14"	17"	18 "	1.57	30 nin		
11	100	57	680 1774	1009	1.6		12"	15"	15"_		30 mm		
12	8:3-	e~	6917712	.081	1.2	/	18!	13,5	30,5		30 m, N		
13	630	9t	6905109	,117	1.4	300	12"	26 "	28 "	MUNAY	20 inter		
14	loze	51	7022470	118	1.5	300	8 `	24 "	24 "	murky	ø		
15	For	SP	7141265	,111	116	320	Broke	22"	20.5 "	Better	G		
16	700	JP	7252626	114	20	320	-	20 "	17"	1.54	+-54-1C		
17	702	sr	7367512		2.1	350	-	18 "	16 "	1.74	ø		
18	700	56	7434824	、ひじり_	1.9	360	·····	16"	15"	-	B B		
19	7:15	MB	7504485	1083	1.0	~	\sim	~	L	· · · · ·	36		
20	4.00	CĽ	7520197	1064).0	/	23''	19"	15'	-			
21	500	or	765570%	, :: 41	100	_	202	Urex	13		30		
22	7:30	00	7704399	·045 .				20'1/2	י"שן		30		
23	In	92	7749637	:054	4.6	450	.—	17"	14 *	1.96	30 um		
24	100	92	7805381	.094	3.0	420	5	15"	8 *	1.27	15 min		
25	702	JP	7905732	·093	2.8	420	f	12"	25 "		Kmm		
26	100	50	7999426	,115	2.1	430	-	10*10	17"13		15mm		
27	too	un	814484	067	2,4						15 mi		
28	IOD 1	NR	8182387	·OLS	3.0	_	~	21"	16		Bry		
29	7.00	30	8251572	1087	23	450	~	21.5"	10 17-20	3.4	15 min		
30	100	JP :	8341272	,06L	2,4	450	-	18"	22"	1.31	15min		
31	2.0	59	840 7611		24	430	-	15"	15"	0.89			
1													
TOTAL DRIP FIELD FLOW #NAME? ROCK WREN TOTAL TOTAL USED: ####################################													
	. 1		GPD AVERAGE:	 i	1		1	1	ļ	1			
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			2022			- <u>-</u>				1	
	UNE		2023	CYP	RESS	S RAN		WTP		<u> </u>	
	. <u>.</u>	- <u>1</u>	MASTED					Alum	CI 2	T	WASTE
DATI	ETIME		METER	FLOW	CL2	30 MIN SET	r \$BD	Daytank	Daytank	TURBIDITY	TIME
1	700	JP	8489057	081	2.6			13 *	٩"		Lomm
2	700	i sp	8562335	.073	25	450		285"	26 "		1534
3	500	C	9682840	051	2,2	-	-	25"	18		15 m.
4	3.0	2 00	2755573	.062	2.4			22"	13~		15 mi
5	100	ീ	8818502	1084	2,5	500		22 "	9#		15 mm
6	Tou	JP	8903325	,073	22	440	-	20*	17"	1.04	
7	An	n.	8976716	.094	19	340		18 "	13.5 "	1.17	15 min
	700	5r	9071707	.083	20	510	-	16.13	5 7 1/5		Komm
' 9	Tue	51	9155444	.108	2.2	540	-	29"	24.5 "		SO min
10	ino	Illa	9263377	125	7.0		-	27'	22"		30 Min
11	430	on	9388409	,060	2.4		/	24/2	19.0"	15	BOMI
12	900	9t	9448498	.068	2.2	550		23.5"	17"		15 ruin
13	700	JP	9517122	.063	1.9	5570		22 "	14"	0.90	30 un
14	Fur	JP	9580184	075	1.8	540		2c "	20_	0.82	30 mm
15	7.00	JP	9656163	1076	20	620	_	18	15"		30 min
16	700	R	9732290	.114	2.1	SHD	-	29 1	Z4"		30 min
17	400	Cr	9846436	107	217		-	26"	25"		
18	3:30	CC	9954611	.057	1.0	1 The water		"	and the		30 min
19	700	jp	100 12043	104	1.9	650	: 8	21	24"		15mi
20	645	n	116211	.075	3.4	550	12"	184	20"	1.09	30 mm
21	700	570	192199	,090	2.8	570	12"	15"	15 "	6.63	Borum
22	330	ce	233119	,675	2,5		· ·	11	23'		3 & n. J.
23	930	JP	358187	.101	2.0	540	14"	12"	20"		30 min
24	Inn	un	459370.0	,098	2.4	_	16	250"	233		15
25	330	au	557629	.084	2.0		16	22	15.0		30
26	1 45	re	642036	1082	1.8	540	12"	21*	14'		30 min
27	700	sp	724122	1069	3.5	550	14.	19"	10"	1.11	30 mm.
28	Two	JP	793983	פרט	2.7	520	16"	(7"	15"	1.07	30 mm
29	8:15	Ce	871711	.072	2, •	570	13*	n^{α}	10.		Jomm
30	9:00	6-	948437		1.6	_	12"	16 /95	7 /32	7	30m2
31				·				1			、
1											
		TOTAL	ORIP FIELD FLOW	#NAME?					TYPE 1		
		R						-	TYPE 2		
			TOTAL USED:	##########		. .					•
]	· i		GPD AVERAGE:	########		Ì	ļ			1	
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J	ULY		2023								
				CYPI	RESS	RAN	CH W	NTP			
DATE	TIME	OPER	MASTER	TOTAL FLOW	CL2	30 MIN SET	SBD	Alum Davtank	CL2 Davtank	TURBIDITY	WASTE TIME
1	320	a	1044133	.100	2.2	/	14"	24	27	10	15mm
2	400	er	192338	1061	2.4	/	16''	25"	20	Ð	15mor
3	700	SP	1185154	280,	2.0	560	15"	22.5"	18"		30 min
4	900	35	1264874	J. 983	4.3	550	12 "	19"	13"	1.47	30 min
5	700	<u> </u>	1351483	085	4.0	580	14"	16.5"	17"	1.51	30 MIM
6	715	SP	1436929	.0	3.5	530	18'	13"	13 "		30 Nim
7	715	JP	1436929	144	4.2	<u> </u>	24"	28"	26 "		Soun
8	930	nn	1581755	100	2.5		16	2/	28		15
9	530	N	1682163	10.52	2.8	<u> </u>	16"		2		30
10	700	<u>T</u>	1734394	.071	31	480	18"	19"	13"		30 Mm
11	700	JP	1805805	069	1.6	500	124	17"	11"	0.67	30 mm
12	BUU	CL	1875025	1071	1,0		14~	15/32	15-	1.59	70 ~~~
13	7:30	a	1946936	,017	1.4	/	12/32	32	12'		30 min
14	832	39	196 3773	,010	1.4	450	14"	285'	265"		30 sum
15	12:00	12	2023546	.079	1.3		12"	24	29.5	×	15 min
16	9.00	er	210258	1034	1.5		14"	172	20		15 mm
17	700	50	2136268	,067	1.7	420	14 *	175'	15 "		
18	100	T	214 383,7	.105	2.1	420	14"	<u>"14 "</u>	il"	1.25	0
19	for	٩٦	2249440	. 102	1.8	420	12.0%	Z"	6 "	1.17	www.rs onsite
20	みい	N	2355587	,074	1.7		°,	<u>୍</u> ମ୍"	2٤ "		
21	7:30	M	2429514	212	1.7	·	8"	æ	28	-	10
22	400	Mn	2491822	069	2.0	\prec	10"	23/2	2212	·	20 min
23	500	ng	1561661	.025	17)	12"	20"	18		20 MIN
24	for	Ŷt	2586686	1057	17	420	12"	19"	17"		30 m.m
25	to	JP	2644312	.051	2.0	430	14"	16.5"	12.5"	0.80	Se mm
26	700	39	2695245	.04	2.1	410	12"	14. "	9"	1.01	BU MM
27	780	m	2757074	. 063	2.2		16"	12"	7"130"		
28	810	sp	2810894	,080	2.0	420	14"	25'	26"		30 mm
29	16:30	a	2290920	,067	17	/	18~	23	21		15 m
30	6.30	CL :	2957404	.035	19		/[~	19,5	16.5		5
31	For	JP :	2988927	att of the ar	2.0	450	187	8"	14"		30 min
1											
TOTALDRIP FIELD FLOW #NAME? TYPE 1											
	i.	Dr						1	YPE 2	256,000	
		n <u>r</u>	TOTAL USED:			;					
.			GPD AVERAGE:	*******							
						<u> </u>			<u></u>		/
	· · · ·										

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				CVD	SEGG	RAN		NTP		-	
			MASTER	TOTAL	1233			Alum	CL2		WASTE
DATE	TIME	OPER	METER	FLOW	CL2	30 MIN SET	SBD	Daytank	Daytank	TURBIDITT	TIME
1	730	50	3071985	.091	2.2	480	14	16 "	20"	0.58	30 rum
2	1000	50	3163960	.065	1.5	440	14"	12'	16"	0.93	30 mm
3	830	m	3229846	.060	1.8	470	12"	9"	13"		"30 min
4	700	30	3290328	,087	1.0	450	12 "	27"	22 "		30 min
5	500	M	3377443	104.	1.6		145	22	16		30 min
6	bpm	m	3482133	.030	1.4		12	18	18"		30 min
7	7Ŀ	30	3512144	.047	.Z	4150	12 *	17"	10"		
8	730	SP	3519856	.091	1.3	490	12 "	14*	24"	0.65	30 Min
9	745	JP	3670963	. 083	1.2	460	12"	11"	18 "	0.57	30 mm
10	730	JP	3754294	.058	1.3	450	12'	17"	14"		30 mun
11	730	5P	3812312	.089	1.4		10 "	30"	30"		30 min
12	(10	cr	39026910	.061	1.5		J.)"	21	27		15 mm
13	532	ev	3963673,8	.046	1.0		14''	24	24"		
14	780	JP.	4010176	.071	1.4	- A Construction of the second second	14 ^	23*	21"		30 mm
15	745	92	4081551	.046	1.1	490	16"	21"	18"	0.96	Somin
16	730	SP	4148365	.067	1.2	490	14 ^e	18"	14"	1.12	BONIM
17	820	tv	4216271	.059	1.5	470	12"	15 "	30 "		30 nim
18	730	58	4276265	Oblo	1.4	480	14 *	14"	26"		30 min
19	300 P1	MR	4341917	162	Lite		14"	25/2	22		30 mi
20	Hom	ne	4395180	.043	19		12''	23	18/2		15 min
21	700	50	4438477	.066	1.7	480	14"	21"	16 "		<u>.</u>
22	Tra	112	4505135	.070	1.1	470	16"	18"	13 1/2 "/	0.74	0-74-30m
22		JP	4571.038	.077	1.6	480	12"	16.5"	9."	Ø.52	30 mm
23	720	TP	4653656	.002	1.3	470	14"	14 *	21"		30mm
24	Jem	TP		, <u> </u>	1.4	460	14"	12 "	18 *		30 min
20 90	7.000	30	477143	.080	1.2	480	16"	26"	24"		15mm
27	1000	SP SP	4809757	.056			12"	33.5	20		15 mm
20	12	50	4611207	n74	2.0	460	14 "	21 "	17 "		30 min
20	120	TP 1	4991700	1097	1.0	500	16"	19"	13.5 "	0.64	30 run
23	700	<u>, , , , , , , , , , , , , , , , , , , </u>	CI0832.81	. 093	1.0	520	14"	16 1/2 "	10"	0.76	30 mm
<u>30</u>	20	Jľ TO	0.0 - 407	. 101	1.3		12.	13"	26 "		30 mm
51	100		3180484				1	/			
1								L			19-19-19-19-19-19-19-19-19-19-19-19-19-1
	[IUTAL	UKIP FIELD FLOW	#NAME7	•				TYPE 2		
		R	OCK WREN TOTA	#********	`		258,	000 941	L		
			TOTAL USED:	waren er	1			-	1	1	
]	<u>*</u>		GPD AVERAGE:	##########							

S	EPT		2023										
			v	CYPF	RESS	RANC	CH W	NTP					
DATE	TIME	OPER	MASTER	TOTAL	CL2	30 MIN SET	SBD	Alum	CL2	TURBIDITY	WASTE		
	<i>d</i>	+ 6	METER	FLOW		450	· · · ·	Daytank	24 "		30 mm		
1	750	Jr	5281744	.097	1.2	110	19	10 			15 444		
2	430	me	5 5 7 4 13 4	.087	1.0		18	23.5	28		LE MAN		
3	600	MR	5467880	.072	2.4		14"	21	22 2n "		Ennum		
4	1200	<u>cı</u>	6569597	1074	2.3		14	20	20				
5	700	Jr	5586586	,100	1.3	570	16"	18	17	0.68	-		
6	745	JP	5687300	. 074	2.2	540	14	16 "	13.5	0.87	somm		
7	730	JP	5762057	1077	1.8	530	16"	13-	10 "		30 mm		
8	1045	JP	5840038	1050	2.0	520	14 "	28.5	25*				
9	745	SP	5890556	,067	ר.ן	500	16"	26 "	22*		So min Decant		
10	730	SP	5957821	.070	2.1	490	16"	23"	_I¶ "		Disester		
11	730	SP	6028264	.074	2.2	530	/8 "	20*	15"	<u>-</u>	SOMM		
12	730	570	6-102271	.059	1.5	500	<u>)</u> 6 "	17 "	12"	0.8/	Ø		
13 -	730	SP	6161788	1075	1-5	500	12"	13"	9"	0.86	30 nim		
14	730	SP	6237165	.084	1-6		14"	9"	- 23 "		SOMIA		
15	130	50	6323765	.091	.5		12"	6 730	19 130		30 Min		
16	120	MR	6414296	,087	2.0	/	12"	27	25/2		15 min		
17	1500	un	1500918	.041.	2.4	1	16"	22	21"		15 min		
18	734	.TP	4546952	.085	1.9	540	18"	21"	17"		DECANT		
19	730	112	4432423	.081	1.3	550	16 "	/8 *	// "	0.73			
20	770	JP	6714172	,065	2.2	540	16."	14."	12"	0.95	30 mm		
24	720	m	(.77475L	.068	2.1	550	18"	30"	26"		30 MIA		
21	47.	50	1-240557	199	2.2		20 "	27."	22"		Bonn		
- 22	3.80	<u>.</u>	1.94 2027	ALO	1.6	\sim	116''	13/2	17/2				
23	J70 NAA		70 11299	1060	19		18"	20 /2	14"				
24	700	pur S	70 (0) 1	·9/3	1.		24"	18 4	11 "		30 mm		
25	750	J7 	4030603	. 141	12		<u> </u>	14 "	8"	0.59	15 min		
26	730	<u> </u>	1/7/982	.085		<u> </u>	10"	17"	17."	0.64	30 min		
27	750	JP	1257774	. 041	17	550	<u>י ו</u>	15 M	79."		30 min		
28	130	50	7318980	.067	[. 3	360	10 4	17	11."		30 11.1		
29	750	JP	7388314	· U FS	1.4		16	<u>× r</u> 174	10 P		20 11/1		
30	700	51	7463413	.055	l.2	570	/1	<u>ر کر</u>	44		SU MIN		
31								<u> </u>	10.00		·		
_1	7ov	JP	7518611		1.3		<u>ل</u> ه ً	20 "	18.2				
		TOTAL	DRIP FIELD FLOW	#NAME?					TYPE 1				
<u>`</u>			TOTAL USED:	########									
]	-		GPD AVERAGE:	###############									
			······					······································	. <u> </u>				

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0	CT	1		1	2023					Γ			
		_			CYP	RESS	S RAI	NCH W	WTP	/	<u> </u>		
DATE	TIME	TEMP	RAIN	OPER	MASTER METER	TOTAL FLOW	CL2	30 MIN SET	SBD	Alum Daytank	CL2 Daytank	TURBIDITY	WASTE
1	700	670	ø	SP	7518611	,078	1.3	650	16	20"	18.5"		Occ Ant
2	730	680	4	JP	759 7411	.070	1.4	550	W"	16"	15"		30 m Decrint
3	700	680	ø	50	7668127	.063	1.15	540	18 "	<u>n'</u>	<u>n"</u>	0.68	UWIS
4	730	790	ø	59	7731570	.082	1.2	490	16	8"	8"	1.07	30 mm
5	730	718	Z"	50	7814504	. 088	1,3	560	[2"	28"	26"		30 mir
.6	730	45°	ø	50	7902619	080	1.2	550	18"	22.5	25.5"		30min
7	420	70	Ì	MAZ	7983162	,078	1,22	<u> </u>	16"	17"	22''		15
8	400	75	হৈ	un	8061415	,024	1.12		16'	12	18"		15
9	730	54°	ø	30	808 6368	,059	1.4	\sim	14"_	10 "	16.5		DecAN
10	730	650	Æ	JP	8145153	.046	1.0	560	16"	21"	13.5	0.78	WWFS
11	730	67-	ø	38	8192211	,009	1.1	540	14"	17"	10 "	0.85	45-Decan
12	730	70.	ø	50	8201803	.089	1.2	550	16 "	/3"	7"		15mm
13	730	75°	ø	50	8291252	.066	1.3	650	4 "	27"	21.5		15 min
14	740	62*	4	5P	8357959	.072	1.2	500	14***	23.5"	18.5		
15	730	55°	ys.	56	8430170	1097	1.3	610	16	20 "	15.5		30 un
16	730	55	ø	5P	8527331	.068	<u>.</u>	640	16 "	11."	12		30 mm
17	730	420	B	SP	8596023	,160	1.0	510	_ <u>llo".</u>	12''	8"	0.77	WWTS OF WWTS
18	730	540	ø	59	8696220	.QLO	<u>3</u> .6	550	/4 "	81	28"	0.83	AUN SEE
19	730	590	Ø	SP	8756892	.081	2.4	570	22 "	15"	22"		30 min
20	730	550	ø	JP	8838258	,085	2.3	\leq	16"	23"	28		40 mm
21	500	85°	X	ne	8923580	,050	1.0		18"	19/2	132		15min_
22	3pm	80	8	nin	8973953	.075	1.2	300	16		212		15 min
23	732	73 "	Yz"	50	9049285	.013	1.3	450	18"	15-1	18.5"		
24	730	75"	18"	JP	1113237	1089	1.5	440	20"	_12"	14 "	079 	
25	830	72°	1/2"	59	9202886	. 094	1.3	450	18"	8"	10 "	0.70	
26	\$:30	71°	יב/י	20	9297630	.093	1.2	\langle	21''	24"	21.		15min
27	<u>B'.15</u>	75°_	1/4"	30	9391445	.097	1.3	400	_20''	22,5"	18''_		15min
28	740	74°	Ø	٩t	9489377	.076	1,4	400	12"	20"	<u> </u> [6"		30 min
29	700	740	Tec	3P	9566286	.079	1.4		<u> 4"</u>	۴۳]	13"		
30	830	410	11/8"	<u>5</u> P	9445485	102	1.3	400	16"	13 "	10"		
31	730	430	Tec	JP_	5748242	<u>, 114</u>	2.7	390		ю"	8	0.97	
1	730	34°	Ķ	JP	9862914		2.6					0.84	
			•	TOTAL	DRIP FIELD FLOW	#NAME?				A 0.	TYPE 1		
			•	R	OCK WREN TOTA	############	10-	21-23	-40%	150/0	IYPE 2		
					GPD AVERAGE:	#######		i	1				
	5-450 10-350 15-												

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NOV 2023														
		<u> </u>	l	- -	CYF	RES	S RA	NCH V	WTP					
DATE	TIME	TEMP	RAIN	OPER	MASTER METER	TOTAL	CL2	30 MIN SET	SBD	Alum Daytank	CL2 Daytank	TURBIDITY	WASTE TIME	
1	730	340	ø	J	9862914	. 120	2.2	380	<u>18 "</u>	26 "	23.5 "	0.84		
2	1135	58°	ø	JP	9982969	.070	2.4			22 1	18 ^			
3	730	470	ø	SP	63084	1/30	2.2	310	12"	19"	14"			
4	300		Ø.	jun	198159	082	1.99	-	16"	23/2	25 1/2			
5	100	1	\$	na	275145	.076	1.95	/	12"	23'	2012			
6	730	690	ø	JP	342741	103	2.1		14 "	21"	18."			
7	800	68°	Ø	J P	445898	.109	1.5	400	16 "	17.5"	14.5	1.07		
8	730	73°	ø	SP	555207	.095	1.4	410	20"	15 *	12.5 "	1.30		
9	730	72"	Ø	JP	650317	.090	1.7	420	18 "	12"	10.5 "			
10	845	53°	<u>/"</u>	JP	741278	./00	1.5	430	16"	27"	28 '			
11	//10	58°	ø	SP	842269	.072	1.6		12-16-	23.5 "	25 "		25 min	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$														
13	730	65 °	. 25 "	SP	996891	.094	1.6	440	12 "	18"	20 "			
14	730	56°	ø	JP	1091806	.097	1.6	460	16"	15 "	17 "	1.27	25 Min	
15	730	so"	ø	კი	1189307	. 101	1,5	. 420	12"	12"	13"	1.17	\sim	
16	730	57°	ø	JP	1291064	.081	1.2	450	13 "	10.5"	11.5"		\sim	
17	730	51°	ø	sp	1372364 .	.085	1.4		12"	28 "	26 "		30 min	
18	700	41"	ø	A ل	1457738	.089	1.6		14 "	25 "	23.5"	\leq		
19	700	<u>5</u> 9°	ø	J P	1547548	.081	1.4	500	14	23"	20."		30 MIN	
20	730	63°	Tec	JP	1628837	. 687	1.4	430	8"	21.5"	17.5"		\sim	
21	<u> 115</u>	54°	ø	JP	1716038	.095	3.0	450	2"	20"	15"'	1.10		
22	720	350	ø	TP	1811377	1085	1.8	480	14 ^{11.}	18.5"	11.5 *	0.93	30 mm	
23	8:10	460	8	20	1897166	,095	1.7	470	13''	17"	27.5		15 min	
24	1:00	480	Ø	aĩ	199,2290	,102	1.9	500	15"	15"	23		20 min	
25 ⁱ	ton	620	d>	mr,	2095133	1081	2.4	_	ET 16	11/2	19		15 min	
26	300	56	Þ,	M	0176510	.089	2.3		16''	9"	1512		R) 1.5 mi	
27	730	350	ø	JP	2266184	.119	2.0	\leq	20"	8"	14"			
28	730	470	ø	مر	2385434	·]38	1.7	540	14"	16	<u>H"</u>	0.87	30 mm	
29	730	50°	ø	R	2524258	.118	1.5	470	12	12 "	8"	0.76		
30	730	59°	Vec	<u>r</u>	2642514	. 119	1.9		_14"	27"	28 "			
31							$ \rightarrow $	-		$ \longrightarrow $		$ \rightarrow $		
1			\leq											
			ņ		ORIP FIELD FLOW	#NAME?					TYPE 1			
			_	R	OCK WREN TOTAL TOTAL USED:	######################################	·		• `	·	TYPE 2	•	•	
<u>7</u>].					GPD AVERAGE:	########			1					
1-26-23 - Clarifies dist looking this weekend thanked the ON time for sump from 90 min & 45 - Contact offluer was 75 % full.														

D	EC]	2023	Ι		Ι					
					CYP	RES	S RA	NCH W	WTP				
DATE	TIME	TEMP	RAIN	OPER	MASTER	TOTAL FLOW	CL2	30 MIN SET	SBD	Alum Davtank	CL2 Daytank	TURBIDITY	WASTE TIME
1	730	S1°	Tec	JP	2762178	./37	1.8	480	14"	24"	76 *		30 mm
2	2.00	0,8	/	r.e	2900044	.100	126		14 "	201"	23		-
3	11.20	49		10	3000064	.090	100		15"	17"	2000		
4	730	43°	ø	SP	3090756	. 104	1.4		20 "	14 "	17.5 *		10 mm
5	730	38*	ø	sp	3195708	.105	2.4	500	/8 *	// "	14.0"	0.98	30 mm
6	730	42.0	ø	مى	3301142	.078	2.1	500	12"	8 "	11 "	0.86	
7	730	48°	ø	59	3379959	.086	2.3		10"	28*	29 "		30 min
8	730	44°	ø	JP	3446641	.092	2.2		10"	25"	25"		
9	730	:	Ø	5P	3559594	.096	2.0	470	12 "	22 "	23 *		30 mm
10	730	390	ø	sp	3656125	.103	2.1		18 *	20 "	21"		
11	730	32°	¥	SP	3759861	.102	2.24		20"	17 "	17.5 "		
12	730	390	Ø	JP.	3862437	.078	1.9	510	24"	14 "	14"	0.76	30 mm
13	730	53°	ø	JP	3940562	.098	2.0	490	12"	10"	""	0.60	30 mm
14	000	54*	ø	مر	4039107	.075	1.7		12 "	24 "	25"	\square	25 min
15	700	56°	ø	JP	4114860	.105	1.1	540	12 "	21"	22 "	\square	\sim
16	11900	580	0	me	4220562	, 101	2.2		16	17"	18/2		15 nio
17	109	62	Ø	m	4321680	\$056	2.0		16"	13''	14 "		15min
18	7:30	48	0	MB	4377687	.065	1.8		14	11''	<u>)</u> [""	~	30 nin
19	730	37 °	ø	r	4443540	.063	2.0	560	18"	ę	٩"	1.02	30 O. GNIIN
20	730	53°	ø	n	450 7001	.074	2.3	530	/3 "	22.5 "	21"	0.73	30 Min
21	730	60°	10 Ran	N	4581905	,060	1.9	370 500	12."	/9 "	20"		
22	730	60°	1/2 "	JP	4642890	1054	2.2		14"	16 *	18:5"		
23	700	630	б	JP	4697856	.082	1.5		14"	26"	28"		
24	700	59°	1.5"	SP	4779909	. [14	1.6		14"	23"	25"		
25	715	41°	1/8"	SP	4893978	,089	1.3	600	16"	20 ".	23"		50mm 40/60
26	715	33 "	ø	50	4983746	.089	1.4	620	14."	18 *	20"		30 min
27	730	31 "	ø	JP	5073058	. 064	2.7	630	14"	15 ''	14.5 "	0.43	30 min
28	730	350	ø	JP	5137219	.067	3.1	640	16"	13"	13"	0.71	
29 7	130	34°	ø	JP	520 5050	107	2.8	700	12"	//"	10*		30 Min
30	700	330	ø	JP 1	9312930	.117	2.2	490	13"	22	19.5"		30 mm
31	700	390	Ø	50	5430483 .	108	20	400	14 "	16 **	19"		
1	730	410	ø	<u>je</u>	538609		2.1		¥"	17"	13"		
	TOTALDRIP FIELD FLOW #NAME? TYPE 1												
	TYPE 2												
					TOTAL USED: 1	******	-						
				[GPD AVERAGE:	****							

	JAN 2024													
	CYPRESS RANCH WWTP													
DAY	DATE	TIME	TEMP	RAIN	OPER	MASTER	TOTAL	CL2	30 MIN SET	SBD	Alum	CL2 Davtank	TURBIDITY	WASTE TIME
	4	730	4/*	0	50	553840 4	. 104	2.1	\square	12"	17"	18"		
 T	2	800	40°	Ø	110	5643004	. 114	32	690	16"	13"	9"	0.69	30 mm
w	3	730	430	1.5 "	T	5151323	.098	1.7	670	14"	27"	30"	0.51	30 mm
т	4	130	43°	0	TP	5855729	.080	1.9	680	12"	23"	26"		30 mm
F	5	730	47"	.25 "	JP	5936512	, 105	Z.1	440	12"	22"	235"		30 min
s	6	730	420	× K	JP	6041993	.105	2.0		13"	20 *	20 "		
S	7	1.0.00	Ндо	Ø	2D	6147475	.102	1.8		15"	17"	1611		30 min
M	8	645	67°	. 125"	SP	6249906		2.0	700	12 *	15 "	13 "		30mm
т	9	730	410	. 250	SP	6341541	.110	3.4	700	14"	13 "	10.5"	0.84	50 mm
w	10	730	41.	Ø	SP	6471659	.108	1.8	670	10 "	11 "	7"	0.76	30 min
т	11	730	400	ø	SP	4576495	.107	2.0	650	16"	24"	21"		30 mm
F	12	730	510	ø	JP	6684079	.093	2.3		14"	22"	18 "		
s	13	10:00	510	Ø	30	6777746	.099	2.1	\square	15"	24.5	+20		15 min
S	14	9:15	210	ø	20	6877379	.099	2.0		16"	18	24		15 min
м	15	730	170	ø	5P	6977353	.113	2.1		14"	16 "	22"		
т	16	730	160	ø	JP	7090786	.117	3.4	800	16"	15"	15"	0.75	30 mm
w	17	757	16 •	ø	SP	7208/33	.109	3.0	800	14"	14 "	10 "	0.91	30 min
т	18	730	38°	ø	r	7317915	.///	2.6	760	12"	12"	5"		Bomin
F	19	900	350	ø	16	7429540	.06 5	2.4	790	14"	26"	26 "		30 min
S	20	10:30	320	Ø	20	7492857	· 077	2.2		5''	23'	22"		15 min
s	21	0:00	390	Ø	2D	757040	.096	2.1		13"	20.5	18"		30 min
м	22	730	45°	2"	٦°	7667098	.135	2.4	790	12"	17"	15 "		30 min
т	23	130	છે.	09"	JP	7802341	.076	2.2	770	14"	14 "	12"	0.49	Bamm
w	24	730	53°	0.5"	r	7878806	,097	1.9	880 770	16"	12"	9"	0.74	Jum
т	25	920	51°	0.TS"	r	7976220	.046	2.0	720	14"	13"	/3"		Jomin
F	26	730	50°	TAC	JP	8022533	1074	1.8	700	12"	11" 30"	10"	\square	30 min
s	27 (235	540	ø	C 14	8097150	1062	1,9	\square	15'	28	27		
s	28	7:00	1/5*	ø	H	3/59478	.078	1.7	\square	12"	27.15	23	\square	
м	29	130	40 3	ø	5P	823 8338	.070	1.9	720	14 "	25 "	20"		30 m ~
T	30	730	44 °	ø	7	8309026	.064	2.7	700	16"	23.5 "	17"	0.94	30 min
w	31 J	730	43°	ø	JP .	807 3416	.059	2.2	660	14"	22"	13"	0.68	30 min
т	1 1	730	50°	ø	3P	8432684		2.0	\square	12"	20"	10"		30 MM
Γ				h		RIP FIELD FLOW	#NAME?					TYPE 1		
					RC						,	TYPE 2		
						GPD AVERAGE:	*********	1						
						·								

F	EB				2024					1			
.	CYPRESS RANCH WWTP												
DATE	TIME	TEMP	RAIN	OPER	MASTER METER	TOTAL FLOW	CL2	30 MIN SET	SBD	Alum Daytank	CL2 Daytank	TURBIDITY	WASTE TIME
1	730	50°	\triangleright	rt	8432684	.075	2.0		12"	20 "	10		30 min
2	730	62*	Tec	50	850 7971	683	1.8	520	14 "	17"	23'		30 min
3	12:00	640	-5	LA	8511168	.068	2.0		14"	1711	21		150,60
4	10:45	610			8659249	.073	1.9		12"	15 F	165"		154143
5	8:00	510		mß	8732721	.058	1.7		14 11	14.	14	/	15 mi
6	700	50°		٩٢	8790819	.068	1.9	720	12"	13"	// "	0.90	30min
7	730	61°		9T	8859232	.065	2.4	600	14 *	11 30"	7" 30"	0.74	30 mm
8	730	590		JP	8924632	.086	2.4	560	12	28"	28 "		15 min
9	9:00	640	/	4 2	9011200	,051	2.2		13"	25"	23''		30
10	15:00	590	5 ۱ ،	20	9063184	. 000	2.3		14"	23	22		15min
11	930	53 [°]	,77	2 D	9063184	.159	2.1		13''	21	21.5		15 min
12	745	40"	\leq	JP	9222358	,0 73	1.0	650	16"	19 "	22"		30 mm
13	730	40°	\leq	<u></u> ጽዮ	9295736	.063	ι.4	600	12"	17"	18 "	0.98	30 mm
14	745	41°	\square	SP	9358882	0.072	ાડ	570	14"	16"	15"	0,94	30 mm
15	7:30	55 "	\square	mß	9430947	.084	1.8		14	14"	11.5		30 min
16	730	61°	\leq	JP	9434 958	.167	2.0		12"	12" 30"	10" 30"	/	ls mm
17	1:15	470	\leq	(#	9602066	.079	1.9		14"	27	26		15 min
18);n	55	\square	64	9681932	.056	2,0		1211	24.50	21.75		15mils
19	730	37.		N	9738359	.073	1.9	610 ·	16"	23"	18.5 "		15 mm
20	730	440	\leq	4t	9811477	.073	2.0	400	14 *	20 "	14.6 "	1.09	30 nm
21	730	se 2°	\square	JP -	9884555	1041	1.7	صا5.	12"	18.s"	11 "	0.92	30 min
22	710	63°	\leq	50	9946164	.071	1.8	540	14"	17" 30"	8, 26"		30 rum
23	730	51°	\leq	sr	17289	.067	2.0	\leq	16	29"	25 "		30 min
24	7:50	650		20	84677	.080	1.8		15"	27.5	22.5		15 min
25	<u>1:45</u>	670		20	165270	.087	1,9		14"	26	18		15 min
26	30	58°	\leq	SP	262886	.089	[.7		12"	25"	16"		So min
27	730	68°	\leq	50	342032	.099	2.3	600	14"	24'	13"	0.67	OHEIL
28	730	53°	\triangleleft	JP	441747	.067	2.1	640	12*	22"	10"	0.76	30 mm
29	730	410	\triangleleft	5°	508926	.046	2.0	620	14"	18" 30"	30"		30 min
30		\leq				\leq	\leq						
31 -	730	390	\leq	JP	605629								
1												l·	
			Т	OTALD	RIP FIELD FLOW	#NAME?				<u>ד</u>	YPE 1		
	TYPE 2												
			•	1.0	TOTAL USED:	# <i>######</i> #							
	<u> </u>				GPD AVERAGE:	########]				
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MA	RCH				2024			[•				
	CYPRESS RANCH WWTP												
DATE	TIME	TEMP	RAIN	OPER	MASTER	TOTAL FLOW	CL2	30 MIN SET	SBD	Alum Daytank	CL2 Daytank	TURBIDITY	WASTE TIME
1	130	39"		JP	605629	101	1.9		14"	26"	· 26"		Bomin
2	11.00	770		L.H	707579	1071	2,0	/	1511	21"	211	/	15mils
3	10:57	740	1	12A	798900	.090	2.0	1	1411	1517,5	1811		15mis
4	730	450		72	889662	. 099	1.3	620	12"	13 "	16.5"		30 min
5	730	600		JL	989117	.097	1.9	. 590	14"	8"	13"	0.82	wwts
6	730	51°		JP	1086350	.085	1.7	690	12"	6-26	26	0.89	30 mm
7	730	460		Jr	1172163	.081	1.8	600	14"	<i>2</i> 3"	234		30min
8	730	58°	1/2"	TC	1253413	.008	1.6	580	16"	20"	20"		16 m.m
9	5301	62	R	mp	1322369	.068	3,5		18"	15"	15		15 Min
10	2000	69		m	1340775	038	2.0		16	11	10,5		15 min
11	730	510		58	1379358	.119	1.8	190 630	14 "	9".30"	94 30"		Somm
12	730	610		30	1498591	.087	2.3	430	16'	26"	26"	0.984	30 min
13	730	660		92	1585785	.065	2.4	580	14"	_23 "	23.5	0.77	30 min
14	830	48		JP.	1650897	. 063	2.0		12"	21"	22.5		16 mm
15	750	68.	/	R	1714298	.060	1.4		14"	19 25.	20" 30"	\leq	lSmin
16	10:00	610	.05"	20	1774336	0	1.6		13''	21"	28"		15 mín
17	<u>9:45</u>	620	, 54'	20	1774336	.118	1.5		14"	17"	25.5"		30 min
18	730	53°	\angle	59	1893000	.140	1.6	750 570	16 "	14"	22.5	\sim	
19	730	430	\leq	JP	2033791	1011	2.9	500	12 *	11" 30"	H.S"	0.95	30 mm
20	780	50°	\leq	N	2045628	.003	2.6	490	14 "	26.5	16"	0.80	\leq
21	730	<u>58°</u>	TRL	Jρ	2049507	.168	2.0	\sim	16"	22.5	13 "		30
22	130	54°	<u> </u>	92	2217810	1000	1.9		2'	18 30"	10" 30"		ISmin
23	1:10	63	Ø,	(H	22/9378	1/22	2.0		12 "	23.5	27		15mins
24	1.15	65	9	64	134 1858	.049	1.8		<u>11 "</u>	18.5	23,75		15 mins
25	730	52"	1/2 "	ग	2411383	1030	1.6		16"	<u>15 "</u>	21.5"		
26	730	450	\leq	r	2442092	, 140	2.6	490	14"	11 1	18.5 "	0.74	Bomin
27 -	730	470		Tr	2582227	.076	2.4	50 500	16"	25"	15*	0.90	30 MIN
28	730	45"	1/4"	30	2658991	.087	2.1		14"	189 ° 1	12"		45MA
29	830	60°	\leq	<u> 1</u>	2946070	.139	1.7		ιz "	29"	30"		
<u>30</u>	5 pm	<u>м</u>		MR	2879954	./08	2.3		16"	Z4	2812		15
<u>31</u>	190			w	2988433		1.6		16"	20"	25 12		15
1													
	ТҮРЕ 2												
	ROCK WREN TOTAL TOTAL USED:												
	·				GPD AVERAGE:	0							
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A =	DU				2007		r - `	•••	<u>.</u>	<u></u>	1		
<u></u> AF	RIL			<u> </u>		RESS	RA		WTP	.L	1	<u> </u>	
					MASTER	TOTAL		30 MIN SET	SBD	Alum	CL2	TURBIDITY	WASTE
	TIME	TEMP	RAIN	OPER	METER	FLOW		SU MIN GET		Daytank	Daytank		TIME
1	700	710		JP	3013746	.077	1.4 .		16"	19"	26		30 mm
2	730	56°	<u>'/4</u> "	38	3091662	.063	2.3	520	14"	<u>[[]</u>	22.6	1.11	Somin
3	730	440		50	3155228	1045	2.1	600	18.	13"	19.5	0.96	30 min
4	730	490		N	3220945	1074	2.0		14"	10	16.5		
5	92D	70°	2	JP	3295755	.086	2.1		16"	30	27 5		30 Mun
6	10:30	680		ZD	3381821	,060	2.0		15"	21	055		10min
7	1000	660	.04	ZD	3448287	.064	1.9		10	127	d		10111
8	0730	47°		50	3515012	.046	1.4	640	18"	21"	23.5		15 Min
9	730	720	\leq	SP	3681354	,078	2.2	540	<u>[[e]"</u>)8	21.5	0.96	
10	730	56°	"	JP	346 0292	.056	1.7	540	19	15"	19.6"	0.99	50 min
11	780	50°		JP JP	3715917	.050	1.8)2.	12 "	17"		15 min_
12	730	520	<u> </u>	P	3766355	57	1.7	580	<u> 2</u> "	80"	30'		30 min
13	639	80	/	ur	3766412	38	1.0		14	28	21		
14	1200	75		un	3766450	.124	1.0		14	25/2			25
15	800	69°		JP .	3890831	.072	1.3		12	21.5	27		LO MIN
16	730	70°	TAL	JP .	396326/	.065	3.1	580	12	19"	24	0.95	30 ши
17	700	72°	\angle	5P	4029109	.077	4.0	550	16"	15"	20	0.96	30 run
18	800	74"	4	TP	4106989	.060	2.9			8"	18"		30 min
19	730	48	\angle	9t	4167412	<u>•067</u>	2.0	540	14 "	- 30"	30"		60 min
20	<u>10:15</u>	65	_	66	4237352	.077_	12		19"	27	67		1)mins
21	2.30	67	.75	14	4316554	1045	2-1		14"	263	27.5		Bur is
22	7.15	53	0	MB	4362960	.063	1.9		16''	25.0	18.5		15
23	730	570	\angle	sp	4425638	بامان، معرد	1.7	530	14"	23"	14"	0.85	
24	730	69.	\geq	<u>or</u>	4492262	off	1.0	540		8	21.5"	0.80	30 Min
25	730	70°		SP	4492262	.137	1.2	550	14"	<u>"</u> "	30"		30 41.00
26	730	73°	\leq	r	4630055	,088	1.3	630	16"	27"	29"		30 min
27	300	NI		au	4718430.0	<u>D84</u>	1.0	/	<u> </u> 8	22	28		15 min
28	W		\leq	KIK	4802539	.042	(1)		/4	17 "	25		15 min
29	730	75°		JP	484 6275	.027	1.2	640	14"	14	23"		SD mm
30	730	690	\leq	IP	4872494	. 130	30	530	12"	<u>?"</u>	21"	1.0Z	15 min
1	0715	72°	\leq	TP	5003170								
					•								
				TOTAL	DRIP FIELD FLOW	#NAME?					TYPE 1		
ROCK WREN TOTAL													
					GPD AVERAGE:	##########		İ]		
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Attachment 8: TABLE 3.0(1) – LAND APPLICATION SITE CROPS

ATTACHMENT 8										
	Land Application Site Crops									
	Worksheet 3.0 - Table 3.0(1), on	Page 31 of 66 c	of Technical Rep	ort 1.0						
Phase	Crop Type and Land Use	Daily Avg Flow (MGD)	Drip Irrigation (Acre)	Spray Irrigation (Acre)	Effl. Application on Spray Irrig. Area (GPD)	Public Access (Y/N)				
Interim Phase 1	Bermuda overseeded with Rye - Low Use Greenbelt	0.066	15.150	0.0	0	Yes				
Interim Phase 2	Bermuda overseeded with Rye and Various Landscape plantings - Parkland and Low Use Greenbelt	0.100	21.120	7.0	8,750	Yes				
Interim Phase 3	Bermuda overseeded with Rye and Various Landscape plantings - Parkland and Low Use Greenbelt	0.135	27.548	12.0	15,000	Yes				
FINAL	Bermuda overseeded with Rye and Various Landscape plantings - Parkland and Low Use Greenbelt	0.200	42.470	12.0	15,000	Yes				

Attachment 9: CROPPING PLAN

ATTACHMENT 9 – ANNUAL CROPPING PLAN CYPRESS RANCH WCID No. 1 TCEQ WQ PERMIT No. WQ0014368001

The proposed 45.92 acre area to be irrigated with treated effluent will be used to grow Bermuda grass, overseeded with Perennial Rye. A soils map is attached to this report and shows that approximately 75% of the site has Brackett soils, rolling, 15% of the site has Brackett soils, steep, and the other 10% is Volente Complex, 1-8%. From our investigation of the site, the soils will support the growth of the proposed crop, with topsoil added as needed for a total soil depth of 12-inches below the drip tubing and a minimum of four-inches of soil above the tubing. The existing use of land is pasture for livestock and the existing vegetation is established and thriving. Items required for this cropping plan are addressed below:

- a. A soil map is included in this report, and shows that approximately 75% of the site has Brackett soils, rolling, 15% of the site has Brackett soils, steep, and the other 10% is Volente Complex, 1-8%. Currently, typical vegetation in the area is 90% grass coverage with grasses and fobs, with an overstory of 30% coverage of woody species, including oak, juniper, dyosporis, and agarito. The existing use of the land is pasture for livestock, and the existing vegetation is well established and thriving. From our investigation of the site, the soils will easily support the growth of the proposed crop, provided topsoil is added on an as-needed basis to meet the soil section requirements.
- b. The crop will be Bermuda Grass and Perennial Rye. The acreage irrigated will be 45.92 acres for each crop.
- c. The crop will be Bermuda Grass from April 15th to October 10th. The crop will be Perennial Rye from October 16th to April 15th. The acreage irrigated will be 45.92 acres for each crop.
- d. Common Bermuda grass with Perennial Rye overseed can assimilate over 200 pounds of nitrogen per acre per year and approximately 75 pounds of phosphorus per acre per year. The proposed irrigation of treated effluent will result in 132 lbs. of Nitrogen per year and 53 lbs. of phosphorus per acre per year.
- e. The crops will receive nutrients from the proposed irrigation of treated effluent. Once the crop is established, no additional nutrients will be applied. This should provide sufficient nutrients to grow a crop, based on the currently growing crop of grasses without irrigation of effluent. During the initial establishment of the grasses, Nitrogen will be applied at a rate of 100 lbs./acre. No other application of nutrients is planned.
- f. Supplemental water will not be applied except during the initial establishment of the grasses and prior to the irrigation of treated effluent. The initial establishment of grasses will be accomplished with surface spray of potable water from the wells located on-site or construction water trucks.

Crop	Ece for Zero Crop	Ece for 10% Crop
	Reduction (mmhos/cm)	Reduction (mmhos/cm)
Bermuda	6.9	8.5
Grass		
Perennial	5.6	6.9
Rye		

g. Salt tolerances of each crop:

From report by Borrelli et al, "Mean Crop Consumptive Use for Texas" dated Feb. 1, 1998

h. The grasses will be mulched when grass height reaches 3" to 5". An extra low cutting of the Bermuda will be made on about October 10th to allow the Rye to dominate in the cooler months, and extra low cutting of the rye will be made on about April 15th to allow the Bermuda to dominate in the warm months. The mulched clippings will promote the growth of grasses year round.

Attachment 10: GROUNDWATER WELL MAP

ATTACHMENT 10.1 GROUNDWATER WELL MAP WORKSHEET 3.0 - ITEM 6 CYPRESS RANCH WCID No. 1 TCEQ WQ PERMIT No. WQ0014368001




Attachment 11: WELL INFORMATION

ATTACHMENT 11 – GROUND WATER WELL INFORMATION WELLS WITHIN 1/2 MILE RADIUS CYPRESS RANCH WCID No. 1

TCEQ WQ PERMIT No. WQ0014368001

Latitude Longitude Producing Bottom Depth Well Report (DD-MM-SS) (DD-MM-SS) (Y-Yes/ Date (ft below **Depth to Groundwater Estimated Yield** Well Number** (North) (West) N-No) Drilled/Plugged ground level) (ft below ground level) Status (gpm) 4155 30-21-00 98-04-00 Plugged Ν 10/8/2001 226 N/A N/A Υ 268 10278 30-21-13 98-03-57 7/31/2002 370 6 Domestic 11658 30-21-12 98-03-49 Domestic Υ 5/23/2002 605 unavailable 30 Υ 405 20 12378 30-21-21 98-04-18 Domestic 7/8/2002 unavailable 7/10/2002 Υ 12381 30-20-58 98-04-25 Domestic 325 unavailable 30 16951 30-21-07 98-03-59 Υ 1/6/2003 350 260 20 Domestic Υ 24861 30-22-01 98-04-29 Domestic 7/14/2003 250 175 20 26181 30-20-11 98-05-17 Unk 8/4/2003 130 88 15 Domestic N/A 29108 30-21-07 98-04-54 Plugged Ν 12/1/2005 490 N/A 32179 30-20-55 98-04-32 Domestic Υ 6/30/2003 405 310 50 41332 Υ 250 30-21-27 98-04-08 Domestic 6/23/2004 320 12 55013 30-21-40 98-03-58 Domestic Υ 2/16/2005 290 200 30 Υ 9 55311 30-21-25 98-05-23 Domestic 12/1/2003 257 unavailable 73104 30-21-14 98-05-04 Ν 6/2/2011 430 N/A N/A Plugged 73207 30-21-03 98-04-33 **Public Supply** Υ 11/23/2005 280 unavailable 20 74963 30-20-56 98-04-52 Test Well Ν 6/1/2004 490 unavailable unavailable unavailable 75740 30-21-02 98-05-59 Domestic Υ 5/6/2002 400 6 91347 Υ 7/23/2006 unavailable 15 30-21-11 98-03-51 **Public Supply** 415 92815 30-21-17 98-04-43 Υ 3/26/2004 310 unavailable 20-30 **Public Supply** 92851 Υ 3/26/2004 320 unavailable 30 30-21-41 98-04-14 Irrigation Υ 92854 30-21-46 98-04-13 Irrigation 3/25/2004 340 unavailable 30 95923 30-21-07 98-04-41 Domestic Υ 3/17/2006 365 unavailable 6 Υ 109178 30-21-16 98-03-56 Domestic 1/5/2007 540 unavailable 25

JUNE 2024

	Latitude	Longitude		Producing		Bottom Depth		Well Report
	(DD-MM-SS)	(DD-MM-SS)		(Y-Yes/	Date	(ft below	Depth to Groundwater	Estimated Yield
Well Number**	(North)	(West)	Status	N-No)	Drilled/Plugged	ground level)	(ft below ground level)	(gpm)
112963	30-20-48	98-04-46	Plugged	N	11/3/2005	270	unavailable	N/A
121409	30-21-18	98-04-28	Plugged	N	7/22/2008	270	unavailable	N/A
123692	30-21-10	98-04-51	Test Well	N	9/15/2003	300	unavailable	25
123703	30-21-06	98-04-55	Test Well	Y	9/11/2003	300	unavailable	15-20
123705	30-21-07	98-21-07	Test Well	N	9/11/2003	320	unavailable	30
133074	30-21-39	98-03-58	Domestic	Y	9/28/2007	325	unavailable	45
139951	30-21-27	98-03-55	Domestic	Y	3/29/2008	320	unavailable	10
140076	30-21-01	98-05-04	Plugged	N	12/3/2012	400	unavailable	N/A
153289	30-21-16	98-04-55	Public Supply	Y	8/16/2008	310	unavailable	20
167454	30-21-06	98-04-54	Public Supply	Y	10/15/2003	315	unavailable	30
182209	30-21-17	98-04-55	Domestic	Y	10/18/2004	300	unavailable	10
194145	30-21-54	98-05-12	Domestic	Y	12/14/2006	145	unavailable	25
205207	30-21-11	98-03-57	Public Supply	Y	11/18/2009	400	250	20
253290	30-22-02	98-04-22	Domestic	Y	5/4/2011	505	unavailable	12
253294	30-21-57	98-04-25	Domestic	Y	5/6/2011	300	unavailable	31
257446*	30-21-18	98-05-07	Public Supply	Y	6/7/2011	236	131.48	12
258042	30-21-10	98-04-56	Public Supply	Y	5/26/2011	284	182.2	25
258260	30-21-14	98-05-04	Public Supply	Y	6/3/2011	270	176	7
258375	30-21-13	98-04-57	Public Supply	Y	6/1/2011	290	180	15-20
287669	30-21-18	98-03-55	Domestic	Y	3/23/2012	385	unavailable	8
327780 (#12)	30-20-44	98-05-20	Public Supply	Y	6/19/2013	280	160	5
328701	30-21-02	98-05-09	Irrigation	Y	6/10/2013	320	243	27
340386	30-20-53	98-05-06	Closed-Loop	Y	8/9/2013	305	unavailable	N/A
345838	30-21-55	98-04-44	Domestic	Y	10/4/2013	330	195	3
379826	30-21-19	98-03-51	Domestic	Y	7/23/2014	340	unavailable	17
379827	30-21-22	98-03-55	Domestic	Y	7/24/2014	300	unavailable	12
381243	30-20-12	98-05-18	Domestic	У	10/20/2014	420	228	10
382742 (#13)	30-20-37	98-05-17	Public Supply	Y	10/30/2014	300	unavailable	35
382755 (#14)	30-20-33	98-05-15	Public Supply	Y	10/31/2014	260	unavailable	38
382757 (#15)	30-20-24	98-05-11	Public Supply	Y	11/2/2014	280	unavailable	15
384315	30-21-57	98-04-37	Domestic	Y	12/19/2014	250	unavailable	11.5

	Latitude	Longitude		Producing		Bottom Depth		Well Report
	(DD-MM-SS)	(DD-MM-SS)		(Y-Yes/	Date	(ft below	Depth to Groundwater	Estimated Yield
Well Number**	(North)	(West)	Status	N-No)	Drilled/Plugged	ground level)	(ft below ground level)	(gpm)
397063	30-20-59	98-04-09	Domestic	Y	4/22/2015	380	260	22
515974 (#16)	30-20-32	98-05-23	Public Supply	Y	5/29/2019	250	165	+20
515979 (#19)	30-20-29	98-05-21	Public Supply	Y	5/27/2019	270	180	+20
519899 (#20)	30-20-23	98-05-19	Public Supply	Y	8/5/2019	245	188	+20
519919 (#18)	30-20-40	98-05-25	Public Supply	Y	7/29/2019	230	140	+20
521774 (#17)	30-20-45	98-05-29	Public Supply	Y	8/1/2019	230	unavailable	+20
5748106*	30-21-18	98-05-07	Public Supply	Y	6/7/2011	236	131.48	12
5748201	30-21-23	98-04-13	Domestic	Y	6/1/1970	227	100	15
5748203	30-20-53	98-04-08	Domestic	Y	8/18/1972	320	140.21	20
5748207	30-21-17	98-03-55	Domestic	Y	1972	330	262.22	12
5748213	30-21-15	98-04-45	Public Supply	Y	8/23/2011	315	unavailable	30
5748214	30-21-09	98-04-51	Public Supply	Y	8/23/2011	310	unavailable	20-30
5748403	30-19-53	98-05-11	Domestic	Y	8/18/1972	unavailable	unavailable	unavailable

* - Note that Well #'s 257446 and 5748106 are the same well (with the same Drill Date and same Latitude/Longitude).

** - where relavent, Cypress Ranch WCID #1 Water Well Numbers are listed in parenthesis.

Attachment 12: GROUNDWATER QUALITY REPORT



ATTACHMENT 12

CONSULTING. ENGINEERING. CONSTRUCTION.

GROUNDWATER QUALITY REPORT

for the

CYPRESS RANCH WCID NO. 1 RENEWAL APPLICATION FOR TCEQ WATER QUALITY PERMIT NO. WQ0014368001

PREPARED FOR Cypress Ranch WCID No. 1 102 N. Railroad Avenue Pflugerville, TX 78660

PREPARED BY Atwell, LLC 805 Las Cimas Parkway, Bldg III, Suite 310 Austin, TX 78746



June 2024

Groundwater Quality Report for the Cypress Ranch WCID No. 1 Renewal of TCEQ Wastewater Permit ATTACHMENT 12 June 2023

TABLE OF CONTENTS

SECTION A.	PURPOSE	1
SECTION B.	SCOPE	1
SECTION C.	GENERAL INFORMATION	1
SECTION D.	EXISTING WELL INFORMATION	2
SECTION E.	PROPOSED RE-DRILLED WELL INFORMATION	4
SECTION E.	POLLUTION HAZARD SURVEY	4

EXHIBITS

Exhibit 1	_	Location Map
Exhibit 2	-	Shingle Hills USGS Quad Map - Entire Map
Exhibit 3	-	Shingle Hills USGS Quad Map - Closeup

APPENDICES

Appendix A	_	List of Water Wells with 1/2 Mile of Site
Appendix B	-	State of Texas Well Reports (for wells listed in Appendix A)
Appendix C	-	Chemical Test Results for New Wells at Cypress Ranch WCID #1
		Wells #16, #17, #18, #19, and #20

Groundwater Quality Report for the Cypress Ranch WCID No. 1 Renewal Permit Application TCEQ WQ Permit No. WQ0014368001 June 2024 Page 1

A. PURPOSE

The purpose of this report is to support the renewal application of the Cypress Ranch WCID No. 1 Texas Commission on Environmental Quality (TCEQ) wastewater permit (TCEQ WQ Permit No. WQ0014368001). The Cypress Ranch WCID No. 1 serves the West Cypress Hills subdivision which is located on Highway 71 in western Travis County, Texas (See General Location Map in **Exhibit 1**). This Groundwater Quality Report is provided as requested by Worksheet 3.0, Section 7, on page 34 of 66 of the Domestic Technical Report 1.0 of the permit application

B. SCOPE

This report provides general groundwater well and groundwater quality information as outlined in \$309.20(a)(4)(A), along with verification that sources of the domestic raw water supply are protected.

C. GENERAL INFORMATION

Cypress Ranch WCID No. 1 services the West Cypress Hills subdivision win west Travis County. Construction on the subdivision began in the early 2000's. Currently, the wastewater treatment facility includes an activated sludge facility operating in the extended aeration mode, with disposal by a combination of subsurface drip irrigation and a limited amount of surface spray irrigation.

D. EXISTING WELL INFORMATION

As required by §309.20(a)(4)(A), an inventory of all water wells within 1/2 mile radius of the site must be provided. **Appendix A** includes a detailed table of the water wells identified. The table includes well location, usage status, date drilled/plugged, well depth, and estimated well yield.

Additional information on the groundwater wells is included in **Appendix B** with the individual State of Texas Well reports for each well.

The newest wells drilled by the Cypress Ranch WCID No. 1 for use in their TCEQ public water system (TCEQ PWS #) were Wells #16, #17, #18, #19, #20. Complete chemical analysis for these wells are included in Appendix C.

E. PROTECTION OF GROUNDWATER RESOURCES

The protection of groundwater resources in and around the Cypress Ranch WCID No. 1 boundary can be aided by limiting the wastewater application rates of the subsurface and surface disposal areas. The TCEQ wastewater permit does this by limiting the application rate of wastewater to 0.1 gallons/sq.ft./day. The wastewater facility also has the ability to store wastewater for a minimum of three days (based on permitted daily average flow). The wastewater is stored in steel, above-ground tanks.

Groundwater Quality Report for the Cypress Ranch WCID No. 1 Renewal Permit Application TCEQ WQ Permit No. WQ0014368001 June 2024

Exhibit 1: General Location Map



Groundwater Quality Report for the Cypress Ranch WCID No. 1 Renewal Permit Application TCEQ WQ Permit No. WQ0014368001 June 2024

<u>Exhibit 2:</u> SHINGLE HILLS USGS QUAD MAP - OVERALL SITE MAP WITH WATER WELLS IDENTIFIED (by State of Texas Well ID #)

ATTACHMENT 10.1 GROUNDWATER WELL MAP WORKSHEET 3.0 - ITEM 6 CYPRESS RANCH WCID No. 1 TCEQ WQ PERMIT No. WQ0014368001



Groundwater Quality Report for the Cypress Ranch WCID No. 1 Renewal Permit Application TCEQ WQ Permit No. WQ0014368001 June 2024

Exhibit 3: SHINGLE HILLS USGS QUAD MAP - CLOSEUP WITH WATER WELLS IDENTIFIED (by State of Texas Well ID #)



Groundwater Quality Report for the Cypress Ranch WCID No. 1 Renewal Permit Application TCEQ WQ Permit No. WQ0014368001 June 2024

<u>Appendix A:</u> LIST OF WATER WELLS WITHIN 1/2 MILE OF SITE (refer to Exhibits 2 and 3 for Well Location Map)

ATTACHMENT 11 – GROUND WATER WELL INFORMATION WELLS WITHIN 1/2 MILE RADIUS CYPRESS RANCH WCID No. 1

TCEQ WQ PERMIT No. WQ0014368001

Latitude Longitude Producing Bottom Depth Well Report (DD-MM-SS) (DD-MM-SS) (Y-Yes/ Date (ft below **Depth to Groundwater Estimated Yield** Well Number** (North) (West) N-No) Drilled/Plugged ground level) (ft below ground level) Status (gpm) 4155 30-21-00 98-04-00 Plugged Ν 10/8/2001 226 N/A N/A Υ 268 10278 30-21-13 98-03-57 7/31/2002 370 6 Domestic 11658 30-21-12 98-03-49 Domestic Υ 5/23/2002 605 unavailable 30 Υ 405 20 12378 30-21-21 98-04-18 Domestic 7/8/2002 unavailable 7/10/2002 Υ 12381 30-20-58 98-04-25 Domestic 325 unavailable 30 16951 30-21-07 98-03-59 Υ 1/6/2003 350 260 20 Domestic Υ 24861 30-22-01 98-04-29 Domestic 7/14/2003 250 175 20 26181 30-20-11 98-05-17 Unk 8/4/2003 130 88 15 Domestic N/A 29108 30-21-07 98-04-54 Plugged Ν 12/1/2005 490 N/A 32179 30-20-55 98-04-32 Domestic Υ 6/30/2003 405 310 50 41332 Υ 250 30-21-27 98-04-08 Domestic 6/23/2004 320 12 55013 30-21-40 98-03-58 Domestic Υ 2/16/2005 290 200 30 Υ 9 55311 30-21-25 98-05-23 Domestic 12/1/2003 257 unavailable 73104 30-21-14 98-05-04 Ν 6/2/2011 430 N/A N/A Plugged 73207 30-21-03 98-04-33 **Public Supply** Υ 11/23/2005 280 unavailable 20 74963 30-20-56 98-04-52 Test Well Ν 6/1/2004 490 unavailable unavailable unavailable 75740 30-21-02 98-05-59 Domestic Υ 5/6/2002 400 6 91347 Υ 7/23/2006 unavailable 15 30-21-11 98-03-51 **Public Supply** 415 92815 30-21-17 98-04-43 Υ 3/26/2004 310 unavailable 20-30 **Public Supply** 92851 Υ 3/26/2004 320 unavailable 30 30-21-41 98-04-14 Irrigation Υ 92854 30-21-46 98-04-13 Irrigation 3/25/2004 340 unavailable 30 95923 30-21-07 98-04-41 Domestic Υ 3/17/2006 365 unavailable 6 Υ 109178 30-21-16 98-03-56 Domestic 1/5/2007 540 unavailable 25

JUNE 2024

	Latitude	Longitude		Producing		Bottom Depth		Well Report
	(DD-MM-SS)	(DD-MM-SS)		(Y-Yes/	Date	(ft below	Depth to Groundwater	Estimated Yield
Well Number**	(North)	(West)	Status	N-No)	Drilled/Plugged	ground level)	(ft below ground level)	(gpm)
112963	30-20-48	98-04-46	Plugged	N	11/3/2005	270	unavailable	N/A
121409	30-21-18	98-04-28	Plugged	Ν	7/22/2008	270	unavailable	N/A
123692	30-21-10	98-04-51	Test Well	N	9/15/2003	300	unavailable	25
123703	30-21-06	98-04-55	Test Well	Y	9/11/2003	300	unavailable	15-20
123705	30-21-07	98-21-07	Test Well	N	9/11/2003	320	unavailable	30
133074	30-21-39	98-03-58	Domestic	Y	9/28/2007	325	unavailable	45
139951	30-21-27	98-03-55	Domestic	Y	3/29/2008	320	unavailable	10
140076	30-21-01	98-05-04	Plugged	N	12/3/2012	400	unavailable	N/A
153289	30-21-16	98-04-55	Public Supply	Y	8/16/2008	310	unavailable	20
167454	30-21-06	98-04-54	Public Supply	Y	10/15/2003	315	unavailable	30
182209	30-21-17	98-04-55	Domestic	Y	10/18/2004	300	unavailable	10
194145	30-21-54	98-05-12	Domestic	Y	12/14/2006	145	unavailable	25
205207	30-21-11	98-03-57	Public Supply	Y	11/18/2009	400	250	20
253290	30-22-02	98-04-22	Domestic	Y	5/4/2011	505	unavailable	12
253294	30-21-57	98-04-25	Domestic	Y	5/6/2011	300	unavailable	31
257446*	30-21-18	98-05-07	Public Supply	Y	6/7/2011	236	131.48	12
258042	30-21-10	98-04-56	Public Supply	Y	5/26/2011	284	182.2	25
258260	30-21-14	98-05-04	Public Supply	Y	6/3/2011	270	176	7
258375	30-21-13	98-04-57	Public Supply	Y	6/1/2011	290	180	15-20
287669	30-21-18	98-03-55	Domestic	Y	3/23/2012	385	unavailable	8
327780 (#12)	30-20-44	98-05-20	Public Supply	Y	6/19/2013	280	160	5
328701	30-21-02	98-05-09	Irrigation	Y	6/10/2013	320	243	27
340386	30-20-53	98-05-06	Closed-Loop	Y	8/9/2013	305	unavailable	N/A
345838	30-21-55	98-04-44	Domestic	Y	10/4/2013	330	195	3
379826	30-21-19	98-03-51	Domestic	Y	7/23/2014	340	unavailable	17
379827	30-21-22	98-03-55	Domestic	Y	7/24/2014	300	unavailable	12
381243	30-20-12	98-05-18	Domestic	У	10/20/2014	420	228	10
382742 (#13)	30-20-37	98-05-17	Public Supply	Y	10/30/2014	300	unavailable	35
382755 (#14)	30-20-33	98-05-15	Public Supply	Y	10/31/2014	260	unavailable	38
382757 (#15)	30-20-24	98-05-11	Public Supply	Y	11/2/2014	280	unavailable	15
384315	30-21-57	98-04-37	Domestic	Y	12/19/2014	250	unavailable	11.5

	Latitude	Longitude		Producing		Bottom Depth		Well Report
	(DD-MM-SS)	(DD-MM-SS)		(Y-Yes/	Date	(ft below	Depth to Groundwater	Estimated Yield
Well Number**	(North)	(West)	Status	N-No)	Drilled/Plugged	ground level)	(ft below ground level)	(gpm)
397063	30-20-59	98-04-09	Domestic	Y	4/22/2015	380	260	22
515974 (#16)	30-20-32	98-05-23	Public Supply	Y	5/29/2019	250	165	+20
515979 (#19)	30-20-29	98-05-21	Public Supply	Y	5/27/2019	270	180	+20
519899 (#20)	30-20-23	98-05-19	Public Supply	Y	8/5/2019	245	188	+20
519919 (#18)	30-20-40	98-05-25	Public Supply	Y	7/29/2019	230	140	+20
521774 (#17)	30-20-45	98-05-29	Public Supply	Y	8/1/2019	230	unavailable	+20
5748106*	30-21-18	98-05-07	Public Supply	Y	6/7/2011	236	131.48	12
5748201	30-21-23	98-04-13	Domestic	Y	6/1/1970	227	100	15
5748203	30-20-53	98-04-08	Domestic	Y	8/18/1972	320	140.21	20
5748207	30-21-17	98-03-55	Domestic	Y	1972	330	262.22	12
5748213	30-21-15	98-04-45	Public Supply	Y	8/23/2011	315	unavailable	30
5748214	30-21-09	98-04-51	Public Supply	Y	8/23/2011	310	unavailable	20-30
5748403	30-19-53	98-05-11	Domestic	Y	8/18/1972	unavailable	unavailable	unavailable

* - Note that Well #'s 257446 and 5748106 are the same well (with the same Drill Date and same Latitude/Longitude).

** - where relavent, Cypress Ranch WCID #1 Water Well Numbers are listed in parenthesis.

Groundwater Quality Report for the Cypress Ranch WCID No. 1 Renewal Permit Application TCEQ WQ Permit No. WQ0014368001 June 2024

Appendix B: STATE OF TEXAS WELL REPORTS FOR ALL WATER WELLS WITHIN 1/2 MILE OF SITE

	STATE OF TEXAS PLUGGING REPORT for Tracking #4155						
Owner:	HAZY	HILLS WATER S	YS	Owner Well	#: No Data		
Address:	9511 F	R 620 N.		Grid #:	57-48-2		
Woll Locatio		N, TX 78726		Latitude:	30° 21' 00" N		
	on. No Da	ld		Longitude:	098° 04' 00" W		
Well County	y: Travis			Elevation:	No Data		
Well Type:	: Wi	thdrawal of Wate	r				
Drilling Inform	nation						
Company:	No Data			Date Drille	d: No Data		
Driller:	No Data			License Nu	mber: No Data		
Borehole: <i>Plugging Infor</i> Date Plugge Plug Methor	Borehole: No Data Plugging Information Plugging Information Date Plugged: 10/8/2001 Plugger: BYRON BENOIT Plug Method: Tremmie pipe bentonite from bottom to 2 feet from surface, cement top 2 feet						
Dla (in)	Ton (ft.)	Bottom (ft.)	Top (ft.)	Bottom (ft)	Description (number of sacks & material)		
	0	0	0	20 20	4		
			20	226	20		
Certification Data: The driller certified that the driller plugged this well (or the well was plugged und driller's direct supervision) and that each and all of the statements herein are tru correct. The driller understood that failure to complete the required items will res the reports(s) being returned for completion and resubmittal. Company Information: ASSOCIATED DRILLING					ell (or the well was plugged under the of the statements herein are true and nplete the required items will result in resubmittal.		
Driller Nam	ı ۵ .	MANCHACA, T	Х 78652 т	1	icense Number: 1955		
Comments	:	ENTERED BY D)G	L			

	STATE OF TEXAS WELL REPORT for Tracking #10278					
Owner:	MARK BOWLES	Owner Well #:	001			
Address:	6800 HWY 290 W. AUSTIN TX 78735	Grid #:	57-48-2			
Well Location:	REIMERS RR @ 71 W. LOT 5	Latitude:	30° 21' 13" N			
	SPICEWOOD, TX 78669	Longitude:	098° 03' 57" W			
Well County:	Travis	Elevation:	1300 ft. above sea level			
Type of Work:	New Well	Proposed Use:	Domestic			

Drilling Start Date: 7/31/2002 Drilling End Date: 7/31/2002

	Diameter (in.)	Top De	pth (ft.)	Bottom Depth (ft.)	
Borehole:	8)	10	
	6.125	1	0	370	
Drilling Method:	Air Rotary				
Borehole Completion:	Open Hole				
	Top Depth (ft.)	Bottom Depth (ft.)	De	escription (number of sacks & ma	iterial)
Annular Seal Data:	0	10		6	
Seal Method: SL	URRIED & POURE	D Di	stance to P	roperty Line (ft.): No Data	
Sealed By: BC	BBY ROBERTS	Dista conc	nce to Sept entrated co	ic Field or other ntamination (ft.): No Data	1
		C	Distance to	Septic Tank (ft.): No Data	
			Metho	d of Verification: NOT YE	T INSTALLED
Surface Completion:	Surface Sleeve In	stalled			
Water Level:	268 ft. below land	d surface on 2002-07	-31 Meas	surement Method: Unkn	own
Packers:	PLASTIC 10 PLASTIC 315				
Type of Pump:	Submersible		Ρι	Imp Depth (ft.): 340	
Well Tests:	Jetted	Yield: 6 GPM			

	Strata Depth (ft.)	Water Type					
Water Quality:	No Data	No Data					
		Chemical Analysis	Made: No				
Did the driller knowingly penetrate any strata which contained injurious constituents?: No							
Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.							
Company Information:	BEE CAVE DRILL	ING, INC.					
	185 ANGELFIRE D DRIPPING SPRING	DR. 38, TX 78620					
Driller Name:	JIM BLAIR	L	icense Number:	54416			
Apprentice Name:	BOBBY ROBERTS	3 A	pprentice Numbe	er: WWDAPP00001 234			
Comments:	No Data						

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0	2	TOPSOIL	4.5 NEW PLASTIC 0 - 330
2	7	WHITE ROCK	4.5 NEW SCREEN MFG. 330 - 370
7	25	CALICHE	
25	50	GREY LIMESTONE	
50	70	BLUE SHALE	
70	100	GREY LIMESTONE	
100	120	BLUE SHALE	
120	160	TAN ROCK	
160	210	BLUE SHALE	
210	270	GREY LIMESTONE	
270	315	BLUE SHALE	
315	340	WHITE ROCK W/B 6 GPM	
340	370	GREY ROCK	

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) 463-7880

	STATE OF TEXAS WELL REPORT for Tracking #11658					
Owner:	Lyle Murphy c/o Action Water Wells	Owner Well #:	No Data			
Address:	100 Spanish Oak Trail Spicewood, TX, 78669	Grid #:	57-48-2			
Well Location:	Hwy 71 Storage Unit	Latitude:	30° 21' 12" N			
	Spicewood, TX 78669	Longitude:	098° 03' 49" W			
Well County:	Travis	Elevation:	No Data			
Type of Work:	New Well	Proposed Use:	Domestic			

Drilling Start Date: 5/23/2002 Drilling End Date: 5/23/2002

	Diameter (in.) Top De	epth (ft.)	Bottom Depth (ft.)	
Borehole:	6	1	0	605	
	0)	10	
Drilling Method:	Air Rotary				
Borehole Completion:	cased				
	Top Depth (ft.)	Bottom Depth (ft.)	Des	scription (number of sacks & mater	ial)
Annular Seal Data:	0	20		4	
Seal Method: Slu	urry	Di	stance to Pro	operty Line (ft.): No Data	
Sealed By: Driller		Dista conc	nce to Septi entrated cor	c Field or other ntamination (ft.): 100+	
		Γ	Distance to S	Septic Tank (ft.): No Data	
			Method	d of Verification: as per land	downe
Surface Completion:	Surface Sleeve Ir	nstalled			
Water Level:	No Data				
Packers:	Burlap 470',460',	,20'			
Type of Pump:	No Data				
Well Tests:	Estimated	Yield: 30 GPM			

	Strata Depth (ft.)	Water Type		
Water Quality:	475-595	Trinity		
		Chemical Analysis N	Made: No	
	Did the driller	knowingly penetrate any strata w contained injurious constitue	vhich ents?: No	
Certification Data:	The driller certified th driller's direct superv correct. The driller u he report(s) being re	at the driller drilled this well (or this ision) and that each and all of the nderstood that failure to complete sturned for completion and resub-	he well was drilled e statements here e the required iten mittal.	d under the ein are true and ms will result in
Company Information:	APEX Drilling			
	P.O. Box 867 Marble Falls, TX 7	78654		
Driller Name:	Michael Becker	Lice	ense Number:	54516
Apprentice Name:	Andrew Johnson	Арр	prentice Number:	1116
Comments:	No Data			

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	40	Caliche
40	95	Blue LS
95	110	Tan LS
110	135	Gry LS w/Clay
135	170	Tan LS
170	207	Gry LS w/Clay
207	255	Gry-Tan LS
255	270	Tan LS
270	310	Gry LS w/Clay
310	356	Tan LS (H20)
356	362	Gry LS
362	396	Wht LS (H20)
396	426	Gry LS w/Clay
426	455	Blue Clay
455	462	Gry LS
462	475	Gry SS
475	501	Red SS

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)			
5 New I	PVC +2 to 3	385 Scl	h40			
5 New PVC 385-605 SDR17						

501	515	Gravel (H20)
515	540	Red Sand-Clay
540	595	Gravel (H20)
595	605	Tan Blue LS

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) 463-7880

	STATE OF TEXAS WELL REPORT for Tracking #12378				
Owner:	Donny Jung	Owner Well #:	No Data		
Address:	1110 Hwy 1431 W Marble Falls, TX, 78654	Grid #:	57-48-2		
Well Location:	Hwy 71 West	Latitude:	30° 21' 21" N		
Marble Falls, TX 78654	Longitude:	098° 04' 18" W			
Well County:	Travis	Elevation:	No Data		
Type of Work:	New Well	Proposed Use:	Domestic		

Drilling Start Date: 7/8/2002 Drilling End Date: 7/8/2002

	Diameter (in	.) Top Dep	th (ft.)	Bottom Depth (ft.)	
Borehole:	6	10		405	
	0	0		10	
Drilling Method:	Air Rotary				
Borehole Completion:	cased				
	Top Depth (ft.)	Bottom Depth (ft.)	De	scription (number of sacks & materi	ial)
Annular Seal Data:	a: 0 20		4	4	
Seal Method: SI	urry	Dist	ance to Pr	operty Line (ft.): No Data	
Sealed By: D	Distance to Septic Field or other concentrated contamination (ft.): 100+				
		Di	stance to S	Septic Tank (ft.): No Data	
			Metho	d of Verification: as per land	lowner
Surface Completion:	Surface Sleeve I	nstalled			
Water Level:	No Data				
Packers:	Burlap 320',310'	',20 '			
Type of Pump:	No Data				
Well Tests:	Estimated	Yield: 20-25 GPM	1		

Water Quality:	Strata Depth (ft.) 320-402 Did the driller know Comparison	Water Type Glenrose Chemical Analysis Made: ingly penetrate any strata which contained injurious constituents?:	No
Water Quality:	320-402 Did the driller know	Glenrose Chemical Analysis Made: ingly penetrate any strata which contained injurious constituents?:	No
	Did the driller know	Chemical Analysis Made: ringly penetrate any strata which contained injurious constituents?:	No
	Did the driller know	ringly penetrate any strata which contained injurious constituents?:	Νο
	C	contained injurious constituents?:	Νο
Certification Data:	The driller certified that the driller's direct supervision) correct. The driller unders the report(s) being returned	Ariller drilled this well (or the well v and that each and all of the statem stood that failure to complete the rec ad for completion and resubmittal.	vas drilled under the ents herein are true and quired items will result in
Company Information:	APEX Drilling		
	P.O. Box 867 Marble Falls, TX 78654	ŀ	
Driller Name:	Michael Becker	License Nu	mber: 54516
	Andrew Johnson	Apprentice	Number: 1116
Apprentice Name:		Appleinide	

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	35	Caliche
35	125	Blue LS
125	160	Tan LS
160	205	Gry LS w/Clay
205	225	LT Gry-Tan LS
225	265	Tan LS
265	295	LT Gry-Tan LS
295	320	Gry LS
320	402	Wht LS (Cowcreek)
402	405	Gry LS w/Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)			
5 New PVC +2 to 405 Sch40						

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Texas Department of Licensing and Regulation P.O. Box 12157 Austin, TX 78711 (512) 463-7880

	STATE OF TEXAS WELL REP	ORT for Trac	cking #12381
Owner:	Sue Thompson	Owner Well #:	No Data
Address:	P.O. Box 1358 Needville, TX 77461	Grid #:	57-48-2
Well Location:	Hwy 71 West	Latitude:	30° 20' 58" N
	Spicewood, TX 78669	Longitude:	098° 04' 25" W
Well County:	Travis	Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 7/10/2002 Drilling End Date: 7/10/2002

	Diameter (in	Diameter (in.) Top Depth (ft.)		Bottom Depth (ft.)	
Borehole:	8	0		15	
	6	15	5	325	
Drilling Method:	Air Rotary				
Borehole Completion:	cased				
	Top Depth (ft.)	Bottom Depth (ft.)	Des	cription (number of sacks & materi	al)
Annular Seal Data:	0	20		4	
Seal Method: SI	urry	Dis	tance to Pro	operty Line (ft.): No Data	
Sealed By: Driller		Distance to Septic Field or other concentrated contamination (ft.): 100+			
		D	istance to S	Septic Tank (ft.): No Data	
			Method	of Verification: as per land	lowner
Surface Completion:	Surface Sleeve I	nstalled			
Water Level:	No Data				
Packers:	Burlap 215',210'	',20'			
Type of Pump:	No Data				
Well Tests:	Estimated	Yield: 30 GPM			

	Strata Depth (ft.)	Water Type		
Water Quality:	218-315 GlenRose			
		Chemical Analysis Ma	ade: No	
	Did the driller	knowingly penetrate any strata wh	nich	
		contained injurious constituer	nts?: No	
Certification Data: 7 c c t	The driller certified th driller's direct superv correct. The driller u he report(s) being re	hat the driller drilled this well (or the ision) and that each and all of the nderstood that failure to complete eturned for completion and resubm	e well was drilled statements here the required iter nittal.	d under the ain are true and ms will result in
Company Information:	APEX Drilling			
	P.O. Box 867 Marble Falls, TX 7	78654		
Driller Name:	Michael Becker	Licer	nse Number:	54516
Apprentice Name:	Andrew Johnson	Аррг	rentice Number:	1116
Comments:	No Data			

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	30	Caliche
30	40	Blue LS
40	75	Tan LS w/Clay
75	130	Gry LS w/Clay
130	150	Lt Gry-Tan LS
150	180	Tan LS-LT Gry
180	218	Gry LS
218	255	Tan Wht LS
255	263	Gry LS
263	290	Wht LS (H20)
290	315	Gry-Sandy LS (H20)
315	325	Gry LS w/Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Туре	e Setting From/To (ft.)			
5 New PVC +2 to 325 Sch40						

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Texas Department of Licensing and Regulation P.O. Box 12157 Austin, TX 78711 (512) 463-7880

S	TATE OF TEXA	S WELL RE	PORT for T	racking #16951	
Owner: G	ARY EVENSEN		Owner Well #	#: 001	
Address: 14	1400 O'REILY CT.		Grid #:	57-48-2	
Well Location: BI	AUSTIN, TX 78734 ation: BEHIND ARBORMASTER ON HWY 71 @ REIMERS SPICEWOOD. TX 78669		Latitude:	30° 21' 07" N	
@ SI			Longitude:	098° 03' 59" W	
Well County: Tr	ty: Travis			1118 ft. above sea leve	vel
Type of Work: Ne	w Well		Proposed Us	se: Domestic	
Drilling Start Date:	1/6/2003 Drilling	g End Date: 1/6/2	2003	Bottom Depth (ft)	
Borehole:	9,875	.) 1	0	13	
	6.5		13	350	
Drilling Method:	Air Rotary	I			
Borehole Completio	n: Open Hole				
	Top Depth (ft.)	Bottom Depth (fi	t.) Des	cription (number of sacks & material)	
Annular Seal Data:	0	10		12	
Seal Method:	SLURRIED & POURI	ED	Distance to Pro	operty Line (ft.): No Data	
Sealed By:	Driller	Γ	Distance to Septic concentrated con	: Field or other tamination (ft.): No Data	
			Distance to S	eptic Tank (ft.): No Data	
			Method	of Verification: NOT YET INS	TALLED
Surface Completion	Surface Sleeve I	nstalled			
Water Level:	260 ft. below lar	nd surface on 200	3-01-07 Measu	urement Method: Unknown	
Packers:	PLASTIC 10 PLASTIC 300				

Type of Pump: Submersible

Jetted

Well Tests:

Yield: 20 GPM

Pump Depth (ft.): 320

	Strata Depth (ft.)	Water Type				
Water Quality:	No Data	No Data				
		Chemical Analysis Mad	e: No			
	Did the driller I	knowingly penetrate any strata whic contained injurious constituents	h ?: No			
Certification Data:	The driller certified the driller's direct supervi correct. The driller ur the report(s) being re	at the driller drilled this well (or the v sion) and that each and all of the standerstood that failure to complete th turned for completion and resubmitt	well was drille atements her e required ite al.	ed under the rein are true and ems will result in		
Company Information:	BEE CAVE DRILLI	NG, INC.				
	185 ANGELFIRE D DRIPPING SPRING	R. S, TX 78620				
Driller Name:	BOBBY ROBERTS	Licens	e Number:	54416		
Comments:	No Data					

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	4	TOPSOIL
4	25	CALICHE
25	73	GREY LIMESTONE
73	105	TAN CLAY
105	130	GREY LIMESTONE
130	165	TAN ROCK
165	180	GREY CLAY
180	190	GREY LIMESTONE
190	195	BLUE CLAY
195	305	GREY LIMESTONE
305	350	WHITE ROCK W/B 20 GPM

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) Nev	v/Used Typ	e Setting From/To (ft.)			
4.5 NEW PLASTIC 0 - 300					
4.5 NEW SCREEN MFG. 300 - 340					
4.5 NEW PLASTIC 340 - 350					

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Texas Department of Licensing and Regulation P.O. Box 12157 Austin, TX 78711 (512) 463-7880

	STATE OF TEXAS WELL REPORT for Tracking #24861					
Owner:	PEDERNALES WATER CO-OP	Owner Well #:	004			
Address:	22609 HWY 71 W. SPICEWOOD TX 78669	Grid #:	57-48-2			
Well Location:	22303 HWY 71 W.	Latitude:	30° 22' 01" N			
	SPICEWOOD, TX 78669	Longitude:	098° 04' 29" W			
Well County:	Travis	Elevation:	960 ft. above sea level			
Type of Work:	New Well	Proposed Use:	Domestic			

Drilling Start Date: 7/14/2003 Drilling End Date: 7/14/2003

	Diameter (in.)		Top Depth (ft.)		Bottom Dep	th (ft.)
Borehole:					13	
	8			13	250	
Drilling Method:	Air Rotary					
Borehole Completion:	Filter Packed					
	Top Depth (ft.)	Top Depth (ft.) Bottom Deptl		Filter	^r Material	Size
Filter Pack Intervals:	150	250	Grave		ravel	
	Top Depth (ft.)	Bottom	Depth (ft.) [Description (number of sa	acks & material)
Annular Seal Data:	l Data: 0		100		8	
	130		150		4	
Seal Method: PR	ESSURE CEME	NTED		Distance to F	Property Line (ft.):	No Data
Sealed By: Dri	iller		D	vistance to Sep concentrated c	otic Field or other ontamination (ft.):	No Data
				Distance to	Septic Tank (ft.):	No Data
				Meth	od of Verification:	NOT YET INSTALLED
Surface Completion:	Surface Sleeve	Installed				
Water Level:	175 ft. below la	and surface	on 200 3	3-07-16 Mea	asurement Method:	Unknown
Packers:	PLASTIC 100					
Type of Pump:	Submersible			P	Pump Depth (ft.): 24	40
Well Tests:	Jetted	Yield	d: 20 GF	PM		
	Strata Depth (ft.)	Water Type				
----------------------	---	-----------------------------------	----------------	-------	--	
Water Quality:	No Data	No Data				
		Chemical Analysis Ma	ade: No			
	Did the driller I	knowingly penetrate any strata wh	nich			
			ns?. 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 results.					
			intai.			
Company Information:	BEE CAVE DRILLI	NG, INC.				
	185 ANGELFIRE D DRIPPING SPRING	R. iS, TX 78620				
Driller Name:	BOBBY ROBERTS	Licer	nse Number:	54416		
Comments:	No Data					

Top (ft.)	Bottom (ft.)	Description
0	1	TOPSOIL
1	5	SURFACE ROCK
5	28	CALICHE
28	45	GREY LIMESTONE
45	50	GREY CLAY
50	65	GREY LIMESTONE
65	75	GREY CLAY
75	162	GREY LIMESTONE
162	168	GREY CLAY
168	188	GREY ROCK
188	235	LIGHT GREY & WHITE ROCK W/B
235	250	GREY ROCK

Casing: BLANK PIPE & WELL SCREEN DATA

			Setting From Fo (it.)	
4.5 NEW	PLASTIC	0 - 18	0	
4.5 NEW SCREEN MFG. 180 - 240 .10				
4.5 NEW PLASTIC 240 - 250				

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	STATE OF TEXAS WELL REPORT for Tracking #26181			
Owner:	BOB HUTHNANCE	Owner Well #:	003	
Address:	4001 HARBORLIGHT COVE	Grid #:	57-48-1	
Well Location:		Latitude:	30° 20' 11" N	
	DRIPPING SPRINGS, TX 78620	Longitude:	098° 05' 17" W	
Well County:	Travis	Elevation:	1026 ft. above sea level	
Type of Work:	New Well	Proposed Use:	Domestic	

	Diameter (in.)		Top Depth (ft.)		Bottom Depth (ft.)		
Borehole:	10			0	13		
	7		1	3	130		
Drilling Method:	Air Rotary						
Borehole Completion:	Filter Packed						
	Top Depth (ft.)	Bottom Dep	th (ft.)	Filter M	aterial	Size	
Filter Pack Intervals:	70	130		Gravel			
	Top Depth (ft.)	Bottom	n Depth (ft.)	Des	Description (number of sacks & material)		y
Annular Seal Data:	0	0 13			10		
55			70		2		
Seal Method: SLURRIED & POURED Distance to Property Line (ft.): No Data							
Sealed By: GR	EG SVETLIK		Dista conc	nce to Septic entrated con	c Field or other tamination (ft.): N	o Data	
			I	Distance to S	Septic Tank (ft.): N	o Data	
				Method	of Verification: N	OT YET IN	STALLED
Surface Completion:	Surface Sleeve	e Installed					
Water Level:	88 ft. below la	nd surface of	on 2003-09-	02 Measu	urement Method:	Unknown	1
Packers:	PLASTIC 13						
Type of Pump:	Submersible			Pur	mp Depth (ft.): 12	0	
Well Tests:	Jetted	Yiel	d: 15 GPM				

	Strata Depth (ft.)	Water Type			
Water Quality:	No Data	No Data			
		Chemical Analysis	s Made: No		
	Did the driller	knowingly penetrate any strata contained injurious constit	a which tuents?: No		
Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.					
Company Information:	BEE CAVE DRILL	NG, INC.			
	185 ANGELFIRE D DRIPPING SPRINC	9R. 3S, TX 78620			
Driller Name:	JIM BLAIR	L	icense Number:	54416	
Apprentice Name:	GREG SVETLIK	Ą	Apprentice Number	:: WWDAPP00001 734	
Comments:	No Data				

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0	10	SURFACE ROCK	4.5 NEW PLASTIC 0 - 80
10	30	CALICHE	4.5 NEW SCREEN MFG. 80 - 120 .10
30	32	GREY SHALE	4.5 NEW PLASTIC 120 - 130
32	63	TAN ROCK W/ CALICHE	-
63	68	TAN CLAY	
68	105	GREY LIMESTONE	-
105	130	TAN & GREY LIMESTONE W/B 15 GPM	-

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s	ТАТЕ	OF TEXAS PLUG	GING F	REPORT f	or Tracking #29108
Owner:	Cypre	ess Ranch Limited		Owner Wel	#: No Data
Address:	500 P	laza on the Lake, Ste. 170)	Grid #:	57-48-2
Well Location:	West	n, TX 78746 Cypress Hills		Latitude:	30° 21' 07" N
	Spice	wood, TX 78669		Longitude:	098° 04' 54" W
Well County:	Travis	5		Elevation:	No Data
Well Type: Withdrawal of Water					
Drilling Informat	ion				
Company: N	o Data			Date Drille	d: 6/1/2004
Driller: A	AARON GLASS License Number: 42			mber: 4227	
		Diameter (in.)	Тор	Depth (ft.)	Bottom Depth (ft.)
Borehole:		6			490
Plugging Informa Date Plugged: Plug Method:	ation 12/1/2 Tren	2005 nmie pipe cement from bo	Plugger:	ROCENDO /	ALVAREZ
Casir	ng Left ir	Well:		Plug	(s) Placed in Well:
Dla (in.) To	p (ft.)	Bottom (ft.)	Гор (ft.)	Bottom (ft.)	Description (number of sacks & material)
6	-1	18	0	290	113
Certification I	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 Info	mation:	2520 HWY. 290 WEST DRIPPING SPRINGS. T	.LING, INC X 78620		
Driller Name:		AARON GLASS	-	L	icense Number: 4227
Comments:		No Data			

	STATE OF TEXAS WELL REPORT for Tracking #32179		
Owner:	Kendall Collier	Owner Well #:	No Data
Address:	5414 Reimers Road Austin TX 78669	Grid #:	57-48-2
Well Location:	5414 Reimers Road	Latitude:	30° 20' 55" N
	Austin, TX 78669	Longitude:	098° 04' 32" W
Well County:	Travis	Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 5/17/2003 Drilling End Date: 6/30/2003

	Diameter (in.)	Top Dep	oth (ft.)	Bottom Depth (ft.)	
Borehole:	Borehole: 10			10	
	8	10)	38	
	6.25	38	3	405	
Drilling Method:	Air Hammer				
Borehole Completion:	Straight Wall				
	Top Depth (ft.)	Bottom Depth (ft.)	Des	scription (number of sacks & material)	
Annular Seal Data:	0	38	8 Cement		
Seal Method: Ha	Distance to Property Line (ft.): No Data				
Sealed By: Dr i	Sealed By: Driller Distance to Septic Field or other concentrated contamination (ft.): 200			c Field or other ntamination (ft.): 200	
		D	istance to S	Septic Tank (ft.): No Data	
			Method	of Verification: Tape Measure- Proposed Site	
Surface Completion:	Surface Sleeve In	stalled			
Water Level:	310 ft. below land	d surface on 2003-06-	30 Meas	urement Method: Unknown	
Packers:	Shale Catcher 35	50'			
Type of Pump:	Submersible		Pu	mp Depth (ft.): 380	
Well Tests:	Estimated	Yield: 50 GPM			

_

	Strata Depth (ft.)	Water Type		
Water Quality:	No Data	No Data		
		Chemical Analysis Made:	No	
	Did the driller	knowingly penetrate any strata which contained injurious constituents?:	No	
Certification Data:	The driller certified th driller's direct superv correct. The driller u the report(s) being re	nat the driller drilled this well (or the we ision) and that each and all of the state nderstood that failure to complete the eturned for completion and resubmittal.	II was drille ments her required ite	ed under the rein are true and ems will result in
Company Information:	Tom Arnold Drillin	ng		
	1147 County Road Round Rock, TX	1 170 78664		
Driller Name:	Tommy Arnold	License I	Number:	2096
Comments:	\$dfs			

Top (ft.)	Bottom (ft.)	Description
0	1	Brown Limestone
1	2	Red Clay
2	17	Yellow Limestone
17	22	Blue Limestone
22	44	Brown Limestone
44	82	Blue Bimestone and Shale
82	90	Blue Shale
90	108	Gray Limestone
108	134	Yellow Limestone
134	157	Gray Limestone
157	189	Yellow Limestone
189	246	Blue Limestone
246	266	Gray Limestone
266	325	Brown Limestone
325	330	Gray Limestone
330	350	White Limestone
350	365	White Sandstone
365	378	Gray Limestone

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)		
6 1/4 Ne	w Plastic	0 40			
4 1/2 New Plastic 0 405					
Perf. 385 405					

378	390	White Limestone
390	400	White Limestone and Fractures
400	405	Gray Limestone

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Texas Department of Licensing and Regulation

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	STATE OF TEXAS WELL REPORT for Tracking #41332				
Owner:	WILL SNYDER	Owner Well #:	No Data		
Address:	21814 1/2 HWY 71 WEST SPICEWOOD TX 78669	Grid #:	57-48-2		
Well Location:	21511 HWY 71 WEST	Latitude:	30° 21' 27" N		
	SPICEWOOD, TX 78669	Longitude:	098° 04' 08" W		
Well County:	Travis	Elevation:	1064 ft. above sea level		
Type of Work:	New Well	Proposed Use:	Domestic		

Drilling Start Date: 6/23/2004

Drilling End Date: 6/23/2004

	Diameter	(in.)	Top Dep	oth (ft.)	Bottom Depth	h (ft.)
Borehole:	8		0		320	
Drilling Method:	Air Rotary					
Borehole Completion:	Filter Packed					
	Top Depth (ft.)	Bottom Dep	th (ft.)	Filter M	aterial	Size
Filter Pack Intervals:	220	320		Gra	vel	
	Top Depth (ft.)	Bottom	Depth (ft.)	Des	cription (number of sa	cks & material)
Annular Seal Data:	0		100	12 CEMENT		Т
	216		220		2 HOLE PLU	JG
Seal Method: PR	RESSURE CEME	NTED	Dist	tance to Pro	operty Line (ft.): N	o Data
Sealed By: MA	ARTIN LINGLE		Distan conce	ice to Seption	c Field or other tamination (ft.): N	lo Data
			Di	istance to S	eptic Tank (ft.): N	o Data
				Method	l of Verification: N	OT YET INSTALLED
Surface Completion:	Surface Sleeve	e Installed				
Water Level:	250 ft. below la	and surface	on 2004-06- 2	23 Meas	urement Method:	Unknown
Packers:	PLASTIC 100					
Type of Pump:	Submersible			Pur	np Depth (ft.): 30	0
Well Tests:	Jetted	Yiel	d: 12 GPM			

	Strata Depth (ft.)	Water Type		
Water Quality:	No Data	No Data		
		Chemical Analys	is Made: No	
	Did the driller	knowingly penetrate any strat contained injurious const	a which ituents?: No	
Certification Data: 7 c c t	The driller certified th Iriller's direct superv correct. The driller u he report(s) being re	nat the driller drilled this well (d ision) and that each and all of inderstood that failure to comp aturned for completion and res	or the well was drill the statements he plete the required it submittal.	led under the prein are true and tems will result in
Company Information:	BEE CAVE DRILL	ING, INC.		
	185 ANGEL FIRE	DR. GS, TX 78620		
Driller Name:	MARTIN DALE LIN	NGLE, JR.	License Number:	54813
Comments:	No Data			
Lith	ology:		Casing:	

DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description	
0	3	TOPSOIL	
3	20	CALICHE	
20	60	BROWN CLAY	
60	100	GREY LIMESTONE W/CLAY LAYERS	
100	290	LIMESTONE	
290	320	WHITE ROCK W/B 12 GPM	

Casing: **BLANK PIPE & WELL SCREEN DATA**

Dia. (in.) New/Used Type Setting From/To (ft.) 4.5 NEW PLASTIC 0 - 250 4.5 NEW SCREEN MFG 250 - 310 .10 4.5 NEW PLASTIC 310 - 320

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

	STATE OF TEXAS WELL REPORT for Tracking #55013				
Owner:	TOMMY WILBORN	Owner Well #:	No Data		
Address:	4504 VISTA ESTATES CT. SPICEWOOD. TX 78669	Grid #:	57-48-2		
Well Location:	LOT 17 VERDE VISTA	Latitude:	30° 21' 40" N		
	SPICEWOOD, TX 78669	Longitude:	098° 03' 58" W		
Well County:	Travis	Elevation:	980 ft. above sea level		
Type of Work:	New Well	Proposed Use:	Domestic		

Drilling Start Date: 2/16/2005 Drilling End Date: 2/16/2005

	Diameter (in.) 10		Top Depth (ft.)		Bottom Deptl	h (ft.)
Borehole:				0	13	
	8			13	290	
Drilling Method:	Air Hammer					
Borehole Completion:	Filter Packed					
	Top Depth (ft.)	Bottom Dep	th (ft.)	Filter M	laterial	Size
Filter Pack Intervals:	190	290		Gra	vel	
	Top Depth (ft.)	Bottom	n Depth (ft.)	Des	cription (number of sa	cks & material)
Annular Seal Data:	0		10		10 CEMENT	
	180		190	3 HOLE PLUG		IG
Seal Method: SL	URRIED & POUI	RED		Distance to Pro	operty Line (ft.): N	o Data
Sealed By: GR	EG SVETLIK		Dis co	tance to Seption	c Field or other ntamination (ft.): N	lo Data
				Distance to S	Septic Tank (ft.): N	o Data
				Method	d of Verification: N	OT YET INSTALLED
Surface Completion:	Surface Sleeve	Installed				
Water Level:	200 ft. below la	and surface	on 2005- 0	02-23 Meas	urement Method:	Unknown
Packers:	PLASTIC 10					
Type of Pump:	Submersible			Pur	mp Depth (ft.): 26	0
Well Tests:	Jetted	Yiel	d: 30 GPN	n		

Water Quality: Strata Depth (t.) Water Type No Data No Data Chemical Analysis Made: No Did the driller knowingly penetrate any strata which contained injurious constituents?: No Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal. Company Information: BEE CAVE DRILLING, INC. 185 ANGELFIRE DR. DRIPPING SPRINGS, TX 78620 Driller Name: JIM BLAIR License Number: 54416 Apprentice Name: GREG SVETLIK Mo Data Economents: No Data MyDAPP00001						
Water Quality: No Data No Data Chemical Analysis Made: No Did the driller knowingly penetrate any strata which contained injurious constituents?: No Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal. Company Information: BEE CAVE DRILLING, INC. 185 ANGELFIRE DR. DRIPPING SPRINGS, TX 78620 Driller Name: JIM BLAIR License Number: 54416 Apprentice Name: GREG SVETLIK No Data Mo Data		Strata Depth (ft.)	Water Type			
Chemical Analysis Made: No Did the driller knowingly penetrate any strata which contained injurious constituents?: No Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal. Company Information: BEE CAVE DRILLING, INC. 185 ANGELFIRE DR. DRIPPING SPRINGS, TX 78620 License Number: 54416 Apprentice Name: JIM BLAIR License Number: 54416 Apprentice Name: GREG SVETLIK Apprentice Number: WWDAPP00007 Toda No Data Kata Kata	Water Quality:	No Data	No Data			
Did the driller knowingly penetrate any strata which contained injurious constituents?: No Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal. Company Information: BEE CAVE DRILLING, INC. 185 ANGELFIRE DR. DRIPPING SPRINGS, TX 78620 Driller Name: JIM BLAIR License Number: 54416 Apprentice Name: GREG SVETLIK Apprentice Number: WWDAPP00007 734 Comments: No Data No Data Kenter Statements			Chemical Analysis	s Made: No)	
Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal. Company Information: BEE CAVE DRILLING, INC. 185 ANGELFIRE DR. DRIPPING SPRINGS, TX 78620 Driller Name: JIM BLAIR Apprentice Name: GREG SVETLIK No Data No Data		Did the driller	knowingly penetrate any strata contained injurious constit	a which :uents?: No)	
Company Information: BEE CAVE DRILLING, INC. 185 ANGELFIRE DR. DRIPPING SPRINGS, TX 78620 Driller Name: JIM BLAIR Apprentice Name: GREG SVETLIK Apprentice Name: No Data	Certification Data: 7 c c t	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.				
185 ANGELFIRE DR. DRIPPING SPRINGS, TX 78620 Driller Name: JIM BLAIR Apprentice Name: GREG SVETLIK Apprentice Name: No Data	Company Information:	BEE CAVE DRILL	ING, INC.			
Driller Name: JIM BLAIR License Number: 54416 Apprentice Name: GREG SVETLIK Apprentice Number: WWDAPP00007 Comments: No Data Vertice Number: Vertice Number:		185 ANGELFIRE D DRIPPING SPRING	DR. GS, TX 78620			
Apprentice Name: GREG SVETLIK Apprentice Number: WWDAPP0000 Comments: No Data Volume Volume	Driller Name:	JIM BLAIR	L	icense Numb.	er: 5	4416
Comments: No Data	Apprentice Name:	GREG SVETLIK	A	pprentice Nu	mber:	WWDAPP00001 734
	Comments:	No Data				

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0	2	TOPSOIL	4.5 NEW PLASTIC 0 - 248
2	18	SHELF ROCK & CALICHE	4.5 NEW SCREEN MFG. 248 - 288 .050
18	26	YELLOW CLAY	4.5 NEW PLASTIC 288 - 290
26	31	YELLOW CLAY	
31	64	GOLD SANDSTONE	
64	68	GREY SHALE	
68	83	GREY LIMESTONE	
83	105	GREY SANDY SHALE	
105	192	GREY LIMESTONE	
192	210	GREY SHALE	
210	235	LIGHT GREY LIMESTONE W/B 12 GPM	
235	243	GREY LIMESTONE	
243	248	WHITE & LIGHT GREY LIMESTONE	
248	257	GREY LIMESTONE	
257	263	WHITE LIMESTONE	
263	277	WHITE ROCK W/B 30 GPM	

277	282	LIGHT GREY FRACTURED LIMESTONE
282	290	GREY LIMESTONE

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

	STATE OF TEXAS WELL REPORT for Tracking #55311					
Owner:	Patricia A Morris & Kenneth E Pfiester	Owner Well #:	1			
Address:	4609 Little Creek Trail Spicewood TX 78669	Grid #:	57-48-1			
Well Location:	4609 Little Creek Trail	Latitude:	30° 21' 25" N			
	Spicewood, TX 78669	Longitude:	098° 05' 23" W			
Well County:	Travis	Elevation:	No Data			
Type of Work:	New Well	Proposed Use:	Domestic			

Drilling Start Date: 12/1/2003 Drilling End Date: 12/1/2003

	Diameter (in	.) Top Dep	oth (ft.)	Bottom Depth (ft.)	
Borehole:	8	0		100	
	6	10	0	257	
Drilling Method:	Air Rotary				
Borehole Completion:	Straight Wall				
	Top Depth (ft.)	Bottom Depth (ft.)	Des	cription (number of sacks & material	
Annular Seal Data:	0	100		9	
Seal Method: Pr	ressure Tremmie	Dis	tance to Pro	operty Line (ft.): 20	
Sealed By: Driller		Distance to Septic Field or other concentrated contamination (ft.): 100+			
		D	istance to S	Septic Tank (ft.): No Data	
			Method	d of Verification: landowner	
Surface Completion:	Surface Sleeve I	nstalled			
Water Level:	No Data				
Packers:	Burlap 155', 150)', 100'			
Type of Pump:	No Data				
Well Tests:	Jetted	Yield: 9 GPM			

		Strata Depth (ft.)	Water Type				
V	Vater Quality:	180-242	Trinity				
			Chemical Analys	sis Made: No	D		
		Did the driller	knowingly penetrate any stra contained injurious cons	ita which tituents?: No	0		
С	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.						
С	Company Information:	APEX Drilling Inc.					
		PO Box 867 Marble Falls, TX 7	78654				
D	Priller Name:	Michael G Becker	, P.G.	License Numb	ber:	54516	
С	Comments:	Amendment to Tra Well Location to c Report to alter the	acking # 41555: Changes a orrect 911 address. Nothin original Well Report	re to correct tl g else has bee	he Ow en ch <i>a</i>	mer's Name & anged on the V	the Vell

Top (ft.)	Bottom (ft.)	Description
0	3	Caliche
3	40	White-Tan Limestone
40	87	Grey Limestone
87	130	Blue Clay
130	152	Red Clay
152	180	Red Sandstone
180	242	Gravel
242	257	Tan Clay

Casing:	
BLANK PIPE & WELL SCREEN DATA	(

Dia. (in.) New/Used Type Setting From/To (ft.)

4.5" (5"OD) New PVC +2' to 257' Sch40

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STATE OF TEXAS PLUGGING REPORT for Tracking #73104							
Owner:	TEXAS	S ENG. SOL./CYPRE	SS #9	Owner \	Vell #: No Da	ta	
Address:	5000 E	BEE CAVES RD., STE	E. 206	Grid #:	57-48-	1	
Wall Leastion	AUSTI	N, TX 78746		Latitude	: 30° 2	21' 14" N	
Well Location.	SPICE	WOOD, TX 78669	_vD.	Longitud	le: 098° 0	05' 04" W	
Well County:	Travis			Elevatio	n: No Da	ta	
Well Type:	Wi	thdrawal of Water					
Drilling Information	on						
Company: No	Data			Date D	rilled: 6/2/	2011	
Driller: AARON GLASS			License	Number: 422	7		
Well Report Tr	acking	<u>#258225</u>					
		Diameter (in.)		Top Depth (ft.)	Bottom	Depth (ft.)	
Borehole:		10.875			2	130	
Plugging Informat	ion						
Date Plugged:	6/2/20	11	Plu	igger: AARON	GLASS		
Plug Method:	See (Comments					
Casing	g Left in	Well:		Plu	ıg(s) Placed in W	ell:	
· · · · · ·	-		Top (ft.)	Bottom (ft.)	Description (nu	umber of sacks & ma	terial)
N	o Data	_	250	430	29	CEMENT	
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 Inforr	Company Information: CENTEX PUMP & SUPPLY, INC. 2520 HWY. 290 WEST DRIPPING SPRINGS TX 79620						
Driller Name:		AARON GLASS			License Numb	er: 4227	
Comments:		TRIMMIE 430' TO 2	250'				

	STATE OF TEXAS WELL REPORT for Tracking #73207				
Owner:	CYPRESS RANCH L.T.D./MOORE	Owner Well #:	No Data		
Address:	1000 CUERNAVACA DRIVE AUSTIN, TX 78733	Grid #:	57-48-2		
Well Location:	HWY. 71 @ CRAWFORD RD.	Latitude:	30° 21' 03" N		
	SPICEWOOD, TX 78669	Longitude:	098° 04' 33" W		
Well County:	Travis	Elevation:	No Data		
Type of Work:	Reconditioning	Proposed Use:	Public Supply		

Drilling Start Date: 11/21/2005 Drilling End Date: 11/23/2005

Plans Approved by TCEQ - YES

	Diameter	(in.)	Top Depth (ft.)	Bottom Dept	th (ft.)	
Borehole:	10.75		0	280		
Drilling Method:	Air Rotary					
Borehole Completion:	Filter Packed					
	Top Depth (ft.)	Bottom Depth (ft.,) Filter	Material	Size	
Filter Pack Intervals:	115	280	Gr	avel	1/4-3/8	
	Top Depth (ft.)	Bottom Dep	th (ft.) D	escription (number of sa	acks & material)	
Annular Seal Data:	0	115		1 GEL		
	0	115		40 CEMEN	40 CEMENT	
Seal Method: PI	RESSURE TRIMN EMENT	ſΥ	Distance to F	Property Line (ft.): 5	i0+	
Sealed By: D	riller		Distance to Sep concentrated co	tic Field or other ontamination (ft.): 1	100+	
			Distance to	Septic Tank (ft.):	No Data	
			Metho	od of Verification: C	OWNER	
Surface Completion:	Surface Slab Ir	nstalled				
Water Level:	No Data					
Packers:	NONE GRAVE	L PACKED 11	5 TO 280			
Type of Pump:	Submersible					
Well Tests:	Jetted	Yield: 20) GPM			

		Strata Depth (ft.)	Water Type			
Water	Quality:	40	GLENROSE			
			Chemical Analysis M	Made: Yes		
		Did the driller	knowingly penetrate any strata w contained injurious constitue	vhich ents?: No		
Certifi	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.					
Comp	any Information:	WESTERN WATE	R WELLS			
		500 SOUTHLAND BURNET, TX 786	DRIVE 11			
Driller	Name:	FRANK GLASS	Lice	ense Number:	1313	
Comm	nents:	No Data				

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	35	CALICHE
35	70	BLUE LIMESTONE
70	180	GRAY LIMESTONE
180	200	WHITE LIMESTONE
200	220	GRAY LIMESTONE
220	250	WHITE LIMESTONE
250	280	GRAY LIMESTONE

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)

6 5/8" N STEEL 0 TO 280 .250

100' PERF.

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

	STATE OF TEXAS WELL REPORT for Tracking #74963				
Owner:	THE MOORE GROUP	Owner Well #:	2nd. Comm Well		
Address:	1000 Cuernavaca Dr	Grid #:	57-48-2		
Well Location:	1st. Trinity Test Hole 2nd. Comm.	Latitude:	30° 20' 56" N		
	Well TX	Longitude:	098° 04' 52" W		
Well County:	Travis	Elevation:	No Data		
Type of Work:	New Well	Proposed Use:	Test Well		

Diameter (in.) Top Depth (ft.) Bottom Depth (ft.) Borehole: 16 18 490 9 0 18 **Drilling Method: Air Rotary** Borehole Completion: **Open Hole** Annular Seal Data: No Data Seal Method: 2 Bags VOLCLAY Distance to Property Line (ft.): No Data Sealed By: Unknown Distance to Septic Field or other concentrated contamination (ft.): No Data Distance to Septic Tank (ft.): No Data Method of Verification: No Data Surface Completion: Unknown Water Level: No Data Packers: No Data

Drilling End Date: 6/1/2004

Type of Pump: No Data

Drilling Start Date: 6/1/2004

Well Tests: Jetted

No Test Data Specified

	Strata Depth (ft.)	Water Type				
Water Quality:	No Data	Glen Rose/Trinity				
		Chemical Analysis Made:	Yes			
	Did the driller k	knowingly penetrate any strata which contained injurious constituents?:	Νο			
Certification Data:	Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.					
Company Information:	CENTRAL TEXAS	DRILLING INC				
	2520 Hwy 290 Wes Dripping Springs,	it TX 78620				
Driller Name:	Aaron Glass	License N	√umber:	4227		
Comments:	\$dfs					

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	24	Caliche
24	30	Blue Limestone
30	120	Gray Limestone
120	140	Tan Limestone
140	180	Gray Limestone
180	190	Gray/Tan Limestone
190	235	Tan Limestone
235	255	Gray Limestone
255	265	Gray Limestone with Gray Clay
265	285	Gray Limestone
285	310	Hammid Clay
310	325	Hammid Clay with Oil
325	330	Gray Limestone
330	345	Gray Red Sandstone
345	360	Red Sandstone with Blue Shale
360	380	Trinity Gravel and Red Sandstone

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)

6 New PVC -2 18 Sch40

380	420	Brown/Yellow/Red Limestone
420	460	Black Limestone w/Red Clay Strips Hard
460	470	Tan/Brown Limestone
470	480	Black Limestone
480	490	Black Limestone with Blue Shale

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

	STATE OF TEXAS WELL REPORT for Tracking #75740			
Owner:	Eugne Reimers	Owner Well #:	No Data	
Address:	23800 Hamilton Pool Dripping Springs, TX 78620	Grid #:	57-48-1	
Well Location:	23800 Hamilton Pool	Latitude:	30° 21' 02" N	
	Dripping Springs, TX 78620	Longitude:	098° 05' 59" W	
Well County:	Travis	Elevation:	No Data	
Type of Work:	New Well	Proposed Use:	Domestic	

Drilling Start Date: 5/5/2002 Drilling End Date: 5/6/2002

	Diameter (in.) Top Dep	oth (ft.)	Bottom Depth (ft.)
Borehole:	8 0			10
	6.75	1()	400
Drilling Method:	Air Rotary			
Borehole Completion:	Cased to Bottom	1		
	Top Depth (ft.)	Bottom Depth (ft.)	Des	scription (number of sacks & material
Annular Seal Data:	0	100		
Seal Method: Slu	urry	Dis	tance to Pro	operty Line (ft.): No Data
Sealed By: James Tucker		Distar conce	nce to Septie entrated cor	c Field or other htamination (ft.): No Data
		D	istance to S	Septic Tank (ft.): No Data
			Method	d of Verification: No Data
Surface Completion:	Unknown			
Water Level:	No Data			
Packers:	Cement 100'			
Type of Pump:	Submersible		Pur	mp Depth (ft.): 240
Well Tests:	Jetted	Yield: 6 GPM		

	Strata Depth (ft.)	Water Type		
Water Quality:	No Data	No Data		
		Chemical Analysis Made:	Unknov	wn
	Did the driller	knowingly penetrate any strata which contained injurious constituents?:	No	
Certification Data:	The driller certified th driller's direct supervi correct. The driller u the report(s) being re	hat the driller drilled this well (or the we ision) and that each and all of the state nderstood that failure to complete the eturned for completion and resubmittal.	ll was drille ments her required ite	ed under the ein are true and ems will result in
Company Information:	James Tucker Dril	lling, Inc.		
	P. O. Box 308 Dripping Springs,	TX 78620		
Driller Name:	J.B. Tucker	License	Number:	1488
Comments:	\$dfs			

Top (ft.)	Bottom (ft.)	Description	
0	1	Surface	
1	10	Ledge Rock	
10	15	Brown Limestone	
15	20	Seepy	
20	23	Blue Clay	
23	28	Medium Limestone	
28	30	Clay	
30	34	Medium Limestone	
34	35	Clay	
35	70	Lt. Gray Limestone	
70	80	Lt. Brown Sandstone	
80	83	Med. Gray Limestone	
83	89	Lt. Gray Limestone	
89	91	Medium Limestone	
91	95	Lt. Brown Limestone	
95	110	Brown Sandstone Water 2 gpm	
110	120	Blue Clay	

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used	Туре	Setting From/To (ft.)
5 New Plastic +2	400	
Perf. 100 120		
Perf. 180 220		
Perf. 220 240		
Perf. 300 320		

120	125	Brown Clay
125	138	Brown Sandstone
138	142	Blue Clay
142	170	Red and Brown Clay
170	195	White Limestone
195	220	Broken Limestone
220	240	Lt. Gray Limestone
240	260	Blue Clay
260	290	White Broken Limestone
290	300	Red and Blue Limestone
300	315	Hard Brown Limestone
315	320	Broken Limestone
320	340	Hard Brown Limestone
340	360	Hard Limestone
360	380	Broken Limestone
380	400	Base on Well

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

	STATE OF TEXAS WELL REPORT for Tracking #91347			
Owner:	Lyle Murphey	Owner Well #:	No Data	
Address:	PO Box 340156	Grid #:	57-48-2	
Well Location:	2114 Hwy 71 W	Latitude:	30° 21' 11" N	
	Spicewood, TX 78669	Longitude:	098° 03' 51" W	
Well County:	Travis	Elevation:	No Data	
Type of Work:	New Well	Proposed Use:	Public Supply	
Drilling Start Date: 7/22/2006 Drilling End Date: 7/23/2006 Plans Approved by TCEQ - YES				

	Diameter (in.,) Top De	oth (ft.)	Bottom Depth (ft.)
Borehole:	8	C		260
	6.5	26	0	415
Drilling Method:	Air Rotary			
Borehole Completion:	Straight Wall			
	Top Depth (ft.)	Bottom Depth (ft.)	De	scription (number of sacks & material)
Annular Seal Data:	0	260		53 of Portaind
Seal Method: Pr	essure Tremmie	Dis	stance to Pr	roperty Line (ft.): 40
Sealed By: Driller		Distar conce	nce to Septi entrated cor	ic Field or other ntamination (ft.): 150+
		C	istance to S	Septic Tank (ft.): No Data
			Metho	d of Verification: Landowner
Surface Completion:	Surface Sleeve Ir	nstalled		
Water Level:	No Data			
Packers:	Neoprene 265', 2	260'		
Type of Pump:	No Data			

Well Tests: Jetted Yield: 15 GPM

	Strata Depth (ft.)	Water Type		
Water Quality:	260-395	Cow Creek		
		Chemical Analysis Ma	ade: No	
	Did the driller h	knowingly penetrate any strata wh contained injurious constituer	nich nts?: No	
Certification Data:	The driller certified the driller's direct supervis correct. The driller ur the report(s) being re	at the driller drilled this well (or the sion) and that each and all of the nderstood that failure to complete turned for completion and resubm	e well was drille statements here the required ite nittal.	ed under the ein are true and ems will result in
Company Information:	Apex Drilling, Inc			
	PO Box 867 Marble Falls, TX 7	8654		
Driller Name:	Michael G Becker	P.G. Lice	nse Number:	54516
Comments:	No Data			

Top (ft.)	Bottom (ft.)	Description
0	28	Caliche
28	105	Grey Limestone w/ Clay
105	120	Tan Limestone
120	260	Tan-Grey Limestone
260	330	Tan Limestone H2O
330	380	White Limestone H2O
380	395	Tan Limestone
395	415	Grey Limestone w/ Clay

Casing: BLANK PIPE & WELL SCREEN DATA

 Dia. (in.)
 New/Used
 Type
 Setting From/To (ft.)

 4.5" (5" OD)
 New PVC +2' to 315' SDR17

4.5" (5" OD) New Slotted PVC 315' to 415' .035

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

	STATE OF TEXAS WELL REPORT for Tracking #92815			
Owner:	CYPRESS RANCH LTD	Owner Well #:	#4	
Address:	1000 CUERNAVACA DRIVE	Grid #:	57-48-2	
Well Location:	HWY 71 @ CRAWFORD RD	Latitude:	30° 21' 17" N	
	SPICEWOOD, TX 78669	Longitude:	098° 04' 43" W	
Well County:	Travis	Elevation:	No Data	
Type of Work:	New Well	Proposed Use:	Public Supply	

Drilling End Date: 3/26/2004

Diameter (in.) Top Depth (ft.) Bottom Depth (ft.) Borehole: 10 0 310 Drilling Method: Air Rotary Borehole Completion: Straight Wall Bottom Depth (ft.) Top Depth (ft.) Description (number of sacks & material) Annular Seal Data: 0 180 115 Seal Method: PRESSURE TRIMMY Distance to Property Line (ft.): No Data Sealed By: WESTERN WATER WELLS Distance to Septic Field or other concentrated contamination (ft.): 100+ Distance to Septic Tank (ft.): No Data Method of Verification: OWNER Surface Completion: Surface Slab Installed Water Level: No Data Packers: No Data Type of Pump: **Submersible** Well Tests: Jetted Yield: 20-30 GPM

Drilling Start Date: 3/25/2004

Plans Approved by TCEQ - NO

	Strata Depth (ft.)	Water Type		
Water Quality:	35	COW CREEK		
		Chemical Analysis	Made: No	
	Did the driller I	knowingly penetrate any strata contained injurious constitu	which uents?: No	
Certification Data: T d c tl	he driller certified that riller's direct supervisorrect. The driller ur ne report(s) being re	at the driller drilled this well (or sion) and that each and all of t nderstood that failure to comple turned for completion and resu	[•] the well was drille he statements her ete the required ite ibmittal.	ed under the ein are true and ems will result in
Company Information:	WESTERN WATER	R WELLS LLC		
	500 SOUTHLALND BURNET, TX 7861	DRIVE 1		
Driller Name:	Frank Glass	Li	icense Number:	1313
Comments:	LCS\$ TWDB SW #57-48-:	214 Doc Jones 8/23/2011		

Casing: BLANK PIPE & WELL SCREEN DATA

	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
	1	TOP SOIL	6 5/8 NEW STEEL +2 315 250
1	57	CALICHE	100' PERF
57	90	BLUE LIME	GRAVEL PACKED 180 - 315
90	160	GREY LIME	
160	200	GREY LIME & CLAY	
200	280	TAN & WHITE LIME PORCE BLUE LIME STRIPS	
280	295	BROWN LIME & CLAY STRIPS	
295	310	CLAY STRIPE HAMMOND	

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

	STATE OF TEXAS WELL REF	ORT for Trac	cking #92851
Owner:	CYPRESS RANCH LTD IRR#2 CLOSES TO RD	Owner Well #:	No Data
Address:		Grid #:	57-48-2
Address.	AUSTIN, TX 78733	Latitude:	30° 21' 41" N
Well Location:	HWY 71 @ CRAWFORD RD SPICEWOOD, TX 78669	Longitude:	098° 04' 14" W
Well County:	Travis	Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling End Date: 3/26/2004

	Diameter (in.) Top Depti	h (ft.)	Bottom Depth (ft.)
Borehole:	9	0		40
	6	40		320
Drilling Method:	Air Rotary			
Borehole Completion:	Straight Wall			
	Top Depth (ft.)	Bottom Depth (ft.)	Des	cription (number of sacks & materia
Annular Seal Data:	0	40		7
Seal Method: SI	urry	Dista	ance to Pro	operty Line (ft.): OWNER
Sealed By: W	ESTERN WATER V	VELLS Distanc concer	e to Seption trated con	c Field or other tamination (ft.): 100+
		Dis	stance to S	eptic Tank (ft.): No Data
			Method	of Verification: No Data
Surface Completion:	Surface Sleeve I	nstalled		
Water Level:	No Data			
Packers:	4 PVC & BURLA	P 40 80 220 240		
Type of Pump:	Submersible			

Drilling Start Date: 3/26/2004

	Strata Depth (ft.)	Water Type		
Water Quality:	40	COW		
		Chemical Analysis Made:	No	
	Did the driller h	knowingly penetrate any strata which contained injurious constituents?:	No	
Certification Data:	The driller certified that driller's direct supervision correct. The driller ur the report(s) being re-	at the driller drilled this well (or the we sion) and that each and all of the stat nderstood that failure to complete the turned for completion and resubmittal	ell was drille ements he required ite	ed under the rein are true and ems will result in
Company Information:	WESTERN WATEF	R WELLS LLC		
	500 SOUTHLAND I BURNET, TX 7861	DRIVE 1		
Driller Name:	Frank Glass	License	Number:	1313
Comments:	LCS\$			

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	35	CALICHE
35	75	CALICHE & LIME TAN
75	120	BLUE LIME
120	200	BLUE LIME
200	230	DARK BROWN LIME
230	245	GREY LIME
245	300	COW CREEK
300	320	GREY LIME & CLAY

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)

5 NEW PLASTIC +2 320 SCH 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.

	STATE OF TEXAS WELL REP	PORT for Trac	cking #92854
Owner:	CYPRESS RANCH LTD IRR#1 CLOSES TO RD	Owner Well #:	No Data
Address:	1000 CUERNAVACA DR	Grid #:	57-48-2
/ dui obol	AUSTIN, TX 78733	Latitude:	30° 21' 46" N
Well Location:	HWY 71 @ CRAWFORD RD SPICEWOOD, TX 78669	Longitude:	098° 04' 13" W
Well County:	Travis	Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling End Date: 3/25/2004

	Diameter (in.	.) Top Dep	th (ft.)	Bottom Depth (ft.)
Borehole:	9	0		50
	6	50		340
Drilling Method:	Air Rotary			
Borehole Completion:	Straight Wall			
	Top Depth (ft.)	Bottom Depth (ft.)	Des	scription (number of sacks & material,
Annular Seal Data:	0	50		8
Seal Method: SI	urry	Dist	ance to Pro	operty Line (ft.): OWNER
Sealed By: W	ESTERN WATER V	WELLS Distan conce	ce to Septi- ntrated cor	c Field or other htamination (ft.): 100+
		Di	stance to S	Septic Tank (ft.): No Data
			Method	d of Verification: No Data
Surface Completion:	Surface Sleeve I	nstalled		
Water Level:	No Data			
Packers:	3 PVC & BURLA	P 50 200 220		
Type of Pump:	Submersible			

Drilling Start Date: 3/25/2004

	Strata Depth (ft.)	Water Type		
Water Quality:	40	COW		
		Chemical Analysis Made	: No	
	Did the driller	knowingly penetrate any strata which contained injurious constituents?	: No	
Certification Data:	The driller certified th driller's direct supervi correct. The driller u the report(s) being re	at the driller drilled this well (or the wision) and that each and all of the star nderstood that failure to complete the sturned for completion and resubmitta	ell was drille tements he required ite I.	ed under the rein are true and ems will result in
Company Information:	WESTERN WATER	R WELLS LLC		
	500 SOUTHLAND BURNET, TX 7861	DRIVE I1		
Driller Name:	Frank Glass	License	Number:	1313
Comments:	LCS\$			

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	35	CALICHE
35	45	BLUE LIME
45	80	TAN LIME
80	120	BLUE LIME
120	200	GREY & BROWN LIME
200	220	DARK BROWN LIME
220	300	STRIPS COW CREEK & YELLOW CLAY
300	330	BLUE LIME
330	340	HAMMOND

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)

5 NEW PLASTIC +2 340 SCH 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.

	STATE OF TEXAS WELL REPORT for Tracking #95923			
Owner:	Gary Priest	Owner Well #:	No Data	
Address:	5434 Reimers Rd Spicewood TX 78669	Grid #:	57-48-2	
Well Location:	5418 Reimers Rd	Latitude:	30° 21' 07" N	
	Spicewood, TX 78669	Longitude:	098° 04' 41" W	
Well County:	Travis	Elevation:	No Data	
Type of Work:	New Well	Proposed Use:	Domestic	

Drilling Start Date: 3/17/2006 Drilling End Date: 3/17/2006

	Diameter (in.	.) Top De	pth (ft.)	Bottom Depth (ft.)
Borehole:	8	()	20
	6	2	0	365
Drilling Method:	Air Rotary			
Borehole Completion:	Straight Wall			
	Top Depth (ft.)	Bottom Depth (ft.)	De	scription (number of sacks & material)
Annular Seal Data:	0	20		5 of Portland
Seal Method: SI	urry	Di	stance to Pr	operty Line (ft.): 50
Sealed By: Driller		Dista conc	nce to Septi entrated cor	ic Field or other ntamination (ft.): 100
		C	Distance to S	Septic Tank (ft.): No Data
			Metho	d of Verification: Landowner
Surface Completion:	Surface Sleeve I	nstalled		
Water Level:	No Data			
Packers:	Burlap 260', 255	i', 20'		
Type of Pump:	No Data			
Well Tests:	Jetted	Yield: 6 GPM		

	Strata Depth (ft.)	Water Type		
Water Quality:	265-355	Cowcreek		
		Chemical Analysis Ma	ade: No	
	Did the driller I	knowingly penetrate any strata wh contained injurious constituer	nich nts?: No	
Certification Data:	The driller certified th driller's direct supervi correct. The driller un he report(s) being re	at the driller drilled this well (or the sion) and that each and all of the nderstood that failure to complete turned for completion and resubm	e well was drille statements here the required ite hittal.	ed under the ein are true and ems will result in
Company Information:	Apex Drilling, Inc			
	PO Box 867 Marble Falls, TX 7	8654		
Driller Name:	Michael G Becker,	P.G. Licer	nse Number:	54516
Comments:	No Data			

Top (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0	30	Tan Limestone	4.5" (5" OD) New PVC +2' to 275' Sch40
30	45	Grey Limestone w/ Clay	4.5" (5" OD) New Slotted PVC 275' to 355' .035
45	125	Tan Limestone	4.5" (5" OD) New PVC 355' to 365' Sch40
125	190	Grey Limestone	
190	265	Grey & Tan Limestone	
265	355	Tan & White Limestone	
355	365	Grey Clay	

Casing: **BLANK PIPE & WELL SCREEN DATA**

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

	STATE OF TEXAS WELL REPORT for Tracking #109178			
Owner:	SVY PROPERTIES	Owner Well #:	No Data	
Address:	14422 HWY. 71 W. UNIT B	Grid #:	57-48-2	
Well Location:	21220 HWY. 71 W.	Latitude:	30° 21' 16" N	
	AUSTIN, TX	Longitude: 098° 03' 56" W	098° 03' 56" W	
Well County:	Travis	Elevation:	No Data	
Type of Work:	New Well	Proposed Use:	Domestic	

Drilling Start Date: 1/5/2007 Drilling End Date: 1/5/2007

	Diameter (in.) 8.625 6.5		Top Depth (ft.) 0 50		Bottom De	əpth (ft.)	
Borehole:					50 540		
Drilling Method:	Air Rotary						
Borehole Completion:	CASED						
	Top Depth (ft.)	Top Depth (ft.) Bottom Depth (ft.)		Description (number of sacks & material)			
Annular Seal Data:	0	50		4 VOLCLAY			
	0		50		6 CEMENT		
Seal Method: SI	urry		Dis	tance to Pro	operty Line (ft.):	N/A	
Sealed By: Driller			Distance to Septic Field or other concentrated contamination (ft.): N/A				
			D	istance to S	eptic Tank (ft.):	No Data	
				Method	l of Verification:	WELL DRILLI FIRST	ED
Surface Completion:	Surface Sleeve I	nstalled					
Water Level:	No Data						
Packers:	7 BURLAP,PVC,RUBBER 50',280',300',380', 400',440',460'						
Type of Pump:	Submersible						
Well Tests:	Jetted	Yield	d: 25 GPM				
	Strata Depth (ft.)	Water Type					
----------------------	--	--	---	-----------------------	--	--------	
Water Quality:	50	TRINITY					
		Chemical Analysi	s Made: No				
	Did the driller	knowingly penetrate any strat contained injurious consti	a which tuents?: No				
Certification Data:	The driller certified th driller's direct supervi correct. The driller u the report(s) being re	nat the driller drilled this well (or ision) and that each and all of nderstood that failure to comp eturned for completion and res	or the well was d the statements lete the required ubmittal.	rille her 1 ite	ed under the ein are true and ems will result ir	ן ר	
Company Information:	CENTRAL TEXAS	DRILLING, INC.					
	2520 HWY. 290 WI DRIPPING SPRING	EST GS, TX 78620					
Driller Name:	AARON GLASS	I	_icense Number	:	4227		
Comments:	No Data						

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	30	TAN LIMESTONE
30	50	GRAY LIMESTONE
50	100	GRAY W/TAN LIMESTONE
100	120	TAN LIMESTONE
120	150	TAN LIMESTONE W/CLAY
150	165	GRAY LIMESTONE
165	270	GRAY W/TAN LIMESTONE
270	310	GRAY/BROWN LIMESTONE
310	330	TAN LIMESTONE COW CRK.
330	345	WHITE W/GRAY LIMESTONE
345	365	WHITE/TAN LIMESTONE
365	385	GRAY LIMESTONE
385	425	GRAY W/RED CLAY
455	510	RED/TAN/GRAY LIMESTONE
510	540	TRINITY GRAVEL & SAND

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.) 5" OD N SDR17 PVC +3 TO 540

5" OD N SDR17 PVC SLOT 480 TO 540 .032

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.

STATE OF TEXAS PLUGGING REPORT for Tracking #112963					
Owner:	RICHARD SKINNER #2	0	wner Well #:	2	
Address:	1310 RR 620 S. STE C-1	G G	rid #:	57-48-2	
Well Location:	AUSTIN, 1X 78734	La	atitude:	30° 20' 48" N	
	SPICEWOOD, TX 78669	Lo	ongitude:	098° 04' 46" W	
Well County:	Travis	E	levation:	920	
Well Type:	Well Type: Domestic				
Drilling Informatic	n				
Company: BE	E CAVE DRILLING, INC.	C	Date Drilled:	11/3/2005	
Driller: Jin	n Blair	License Number: 54416		54416	
Well Report Tr	acking #72569				
	Diameter (in.)	Top Dept	h (ft.)	Bottom Depth (ft.)	
Borehole:	8	0		10	
	6.5	10 270		270	
Plugging Informat	ion				
Date Plugged:	11/3/2005	Plugger: BC	BBY ROBERTS	5	
Plug Method:	Unknown				
Casing	g Left in Well:		Plug(s) Place	ed in Well:	
		Description (numb	er of sacks & materi	al)	
No	o Data	1 - 3 - 3	CEMENT		
		3 - 270 - 1	5 BENSEAL		
		NONE 0 - 1	I - TOPSOIL		

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:	BEE CAVE DRILLING, INC.		
	185 ANGELFIRE DR. DRIPPING SPRINGS, TX 78620		
Driller Name:	BOBBY ROBERTS	License Number:	54416

Comments: No Data

ST	ATE OF TEXAS PLU	JGGING REPORT for	Tracking #121409			
Owner:	SIDNEY SHINKAWA	Owner Well #	: #2			
Address:	2714 PACEBEND RD	Grid #:	57-48-2			
Well Location:	2714 PACEBEND RD	Latitude:	30° 21' 18" N			
	SPICEWOOD, TX 78669	Longitude:	098° 04' 28" W			
Well County:	Travis	Elevation:	798			
Well Type: Domestic						
Drilling Information	n					
Company: BEI	E CAVE DRILLING INC	Date Drilled:	7/22/2008			
Driller: Jim	Blair	License Number: 54416				
Well Report Tra	acking #149203					
	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)			
Borehole:	10	0	12			
	8	12	270			
Plugging Information	on					
Date Plugged:	7/22/2008	Plugger: JIM BLAIR				
Plug Method:	Unknown					
Casing	Casing Left in Well: Plug(s) Placed in Well:					
		Description (number of sacks & m	aterial)			
No	Data	0-1 TOPSOIL				
		1-4 CEMENT 3				
	4-270 CUTTINGS					

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:	BEE CAVE DRILLING INC		
	185 ANGELFIRE DR DRIPPING SPRINGS, TX 78620		
Driller Name:	JIM BLAIR	License Number:	54416
Apprentice Name:	CESAR RAMOS	Apprentice Number:	57534
Comments:	No Data		

	STATE OF TEXAS WELL REP	ORT for Trac	king #123692
Owner:	CYPRESS RANCH LTD C/O THE MOORE GROUP 3	Owner Well #:	No Data
Address:	1000 CUERNAVACA DRIVE AUSTIN, TX 78733	Grid #:	57-48-2
		Latitude:	30° 21' 10" N
Well Location:	2000 SW OF HWY 71 ON CRAWFORD RD SPICEWOOD, TX 78669	Longitude:	098° 04' 51" W
		Elevation:	No Data
Well County:	Travis		
Type of Work:	New Well	Proposed Use:	Test Well
		r ioposed Use.	

Drilling Start Date: 9/15/2003 Drilling End Date: 9/15/2003

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	20
	6	20	300
Drilling Method:	Air Rotary		
Borehole Completion:	Open Hole		
Annular Seal Data:	No Data		
Seal Method: No	ot Applicable	Distance to Pro	operty Line (ft.): No Data
Sealed By: Unknown		Distance to Septic concentrated con	c Field or other tamination (ft.): No Data
		Distance to S	eptic Tank (ft.): No Data
		Method	l of Verification: No Data
Surface Completion:	Unknown		
Water Level:	No Data		
Packers:	No Data		
Type of Pump:	No Data		
Well Tests:	Jetted	Yield: 20 25 GPM	

	Strata Depth (ft.)	Water Type			
Water Quality:	30	COW CREEK			
		Chemical Analysis Made:	No		
	Did the driller k	nowingly penetrate any strata which contained injurious constituents?:	No		
Certification Data:	The driller certified that driller's direct supervis correct. The driller un the report(s) being ret	at the driller drilled this well (or the well sion) and that each and all of the state derstood that failure to complete the r urned for completion and resubmittal.	I was drill ments he equired it	led under the erein are true and tems will result in	
Company Information	: WESTERN WATER	WELLS LLC			
	500 SOUTHLAND E BURNET, TX 7861	DRIVE 1			
Driller Name:	Frank Glass	License N	lumber:	1313	
Comments:	LCS\$				

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	55	CALICHE
55	90	BLUE LIME
90	160	GREY LIME
160	200	GREY & BROWN LIME
200	270	WHITE & TAN LIME
270	300	BROWN LIME & STRIPS HAMMOND

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)

6 NEW PLASTIC +2 20 SCH 40

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

	STATE OF TEXAS WELL REP	ORT for Trac	king #123703
Owner:	CYPRESS RANCH LTD C/O THE MOORE GROUP 1	Owner Well #:	No Data
Address:	1000 CUERNAVACA DRIVE	Grid #:	57-48-2
	AUSTIN, TX 78733	Latitude:	30° 21' 06" N
Well Location:	2000 SW OF HWY 71 ON CRAWFORD RD SPICEWOOD, TX 78669	Longitude:	098° 04' 55" W
		Elevation:	No Data
Well County:	Travis		
Type of Work:	New Well	Proposed Use:	Test Well

Drilling Start Date: 9/11/2003 Drilling End Date: 9/11/2003

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	20
	6	20	300
Drilling Method:	Air Rotary		
Borehole Completion:	Open Hole		
Annular Seal Data:	No Data		
Seal Method: No	ot Applicable	Distance to Pro	operty Line (ft.): No Data
Sealed By: U	nknown	Distance to Seption concentrated con	c Field or other tamination (ft.): No Data
		Distance to S	Septic Tank (ft.): No Data
		Method	of Verification: No Data
Surface Completion:	Unknown		
Water Level:	No Data		
Packers:	No Data		
Type of Pump:	No Data		
Well Tests:	Jetted	Yield: 15 20 GPM	

	Strata Depth (ft.)	Water Type		
Water Quality:	25	COW CREEK		
		Chemical Analysis Made	: No	
	Did the driller	knowingly penetrate any strata which contained injurious constituents?	?: No	
Certification Data: T d c tł	The driller certified th Iriller's direct supervi correct. The driller un the report(s) being re	at the driller drilled this well (or the w ision) and that each and all of the sta nderstood that failure to complete the turned for completion and resubmitta	rell was drill tements he e required it al.	ed under the rein are true and ems will result in
Company Information:	WESTERN WATER	R WELLS LLC		
	500 SOUTHLAND BURNET, TX 7861	DRIVE		
Driller Name:	Frank Glass	License	Number:	1313
Comments:	LCS\$			

Top (ft.)	Bottom (ft.)	Description	
0	1	TOPSOIL	
1	19	CALICHE	
19	45	BLUE LIME	
45	85	GRAY & BROWN LIME	
85	120	GRAY LIME	
120	160	BROWN LIME	
160	168	GRAY LIME	
168	195	WHITE FOSSILS	
195	230	WHITE PORCE LIME & GRAY STREAKS	
230	280	GRAY LIME & BROWN	
280	300	HAMMOND	

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)

6 NEW PLASTIC +2 20 SCH 40

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

STATE OF TEXAS WELL REPORT for Tracking #123705						
Owner:	CYPRESS RANCH LTD C/O THE MOORE GROUP 2	Owner Well #:	No Data			
Address:		Grid #:	57-48-2			
AUSTIN, TX 78733	AUSTIN, TX 78733	Latitude:	30° 21' 07" N			
Well Location:	/ell Location: 2000 SW OF HWY 71 ON CRAWFORD RD SPICEWOOD, TX 78669	Longitude:	098° 04' 46" W			
		Elevation:	No Data			
Well County:	Travis					
Type of Work:	New Well	Proposed Use:	Test Well			

Drilling Start Date: 9/11/2003 Drilling End Date: 9/11/2003

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)
Borehole:	9	0	20
	6	20	320
Drilling Method:	Air Rotary		
Borehole Completion:	Open Hole		
Annular Seal Data:	No Data		
Seal Method: No	t Applicable	Distance to Pro	perty Line (ft.): No Data
Sealed By: Unknown		Distance to Septic concentrated cont	Field or other amination (ft.): No Data
		Distance to Se	eptic Tank (ft.): No Data
		Method	of Verification: No Data
Surface Completion:	Unknown		
Water Level:	No Data		
Packers:	No Data		
Type of Pump:	No Data		

Well Tests: Jetted Yield: 30 GPM

	Strata Depth (ft.)	Water Type		
Water Quality:	40	COW CREEK		
		Chemical Analysis Made:	No	
	Did the driller	knowingly penetrate any strata which contained injurious constituents?:	Νο	
Certification Data: T d c tł	The driller certified th Iriller's direct supervion orrect. The driller un the report(s) being re	at the driller drilled this well (or the well ision) and that each and all of the state nderstood that failure to complete the r trurned for completion and resubmittal.	ll was drille ments her equired ite	ed under the rein are true and ems will result in
Company Information:	WESTERN WATER	R WELLS LLC		
	500 SOUTHLAND BURNET, TX 7861	DRIVE I1		
Driller Name:	Frank Glass	License N	lumber:	1313
Comments:	LCS\$			
Litho	ology:		Casing:	

DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description	
0	1	TOPSOIL	
1	60	CALICHE	
60	105	BLUE LIME	
105	215	GREY & BROWN LIME STRIP SS	
215	290	WHITE LIME PORCE TAN	
290	320	GREY LIME	

BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)

6 NEW PLASTIC +2 20 SCH 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.

STATE OF TEXAS WELL REPORT for Tracking #133074					
Owner:	Mike Edwards	Owner Well #:	No Data		
Address:	4309 Ridgepole Lane Spicewood TX 78669	Grid #:	57-48-2		
Well Location:	I Location: Verde Vista Estates Lot # 16 Spicewood, TX 78669	Latitude:	30° 21' 39" N		
		Longitude:	098° 03' 58" W		
Well County:	Travis	Elevation:	No Data		
Type of Work:	New Well	Proposed Use:	Domestic		

Drilling Start Date: 9/28/2007 Drilling End Date: 9/28/2007

	Diameter (in	.) Top De	pth (ft.)	Bottom Depth (ft.)	
Borehole:	8	()	20	
	6.5	2	0	325	
Drilling Method:	Air Rotary				
Borehole Completion:	Straight Wall				
	Top Depth (ft.)	Bottom Depth (ft.)	De	scription (number of sacks & material)	
Annular Seal Data:	0	20		4 of Portland	
Seal Method: SI	urry	Dis	stance to Pr	roperty Line (ft.): 50+	
Sealed By: Driller		Distance to Septic Field or other concentrated contamination (ft.): 100+			
		C	Distance to S	Septic Tank (ft.): No Data	
			Metho	d of Verification: Landowner	
Surface Completion:	Surface Sleeve I	nstalled			
Water Level:	No Data				
Packers:	Burlap/Neoprene 210', 200', 20'				
Type of Pump:	No Data				
Well Tests:	Jetted	Yield: 45 GPM			

	Strata Depth (ft.)	Water Type				
Water Quality:	210-285	Cowcreek				
		Chemical Analysis Made:	No			
	Did the driller	knowingly penetrate any strata which contained injurious constituents?	No			
Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.					
Company Information:	Apex Drilling, Inc					
	PO Box 867 Marble Falls, TX 7	78654				
Driller Name:	Andrew J Johnson	n License	Number:	54989		
Comments:	No Data					

Top (ft.)	Bottom (ft.)	Description
0	30	Caliche
30	60	Blue Limestone
60	85	Tan Limestone
85	180	Grey Limestone
180	190	Tan-Grey Limestone
190	210	Clay
210	255	White Limestone H2O
255	262	Grey Limestone
262	285	White Limestone H2O
285	325	Grey Limestone

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)
4.5" (5"	OD) New	PVC +2	' to 220' SDR17
4.5" (5"	OD) New	Slotted	PVC 220' to 240' .035
4.5" (5"	OD) New	PVC 24	0' to 260' SDR17
4.5" (5"	OD) New	Slotted	PVC 260' to 300' .035
4.5" (5"	OD) New	PVC 30	0' to 325' SDR17

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

STATE OF TEXAS WELL REPORT for Tracking #139951					
Owner:	Tom Buerk	Owner Well #:	No Data		
Address:	2705 Oakride Dr Spicewood, TX 78669	Grid #:	57-48-2		
Well Location:	21325 Hill Dale	Latitude:	30° 21' 27" N		
	Spicewood, TX 78669	Longitude:	098° 03' 55" W		
Well County:	Travis	Elevation:	No Data		
Type of Work:	New Well	Proposed Use:	Domestic		

Drilling Start Date: 3/29/2008 Drilling End Date: 3/29/2008

	Diameter (in	.) Top De	oth (ft.)	Bottom Depth (ft.)
Borehole:	8	(20
	6.5	2	D	320
Drilling Method:	Air Rotary			
Borehole Completion:	Straight Wall			
	Top Depth (ft.)	Bottom Depth (ft.)	De	escription (number of sacks & material)
Annular Seal Data:	0	20		4 of Portland
Seal Method: SI	urry	Dis	stance to P	roperty Line (ft.): 50+
Sealed By: D	riller	Dista conc	Distance to Septic Field or other concentrated contamination (ft.): 100+	
		C	istance to	Septic Tank (ft.): No Data
			Metho	d of Verification: Landowner
Surface Completion:	Surface Sleeve I	nstalled		
Water Level:	No Data			
Packers:	Burlap/Neopren	e 240', 220', 20'		
Type of Pump:	No Data			
Well Tests:	Jetted	Yield: 10-12 GP	М	

	Strata Depth (ft.)	Water Type		
Water Quality:	250-305	Cowcreek		
		Chemical Analysis Made	: No	
	Did the driller k	nowingly penetrate any strata which contained injurious constituents?	No	
Certification Data:	The driller certified tha driller's direct supervis correct. The driller un the report(s) being retu	It the driller drilled this well (or the we ion) and that each and all of the stat derstood that failure to complete the urned for completion and resubmitta	ell was drille ements her required ite l.	ed under the rein are true and ems will result in
Company Information:	Apex Drilling, Inc			
	PO Box 867 Marble Falls, TX 78	3654		
Driller Name:	Michael G Becker, I	P.G. License	Number:	54516
Comments:	Amended 4/29/05 F	Ref.# 5853		

Report Amended on 4/28/2008 by Request #5853

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	30	Tan Limestone
30	210	Tan-Grey Limestone
210	240	Tan-White Limestone
240	250	Tan-Grey Limestone
250	305	Tan Limestone H2O
260	262	Cave
305	320	Grey Limestone w/ Clay

Casing:				
BLANK PIPE & WELL SCREEN DATA				

··· ()	Setting From/10 (ft.)
4.5" (5" OD) New PVC	+2' to 260' SDR17
4.5" (5" OD) New Slott	ed PVC 260' to 320' .035

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

STATE OF TEXAS PLUGGING REPORT for Tracking #140076				
Owner: Lake	Travis ISD	Owner Well #	* No Data	
Address: Hwy	71 West	Grid #:	57-48-1	
Well Location: Cvpr	cave, IX ess Ranch Blvd	Latitude:	30° 21' 01" N	
Spice	ewood, TX	Longitude:	098° 05' 04" W	
Well County: Travi	S	Elevation:	No Data	
Well Type: T	est Well			
Drilling Information				
Company: Ball Drill	ing Company	Date Drilled:	12/3/2012	
Driller: Lonnie B	Sall	License Num	ber: 2298	
Well Report Tracking	g #310333			
	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)	
Borehole:	4.75	0	400	
Plugging Information				
Date Plugged: 12/3/	2012	Plugger: Lonnie Ball		
Plug Method: Unk	known			
Casing Left i	n Well:	Plug(s)	Placed in Well:	
		Description (number of sacks & r	naterial)	
No Data		2 - 400 Benseal		
		None 0 - 2 Cement		
Certification Data:	The driller certified that driller's direct supervisi correct. The driller und the reports(s) being ref	t the driller plugged this wel on) and that each and all o derstood that failure to com turned for completion and re	I (or the well was plugged u f the statements herein are plete the required items will esubmittal.	nder the true and result in
Company Information	Ball Drilling Company			
	Box 3011 Marble Falls, TX 7865	4		
Driller Name:	Lonnie Ball	Lic	cense Number: 2298	
Comments:	No Data			

STATE OF TEXAS WELL REPORT for Tracking #153289					
Owner:	Cypress Ranch WCID #1	Owner Well #:	6		
Address:	1000 Cuernavaca Drive	Grid #:	57-48-2		
Well Location:	Well Location: South of Hwy 71 on Cypress Ranch Blvd. Spicewood. TX 78669	Latitude:	30° 21' 16" N		
Wen Location.		Longitude:	098° 04' 55" W		
Well County:	Travis	Elevation:	No Data		
Type of Work:	New Well	Proposed Use:	Public Supply		
Drilling Start Da	te: 8/13/2008 Drilling End Da	te: 8/16/2008	Plans Approved by TCEQ - YES		
	Diameter (in)	Top Denth (ft.)	Bottom Depth (ft.)		

	Diameter (in.		1 (11.)	Bollom Depin (n.)	
Borehole:	12	0		310	
Drilling Method:	Air Rotary				
Borehole Completion:	Straight Wall				
	Top Depth (ft.)	Bottom Depth (ft.)	Desc	cription (number of sacks & material)	
Annular Seal Data:	0	150		68	
Seal Method: Pr	essure Tremie	Dista	ance to Pro	perty Line (ft.): 5+	
Sealed By: Dr	Sealed By: Driller Distance to Septic Field or concentrated contamination		Field or other amination (ft.): 50+		
		Dis	tance to Se	eptic Tank (ft.): No Data	
			Method	of Verification: Owner	
Surface Completion:	Surface Sleeve I	nstalled			
Water Level:	No Data				
Packers:	None				
Type of Pump:	Submersible				
Well Tests:	Jetted	Yield: 20 GPM			

	Strata Depth (ft.)	Water Type		
Water Quality:	25	Cow Creek		
		Chemical Analysis Made:	No	
	Did the driller I	knowingly penetrate any strata which contained injurious constituents?:	No	
Certification Data:	The driller certified the driller's direct supervis correct. The driller ur the report(s) being ref	at the driller drilled this well (or the we sion) and that each and all of the state nderstood that failure to complete the turned for completion and resubmittal.	II was drille ments her required ite	ed under the rein are true and ems will result in
Company Information:	Western Water We	lls		
	500 Southland Driv Burnet, TX 78611	/e		
Driller Name:	Frank Glass	License I	Number:	1313
Comments:	No Data			

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	19	Caliche
19	45	Blue Lime
45	85	Gray and Brown Lime
85	120	Gray Lime
120	160	Brown Lime
160	168	Gray Lime
168	195	White Fossil
195	230	White Porous Lime & Gray Streaks
230	280	Gray Lime & Brown
280	300	Hammond Strips
300	310	Hammond

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)

6 5/8" New Steel +2 to 310' .250

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

STATE OF TEXAS WELL REPORT for Tracking #167454				
Cypress Ranch Ltd c/o The Moore	Owner Well #:	No Data		
1000 Cuernavaca Drive	Grid #:	57-48-2		
Austin, TX 78733	Latitude:	30° 21' 06" N		
2000' SW of Hwy 71 on Crawford Rd Spicewood, TX 78669	Longitude:	098° 04' 54" W		
Travis	Elevation:	No Data		
New Well	Proposed Use:	Public Supply		
	STATE OF TEXAS WELL REF Cypress Ranch Ltd c/o The Moore Group 1000 Cuernavaca Drive Austin, TX 78733 2000' SW of Hwy 71 on Crawford Rd Spicewood, TX 78669 Travis New Well	STATE OF TEXAS WELL REPORT for TracCypress Ranch Ltd c/o The Moore GroupOwner Well #: Grid #: Latitude:1000 Cuernavaca Drive Austin, TX 78733Latitude: Latitude: Longitude:2000' SW of Hwy 71 on Crawford Rd Spicewood, TX 78669Longitude: Elevation:TravisProposed Use:		

Drilling End Date: 10/15/2003

Bottom Depth (ft.) Diameter (in.) Top Depth (ft.) Borehole: 0 10 315 **Drilling Method:** Air Rotary **Straight Wall Borehole Completion:** Top Depth (ft.) Bottom Depth (ft.) Description (number of sacks & material) Annular Seal Data: 0 190 120 Cement Seal Method: Pressure Tremmie Distance to Property Line (ft.): No Data Sealed By: Western Water Wells Distance to Septic Field or other concentrated contamination (ft.): 100+ Distance to Septic Tank (ft.): No Data Method of Verification: Owner Surface Completion: **Surface Slab Installed** Water Level: No Data Packers: None Type of Pump: No Data Well Tests: Jetted Yield: 30 GPM

Drilling Start Date: 10/7/2003

Plans Approved by TCEQ - NO

	Strata Depth (ft.)	Water Type		
Water Quality:	20	Glen Rose		
		Chemical Analysis	Made: Yes	
	Did the driller I	knowingly penetrate any strata contained injurious constitu	which ents?: No	
Certification Data:	The driller certified that driller's direct supervictorrect. The driller un he report(s) being re	at the driller drilled this well (or t sion) and that each and all of th nderstood that failure to comple turned for completion and result	the well was drille the statements her te the required ite comittal.	ed under the ein are true and ems will result in
Company Information:	Western Water We	lls, LLC		
	500 Southland Driv Burnet, TX 78611	/e		
Driller Name:	Frank Glass	Lic	ense Number:	1313
Comments:	\$mew TWDB SW #57-48-	213 Doc Jones 8/23/2011		

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	30	Caliche
30	32	Caliche with Yellow Clay
32	70	Caliche
70	74	Blue Lime
74	185	Gray Lime
185	215	Gray with Little Yellow Hard
215	255	Tan Water
255	260	Gray & Tan
260	265	Tan with Blue Gray
265	290	Tan Sandstone
290	305	Gray
305	310	Gray with Hard Tan Rock
310	315	Gray Shell with Little Tan

Casing: BLANK PIPE & WELL SCREEN DATA

op (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0	1	Top Soil	6 5/8 New Steel +2 - 315 250
1	30	Caliche	
30	32	Caliche with Yellow Clay	
32	70	Caliche	
70	74	Blue Lime	
74	185	Gray Lime	
185	215	Gray with Little Yellow Hard	
215	255	Tan Water	
255	260	Gray & Tan	
260	265	Tan with Blue Gray	
265	290	Tan Sandstone	
290	305	Gray	
305	310	Gray with Hard Tan Rock	

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

STATE OF TEXAS WELL REPORT for Tracking #182209				
Owner:	Cypress Ranch Ltd c/o The Moore Group #5	Owner Well #:	No Data	
Address:	1000 Cuernavaca Dr	Grid #:	57-48-2	
	Austin, TX 78733	Latitude:	30° 21' 17" N	
Well Location:	Hwy 71 at Crawford Rd Spicewood, TX 78669	Longitude:	098° 04' 55" W	
Well County:	Travis	Elevation:	No Data	
Type of Work:	New Well	Proposed Use:	Domestic	

Drilling Start Date: 10/18/2004 Drilling End Date: 10/18/2004

	Diameter (in.))	Top Dep	oth (ft.)	Bottom Depth (ft.)	
Borehole:	9		0		40	
	6		40)	300	
Drilling Method:	Air Rotary					
Borehole Completion:	Straight Wall					
	Top Depth (ft.)	Bottom	n Depth (ft.)	Des	cription (number of sacks & material)	
Annular Seal Data:	0		40		8	
Seal Method: Slu	ırry		Dis	tance to Pro	operty Line (ft.): No Data	
Sealed By: Dri	Driller		Distance to Septic Field or other concentrated contamination (ft.): 100+			
			D	istance to S	eptic Tank (ft.): No Data	
				Method	of Verification: owner	
Surface Completion:	Surface Sleeve Ir	nstalled				
Water Level:	No Data					
Packers:	3 PVC & burlap a	at 40', 18	80', 220'			
Type of Pump:	Submersible					
Well Tests:	Jetted	Yiel	d: 10-20 GPI	N		

	Strata Depth (ft.)	Water Type			
Water Quality:	35	Glen Rose			
		Chemical Analysis Made:	No		
	Did the driller k	knowingly penetrate any strata which contained injurious constituents?:	Νο		
Certification Data:	The driller certified that driller's direct supervis correct. The driller un the report(s) being ret	at the driller drilled this well (or the we sion) and that each and all of the state inderstood that failure to complete the r turned for completion and resubmittal.	l was drille ments her equired ite	ed under the rein are true and ems will result in	
Company Information:	Western Water We	lls, LLC			
	500 Southland Driv Burnet, TX 78611	/e			
Driller Name:	Frank A. Glass	License N	lumber:	1313	
Comments:	\$scd				

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	36	caliche
36	70	blue lime
70	180	gray lime
180	200	white lime
200	220	gray lime
220	260	white lime
260	290	gray lime
290	300	Hammond

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)

5 OD N plastic +2-300 sch40

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

STATE OF TEXAS WELL REPORT for Tracking #194145				
Owner:	Silverton Custom Homes	Owner Well #:	No Data	
Address:	18592 FM 1431 Jonestown. TX 78645	Grid #:	57-48-1	
Well Location:	5103 Canvon Ranch Trail	Latitude:	30° 21' 54" N	
	Spicewood, TX 78669	Longitude:	098° 05' 12" W	
Well County:	Travis	Elevation:	No Data	
Type of Work:	New Well	Proposed Use:	Domestic	

Drilling Start Date: 11/27/2006 Drilling End Date: 12/14/2006

	Diamator (in	,	Top Do	nth (ft)	Pottom D	opth (ft)	
		/	TOP De	pur (n.)	Bollom De		
Borehole:	8		C		20		
	6.5		2	0	14	5	
Drilling Method:	Air Hammer						
Borehole Completion:	Straight Wall						
	Top Depth (ft.)	Bottom	Depth (ft.)	Des	cription (number of	sacks & materia	n/)
Annular Seal Data:	0	2	20		7		
Seal Method: ha	d: hand poured Distance to Property Line (ft.): No Data						
Sealed By: Driller			Distance to Septic Field or other concentrated contamination (ft.): 155				
			C	istance to S	eptic Tank (ft.):	No Data	
				Method	l of Verification:	tape measu proposed s	re from it
Surface Completion:	Surface Sleeve Ir	nstalled					
Water Level:	67 ft. below land	surface or	n 2006-12-1	4 Measu	urement Metho	d: Unknow i	า
Packers:	shale trap, 90'						
Type of Pump:	Submersible			Pur	np Depth (ft.):	100	
Well Tests:	Estimated	Yield	: 25 GPM				

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	Strata Depth (ft.)	Water Type			
Water Quality:	No Data	No Data			
		Chemical Analysis Made	: No		
	Did the driller k	knowingly penetrate any strata which contained injurious constituents?	: No		
Certification Data:	The driller certified that driller's direct supervis correct. The driller un the report(s) being ret	at the driller drilled this well (or the w sion) and that each and all of the sta nderstood that failure to complete the turned for completion and resubmitta	ell was drille tements he required it	ed under the rein are true an ems will result i	d n
Company Information:	Tom Arnold Drillin	g			
	1147 CR 170 Round Rock, TX 7	8664			
Driller Name:	Tommy D. Arnold	License	Number:	2096	
Comments:	Distance to neares \$scd	t source of contamination was me	asured fro	om the propose	d site.

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0	6	yellow limestone	4.5 N plastic 0-145
6	20	blue limestone	perforated 105-125
20	55	gray limestone	
55	66	white limestone	
66	90	blue limestone	
90	114	white limestone	
114	140	gray limestone	
140	145	gray limestone and shale	

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

	STATE OF TEXAS WELL REPORT for Tracking #205207					
Owner:	Paul Wilsher	Owner Well #:	1			
Address:	21209 Hwy 71 West	Grid #:	57-48-2			
Well Location:	21209 Hwy 71 West	Latitude:	30° 21' 11" N			
	Spicewood, TX	Longitude:	098° 03' 57" W			
Well County:	Travis	Elevation:	1088 ft. above sea level			
Type of Work:	New Well	Proposed Use:	Public Supply			
Drilling Start Da	te: 11/9/2009 Drilling End Date: 11/18	8/2009	Plans Approved by TCEQ - YES			

	Diameter (in.)	Top Depth (ft.)		Bottom Depth (ft.)	
Borehole:	12		()	6	
	10		(3	400	
Drilling Method:	Air Rotary					
Borehole Completion:	Straight Wall					
	Top Depth (ft.)	Bottom	n Depth (ft.)	Des	cription (number of sacks & materia	ı <i>l)</i>
Annular Seal Data:	0	:	300		65 cement	
Seal Method: Tremmie Distance to Property Line (ft.): 15						
Sealed By: MWS			Distance to Septic Field or other concentrated contamination (ft.): 150			
			Γ	Distance to S	eptic Tank (ft.): No Data	
				Method	of Verification: measured v	vith owner
Surface Completion:	Surface Slab Inst	talled				
Water Level:	250 ft. below lan	d surface	e on 2009-11	-18 Measu	urement Method: Unknow	n
Packers:	Neoprene @ 300	0'				
Type of Pump:	Submersible			Pur	np Depth (ft.): 360	
Well Tests:	Estimated	Yiel	d: 20 GPM			

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	Strata Depth (ft.)	Water Type		
Water Quality:	320-400	Trinity		
		Chemical Analysis Made	: No	
	Did the driller	knowingly penetrate any strata which contained injurious constituents?	: No	
Certification Data:	The driller certified th driller's direct supervi correct. The driller u the report(s) being re	at the driller drilled this well (or the we ision) and that each and all of the stat nderstood that failure to complete the sturned for completion and resubmitta	ell was drilled ements here required iter I.	d under the ઝંn are true and ms will result in
Company Information:	Motal Well Service	9		
	3315 Galesburg D Austin, TX 78745	r		
Driller Name:	Paul Motal	License	Number:	54313
Apprentice Name:	Marcos Motal	Apprent	ice Number:	58390
Comments:	No Data			

Casing:
BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0	6	Topsoil and fill material	10.75 N STEEL 0-6
6	35	Caleche	6 N SDR-17 0-320
35	115	Grey L/S and shale	6 N SDR-17 SCREEN 320-400 0.020
115	160	Tan L/S	
160	185	Grey L/S	
185	195	Hard L/S	
195	245	Grey L/S	
245	305	Grey shale and L/S	
305	400	Grey and White L/SH2O	

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

STATE OF TEXAS WELL REPORT for Tracking #253290			
Owner:	Land Art Garden Center	Owner Well #:	1
Address:	22101 W Hwy 71 Spicewood TX 78669	Grid #:	57-48-2
Well Location:	22101 W Hwy 71	Latitude:	30° 22' 02" N
	Spicewood, TX 78669 Longitude	Longitude:	098° 04' 22" W
Well County:	Travis	Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 5/3/2011 Drilling End Date: 5/4/2011

	Diameter (in	.) Top Dep	oth (ft.)	Bottom Depth (ft.)
Borehole:	8	0		100
	6.25	10	0	505
Drilling Method:	Air Rotary			
Borehole Completion:	Straight Wall			
	Top Depth (ft.)	Bottom Depth (ft.)	Des	cription (number of sacks & material)
Annular Seal Data:	0	100		11 of Portland
Seal Method: Pi	ressure	Dis	tance to Pro	operty Line (ft.): 50+
Sealed By: D	riller	Distar	nce to Septie entrated cor	c Field or other htamination (ft.): 50+
		D	istance to S	Septic Tank (ft.): No Data
			Method	d of Verification: Landowner
Surface Completion:	Surface Sleeve I	nstalled		
Water Level:	No Data			
Packers:	Burlap/Neopren	e 390, 380, 375, 100		
Type of Pump:	No Data			
Well Tests:	Pump	Yield: 12 GPM		

	Strata Depth (ft.)	Water Type		
Water Quality:	396-462	Trinity		
		Chemical Analys	sis Made: No	
	Did the driller	knowingly penetrate any stra contained injurious cons	ita which tituents?: No	
Certification Data: 7 c c t	The driller certified th Iriller's direct superv correct. The driller u he report(s) being re	hat the driller drilled this well (ision) and that each and all o nderstood that failure to com eturned for completion and re	or the well was drill f the statements he plete the required it submittal.	ed under the rein are true and ems will result in
Company Information:	Apex Drilling, Inc.			
	P O Box 867 Marble Falls, TX 7	78654		
Driller Name:	Andrew Jackson	Johnson	License Number:	54989
Comments:	No Data			

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	68	Tan Limestone
68	210	Tan/Grey Limestone
210	245	Tan/White Limestone
245	262	Tan/Grey Limestone
262	278	Tan/White Limestone
278	330	Tan/Grey Limestone w/ Clay
330	355	Grey Clay
355	362	Grey Sandstone
362	396	Red Sandstone
396	404	Gravel H2O
404	418	Red Sandstone
418	421	Gravel H2O
421	437	Red Sandstone
437	445	Gravel H2O
445	454	Red Sandstone
454	462	Gravel H2O
462	495	Red Sandstone

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)	
4.5" (5"	' OD) New	PVC +	- 2' to 405' SDR17	
4.5" (5"	' OD) New	Slotte	d PVC 405' to 465' 0.35	
4.5" (5"	' OD) New	PVC 4	65' to 505' SDR17	

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

	STATE OF TEXAS WELL REP	ORT for Trac	king #253294
Owner:	Land Art Garden Center	Owner Well #:	2
Address:	22101 W Hwy 71 Spicewood TX 78669	Grid #:	57-48-2
Well Location:	22101 W Hwy 71	Latitude:	30° 21' 57" N
	Spicewood, TX 78669	Longitude:	098° 04' 25" W
Well County:	Travis	Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 5/6/2011 Drilling End Date: 5/6/2011

	Diameter (in	.) Top Dep	th (ft.)	Bottom Depth (ft.)	
Borehole:	8	0		20	
	6.5	20	1	300	
Drilling Method:	Air Rotary				
Borehole Completion:	Straight Wall				
	Top Depth (ft.)	Bottom Depth (ft.)	Des	cription (number of sacks & material	
Annular Seal Data:	0	20		4 of Portland	
Seal Method: SI	urry	Dist	ance to Pro	operty Line (ft.): 50+	
Sealed By: A	pex Drilling, Inc.	Distan conce	ce to Seption	c Field or other tamination (ft.): 100+	
		Di	stance to S	eptic Tank (ft.): No Data	
			Method	of Verification: Landowner	
Surface Completion:	Surface Sleeve I	nstalled			
Water Level:	No Data				
Packers:	Burlap/Neopren	e 210, 200, 20			
Type of Pump:	No Data				
Well Tests:	Pump	Yield: 31 GPM wi	ith 18 ft. dr	awdown after 2 hours	
	Strata Depth (ft.)	Water Type			
----------------------	--	--	--	---	
Water Quality:	212-275	Cowcreek			
		Chemical Analysis	s Made: No		
	Did the driller I	knowingly penetrate any strata contained injurious consti	a which tuents?: No		
Certification Data:	The driller certified th driller's direct supervi correct. The driller u the report(s) being re	at the driller drilled this well (o sion) and that each and all of nderstood that failure to comp turned for completion and res	or the well was drille the statements her lete the required ite ubmittal.	ed under the rein are true and ems will result in	
Company Information:	Apex Drilling, Inc				
	P O Box 867 Marble Falls, TX 7	8654			
Driller Name:	Andrew Jackson J	lohnson L	_icense Number:	54989	
Comments:	No Data				

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	68	Tan Limestone
68	212	Grey/Tan Limestone
212	240	Tan Limestone H2O
240	258	Tan/Grey Limestone
258	275	Tan/White Limestone H20
275	300	Tan Grey Limestone

Casing:
BLANK PIPE & WELL SCREEN DATA

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

STATE OF TEXAS WELL REPORT for Tracking #257446							
Owner:	TEXAS ENG	TEXAS ENG. SOLUTIONS/CYPRESS		Owner Well #:	No Data		
Address:	5000 BEE C	AVES RD., STE. 20	6	Grid #:	57-48-1		
	AUSTIN, TX 78746		-	Latitude:	: 30° 21' 18" N de: 098° 05' 07" W		
Well Location:	5620 CYPRE SPICEWOOI	5620 CYPRESS RANCH BLVD. SPICEWOOD, TX 78669		Longitude:			
Well County:	Travis			Elevation:	ation: No Data		
Type of Work:	New Well			Proposed Use:	Public Supply		
Drilling Start Date: 6/6/2011 Drilling End Date: 6/7/2011 Plans Approved by TCEQ - YES							
		Diameter (in.)	Top De	epth (ft.)	Bottom Depth (ft.)		
Borehole:		12		0	10		

10.875 10 236 Drilling Method: Air Rotary **Filter Packed Borehole Completion:** Top Depth (ft.) Bottom Depth (ft.) Filter Material Size Filter Pack Intervals: 115 236 Gravel 3/8" Bottom Depth (ft.) Top Depth (ft.) Description (number of sacks & material) Annular Seal Data: 0 115 **43 CONCRETE** Seal Method: PRESSURE TRIMMIE Distance to Property Line (ft.): N/A CEMENT Sealed By: Driller Distance to Septic Field or other concentrated contamination (ft.): N/A Distance to Septic Tank (ft.): No Data Method of Verification: OWNER

 Surface Completion:
 Surface Slab Installed

 Water Level:
 131.48 ft. below land surface on 2011-06- Measurement Method:
 Unknown

 Packers:
 N/A
 Viable
 Pump Depth (ft.):
 15

 Well Tests:
 Pump
 Yield:
 12 GPM
 Vield:
 12 GPM

	Strata Depth (ft.)	Water Type		
Water Quality:	60	MIDDLE TRINITY		
		Chemical Analysis Made	Yes	
	Did the driller	knowingly penetrate any strata which		
		contained injurious constituents?	No	
Certification Data:	The driller certified th driller's direct supervi correct. The driller u the report(s) being re	at the driller drilled this well (or the we ision) and that each and all of the stat nderstood that failure to complete the turned for completion and resubmittal	ell was drille ements her required ite	ed under the rein are true and ems will result in
Company Information:	CENTEX PUMP &	SUPPLY. INC.		
	2520 HWY. 290 WI DRIPPING SPRING	EST SS, TX 78620		
Driller Name:	AARON GLASS	License	Number:	4227
Comments:	No Data			

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	18	CALICHE
18	72	GRAY LIMESTONE
72	90	GRAY/TAN/WHITE LIMESTONE
90	100	TAN/GRAY LIMESTONE
100	120	GRAY/BROWN LIMESTONE
120	125	BROWN/BLUE LIMESTONE
125	128	TAN LIMESTONE W/BLUE CLAY
128	145	WHITE/TAN LIMESTONE
145	155	GRAY LIMESTONE
155	170	WHITE LIMESTONE
170	230	GRAY LIMESTONE
230	236	CLAY

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.)New/UsedTypeSetting From/To (ft.)6 5/8 N STEEL STANDARD WALL +3 TO 236

6 5/8 N STEEL STANDARD WALL 151 TO 214 SLOT

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

STATE OF TEXAS WELL REPORT for Tracking #258042							
Owner:		AS ENG. SOLUTIONS/CYPRESS		Wner Well #:	No Data		
Address:	5000 E			Grid #:	57-48-2		
	AUSTIN, TX 78746		L	atitude:	30° 21' 10" N		
Well Location:	5620 (SPICE	20 CYPRESS RANCH BLVD. ICEWOOD, TX 78669		ongitude:	098° 04' 56" W		
Well County:	Travis	;	E	levation:	No Data		
Type of Work:	New W	/ell	F	Proposed Use	E Public Supply		
Drilling Start Date: 5/25/2011 Drilling End Date: 5/26/2011 Plans Approved by TCEQ - YES							
		Diameter (in.)	Тор Дер	oth (ft.)	Bottom Depth (ft.)		
Borehole:	1	12	0		10		

Borehole:	12		0		10		
	10.875			10	284		
Drilling Method:	Air Rotary						
Borehole Completion:	Filter Packed; CASED						
	Top Depth (ft.)	Bottom Dep	oth (ft.)) Filter Material		Size	
Filter Pack Intervals:	135	284		Gravel		3/8"	
	Top Depth (ft.)	Bottom Depth (Des	cription (number of sad	:ks & material)	
Annular Seal Data:	0 135 55 CEN					Г	
Seal Method: PR CE	ESSURE TRIMM	1IE	I	Distance to Pro	operty Line (ft.): N	Ά	
Sealed By: Driller			Distance to Septic Field or other concentrated contamination (ft.): N/A				
				Distance to S	eptic Tank (ft.): N	o Data	

Method of Verification: **OWNER**

 Surface Completion:
 Surface Slab Installed

 Water Level:
 182.2 ft. below land surface on 2011-05- Measurement Method: Unknown 26

 Packers:
 N/A

 Type of Pump:
 Submersible

 Well Tests:
 Pump
 Yield: 25 GPM with 45 ft. drawdown after 36 hours

	Strata Depth (ft.)	Water Type	
Water Quality:	60	MIDDLE TRINITY	
		Chemical Analysis Made:	Yes
	Did the driller kr	nowingly penetrate any strata which contained injurious constituents?:	Νο
Certification Data:	The driller certified that driller's direct supervisi correct. The driller und the report(s) being retu	t the driller drilled this well (or the well on) and that each and all of the state derstood that failure to complete the re irned for completion and resubmittal.	was drilled under the ments herein are true and equired items will result in
Company Information:	CENTEX PUMP & S	UPPLY, INC.	
	2520 HWY. 290 WES DRIPPING SPRINGS	ST S, TX 78620	
Driller Name:	AARON GLASS	License N	umber: 4227
Comments:	No Data		
Lit DESCRIPTION & COLOF	hology: ₹ OF FORMATION MA [¬]	C FERIAL BLANK PIPE & \	Casing: WELL SCREEN DATA
Top (ft.) Bottom (ft.)	Description	Dia. (in.) New/Used Type	Setting From/To (ft.)

Top (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Used Type Setting From/To (ft.)
0	8	YELLOW CALICHE	6 5/8 N STANDARD WALL STEEL +3 TO 284
8	25	BLUE LIMESTONE	6 5/8 N STANDARD WALL STEEL SLOT 203 TO 263
25	170	GRAY LIMESTONE	
170	185	WHITE LIMESTONE	
185	195	YELLOW LIMESTONE	
195	210	WHITE LIMESTONE (H20)	
210	284	GRAY LIMESTONE	

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

STATE OF TEXAS WELL REPORT for Tracking #258260							
Owner:	TEXAS ENG	TEXAS ENG. SOLUTIONS/CYPRESS		Owner Well #:	No Data		
Address:	5000 BEE C	5000 REE CAVES RD STE 206		Grid #:	57-48-1		
	AUSTIN, TX 78746		-	Latitude:	30° 21' 14" N		
Well Location:	5620 CYPRE SPICEWOO	620 CYPRESS RANCH BLVD. PICEWOOD, TX 78669		Longitude:	098° 05' 04" W	95' 04" W	
Well County:	Travis	Travis			No Data		
Type of Work:	New Well			Proposed Use:	Public Supply		
Drilling Start Date: 6/2/2011 Drilling End Date: 6/3/2011 Plans Approved by TCEQ - YES							
		Diameter (in.)	Top D	Depth (ft.)	Bottom Depth (ft.)		
Borehole:		12		0	10		

10.875 10 270 Drilling Method: Air Rotary **Filter Packed Borehole Completion:** Top Depth (ft.) Bottom Depth (ft.) Filter Material Size Filter Pack Intervals: 140 250 Gravel 3/8 Bottom Depth (ft.) Top Depth (ft.) Description (number of sacks & material) Annular Seal Data: 0 140 **56 CEMENT** Seal Method: PRESSURE TRIMMIE Distance to Property Line (ft.): N/A CEMENT Sealed By: Driller Distance to Septic Field or other concentrated contamination (ft.): N/A Distance to Septic Tank (ft.): No Data

Method of Verification: WELL DRILLED FIRST

 Surface Completion:
 Surface Slab Installed

 Water Level:
 176 ft. below land surface on 2011-06-03 Measurement Method: Unknown

 Packers:
 N/A

 Type of Pump:
 Submersible

 Well Tests:
 Pump

 Yield: 7 GPM with 45 ft. drawdown after 36 hours

	Strata Depth (ft.) Water Type		
Water Quality:	60	MIDDLE TRINITY	
		Chemical Analysis Mad	le: Yes
	Did the driller k	nowingly penetrate any strata whic contained injurious constituents	h ?: No
Certification Data:	The driller certified that driller's direct supervis correct. The driller un the report(s) being ret	at the driller drilled this well (or the sion) and that each and all of the st derstood that failure to complete th urned for completion and resubmitt	well was drilled under the atements herein are true and he required items will result in cal.
Company Information:	CENTEX PUMP & S	SUPPLY, INC.	
	2520 HWY. 290 WE DRIPPING SPRING	ST S, TX 78620	
Driller Name:	AARON GLASS	Licens	e Number: 4227
Comments:	No Data		
Lit DESCRIPTION & COLOF	hology: ₹ OF FORMATION MA	TERIAL BLANK PIPE	Casing: & WELL SCREEN DATA
From (ft) To (ft) Desc	ription	Dia. (in.) New/Used Type	e Setting From/To (ft.)
0-1 TOP SOIL		6 5/8" N STEEL STAN	IDARD WALL +3 TO 270
1-18 CALICHE		6 5/8" N STEEL STAN	DARD WALL 186 TO 249 .032
18-35 GRAY W/TAN LIM	ESTONE		
35-45 TAN LIMESTONE			
45-55 GRAY/TAN/BROW	N LIMESTONE		
55-70 GRAY W/LITTLE T	AN LIMESTONE		
70-80 GRAY LIMESTONE	E		
80-135 GRAY/TAN LIMES	STONE		
135-155 GRAY/BROWN I			
155-170 TAN LIMESTON	E W/BLUE CLAY		
STRIPS			
190-205 GRAY W/TAN LIMESTONE			
230-240 GRAT/TAN LIME			
240-240 GRAT LIMESTO			
245-250 GRAT LIMESTU			
GLAT			

260-270 HAMMIT CLAY

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

STATE OF TEXAS WELL REPORT for Tracking #258375					
Owner:	TEXAS ENG. SOLUTIONS/CYPRESS	Owner Well #:	No Data		
Address:	5000 BEE CAVES RD., STE. 206	Grid #:	57-48-2		
, laureee.	AUSTIN, TX 78746		30° 21' 13" N		
Well Location:	5620 CYPRESS RANCH BLVD. SPICEWOOD, TX 78669	Longitude:	098° 04' 57" W		
Well County:	Travis	Elevation:	No Data		
Type of Work:	New Well	Proposed Use:	Public Supply		
Drilling Start Da	te: 5/30/2011 Drilling End Date: 6/1/20	11	Plans Approved by TCEQ - YES		

	Diameter (in.)		Top I	Depth (ft.) Bottom Dept		h (ft.)	
Borehole:	12			0	10		
	10.875			10	290		
Drilling Method:	Air Rotary						
Borehole Completion:	Filter Packed						
	Top Depth (ft.)	(ft.) Bottom Depth (ft.)		Filter Material		Size	
Filter Pack Intervals:	140	270		Gravel		3/8"	
	Top Depth (ft.)	Bottom	Bottom Depth (ft.) Description (number of se		acks & material)		
Annular Seal Data:	0		140		56 CEMEN	Т	
Seal Method: PRESSURE TRIMMIE Distance to Property Line (ft.): N/A CEMENT							
Sealed By: Driller			Distance to Septic Field or other concentrated contamination (ft.): N/A				
				Distance to S	Septic Tank (ft.): N	lo Data	
				Method	l of Verification: V F	VELL DRILLE TIRST	Ð
Surface Completion:	Surface Slab Ir	nstalled					
Water Level:	180 ft. below la	and surface	on 2011-0	6-01 Meas	urement Method:	Unknown	
Packers:	N/A						
Type of Pump:	Submersible						
Well Tests:	Pump	Yiel	d: 15-20 G	PM with 45 ft	. drawdown afte	r 36 hours	

under the in are true and ns will result in
4227
/To (ft.) +3 TO 290
SLOT 186 TO 249

230-250 TAN W/WHITE LIMESTONE

250-265 GRAY LIMESTONE

265-280 GRAY LIMESTONE W/HAMMIT

280-290 HAMMIT CLAY

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

STATE OF TEXAS WELL REPORT for Tracking #287669				
Owner:	Tim Lowe	Owner Well #:	No Data	
Address:	21300 Hwy 71 W Spicewood, TX 78669	Grid #:	57-48-2	
Well Location:	21300 Hwy 71 W	Latitude:	30° 21' 18" N	
	Spicewood, TX 78669	Longitude:	098° 03' 55" W	
Well County:	Travis	Elevation:	No Data	
Type of Work:	New Well	Proposed Use:	Domestic	

Drilling Start Date: 3/23/2012 Drilling End Date: 3/23/2012

	Diameter (in	.) Top Dep	oth (ft.)	Bottom Depth (ft.)
Borehole:	8	0		100
	6.5	10	0	385
Drilling Method:	Air Rotary			
Borehole Completion:	Straight Wall			
	Top Depth (ft.)	Bottom Depth (ft.)	Des	cription (number of sacks & materia
Annular Seal Data:	0	100		10Benseal-1Port
Seal Method: Pr	ressure	Dis	tance to Pro	operty Line (ft.): 20
Sealed By: Driller		Distance to Septic Field or other concentrated contamination (ft.): 100+		
		D	istance to S	Septic Tank (ft.): No Data
			Method	d of Verification: Landowner
Surface Completion:	Surface Sleeve I	nstalled		
Water Level:	No Data			
Packers:	Burlap/Neopren	e 340, 330, 100		
Type of Pump:	No Data			
Well Tests:	Jetted	Yield: 8 GPM		

	Strata Depth (ft.)	Water Type		
Water Quality:	340-384	Cow Creek		
		Chemical Analysis	Made: No	
	Did the driller k	nowingly penetrate any strata v contained injurious constitue	which ents?: No	
Certification Data:	The driller certified that driller's direct supervis correct. The driller un the report(s) being ret	at the driller drilled this well (or t sion) and that each and all of the iderstood that failure to complet urned for completion and resub	he well was drille e statements here te the required ite omittal.	ed under the ein are true and ems will result in
Company Information:	Apex Drilling, Inc.			
	P.O. Box 867 Marble Falls, TX 78	8654		
Driller Name:	Michael G. Becker,	P.G. Lic	ense Number:	54516
Comments:	No Data			

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	30	Tan Limestone
30	281	Grey/Tan Limestone
281	317	Tan Limestone
317	340	Grey/Tan Limestone
340	362	Tan/White Limestone
362	384	Grey/Tan Limestone
384	385	Grey Clay

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)	
4.5" (5" OD) New PVC + 2' to 305' SDR17	
4.5" (5" OD) New Slotted PVC 305' to 365' .035	
4.5" (5" OD) New PVC 365' to 385' SDR17	

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

Owner:	CYPR	PRESS RANCH W.C.I.D. #1) N.CAP.OF TX. HWY.,BLDG.1, STIN, TX 78746		Owner Well #:	No Data	
Address:	500 N AUST			Grid #: Latitude:	57-48-1	
Well Location:	Location: WEST CYPRESS HILLS SUBD. WEL		S SUBD. WELL		30° 20' 44" N	
#12 SPICEWOOD, TX 78669		69	Longitude:	098° 05' 20" W		
Well County:	Well County: Travis			Elevation:	No Data	
Type of Work:	New V	Vell		Proposed Use:	Public Supply	
Borehole:		Diameter (14	in.) To	op Depth (ft.) 0	Bottom Depth (ft.) 20	
		11		20	280	
Drilling Method:		Air Rotary				
Borehole Comp	letion:	Filter Packed				
		Top Depth (ft.)	Bottom Depth (ft.)	Filter Materia	al	Size
Filter Pack Inter	vals:	150	280	Gravel	1/4	TO 3/8
Filter Pack Inter	vals:	150 Top Depth (ft.)	280 Bottom Depth (ft.	Gravel	1/4	TO 3/8 erial)
Filter Pack Inter Annular Seal Da	vals: ata:	150 Top Depth (ft.) 0	280 Bottom Depth (ft. 150	Gravel) Descript	1/4 ion (number of sacks & mat 72 TYPE H PORT.	TO 3/8 erial)
Filter Pack Inter Annular Seal Da Seal Met	vals: ata: hod: PR CE	150 Top Depth (ft.) 0 RESSURE TRIMN MENTING	280 Bottom Depth (ft. 150	Gravel) Description Description Distance to Proper	1/4 ion (number of sacks & mat 72 TYPE H PORT. rty Line (ft.): N/A	TO 3/8 erial)
Filter Pack Inter Annular Seal Da Seal Met Sealec	vals: ata: hod: PR CE d By: CE DR	150 Top Depth (ft.) 0 RESSURE TRIMM MENTING ENTRAL TEXAS RILLING, INC.	280 Bottom Depth (ft. 150 IIE	Gravel) Description Distance to Proper Distance to Septic Field concentrated contame	1/4 ion (number of sacks & mat 72 TYPE H PORT. Ity Line (ft.): N/A eld or other ination (ft.): N/A	TO 3/8 erial)
Filter Pack Inter Annular Seal Da Seal Met Sealec	vals: hod: PR CE d By: CE DR	150 Top Depth (ft.) 0 RESSURE TRIMM MENTING ENTRAL TEXAS RILLING, INC.	280 Bottom Depth (ft. Bottom Depth If. 150 If.	Gravel) Description Distance to Proper Distance to Septic Field concentrated contame Distance to Septi	1/4 ion (number of sacks & mat 72 TYPE H PORT. Inty Line (ft.): N/A eld or other hination (ft.): N/A ic Tank (ft.): No Data	TO 3/8 erial)
Filter Pack Inter Annular Seal Da Seal Met Sealec	vals: hod: PR CE d By: CE DF	150 Top Depth (ft.) 0 RESSURE TRIMM MENTING INTRAL TEXAS RILLING, INC.	280 Bottom Depth (ft. 150 IIE	Gravel) Description Distance to Proper Distance to Septic Field Concentrated contain Distance to Septic Method of	1/4 ion (number of sacks & mat 72 TYPE H PORT. Ty Line (ft.): N/A eld or other ination (ft.): N/A ic Tank (ft.): No Data Verification: No Data	TO 3/8 erial)
Filter Pack Inter Annular Seal Da Seal Met Sealec	vals: hod: PR CE By: CE DR	150 Top Depth (ft.) 0 ESSURE TRIMM MENTING ENTRAL TEXAS RILLING, INC. Surface Slab In	280 Bottom Depth (ft. 150	Gravel Descripti Distance to Proper Distance to Septic Fie concentrated contam Distance to Septi Method of	1/4 ion (number of sacks & mat 72 TYPE H PORT. Ty Line (ft.): N/A eld or other hination (ft.): N/A ic Tank (ft.): No Data Verification: No Data	TO 3/8 erial)
Filter Pack Inter Annular Seal Da Seal Met Sealec Surface Comple Water Level:	vals: hod: PR CE d By: CE DR	150 Top Depth (ft.) 0 RESSURE TRIMM MENTING INTRAL TEXAS RILLING, INC. Surface Slab In 160 ft. below la	280 Bottom Depth (ft. 150 IIE Stalled	Gravel) Description Distance to Proper Distance to Septic Field concentrated contam Distance to Septic Method of 3-06-19 Measurer	1/4 ion (number of sacks & mat 72 TYPE H PORT. Ity Line (ft.): N/A eld or other ination (ft.): N/A ic Tank (ft.): No Data Verification: No Data	TO 3/8 erial) own
Filter Pack Inter Annular Seal Da Seal Met Sealec Surface Comple Water Level: Packers:	vals: ata: hod: PR CE d By: CE DR	150 Top Depth (ft.) 0 ESSURE TRIMM MENTING ENTRAL TEXAS RILLING, INC. Surface Slab Ir 160 ft. below la N/A	280 Bottom Depth (ft. 150 IIE stalled	Gravel Description Distance to Proper Distance to Septic File concentrated contam Distance to Septi Method of 3-06-19 Measurer	1/4 ion (number of sacks & mat 72 TYPE H PORT. Ty Line (ft.): N/A eld or other ination (ft.): N/A ic Tank (ft.): No Data Verification: No Data	TO 3/8 erial) own
Filter Pack Inter Annular Seal Da Seal Met Sealec Surface Comple Water Level: Packers: Type of Pump:	vals: hod: PR CE d By: CE DR	150 Top Depth (ft.) 0 RESSURE TRIMM MENTING INTRAL TEXAS RILLING, INC. Surface Slab In 160 ft. below la N/A No Data	280 Bottom Depth (ft. 150 IIE stalled	Gravel Concentrated contam Distance to Septic Fie Concentrated contam Distance to Septi Distance to Septi Method of	1/4 ion (number of sacks & mat 72 TYPE H PORT. Ty Line (ft.): N/A eld or other ination (ft.): N/A ic Tank (ft.): No Data Verification: No Data	TO 3/8 erial) own

	Strata Depth (ft.)	Water Type	
Water Quality:	60	MIDDLE TRINITY	
		Chemical Analysis Made:	No
	Did the driller	knowingly penetrate any strata which contained injurious constituents?:	Νο
Certification Data:	The driller certified th driller's direct superv correct. The driller u the report(s) being re	nat the driller drilled this well (or the we ision) and that each and all of the state nderstood that failure to complete the r eturned for completion and resubmittal.	I was drilled under the ments herein are true and equired items will result in
Company Information:	CENTEX PUMP &	SUPPLY, INC.	
	2520 HWY. 290 W SPICEWOOD, TX	EST 78669	
Driller Name:	FRANK GLASS	License N	lumber: 1313
Comments:	No Data		
From (ft) To (ft) Desc 0-2 TOP SOIL & LEDGER	ription ROCK	Dia. (in.) New/Used Type 6.9 N SDR17 PVC CASIN	Setting From/To (ft.) IG +3 TO 280
0-2 TOP SOIL & LEDGER	ROCK	6.9 N SDR17 PVC CASIN	IG +3 10 280
18-20 BLUE GRAV LIME	STONE	6.9 N SDR17 PVC SLOT	218 TO 258 .032
20-35 TAN LIMESTONE	010112		
35-60 GRAY LIMESTONE			
60-65 TAN LIMESTONE			
65-72 TAN/GRAY LIMES	TONE		
72-90 GRAY LIMESTONE	Ξ		
90-100 TAN/GRAY LIME	STONE		
100-110 GRAY LIMESTO	NE		
110-150 TAN/GRAY LIME	ESTONE		
150-160 GRAY LIMESTO	NE		
160-180 GRAY/BLUE LIN	IESTONE W/BLUE		
CLAY STRIPS			
180-190 SLOW RETURN	S		
190-220 GRAY W/TAN LI	MESTONE		
220-235 TAN LIMESTON	E		
235-265 TAN LIMESTON	E W/BROWN STRIP	S	

SLOW RETURNS

275-280 HAMMETT CLAY

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

Texas Department of Licensing and Regulation

P.O. Box 12157 Austin, TX 78711 (512) 463-7880

	STATE OF TEXAS WELL REP	ORT for Trac	king #328701
Owner:	Lake Travis ISD	Owner Well #:	1
Address:	3322 RR 620 S. Austin TX 78738	Grid #:	57-48-1
Well Location:	6112 Cypress Ranch Rd.	Latitude:	30° 21' 02" N
	Spicewood, TX 78669	Longitude:	098° 05' 09" W
Well County:	Travis	Elevation:	1050 ft. above sea level
Type of Work:	New Well	Proposed Use:	Irrigation

Drilling Start Date: 6/2/2013

Drilling End Date: 6/10/2013

	Diameter ((in.)	Top Depti	h (ft.)	Bottom Depth	h (ft.)	
Borehole:	12.25		0		320		
Drilling Method:	Air Hammer						
Borehole Completion:	Filter Packed						
	Top Depth (ft.)	Bottom Depth	(ft.)	Filter M	laterial	Size	
Filter Pack Intervals:	220	320		Gra	vel	3/8"	
	Top Depth (ft.)	Bottom D	epth (ft.)	Des	cription (number of sa	cks & material)	
Annular Seal Data:	0	4	40		12 cement		
	40	24	240		25 bentonite		
Seal Method: pr	essure cemente	d	Dista	ance to Pro	operty Line (ft.): N	o Data	
Sealed By: St	eve Stewart		Distanc concer	e to Septie trated cor	c Field or other ntamination (ft.): n	one	
			Dis	tance to S	Septic Tank (ft.): N	lo Data	
				Method	d of Verification: N	o Data	
Surface Completion:	Surface Sleeve	e Installed					
Water Level:	243 ft. below la	and surface o	n 2013-06-1	5 Meas	urement Method:	Unknown	
Packers:	No Data						
Type of Pump:	Submersible			Pur	mp Depth (ft.): 29	4	
Well Tests:	Jetted	Yield:	27 GPM				

_

	Strata Depth (ft.)	Water Type			
Water Quality:	No Data	Cow Creek			
		Chemical Analysis Made	: No		
	Did the driller	knowingly penetrate any strata which contained injurious constituents?	: No		
Certification Data:	The driller certified th driller's direct superv correct. The driller u the report(s) being re	hat the driller drilled this well (or the w ision) and that each and all of the sta nderstood that failure to complete the sturned for completion and resubmitta	ell was drill tements he required it	ed under the rein are true and ems will result in	
Company Information:	Bee Cave Drilling,	Inc.			
	185 Angel Fire Dr. Dripping Springs,	TX 78620			
Driller Name:	Jim Blair	License	Number:	54416	
Apprentice Name:	Steve Stewart				
Comments:	No Data				

Top (ft.)	Bottom (ft.)	Description
0	1	surface rock
1	7	tan caliche
7	12	tan limestone
12	30	gray shale
30	45	gray clay
45	75	tan limestone
75	210	white & gray limestone
210	240	dark gray limestone
240	310	white sandstone wb 27 gpm 350 tds

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)

6.9" OD new sdr-17 pvc 0 240

6.9" OD new sdr-17 pvc mfg screen 0.032" 240 320

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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

	STATE OF TEXAS WELL REPORT for Tracking #340386					
Owner:	Lake Travis ISD	Owner Well #:	1-229			
Address:	6112 Cypress Ranch Blvd Spicewood, TX 78669	Grid #:	57-48-1			
Well Location:	6112 Cypress Ranch Blvd	Latitude:	30° 20' 53" N			
	Spicewood, TX 77669	Longitude:	098° 05' 06" W			
Well County:	Travis	Elevation:	No Data			
Type of Work:	New Well	Proposed Use:	Closed-Loop Geothermal			

Drilling Start Date: 5/15/2013 Drilling End Date: 8/9/2013

	Diameter (in.) Top De	epth (ft.)	Bottom Depth (ft.)	
Borehole:	4.75		0	305	
Drilling Method:	Air Rotary				
Borehole Completion:	Unknown				
	Top Depth (ft.)	Bottom Depth (ft.)	Des	cription (number of sacks & material)	
Annular Seal Data:	0	305		Thermal Grout	
Seal Method: Tremie		Di	stance to Pro	operty Line (ft.): No Data	
Sealed By: Loop Tech		Dista conc	nce to Septic entrated con	c Field or other tamination (ft.): No Data	
		Distance to Septic Tank (ft.): No Data			
			Method	of Verification: No Data	
Surface Completion:	Unknown				
Water Level:	No Data				
Packers:	No Data				
Type of Pump:	No Data				

Well Tests: No Test Data Specified

	Strata Depth (ft.)	Water Type		
Water Quality:	No Data	No Data		
		Chemical Analysis Made:	Unknow	wn
	Did the driller	knowingly penetrate any strata which		
		contained injurious constituents?:	Unknov	wn
Certification Data:	The driller certified th driller's direct supervi correct. The driller u he report(s) being re	at the driller drilled this well (or the well ision) and that each and all of the state nderstood that failure to complete the r turned for completion and resubmittal.	I was drille ments her equired ite	ed under the ein are true and ems will result in
Company Information:	Loop Tech Interna	tional LLC		
	P O Box 1609 New Waverly, TX	77358		
Driller Name:	Ralph Cadwallade	r License N	lumber:	2026
Comments:	This project is a g	eothermal well field with 229 boring	s on 20' s	pacing

Top (ft.)	Bottom (ft.)	Description
0	3	Sandy brown clay
3	40	Tan Limestone
40	92	Dark grey shale
92	105	Grey Limestone
105	220	Light grey shale
220	260	Light grey-med hard limestone
260	284	Blue/grey soft shale
284	305	Tight sand

Casing: BLANK PIPE & WELL SCREEN DATA

Setting From/To (ft.)

1" New HDPE Geothermal loops 0-300'

Dia. (in.) New/Used Type

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

	STATE OF TEXAS WELL REPORT for Tracking #345838					
Owner:	Gordon Inscore	Owner Well #:	No Data			
Address:	22609 Rocking A Trail Spicewood TX 78669	Grid #:	57-48-2			
Well Location:	22609 Rocking A Trail	Latitude:	30° 21' 55" N			
	Spicewood, TX 78669	Longitude:	098° 04' 44" W			
Well County:	Travis	Elevation:	No Data			
Type of Work:	New Well	Proposed Use:	Domestic			

Drilling Start Date: 10/4/2013 Drilling End Date: 10/4/2013

	Diameter (in.) Top Dep	th (ft.)	Bottom Dept	th (ft.)	
Borehole:	9	0	0			
	6.25	50		330		
Drilling Method:	Air Rotary	Rotary				
Borehole Completion:	cased; Straight V	Wall				
	Top Depth (ft.)	Bottom Depth (ft.)	Des	cription (number of sa	acks & material)	
Annular Seal Data:	1	50		6cmt 3ge	I	
Seal Method: ha	nd poured	Dist	ance to Pro	operty Line (ft.): 5	60+	
Sealed By: AD	: ADC Distance to Septic concentrated cont			c Field or other tamination (ft.): 1	00+	
		Distance to Septic Tank (ft.): No Data				
			Method	of Verification: c	owner / tape	
Surface Completion:	Surface Sleeve Ir	nstalled				
Water Level:	195 ft. below land	d surface on 2013-10-(04 Measu	urement Method:	Unknown	
Packers:	burlap,plastic,ru	ıbber @ 230,210,50				
Type of Pump:	Submersible		Pur	np Depth (ft.): 0		
Well Tests:	Jetted	Yield: 3-5 GPM				
	Descriptio	on (number of sacks & mater	rial)	Top Depth (ft.)	Bottom Depth (ft.)	
Plug Information:		n/a				

Strata Depth (tt.) Water Type 240-300 trinity Chemical Analysis Made: No Did the driller knowingly penetrate any strata which contained injurious constituents?: No Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal. Company Information: Associated Drilling Inc. PO Box 673 Dripping Springs, TX 78620 Driller Name: James Benoit License Number: 4064 Comments: Joelander Amended address at driller's request. Unabel to use amendment functionality of system - 1/10/14 - DT						
Water Quality: 240-300 trinity Chemical Analysis Made: No Did the driller knowingly penetrate any strata which contained injurious constituents?: No Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal. Company Information: Associated Drilling Inc. PO Box 673 Dripping Springs, TX 78620 Driller Name: James Benoit License Number: 4064 Comments: Joelander Amended address at driller's request. Unabel to use amendment functionality of system - 1/10/14 - DT		Strata Depth (ft.)	Water Type			
Chemical Analysis Made: No Did the driller knowingly penetrate any strata which contained injurious constituents?: No Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal. Company Information: Associated Drilling Inc. PO Box 673 Dripping Springs, TX 78620 Driller Name: James Benoit License Number: 4064 Comments: Joelander Amended address at driller's request. Unabel to use amendment functionality of system - 1/10/14 - DT	Water Quality:	240-300	trinity			
Did the driller knowingly penetrate any strata which contained injurious constituents?: No Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal. Company Information: Associated Drilling Inc. PO Box 673 Dripping Springs, TX 78620 Driller Name: James Benoit License Number: 4064 Comments: Joelander Amended address at driller's request. Unabel to use amendment functionality of system - 1/10/14 - DT			Chemical Analysis Made	No		
Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal. Company Information: Associated Drilling Inc. PO Box 673 Dripping Springs, TX 78620 Icense Number: Driller Name: James Benoit License Number: Joelander Amended address at driller's request. Unabel to use amendment functionality of system - 1/10/14 - DT		Did the driller	knowingly penetrate any strata which contained injurious constituents?	: No		
Company Information: Associated Drilling Inc. PO Box 673 Dripping Springs, TX 78620 Driller Name: James Benoit License Number: 4064 Comments: Joelander Amended address at driller's request. Unabe to use amendment functionality of system - 1/10/14 - DT	Certification Data:	The driller certified th driller's direct superv correct. The driller u the report(s) being re	nat the driller drilled this well (or the we rision) and that each and all of the stat inderstood that failure to complete the eturned for completion and resubmittal	ell was drille ements he required ite l.	ed under the rein are true and ems will result in	
PO Box 673 Dripping Springs, TX 78620 Driller Name: James Benoit License Number: 4064 Comments: Joelander Amended address at driller's request. Unabel to use amendment functionality of system - 1/10/14 - DT	Company Information:	Associated Drillin	ig Inc.			
Driller Name: James Benoit License Number: 4064 Comments: Joelander Amended address at driller's request. Unabel to use amendment functionality of system - 1/10/14 - DT		PO Box 673 Dripping Springs,	TX 78620			
Comments: Joelander Amended address at driller's request. Unabel to use amendment functionality of system - 1/10/14 - DT	Driller Name:	James Benoit	License	Number:	4064	
Amended address at driller's request. Unabel to use amendment functionality of system - 1/10/14 - DT	Comments:	Joelander				
		Amended address system - 1/10/14 -	s at driller's request. Unabel to use DT	amendme	ent functionality of	

Casing: BLANK PIPE & WELL SCREEN DATA

Top (ft.)	Bottom (ft.)	Description
0	25	tan and yellow lime
25	110	gray lime
110	155	tan limestone
155	175	gray limestone
175	205	gray shale
205	220	red clay
220	280	red and white limestone
280	295	yellow limestone
295	310	gray limestone
310	330	gray clay

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)		
5 od ne	w sdr17 p	vc -3 to	250		
5 od new sdr17 pvc (.032) screen 250 to 310					
5 od new sdr17 pvc 310 to 330					

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STATE OF TEXAS WELL REPORT for Tracking #379826			
Owner:	Tom Buerk	Owner Well #:	No Data
Address:	1826 Bee Creel Rd Spicewood, TX 78669	Grid #:	57-48-2
Well Location:	/ell Location: 21300 Crestmont	Latitude:	30° 21' 19" N
Spicewood, TX 78669	Longitude:	098° 03' 51" W	
Well County:	Travis	Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 7/23/2014 Drilling End Date: 7/23/2014

	Diameter (in	.) Top De	epth (ft.)	Bottom Depth (ft.)	
Borehole:	8)	100	
	6.25	10	00	340	
Drilling Method:	Air Rotary				
Borehole Completion:	Straight Wall				
	Top Depth (ft.)	Bottom Depth (ft.)	Des	scription (number of sacks & materia	
Annular Seal Data:	0	100		7ben1port	
Seal Method: Pr	essure	Di	stance to Pr	operty Line (ft.): 50+	
Sealed By: Driller		Distance to Septic Field or other concentrated contamination (ft.): 50+			
		C	Distance to S	Septic Tank (ft.): No Data	
			Metho	d of Verification: Land Owne	
Surface Completion:	Surface Sleeve I	nstalled			
Water Level:	No Data				
Packers:	Burlap/Neopren	e 235,230,105,100			
Type of Pump:	No Data				
Well Tests:	Jetted	Yield: 17 GPM			

	Strata Depth (ft.)	Water Type		
Water Quality:	235-332	M Trinity		
		Chemical Analysis	Made: No	
	Did the driller	knowingly penetrate any strata contained injurious constit	which uents?: No	
Certification Data:	The driller certified th driller's direct supervi correct. The driller u he report(s) being re	at the driller drilled this well (or ision) and that each and all of t nderstood that failure to compl turned for completion and resu	r the well was dr he statements h ete the required ubmittal.	illed under the erein are true and items will result in
Company Information:	APEX Drilling INC			
	P O Box 867 Marble Falls, TX 7	78654		
Driller Name:	Andrew Jackson J	Johnson L	icense Number:	54989
Comments:	No Data			
Lith	ology:		Casing:	

DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	52	Tan Limestone
52	235	Tan Gray Limestone
235	305	Tan White Limestone
305	332	Gray Tan Limestone
332	340	Gray Sandstone w Clay

Casing: **BLANK PIPE & WELL SCREEN DATA**

Dia. (in.) New/Used Type Setting From/To (ft.) 4.5" (5OD) New PVC +2' to 340' SDR17

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

STATE OF TEXAS WELL REPORT for Tracking #379827			
Owner:	Singing Bush LLC	Owner Well #:	No Data
Address:	1826 Bee Creel Rd Spicewood TX 78669	Grid #:	57-48-2
Well Location:	4819 RD Dr	Latitude:	30° 21' 22" N
	Spicewood, TX 78669	Longitude:	098° 03' 55" W
Well County:	Travis	Elevation:	No Data
Type of Work:	New Well	Proposed Use:	Domestic

Drilling Start Date: 7/24/2014 Drilling End Date: 7/24/2014

	Diameter (in	.) Top De	epth (ft.)	Bottom Depth (ft.)
Borehole:	8		0	100
	6.25	10	00	300
Drilling Method:	Air Rotary			
Borehole Completion:	Straight Wall			
	Top Depth (ft.)	Bottom Depth (ft.)	Des	scription (number of sacks & materia
Annular Seal Data:	0	100		7ben1port
Seal Method: Pr	essure	Di	stance to Pr	operty Line (ft.): 5+
Sealed By: Driller		Distance to Septic Field or other concentrated contamination (ft.): 50+		
		[Distance to S	Septic Tank (ft.): No Data
			Method	d of Verification: Land Owne
Surface Completion:	Surface Sleeve I	nstalled		
Water Level:	No Data			
Packers:	Burlap/Neopren	e 235,230,105,100		
Type of Pump:	No Data			
Well Tests:	Jetted	Yield: 12 GPM		

	Strata Depth (ft.)	Water Type		
Water Quality:	211-280	M Trinity		
		Chemical Analys	sis Made: No	
	Did the driller	knowingly penetrate any stra contained injurious cons	ita which tituents?: No	
Certification Data: 7 c c t	The driller certified th friller's direct supervi correct. The driller u he report(s) being re	hat the driller drilled this well (ision) and that each and all o nderstood that failure to com eturned for completion and re	or the well was drill f the statements he plete the required it submittal.	ed under the rein are true and ems will result in
Company Information:	APEX Drilling INC	•		
	P O Box 867 Marble Falls, TX 7	78654		
Driller Name:	Andrew Jackson	Johnson	License Number:	54989
Comments:	No Data			

Top (ft.)	Bottom (ft.)	Description	Dia. (in.) New/Use
0	32	Tan Limestone	4.5" (50D) Ne
32	211	Gray Tan Limestone	4.5" (50D) Ne
211	280	Tan White Limestone	4.5" (50D) Ne
280	295	Gray Tan Limestone	
295	300	Gray Limestone w Clay	

Casing:				
BLANK PIPE & WELL SCREEN DATA				

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)
4.5" (5	OD)New I	PVC +2	' to 220' SDR17
4.5" (5	OD)New \$	Slotted	220' to 280' .035
4.5" (5	OD)New I	PVC 28	0' to 300' SDR17

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

STATE OF TEXAS WELL REPORT for Tracking #381243					
Owner:	Bob Huthnance	Owner Well #:	No Data		
Address:	4001 Harborlight Cove Austin, TX_78731	Grid #:	57-48-1		
Well Location: 2	21300 Hamilton Pool Rd. Dripping Springs, TX 78620	Latitude:	30° 20' 12" N		
		Longitude:	098° 05' 18" W		
Well County:	Travis	Elevation:	1045 ft. above sea level		
Type of Work:	New Well	Proposed Use:	Domestic		

Drilling Start Date: 10/20/2014 Drilling End Date: 10/20/2014

	Diameter (in.)	Top Dept	h (ft.)	Bottom Depth (ft.)			
Borehole: 1		0		10			
	8.5	10		20			
	6.75	20		420			
Drilling Method:	Air Rotary						
Borehole Completion:	Open Hole						
	Top Depth (ft.)	Bottom Depth (ft.)	Des	cription (number of sacks & material)			
Annular Seal Data:	0	50		14 cement			
Seal Method: slı	ırry & pour	Dist	ance to Pro	perty Line (ft.): No Data			
Sealed By: De	Distance to Septic Field or other concentrated contamination (ft.): No Data						
		Distance to Septic Tank (ft.): No Data					
			Method	of Verification: No Data			
Surface Completion: Pitless Adapter Used							
Water Level:	228 ft. below land surface on 2014-10-23 Measurement Method: Unknown						
Packers:	neoprene 50, 140, 200, 210						
Type of Pump:	Submersible		Pun	np Depth (ft.): 340			
Well Tests:	Jetted	Yield: 10 GPM					

	Strata Depth (ft.)	Water Type		
Water Quality:	No Data	Glenrose		
		Chemical Analysis Made:	No	
	Did the driller	knowingly penetrate any strata which contained injurious constituents?:	No	
Certification Data:	The driller certified th driller's direct superv correct. The driller u he report(s) being re	nat the driller drilled this well (or the we ision) and that each and all of the state nderstood that failure to complete the eturned for completion and resubmittal.	II was drille ements hei required ite	ed under the rein are true and ems will result in
Company Information:	Bee Cave Drilling,	, Inc.		
	185 Angel Fire Dr. Dripping Springs,	TX 78620		
Driller Name:	Jim Blair	License I	Number:	54416
Comments:	No Data			

Top (ft.)	Bottom (ft.)	Description
0	1	topsoil
1	80	tan limestone
80	90	gray limestone
90	120	gray limestone & clay
120	170	gray limestone
170	190	gray & brown limestone
190	210	gray limestone
210	230	tan limestone
230	250	gray & tan limestone
250	270	tan sandstone wb 10 gpm 550 tds
270	300	gray sandstone
300	310	gray limestone
310	350	gray limestone w/ shale & clay
350	390	red sandstone & clay
390	400	trinity mix (no production)
400	420	black rock

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)
4.5 new sdr-17 0 240

4.5 new perf 240 300

4.5 new sdr-17 300 400

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.

STATE OF TEXAS WELL REPORT for Tracking #382742					
Owner:	CYPRESS RANCH WCID #1	Owner Well #:	No Data		
Address:	102 NORTH RAILROAD AVE. PELUGERVILLE TX 78660	Grid #:	57-48-1		
Well Location:	WEST CYPRESS HILLS SUBD #13	Latitude:	30° 20' 37" N		
	SPICEWOOD, TX 78669	Longitude:	098° 05' 17" W		
Well County:	Travis	Elevation:	No Data		
Type of Work:	New Well	Proposed Use:	Public Supply		

Drilling End Date: 10/30/2014

Diameter (in.) Top Depth (ft.) Bottom Depth (ft.) Borehole: 10 0 16 11 10 300 Drilling Method: **Air Rotary** Borehole Completion: **Filter Packed** Top Depth (ft.) Bottom Depth (ft.) Filter Material Size Filter Pack Intervals: 145 300 Gravel 1/4 TO 3/8 Bottom Depth (ft.) Description (number of sacks & material) Top Depth (ft.) Annular Seal Data: 0 145 51 TYPE H CEM. Seal Method: PRESSURE TRIMMIE Distance to Property Line (ft.): 50+ CEMENT Sealed By: Driller Distance to Septic Field or other concentrated contamination (ft.): 150+ Distance to Septic Tank (ft.): No Data Method of Verification: WEST CYPRESS HILLS Surface Completion: **Surface Slab Installed** Water Level: No Data Packers: No Data Type of Pump: Submersible Well Tests: Yield: 35 GPM Jetted

Drilling Start Date: 10/29/2014

Plans Approved by TCEQ - YES

	1		
	Strata Depth (ft.)	Water Type	
Water Quality:	70	MIDDLE TRINITY	
		Chemical Analysis Made:	Νο
	Did the driller I	knowingly penetrate any strata which contained injurious constituents?:	Νο
Certification Data:	The driller certified the driller's direct supervis correct. The driller ur the report(s) being ref	at the driller drilled this well (or the we sion) and that each and all of the state nderstood that failure to complete the turned for completion and resubmittal.	II was drilled under the ements herein are true and required items will result in
Company Information:	ASSOCIATED DRI	LLING	
	P. O. BOX 673 DRIPPING SPRING	S, TX 78620	
Driller Name:	FRANK GLASS	License I	Number: 1313
Comments:	Amended 8/10/15	Ref.# 14149	
Report Amended or	n 8/7/2015 by Reques	t #14149	
Lit DESCRIPTION & COLOF	hology: R OF FORMATION MA	ATERIAL BLANK PIPE &	Casing: WELL SCREEN DATA
From (ft) To (ft) Desc	ription	Dia. (in.) New/Used Type	Setting From/To (ft.)
0-2 BACKFILL & CALICH	IE	6.9 N SDR17 PVC +3 TC) 300
2-12 CALICHE		6.9 N SDR17 PVC 220 T	O 300 .025
12-20 CALICHE W/BROV	VN CLAY		
20-25 CALICHE/TAN LIM	IESTONE		
25-28 BLUE LIMESTONE	E		
28-100 GRAY LIMESTON	IE		
100-120 GRAY W/TAN LI	MESTONE		
120-145 TAN/GRAY LIME	ESTONE		
145-155 TAN/GRAY W/B	ROWN		
LIMESTONE			
155-170 BROWN/TAN LI	MESTONE		
170-190 WHITE/TAN/BRO	OWN		
LIMESTONE			
190-205 WHITE/TAN/W/G	GRAY		
LIMESTONE			
205-265 TAN/GRAY LIME	ESTONE		
265-270 GRAY LIMESTO	NE W/CLAY		

STRIPS

270-290 GRAY LIMESTONE

290-295 GRAY LIMESTONE W/CLAY

295-300 CLAY HAMMETT

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STATE OF TEXAS WELL REPORT for Tracking #382755					
Owner:	CYPRESS RANCH WCID NO. 1	Owner Well #:	14		
Address:	8760 A-RESEARCH BLVD.	Grid #:	57-48-1		
Well Location:	WEST CYPRESS HILLS SUBD. #14 SPICEWOOD, TX 78669	Latitude:	30° 20' 33" N		
Weil Location.		Longitude:	098° 05' 15" W		
Well County:	Travis	Elevation:	No Data		
Type of Work:	New Well	Proposed Use:	Public Supply		

 Drilling Start Date:
 10/31/2014
 Plans Approved by TCEQ - YES

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

Borehole:	16		0		18		
	11		1:	8	260)	
Drilling Method:	Air Rotary						
Borehole Completion:	Filter Packed						
	Top Depth (ft.)	Bottom Dep	th (ft.)	Filter Ma	aterial	Size	
Filter Pack Intervals:	150	260		Gravel		1/4 TO 3/8	
	Top Depth (ft.) Bottom		n Depth (ft.)	Depth (ft.) Description (number c		of sacks & material)	
Annular Seal Data:	0		145	51 TYPE H		PORT.	
Seal Method: PR CE	ESSURE TRIMM	IIE	Dis	stance to Pro	operty Line (ft.):	50+	
Sealed By: Driller			Distance to Septic Field or other concentrated contamination (ft.): 150+				
			C	Distance to S	eptic Tank (ft.):	No Data	
				Method	of Verification:	WEST CYPF HILLS	RESS
Surface Completion:	Surface Slab In	stalled					
Water Level:	No Data						
Packers:	No Data						
Type of Pump:	Submersible						
Well Tests:	Jetted	Yiel	d: 38 GPM				
	Strata Depth (ft.)	Water Type					
----------------------	---	--	--	--			
Water Quality:	80	MIDDLE TRINITY					
		Chemical Analysis Made	No				
	Did the driller	knowingly penetrate any strata which					
		contained injurious constituents?	No				
Certification Data:	The driller certified th driller's direct superv correct. The driller u the report(s) being re	hat the driller drilled this well (or the we ision) and that each and all of the stat nderstood that failure to complete the eturned for completion and resubmittal	ell was drilled under the ements herein are true and required items will result in l.				
Company Information	n: ASSOCIATED DR	ILLING					
	P. O. BOX 673 DRIPPING SPRING	GS, TX 78620					
Driller Name:	FRANK GLASS	License	Number: 1313				
Comments:	Amondod 9/8/15	Pof # 1/122					
Comments.							
Report Amended	on 8/6/2015 by Reques	st #14122					
	ithology:		Casing.				
DESCRIPTION & COLO	DR OF FORMATION M	ATERIAL BLANK PIPE 8	WELL SCREEN DATA				
From (ft) To (ft) De	escription	Dia. (in.) New/Used Type	Setting From/To (ft.)				
0-30 CALICHE/LIMEST	ONE STRIPS	6.9 N SDR17 PVC +3 T	D 260				
30-95 GRAY LIMESTO	NE	6.9 N SDR17 PVC SLOT	Г 180 ТО 260 .032				
95-125 TAN/GRAY LIM	ESTONE						
125-140 TAN LIMESTO	NE						
140-155 GRAY/TAN LII	MESTONE						
155-160 TAN W/GRAY	LIMESTONE						
160-195 WHITE/TAN LI	MESTONE						
195-200 GRAY W/WHIT							
200-210 TAN W/GRAY	LIMESTONE						
210-240 TAN LIMESTO	NE						
240-255 GRAY/TAN LI							
	MESTONE						
255-260 GRAY/TAN LI	MESTONE MESTONE W/CLAY						

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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) 463-7880

STATE OF TEXAS WELL REPORT for Tracking #382757					
Owner:	CYPRESS RANCH WCID NO. 1	Owner Well #:	15		
Address:	8760 A-RESEARCH BLVD. AUSTIN. TX 78758	Grid #:	57-48-1		
Well Location:	WEST CYPRESS HILLS SUBD. #15	Latitude:	30° 20' 24" N		
	SPICEWOOD, TX 78669	Longitude:	098° 05' 11" W		
Well County:	Travis	Elevation:	No Data		
Type of Work:	New Well	Proposed Use:	Public Supply		

Drilling End Date: 11/2/2014

Diameter (in.) Top Depth (ft.) Bottom Depth (ft.) Borehole: 10 0 16 11 10 280 Drilling Method: **Air Rotary** Borehole Completion: **Filter Packed** Top Depth (ft.) Bottom Depth (ft.) Filter Material Size Filter Pack Intervals: 145 1/4 TO 3/8 280 Gravel Top Depth (ft.) Bottom Depth (ft.) Description (number of sacks & material) Annular Seal Data: 0 145 **49 CLASS H PORT** Seal Method: PRESSURE TRIMMIE Distance to Property Line (ft.): 50+ CEMENT Sealed By: Driller Distance to Septic Field or other concentrated contamination (ft.): 150+ Distance to Septic Tank (ft.): No Data Method of Verification: WEST CYPRESS HILLS Surface Completion: **Surface Slab Installed** Water Level: No Data Packers: No Data Type of Pump: Submersible

Well Tests: Jetted Yield: 15 GPM

Drilling Start Date: 11/1/2014

Plans Approved by TCEQ - YES

	Strata Depth (ft.)	Water Type		
Water Quality:	80	MIDDLE TRINITY		
		Chemical Analysis Made:	No	
	Did the driller	knowingly penetrate any strata which contained injurious constituents?:	Νο	
Certification Data:	The driller certified th driller's direct supervi correct. The driller un the report(s) being re	at the driller drilled this well (or the well ision) and that each and all of the state nderstood that failure to complete the re- turned for completion and resubmittal.	was drilled under the ments herein are true and equired items will result in	
Company Information:	ASSOCIATED DRI	LLING		
	P. O. BOX 673 DRIPPING SPRING	GS, TX 78620		
Driller Name:	FRANK GLASS	License N	lumber: 1313	
Comments:	Amended 9/8/15 R	Ref.# 14123		
Report Amended or	n 8/6/2015 by Reques	st #14123		
Lit DESCRIPTION & COLOF	thology: R OF FORMATION MA	C ATERIAL BLANK PIPE & V	Casing: WELL SCREEN DATA	
From (ft) To (ft) Desc	cription	Dia. (in.) New/Used Type	Setting From/To (ft.)	
From (ft) To (ft) Desc 0-1 TOP SOIL	sription	Dia. (in.) New/Used Type 6.9 N SDR17 PVC +3 TO	Setting From/To (ft.) 280	
From (ft) To (ft) Desc 0-1 TOP SOIL 1-30 CALICHE	cription	Dia. (in.) New/Used Type 6.9 N SDR17 PVC +3 TO 6.9 N SDR17 PVC SLOT 5	Setting From/To (ft.) 280 200 TO 280 .025	
From (ft) To (ft) Desc 0-1 TOP SOIL 1-30 CALICHE 30-40 CALICHE W/BLUE 100 CALICHE	eription	Dia. (in.) New/Used Type 6.9 N SDR17 PVC +3 TO 6.9 N SDR17 PVC SLOT	Setting From/To (ft.) 280 200 TO 280 .025	
From (ft) To (ft) Desc 0-1 TOP SOIL 1-30 CALICHE 30-40 CALICHE W/BLUE LIMESTONE	eription	Dia. (in.) New/Used Type 6.9 N SDR17 PVC +3 TO 6.9 N SDR17 PVC SLOT	Setting From/To (ft.) 280 200 TO 280 .025	
From (ft) To (ft) Desc 0-1 TOP SOIL 1-30 CALICHE 30-40 CALICHE W/BLUE LIMESTONE 40-55 TAN/GRAY LIMES	E & GRAY	Dia. (in.) New/Used Type 6.9 N SDR17 PVC +3 TO 6.9 N SDR17 PVC SLOT	Setting From/To (ft.) 280 200 TO 280 .025	
From (ft) To (ft) Desc 0-1 TOP SOIL 1-30 CALICHE 30-40 CALICHE W/BLUE LIMESTONE 40-55 TAN/GRAY LIMES 55-100 GRAY LIMESTON	Eription E & GRAY TONE NE	Dia. (in.) New/Used Type 6.9 N SDR17 PVC +3 TO 6.9 N SDR17 PVC SLOT	Setting From/To (ft.) 280 200 TO 280 .025	
From (ft) To (ft) Desc 0-1 TOP SOIL 1-30 CALICHE 30-40 CALICHE W/BLUE LIMESTONE 40-55 TAN/GRAY LIMESTON 55-100 GRAY LIMESTON 100-135 GRAY W/TAN LI	Example of the second s	Dia. (in.) New/Used Type 6.9 N SDR17 PVC +3 TO 6.9 N SDR17 PVC SLOT 5	Setting From/To (ft.) 280 200 TO 280 .025	
From (ft) To (ft) Desc 0-1 TOP SOIL 1-30 CALICHE 30-40 CALICHE W/BLUE LIMESTONE 40-55 TAN/GRAY LIMESTON 55-100 GRAY LIMESTON 100-135 GRAY W/TAN LI 135-155 TAN/GRAY/W/B	Exerciption E & GRAY TONE NE IMESTONE LUE LIMESTONE	Dia. (in.) New/Used Type 6.9 N SDR17 PVC +3 TO 6.9 N SDR17 PVC SLOT 5	Setting From/To (ft.) 280 200 TO 280 .025	
From (ft) To (ft) Desc 0-1 TOP SOIL 1-30 CALICHE 30-40 CALICHE W/BLUE LIMESTONE 40-55 TAN/GRAY LIMES 55-100 GRAY LIMESTON 100-135 GRAY W/TAN LIME 135-155 TAN/GRAY/W/B	Exerciption E & GRAY TONE NE IMESTONE LUE LIMESTONE ESTONE	Dia. (in.) New/Used Type 6.9 N SDR17 PVC +3 TO 6.9 N SDR17 PVC SLOT 5	Setting From/To (ft.) 280 200 TO 280 .025	
From (ft) To (ft) Desc 0-1 TOP SOIL 1-30 CALICHE 1-30 CALICHE 30-40 CALICHE W/BLUE S0-40 CALICHE W/BLUE 100-135 TAN/GRAY LIMESTON 100-135 GRAY W/TAN LIME 135-155 TAN/GRAY/W/B 155-175 GRAY/TAN LIMESTON 175-180 GRAY LIMESTON	Exiption E & GRAY TONE NE IMESTONE LUE LIMESTONE ESTONE DNE	Dia. (in.) New/Used Type 6.9 N SDR17 PVC +3 TO 6.9 N SDR17 PVC SLOT 5	Setting From/To (ft.) 280 200 TO 280 .025	
From (ft) To (ft) Desc 0-1 TOP SOIL 1-30 CALICHE 1-30 CALICHE 30-40 CALICHE W/BLUE S0-40 CALICHE W/BLUE 100-135 TAN/GRAY LIMESTON 40-55 TAN/GRAY LIMESTON 100-135 GRAY W/TAN LIME 135-155 TAN/GRAY/W/B 155-175 GRAY/TAN LIMESTON 175-180 GRAY LIMESTON 180-220 TAN LIMESTON	Exercise of the second	Dia. (in.) New/Used Type 6.9 N SDR17 PVC +3 TO 6.9 N SDR17 PVC SLOT 5	Setting From/To (ft.) 280 200 TO 280 .025	
From (ft) To (ft) Desc 0-1 TOP SOIL 1-30 CALICHE 1-30 CALICHE 30-40 CALICHE W/BLUE 30-40 CALICHE W/BLUE 100-135 TAN/GRAY LIMESTON 40-55 TAN/GRAY LIMESTON 100-135 GRAY W/TAN LIME 135-155 TAN/GRAY/W/B 155-175 GRAY/TAN LIME 175-180 GRAY LIMESTON 180-220 TAN LIMESTON 220-255 GRAY/TAN LIME 140-140	Extone ESTONE ESTONE ESTONE	Dia. (in.) New/Used Type 6.9 N SDR17 PVC +3 TO 6.9 N SDR17 PVC SLOT	Setting From/To (ft.) 280 200 TO 280 .025	
From (ft) To (ft) Desc 0-1 TOP SOIL 1-30 CALICHE 1-30 CALICHE 30-40 CALICHE W/BLUE 30-40 CALICHE W/BLUE 100-135 TAN/GRAY LIMESTONE 40-55 TAN/GRAY LIMESTON 100-135 GRAY W/TAN LIME 135-155 TAN/GRAY/W/B 155-175 GRAY/TAN LIME 175-180 GRAY LIMESTON 180-220 TAN LIMESTON 220-255 GRAY/TAN LIME 255-270 TAN/GRAY LIME	EXTONE ESTONE ESTONE ESTONE ESTONE ESTONE ESTONE ESTONE ESTONE	Dia. (in.) New/Used Type 6.9 N SDR17 PVC +3 TO 6.9 N SDR17 PVC SLOT 2	Setting From/To (ft.) 280 200 TO 280 .025	
From (ft) To (ft) Desc 0-1 TOP SOIL 1-30 CALICHE 1-30 CALICHE 30-40 CALICHE W/BLUE 30-40 CALICHE W/BLUE 100-135 TAN/GRAY LIMESTONE 40-55 TAN/GRAY LIMESTON 100-135 GRAY W/TAN LIME 135-155 TAN/GRAY/W/B 155-175 GRAY/TAN LIME 175-180 GRAY LIMESTON 180-220 TAN LIMESTON 220-255 GRAY/TAN LIME 255-270 TAN/GRAY LIME 270-280 GRAY/TAN LIME 140-220 TAN LIME	E & GRAY TONE TONE NE IMESTONE LUE LIMESTONE ESTONE ESTONE ESTONE ESTONE ESTONE	Dia. (in.) New/Used Type 6.9 N SDR17 PVC +3 TO 6.9 N SDR17 PVC SLOT	Setting From/To (ft.) 280 200 TO 280 .025	

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Texas Department of Licensing and Regulation P.O. Box 12157 Austin, TX 78711 (512) 463-7880

	STATE OF TEXAS WELL REPORT for Tracking #384315				
Owner:	Shane Meyers	Owner Well #:	No Data		
Address:	22325 Rocking A Trail Spicewood, TX 78669	Grid #:	57-48-2		
Well Location:	22325 Rocking A Trail	Latitude:	30° 21' 57" N		
	Spicewood, TX 78669	Longitude:	098° 04' 37" W		
Well County:	Travis	Elevation:	No Data		
Type of Work:	New Well	Proposed Use:	Domestic		

Drilling Start Date: 12/19/2014 Drilling End Date: 12/19/2014

	Diameter (in.,)	Top Dep	oth (ft.)	Bottom Depth (ft.)	
Borehole:	8	0			15	
	6.25		15	5	250	
Drilling Method:	Air Rotary					
Borehole Completion:	Straight Wall					
	Top Depth (ft.)	Bottom Dep	th (ft.)	Des	cription (number of sacks & material)	
Annular Seal Data:	0	20			4 portland	
Seal Method: Slu	urry		Dis	tance to Pro	operty Line (ft.): 50+	
Sealed By: Dri	Driller		Distance to Septic Field or other concentrated contamination (ft.): 100 +			
			D	istance to S	eptic Tank (ft.): No Data	
				Method	of Verification: Land Owner	
Surface Completion:	Surface Sleeve Ir	nstalled				
Water Level:	No Data					
Packers:	Burlap / Neoprei	ne 160,155,20	0			
Type of Pump:	No Data					
Well Tests:	Jetted	Yield: 11	I.5 GPM			

	Strata Depth (ft.)	Water Type		
Water Quality:	160 - 230	Cow Creek TDS 400)	
		Chemical Analys	is Made: No	
	Did the driller k	knowingly penetrate any strat contained injurious const	a which ituents?: No	
Certification Data:	The driller certified that driller's direct supervis correct. The driller ur the report(s) being ret	at the driller drilled this well (or sion) and that each and all of inderstood that failure to comp turned for completion and res	or the well was drille the statements her plete the required ite submittal.	ed under the rein are true and ems will result in
Company Information:	APEX Drilling INC.			
	P O Box 867 Marble Falls, TX 7	8654		
Driller Name:	Andrew Jackson J	ohnson	License Number:	54989
Comments:	No Data			

Top (ft.)	Bottom (ft.)	Description
0	1	Top Soil
1	24	Tan LS
24	164	Gray Tan LS
164	185	Tan White LS
185	201	Gray Tan LS
201	230	Tan White LS
230	243	Gray Tan LS
243	250	Gray LS W/ Clay

Casing:
BLANK PIPE & WELL SCREEN DATA

Dia. (in.)	New/Used	Туре	Setting From/To (ft.)	
4.5 (5 C	DD)NewF	PVC +2	' to 170' SDR17	
4.5 (5 C	DD)New S	Slotted	170' to 230' .035	
4.5 (5 0	DD)NewF	PVC 23	0' to 250' SDR17	

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Texas Department of Licensing and Regulation P.O. Box 12157 Austin, TX 78711 (512) 463-7880

STATE OF TEXAS WELL REPORT for Tracking #397063				
Owner:	Ameristar Remodeling	Owner Well #:	No Data	
Address:	109 S. Harris Ste. 125 Round Rock, TX, 78664	Grid #:	57-48-2	
Well Location:	5406 W. Reimers Rd.	Latitude:	30° 20' 59" N	
	Spicewood, TX 78669	Longitude:	098° 04' 09" W	
Well County:	Travis	Elevation:	1083 ft. above sea level	
Type of Work:	New Well	Proposed Use:	Domestic	

Drilling Start Date: 4/22/2015 Drilling End Date: 4/22/2015

	Diameter (in.))	Top Depth ((ft.)	Bottom Depth	(ft.)
Borehole:	10		0		10	
	8		10		20	
	6.75		20		380	
Drilling Method:	Air Rotary					
Borehole Completion:	Open Hole					
	Top Depth (ft.)	Bottom	Depth (ft.)	Desc	ription (number of sac	ks & material)
Annular Seal Data:	0	20 6		6 cement	6 cement	
	20	50			3 bentonite	
Seal Method: slu	urried & poured		Distar	nce to Pro	perty Line (ft.): No	o Data
Sealed By: Steve Stewart		Distance to Septic Field or other concentrated contamination (ft.): No Data				
			Dista	ance to Se	eptic Tank (ft.): N	o Data
				Method	of Verification: No	o Data
Surface Completion:	Pitless Adapter L	Jsed				
Water Level:	260 ft. below land	d surface	on 2015-04-23	Measu	rement Method:	Unknown
Packers:	neoprene 50, 29	5, 297				
Type of Pump:	No Data					
Well Tests:	Jetted	Yield	l: 22 GPM			

		Strata Depth (ft.)	Water Type			
Water	Quality:	No Data	No Data			
			Chemical Analysis N	Made: No		
		Did the driller	knowingly penetrate any strata w contained injurious constitue	vhich ents?: No		
Certifi	cation Data:	The driller certified th driller's direct superv correct. The driller u he report(s) being re	nat the driller drilled this well (or the self of the self of the self of the nderstood that failure to complet seturned for completion and resub	he well was drille e statements her e the required ite mittal.	ed under the rein are true and ems will result in	
Comp	any Information:	Bee Cave Drilling,	, Inc.			
		185 Angel Fire Dr. Dripping Springs,	TX 78620			
Driller	Name:	Jim Blair	Lice	ense Number:	54416	
Comm	nents:	No Data				

Top (ft.)	Bottom (ft.)	Description
0	3	topsoil & rock
3	15	tan & yellow caliche
15	45	gray limestone
45	55	gray clay
55	110	tan limestone
110	295	gray limestone
295	350	white sandstone wb 30 gpm 300 tds
350	360	gray limestone
360	380	tan & white sandstone

Casing: BLANK PIPE & WELL SCREEN DATA

Dia. (in.) New/Used Type Setting From/To (ft.)

4.5 new sdr-17 0 380

perf 300-380

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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) 463-7880

	STATE	E OF TEXAS	6 WELL REP	ORT for Trac	king #515974	
Owner:	WEST C	YPRESS RANC	H WCID#1/C/O	Owner Well #:	16 WELL #16	
Address'	3815 SC	L, LLC/ WELL #	16 OF TX	Grid #:	57-48-1	
Address.	HWY.,S	TE. 300 TX 78704		Latitude:	30° 20' 32.34" N	
Well Location:	WELL #	16 FIELD EXPA	NSION	Longitude:	098° 05' 22.68" W	
	SPICEW	/OOD, TX 78669	9	Elevation:	No Data	
Well County: Travis						
Type of Work:	New We	II		Proposed Use:	Public Supply	
Drilling Start Date	e: 5/29/2	019 Drilling	9 End Date: 5/29/2	019	Plans Approved by TO PWS	CEQ - YES # 227035
		Diameter (in.) Top	Depth (ft.)	Bottom Depth (ft.)	
Borehole:		14.75		0	18	
		9.875		18	250	
Drilling Method:	Δ	ir Rotary				
Borehole Comple	etion: S	traight Wall				
		Top Depth (ft.)	Bottom Depth (ft.)	(ft.) Description (number of sacks & material)		
Annular Seal Dat	a:	0	130	TYPE H PORTLAND CEMENT 52 Bags/Sacks		
Seal Metho	od: Press	sure		Distance to Prope	rty Line (ft.): 1000+	
Sealed I	By: Drille	r	Di	Distance to Septic Field or other		
				Distance to Septic Tank (ft.): N/A		
				Method of	Verification: OWNER	
Surface Completi	ion: S	urface Slab Inst	talled	Surfa	ce Completion by Drille	r
Water Level:		165 ft. below lan	d surface on 2019-	•05-29 Measurer	nent Method: Electric	Line
Packers:	kers: BURLAP & RUBBER at 130 ft. BURLAP & RUBBER at 135 ft. BURLAP & RUBBER at 140 ft.					
Type of Pump:	5	Submersible		Pump I	Depth (ft.): 230	
Well Tests:		Jetted	Yield: 20+ GF	РМ		

	Strata Depth (ft.)	Water Type			
Water Quality:	190 - 250	COW CREEK			
	Chemical Analysis Made: Yes				
		contained injurious constituents	?: No		
Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.				
Company Information:	Centex Pump & Su	pply, Inc.			
	2520 Hwy. 290 West Dripping Springs, TX 78620				
Driller Name:	MARTIN DALE LIN	GLE License	e Number:	54813	
Comments:	No Data				

Top (ft.)	Bottom (ft.)	Description
0	10	TOP SOIL
10	30	GRAY LIMESTONE W/CLAY
30	60	GRAY LIMESTONE
60	70	BROWN LIMESTONE W/CLAY
70	110	GRAY/TAN LIMESTONE
110	130	GRAY LIMESTONE
130	160	TAN LIMESTONE
160	170	GRAY LIMESTONE
170	190	GRAY LIMESTONE W/CLAY
190	210	TAN/WHITE LIMESTONE
210	230	GRAY LIMESTONE W/CLAY STRIPS
230	250	GRAY LIMESTONE W/CLAY STRIPS

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
10	SDR21	New Plastic (PVC)		0	18
5	SDR17	New Plastic (PVC)		2	190
5	SDR17	New Plastic (PVC)		190	250

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

STATE OF TEXAS WELL REPORT for Tracking #515979							
Owner:	WEST		RANCH		Owner Well #:	19 WELL 19	
Address:	3815 S			JWY	Grid #:	57-48-1	
	STE. 3 AUSTI	00 N. TX 78704		,	Latitude:	30° 20' 28.74" N	
Well Location:	WELL	#19 FIELD EXPAN	SION		Longitude:	098° 05' 21.24" W	
:	SPICE	WOOD, TX 78669			Elevation:	No Data	
Well County:	Travis						
Type of Work:	New W	lell			Proposed Use:	Public Supply	
Drilling Start Date: 5/27/2019 Drilling End Date: 5/27/2019 Plans Approved by TCEQ - YES PWS# 2270352							
		Diameter (in.)		Top L	Depth (ft.)	Bottom Depth (ft.)	
Borehole:		14.75			0	18	
		9.875			18	270	
Drilling Method:		Air Rotary					
Borehole Complet	tion:	Straight Wall					
		Top Depth (ft.)	Botton	n Depth (ft.)	Descrip	ntion (number of sacks & materia	1)
Annular Seal Data	a:	0		155	TYPE H PORTLAND CEMENT 61 Bags/Sacks		
Seal Metho	d: Pre	ssure		C	Distance to Prope	erty Line (ft.): 1000+	
Sealed B	By: Dri l	ller		Dist con	ance to Septic F	ield or other mination (ft.): N/A	
					Distance to Sep	tic Tank (ft.): N/A	
					Method of	Verification: OWNER	
Surface Completic	on:	Surface Slab Inst	alled		Surfa	ace Completion by Drille	r
Water Level:		180 ft. below land surface on 2019-05-27 Measurement Method: Electric Line					
Packers:		BURLAP & RUBI BURLAP & RUBI	BER at 1 BER at 1	50 ft. 55 ft.			
Type of Pump:		Submersible			Pump	Depth (ft.): 260	
Well Tests:		Jetted	Yiel	d: 20+ GPI	м		

	Strata Depth (ft.)	Water Type		
Water Quality:	210 - 270	COW CREEK		
		Chemical Analysis Mad	e: Yes	
	Did the driller	knowingly penetrate any strata whic contained injurious constituents	h ?: 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.				ed under the rein are true and ems will result in
Company Information:	Centex Pump & S	upply, Inc.		
	2520 Hwy. 290 We Dripping Springs,	st TX 78620		
Driller Name:	Martin Dale Lingle	Licens	e Number:	54813
Comments:	No Data			

Report Amended on 7/16/2019 by Request #28280

Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	1	TOP SOIL
1	10	TAN/BROWN/GRAY LIMESTONE
10	30	GRAY LIMESTONE
30	50	TAN LIMESTONE W/GRAY CLAY
50	70	GRAY LIMESTONE
70	80	BROWN LIMESTONE
80	90	GRAY LIMESTONE
90	140	GRAY/BROWN LIMESTONE
140	150	GRAY/TAN LIMESTONE
150	180	TAN LIMESTONE
180	200	TAN/GRAY LIMESTONE
200	210	GRAY LIMESTONE W/CLAY
210	240	TAN/BROWN LIMESTONE
240	250	GRAY/BROWN LIMESTONE
250	270	GRAY CLAY

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
10	Blank	New Plastic (PVC)	SDR21	0	18
5	Blank	New Plastic (PVC)	SDR17	2	210
5	Perforated or Slotted	New Plastic (PVC)	SDR17	210	270

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

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

STATE OF TEVAS WELL PEROPT for Tracking #510800						
3	DIATE OF II	ENAS WELL	REPURI		will #21969	J
Owner:	WEST CYPRESS ATWELL. LLC/ W	RANCH WCID#1/ ELL #20	C/O Ow	ner Well #:	20 WELL	#20
Address:	3815 SOUTH CAP	PITAL OF TX. HW	Grie Y.,	d #:	57-48-1	
	STE. 300 AUSTIN, TX 7870)4	Lati	itude:	30° 20' 22.5"	Ν
Well Location:	NELL #20 FIELD	EXPANSION	Lon	igitude:	098° 05' 19.2"	W
ŝ	SPICEWOOD, TX	78669	Ele	vation:	No Data	
Well County: Travis						
Type of Work: N	lew Well		Pro	posed Use:	Public Supply	
Drilling Start Date: 8/5/2019 Drilling End Date: 8/5/2019 Plans Approved by TCEQ - YES PWS# 2270352						
	Dian	Diameter (in.) Top		(ft.)	Bottom Depth (ft.)	
Borehole:	1	14.75			18	
	9	.875	18		245	
Drilling Method:	Air Rotary					
Borehole Complet	ion: Straight W	all				
	Top Depth	(ft.) Bottom De	epth (ft.)	h (ft.) Description (number of sacks & material)		
Annular Seal Data	: 0	160	D	TYPE H	I CEMENT 46 Bag	s/Sacks
	0	160	D	Bei	ntonite 5 Bags/Sa	icks
Seal Metho	d: Pressure		Distar	nce to Prope	rty Line (ft.): 100	
Sealed B	y: Driller		Distance concent	e to Septic Fie rated contam	eld or other hination (ft.): N/A	
			Dist	ance to Sept	ic Tank (ft.): N/A	
				Method of	Verification: OWN	ER
Surface Completio	n: Surface SI	ab Installed		Surfa	ce Completion by	Driller
Water Level:	188 ft. bel	188 ft. below land surface on 2019-08-06 Measurement Method: Electric Line				
Packers: BURLAP & RUBBER at 155 ft. BURLAP & RUBBER at 160 ft.						
Type of Pump:	Submersi	ble		Pump I	Depth (ft.): 221	
Well Tests:	Jetted	Yield:	15 GPM			

	Strata Depth (ft.)	Water Type		
Water Quality:	160 - 230	MIDDLE TRINITY		
	Did the driller	Chemical Analy knowingly penetrate any stra contained injurious cons	sis Made: Yes ata which stituents?: No	
 Certification Data:	The driller certified th driller's direct supervi correct. The driller u the report(s) being re	at the driller drilled this well ision) and that each and all c nderstood that failure to com turned for completion and re	(or the well was drill of the statements he plete the required it submittal.	ed under the rein are true and ems will result in
Company Information:	Centex Pump & S	upply, Inc.		
	2520 Hwy. 290 We Dripping Springs,	st TX 78620		
Driller Name:	MARTIN DALE LIN	IGLE	License Number:	54813
Comments:	No Data			

Top (ft.)	Bottom (ft.)	Description
0	2	TOP SOIL W/ROCK
2	12	BROWN LIMESTONE
12	21	GRAY/BROWN LIMESTONE
21	50	GRAY LIMESTONE W/CLAY
50	60	TAN LIMESTONE
60	70	GRAY LIMESTONE W/CLAY
70	85	GRAY/TAN LIMESTONE
85	110	BROWN LIMESTONE
110	120	GRAY LIMESTONE
120	200	TAN/GRAY LIMESTONE
200	220	WHITE/BROWN LIMESTONE
220	245	GRAY CLAY

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)	
5	Blank	New Plastic (PVC)	SDR17	2	160	
5	Perforated or Slotted	New Plastic (PVC)	SDR17	160	230	
5	Blank	New Plastic (PVC)	SDR17	230	245	

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

And the second						
STATE OF TEXAS WELL REPORT for Tracking #519919						
Owner: W	Owner: WEST CYPRESS RANCH WCID#1/C/O			No Data WELL #18		
Address: 38	WELL,LLC/WELL #1	OF TX, HWY,	Grid #:	57-48-1		
ST	E. 300 JSTIN, TX 78704	•••••••	Latitude:	30° 20' 39.54" N		
Well Location: W	ELL #18 FIELD EXPA	NSION	Longitude:	098° 05' 24.84" W		
SF	ICEWOOD, TX 7866	9	Elevation:	No Data		
Well County: Tra	avis					
Type of Work: New Well Proposed Use: Public Supply						
Drilling Start Date: 7/29/2019 Drilling End Date: 7/29/2019 Plans Approved by TCEQ - YES PWS# 2270352						
	Diameter (in	р.) Тор	Depth (ft.)	Bottom Depth (ft.)		
Borehole:	14.75	14.75		18		
	9.875		18	230		
Drilling Method:	Air Rotary					
Borehole Completior	: Straight Wall					
	Top Depth (ft.)	Bottom Depth (ft.)	Descrip	tion (number of sacks & material)		
Annular Seal Data:	0	125	TYPE H	I CEMENT 40 Bags/Sacks		
	0	125	Be	ntonite 4 Bags/Sacks		
Seal Method:	Pressure		Distance to Prope	rty Line (ft.): 1000		
Sealed By:	Driller	Di	stance to Septic Fi oncentrated contan	eld or other nination (ft.): N/A		
			Distance to Sept	ic Tank (ft.): N/A		
			Method of	Verification: OWNER		
Surface Completion:	Surface Slab Ins	Surfa	ce Completion by Driller			
Water Level:	140 ft. below lar	nd surface on 2019.	-07-30 Measure	ment Method: Electric Line		
Packers: BURLAP & RUBBER at 125 ft. BURLAP & RUBBER at 130 ft.						
Type of Pump:	Submersible					
Well Tests:	Jetted	Yield: 20+ GI	PM			

-

	Strata Depth (ft.)	Water Type				
Water Quality:	160 - 220	MIDDLE TRINITY				
	Did the driller k	Chemical Analysi nowingly penetrate any strat contained injurious consti	is Made: Yes a which ituents?: No			
Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.						
Company Information:	Centex Pump & Su	pply, Inc.				
	2520 Hwy. 290 Wes Dripping Springs,	st FX 78620				
Driller Name:	MARTIN DALE LIN	GLE I	License Number:	54813		
Comments:	No Data					

Top (ft.)	Bottom (ft.)	Description
0	1	ROCK TOP SOIL
1	18	BROWN LIMESTONE
18	25	GRAY LIMESTONE
25	110	GRAY/TAN LIMESTONE
110	130	GRAY LIMESTONE
130	150	GRAY/TAN LIMESTONE
150	170	GRAY/BROWN LIMESTONE
170	180	TAN/WHITE/BROWN LIMESTONE
180	190	WHITE LIMESTONE
190	220	TAN & WHITE LIMESTONE
220	230	GRAY LIMESTONE W/CLAY

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Type	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
5	Blank	New Plastic (PVC)	SDR17	2	160
5	Perforated or Slotted	New Plastic (PVC)	SDR17	160	220
5	Blank	New Plastic (PVC)	SDR17	220	230

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

. <u></u>	STAT	TE OF TEXAS	WELL REP	ORT for Trac	cking #5217	74	
Owner:	WEST		H WCID#1/C/O	Owner Well #:	No Data	WELL #17	
Address: 3815 SOUTH CAPITAL OF TX. HWY., STE. 300 AUSTIN. TX 78704			OF TX. HWY	Grid #:	57-48-1		
			,	Latitude:	30° 20' 45"	Ν	
Well Location:	WELL	. #17 FIELD EXPAI	NSION	Longitude:	098° 05' 29.3	28" W	
	SPICE	WOOD, TX 78669)	Elevation:	No Data		
Well County:	Travis	;					
Type of Work:	New W	Vell		Proposed Use:	Public Supp	bly	
Drilling Start Da	ate: 8/1/2	2019 Drilling	End Date: 8/1/20	19	Plans Approv	ed by TCEQ - YES PWS# 2270352	
		Diameter (in.)) Τομ	o Depth (ft.)	Bottom Depth (ft.)	
Borehole:		14.75		0	18	rectand second se	
		9.875		18	230	анарана 1971 г Сек	
Drilling Method:		Air Rotary					
Borehole Comp	letion:	Straight Wall					
		Top Depth (ft.)	Bottom Depth (ft.)	Descrip	tion (number of sack	s & material)	
Annular Seal Da	ata:	0	160	TYPE I	H CEMENT 47 B	ags/Sacks	
	·	0	160	BENSEAL 4 Bags/Sa		Sacks	
Seal Met	hod: Pre	essure		Distance to Prope	erty Line (ft.): 100	0	
Sealed	l By: Dri	ller	Di	stance to Septic F	ield or other mination (ft.): N/#	A	
				Distance to Sep	tic Tank (ft.): N/A	١	
				Method of Verification: No Data			
Surface Comple	etion:	Surface Slab Inst	alled	Surface Completion by Driller			
Water Level:		No Data		Measure	ment Method:	Electric Line	
Packers:		BURLAP & RUB BURLAP & RUB	BER at 125 ft. BER at 150 ft.				
Type of Pump:	:	Submersible					
Moll Tests		Jetted	Yield: 20+ G	PM			

Water Quality:	Strata Depth (ft.) 160 - 220	Water Type MIDDLE TRINITY						
		Chemical Analysis Mad	e: Yes					
	Did the driller	knowingly penetrate any strata whic contained injurious constituents	h ?: No					
	The driller did certify that while drilling, deepening or otherwise altering the above described well, injurious water or constituents was encountered and the landowner or person having the well drilled was informed that such well must be completed or plugged in such a manner as to avoid injury or pollution.							
Certification Data:	The driller certified th driller's direct supervices correct. The driller u the report(s) being re	nat the driller drilled this well (or the v ision) and that each and all of the st nderstood that failure to complete th eturned for completion and resubmitt	well was drill atements he e required it al.	ed under the rein are true and ems will result in				
Company Information:	Centex Pump & S	upply, Inc.						
	2520 Hwy. 290 We Dripping Springs,	est TX 78620						
Driller Name:	MARTIN DALE LIN	IGLE License	e Number:	54813				
Comments:	No Data							

Top (ft.)	Boltom (ft.)	Description
0	1	TOP SOIL
1	15	TAN/BROWN LIMESTONE
15	25	GRAY LIMESTONE
25	48	TAN LIMESTONE W/ GRAY CLAY
48	150	GRAY/BROWN/ TAN
150	180	TAN LIMESTONE
180	220	TAN/BROWN LIMESTONE
220	230	GRAY CLAY

Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)	
5		New Plastic (PVC)	SDR17	2	100	
5	Perforated or Slotted	New Plastic (PVC)	SDR17	100	220	-
5		New Plastic (PVC)	SDR17	220	230	

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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



Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 57-48-106



GWDB Reports and Downloads

Well Basic Details

Scanned Documents

State Well Number	<mark>5748106</mark>
County	Travis
River Basin	Colorado
Groundwater Management Area	9
Regional Water Planning Area	K - Lower Colorado
Groundwater Conservation District	Southwestern Travis County GCD
Latitude (decimal degrees)	30.355001
Latitude (degrees minutes seconds)	30° 21' 18" N
Longitude (decimal degrees)	-98.085278
Longitude (degrees minutes seconds)	098° 05' 07" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	218CCRK - Cow Creek Limestone
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	945
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	236
Well Depth Source	Geophysical Log
Drilling Start Date	
Drilling End Date	6/7/2011
Drilling Method	Air Rotary
Borehole Completion	Perforated or Slotted

Well Type	Withdrawal of Water
Well Use	Public Supply
Water Level Observation	Miscellaneous Measurements
Water Quality Available	Yes
Pump	Submersible
Pump Depth (feet below land surface)	
Power Type	Electric Motor
Annular Seal Method	PRESSURE TRIMMIE CEMENT
Surface Completion	Surface Slab Installed
Owner	West Cypress Hills #7
Driller	Centex Pump & Supply
Other Data Available	Drillers Log; Gamma Ray; Induction; Other
Well Report Tracking Number	257446
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	#7
Other Well Number	
Previous State Well Number	
Reporting Agency	Groundwater Conservation District
Created Date	10/26/2015
Last Update Date	3/4/2020

Remarks Yi

2011-06-07

s Yield about 10 GPM. 2015.

Pump

Casing										
Diameter (in.)	Casing Type	Casing	Material	Schedule	•	Gauge		Top Depth	(ft.)	Bottom Depth (ft.)
7	Blank	Plastic (PVC)						-3	151
7	Screen	Plastic (PVC)						151	214
7	Blank	Plastic (I	PVC)						214	236
Well Tests										
Test Date	Test Type		Yield (gallons	per minute)	Drawdov	VN (ft.)	Test Ho	urs		

12



Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 57-48-106



Lithology		
Top Depth (ft.)	Bottom Depth (ft.)	Description
0	1	TOP SOIL
1	18	CALICHE
18	72	GRAY LIMESTONE
72	90	GRAY/TAN/WHITE LIMESTONE
90	100	TAN/GRAY LIMESTONE
100	120	GRAY/BROWN LIMESTONE
120	125	BROWN/BLUE LIMESTONE
125	128	TAN LIMESTONE W/BLUE CLAY
128	145	WHITE/TAN LIMESTONE
145	155	GRAY LIMESTONE
155	170	WHITE LIMESTONE
170	230	GRAY LIMESTONE
230	236	CLAY

Annular Seal Range - No Data

Borehole			Plugged Bac
Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)	
12	0	10	
10.875	10	236	
ilter Pack			
Filter Material	Top Depth (ft.)	Bottom Depth (ft.)	
Gravel	115	236	







Code Descriptions

Status Code	Status Description
Р	Publishable





Water Quality Analysis

Sample Date:	7/29/2015	Sample Time:	1108	Sample Number:	1	Collection Entity:	Barton Springs/Edwards Aquifer CD
Sampled Aquife	er: Cow Cree	k Limestone					
Analyzed Lab:	LCRA - Lower	Colorado River Au	uthority	Re	eliability:	Sampled using T	NDB protocols
Collection Rem	arks: Lab Ca	alculated Anion/Ca	tion Chg	Bal set to TWDB Ca	lculated	/alue due to an erro	r in the lab calculated formula

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	<	20	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CACO3)		204	mg/L as CACO 3	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	4	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		2.2	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		19.3	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		248.95	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		83	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)	<	0.04	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		50.1	mg/L	
28004	CARBON-14 DISS APPARENT AGE (YEARS BP)		14670	Y-BP	
82172	CARBON-14 FRACTION MODERN		0.161		0.001
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		8.44	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	1	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		1.01	ug/L	
82081	DELTA CARBON 13 C13/C12 PER MIL		-4.8	0/00	
50791	DEUTERIUM, EXPRESSED AS PERMIL VSMOW		-22.6	0/00	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.5	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CACO3)		236	mg/L as CACO 3	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		7.87	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		26.4	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		3.57	ug/L	



Texas Water Development Board (TWDB) Groundwater Database (GWDB) Well Information Report for State Well Number 57-48-106



Parameter Code	Parameter Description F	lag	Value*	Units	Plus/Minus
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		0.31	mg/L as NO3	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		0.0707	mg/L as N	
50790	OXYGEN-18, EXPRESSED AS PERMIL VSMOW		-3.93	0/00	
00400	PH (STANDARD UNITS), FIELD		7.44	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)		0.0372	mg/L as P	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		2.04	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	4	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		12.6	mg/L as SIO2	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.29		
00932	SODIUM, CALCULATED, PERCENT		9	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		10.2	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		481	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		1910	ug/L	
48297	STRONTIUM, ISOTOPE OF MASS 86 AND 87 RATIO		0.707974	N/A	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		30.6	mg/L as SO4	
00010	TEMPERATURE, WATER (CELSIUS)		23.71	С	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		266	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)		1.14	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)	<	1	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		80.8	ug/L	

* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

GWDB DISCLAIMER: Except where noted, all of the information provided in the Texas Water Development Board (TWDB) Groundwater Database (https://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp) is believed to be accurate and reliable; however, the TWDB assumes no responsibility for any errors appearing in rules or otherwise. Further, TWDB assumes no responsibility for the use of the information provided. PLEASE NOTE that users of these data are responsible for checking the accuracy, completeness, currency and/or suitability of all information themselves. TWDB makes no guarantees or warranties as to the accuracy, completeness, currency, or suitability of the information provided via the Groundwater Database (GWDB). TWDB specifically disclaims any and all liability for any claims or damages that may result from providing GWDB data or the information it contains. For additional information or answers to questions concerning the TWDB GWDB, contact the Groundwater Data Team at GroundwaterData @twdb.texas.gov.

TEXAS WATER DEVELOPME	NT BOARD
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WELL SCHEDULE

State Wall No 58 -48 201-Kyt Kyt Aquifer Field No. County TrAUL Owner's Well No. 1. Location: 1507 m AUSTIN its fins 1677 2. mener: Hatris Memorial Address 60/ Austen Tenant: BAbtist Church Address: HWN Driller: RICHA. d. L. B. ble Address: AUSTIN ft. aboy 3. Elevation of 1970; Dur, Gable Tool) Rote 4. Drilled: ASING & BLANK PIPI 5. Depth: Rept. 2 ____ft. Neas. _____ft. Di Setting, 6. Completions Open Hole, Straight Wall, Underreamed, Gravel Packed (in. 7. Pump: Mfgr.___ Туре _____ No. Stages____, Bowle Diam.____in., Setting_____ft. \sim Column Diam, ______in., Length Tailpipe ______ft. 8. Motor: Fuel Make & Model 9. Yield: Flow____gom, Pump_____gom, Meas., Rept., Bet.____ 12 Nade by Balled 10. Performance Test: Date 6/20 Length of Test Static Level /// Oft. Pumping Level ft. Drawdown () ___ft. Production /5 gpm Specific Capacity _____gpm/ft. 11. Water Level: /00 rt. (rept above C ---- tt. shows surface. above TOP OF CREINS which is _ b _ ft. (both) surface. _147.6 m. = 2/18_1971 which is h ft. showe surface below ~ ~ which is _____ haiow 12. Use: Dom., Stock, Public Supply, Ind., Irr., Waterflooding, Observation, Not Used, 13. Quality: (Reparks on taste, odor, color, etc.) "F, Date sampled for analysis 2/18/11 Laboratory T5/1 Тетр Temp. "F, Date sampled for analysis______Laboratory__ Screen Openings Setting, ft Dia Temp. ___ 'P, Date sampled for analysis _____ Laboratory ____ (in. 14. Other data available as circled: Driller's Log, Radioactivity Log, Electric Log, Formation Samples, Pumping Test, 15. Becard by: JOHN Derfan Date 2/4/ 27/ Source of Date DL+UDR 16. Remarks: ACC TWDBE-GW-49 (Sketch) 57.48-201

0-5 Broken formation 5-80 white lime 80-180 Blue Lime 180-190 Water 190-195 Shell 195-227 white cime PALEFACE STORE Zilmi * * * * * gate -Reservoirt KCanbe Seen from Huy

Send original copy by For TWDB use only Well No. certified mail to the Texas Water Development Board P. 0. Sox 12386 State of Texas Received: WATER WELL REPORT Austin, Texas 78711 U 1) OWNER: 601 6 Person having well drilled (Stre aut 7 Yau á (er Land (City) (Na (State) 2) LOCATION OF WELL: 5 60 36 au miles in L County_ direction fr (N.E., S.W., etc.) (Town) Locate by sketch map hiway number, etc.* Give legal location with distances adjacent sections or survey lines. showing landmarks, roads, creeks, and directions from متحفقا part -71 Labo League 140 North Block Survey Abstract No. (Use reverse side if necessary) (NW& NE& SW& SE&) of Section 4) FROPOSED USE (Check): 3) TYPE OF WORK (Chuck): New Well 5) TYPE OF WELL (Check): Rotary Driven Deepening mstic-Industrial Municipal Dug Reconditioning Test Well Other Cable Irrigation Plugging Jetted Bored 6)WELL LOG: 170 61,4 227 227 Depth drilled ft. Depth of completed well Diameter of hol in. Date dri 0 ft.above ground level. All measurements made from Casing: Type: 01d To From escription and color (ft.) (ft.) Steel Plastic Other for New 15 D Cemented from ft. to ft. 15 80 2 Setting From (ft.) Dismeter (inches) To (ft,) Gage Lr D 80 70 P 0 21 190 wet 180 لم 195 190 പ white 195 227 10) SCREEN: Туре_ Perforated Slotted Dismeter Setting Slot From (ft.) (inches) Size (Use reverse side if necessary) 7) COMPLETION (Check): 11) WELL TESTS: 💰 If yes, by whom? Straight wall Grave[packed Other Was a pump test made? Yes Under reamed Open Hole Yield: gom with ft. drawdown after hrs. 8) WATER LEVEL 6/70 ft.drawdown after Yhans. Static level 10 0 ft. below land surface Date Bailer test_ gpm with Artesian pressure_ _lbs. per square inch Date Artesian flow, Temperature of water Depth to pump bowls, cylinder, jet, etc. ft 12) WATER QUALITY: Was a chemical analysis made? below land surface. Yes Ø Did my strate contain undesirable water? Yes Type of water? depth of strate hereby cercify that this well was drilled by me (or under my supervision) and that ach and all of the statements herein are true to the best of my knowledge and belief. Water Well Drillers Registration 4ustis ADDRESS (City (Signed) -201 YD57-48 Please attach electric log, chemical analysis, and other pertinent information, if evailable. *Additional instructions on reverse side. TWDBE-GV-53

j ut d		TIMPE	
		IWDDE-	
		Program No.	421
	CHEMICAL WATER ARALYSIS REPORT	Proj. No	
Typewrite (Black ribbon) or Print Plainly (soft puncil or black ink) Do not use ball point pen	r	Téxas State Department 1100 West 49th Street Austin 5, Texas 57	of Ecalth Laboratories '- 48-20/
Send report to:		County TrAC	115
Ground Water Division		State Well No.	.48.20/
Texas Water Development Board P.O. Box 13087		Ve	11 No
Austin, Texes 78711		Date Collected 2//	8/71
		N JOHN D.	erton
Location 2 Mi E of FM	12322 ON Hay	171	
Source (type of well) Subm E/C	6 Omer Harris M	emorial Ba	btistchurch
Date Drilled 6/70	Depth 227	ft. WBF	
Producing intervals 21-227	Water level 14	7.6	ft.
Sampled after pumping 5min hrs.	Tield GPM meas,	Temperature 74	°F °C
Point of collection four etal	Lucell Appearance		
Use Public Remarks	·	clear turbid - c	olored
supply			
FOR LABORATORY USE ONLY			HETE PUNCHER
،	CHEMICAL ANALYSIS		
184891 ^W	061971		MAR 1 1 1971
Laboratory No Date Rec	eived FEB AV	Date Reported	
MG/L M	Œ/L	MG/L	MR /T
Gilian I A			
	Carbonate		
Calcium 54 2	169 Bickrootet	232	<u>0</u> <u>3.80</u>
Calcium 54 2 Magnesium 18	169 Bickrootste 145 Sulfate	232	0 3.80 0.46
Calcium 54 2 Magnesium 18 11 Sodium 7 0	169 Bickroomate 145 Sulfate 129 Chloride	232	0 3.80 0.46 0.25
Calcium 54 2 Magnesium 18 11 Sodium 7 0 Total 4	Carbonate 169 Bicarbonate Bi	232 22 9 0.3	0 3.80 0.46 0.25
Calcium 54 2 Magnesium 8 1 Sodium 7 0 Total 4	Carbonate 169 Bicarbonate 145 Sulfate 29 Chloride 143 Fluoride Bitrate	232 22 9 0.3 <0.4	0 3.80 0.46 0.25
Calcium 54 2 Magnesium 18 10 Sodium 7 0 Total 4 Potassium	Carbonate 169 Bickroodate 145 Sulfate 29 Chloride 143 Fluoride Fluoride Fluoride 143 Pluoride	232 22 9 0.3 <0.4 2 Total	
Calcium 54 2 Magnesium 18 14 Sodium 7 0 Total 4 Potassium	Carbonate 169 Bicarbonate 145 Sulfate 29 Chloride 11trate pH 1/Dissolved S	232 22 9 <u>9</u> <u>0.3</u> <u><0.4</u> 2 Total 3011ds (sum)	
Calcium 54 2 Magnesium 18 14 Sodium 7 2 Total 4 Potassium	Carbonate 169 Bicarbonate 145 Sulfate 29 Chloride 1000000000000000000000000000000000000	232 232 9 0.3 4 2 Total 30lide (sum) alein Alkalinity as C =	$ \begin{array}{c} 0 \\ 3.80 \\ 0.46 \\ 0.25 \\$
Shilles 3 Calcium 5 2 Magnesium 1 1 Sodium 7 0 Total 4 Potassium	Carbonate 169 Hickroodate Sulfate 29 Chloride Fluoride Fluoride Fluoride 1/Dissolved S Phenolphthe Total Alkal	2 9 9 1.3 4 2 Total Solids (sum)	
Calcium 2 Calcium 2 Magnesium 2 Sodium 7 Total 4 Potassium 7 Nanganese 7 Nan	Carbonate 169 Bicarbonate Bicarbonate Bicarbonate Bilate Chloride Flu	232 9 132 9 133 14 2 3011ds (sum) slein Alkelinity as C acos 1111ty as C acos 12 13011ds (sum) 14 15 16 16 17 18 19 10 10 10 11 11 12 12 13 14 14 15 16 16 17 18 19 10 10 11 12 13 14 14 15 16 17 18 19 10 10 10 10 10 10	$ \begin{array}{c} 0 \\ 3.80 \\ 0.46 \\ 0.25 \\ \hline 4.51 \\ 236 \\ \hline 236 \\ \hline 190 \\ (4) 207 \\ \end{array} $
Calcium 2 Calcium 2 Magnesium 2 Sodium 7 Total 4 Potassium 7 Nanganese 7 Na 7 Distal Iron 8 Decific Conductance (microshos/cm ³) 1 Diluted Conductance (microshos/cm ³) 1	Carbonate 169 Bicarbonate Bicarbonate Bicarbonate Bicarbonate Bilante Chloride Fluoride	232 9 132 9 14 2 3011ds (sum) slein Alkelinity as C = 1111ty as C =	$ \begin{array}{c} 0 \\ 3.80 \\ 0.46 \\ 0.25 \\ \hline 4.51 \\ 236 \\ \hline 236 \\ \hline 190 \\ (4) 207 \\ \end{array} $
Calcium	Carbonate 169 Hickroomte Bickroomte Bickroomte Biltate Chloride Fluor	2 2 9 9 9 9 1 1 3011ds (sum) 1 slein Alkalinity as C = 1 1 1 slein Alkalinity as C = 1 1 1 <td< td=""><td>$\begin{array}{c} 0 \\ 3.80 \\ 0.46 \\ 0.25 \\ \hline 4.51 \\ 236 \\ \hline 236 \\ \hline 190 \\ 14) 207 \\ \end{array}$</td></td<>	$ \begin{array}{c} 0 \\ 3.80 \\ 0.46 \\ 0.25 \\ \hline 4.51 \\ 236 \\ \hline 236 \\ \hline 190 \\ 14) 207 \\ \end{array} $

1/ The bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent emount of carbonate, and the carbonate figure is used in the computation of this sum.

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	TEXAS WATER DEVE	LOPMENT BOARD			
	WELL SCHE	DULE			
			c		
Aquifor the + Kon	Pield No.	State Well	No. 37.48	203	
Kanl		Gounty	Francia		
		00000y			
				····	
1. Location:1/4,1/4	Sec, Block Survey			$\{i\}$	i }
				-+-+	-+
				l i l	1
2. Owner:	wereAddress:_		<u> </u>	<u> </u> ++-	
Tenent:	Address:				1
Driller: Vide 1.00	TI'D LA O Address;				+
					{
3. Elevation of	151t. above	mai, determined by		┖╼╼╌┵╌┄╼╌┵	J
4. Drilled:	19 7 2_; Dug, Cable Fool, Rotary,		CASING & BLANI	PIPE	
5. Depth: Rept. 320-220 511.	Heas. ft.	Cemented 1	rom O ft.	to <u>17</u>	<u>_n.</u>
6 Comletime Open Hole Straight		Diam.	Туре	Setting,	ft.
d. comprecide: open note, bureig			<u> </u>		
7. Pump: Mfgr.	Type	#5			
No. Stages, Bowls I	hamin., Settingft.				
Column Di An .	in. Length Tailpipe ft.			: 33	
B. Motor: Fuel Kerre		***		14-	
9. Yield: Flowgpm, Pump	ZOgpm, Mess., Rept., Est			1	
10. Performance Test: Date	Length of Test Hade by				
Statta Lowal Ct Puer	ning level ft. Drawlown ft.				
		1 1			1
ProductionSP	a Specific Capacitygon/rt.	· · ·		~	
11. Water Level: 40.2 rt. rej	1. Cura 8 1972 above - +	esig	which is 0	belo	U surface. W
ft. rei	pt. 19 above	0	which is	n. abov	^B surface.
	below below		which is	et apov	surface.
	is below			belo	
ft. Tel	as 19 below		***********	it. belo	suriace.
12. Use: Dom. Stock Public S	Supply, Ind., Irr., Waterflooding, Observ	ation, Not Used,			
13. Quality: (Remarks on taste, or	dar, color, stc.)				
72 P Data annial	for maluate \$ -18-72 Laboratory	SH0			,
TampF, Date sampled		Some	WELL SCR	CEN	
Temp °F, Data sampled	for analysisLaboratory	Diam.	Туре	Setting,	R.
Temp °F, Date sampled	for analysis Laboratory	(in.)		from	to
1). Other data available as circle	d: Driller's Log. Radioactivity Log, Electri	ic Log,		!!	
14. 00.01 4404 0001000				170-	140
Formation Samples, Pumparny Test	⁶ /	/*		┥ŀ	
15. Record by:	Date 5-	<u>19_72</u>		2	22.
Source of Data	Observation				
26 Pasarba:		ļ ,			1
10. <u>Neisel X8</u> .					
				┥╾╴┑╴╴╴┝	~
)	
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1					
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X				e	· · · · · · · · · · · · · · · · · · ·
				57-48	- 203
TWD SE #2 -2	(Sketch)			57-48	- 203

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Typewrite (Black ribbon) or Print Plainly (soft pencil or black ink) Do not use ball point pen		TWDBE-GW (DNLY
Texes State Department of Health Laboratories		Program No	7-61
Austin, Texas 78756		Proj. No	
CHEMIC	AI WATED ANALVER DEDO	PT	
Criemic	AL WATER ANALTOIS REFO	YDT	RAVIS
Send report to:		County	
Ground Water Data and Protection Division Texas Water Development Board P.O. Box 13087 Austin, Texas 78711		State Well No	
	0	By By	
Location John Reimers	, Spicewood, +	₩	
Source (type of well) Ow	Ner		<u> </u>
Date Drilled Depth ft.	WBF	-	
Producing intervals Water level	ft.		
Sampled after pumping hrs	. Yield	_ GPM meas. Temperature	ſ°₣Ĺ <u>↓_</u> _ſ°с
Point of collection	: 	_ Appearance 🔲 clear 🖾 turbid 🗍	cciored C other
Use Remarks			
(FOR LABORATORY USE ONLY)			
235866	CHEMICAL ANALYSIS	KEY PUNCHED	SEP 12 19 2
Laboratory No Da	te Received _ AIIG 9 1 1	Date Reported	.t. /
			ME/L
Silica · · · · · · · · · · · · · · · · · · ·	Carbonate · ·		
	Bicarbohete		1 70
Magnesium · · · · · · · ·	3 . 76 Sulfate · · ·		0.86
Sodium · · · · · · · ·	0.33 Chloride · ·		0.45
Total	7.74 Fluoride · ·		
D Potessium	Nitrate · · ·		╺┼┼┤╹┠┼┤
O Manganese	рН · · ·		
₩ 1 Dawa	·····		
	jy Dissolved Solids	(sum in MG/L) · · · · · ·	390
3/□ Total Iron · · · · · ·	Phenolphthalein	Alkalinity as C aCO3 · · · ·	
[] (other) MG/L	Total Alkalinity	as C aCO3 (. 6 . 38)	216
Specific Conductance (micromhos/cm ³)	Total Hardness a	scacoa .7. 41)	
		2/ Nitrogen Cycle	
	4.7 Ammonia-N ·		<u>↓</u> ↓┥●┝ _↓ ↓┥
" 🗆 " items will be analyzed if checked.	Nitrite - N · ·		
Y The bicarbonate reported in this analysis is converted by a	omputation Nitrate - N -		╅┽┥╹┝┽┥
carbonate figure is used in the computation of this sum.		ŀ	┵┽┫╹┢╌┽┥
Ar Nitrogen cycle requires separate sample. Ar Total Iron requires separate sample.	Organic Nitrogen		
TWD8E-WD-1 (Rev. 1-25-72)	Analyst	Checked By	

TEXAS WATER D	EVELOPMENT	BOARD
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WELL SCHEDULE

	June Alillan 2211			40	207
	Aquifer(s) LOWEY OTCH NOSE Project No 24/B	State We		<i></i>	
	Field No./Owner's Well No. Z	County_		2 //d	
1.	Trailer Park 16/K West of Bob Wire Rdon	_, Lat 20 Hwy	<u>-2/:/4</u> _	, Long.7 <u>8</u> -	0 <u>3</u> -57
		,-			
2.	Owner: Norman SadilsAddress: Rt. 3, Bo	x 75	<u> 14, Sp</u>	(CCLARD)	,7X
	Tenant (other):Address:				
	Driller: Calvin J. ShanksAddress:				
3.	Land Surface Elevation: 1088 ft. above ms1 determined by 7/2/76	20		_ ~	
4.	Drilled:				
5.	Depth: Rept. 330 t ft. Neasft.	CA	SING, BLANK	PIPE & WELL	SCREEN
6.	Borehole Completion: Open Hole, Straight Wall, Underreamed, Gravel Packed	Diam.	Type	Setting	Tt. (feet)
7.	Pump: MfrTypeSyb	(in.)		from	to
	No. Stages, Bowls Diamîn., Settingft.	6	Steel	UNK	NOWN
	Column Diamin., Length Tailpipeft.		L		
8.	Hotor: MfrFuelFuelHP		├ ──── ─		
9.	Yield: Flowgpm, Pump_/2gpm, Meas, Rept. EstDate	 	└── ─┤		
10.	Performance Test: DateLength of TestMade by				
	Static Levelft. Pumping Levelft. Drawdownft.		┝────┼		
	Productiongpm Specific Capacitygpm/ft.	ļ			
н.	Quality: (Remarks on taste, odor, color, etc.)	Į	├		
	Analyses	·	┝━━━━╋		
	DateLaboratoryTDSSp Cond	}	<u> </u>		
	DateLaboratoryTDSSp Cond		<u> </u>		
12.	Other data available (as circled): Pumping Test, Power & Yield Test, Drillers Log,				
	Formation Samples, Geophysical Log(s)				
13.	Water Level (s): 262,72 tt, rept. 10-2 198 Tabove Hole Inites	[≠] which	is . 3 ft.	above	Surface
	ft. rept. 19 above	which	is ft.	above Land	l Surface
14.	Use: Dom., Stock, Public Supply, Ind., Irr., Observation, Other (Test Hole, 01)	Test, e	tc.) Stan	dby	
۱5.	Recorded by: J. Derton Source of data: OWNER +06:	s	Date:	0-8-8	· .
16.	Remarks: Calvin J. Shanks had this well drilled				
17.	Location or Sketch:				

TWDB-0308 (Rev. 12-11-85)

e.

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	Texas Water Develo Well Schee	groundwater resources	
State Well Number: 57-48-213	Previous Well Number:		County: Travis 45
Latitude (dms): 302115 Longitude (d	ms): 980445 Coo	rdinate Accuracy: Global	Positioning System - GPS
River Basin: Colorado River	GMA: 9 RWPA:	K GCD:	
Owner: Cypress Ranch WCID #1	Driller: Western Water	Aquifer ID: T	rinity
Well #1	Wells, LLC	Aquifer Code:	218GLRS
Depth (ft): 315	Elevation (ft): 1052		GLEN ROSE LIMESTONE
Source of Depth: Driller's Log	Source of Elevation: D	Digital Elevation Nodel -DEM	
Date Drilled: 10/15/2003 V	Vell Type: Withdrawal of V	Vater	CASING INTERVALS: Casing/Blank Pipe (C) Well Screen/Slotted Zone (S)
Type of Lift: Unknown	Power:	Horsepower:	Dia. Top Bottom
Construction: Air Rotary	Completion:		(in.) (ft.) (ft.) C 7 0
Casing Material: Steel	Screen Material:		
WATER USE			
Primary: Public Secon Supply	dary:	Tertiary:	
Water Levels: None		Water Quality: N	_
	Other Data:	Logs: D	
REMARKS: Owners well #1. OWS ID #2270352A. Estimated yield 30 GPM. Cemented	Reporting Agency:	TWC/TNRCC/TCEQ	
tracking #167454.	Date Collected or Rep	ported: 08/23/2011	
	Recorded by:	R. Jones	

Tuesday, August 23, 2011

57-48-213 N€W

TRACKING# 167454	STATE OF TEXAS WELL REPORT	Date Entered: 2/4/2009
WNER: Cypress Ranch Ltd c/o The Moore Group ADDRESS OF WELL'S LOCATION: 2000' SW of Hwy 71 on Crawford Rd Spicewood , TX 78669	OWNER 1000 Cuernavaca Drive ADDRESS: Austin , TX	78733
COUNTY, Travis I ATITUDE, 30210	6 LONCITUDE: 980454 Brand/M	Model of GPS:
Owner's Well Number:	ELEVATION:	rid Number: 57 - 48 - 2
✓ New Well □ Replacement Well □ Deepening □ Reconditioning	Industrial Irrigation Injection Public Supply De-watering Rig Suppl If Public Supply well, were plans submitted to	Geothermal Heat Loop y Stock or Livestock the TNRCC? Yes No
VELL LOG: DIAMETER OF 1	HOLE DRILLING METHOD:	
Date DrillingDia. (in)From (frStarted10/7/200310SurfaceCompleted10/15/200310Surface	t.) To (ft.) □ Driven □ Air Hamme 315 ☑ Air Rotary □ Cable Tool □ Mud Rotary □ Jetted	r Hollow Stem Auger Bored Reverse Circulation Other
-	ANNULAR SEAL DATA	
SOREHOLE COMPLETION:	From ⁰ ft. to ¹⁹⁰ ft. #S	acks + Material 120 Cement
Open Hole Underreamed Other	From ft. to ft. #S	acks + Material
Straight Wall 🗌 Gravel Packed	From ft. to ft. #S	acks + Material
Gravel Packed Interval from ft. to	ft. Comparted Py Western Water We	110
Size URFACE COMPLETION: ✓ Surface Slab Installed □ Surface Sleeve Installed □ Alternative Pro-	Distance to Septic System 100 Distance to Property Line: r Used Method of Verification Owner breedure Used Approved by Variance No	+
WATER LEVEL:	PLUCGING INFO	
Static Level ft. below land surface	Well Plugged within 48 h	ours
Artesian Flow gpm.	Date Casing left in well: Cer From (ft.) To (ft. From	nent/Bentonite left in well: (ft.) To (ft.) Cem/Bent Sacks Used:
TYPE OF PUMP:		
U Turbine U Jet Submersible	_] Cylinder	
Depth to pump bowls, cylinder, jet, etc.	PACKERS:	
WELL TESTS:	Туре	Depth
Type of test: 🗌 Pump 📄 Bailer 🔽 Jette	ed 🗹 Estimated None	
Yield: ³⁰ gpm with ft. drawdown a	after hrs.	
WATER QUALITY:		
Did Driller knowingly penetrate any strata w contained undesirable constituents?	hich Yes Type of water: Glen Rose ✓ No Depth of Strata: 20 Chemical Analysis made?	✓ Yes □ No
COMPANY NAME: Western Water Wells, LLC	WELL DRILLER'S L	ICENSE NO. 1313
ADDRESS 500 Southland Drive	Burnet TX 78611	
Name as Signature Frank Glass	Registered Driller Apprentice	
Driller Comments \$mew TWDB SW #57-48-213 Doc Jones 8/23/2011		

157.	48-	213
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WELL REPORT CONFIDENTIALITY NOTICE

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 Regulation Water Well Driller/Pump Installer Section P.O. Box 12157 Austin, TX 78711 Toll free (800)803-9202 (512)463-7880 FAX (512)463-8616 Email address: water.well@license.state.tx.us Web address: www.license.state.tx.us

DESCRIPTION AND COLOR OF FORMATION MATERIAL		CASING, BLANK PIPE, AND WELL SCREEN DA							
From	(ft.) To (ft.) Description	Dia. New/Used	І Туре	Setting From/To	Gage				
0 - 1 1 - 30	Top Soil Caliche	6 5/8 New	Steel	+2 - 315 250					
30 - 32	Caliche with Yellow Clay								
32 - 70	Caliche								
70 - 74	Blue Lime								

- 30 32
 Caliche with Yellow Clay

 32 70
 Caliche

 70 74
 Blue Lime

 74 185
 Gray Lime

 185 215
 Gray with Little Yellow Hard

 215 255
 Tan Water

 255 260
 Gray & Tan

 260 265
 Tan with Blue Gray

 265 290
 Tan Sandstone

 290 305
 Gray

 305 310
 Gray with Hard Tan Rock
- 310 315 Gray Shell with Little Tan

57.48-213

ATTENTION OWNER: Confident Privilege Notice on Reverse Side	iality		State WELL	of Texa REPOR	3 T		Texas Water	Well Drill P.O. Box Austin, T 512-463	-7880	y Council
1) OWNER <u>CYPRESS RANCH L</u>	TD C/O THE MOOR (Name)		ADDRES	s10	0 CUERN (Street	AVACA DRIVE or RFD)	E <u>AUSTIN</u> (City)		TEXAS (State)	(Zip)
2) ADDRESS OF WELL: County <u>TRAVIS</u>	2000' SW OF Hi (Street or R	ny 71 on Crav FD)	VFORD RD	SPICEWOO (City)	<u> </u>	TEXAS (State)	<u>78669</u> G (Zip)	RID#	57-48	2
3) TYPE OF WORK (Check):	4) PROPOSED	USE (Check):		r 💭 Envi	onmental	Soli Boring	Domestic		5)	
New Well Deepening	Industrial	C inigation	Injection	Public S	upply [De-watering	C Testwell		N 30° 21.1	
Reconditioning Plugging	If Public Supply	well, were plans	submitted to	the TNRCC?					W 98° 04.9	
o) well LOG: Date Drilling:	Die (in)				LLING NI	ETHOD (Chec block I''	Rateov □ Rome	n		
Started 10-07-2003	10	0	315		Air Hamm	er 🛛 Cabi	e Tool 🗆 Jetted	-		
Completed10-15-2003					Other			-		
From (fl.) To (fl.)	Description and c	l	material	8) Bo	ehole Co	mpletion (Che	ck): COpe	n Hole	⊠ Stra	Ń ight Wall
0 1	TOP SOIL				Underrean	ned 🛛	Gravel Packed	Other	<u> </u>	
1 30	CALICHE			140	navel Pac	ked give interv	al from	f	l. to	ft.
30 32 32 32 32 32 32 32 32 32 32 32 32 32	CALICHE WITH YE	LLOW CLAY		CASI	IG, BLAN	K PIPE, AND	WELL SCREEN DA	ITA:	ting (ft)	Gane
70 74	BLUE LIME			Dia.	or	Perf., Slotte	d, etc.	Joel	unig (it.)	Casting
74 185	GRAY LINE			(in.)	Used	Screen Mfg	, if commercial	From	То	Screen
185 215	GRAY WILITTLE Y	ELLOW HARD		6 5/8	NEW	STEEL		+2	315	250
215 265 255 260	GRAY & TAN	·····			+				+	
260 265	TAN WITH BLUE C	LAY			+					
265 290	TAN SANDSTONE			9) CI	MENTING	DATA [Rule	338.44(1)]			
	DAV .			1			400 0	Nor	f sacks used	120
290 305				Ceme	nted from		. то <u>190</u> т.	140.0		
290 305 305 310 310 315	GRAY WHARD TA				nted from	f	. to <u>190</u> ft. t. to <u>1</u> 7	No. o	f sacks used	
290 306 0 305 310 0 310 315 0	GRAY W HARD TA GRAY SHELL W LI	N ROCK TTLE TAN		Ceme	nted from d used nted by	f	. to <u>190</u> fl. t. to <u>1</u> fl. TRIMMY WATER WELLS	No. o	f sacks used	
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280 305 310 305 310 315 310 315 (Use rew 3) TYPE PUMP: Image: state	SIGNT GRAY W HARD TA GRAY W HARD TA GRAY SHELL W LI Price side if necessa Submersible Ier El Jetted Ier	N ROCK TTLE TAN TY C Cylinder Cylinder Cylinder C Cylin	mated	Cerne Methy Cerne Distai Methy 10) S 11) V 12) F 12) F 12) F and all of the and all of the Ins. 11) V 12) F (Sign Iysis, and other R'S COF	d used	f	to ft. to ft. training water wells ines or other conco distanceW water wells ines or other conco distanceW is ace Slab Installed (I Sleeve Installed [Used [Rule 338.4 mative Procedure L ft. below land s gpm Type e to the best of my	Rule 338.44 Rule 338.44 Rule 338.44 (3)(b)) Ised [Rule 3 unface knowledge is Rule 3 Rule 3 Ru	r sacks used tamination (2)(A)] (3)(A)] 38.71] Date Date Depth and belief. 1 u RCON RCC CC	100+ 11.
290 305 310 305 310 315 (Use rew (Use rew 3) TYPE PUMP: Jet S 3) Type Test: Pump Bai field: _30 gpm with	Submersible Submersible Ier It Intersible Ier Ier Ier Ier Ier Ier Ier I	N ROCK TTLE TAN TY) C Cylinder t Cylinder t Cylinder Cyli	mated	Cerre Methy Cerre Distai Methy 10) S 10) S 10 S 10) S 10) S	d used	f f PRESSURE WESTERN ic system field ation of above COMPLETION Specified Surf Specified Stee Pitless Adapte Approved Atten VEL: el therein are tru CS LICENSE I ant information	to ft. to ft. tro ft. tro ft. tro ft. tro concordistanceOW to concord distanceOW to concord distanceOW to concord the concord distanceOU to concord the concord distanceOU to concord the concord distanceOU to concord distance	Inc. o No. o entrated con <u>INER</u> Rule 338.444 (3)(b)) Ised [Rule 3 Uniface Internet internet internet Internet internet	r sacks used tamination (2)(A)] (3)(A)] 38.71] Date Date Depth and belief. 1 u V E I V E I ROOM 3 2005 RCC CCC AMOUNT	I 100+ ft.

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Texas Water Development Board Well Schedule					groundwater resource:		
Previous Well Number	r:		County	Trav	is	45:	
ns): 980451 Co	ordinate Accuracy:	Global	Positio	ning S	ystem	- GPS	
GMA: 9 RWPA	: K GCD:						
Driller: Western Water	Aqu	iifer ID: T I	rinity				
Wells, LLC	Αqι	ifer Code:	218GL	RS			
Elevation (ft): 1033			GLEN I LIMES	ROSE FONE			
Source of Elevation:	Digital Elevation Model -DEM	n					
Ill Type: Withdrawal of	Water	<u> </u>	C/ Ca W	ASING II asing/Bla ell Scree pen Hole	NTERVA ank Pipe en/Slotte e (O)	NLS: (C) ed Zone (S)	
Power: Electric Motor	Horsepow	er:		Dia.	Тор	Bottom	
Completion: Perfor	ated or Slotted			(in.) _	(ft.)	(ft.)	
Screen Material:			C S	7	0 190	180 315	
ary:	Tertiary:						
	Water Quality: N		_				
Other Data:	Logs: D						
Reporting Agency:	TWC/TNRCC/	ICEO					
	Texas Water Devel Well Sche Previous Well Number hs): 980451 GMA: 9 RWPA Driller: Western Water Wells, LLC Elevation (ft): 1033 Source of Elevation: ell Type: Withdrawal of Power: Electric Motor Completion: Perfor Screen Material: ary: Other Data: Reporting Agency:	Texas Water Development Board Well Schedule Previous Well Number: Previous Well Number: ns): 980451 Coordinate Accuracy: GMA: 9 RWPA: K GCD: Driller: Western Water Aqu Wells, LLC Aqu Elevation (ft): 1033 Source of Elevation: Digital Elevation Model -DEM Power: Electric Motor Horsepower Completion: Perforated or Slotted Screen Material: Screen Material: ary: Tertiary: Water Quality: N Other Data: Logs: D Reporting Agency: TWC/TNRCC/T	Texas Water Development Board Well Schedule Previous Well Number: Instant State asis 980451 Coordinate Accuracy: GMA: 9 RWPA: K GMA: 9 RWPA: K GMA: 9 RWPA: K GCD: Aquifer ID: Driller: Western Water Wells, LLC Aquifer Code: Elevation (ft): 1033 Source of Elevation: Digital Elevation Model -DEM Model -DEM Morsepower: Power: Electric Motor Horsepower: Completion: Perforated or Slotted Screen Material: Screen Material: any: Tertiary: Water Quality: N Other Data: Logs: D Reporting Agency: TWC/TNRCC/TCEQ	Texas Water Development Board Well Schedule ground Well Schedule Previous Well Number: County: is): 980451 Coordinate Accuracy: Global Position GMA: 9 RVVPA: K GCD: Driller: Western Water Aquifer ID: Trinity Wells, LLC Aquifer Code: 218GL Driller: Western Water Aquifer Code: 218GL Elevation (ft): 1033 LIMEST Source of Elevation: Digital Elevation Model -DEM ell Type: Withdrawal of Water Wo Power: Electric Motor Horsepower: C Completion: Perforated or Slotted C S ary: Tertiary: Water Quality: N water Quality: N N N Other Data: Logs: D D Reporting Agency: TWC/TNRCC/TCEQ Reporting Agency: TWC/TNRCC/TCEQ	Texas Water Development Board Weil Schedule Image: Schedule Previous Well Number: County: Trav is): 980451 Coordinate Accuracy: Global Positioning S GMA: 9 RWPA: K GCD: Online: Western Water Aquifer ID: Trinity Wells, LLC Aquifer Code: 218GLRS Source of Elevation Model -DEM Elevation (ft): 1033 Source of Elevation: Digital Elevation Model -DEM CASING II ell Type: Withdrawal of Water Casing/Bil Well Screet Dia. Power: Electric Motor Horsepower: Dia. Completion: Perforated or Slotted Dia. screen Material: Xater Quality: N any: Tertiany: Yetter Quality: N Water Quality: N Yetter Quality: N Cher Data: Logs: D D Reporting Agency: TWC/TNRCC/TCEQ Yetter Quality: N	Texas Water Development Board Well Schedule Previous Well Number: County: Travis Previous Well Number: County: Travis Image: Second State Accuracy: Global Positioning System GMA: 9 RWPA: K GCD: Online: Wells, LLC Aquifer ID: Trinity Wells, LLC Aquifer Code: 218GLRS Source of Elevation (ft): 1033 GLEN ROSE Source of Elevation: Digital Elevation Model -DEM Mell Type: Withdrawal of Water Casing/Blank Pipe Power: Electric Motor Horsepower: Completion: Completion: Perforated or Slotted Screen Material: Tertiary: ary: Tertiary: Water Quality: N Vater Quality: N Mater Data: Logs: D D Kater Accuracy: D Reporting Agency: TWC/TNRCC/TCEQ Kater Accuracy: D Kater Accuracy: D	

Recorded by: D.R. Jones

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State Well Number: 57-48-214

TRACKING# 92815	STATE OF TEX	AS WELL REPORT	Date Entered: 9/15/2006
OWNER: CYPRESS RANCH LTD	OWNE ADDR	R 1000 CUERNAV. ESS: AUSTIN	ACA DRIVE , TX 78733
ADDRESS OF WELL'S LOCATION: HWY 71 @ CRAWFORD RD SPICEWOOD , TX 78669			
COUNTY: Travis LATITUDE: 302	117 LONGITUDE	: 980443 E	Brand/Model of GPS:
Owner's Well Number: #4	ELEVATION	:	Grid Number: 57 - 48 - 2
TYPE OF WORK: PRO Image: Weil im	POSED USE:	ionitor Well Env. rigation Injectio De-watering Rig rell, were plans submi	Soil Boring Domestic Test Well on Geothermal Heat Loop g Supply Stock or Livestock itted to the TNRCC? Yes V No
WELL LOG:DIAMETER OFDate DrillingDia. (in)Started3/25/2004Completed3/26/2004	FHOLE DR (ft.) To (ft.) pe 310 Image: State St	ILLING METHOD: Driven Air I Air Rotary Cabl Mud Rotary Jette ULAR SEAL DATA	Hammer Hollow Stem Auger Bored le Tool Reverse Circulation d Other
BOREHOLE COMPLETION:	Fro	m 0 ft. to 180	ft. #Sacks + Material 115
Open Hole Underreamed Oth	er	m ft. to	ft. #Sacks + Material
Straight Wall Gravel Packed	Fro	m ft. to	ft. #Sacks + Material
Gravel Packed Interval from ft to	Met ft G	hod Used PRESSURI	
Size	It. Cen	iented By WESTERN	
SURFACE COMPLETION:	Dist	ance to Property Line	e:
Surface Slab Installed Ditless Adapt	ter Used Met	hod of Verification	OWNER
Surface Sleeve Installed Alternative P	rocedure Used App	roved by Variance N	0
WATER LEVEL:	Р	LUGGING INFO:	
Static Level ft. below land surface	Data	Well Plugged with	in 48 hours
Artesian Flow gpm.	Date	Casing left in well: From (ft.) To (ft.	Cement/Bentonite left in well: From (ft.) To (ft.) Cem/Bent Sacks Used:
Turbine Other	Cylinder		
Depth to pump bowls, cylinder, jet, etc.		PACKERS:	
WELL TESTS:		Туре	Depth
Type of test: □ Pump □ Bailer ✓ Je Yield: 20-30 gpm with ft. drawdown	tted 🗹 Estimated		
WATER QUALITY:	···· □••	Type of water: COW	CREEK
Did Driller knowingly penetrate any strata contained undesirable constituents?	which 🗌 Yes 🗹 No	Depth of Strata: ³⁵ Chemical Analysis m	ade? 🗌 Yes 🗹 No
COMPANY NAME: WESTERN WATER WE	LLS LLC	WELL DRILLI	ER'S LICENSE NO. 1313
ADDRESS 500 SOUTHLALND DRIVE	BURNET TY	7861 1	
Name as Signature Frank Glass	Registered Driller	Apprentice	
Driller Comments LCS\$			

V57.48-214	15-	. 48-	214
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WELL REPORT CONFIDENTIALITY NOTICE

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 Regulation Water Well Driller/Pump Installer Section P.O. Box 12157 Austin, TX 78711 Toll free (800)803-9202 (512)463-7880 FAX (512)463-8616 Email address: water.well@license.state.tx.us Web address: www.license.state.tx.us

DESCRIPTION AND COLOR OF FORMATION MATERIAL

From (ft.) To (ft.) Description

CASING, BLANK PIPE, AND WELL SCREEN DATA

Dia. New/Used Type Setting From/To Gage 6 5/8 NEW STEEL +2 315 250

0 1 TOP SOIL 1 57 CALICHE 57 90 BLUE LIME 90 160 GREY LIME 160 200 GREY LIME & CLAY 200 280 TAN & WHITE LIME PORCE BLUE LIME STRIPS 280 295 BROWN LIME & CLAY STRIPS 295 310 CLAY STRIPE HAMMOND

100' PERF GRAVEL PACKED 180 - 315

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WELL SCHEDULE

Aquifer Kan	Field No.	State Well ! County	*. 57 48	403	- 146 .04
1. Location:1/4,1/4 Sec	, BlockSurvey				
2. ONDOY: W. M. Peacock	2701 Service Adr. : 477-51	7.8			
Tenant:	Address:				
Driller: 3. Elevation of LSD	Address: 18 /050 ft. above mal, determined	w tope			
4. Drilled: 19	; Dug, Cable Tool, Rotary,	[CASING & BLANK	PIPE	
5. Depth: Reptft. Meas	^{ft.}	Cemented Fr	roa ft.	to	rt.
6. Completion: Open Hole, Straight Wall, Under	reamsd, Gravel Packed	(1n.)	13be	from	to
7. Pump: Mfgr.	Type Cyl.	4			÷.
No. Stages, Bowls Diamin	., Settingft.	+			
Column Diamin., Length Ta. 8. Motor: Fuel Elsey. Make	ilpipeft. & Model HPft.				
9. Yield: Flowgom, Pumpgom	, Meas., Rept., Est.				
10. Performance Test: DateLangth	of fest Hade by	++-			
Static Levelft. Pumping Level	_ft. Drewdownft.				
Productiongpm Specific (Capacitygpm/ft.	LL_			/
11. Water Lavel:ft. rept. meas	_19sbovebelow		which is	ft. bel	ow surface.
ft. rept. mgas	_19bove		which is	ft. abo bel	ve surface. Sw
ft. rept.	19 shore		which is	ft. abo	We surface.
ft. rept.	19below		which is	ft. abo	ow surface.
12. Use: (Dom.) (Stock) Public Supply, Ind.,	Irr., Waterflooding, Observation; Not Used,				
13. <u>Cuality</u> : (Remarks on taste, odor, color, etc. Term, 73 °F. Date sampled for analysis	Qua. 18.7 Laboratory SHD				~~
The second secon	Laboratory	Screen	WELL SCRE	EN	
Temp r, bare sampled for analysis		Diam.	Туре	Setting	. <u>n.</u>
Temp F, Date sampled for analysis				LFOR	
16. Other data svailable as circled: Briller's D Pormation Samples, Jumping Test,	Log, Kadioactivity Log, Electric Log,				
15. Record by: Drune	Date Qug. 18 1972				1
Source of Data	Ormen-	h			
16. Remarks:					
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Typewrite (Black ribbon) or Print Plain!	TWDBE-GW ONLY
Texas State Department of Health Laboratories	Program No
1100 West 49th Street Austin, Texes 78756	Proj. No
CHEMICAL WATER A	ANALYSIS REPORT
Send report to:	57-48-403
Ground Water Data and Protection Division Texas Water Development Board P.O. Box 13087 Austin, Texas 78711	State Well No Well No Date Confected
Location W. M. Participation	By
Source (type of well)	
Date Drilled Depth ft, WBF	· · · · · · · · · · · · · · · · · · ·
Producing intervals Water level	
Sempled after pumping hrs. Yield	GPM meas. Temperature °F °C
Point of collection	Appearance C clear C turbid C colored C other
Use Remarks	
(FOR LABORATORY USE ONLY) 235865 CHEMICAL A	NALYSIS KEY PUNCHED SEP 12.1072
Laboratory No Date Received	Date Reported
MG/L ME/L A	
Silica · · · · · · ·	Carbonate · · · · ·
Calcium · · · · · · · · / / 2 5.61	/83 Bicarbonate
Magnesium · · · · · · / / 2 0.99	Sulfate
Sodium · · · · · · · · · · · · · · · · · · ·	Chioride
Total 6.92	Fluoride
D Potassium	
Manganese · · · · · · · · · · · · · · · · · ·	pH · · · · · · ·
□ Boron · · · · · · · · · · · · · · · · · · ·	1/ Dissolved Solids (sum in MG/L)
3/1 Total Iron • • • • • • • • • • • • • • • • • • •	Phenolphthalein Alkalinity as $C = CO_3 \cdot \cdot \cdot \cdot \cdot \cdot$
□ (other) MG/L	Total Alkalinity as C aCO3 (6.1.2)
Specific Conductance (micromhos/cm ³)	Total Hardness as C aCO3 (6.60) 330
Diluted Conductance (micromhos/cm ³) 4 × 165	2/ Nitrogen Cycle Ammonia - N · · · · · · · · · · · · · ·
" 🗆 " items will be analyzed if checked. 🥼 🔓	Nitrite - N · · · · · · · · · · · · · · · · · ·
y The bicarbonate reported in this analysis is converted by computation (multiplying by 0.4917) to an equivalent amount of carbonate, and the restorate fluxes for the carbonate fluxes.	Nitrate - N
2/ Nitrogen cycle requires separate sample. 3/ Total iron requires separate sample.	Organic Nitrogen · · · · · · · · · · ·
TWDBE-WD-1 (Rev. 1-25-72)	Analyst Checked By

1. **1**

Groundwater Quality Report for the Cypress Ranch WCID No. 1 **Renewal Permit Application** TCEQ WQ Permit No. WQ0014368001 June 2024

Appendix C: CHEMICAL TEST RESULTS FOR NEWEST WELLS WITHIN THE **CYPRESS RANCH WCID NO. 1 SITE** (CR WCID #1 WELLS #16, #17, #18, #19, and #20)



WELL #16 WELL ID # = 515974 CYPRESS RANCH WCID #1

LCRA Environmental Laboratory Services 3505 Montopolis Drive Austin, TX 78744 Phone: (512) 730-6022 Fax: (512) 730-6021

July 16, 2019

JOE VICKERS THE WELLSPEC COMPANY PO BOX 1156 DRIPPING SPRINGS, TX 78620 jv.wellspec@gmail.com

RE: Final Analytical Report Q1939793

Attn: JOE VICKERS

Enclosed are the analytical results for sample(s) received by LCRA Environmental Laboratory Services. Results reported herein conform to the most current NELAP standards, where applicable, unless otherwise narrated in the body of the report. This final report provides results related only to the sample(s) as received for the above referenced work order.

Thank you for selecting ELS for your analytical needs. If you have any questions regarding this report, please contact us at (512) 730-6022. We look forward to assisting you again.

Authorized for release by:

a leavy

Ariana Dean Account Manager ariana.dean@lcra.org



Enclosures:



LCRA Environmental Laboratory Services 3505 Montopolis Drive Austin, TX 78744 Phone: (512) 730-6022 Fax: (512) 730-6021

Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received
Q1939793001	WEST CYPRESS WELL 16	DW	E200.7 Metals, Trace Elements	6/25/2019 14:45	6/25/2019 15:50
Q1939793001	WEST CYPRESS WELL 16	DW	E200.8, ICP-MS	6/25/2019 14:45	6/25/2019 15:50
Q1939793001	WEST CYPRESS WELL 16	DW	E2340B, Hardness Calc.	6/25/2019 14:45	6/25/2019 15:50
Q1939793001	WEST CYPRESS WELL 16	DW	E300.0, Anions	6/25/2019 14:45	6/25/2019 15:50
Q1939793001	WEST CYPRESS WELL 16	DW	E365.4 Phosphorus, Total	6/25/2019 14:45	6/25/2019 15:50
Q1939793001	WEST CYPRESS WELL 16	DW	SM2320B, Alkalinity	6/25/2019 14:45	6/25/2019 15:50
Q1939793001	WEST CYPRESS WELL 16	DW	SM2510B, Conductivity @ 25°C	6/25/2019 14:45	6/25/2019 15:50
Q1939793001	WEST CYPRESS WELL 16	DW	SM2540C, TDS	6/25/2019 14:45	6/25/2019 15:50
Q1939793001	WEST CYPRESS WELL 16	DW	SM4500-H+B, pH @ 25ºC	6/25/2019 14:45	6/25/2019 15:50

Report Definitions

MRL - Minimum Reporting Limit
LOD - Limit of Detection
ML - Maximum Limit - Client Specified
MCL - Maximum Contaminant Level
MDL - Method Detection Limit
LOQ - Limit of Quantitation - Client Specified
DF - Dilution Factor
Qual - Qualifier
(S) - Surrogate Spike
QC Qual - red font indicates Result Value outside acceptable range
B- Analyte detected in method blank
S - Spike recovery outside limit
R - RPD outside duplicate precision limit
J - Analyte detected below quantitation limit
RPD - Relative Percent Difference



Project Summary

Sample Analysis Comments

Lab ID: Q1939793001

Sample ID: WEST CYPRESS WELL 16

- Not Accredited Calcium Total
- Not Accredited Phosphorus, Total (As P)
- Not Accredited Temperature
- Not Accredited Total Alkalinity (CaCO3)
- Not Accredited ortho-Phosphate (as P)
- Not Accredited pH

LCRA Environmental Laboratory Services

3505 Montopolis Drive Austin, TX 78744 Phone: (512) 730-6022 Fax: (512) 730-6021



LCRA Environmental Laboratory Services 3505 Montopolis Drive Austin, TX 78744 Phone: (512) 730-6022 Fax: (512) 730-6021

Analytical Results

Lab ID: Q1939793001	Date Received: 6/25/2019 15:50	Matrix: Drinking Water
Sample ID: WEST CYPRESS WELL 16	Date Collected: 6/25/2019 14:45	Sample Type: SAMPLE
Project ID: New Well Const. + Wellspec		

Parameter	Results Units	MRL	LOD	ML	DF	Prepared	Ву	Analyzed	Ву	Qual
ALKALINITY (SM232	0B, Alkalinity)									
Total Alkalinity (CaCO3)	238 mg/L	20.0	20.0		1	06/28/19 08:55	AD G	06/28/19 00:00	AD G	*
Conductance @ 25°C	(SM2510B, Conductivity @ 25°	C)								
Specific Conductance	509 umho/cm	10.0	10.0		1	07/03/19 07:32	AD G	07/03/19 13:12	AD G	
INORGANICS (E200.	7 Prep/E200.7 Metals, Trace Elen	nents)								
Calcium Total	82.7 mg/L	0.200	0.0700		1	07/02/19 13:26	KM	07/08/19 23:03	FM	*
Iron Total	<0.0500 mg/L	0.0500	0.0200		1	07/02/19 13:26	н КМ	07/08/19 23:03	FM	
Magnesium Total	16.7 mg/L	0.200	0.0700		1	07/02/19 13:26	н КМ	07/08/19 23:03	FM	
Sodium Total	6.75 mg/L	0.200	0.0700		1	07/02/19 13:26	H KM H	07/08/19 23:03	FM	
INORGANICS (E200.8	3, ICP-MS Prep/E200.8, ICP-MS)									
Aluminum Total	<0.00500 mg/L	0.00500	0.0020		1	07/02/19 13:28	КМ ⊔	07/10/19 16:52	FO	
Arsenic Total	<0.00100 mg/L	0.00100	0.0004	0.01	1	07/02/19 13:28	KM	07/10/19 16:52	FO	
Copper Total	<0.00100 mg/L	0.00100	0.0004	1	1	07/02/19 13:28	KM	07/10/19 16:52	FO	
Lead Total	<0.00100 mg/L	0.00100	0.0004	0.015	1	07/02/19 13:28	КМ	07/10/19 16:52	FO	
Manganese Total	0.00104 mg/L	0.00100	0.0004		1	07/02/19 13:28	н КМ	07/10/19 16:52	FO	
Zinc Total	0.0384 mg/L	0.00500	0.0020		1	07/02/19 13:28	н КМ Н	07/10/19 16:52	FO	
INORGANICS (E2340	B, Hardness Calc.)									
Hardness, Calcium	207 mg/L				1		CW	07/09/19 09:11	CW	1
INORGANICS (E300.), Anions)									
Chloride	10.7 mg/L	1.00	0.500		1	06/26/19 12:34	ML	06/26/19 18:57	ML	
Fluoride	0.330 mg/L	0.0100	0.0050	4	1	06/26/19 12:34	ML	06/26/19 18:57	ML	
Nitrite (as N)	0.0372 mg/L	0.0100	0.0050	1	1	06/26/19 12:34	ML	06/26/19 18:57	ML	
INITIATE (as N)	U.554 mg/L	0.0100	0.0050	10	1	06/26/19 12:34		06/26/19 18:57	IVIL	*
Sulfate	<0.0100 mg/∟ 17 2 ma/l	0.0100	0.0050		1 1	06/26/19 12:34	MI	06/26/19 18:57	MI	-
Gunato	17.Z mg/c	1.00	0.000		I	50/20/13 12.34		55/20/13 10.37	111	
TOTAL DISSOLVED SC	DLIDS (SM2540C, TDS)									



Analytical Results (cont.)

Lab ID: Q1939793001	Date Received: 6/25/2019 15:50	Matrix: Drinking Water
Sample ID: WEST CYPRESS WELL 16	Date Collected: 6/25/2019 14:45	Sample Type: SAMPLE
Project ID: New Well Const. + Wellspec		

Parameter	Results Units	MRL	LOD	ML	DF	Prepared	Ву	Analyzed	Ву	Qual
Total Dissolved Solids(TDS)	314 mg/L	25.0	10.0		10	07/01/19 08:29	AD G	07/01/19 12:27	AD G	
TOTAL PHOSPHATE AS P	(E365.4 Water Prep/E365.4 Ph	osphoru	s, Total)							
Phosphorus, Total (As P)	<0.0200 mg/L	0.0200	0.0080		1	07/03/19 11:02	ME	07/08/19 00:00	MC) *
рН (SM4500-H+B, pH @ 2	5ºC)									
pH Temperature	7.39 ♭H 19.1 C	0.00	0.00		1 1	07/08/19 09:42 07/08/19 09:42	ME ME	07/08/19 15:44 07/08/19 15:44	ME ME	*

Sample Comments

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Sample Type: SAMPLE

General Comments for METHOD SM4500-H+B, pH - Defined as a field parameter, measurement must be taken within 15 minutes of collection. Results are provided for information purposes only.

v.12.7.0



Quality Control

Preparation Batch:	WET / 20017		Analys	is Method:	SM2320)B, Alkalinity
Preparation Method:	SM2320B, Alkalin	ity				
Associated Lab IDs:	Q1939793001					
Limit of Quantitation Che	eck (1279310)					
Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	
Total Alkalinity (CaCO3)	mg/L	20	21.8	109	70 - 130	
Method Reporting Limit (Check (1279311)					
Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	
Total Alkalinity (CaCO3)	mg/L	20	20.2	101	50 - 150	
Duplicate (1279316); Orig	ginal: Q19396690	06				
Parameter	Original	Duplicate	Units	RPD %	Limit	Qualifier
Total Alkalinity (CaCO3)	276	276	mg/L	0	20	
Matrix Spike (1279317) O	riginal: Q1939669	9006				
Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	
Total Alkalinity (CaCO3)	mg/L	100	343	67.1	70 - 130	
Lab Control Sample (127	9318)					
Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	
Total Alkalinity (CaCO3)	mg/L	100	91.5	91.5	90 - 110	
Method Blank (1279319)						
Parameter	Results	Units	MRL	LOD	Qualifier	
Total Alkalinity (CaCO3)	<20.0	mg/L	20.0	20.0		

v.12.7.0



Preparation Batch: MEP / 9357 Preparation Method: E200.7 Prep Associated Lab IDs: Q1939793001

Laboratory Reagent Bla	nk (1281577)					
Parameter	Results	Units	MRL	LOD	Qualifier	
Calcium Total	<0.200	mg/L	0.200	0.0700		
Iron Total	< 0.0500	mg/L	0.0500	0.0200		
Magnesium Total	<0.200	mg/L	0.200	0.0700		
Sodium Total	<0.200	mg/L	0.200	0.0700		

Analysis Method: E200.7 Metals, Trace Elements

Laboratory Fortified Blank (1281578)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %
Calcium Total	mg/L	10	10.5	105	85 - 115
Iron Total	mg/L	1	1.04	104	85 - 115
Magnesium Total	mg/L	10	10.3	103	85 - 115
Sodium Total	mg/L	10	10.8	108	85 - 115

Laboratory Fortified Matrix (1281582) Original: Q1939730007

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %
Calcium Total	mg/L	10	22.4	105	70 - 130
Iron Total	mg/L	1	1.06	106	70 - 130
Magnesium Total	mg/L	10	10.2	102	70 - 130
Sodium Total	mg/L	10	105	131	70 - 130

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Page 8 of 17

Preparation Batch: WE	TP / 4651		Analys	Analysis Method: E365.4 Phosphorus, Total								
Preparation Method: E36	5.4 Water Pre	эp										
Associated Lab IDs: Q19	939793001											
Limit of Quantitation Check	(1282859)											
Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %							
Phosphorus, Total (As P)	mg/L	.02	.02	101	70 - 130							
Matrix Spike (1282860) Origin	nal: Q193926	2001										
Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %							
Phosphorus, Total (As P)	mg/L	1	1.12	71.6	80 - 120							
Lab Control Sample (128286	1); Lab Cont	rol Sample I	Duplicate	(1282862)								
Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	Dup Result	% Dup Recovery	RPD	RPD Limit %			
Phosphorus, Total (As P)	mg/L	1	.96	95.9	90 - 110	.96	96.4	.52	20			
Method Blank (1282863)												
Parameter	Results	Units	MRL	LOD	Qualifier							
Phosphorus, Total (As P)	<0.0200	mg/L	0.0200	0.00800								



Page 9 of 17

Preparation Batch: WET	/ 20029		Analys	is Method	: SM2540	IC, TDS
Preparation Method: SM2	540C, TDS					
Associated Lab IDs: Q19	39793001					
Method Blank (1280042)						
Parameter	Results	Units	MRL	LOD	Qualifier	
Total Dissolved Solids(TDS)	<25.0	mg/L	25.0	10.0		
Lab Control Sample (1280043)					
Parameter	1111	Spiked	Spike	% Spike	Control	
	Units	Amount	Result	Recovery	Limits %	
Total Dissolved Solids(TDS)	mg/L	400	405	101	80 - 120	
Duplicate (1280045); Original	: Q19396700	006				
Parameter	Original	Duplicate	Units	RPD %	Limit	Qualifier
Total Dissolved Solids(TDS)	385	440	mg/L	13.3	20	
Matrix Spike (1280044) Origin	al: Q193967	0006				
Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	
Total Dissolved Solids(TDS)	mg/L	400	832	112	70 - 130	



Preparation Batch: MEP / 7231 Preparation Method: E200.7 Prep Associated Lab IDs: Q1939793001 Analysis Method: E200.7 Metals, Trace Elements

Method Reporting Limit Check (1282004)

	,				
Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %
Calcium Total	mg/L	.2	.2	98.3	50 - 150
Magnesium Total	mg/L	.2	.2	102	50 - 150
Sodium Total	mg/L	.2	.19	95.7	50 - 150
Method Reporting Limit Che	eck (1282003)				
Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %
Iron Total	mg/L	.05	.05	99.6	50 - 150

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Preparation Batch: MEP / 7237 Preparation Method: E200.8, ICP-MS Prep Associated Lab IDs: Q1939793001 Analysis Method: E200.8, ICP-MS

Method Reporting Limit Check (1283239)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %
Arsenic Total	mg/L	.001	0	150	50 - 150
Copper Total	mg/L	.001	0	99.2	50 - 150
Lead Total	mg/L	.001	0	105	50 - 150
Manganese Total	mg/L	.001	0	103	50 - 150

Method Reporting Limit Check (1283240)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %
Aluminum Total	mg/L	.005	.01	100	50 - 150
Zinc Total	mg/L	.005	.01	103	50 - 150



Preparation Batch: WET /		Analysi	is Method:	SM2510	B, Conductivity @ 25°C				
Preparation Method: SM2510B, Conductivity @ 25°C									
Associated Lab IDs: Q1939793001									
Duplicate (1282141); Original:	Q19398000	001							
Parameter	Original	Duplicate	Units	RPD %	Limit	Qualifier			
Specific Conductance	763	765	umho/c	.262	20				
Lab Control Sample (1282142)									
Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %				
Specific Conductance	umho/c	1000	1000	100	70 - 130				

Method Blank (1282143)

Method Blank (1202145)						
Parameter	Results	Units	MRL	LOD	Qualifier	
Specific Conductance	<10.0	umho/c	10.0	10.0		



Preparation Batch: WET / 20002 Preparation Method: E300.0, Anions Associated Lab IDs: Q1939793001

Method Reporting Limit Check (1277386)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %
Chloride	mg/L	1	.74	74.4	50 - 150
Fluoride	mg/L	.01	.01	118	50 - 150
Nitrite (as N)	mg/L	.01	.01	76	50 - 150
Nitrate (as N)	mg/L	.01	.01	64	50 - 150
ortho-Phosphate (as P)	mg/L	.01	.01	81	50 - 150
Sulfate	mg/L	1	.83	83.4	50 - 150

Limit of Quantitation Check (1277388)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %
Chloride	mg/L	5	4.1	82	70 - 130
Fluoride	mg/L	.02	.02	103	70 - 130
Nitrite (as N)	mg/L	.02	.02	89	70 - 130
Nitrate (as N)	mg/L	.02	.02	97.5	70 - 130
ortho-Phosphate (as P)	mg/L	.02	.02	100	70 - 130
Sulfate	mg/L	5	4.37	87.3	70 - 130

Analysis Method: E300.0, Anions

Duplicate (1277846); Original: Q1939410001

Parameter	Original	Duplicate	Units	RPD %	Limit	Qualifier
Chloride	318	427	mg/L	29.3		
Fluoride	2.07	2.48	mg/L	18		
Nitrite (as N)	0	0	mg/L	0		
Nitrate (as N)	16.4	16.4	mg/L	0		
ortho-Phosphate (as P)	.01	0	mg/L	200		
Sulfate	278	403	mg/L	36.7		

Laboratory Reagent Blank (1277400)

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Parameter	Results	Units	MRL	LOD	Qualifier
Chloride	<1.00	mg/L	1.00	0.500	
Fluoride	<0.0100	mg/L	0.0100	0.00500	
Nitrite (as N)	<0.0100	mg/L	0.0100	0.00500	
Nitrate (as N)	<0.0100	mg/L	0.0100	0.00500)
ortho-Phosphate (as P)	<0.0100	mg/L	0.0100	0.00500	
Sulfate	<1.00	mg/L	1.00	0.500	

Laboratory Fortified Blank (1277401)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %
Chloride	mg/L	30	30.3	101	90 - 110
Fluoride	mg/L	1	1.03	103	90 - 110
Nitrite (as N)	mg/L	1	1	99.5	90 - 110
Nitrate (as N)	mg/L	1	1.02	102	90 - 110
ortho-Phosphate (as P)	mg/L	1	.98	98.2	90 - 110
Sulfate	mg/L	30	30.1	100	90 - 110

Laboratory Fortified Matrix (1277397) Original: Q1939792013

Deremeter	Unite	Spiked	Spike	% Spike	Control
Parameter	Units	Amount	Result	Recovery	Limits %

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Quality Control (cont.)

Preparation Batch: WET/20002 Preparation Method: E300.0, Anions Analysis Method: E300.0, Anions

Associated Lab IDs: Q1939793001

(continued)

Deremeter	Unito	Spiked	Spike	% Spike	Control	
Parameter	Units	Amount	Result	Recovery	Limits %	Qual
Chloride	mg/L	20	91.9	81.2	80 - 120	
Fluoride	mg/L	1	1.61	98.9	80 - 120	
Nitrite (as N)	mg/L	1	1.01	101	80 - 120	
Nitrate (as N)	mg/L	1	1.09	104	80 - 120	
ortho-Phosphate (as P)	mg/L	1	1.02	101	80 - 120	
Sulfate	mg/L	20	60.7	94.4	80 - 120	



Preparation Batch: MEP / 9358 Preparation Method: E200.8, ICP-MS Prep Associated Lab IDs: Q1939793001 Analysis Method: E200.8, ICP-MS

Laboratory Reagent Blank (1281584)

Parameter	Results	Units	MRL	LOD	Qualifier
Aluminum Total	<0.00500	mg/L	0.00500	0.00200	
Arsenic Total	<0.00100	mg/L	0.00100	0.000400	
Copper Total	<0.00100	mg/L	0.00100	0.000400	
Lead Total	<0.00100	mg/L	0.00100	0.000400	
Manganese Total	<0.00100	mg/L	0.00100	0.000400	
Zinc Total	<0.00500	mg/L	0.00500	0.00200	

Laboratory Fortified Blank (1281585); Lab Fortified Blank Duplicate (1281586)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	Dup Result	% Dup Recovery	RPD	RPD Limit %
Aluminum Total	mg/L	.05	.05	96.8	85 - 115	.05	96.9	0	20
Arsenic Total	mg/L	.05	.05	95	85 - 115	.05	95.7	.839	20
Copper Total	mg/L	.05	.05	97.9	85 - 115	.05	96.3	1.65	20
Lead Total	mg/L	.05	.05	95	85 - 115	.05	95.6	.63	20
Manganese Total	mg/L	.05	.05	96.9	85 - 115	.05	96.3	.828	20
Zinc Total	mg/L	.05	.05	95.5	85 - 115	.05	94.6	.842	20

Laboratory Fortified Matrix (1281589) Original: Q1939793001; Lab Fortified Matrix Duplicate (1281590)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	Dup Result	% Dup Recovery	RPD	RPD Limit %
Aluminum Total	mg/L	.05	.05	103	70 - 130	.05	103	.195	20
Arsenic Total	mg/L	.05	.05	96.7	70 - 130	.05	97.2	.619	20
Copper Total	mg/L	.05	.05	93.6	70 - 130	.05	90.9	2.82	20
Lead Total	mg/L	.05	.05	97.7	70 - 130	.05	95	2.7	20
Manganese Total	mg/L	.05	.05	95.4	70 - 130	.05	93.8	1.45	20
Zinc Total	mg/L	.05	.09	94.4	70 - 130	.08	91.5	1.65	20



Preparation Batch: WET / 20071	Analysis Method:	SM4500-H+B, pH @ 25ºC
Preparation Method: SM4500-H+B, pH @ 25º	С	
Associated Lab IDs: Q1939793001		

Duplicate (1283709); Original: Q1939762001

· · · · · · · · · · · · · · · · · · ·						
Parameter	Original	Duplicate	Units	RPD %	Limit	Qualifier
pH	8.02	8.04	pН	.249	20	
Temperature	19.4	19.1	С	1.56		

QC Sample Comments

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Page 16 of 17

Sample Type: Duplicate

General Comments for METHOD SM4500-H+B, pH - Defined as a field parameter, measurement must be taken within 15 minutes of collection. Results are provided for information purposes only.



Quality Control Cross Reference

			
Batch ID: ME1//231 - Ana	liytical Method:E200.7 Metals, Trac	e Elements	
Lab ID	Sample ID	Prep Batch	Prep Method
Q1939793001	WEST CYPRESS WELL 16	MEP/9357	E200.7 Prep
Batch ID: MET/7237 - Ana	lytical Method:E200.8, ICP-MS		
Lab ID	Sample ID	Prep Batch	Prep Method
Q1939793001	WEST CYPRESS WELL 16	MEP/9358	E200.8, ICP-MS Prep
Batch ID: WET/20002 - Ar	alytical Method:E300.0, Anions		
Lab ID	Sample ID	Prep Batch	Prep Method
Q1939793001	WEST CYPRESS WELL 16		
Batch ID: WET/20017 - Ar	alytical Method:SM2320B, Alkalin	ity	
Lab ID	Sample ID	Prep Batch	Prep Method
Q1939793001	WEST CYPRESS WELL 16		
Batch ID: WET/20029 - Ar	nalytical Method:SM2540C, TDS		
Lab ID	Sample ID	Prep Batch	Prep Method
Q1939793001	WEST CYPRESS WELL 16		
Batch ID: WET/20049 - Ar	nalytical Method:SM2510B, Condu	ctivity @ 25°C	
Lab ID	Sample ID	Prep Batch	Prep Method
Q1939793001	WEST CYPRESS WELL 16		
Batch ID: WET/20062 - Ar	nalytical Method:E365.4 Phosphore	us, Total	
Lab ID	Sample ID	Prep Batch	Prep Method
Q1939793001	WEST CYPRESS WELL 16	WETP/4651	E365.4 Water Prep
Batch ID: WET/20071 - Ar	nalytical Method:SM4500-H+B, pH	@ 25ºC	
Lab ID	Sample ID	Prep Batch	Prep Method
Q1939793001	WEST CYPRESS WELL 16		

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WELL #17 WELL ID # = 521774 CYPRESS RANCH WCID #1 LCRA Environmental Laboratory Services 3505 Montopolis Drive Austin, TX 78744 Phone: (512) 730-6022 Fax: (512) 730-6021

September 17, 2019

JANIE HENDRIX CENTEX PUMP & SUPPLY 2520 Hwy 290 W Dripping Springs, TX 78620 JANIE@CTDWATERWELLS.COM

RE: Final Analytical Report Q1960671

Attn: JANIE HENDRIX

Enclosed are the analytical results for sample(s) received by LCRA Environmental Laboratory Services. Results reported herein conform to the most current NELAP standards, where applicable, unless otherwise narrated in the body of the report. This final report provides results related only to the sample(s) as received for the above referenced work order.

Thank you for selecting ELS for your analytical needs. If you have any questions regarding this report, please contact us at (512) 730-6022. We look forward to assisting you again.

Authorized for release by:

a leavy

Ariana Dean Account Manager ariana.dean@lcra.org



Enclosures:



LCRA Environmental Laboratory Services 3505 Montopolis Drive Austin, TX 78744 Phone: (512) 730-6022 Fax: (512) 730-6021

Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received
Q1960671001	CYPRIS RANCH 17	DW	E200.7 Metals, Trace Elements	8/29/2019 10:00	8/29/2019 11:50
Q1960671001	CYPRIS RANCH 17	DW	E200.8, ICP-MS	8/29/2019 10:00	8/29/2019 11:50
Q1960671001	CYPRIS RANCH 17	DW	E2340B, Hardness Calc.	8/29/2019 10:00	8/29/2019 11:50
Q1960671001	CYPRIS RANCH 17	DW	E300.0, Anions	8/29/2019 10:00	8/29/2019 11:50
Q1960671001	CYPRIS RANCH 17	DW	E365.4 Phosphorus, Total	8/29/2019 10:00	8/29/2019 11:50
Q1960671001	CYPRIS RANCH 17	DW	SM2320B, Alkalinity	8/29/2019 10:00	8/29/2019 11:50
Q1960671001	CYPRIS RANCH 17	DW	SM2510B, Conductivity @ 25°C	8/29/2019 10:00	8/29/2019 11:50
Q1960671001	CYPRIS RANCH 17	DW	SM2540C, TDS	8/29/2019 10:00	8/29/2019 11:50
Q1960671001	CYPRIS RANCH 17	DW	SM4500-H+B, pH @ 25ºC	8/29/2019 10:00	8/29/2019 11:50

Report Definitions

MRL - Minimum Reporting Limit
LOD - Limit of Detection
ML - Maximum Limit - Client Specified
MCL - Maximum Contaminant Level
MDL - Method Detection Limit
LOQ - Limit of Quantitation - Client Specified
DF - Dilution Factor
Qual - Qualifier
(S) - Surrogate Spike
QC Qual - red font indicates Result Value outside acceptable range
B- Analyte detected in method blank
S - Spike recovery outside limit
R - RPD outside duplicate precision limit
J - Analyte detected below quantitation limit
RPD - Relative Percent Difference



Project Summary

Sample Analysis Comments

Lab ID: Q1960671001

Sample ID: CYPRIS RANCH 17

- Not Accredited Calcium Total
- Not Accredited Phosphorus, Total (As P)
- Not Accredited Temperature
- Not Accredited Total Alkalinity (CaCO3)
- Not Accredited pH

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Analytical Results										
Lab ID: Q1960671001		Date R	eceived:	8/29/2	019 11	:50	Ма	atrix: Drinking Wat	ter	
Sample ID: CYPRIS RANCH 17		Date C	ollected.	8/29/2	019 10).00 Sar	nole T	vne: SAMPLE		
		Dato C	encotou.	0,20,2	01010		npio i	<i>ypo: 0, 111 LL</i>		
Project ID: New Well TESTIN	G									
Parameter	Results Units	MRL	LOD	ML	DF	Prepared	Ву	Analyzed	Ву	Qual
ALKALINITY (SM2320B, Alkalin	ity)									
Total Alkalinity (CaCO3)	222 mg/L	20.0	20.0		1			09/05/19 00:00	ME	*
Conductance @ 25°C (SM2510E	3, Conductivity @ 25°C)								
Specific Conductance	487 umho/cm	10.0	10.0		1			09/04/19 19:06	ME	
INORGANICS (E200.7 Prep/E20	0.7 Metals, Trace Elem	ents)								
Calcium Total	70.3 mg/L	0.200	0.0700		1	09/03/19 09:05	ME	09/04/19 15:33	FM	*
Iron Total	<0.0500 mg/L	0.0500	0.0200		1	09/03/19 09:05	ME	09/04/19 15:33	FM	
Magnesium Total	18.6 mg/L	0.200	0.0700		1	09/03/19 09:05	ME	09/04/19 15:33	FM	
Sodium Total	6.39 mg/L	0.200	0.0700		1	09/03/19 09:05	ME	09/04/19 15:33	FM	
INORGANICS (E200.8, ICP-MS F	Prep/E200.8, ICP-MS)									
Aluminum Total	0.00532 mg/L	0.00500	0.0020		1	09/03/19 09:08	ME	09/06/19 17:45	FO	
Arsenic Total	<1.00 ug/L	1.00	0.400	10	1	09/03/19 09:08	ME	09/06/19 17:45	FO	
Copper Total	<0.00100 mg/L	0.00100	0.0004	1	1	09/03/19 09:08	ME	09/06/19 17:45	FO	
Lead Total	<0.00100 mg/L	0.00100	0.0004	0.015	1	09/03/19 09:08	ME	09/06/19 17:45	FO	
Manganese Total	<0.00100 mg/L	0.00100	0.0004		1	09/03/19 09:08	ME	09/06/19 17:45	FO	
Zinc Total	0.0312 mg/L	0.00500	0.0020		1	09/03/19 09:08	ME	09/06/19 17:45	FO	
INORGANICS (E2340B, Hardnes	ss Calc.)									
Hardness, Calcium	182 mg/L				1			09/04/19 12:54	CW	
INORGANICS (E300.0, Anions)										
Chloride	9.37 mg/L	1.00	0.500		1			08/29/19 13:58	ML	
Fluoride	0.398 mg/L	0.0100	0.0050	4	1			08/29/19 13:58	ML	
Nitrate (as N)	0.318 mg/L	0.0100	0.0050	10	1			08/29/19 13:58	ML	
Nitrite (as N)	<0.0100 mg/L	0.0100	0.0050	1	1			08/29/19 13:58	ML	
Sulfate	20.8 mg/L	1.00	0.500		1			08/29/19 13:58	ML	
TOTAL DISSOLVED SOLIDS (SI	12540C, TDS)									
Total Dissolved	263 mg/L	25.0	10.0		10			09/03/19 11:10	ML	

TOTAL PHOSPHATE AS P (E365.4 Water Prep/E365.4 Phosphorus, Total)

Phosphorus, Total (As P) <0.0200 mg/L 0.0200 0.0080 1 09/04/19 11:53 ME 09/06/19 00:00 МО

pH (SM4500-H+B, pH @ 25ºC)

Solids(TDS)


Analytical Results (cont.)

Lab ID: Q1960671001	Date Received: 8/29/2019 11:50	Matrix: Drinking Water	
Sample ID: CYPRIS RANCH 17	Date Collected: 8/29/2019 10:00	Sample Type: SAMPLE	
Project ID: NEW WELL TESTING			

Parameter	Results Units	MRL	LOD	ML	DF	Prepared	Ву	Analyzed	Ву	Qual
pH Temperature	7.80 թн 19.5 ⊂	0.00	0.00		1 1			09/06/19 15:37 09/06/19 15:37	ME ME	*

Sample Comments

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Sample Type: SAMPLE

General Comments for METHOD SM4500-H+B, pH - Defined as a field parameter, measurement must be taken within 15 minutes of collection. Results are provided for information purposes only.



Quality Control

 Preparation Batch:
 MET / 7357
 Analysis Method:
 E200.7 Metals, Trace Elements

 Preparation Method:
 E200.7 Metals, Trace Elements
 E200.7 Metals, Trace Elements

 Associated Lab IDs:
 Q1960671001
 Q1960671001

Method Reporting Limit Check (1327134)

····· ··· ··· ··· ··· ···	,				
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Calcium Total	mg/L	.2	.24	122	50 - 150
Magnesium Total	mg/L	.2	.18	90.1	50 - 150
Sodium Total	mg/L	.2	.2	101	50 - 150
Method Reporting Limit Check	(1327135)				
Parameter	Unite	Spiked	Spike	Spike	Control
	Units	Amount	Result	Recovery	Limits
Iron Total	ma/l	.05	.05	105	50 - 150



Preparation Batch: MET / 7365 Preparation Method: E200.8, ICP-MS Associated Lab IDs: Q1960671001 Analysis Method: E200.8, ICP-MS

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Method Reporting Limit Check (1330439)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Aluminum Total	mg/L	.001	0	98.4	50 - 150
Arsenic Total	ug/L	1	.96	95.6	50 - 150
Copper Total	mg/L	.001	0	101	50 - 150
Lead Total	mg/L	.001	0	102	50 - 150
Manganese Total	mg/L	.001	0	101	50 - 150

Method Reporting Limit Check (1330440)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Aluminum Total	mg/L	.005	0	99.1	50 - 150
Zinc Total	mg/L	.005	.01	102	50 - 150



Preparation Batch: MEP / 9554 Preparation Method: E200.7 Prep Associated Lab IDs: Q1960671001

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Analysis Method:	E200.7 Metals, Trace Elements

Laboratory Reagent Blank (1326380) Parameter Results Units MRL LOD Qualifier Calcium Total <0.200 0.200 0.0700 mg/L Iron Total <0.0500 mg/L 0.0500 0.0200 Magnesium Total < 0.200 mg/L 0.200 0.0700 Sodium Total <0.200 mg/L 0.200 0.0700

Laboratory Fortified Blank (1326381)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Calcium Total	mg/L	10	10.7	107	85 - 115
Iron Total	mg/L	1	1.11	111	85 - 115
Magnesium Total	mg/L	10	10.4	104	85 - 115
Sodium Total	mg/L	10	10.7	107	85 - 115

Laboratory Fortified Matrix (1326385) Original: Q1960662001

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Calcium Total	mg/L	10	65.1	103	70 - 130
Iron Total	mg/L	1	1.15	107	70 - 130
Magnesium Total	mg/L	10	41.6	101	70 - 130
Sodium Total	mg/L	10	33.3	108	70 - 130



Preparation Batch: W	'ET / 20415		Analys	is Method:	SM2320	B, Alkalinity
Preparation Method: SI	M2320B, Alkalin	ity				
Associated Lab IDs: Q	1960671001					
Limit of Quantitation Check	k (1329251)					
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	
Total Alkalinity (CaCO3)	mg/L	20	20.6	103	70 - 130	
Method Reporting Limit Ch	eck (1329252)					
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	
Total Alkalinity (CaCO3)	mg/L	20	20.5	103	50 - 150	
Duplicate (1329253); Origin	nal: Q19595380	02				
Parameter	Original	Duplicate	Units	RPD %	Limit	
Total Alkalinity (CaCO3)	302	302	mg/L	0	20	
Matrix Spike (1329254) Orig	ginal: Q1959538	8002				
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	
Total Alkalinity (CaCO3)	mg/L	100	375	73	70 - 130	
Lab Control Sample (13292	55)					
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	
Total Alkalinity (CaCO3)	mg/L	100	94	94	90 - 110	
Method Blank (1329256)						
Parameter	Results	Units	MRL	LOD	Qualifier	
Total Alkalinity (CaCO3)	<20.0	mg/L	20.0	20.0		



Preparation Batch: WET / 20394 Preparation Method: E300.0, Anions Associated Lab IDs: Q1960671001

Limit of Quantitation Check (1325889)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Chloride	mg/L	5	4	80	70 - 130
Fluoride	mg/L	.02	.02	106	70 - 130
Nitrite (as N)	mg/L	.02	.02	92.5	70 - 130
Nitrate (as N)	mg/L	.02	.02	98.5	70 - 130
Sulfate	mg/L	5	4.22	84.3	70 - 130

Laboratory Fortified Blank (1325888)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Chloride	mg/L	30	30.1	100	90 - 110
Fluoride	mg/L	1	1.03	103	90 - 110
Nitrite (as N)	mg/L	1	.98	97.7	90 - 110
Nitrate (as N)	mg/L	1	.99	98.6	90 - 110
Sulfate	mg/L	30	30	100	90 - 110

Analysis Method: E300.0, Anions

Method Reporting Limit Check (1325887)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Chloride	mg/L	1	.71	71.2	50 - 150
Fluoride	mg/L	.01	.01	59	50 - 150
Nitrite (as N)	mg/L	.01	.01	66	50 - 150
Nitrate (as N)	mg/L	.01	.01	106	50 - 150
Sulfate	mg/L	1	.79	78.8	50 - 150

Laboratory Reagent Blank (1325885)

Parameter	Results	Units	MRL	LOD	Qualifier
Chloride	<1.00	mg/L	1.00	0.500	
Fluoride	<0.0100	mg/L	0.0100	0.00500	
Nitrite (as N)	<0.0100	mg/L	0.0100	0.00500	
Nitrate (as N)	<0.0100	mg/L	0.0100	0.00500	
Sulfate	<1.00	mg/L	1.00	0.500	

Laboratory Fortified Matrix (1325894) Original: Q1960671001

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Chloride	mg/L	20	29.4	100	80 - 120
Fluoride	mg/L	1	1.36	95.7	80 - 120
Nitrite (as N)	mg/L	1	.92	92.4	80 - 120
Nitrate (as N)	mg/L	1	1.31	99.7	80 - 120
Sulfate	mg/L	20	41.5	103	80 - 120



Preparation Batch: MEP / 9555 Preparation Method: E200.8, ICP-MS Prep Associated Lab IDs: Q1960671001 Analysis Method: E200.8, ICP-MS

Laboratory Reagent Blank (1326398)

Parameter	Results	Units	MRL	LOD	Qualifier
Aluminum Total	<0.00500	mg/L	0.00500	0.00200	
Arsenic Total	<1.00	ug/L	1.00	0.400	
Copper Total	<0.00100	mg/L	0.00100	0.000400	
Lead Total	<0.00100	mg/L	0.00100	0.000400	
Manganese Total	<0.00100	mg/L	0.00100	0.000400	
Zinc Total	<0.00500	mg/L	0.00500	0.00200	

Laboratory Fortified Blank (1326399); Lab Fortified Blank Duplicate (1326400)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit
Aluminum Total	mg/L	.05	.05	95.2	85 - 115	.05	97	1.87	20
Arsenic Total	ug/L	50	47.3	94.6	85 - 115	46.4	92.9	1.92	20
Copper Total	mg/L	.05	.05	93.7	85 - 115	.05	93.9	.213	20
Lead Total	mg/L	.05	.05	96.8	85 - 115	.05	97.1	.206	20
Manganese Total	mg/L	.05	.05	96.2	85 - 115	.05	95.5	.835	20
Zinc Total	mg/L	.05	.05	96.9	85 - 115	.05	96	.83	20

Laboratory Fortified Matrix (1326401) Original: Q1960671001; Lab Fortified Matrix Duplicate (1326402)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit
Aluminum Total	mg/L	.05	.05	95.1	70 - 130	.05	96.2	.941	20
Arsenic Total	ug/L	50	46.8	93.6	70 - 130	49.3	98.5	5.2	20
Copper Total	mg/L	.05	.04	89.8	70 - 130	.05	93.2	3.72	20
Lead Total	mg/L	.05	.05	95	70 - 130	.05	97.7	2.7	20
Manganese Total	mg/L	.05	.05	94.3	70 - 130	.05	98.1	3.74	20
Zinc Total	mg/L	.05	.08	90	70 - 130	.08	94.3	2.85	20



Preparation Batch: WET	⊃ / 4739		Analys	Analysis Method: E365.4 Phosphorus, Total							
Preparation Method: E365	.4 Water Pre	эp									
Associated Lab IDs: Q196	0671001										
Limit of Quantitation Check (1	327994)										
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits						
Phosphorus, Total (As P)	mg/L	.02	.02	107	70 - 130						
Method Blank (1328006)											
Parameter	Results	Units	MRL	LOD	Qualifier					_	
Phosphorus, Total (As P)	<0.0200	mg/L	0.0200	0.00800							
Matrix Spike (1328007) Origina	l: Q196056	0007									
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits						
Phosphorus, Total (As P)	mg/L	1	1.01	101	80 - 120					_	
Lab Control Sample (1328008)	; Lab Conti	rol Sample I	Duplicate ((1328009)							
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit		
Phosphorus, Total (As P)	mg/L	1	1.03	103	90 - 110	.96	95.7	7.35	20		



Preparation Batch: WET	/ 20400		Analys	is Method:	SM25400	C, TDS
Preparation Method: SM2	540C, TDS		2			
Associated Lab IDs: Q19	60671001					
Method Blank (1326487)						
Parameter	Results	Units	MRL	LOD	Qualifier	
Total Dissolved Solids(TDS)	<25.0	mg/L	25.0	10.0		
Lab Control Sample (1326488)					
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	
Total Dissolved Solids(TDS)	mg/L	400	408	102	80 - 120	
Duplicate (1326490); Original	: Q19601620	001				
Parameter	Original	Duplicate	Units	RPD %	Limit	
Total Dissolved Solids(TDS)	541	539	mg/L	.37	20	
Matrix Spike (1326489) Origin	al: Q196016	2001				
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	
Total Dissolved Solids(TDS)	mg/L	400	982	110	70 - 130	



Preparation Batch:	WET / 20411	Analysis Method:	SM2510B, Conductivity @ 25°C
Preparation Method:	SM2510B, Conductivity @ 25°C	>	
Associated Lab IDs:	Q1960671001		

Lab Control Sample (1328495)

	-/				
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Specific Conductance	umho/c	1000	1000	100	70 - 130
Duplicate (1328496); Origina	nl: Q1960817	004			
Parameter	Original	Duplicate	Units	RPD %	Limit
Specific Conductance	618	617	umho/c	.162	20
Method Blank (1328497)					
Parameter	Results	Units	MRL	LOD	Qualifier
Specific Conductance	<10.0	umho/c	10.0	10.0	



Preparation Batch: WET / 20429	Analysis Method:	SM4500-H+B, pH @ 25ºC
Preparation Method: SM4500-H+B, pH @ 25º	С	
Associated Lab IDs: Q1960671001		

Duplicate (1330339); Original: Q1959607001

	,.	•					
Parameter			Original	Duplicate	Units	RPD %	Limit
pН			7.95	7.95	pН	0	20
Temperature			19.7	19.6	С	.509	

QC Sample Comments

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Sample Type: Duplicate

General Comments for METHOD SM4500-H+B, pH - Defined as a field parameter, measurement must be taken within 15 minutes of collection. Results are provided for information purposes only.



Quality Control Cross Reference

MET/7357 - E200.7 Me	etals, Trace Elements			
Lab ID	Sample ID	Prep Batch	Prep Method	
Q1960671001	CYPRIS RANCH 17	MEP/9554	E200.7 Prep	
MET/7365 - E200.8, IC	CP-MS			
Lab ID	Sample ID	Prep Batch	Prep Method	
Q1960671001	CYPRIS RANCH 17	MEP/9555	E200.8, ICP-MS Prep	
WET/20394 - E300.0,	Anions			
Lab ID	Sample ID	Prep Batch	Prep Method	
Q1960671001	CYPRIS RANCH 17			
WET/20400 - SM2540	C, TDS			
Lab ID	Sample ID	Prep Batch	Prep Method	
Q1960671001	CYPRIS RANCH 17			
WET/20411 - SM2510	B, Conductivity @ 25°C			
Lab ID	Sample ID	Prep Batch	Prep Method	
Q1960671001	CYPRIS RANCH 17			
WET/20415 - SM2320	B, Alkalinity			
Lab ID	Sample ID	Prep Batch	Prep Method	
Q1960671001	CYPRIS RANCH 17			
WET/20421 - E365.4 F	Phosphorus, Total			
Lab ID	Sample ID	Prep Batch	Prep Method	
Q1960671001	CYPRIS RANCH 17	WETP/4739	E365.4 Water Prep	
WET/20429 - SM4500	-H+B, pH @ 25ºС			
Lab ID	Sample ID	Prep Batch	Prep Method	
Q1960671001	CYPRIS RANCH 17			

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Environmental Laboratory Services Standard Terms and Conditions

Effective September 2016

Acceptance of Samples ... The Lower Colorado River Authority (LCRA) Environmental Laboratory Services (ELS) will accept samples and perform services in accordance with these terms and conditions. No modifications to these terms and conditions will be valid or binding unless in writing and signed by authorized representatives of both the Customer and ELS.

ELS reserves the right to refuse or revoke receipt of any sample due to insufficient sample volume, improper sample container, unacceptable customer credit, or risk of handling for any health, safety, regulatory, environmental, holding time issues or any other reason, at the discretion of ELS

ELS also reserves the right to terminate any work being done or work promised on samples accepted for ELS's sole convenience. In the event of such termination, ELS will notify all affected Customers as soon as possible.

Payment & Invoicing ... Customer must pay for all services by check or credit card upon delivery of sample to ELS unless other billing arrangements are agreed to by ELS and Customer. Invoices will be issued monthly following the completion of services. All payments are due 30 days from receipt of the invoice. A one percent (1%) per month late fee will be assessed on unpaid invoices after the due date. Customers that have outstanding balances equal to or greater than 90 days must make payment in full at the time of sample delivery

Quoted Fees ... Written quoted fees for all services to be performed by the ELS will be honored for a period of thirty (30) days from the quotation date unless otherwise specified by ELS in writing.

Costs for Compliance...All costs associated with compliance with any subpoena for documents, testimony, or assistance, or for any other purpose relating to work performed by ELS for the Customer, will be paid by the Customer or requesting party. Such costs will include, but not be limited to, hourly charges for each staff member, travel and accommodations, mileage, and any other miscellaneous expenses incurred.

Use of Data... The Customer is solely responsible for determining what actions are required as a result of the data, information, recommendations, interpretations, and opinions provided by ELS. The Customer also assumes sole responsibility for determining whether the nature, type, and quantity of work requested by the Customer is adequate and sufficient for the Customer's intended purpose. Customer hereby indemnifies and releases ELS from and against any and all liabilities arising out of, related to, or resulting from Customer's incorrect or inappropriate use of any data or opinions provided to it by ELS.

Reports...ELS will deliver approved final reports and/or electronic data including any Customer-approved subcontract laboratory data by the agreed upon due date. Reports may not be reproduced, except in full, without prior written approval by ELS. Reports or copies of reports will not be provided to any person or representative other than the Customer without the Customer's written authorization, except as may be required by law.

Confidentiality ... Strict confidentiality is maintained regarding all Customer transactions and results. Where information is lawfully subpoenaed, must be released to a regulatory or other legal entity with jurisdiction, or disclosure of documents is otherwise required by law, the Customer will be promptly notified.

Confidential, trade secret, and privileged information provided to ELS by Customer, including sample content, analysis, and Reports, is protected from public access by exceptions to the Texas Public Information Act ("PIA"), to which LCRA is subject. ELS will assert the appropriate exception to withhold Customer information requested under the PIA. Customer may be asked by ELS to provide assistance in asserting exceptions to the PIA (e.g. explanation of competitive position, treatment of trade secrets, etc.) Customer agrees to assist ELS in protection of Customer's information

Sample Disclosures...Customer agrees that all samples delivered to the ELS will be accompanied by a properly completed chain-of-custody form disclosing the presence of any contaminated, toxic, or hazardous substances known or suspected to be contained in such samples. ELS shall reject any samples received without a valid chain of custody form

Analytical Errors... Upon request by the Customer, ELS will reanalyze samples whenever test results are suspect. Should the results of the second analysis substantially agree with those of the first, the Customer will pay for the cost of the second analysis. However, if the result of the second analysis materially differs from the first, then Customer will not be charged for the second analysis.

Holding Times...All samples must be delivered to ELS within one-half of the applicable holding time. ELS shall not assume any responsibility for missed holding times for samples submitted outside this criterion. To meet holding time for subcontract samples, ELS may make arrangements for the Customer to deliver samples directly to the subcontract lab.

Sample Retention & Disposal...Samples are stored for 30 days upon transmitting final analysis results to the Customer. After 30 days, samples are disposed of properly. However, Customer may request additional storage time at a storage fee of \$50 per month per sample.

Hazardous Waste ... Any samples found to be or suspected of being hazardous or containing hazardous substances according to state and federal regulations will be disposed of at submitting Customer's expense.

Turnaround Time (TAT) ... Turnaround times (TAT) are based on full "working days" which are defined as 8:00 A.M. to 5:00 P.M. Monday through Friday, excluding holidays. Standard TAT is 7 working days from the day starting after sample receipt. However, TAT may be longer depending upon the tests requested and the same matrix. TAT for samples subcontracted to a Customer-approved laboratory is based on the agreed target due date between all parties (i.e., the Customer, the ELS and the subcontract laboratory).

Expedited Service...Expedited service is available upon approval by ELS and written authorization from the Customer. Service charge amounts added to the total cost of service will be applied as follows: < 01

< 01 - 10 24 ms.	4 A COSLOI SELVICE
2 to 3 days:	3 X cost of service
4 to 6 days:	2 X cost of service

Non-Standard Services... On sample matrices or analytes for which no official or validated test method exists, usage of an accepted method for a different type of sample or analyte or method development, in some situations, may be offered. In such cases, no guarantee of the success of the method or warranty will be provided. The Customer will be notified of the alternate method proposed, and only after its approval, will analyses begin. Approval by the Customer of the alternate method obligates the Customer for payment for that work, regardless of result obtained.

Warranty...Where applicable, ELS will use analytical methodologies in accordance with the U.S. Environmental Protection Agency (EPA), state agency, or other recognized and approved source.

ELS warrants that it possesses and maintains all licenses, accreditations, and certifications that are required to perform services under these terms and conditions, provided that such requirements are documented in writing to ELS prior to sample delivery acceptance. ELS will notify the Customer in writing of any decertification or revocation of any license, or notice of either that affects work in progress.

The foregoing express warranty is exclusive and is given in lieu of all other warranties, whether express, implied, or statutory. The ELS disclaims any other warranties, whether express, implied, or statutory, including a warranty of fitness for particular purpose and warranty of merchantability. The ELS is not responsible for any of the purposes for which the Customer may use ELS test results.

Liability...Customer agrees that the maximum liability of ELS for all claims of any kind whether based on contract, indemnity, warranty, tort (including negligence & strict liability), or otherwise, arising out of, connected with, or resulting from the performance or breach thereof, or from any goods or services covered by or furnished under these terms and conditions or any extension or expansion, is limited to the amounts paid or payable by the Customer for the goods or services giving rise to such claims.

Public Well Completion Data Checklist for Interim Approval (Step 2)

- (viii) Copy of the official State of Texas Well Report (some of the preceding data is included on the Well Report).
- 4. A U.S. Geological Survey 7.5-minute topographic quadrangle map (include quadrangle name and number) or a legible copy showing the location of the completed well; [§290.41(c)(3)(A)]
- Record of a 36-hour continuous pump test on the well showing stable production at the well's rated capacity. Include the following: [§290.41(c)(3)(G)]
 - (i) Test pump capacity in gpm. tdh in feet, and horsepower of the pump motor;
 -] (ii) Test pump setting depth;
 - (iii) Static water level (in feet); and
 - (iv) Draw down (in feet).
- 6. Three bacteriological analysis reports for samples collected on three successive days showing raw well water to be free of coliform organisms. Reports must be for samples of raw (untreated) water from the disinfected well and submitted to a laboratory accredited by TCEQ, accredited to perform these test; and [§290.41(c)(3)(F)(i)]
- 7. Chemical analysis reports for well water samples showing the water to be of acceptable quality for the most problematic contaminants listed below. Reports must come from a laboratory accredited by TCEQ; accredited to perform these tests. Maximum contaminant level (MCL) and secondary constituent level (SCL) units are in milligrams per liter (except arsenic which is in micrograms per liter). [§290.41(c)(3)(G) and§290.104 and §290.105]

Table 1: Primary Constituents with Maximum Contaminant Level (MCL)

	PRIMARY	MCL
	Nitrate	10 (as N)
	Nitrite	1 (as N)
-	Arsenic	10
	Fluoride	4.0

SECONDARY	MCL
Aluminum	0.2
Copper	1.0
- Iron	0.3
 Manganese 	0.05
- Zinc	5.0
Total Dissolved Solids	1,000
Fluoride	2.0
- Lead	N/A
Sulfate	300
Chloride	300
pH	> 7.0

Table 2: Secondary Constituents with Secondary Contaminant Level (SCL)

Revised 11/18

Page 2 of 3

Public Well Completion Data Checklist for Interim Approval (Step 2)

PARAMETER	UNITS
Alkalinity as CaCO3	mg/L
Calcium as CaCO3	mg/L
- Sodium	mg/L

Table 3: Water Quality Parameters

All systems located in a high-risk county (see page 3) shall submit radiological analysis reports for water samples showing the water to be of acceptable quality for the contaminants listed below. Reports must come from a TCEQ accredited laboratory for interim use of the well.

Table 4: Radionuclides with Maximum Contaminant Level (MCL)

CONTAMINANT	MCL
Gross alpha	15 pCi/L
Radium-226/228	5 pCi/L
Beta particle	50 pCi/L
Uranium	30 µg/L

WHERE: pCi/L = pico curies per liter. $\mu g/L = micrograms$ per liter

Please be aware when you review your radiological data that if the report has gross alpha over 15 pCi/L and individual uranium isotopes are not reported, you will have to resample or reanalyze and resubmit radionuclide results. If you see gross alpha plus radium-228 over 5 pCi/L, and don't have radium-226, you will have to resample or reanalyze and resubmit complete results.

List Of Counties Where Radionuclide Testing Is Required

Please be aware that we have added the requirement for analysis for radionuclides for high risk counties. For elevated levels of any contaminants found in a test well, treatment or blending may be required.

		COUNTY		1
Atascosa	Bandera	Bexer	Bosque	Brazoria
Brewster	Burnet	Concho	Culberson	Dallam
Dawson	Erath	Fort Bend	Frio	Garza
Gillespie	Gray	Grayson	Harris	Hudspeth
Irion	Jeff Davis	Jim Wells	Kendall	Kent
Kerr	Kleberg	Liberty	Llano	Lubbock
McCulloch	Mason	Matagorda	Medina	Midland
Montgomery	Moore	Parker	Pecos	Polk
Presidio	Refugio	San Jacinto	San Saba	Tarrant
Travis	Tyler	Upton	Val Verde	Victoria
Walker	Washington	Wichita	Williamson	Zavala

Table 5: List of Counties where Radionuclide Testing is Required

Public Well Completion Data Checklist for Interim Approval (Step 2)

Texas Commission on Environmental Quality Water Supply Division Plan Review Team MC-159 P.O. Box 13087, Austin, Texas 78711-3087 Public Water System I.D. No._ TCEQ Log No. P-

The following list is a brief outline of the "Rules for Public Water Systems", 30 TAC Chapter 290 regarding proposed Water Supply Well Completion. Failure to submit the following items may delay project approval. Copies of the rules may be obtained from Texas Register, 1019 Brazos St, Austin, TX, 78701-2413, Phone: (512) 463-5561 or downloaded from the website: http://www.tceq.texas.gov/rules/indxpdf.html

Any well proposed as a source of water for a public water supply must have plans approved for construction by TCEQ. Please include the well construction approval letter with your submittal of well completion data listed below must be submitted for TCEQ evaluation. Based on this submitted data, interim approval may be given for use of the well.

1.] Site map(s) at	appropriate scales sh	lowing the following:	[§290.41(c)(3)(A)]
----	------------------	-----------------------	-----------------------	--------------------

- (i) Final location of the well with coordinates;
- (ii) Named roadways;
- (iii) All property boundaries within 150 feet of the final well location and the property owners' names;
- (iv) Concentric circles with the final well location as the center point with radii of 10 feet, 50 feet, 150 feet, and ¹/₄ mile;
- (v) Any site improvements and existing buildings;
- (vi) Any existing or potential pollution hazards; and
- (vii) Map must be scalable with a north arrow.
- A copy of the recorded deed of the property on which the well is located showing the Public Water System (PWS) as the landowner, and/or any of the following: [§290.41(c)(1)(F)(iv)]
 - Sanitary control easements (filed at the county courthouse and bearing the county clerk's stamp) covering all land within 150 feet of the well not owned by the PWS (for a sample easement see TCEQ Form 20698);
 - (ii) For a political subdivision, a copy of an ordinance or land use restriction adopted and enforced by the political subdivision which provides an equivalent or higher level of sanitary protection to the well as a sanitary control easement; and/or
 - (iii) A copy of a letter granting an exception to the sanitary control easement rule issued by TCEQ's Technical Review and Oversight Team.
- 3. Construction data on the completed well: [§290.41(c)(3)(A)]
 - Final installed pump data including capacity in gallons per minute (gpm), total dynamic head (tdh) in feet, motor horsepower, and setting depth;
 - (ii) Bore hole diameter(s) (must be 3" larger than casing OD) and total well depth;
 - (iii) Casing size, length, and material (e.g. 200 lf of 12" PVC ASTM F480 SDR-17);
 - (iv) Length and material of any screens, blanks, and/or gravel packs utilized;
 - (v) Cementing depth and pressure method (one of the methods in latest revision of AWWA Standard A-100, Appendix C, excluding the dump bailer and tremie methods);
 - (vi) Driller's geologic log of strata penetrated during the drilling of the well;
 -] (vii) Cementing certificate; and

Revised 11/18

Environmental Laboratory Services Standard Terms and Conditions

Effective September 2016

Acceptance of Samples...The Lower Colorado River Authority (LCRA) Environmental Laboratory Services (ELS) will accept samples and perform services in accordance with these terms and conditions. No modifications to these terms and conditions will be valid or binding unless in writing and signed by authorized representatives of both the Customer and ELS.

ELS reserves the right to refuse or revoke receipt of any sample due to insufficient sample volume improper sample container, unacceptable customer credit, or risk of handling for any health, safety, regulatory, environmental, holding time issues or any other reason, at the discretion of ELS.

ELS also reserves the right to terminate any work being done or work promised on samples accepted for ELS's sole convenience. In the event of such termination, ELS will notify all affected Customers as soon as possible

Payment & Invoicing... Customer must pay for all services by check or credit card upon delivery of sample to ELS unless other billing arrangements are agreed to by ELS and Customer. Invoices will be issued monthly following the completion of services. All payments are due 30 days from receipt of the invoice. A one percent (1%) per month late fee will be assessed on unpaid invoices after the due date. Customers that have outstanding balances equal to or greater than 90 days must make payment in full at the time of sample delivery.

Ouoted Fees...Written quoted fees for all services to be performed by the ELS will be honored for a period of thirty (30) days from the quotation date unless otherwise specified by ELS in writing.

Costs for Compliance...All costs associated with compliance with any subpoena for documents, testimony, or assistance, or for any other purpose relating to work performed by ELS for the Customer, will be paid by the Customer or requesting party. Such costs will include, but not be limited to, hourly charges for each staff member, travel and accommodations, mileage, and any other miscellaneous expenses incurred.

Use of Data...The Customer is solely responsible for determining what actions are required as a result of the data, information, recommendations, interpretations, and opinions provided by ELS. The Customer also assumes sole responsibility for determining whether the nature, type, and quantity of work requested by the Customer is adequate and sufficient for the Customer's intended purpose. Customer hereby indemnifies and releases ELS from and against any and all liabilities arising out of, related to, or resulting from Customer's incorrect or inappropriate use of any data or opinions provided to it by ELS.

Reports...ELS will deliver approved final reports and/or electronic data including any Customer-approved subcontract laboratory data by the agreed upon due date. Reports may not be reproduced, except in full, without prior written approval by ELS. Reports or copies of reports will not be provided to any person or representative other than the Customer without the Customer's written authonization, except as may be required by law.

Confidentiality...Stnct confidentiality is maintained regarding all Customer transactions and results. Where information is lawfully subpoenaed, must be released to a regulatory or other legal entity with jurisdiction, or disclosure of documents is otherwise required by law, the Customer will be promptly notified.

Confidential, trade secret, and privileged information provided to ELS by Customer, including sample content, analysis, and Reports, is protacted from public access by exceptions to the Texas Public Information Act ('PIA'), to which LCRA is subject. ELS will assert the appropriate exception to withhold Customer information requested under the PIA. Customer may be asked by ELS to provide assistance in asserting exceptions to the PIA (e.g., explanation of competitive position, treatment of trade secrets, etc.). Customer agrees to assist ELS in protection of Customer's information.

Sample Disclosures...Customer agrees that all samples delivered to the ELS will be accompanied by a property completed chain-of-custody form disclosing the presence of any contaminated, toxic, or hazardous substances known or suspected to be contained in such samples. ELS shall reject any samples received without a valid chain of custody form.

Analytical Errors...Upon request by the Customer, ELS will reanalyze samples whenever test results are suspect. Should the results of the second analysis substantially agree with those of the first, the Customer will pay for the cost of the second analysis. However, if the result of the second analysis materially differs from the first, then Customer will not be charged for the second analysis. Holding Times...All samples must be delivered to ELS within one-half of the applicable holding time. ELS shall not assume any responsibility for missed holding times for samples submitted outside this criterion. To meet holding time for subcontract samples, ELS may make arrangements for the Customer to deliver samples directly to the subcontract lab.

Sample Retention & Disposal...Samples are stored for 30 days upon transmitting final analysis results to the Customer. After 30 days, samples are disposed of properly. However, Customer may request additional storage time at a storage fee of \$50 per month per sample.

Hazardous Waste...Any samples found to be or suspected of being hazardous or containing hazardous substances according to state and federal regulations will be disposed of at submitting Customer's expense.

Turnaround Time (TAT)...Turnaround times (TAT) are based on full tworking days' which are defined as 8:00 A.M. to 5:00 P.M. Monday through Friday, excluding holidays. Standard TAT is 7 working days from the day starting after sample receipt. However, TAT may be longer depending upon the tests requested and the same matrix. TAT for samples subcontracted to a Customer-approved laboratory is based on the agreed target due date between all parties (i.e., the Customer, the ELS and the subcontract laboratory).

Expedited Service...Expedited service is available upon approval by ELS and written authonization from the Customer. Service charge amounts added to the total cost of service will be applied as follows:

<	or	=	to 24 hrs:	4	х	cost	01	service
2	10 3	3	days.	з	х	cost	of	service
4	to f	6	days:	2	×	cost	of	service

Non-Standard Services...On sample matrices or analytes for which no official or validated test method exists, usage of an accepted method for a different type of sample or analyte or method development, in some situations, may be offered. In such cases, no guarantee of the success of the method or warranty will be provided. The Customer will be notified of the alternate method proposed, and only after its approval, will analyses begin. Approval by the Customer of the alternate method obligates the Customer for payment for that work, regardless of result obtained.

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The foregoing express warranty is exclusive and is given in lieu of all other warranties, whether express, implied, or statutory. The ELS disclaims any other warranties, whether express, implied, or statutory, including a warranty of fitness for particular purpose and warranty of merchantability. The ELS is not responsible for any of the purposes for which the Customer may use ELS test results.

Liability...Customer agrees that the maximum liability of ELS for all claims of any kind whether based on contract, indemnity, warranty, tort (including negligence & strict liability), or otherwise, arising out of, connected with, or resulting from the performance or breach thereof, or from any goods or services covered by or furnished under these terms and conditions or any extension or expansion, is limited to the amounts paid or payable by the Customer for the goods or services giving rise to such claims.



WELL #18 (WELL ID # 519919) CHEMICAL ANALYSIS TEST RESULTS

CYPRESS RANCH WCID #1 TCEQ PWS #2270352 LCRA Environmental Laboratory Services 3505 Montopolis Drive Austin, TX 78744 Phone: (512) 730-6022 Fax: (512) 730-6021

October 3, 2019

JANIE HENDRIX CENTEX PUMP & SUPPLY 2520 Hwy 290 W Dripping Springs, TX 78620 JANIE@CTDWATERWELLS.COM

RE: Final Analytical Report Q1962668

Attn: JANIE HENDRIX

Enclosed are the analytical results for sample(s) received by LCRA Environmental Laboratory Services. Results reported herein conform to the most current NELAP standards, where applicable, unless otherwise narrated in the body of the report. This final report provides results related only to the sample(s) as received for the above referenced work order.

Thank you for selecting ELS for your analytical needs. If you have any questions regarding this report, please contact us at (512) 730-6022. We look forward to assisting you again.

Authorized for release by:

to leavy

Ariana Dean Account Manager ariana.dean@lcra.org



Enclosures:



Sample Summary

LCRA Environmental Laboratory Services 3505 Montopolis Drive Austin, TX 78744 Phone: (512) 730-6022 Fax: (512) 730-6021

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received
Q1962668001	WEST CYPRESS HILL No. 18	DW	E200.7 Metals, Trace Elements	9/5/2019 16:05	9/6/2019 10:30
Q1962668001	WEST CYPRESS HILL No. 18	DW	E200.8, ICP-MS	9/5/2019 16:05	9/6/2019 10:30
Q1962668001	WEST CYPRESS HILL No. 18	DW	E2340B, Hardness Calc.	9/5/2019 16:05	9/6/2019 10:30
Q1962668001	WEST CYPRESS HILL No. 18	DW	E300.0, Anions	9/5/2019 16:05	9/6/2019 10:30
Q1962668001	WEST CYPRESS HILL No. 18	DW	E365.4 Phosphorus, Total	9/5/2019 16:05	9/6/2019 10:30
Q1962668001	WEST CYPRESS HILL No. 18	DW	SM2320B, Alkalinity	9/5/2019 16:05	9/6/2019 10:30
Q1962668001	WEST CYPRESS HILL No. 18	DW	SM2510B, Conductivity @ 25°C	9/5/2019 16:05	9/6/2019 10:30
Q1962668001	WEST CYPRESS HILL No. 18	DW	SM2540C, TDS	9/5/2019 16:05	9/6/2019 10:30
Q1962668001	WEST CYPRESS HILL No. 18	DW	SM4500-H+B, pH @ 25ºC	9/5/2019 16:05	9/6/2019 10:30

Report Definitions

MRL - Minimum Reporting Limit
LOD - Limit of Detection
ML - Maximum Limit - Client Specified
MCL - Maximum Contaminant Level
MDL - Method Detection Limit
LOQ - Limit of Quantitation - Client Specified
DF - Dilution Factor
Qual - Qualifier
(S) - Surrogate Spike
QC Qual - red font indicates Result Value outside acceptable range
B- Analyte detected in method blank
S - Spike recovery outside limit
R - RPD outside duplicate precision limit
J - Analyte detected below quantitation limit
RPD - Relative Percent Difference



Project Summary

Sample Analysis Comments

Lab ID: Q1962668001

Sample ID: WEST CYPRESS HILL No. 18

- Not Accredited Calcium Total
- Not Accredited Phosphorus, Total (As P)
- Not Accredited Temperature
- Not Accredited Total Alkalinity (CaCO3)
- Not Accredited pH

LCRA Environmental Laboratory Services 3505 Montopolis Drive Austin, TX 78744 Phone: (512) 730-6022 Fax: (512) 730-6021



Analytical Results

Lab ID: Q19626	68001	Date R	eceived:	9/6/20	19 10::	30	Ma	atrix: Drinking Wat	ter	
Sample ID: WEST (Date C	ollected	9/5/20	19 16.)5 Sar	nnle T	VDE SAMPLE		
		Date C	oncolou.	5/5/20	15 10.	00 00		ype. OAM EE		
Project ID: NEW W	ELLTESTING									
Parameter	Results Units	MRL	LOD	ML	DF	Prepared	Ву	Analyzed	Ву	Qual
ALKALINITY (SM232	0B, Alkalinity)									
Total Alkalinity (CaCO3) 223 mg/L	20.0	20.0		1			09/12/19 00:00	ME	*
Conductance @ 25°C	(SM2510B, Conductivity @ 25°C)									
Specific Conductance	484 umho/cm	10.0	10.0		1			09/12/19 09:32	ME	
INORGANICS (E200.	7 Prep/E200.7 Metals, Trace Eleme	nts)								
Calcium Total	70.9 mg/L	0.200	0.0700		1	09/16/19 10:03	ME	09/16/19 17:29	FM	*
Iron Total	<0.0500 mg/L	0.0500	0.0200		1	09/16/19 10:03	ME	09/16/19 17:29	FM	
Magnesium Total	19.8 mg/L	0.200	0.0700		1	09/16/19 10:03	ME	09/16/19 17:29	FM	
Sodium Total	5.53 mg/L	0.200	0.0700		1	09/16/19 10:03	ME	09/16/19 17:29	FM	
INORGANICS (E200.	8, ICP-MS Prep/E200.8, ICP-MS)									
Aluminum Total	<0.00500 mg/L	0.00500	0.0020		1	09/16/19 10:08	ME	09/20/19 13:24	FO	
Arsenic Total	1.00 ug/L	1.00	0.400	10	1	09/16/19 10:08	ME	09/20/19 13:24	FO	
Copper Total	<0.00100 mg/L	0.00100	0.0004	1	1	09/16/19 10:08	ME	09/20/19 13:24	FO	
	<0.00100 mg/L	0.00100	0.0004	0.015	1	09/16/19 10:08	ME	09/20/19 13:24	FO	
Manganese Iotal	0.00114 mg/L	0.00100	0.0004		1	09/16/19 10:08	ME	09/20/19 13:24	FO	
ZINC IOTAI	0.0243 mg/L	0.00500	0.0020		1	09/16/19 10:08	ME	09/20/19 13:24	FO	
INORGANICS (E2340	0B, Hardness Calc.)									
Hardness, Calcium	177 mg/L				1			09/17/19 07:50	CW	
INORGANICS (E300.	0, Anions)									
Chloride	8.63 mg/L	1.00	0.500		1			09/06/19 12:26	ML	
Fluoride	0.428 mg/L	0.0100	0.0050	4	1			09/06/19 12:26	ML	
Nitrite (as N)	<0.0100 mg/L	0.0100	0.0050	1	1			09/06/19 12:26	ML	
Nitrate (as N)	<0.0100 mg/L	0.0100	0.0050	10	1			09/06/19 12:26	ML	
Sulfate	25.2 mg/L	1.00	0.500		1			09/06/19 12:26	ML	
TOTAL DISSOLVED S	OLIDS (SM2540C, TDS)									
Total Dissolved Solids(TDS)	249 mg/L	25.0	10.0		10			09/12/19 09:59	ML	
TOTAL PHOSPHATE A	S P (E365.4 Water Prep/E365.4 Pl	hosphoru	s, Total)							
Phosphorus, Total (As I	P) <0.0200 mg/L	0.0200	0.0080		1	09/11/19 11:29	ME	09/12/19 00:00	MO	*



09/06/19 15:37

ME

Analytical Results (cont.)

Lab ID: Q1962668001 Sample ID: WEST CYPRESS Project ID: NEW WELL TEST	HILL No. 18 ING	Date R	eceived: ollected:	9/6/20 9/5/20	019 10: 019 16:	30 05	M Sample ⊺	atrix: Drinking Wat 7ype: SAMPLE	er	
Parameter	Results Units	MRL	LOD	ML	DF	Prepared	Ву	Analyzed	By	Qual

1

Sample Comments

•

Temperature

Sample Type: SAMPLE

General Comments for METHOD SM4500-H+B, pH - Defined as a field parameter, measurement must be taken within 15 minutes of collection. Results are provided for information purposes only.

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Quality Control

Preparation Batch: MET / 7385 Preparation Method: E200.8, ICP-MS Associated Lab IDs: Q1962668001

Method Reporting Limit Check (1341030)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Arsenic Total	ug/L	1	1.02	102	50 - 150
Copper Total	mg/L	.001	0	96.4	50 - 150
Lead Total	mg/L	.001	0	99.9	50 - 150
Manganese Total	mg/L	.001	0	103	50 - 150

Method Reporting Limit Check (1341031)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Aluminum Total	mg/L	.005	.01	102	50 - 150
Zinc Total	mg/L	.005	.01	103	50 - 150

Analysis Method: E200.8, ICP-MS



Quality Control (cont.)

 Preparation Batch:
 MET / 7376
 Analysis Method:
 E200.7 Metals, Trace Elements

 Preparation Method:
 E200.7 Metals, Trace Elements
 E200.7 Metals, Trace Elements

 Associated Lab IDs:
 Q1962668001
 Compared to the second to the

Method Reporting Limit Check (1335951)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Calcium Total	mg/L	.2	.23	116	50 - 150
Magnesium Total	mg/L	.2	.18	89.4	50 - 150
Sodium Total	mg/L	.2	.19	95.9	50 - 150
Method Reporting Limit Chee	ck (1335952)				
Parameter	Units	Spiked	Spike	Spike	Control
		Amount	Result	Recovery	Linits
Iron Total	mg/L	.05	.05	106	50 - 150



Preparation Batch: WET	P / 4750		Analys	is Method:	E365.4 P	hosphorus	, Total		
Preparation Method: E365	.4 Water Pre	р							
Associated Lab IDs: Q196	2668001								
Limit of Quantitation Check (1332899)								
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits				
Phosphorus, Total (As P)	mg/L	.02	.02	113	70 - 130				
Matrix Spike (1332900) Origina	al: Q196231	6007							
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits				
Phosphorus, Total (As P)	mg/L	1	1.19	97.2	80 - 120				
Lab Control Sample (1332901)	; Lab Conti	rol Sample L	Duplicate ((1332902)					
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit
Phosphorus, Total (As P)	mg/L	1	1.02	102	90 - 110	.95	94.6	7.53	20
Method Blank (1332903)									
Parameter	Results	Units	MRL	LOD	Qualifier				
Phosphorus, Total (As P)	<0.0200	mg/L	0.0200	0.00800					



Preparation Batch: WET / 20429	Analysis Method:	SM4500-H+B, pH @ 25ºC
Preparation Method: SM4500-H+B, pH @ 25º	С	
Associated Lab IDs: Q1962668001		

Duplicate (1330341); Original: Q1961780001

• • • •					
Parameter	Original	Duplicate	Units	RPD %	Limit
pН	8.57	8.61	pН	.466	20
Temperature	20.9	20.9	С	0	

QC Sample Comments

•

Sample Type: Duplicate

General Comments for METHOD SM4500-H+B, pH - Defined as a field parameter, measurement must be taken within 15 minutes of collection. Results are provided for information purposes only.



Preparation Batch: WET	/ 20464		Analys	is Method:	SM2540	C, TDS
Preparation Method: SM2	540C, TDS					
Associated Lab IDs: Q196	62668001					
Method Blank (1333914)						
Parameter	Results	Units	MRL	LOD	Qualifier	
Total Dissolved Solids(TDS)	<25.0	mg/L	25.0	10.0		
Lab Control Sample (1333915))					
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	
Total Dissolved Solids(TDS)	mg/L	400	378	94.5	80 - 120	
Duplicate (1333917); Original	: Q19625930	004				
Parameter	Original	Duplicate	Units	RPD %	Limit	
Total Dissolved Solids(TDS)	530	550	mg/L	3.7	20	
Matrix Spike (1333916) Origin	al: Q196259	3004				
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	
Total Dissolved Solids(TDS)	mg/L	400	986	114	70 - 130	



Preparation Batch: W	ET / 20469		Analys	is Method:	SM2320	B, Alkalinity
Preparation Method: SN	12320B, Alkalin	iity				
Associated Lab IDs: Q1	962668001					
Limit of Quantitation Check	(1334409)					
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	
Total Alkalinity (CaCO3)	mg/L	20	20.4	102	70 - 130	
Method Reporting Limit Che	eck (1334410)					
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	
Total Alkalinity (CaCO3)	mg/L	20	20.5	102	50 - 150	
Duplicate (1334411); Origin	al: Q19626680	01				
Parameter	Original	Duplicate	Units	RPD %	Limit	
Total Alkalinity (CaCO3)	223	223	mg/L	0	20	
Matrix Spike (1334412) Orig	inal: Q196266	8001				
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	
Total Alkalinity (CaCO3)	mg/L	100	302	78.8	70 - 130	
Lab Control Sample (13344)	13)					
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	
Total Alkalinity (CaCO3)	mg/L	100	93.1	93.1	90 - 110	
Method Blank (1334414)						
Parameter	Results	Units	MRL	LOD	Qualifier	
Total Alkalinity (CaCO3)	<20.0	mg/L	20.0	20.0		



Preparation Batch: WET / 20457	Analysis Method:	SM2510B, Conductivity @ 25°C
Preparation Method: SM2510B, Conductivity @ 25°C	>	
Associated Lab IDs: Q1962668001		

Lab Control Sample (1333039)

(:000000)							
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits		
Specific Conductance	umho/c	1000	1020	102	70 - 130		
Duplicate (1333040); Original: Q1962884006							
Parameter	Original	Duplicate	Units	RPD %	Limit		
Specific Conductance	1850	1850	umho/c	0	20		
Method Blank (1333041)							
Parameter	Results	Units	MRL	LOD	Qualifier		
Specific Conductance	<10.0	umho/c	10.0	10.0			



Preparation Batch: WET/20428 Preparation Method: E300.0, Anions Associated Lab IDs: Q1962668001

Laboratory Reagent Blank (1330317)

ink (1550511)				
Results	Units	MRL	LOD	Qualifier
<1.00	mg/L	1.00	0.500	
<0.0100	mg/L	0.0100	0.00500	
<0.0100	mg/L	0.0100	0.00500	
<0.0100	mg/L	0.0100	0.00500	
<1.00	mg/L	1.00	0.500	
	Results <1.00	Results Units <1.00	Results Units MRL <1.00	Results Units MRL LOD <1.00

Analysis Method: E300.0, Anions

Method Reporting Limit Check (1330319)

Parameter	Unite	Spiked	Spike	Spike	Control
Falameter	Amount Result Recover	Recovery	Limits		
Chloride	mg/L	1	.76	76.3	50 - 150
Fluoride	mg/L	.01	.01	93	50 - 150
Nitrite (as N)	mg/L	.01	.01	73	50 - 150
Nitrate (as N)	mg/L	.01	.01	109	50 - 150
Sulfate	mg/L	1	.84	84.4	50 - 150

Laboratory Fortified Blank (1330320)

Parameter	Units	Spiked Amount	Spike Result	Spike Recoverv	Control Limits 90 - 110	
Chloride	mg/L	30	31.2	104	90 - 110	
Fluoride	mg/L	1	1.07	107	90 - 110	
Nitrite (as N)	mg/L	1	.97	96.8	90 - 110	
Nitrate (as N)	mg/L	1	1.02	102	90 - 110	
Sulfate	mg/L	30	30.9	103	90 - 110	

Limit of Quantitation Check (1330321)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Chloride	mg/L	5	4.14	82.8	70 - 130
Fluoride	mg/L	.02	.02	120	70 - 130
Nitrite (as N)	mg/L	.02	.02	78	70 - 130
Nitrate (as N)	mg/L	.02	.02	87	70 - 130
Sulfate	mg/L	5	4.34	86.9	70 - 130

Laboratory Fortified Matrix (1330402) Original: Q1962379001

-	. , ,	-			
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Chloride	mg/L	20	197	57.7	80 - 120
Fluoride	mg/L	1	5.85	67.3	80 - 120
Nitrite (as N)	mg/L	1	0	0	80 - 120
Nitrate (as N)	mg/L	1	6.01	27.1	80 - 120
Sulfate	mg/L	20	155	55.8	80 - 120
Duplicate (1330868); Origin	nal: Q19623740	001			
Parameter	Original	Duplicate	Units	RPD %	Limit
Nitrate (as N)	13.5	11.7	mg/L	14.3	



Preparation Batch: MEP / 9594 Preparation Method: E200.7 Prep Associated Lab IDs: Q1962668001

Laboratory Reagent Blank (1335753)

LCRA Environmental Laboratory Services
3505 Montopolis Drive
Austin, TX 78744
Phone: (512) 730-6022
Fax: (512) 730-6021

Сарогаюту кеауетт Ва	ank (1339793)				
Parameter	Results	Units	MRL	LOD	Qualifier
Calcium Total	<0.200	mg/L	0.200	0.0700	
Iron Total	< 0.0500	mg/L	0.0500	0.0200	
Magnesium Total	<0.200	mg/L	0.200	0.0700	
Sodium Total	<0.200	mg/L	0.200	0.0700	

Analysis Method: E200.7 Metals, Trace Elements

Laboratory Fortified Blank (1335754)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Calcium Total	mg/L	10	9.51	95.1	85 - 115
Iron Total	mg/L	1	1	100	85 - 115
Magnesium Total	mg/L	10	9.42	94.2	85 - 115
Sodium Total	mg/L	10	9.43	94.3	85 - 115

Laboratory Fortified Matrix (1335756) Original: Q1962426003

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Calcium Total	mg/L	10	31.3	102	70 - 130
Iron Total	mg/L	1	1.05	105	70 - 130
Magnesium Total	mg/L	10	13.7	103	70 - 130
Sodium Total	mg/L	10	21.3	101	70 - 130



Preparation Batch: MEP / 9595 Preparation Method: E200.8, ICP-MS Prep Associated Lab IDs: Q1962668001 Analysis Method: E200.8, ICP-MS

Laboratory Reagent Blank (1335770)

Parameter	Results	Units	MRL	LOD	Qualifier
Aluminum Total	<0.00500	mg/L	0.00500	0.00200	
Arsenic Total	<1.00	ug/L	1.00	0.400	
Copper Total	<0.00100	mg/L	0.00100	0.000400	
Lead Total	<0.00100	mg/L	0.00100	0.000400	
Manganese Total	<0.00100	mg/L	0.00100	0.000400	
Zinc Total	<0.00500	mg/L	0.00500	0.00200	

Laboratory Fortified Blank (1335771); Lab Fortified Blank Duplicate (1335772)

Parameter	Units	Spiked Amount	Spike Result	Spike Spike Result Recovery		Dup Result	Dup Recovery	RPD	RPD Limit
Aluminum Total	mg/L	.05	.05	99.7	85 - 115	.05	100	.601	20
Arsenic Total	ug/L	50	47.7	95.5	85 - 115	48.2	96.4	1.04	20
Copper Total	mg/L	.05	.05	96.4	85 - 115	.05	97.1	.62	20
Lead Total	mg/L	.05	.05	96.1	85 - 115	.05	95.9	0	20
Manganese Total	mg/L	.05	.05	101	85 - 115	.05	101	0	20
Zinc Total	mg/L	.05	.05	96.5	85 - 115	.05	97.3	1.03	20

Laboratory Fortified Matrix (1335773) Original: Q1962481012; Lab Fortified Matrix Duplicate (1335774)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit
Aluminum Total	mg/L	.05	.05	101	70 - 130	.05	101	0	20
Arsenic Total	ug/L	50	47.4	94.9	70 - 130	48.8	97.6	2.91	20
Copper Total	mg/L	.05	.09	92.7	70 - 130	.09	95.8	1.63	20
Lead Total	mg/L	.05	.05	95	70 - 130	.05	95.2	.21	20
Manganese Total	mg/L	.05	.06	97.6	70 - 130	.06	100	2.01	20
Zinc Total	mg/L	.05	.05	96.8	70 - 130	.05	98.9	2.25	20



Quality Control Cross Reference

MET/7376 - E200.7 Metals, Trace Elements													
Lab ID	Sample ID	Prep Batch	Prep Method										
Q1962668001	WEST CYPRESS HILL No. 18	MEP/9594	E200.7 Prep										
MET/7385 - E200.8, ICP-MS													
Lab ID	Sample ID	Prep Batch	Prep Method										
Q1962668001	WEST CYPRESS HILL No. 18	MEP/9595	E200.8, ICP-MS Prep										
WET/20428 - E300.0, Anions													
Lab ID	Sample ID	Prep Batch	Prep Method										
Q1962668001	WEST CYPRESS HILL No. 18												
WET/20429 - SM4500-H+B, p	H @ 25ºC												
Lab ID	Sample ID	Prep Batch	Prep Method										
Q1962668001	WEST CYPRESS HILL No. 18												
WET/20457 - SM2510B, Cond	ductivity @ 25°C												
Lab ID	Sample ID	Prep Batch	Prep Method										
Q1962668001	WEST CYPRESS HILL No. 18												
WET/20463 - E365.4 Phosph	orus, Total												
Lab ID	Sample ID	Prep Batch	Prep Method										
Q1962668001	WEST CYPRESS HILL No. 18	WETP/4750	E365.4 Water Prep										
WET/20464 - SM2540C, TDS													
Lab ID	Sample ID	Prep Batch	Prep Method										
Q1962668001	WEST CYPRESS HILL No. 18												
WET/20469 - SM2320B, Alka	linity												
Lab ID	Sample ID	Prep Batch	Prep Method										
Q1962668001	WEST CYPRESS HILL No. 18												



						LCRA	Env	viror	nme	ental	Lak	oora	torv	Se	rvice	s					fi	9	51	66	8		
						Request f	or	Ana	lycia	Ch	ain.	of-C	luci	ody	Roc	ord											
	LCR 3505	A - Enviro	onmental Lab olis Dr. 744	Phone: (512) 730-6022 Fax: (512) 356-6021	2 or 1-800-776-52	72		-11a				.01-0		ouy	Rec	oru				Lat	o ID#:						
	Proj	ect: ector:	CENTEX PUMP	Client: Contact:	CENTEX PUMP & SUPPLY JANIE HENDRIX (512) 894.0555					SUPP	LY		Client PO: Invoice To: JANIE HENI CENTEX PU 2520 Hwy 29						ENDRIX PUMP & SUPPLY y 290 W								
					Thone.	Matrix*		Co	ontain	er(s)	Type/F	Preser	vative	/Num	ber *	nngs, i	X /8	620			Requ	estec	Drippi I Ana	ng Spr Iysis	tings, T *	X 786	20
	AB USE ONLY		Sample ID *	Coll	Collected *		OMPOSITE Y/N	LTERED Y/N	0PU	. na	0PHSO4	0PHNO3					0.0DM-48	5.4DM	0.8DM	40-CA	Н4-40-00	0.7DM	10-DU	20-DM	40-DMTDS		
1	1	WEST C	YPRESS HILL No	9/5/19	1605	DW	N	E	1	1	1	1	-				30 X	36 X	20 X	73 X	X 45	X 20	X 25	X 23	× 25		-
sol	2	10		/////	1000			,																			
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	6				1.20	64																					+
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WELL #19 (Well ID # 515979) CHEMICAL ANALYSIS TEST RESULTS

CYPRESS RANCH WCID #1 TCEQ PWS #2270352 LCRA Environmental Laboratory Services 3505 Montopolis Drive Austin, TX 78744 Phone: (512) 730-6022 Fax: (512) 730-6021

July 12, 2019

JOE VICKERS THE WELLSPEC COMPANY PO BOX 1156 DRIPPING SPRINGS, TX 78620 jv.wellspec@gmail.com

RE: Final Analytical Report Q1937827

Attn: JOE VICKERS

Enclosed are the analytical results for sample(s) received by LCRA Environmental Laboratory Services. Results reported herein conform to the most current NELAP standards, where applicable, unless otherwise narrated in the body of the report. This final report provides results related only to the sample(s) as received for the above referenced work order.

Thank you for selecting ELS for your analytical needs. If you have any questions regarding this report, please contact us at (512) 730-6022. We look forward to assisting you again.

Authorized for release by:

to leavy

Ariana Dean Account Manager ariana.dean@lcra.org



Enclosures:

Page 1 of 13


Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received
Q1937827001	WEST CYPRESS HILL WELL NO 19	DW	E200.7 Metals, Trace Elements	6/19/2019 08:41	6/19/2019 16:30
Q1937827001	WEST CYPRESS HILL WELL NO 19	DW	E200.8, ICP-MS	6/19/2019 08:41	6/19/2019 16:30
Q1937827001	WEST CYPRESS HILL WELL NO 19	DW	E300.0, Anions	6/19/2019 08:41	6/19/2019 16:30
Q1937827001	WEST CYPRESS HILL WELL NO 19	DW	SM2320B, Alkalinity	6/19/2019 08:41	6/19/2019 16:30
Q1937827001	WEST CYPRESS HILL WELL NO 19	DW	SM2540C, TDS	6/19/2019 08:41	6/19/2019 16:30
Q1937827001	WEST CYPRESS HILL WELL NO 19	DW	SM4500-H+B, pH @ 25ºC	6/19/2019 08:41	6/19/2019 16:30

Report Definitions

MRL - Minimum Reporting Limit
LOD - Limit of Detection
ML - Maximum Limit - Client Specified
MCL - Maximum Contaminant Level
MDL - Method Detection Limit
LOQ - Limit of Quantitation - Client Specified
DF - Dilution Factor
Qual - Qualifier
(S) - Surrogate Spike
QC Qual - red font indicates Result Value outside acceptable range
B- Analyte detected in method blank
S - Spike recovery outside limit
R - RPD outside duplicate precision limit

J - Analyte detected below quantitation limit

RPD - Relative Percent Difference



Project Summary

Sample Analysis Comments

Lab ID: Q1937827001

Sample ID: WEST CYPRESS HILL WELL NO 19

- Not Accredited Temperature
- Not Accredited Total Alkalinity (CaCO3)
- Not Accredited pH



Analytical Results

Analytical	Results										
Lab ID:	Q1937827001		Date R	eceived	6/19/2	019 16	5:30	trix: Drinking Wat	ter		
Sample ID:	WEST CYPRES	SS HILL WELL NO 19	Date C	collected:	6/19/2	2019 08	3:41 Sar	nple T	ype: SAMPLE		
Project ID:	New Well Const	t. + Wellspec									
Parameter		Results Units	MRL	LOD	ML	DF	Prepared	Ву	Analyzed	Ву	Qual
ALKALINITY	(SM2320B, Alk	calinity)									
Total Alkalinity	(CaCO3)	216 mg/L	20.0	20.0		1	06/21/19 08:19	AD G	06/21/19 00:00	AD G	*
INORGANICS	(E200.7 Prep/	Æ200.7 Metals, Trace Elemo	ents)								
Iron Total		0.0503 mg/L	0.0500	0.0200		1	06/24/19 12:12	ME	06/25/19 20:33	FM	
Sodium Total		6.63 mg/L	0.200	0.0700		1	06/24/19 12:12	ME	06/25/19 20:33	FM	
INORGANICS	(E200.8, ICP-	MS Prep/E200.8, ICP-MS)									
Aluminum Tota	al	<0.00500 mg/L	0.00500	0.0020		1	06/24/19 12:17	ME	06/26/19 10:28	FO	
Arsenic Total		<0.00100 mg/L	0.00100	0.0004	0.01	1	06/24/19 12:17	ME	06/26/19 10:28	FO	
Copper Total		<0.00100 mg/L	0.00100	0.0004	1	1	06/24/19 12:17	ME	06/26/19 10:28	FO	
Lead Iotal	1.1	<0.00100 mg/L	0.00100	0.0004	0.015	1	06/24/19 12:17	ME	06/26/19 10:28	FO	
Manganese Io	otal	0.00145 mg/L	0.00100	0.0004		1	06/24/19 12:17	ME	06/26/19 10:28	FO	
Zinc Iotal		0.0306 mg/L	0.00500	0.0020		1	06/24/19 12:17	ME	06/26/19 10:28	FO	
INORGANICS	(E300.0, Anio	ns)									
Chloride		8.78 mg/L	1.00	0.500		1	06/20/19 16:08	ML	06/20/19 10:36	ML	
Fluoride		0.432 mg/L	0.0100	0.0050	4	1	06/20/19 16:08	ML	06/20/19 10:36	ML	
Nitrite (as N)		0.0159 mg/L	0.0100	0.0050	1	1	06/20/19 16:08	ML	06/20/19 10:36	ML	
Nitrate (as N)		0.128 mg/L	0.0100	0.0050	10	1	06/20/19 16:08	ML	06/20/19 10:36	ML	
Sulfate		26.0 mg/L	1.00	0.500		Ĩ	06/20/19 16:08	IVIL	06/20/19 10:36	IVIL	
TOTAL DISSO	LVED SOLIDS	(SM2540C, TDS)									
Total Dissolved Solids(TDS)	t	294 mg/L	25.0	10.0		10	06/21/19 08:16	AD G	06/21/19 11:26	AD G	
рН (SM4500-	-Н+В, рН @ 258	ºC)									
рН		7.67 pH	0.00	0.00		1	06/25/19 08:48	ME	06/25/19 14:22	ME	*
Temperature		20.3 c				1	06/25/19 08:48	ME	06/25/19 14:22	ME	*

Sample Comments

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Page 4 of 13

Sample Type: SAMPLE

General Comments for METHOD SM4500-H+B, pH - Defined as a field parameter, measurement must be taken within 15 minutes of collection. Results are provided for information purposes only.



Quality Control

Preparation Batch: WET / 19964 Preparation Method: E300.0, Anions Associated Lab IDs: Q1937827001

Laboratory Reagent Blank (1273240)

Parameter	Results	Units	MRL	LOD	Qualifier
Chloride	<1.00	mg/L	1.00	0.500	
Fluoride	<0.0100	mg/L	0.0100	0.00500	
Nitrite (as N)	<0.0100	mg/L	0.0100	0.00500	
Nitrate (as N)	<0.0100	mg/L	0.0100	0.00500	
Sulfate	<1.00	mg/L	1.00	0.500	

Method Reporting Limit Check (1273242)

Baramotor	Unite	Spiked	Spike	% Spike	Control
	Units	Amount	Result	Recovery	Limits %
Chloride	mg/L	1	.75	74.5	50 - 150
Fluoride	mg/L	.01	.01	102	50 - 150
Nitrite (as N)	mg/L	.01	.01	93	50 - 150
Nitrate (as N)	mg/L	.01	.01	136	50 - 150
Sulfate	mg/L	1	.85	84.7	50 - 150

Analysis Method: E300.0, Anions

Laboratory Fortified Blank (1273243)

Parameter	Unite	Spiked	Spike	% Spike	Control
	Onits	Amount	Result	Recovery	Limits %
Chloride	mg/L	30	30.6	102	90 - 110
Fluoride	mg/L	1	1.01	101	90 - 110
Nitrite (as N)	mg/L	1	1.02	102	90 - 110
Nitrate (as N)	mg/L	1	1	100	90 - 110
Sulfate	mg/L	30	30.5	102	90 - 110

Limit of Quantitation Check (1273244)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %
Chloride	mg/L	5	4.13	82.6	70 - 130
Fluoride	mg/L	.02	.02	106	70 - 130
Nitrite (as N)	mg/L	.02	.02	104	70 - 130
Nitrate (as N)	mg/L	.02	.02	108	70 - 130
Sulfate	mg/L	5	4.41	88.2	70 - 130

Laboratory Fortified Matrix (1273433) Original: Q1937827001

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %
Chloride	mg/L	20	29.5	103	80 - 120
Fluoride	mg/L	1	1.42	98.9	80 - 120
Nitrite (as N)	mg/L	1	1	98.2	80 - 120
Nitrate (as N)	mg/L	1	1.14	101	80 - 120
Sulfate	mg/L	20	46.4	102	80 - 120



Page 6 of 13

Preparation Batch: WET	/ 19967		Analys	is Method	SM2540	C TDS
Preparation Method: SM2	540C TDS		Analys		0.02040	0, 100
Accessional an IDe: 010	3400, 103					
Associated Lab IDS: Q19.	37827001					
Method Blank (1273464)						
Parameter	Results	Units	MRL	LOD	Qualifier	
Total Dissolved Solids(TDS)	<25.0	mg/L	25.0	10.0		
Lab Control Sample (1273465))					
Parameter	Units	Spiked	Spike	% Spike	Control	
	onits	Amount	Result	Recovery	Limits %	
Total Dissolved Solids(TDS)	mg/L	400	401	100	80 - 120	
Duralizate (1272107), Original	. 04007007	004				
Duplicate (1273467); Original	: @19378270	101				
Parameter	Original	Duplicate	Units	RPD %	Limit	Qualifier
Total Dissolved Solids(TDS)	294	300	mg/L	2.02	20	
Matrix Spike (1273466) Origin	al: Q193782	7001				
Parameter	Unite	Spiked	Spike	% Spike	Control	
	Units	Amount	Result	Recovery	Limits %	
Total Dissolved Solids(TDS)	mg/L	400	724	108	70 - 130	



Preparation Batch: MEP / 7220 Preparation Method: E200.8, ICP-MS Prep Associated Lab IDs: Q1937827001

Method Reporting Limit Check (1275985)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %
Arsenic Total	mg/L	.001	0	92.7	50 - 150
Copper Total	mg/L	.001	0	98.8	50 - 150
Lead Total	mg/L	.001	0	105	50 - 150
Manganese Total	mg/L	.001	0	104	50 - 150

Method Reporting Limit Check (1275986)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %
Aluminum Total	mg/L	.005	.01	102	50 - 150
Zinc Total	mg/L	.005	.01	101	50 - 150

Analysis Method: E200.8, ICP-MS



Preparation Batch: MEP/9327 Preparation Method: E200.8, ICP-MS Prep Associated Lab IDs: Q1937827001 Analysis Method: E200.8, ICP-MS

Laboratory Reagent Blank (1275090)

Parameter	Results	Units	MRL	LOD	Qualifier
Aluminum Total	<0.00500	mg/L	0.00500	0.00200	
Arsenic Total	<0.00100	mg/L	0.00100	0.000400	
Copper Total	<0.00100	mg/L	0.00100	0.000400	
Lead Total	<0.00100	mg/L	0.00100	0.000400	
Manganese Total	<0.00100	mg/L	0.00100	0.000400	
Zinc Total	<0.00500	mg/L	0.00500	0.00200	

Laboratory Fortified Blank (1275091); Lab Fortified Blank Duplicate (1275092)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	Dup Result	% Dup Recovery	RPD	RPD Limit %
Aluminum Total	mg/L	.05	.05	96.3	85 - 115	.05	95.9	.624	20
Arsenic Total	mg/L	.05	.05	98.3	85 - 115	.05	98.6	.203	20
Copper Total	mg/L	.05	.05	97.3	85 - 115	.05	98.1	.818	20
Lead Total	mg/L	.05	.05	98.1	85 - 115	.05	97	1.23	20
Manganese Total	mg/L	.05	.05	97.8	85 - 115	.05	98.1	.408	20
Zinc Total	mg/L	.05	.05	96.3	85 - 115	.05	96.3	0	20

Laboratory Fortified Matrix (1275093) Original: Q1937192004; Lab Fortified Matrix Duplicate (1275094)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recoverv	Control Limits %	Dup Result	% Dup Recovery	RPD	RPD Limit %
Aluminum Total	ma/L	.05	.05	94.3	70 - 130	.05	97.6	3.17	20
Arsenic Total	mg/L	.05	.05	103	70 - 130	.05	105	2.12	20
Copper Total	mg/L	.05	.05	87.6	70 - 130	.06	90.2	2.38	20
Lead Total	mg/L	.05	.05	100	70 - 130	.05	102	1.94	20
Manganese Total	mg/L	.05	.05	92.7	70 - 130	.05	95.2	2.48	20
Zinc Total	mg/L	.05	.07	91.6	70 - 130	.07	92.9	1.05	20



Preparation Batch:	NET / 19968		Analys	is Method:	SM2320	B, Alkalinity
Preparation Method:	SM2320B, Alkalin	ity				
Associated Lab IDs: (21937827001					
Limit of Quantitation Chee	ck (1273470)					
Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	
Total Alkalinity (CaCO3)	mg/L	20	20	100	70 - 130	
Method Reporting Limit C	heck (1273471)					
Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	
Total Alkalinity (CaCO3)	mg/L	20	19.4	96.8	50 - 150	
Duplicate (1273476); Orig	inal: Q19375620	04				
Parameter	Original	Duplicate	Units	RPD %	Limit	Qualifier
Total Alkalinity (CaCO3)	156	156	mg/L	0	20	
Matrix Spike (1273477) Or	iginal: Q1937562	2004				
Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	
Total Alkalinity (CaCO3)	mg/L	100	229	72.9	70 - 130	
Lab Control Sample (1273	478)					
Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	
Total Alkalinity (CaCO3)	mg/L	100	96.6	96.6	90 - 110	
Method Blank (1273479)						
Parameter	Results	Units	MRL	LOD	Qualifier	
Total Alkalinity (CaCO3)	<20.0	mg/L	20.0	20.0		

v.12.7.0



Page 10 of 13

Preparation Batch: MEP / Preparation Method: E200.7 Associated Lab IDs: Q1937	7218 7 Prep 827001		Analysi	is Method:	E200.7 Metals, Trace Elements	
Method Reporting Limit Check	(1275391)					
Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	
Sodium Total	mg/L	.2	.25	125	50 - 150	
Method Reporting Limit Check	(1275390)					
Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	
Iron Total	mg/L	.05	.05	91.1	50 - 150	



Preparation Batch:	MEP / 9326
Preparation Method:	E200.7 Prep
Associated Lab IDs:	Q1937827001

Laboratory Reagent Blank (1275083)

Laboratory Reagent Blank	(12/0000)					
Parameter	Results	Units	MRL	LOD	Qualifier	
Iron Total	<0.0500	mg/L	0.0500	0.0200		
Sodium Total	<0.200	mg/L	0.200	0.0700		

Analysis Method: E200.7 Metals, Trace Elements

Laboratory Fortified Blank (1275084)

Page 11 of 13

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %
Iron Total	mg/L	1	1.14	114	85 - 115
Sodium Total	mg/L	10	10.8	108	85 - 115

Laboratory Fortified Matrix (1275086) Original: Q1937113006

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control / Limits %
Iron Total	mg/L	1	1.11	111	70 - 130
Sodium Total	mg/L	10	383	166	70 - 130



Preparation Batch: WET / 19987	Analysis Method:	SM4500-H+B, pH @ 25ºC
Preparation Method: SM4500-H+B, pH @ 25º	С	
Associated Lab IDs: Q1937827001		

Duplicate (1275589); Original: Q1937404002

	·····						
Parameter		Original	Duplicate	Units	RPD %	Limit	Qualifier
pН		7.77	7.67	pН	1.3	20	
Temperature		20.4	20.5	С	.489		

QC Sample Comments

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Page 12 of 13

Sample Type: Duplicate

General Comments for METHOD SM4500-H+B, pH - Defined as a field parameter, measurement must be taken within 15 minutes of collection. Results are provided for information purposes only.



Quality Control Cross Reference

Batch ID: MET/7218 -	Analytical Method:E200.7 Metals, Trac	e Elements	
Lab ID	Sample ID	Prep Batch	Prep Method
Q1937827001	WEST CYPRESS HILL WELL NO 19	MEP/9326	E200.7 Prep
Batch ID: MET/7220 -	Analytical Method:E200.8, ICP-MS		
Lab ID	Sample ID	Prep Batch	Prep Method
Q1937827001	WEST CYPRESS HILL WELL NO 19	MEP/9327	E200.8, ICP-MS Prep
Batch ID: WET/19964	- Analytical Method:E300.0, Anions		
Lab ID	Sample ID	Prep Batch	Prep Method
Q1937827001	WEST CYPRESS HILL WELL NO 19		
Batch ID: WET/19967	- Analytical Method:SM2540C, TDS		
Lab ID	Sample ID	Prep Batch	Prep Method
Q1937827001	WEST CYPRESS HILL WELL NO 19		
Batch ID: WET/19968	- Analytical Method:SM2320B, Alkalini	ty	
Lab ID	Sample ID	Prep Batch	Prep Method
Q1937827001	WEST CYPRESS HILL WELL NO 19		
Batch ID: WET/19987	- Analytical Method:SM4500-H+B, pH	@ 25ºC	
Lah ID	Sample ID	Bron Batch	Prop Mothod

Lab ID	Sample ID	Prep Batch	Prep Method
Q1937827001	WEST CYPRESS HILL WELL		
	NO 19		

LCRA - Environmental Lab 3505 Montopolis Dr. Austin, TX 78744 Austin, TX 78744 Austin, TX 78744 Project: Collector: Col	Phone: (512) 730-6022 or 1 Fax: (512) 730-6021 https://els.lcra.org H Date Date	-800-776-5272 ient: intact: ione: ime * HH:MM	Du Composite VI Bu Composite VI Composite		Type/Preservative	Number*	S.	Lab ID#: Client PO: Invoice To:	
Froject: Cypress 1 Collector: Collector: Co	Collecte	d * Ac Ac Ac Ac Ac Ac Ac Ac Ac Ac Ac Ac Ac	Decompositie weight	EILTERED Y/N Container(s)	Type/Preservative/	Number*	ç	Invoice To:	
1 West Cyrress I 6 Well No.19	Collecte	d * Ac s = 1 WW WW WW	Matrix* D = Aqueous = Solid = Tissue N = D U D U D COMPOSITE Y/N	Container(s)	Type/Preservative/	Number *			Kers
sample ID * 1 Weet Cypress 1 6 6 7	Collecte	d * Age 200	D COMPOSITE Y/N					Kequested Analysis	
Sample ID * 1 Weet Cyeress I 2 Well No.19 5 Weite 6 7	Hill ot-19-15	MM:HH.	COM COM				-2	in the l	+
1 Weet Cyrress W 3 4 4 6 6 7	61-61-40 'H	11.38	Ma						
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5 6 7									
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0									
ransfers Relinquished By	Date	Time	Received	By	Date/Time	Cooler Temp (*	Client S	pecial Instructions:	
1 Callet	6/16/9	1630	2-2	6	(11/1) 1870	# T# Obs.	Sorr.	Lune 4 - in Lone 4 - in	40056
3						2	Lab Use	Only:	- Fed

Environmental Laboratory Services Standard Terms and Conditions

Effective September 2016

Acceptance of Samples...The Lower Colorado River Authority (LCRA) Environmental Laboratory Services (ELS) will accept samples and perform services in accordance with these terms and conditions. No modifications to these terms and conditions will be valid or binding unless in writing and signed by authorized representatives of both the Customer and ELS.

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56

24

ELS reserves the right to refuse or revoke receipt of any sample due to insufficient sample volume, improper sample container, unacceptable customer credit or risk of handling for any health, safety, regulatory, environmental, holding time issues or any other reason, at the discretion of ELS.

ELS also reserves the right to terminate any work being done or work promised on samples accepted for ELS's sole convenience. In the event of such termination, ELS will notify all affected Customers as soon as possible.

Payment & Invoicing...Customer must pay for all services by check or credit card upon delivery of sample to ELS unless other billing arrangements are agreed to by ELS and Customer. Invoices will be issued monthly following the completion of services. All payments are due 30 days from receipt of the invoice. A one percent (1%) per month late fee will be assessed on unpaid invoices after the due date. Customers that have outstanding balances equal to or greater than 90 days must make payment in full at the time of sample delivery.

Quoted Fees...Written quoted fees for all services to be performed by the ELS will be honored for a period of thirty (30) days from the quotation date unless otherwise specified by ELS in writing.

Costs for Compliance...All costs associated with compliance with any subpoena for documents, testimony, or assistance, or for any other purpose relating to work performed by ELS for the Customer, will be paid by the Customer or requesting party. Such costs will include, but not be limited to, hourly charges for each staff member, travel and accommodations, mileage, and any other miscellaneous expenses incurred.

Use of Data...The Customer is solely responsible for determining what actions are required as a result of the data, information, recommendations, interpretations, and opinions provided by ELS. The Customer also assumes sole responsibility for determining whether the nature, type, and quantity of work requested by the Customer is adequate and sufficient for the Customer's intended purpose. Customer hereby indemnifies and releases ELS from and against any and all liabilities arising out of, related to, or resulting from Customer's incorrect or inappropriate use of any data or opinions provided to it by ELS.

Reports...ELS will deliver approved final reports and/or electronic data including any Customer-approved subcontract laboratory data by the agreed upon due date. Reports may not be reproduced, except in full, without prior written approval by ELS. Reports or copies of reports will not be provided to any person or representative other than the Customer without the Customer's written authorization, except as may be required by law.

Confidentiality...Strict confidentiality is maintained regarding all Customer transactions and results. Where information is lawfully subpoenaed, must be released to a regulatory or other legal entity with jurisdiction, or disclosure of documents is otherwise required by law, the Customer will be promptly notified.

Confidential, trade secret, and privileged information provided to ELS by Customer, including sample content, analysis, and Reports, is protected from public access by exceptions to the Texas Public Information Act ("PIA"), to which LCRA is subject. ELS will assert the appropriate exception to withhold Customer information requested under the PIA. Customer may be asked by ELS to provide assistance in asserting exceptions to the PIA (e.g., explanation of competitive position, treatment of trade secrets, etc.). Customer agrees to assist ELS in protection of Customer's information.

Sample Disclosures...Customer agrees that all samples delivered to the ELS will be accompanied by a properly completed chain-of-custody form disclosing the presence of any contaminated, toxic, or hazardous substances known or suspected to be contained in such samples. ELS shall reject any samples received without a valid chain of custody form.

Analytical Errors...Upon request by the Customer, ELS will reanalyze samples whenever test results are suspect. Should the results of the second analysis substantially agree with those of the first, the Customer will pay for the cost of the second analysis. However, if the result of the second analysis materially differs from the first, then Customer will not be charged for the second analysis. Holding Times...All samples must be delivered to ELS within one-half of the applicable holding time. ELS shall not assume any responsibility for missed holding times for samples submitted outside this criterion. To meet holding time for subcontract samples, ELS may make arrangements for the Customer to deliver samples directly to the subcontract lab.

Sample Retention & Disposal...Samples are stored for 30 days upon transmitting final analysis results to the Customer. After 30 days, samples are disposed of properly. However, Customer may request additional storage time at a storage fee of \$50 per month per sample.

Hazardous Waste...Any samples found to be or suspected of being hazardous or containing hazardous substances according to state and federal regulations will be disposed of at submitting Customer's expense.

Turnaround Time (TAT)...Turnaround times (TAT) are based on full "working days" which are defined as 8:00 A.M. to 5:00 P-M. Monday through Friday, excluding holidays. Standard TAT is 7 working days from the day starting after sample receipt. However, TAT may be longer depending upon the tests requested and the same matrix. TAT for samples subcontracted to a Customer-approved laboratory is based on the agreed target due date between all parties (i.e., the Customer, the ELS and the subcontract laboratory).

Expedited Service...Expedited service is available upon approval by ELS and written authorization from the Customer. Service charge amounts added to the total cost of service will be applied as follows:

< or = to 24 hrs:	4 X cost of service
2 to 3 days:	3 X cost of service
4 to 6 days:	2 X cost of service

Non-Standard Services... On sample matrices or analytes for which no official or validated test method exists, usage of an accepted method for a different type of sample or analyte or method development, in some situations, may be offered. In such cases, no guarantee of the success of the method or warranty will be provided. The Customer will be notified of the alternate method proposed, and only after its approval, will analyses begin. Approval by the Customer of the alternate method obligates the Customer for payment for that work, regardless of result obtained.

Warranty...Where applicable, ELS will use analytical methodologies in accordance with the U.S. Environmental Protection Agency (EPA), state agency, or other recognized and approved source.

ELS warrants that it possesses and maintains all licenses, accreditations, and certifications that are required to perform services under these terms and conditions, provided that such requirements are documented in writing to ELS prior to sample delivery acceptance. ELS will notify the Customer in writing of any decertification or revocation of any license, or notice of either that affects work in progress.

The foregoing express warranty is exclusive and is given in lieu of all other warranties, whether express, implied, or statutory. The ELS disclaims any other warranties, whether express, implied, or statutory, including a warranty of fitness for particular purpose and warranty of merchantability. The ELS is not responsible for any of the purposes for which the customer may use ELS test results.

Liability...Customer agrees that the maximum liability of ELS for all claims of any kind whether based on contract, indemnity, warranty, tort (including negligence & strict liability), or otherwise, arising out of, connected with, or resulting from the performance or breach thereof, or from any goods or services covered by or furnished under these terms and conditions or any extension or expansion, is limited to the amounts paid or payable by the Customer for the goods or services giving rise to such claims.



09

- (viii) Copy of the official State of Texas Well Report (some of the preceding data is included on the Well Report).
- 4. A U.S. Geological Survey 7.5-minute topographic quadrangle map (include quadrangle name and number) or a legible copy showing the location of the completed well; [§290.41(c)(3)(A)]
- 5. Record of a 36-hour continuous pump test on the well showing stable production at the well's rated capacity. Include the following: [§290.41(c)(3)(G)]
 - (i) Test pump capacity in gpm, tdh in feet, and horsepower of the pump motor;
 - (ii) Test pump setting depth;
 - (iii) Static water level (in feet); and
 - (iv) Draw down (in feet).
- 6. Three bacteriological analysis reports for samples collected on three successive days showing raw well water to be free of coliform organisms. Reports must be for samples of raw (untreated) water from the disinfected well and submitted to a laboratory accredited by TCEQ, accredited to perform these test; and [§290.41(c)(3)(F)(i)]
- 7. Chemical analysis reports for well water samples showing the water to be of acceptable quality for the most problematic contaminants listed below. Reports must come from a laboratory accredited by TCEQ; accredited to perform these tests. Maximum contaminant level (MCL) and secondary constituent level (SCL) units are in milligrams per liter (except arsenic which is in micrograms per liter). [§290.41(c)(3)(G) and§290.104 and §290.105]

Table 1: Primary	Constituents	with Maximum	Contaminant	Level ((MCL))
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PRIMARY	MCL
Nitrate /	10 (as N)
Nitrite /	1 (as N)
Arsenic	10 /
Fluoride /	4.0

SECONDARY	MCL
Aluminum	0.2 /
Copper	1.0
Iron	0.3 /
Manganese	0.05 /
Zinc	5.0
Total Dissolved Solids	1,000
Fluoride	2.0
Lead	N/A
Sulfate /	300
Chloride	300
pH /	> 7.0

Table 2: Secondary Constituents with Secondary Contaminant Level (SCL)

Revised 11/18

Page 2 of 3

Texas Commission on Environmental Quality Water Supply Division Plan Review Team MC-159 P.O. Box 13087, Austin, Texas 78711-3087 Public Water System I.D. No._____ TCEQ Log No. P-

The following list is a brief outline of the "Rules for Public Water Systems", 30 TAC Chapter 290 regarding proposed Water Supply Well Completion. Failure to submit the following items may delay project approval. Copies of the rules may be obtained from Texas Register, 1019 Brazos St, Austin, TX, 78701-2413, Phone: (512) 463-5561 or downloaded from the website: http://www.tceq.texas.gov/rules/indxpdf.html

Any well proposed as a source of water for a public water supply must have plans approved for construction by TCEQ. Please include the well construction approval letter with your submittal of well completion data listed below must be submitted for TCEQ evaluation. Based on this submitted data, interim approval may be given for use of the well.

- 1. Site map(s) at appropriate scales showing the following: [§290.41(c)(3)(A)]
 - (i) Final location of the well with coordinates;
 - (ii) Named roadways;
 -] (iii) All property boundaries within 150 feet of the final well location and the property owners' names;
 - (iv) Concentric circles with the final well location as the center point with radii of 10 feet, 50 feet, 150 feet, and ¹/₄ mile;
 - (v) Any site improvements and existing buildings;
 -] (vi) Any existing or potential pollution hazards; and
 - (vii) Map must be scalable with a north arrow.
- 2. A copy of the recorded deed of the property on which the well is located showing the Public Water System (PWS) as the landowner, and/or any of the following: [§290.41(c)(1)(F)(iv)]
 - (i) Sanitary control easements (filed at the county courthouse and bearing the county clerk's stamp) covering all land within 150 feet of the well not owned by the PWS (for a sample easement see TCEQ Form 20698);
 - (ii) For a political subdivision, a copy of an ordinance or land use restriction adopted and enforced by the political subdivision which provides an equivalent or higher level of sanitary protection to the well as a sanitary control easement; and/or
 - (iii) A copy of a letter granting an exception to the sanitary control easement rule issued by TCEQ's Technical Review and Oversight Team.
- 3. Construction data on the completed well: [§290.41(c)(3)(A)]
 - (i) Final installed pump data including capacity in gallons per minute (gpm), total dynamic head (tdh) in feet, motor horsepower, and setting depth;
 - (ii) Bore hole diameter(s) (must be 3" larger than casing OD) and total well depth;
 - (iii) Casing size, length, and material (e.g. 200 lf of 12" PVC ASTM F480 SDR-17);
 - (iv) Length and material of any screens, blanks, and/or gravel packs utilized;
 - (v) Cementing depth and pressure method (one of the methods in latest revision of AWWA Standard A-100, Appendix C, excluding the dump bailer and tremie methods);
 - (vi) Driller's geologic log of strata penetrated during the drilling of the well;
 - (vii) Cementing certificate; and

Table 3: V	Water Q	Quality	Parameters
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PARAMETER	UNITS
Alkalinity as CaCO ₃	mg/L -
Calcium as CaCO ₃	mg/L -
Sodium	mg/L -

All systems located in a high-risk county (see page 3) shall submit radiological analysis reports for water samples showing the water to be of acceptable quality for the contaminants listed below. Reports must come from a TCEQ accredited laboratory for interim use of the well.

Table 4: Radionuclide	s with Maximum	Contaminant Level	(MCL)
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CONTAMINANT	MCL
Gross alpha	15 pCi/L
Radium-226/228	5 pCi/L
Beta particle	50 pCi/L
Uranium	30 µg/L

WHERE: pCi/L = pico curies per liter, $\mu g/L = micrograms$ per liter

Please be aware when you review your radiological data that if the report has gross alpha over 15 pCi/L and individual uranium isotopes are not reported, you will have to resample or reanalyze and resubmit radionuclide results. If you see gross alpha plus radium-228 over 5 pCi/L, and don't have radium-226, you will have to resample or reanalyze and resubmit complete results.

List Of Counties Where Radionuclide Testing Is Required

Please be aware that we have added the requirement for analysis for radionuclides for high risk counties. For elevated levels of any contaminants found in a test well, treatment or blending may be required.

		COUNTY			
Atascosa Bandera		Bexer	Bosque	Brazoria	
Brewster	Burnet	Concho	Culberson	Dallam	
Dawson	Erath	Fort Bend	Frio	Garza	
Gillespie	Gray	Grayson	Harris	Hudspeth	
Irion	Jeff Davis	Jim Wells	Kendall	Kent	
Kerr	Kleberg	Liberty	Llano	Lubbock	
McCulloch	Mason	Matagorda	Medina	Midland	
Montgomery	Moore	Parker	Pecos	Polk	
Presidio	Refugio	San Jacinto	San Saba	Tarrant	
Travis	Tyler	Upton	Val Verde	Victoria	
Walker	Washington	Wichita	Williamson	Zavala	

Table 5: List of Counties where Radionuclide Testing is Required

Revised 11/18



WELL #20 WELL ID # - 519899 CYPRESS RANCH WCID #1 LCRA Environmental Laboratory Services 3505 Montopolis Drive Austin, TX 78744 Phone: (512) 730-6022 Fax: (512) 730-6021

September 17, 2019

JANIE HENDRIX CENTEX PUMP & SUPPLY 2520 Hwy 290 W Dripping Springs, TX 78620 JANIE@CTDWATERWELLS.COM

RE: Final Analytical Report Q1960745

Attn: JANIE HENDRIX

Enclosed are the analytical results for sample(s) received by LCRA Environmental Laboratory Services. Results reported herein conform to the most current NELAP standards, where applicable, unless otherwise narrated in the body of the report. This final report provides results related only to the sample(s) as received for the above referenced work order.

Thank you for selecting ELS for your analytical needs. If you have any questions regarding this report, please contact us at (512) 730-6022. We look forward to assisting you again.

Authorized for release by:

a leavy

Ariana Dean Account Manager ariana.dean@lcra.org



Enclosures:



Sample Summary

LCRA Environmental Laboratory Services 3505 Montopolis Drive Austin, TX 78744 Phone: (512) 730-6022 Fax: (512) 730-6021

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received
Q1960745001	20 WELL	DW	E200.7 Metals, Trace Elements	8/30/2019 09:00	8/30/2019 10:49
Q1960745001	20 WELL	DW	E200.8, ICP-MS	8/30/2019 09:00	8/30/2019 10:49
Q1960745001	20 WELL	DW	E2340B, Hardness Calc.	8/30/2019 09:00	8/30/2019 10:49
Q1960745001	20 WELL	DW	E300.0, Anions	8/30/2019 09:00	8/30/2019 10:49
Q1960745001	20 WELL	DW	E365.4 Phosphorus, Total	8/30/2019 09:00	8/30/2019 10:49
Q1960745001	20 WELL	DW	SM2320B, Alkalinity	8/30/2019 09:00	8/30/2019 10:49
Q1960745001	20 WELL	DW	SM2510B, Conductivity @ 25°C	8/30/2019 09:00	8/30/2019 10:49
Q1960745001	20 WELL	DW	SM2540C, TDS	8/30/2019 09:00	8/30/2019 10:49
Q1960745001	20 WELL	DW	SM4500-H+B, pH @ 25ºC	8/30/2019 09:00	8/30/2019 10:49

Report Definitions

MRL - Minimum Reporting Limit
LOD - Limit of Detection
ML - Maximum Limit - Client Specified
MCL - Maximum Contaminant Level
MDL - Method Detection Limit
LOQ - Limit of Quantitation - Client Specified
DF - Dilution Factor
Qual - Qualifier
(S) - Surrogate Spike
QC Qual - red font indicates Result Value outside acceptable range
B- Analyte detected in method blank
S - Spike recovery outside limit
R - RPD outside duplicate precision limit
J - Analyte detected below quantitation limit
RPD - Relative Percent Difference



Project Summary

Sample Analysis Comments

Lab ID: Q1960745001

Sample ID: 20 WELL

- Not Accredited Calcium Total
- Not Accredited Phosphorus, Total (As P)
- Not Accredited Temperature
- Not Accredited Total Alkalinity (CaCO3)
- Not Accredited pH

LCRA Environmental Laboratory Services 3505 Montopolis Drive Austin, TX 78744 Phone: (512) 730-6022 Fax: (512) 730-6021



Analytical Results

Lab ID: Q1960745001		Date R	eceived	8/30/2	019 10):49	Ma	atrix: Drinking Wat	ter	
Sample ID: 20 WELL		Date C	ollected	8/30/2	019 09):00 Sar	nple T	ype: SAMPLE		
Proiect ID: NEW WELL TES	TING									
Parameter	Results Units	MRL	LOD	ML	DF	Prepared	Ву	Analyzed	Ву	Qual
ALKALINITY (SM2320B, Alka	alinity)									
Total Alkalinity (CaCO3)	225 mg/L	20.0	20.0		1			09/05/19 00:00	ME	*
Conductance @ 25°C (SM25	10B, Conductivity @ 25°C	;)								
Specific Conductance	502 umho/cm	10.0	10.0		1			09/04/19 19:12	ME	
INORGANICS (E200.7 Prep/E	200.7 Metals, Trace Elem	ents)								
Calcium Total	64.7 mg/L	0.200	0.0700		1	09/09/19 08:27	ME	09/10/19 15:37	FM	*
Iron Total	0.123 mg/L	0.0500	0.0200		1	09/09/19 08:27	ME	09/10/19 15:37	FM	
Magnesium Total	22.6 mg/L	0.200	0.0700		1	09/09/19 08:27	ME	09/10/19 15:37	FM	
Sodium Total	6.20 mg/L	0.200	0.0700		1	09/09/19 08:27	ME	09/10/19 15:37	FM	
INORGANICS (E200.8, ICP-M	IS Prep/E200.8, ICP-MS)									
Aluminum Total	<0.00500 mg/L	0.00500	0.0020		1	09/09/19 08:33	ME	09/11/19 11:33	FO	
Arsenic Total	<1.00 ug/L	1.00	0.400	10	1	09/09/19 08:33	ME	09/11/19 11:33	FO	
Copper Total	<0.00100 mg/L	0.00100	0.0004	1	1	09/09/19 08:33	ME	09/11/19 11:33	FO	
Lead Iotal Mangapasa Total	<0.00100 mg/L	0.00100	0.0004	0.015	1	09/09/19 08:33	ME	09/11/19 11:33	FO	
Zinc Total	0.0382 mg/L	0.00500	0.0020		1	09/09/19 08:33	ME	09/11/19 11:33	FO	
INORGANICS (E2340B, Hard	iness Calc.)									
Hardness, Calcium	162 mg/L				1			09/11/19 06:51	CW	
INORGANICS (E300.0, Anion	is)									
Chloride	7.26 mg/L	1.00	0.500		1			08/30/19 12:08	ML	
Fluoride	0.449 mg/L	0.0100	0.0050	4	1			08/30/19 12:08	ML	
Nitrate (as N)	<0.0100 mg/L	0.0100	0.0050	10	1			08/30/19 12:08	ML	
Nitrite (as N)	<0.0100 mg/L	0.0100	0.0050	1	1			08/30/19 12:08	ML	
Sullate	32.8 mg/L	1.00	0.500		.1			08/30/19 12:08	ML	
TOTAL DISSOLVED SOLIDS	(SM2540C, TDS)									
Total Dissolved Solids(TDS)	267 mg/L	25.0	10.0		10			09/05/19 09:35	ML	
TOTAL PHOSPHATE AS P (E	365.4 Water Prep/E365.4 I	Phosphoru	s, Total)							
Phosphorus, Total (As P)	<0.0200 mg/L	0.0200	0.0080		1	09/04/19 11:53	ME	09/06/19 00:00	MO	*
рН (SM4500-H+B, pH @ 25&	ordm;C)									



Analytical Results (cont.)

Lab ID: Q1960745001		Date R	Date Received: 8/30/2019 10:49					Matrix: Drinking Water			
Sample ID: 20 WELL		Date C	ollected:	8/30/2	2019 09	9:00	Sample T	ype: SAMPLE			
Project ID: NEW WELL T	ESTING										
Parameter	Results Units	MRL	LOD	ML	DF	Prepared	Ву	Analyzed	Ву	Qual	
рН	7.80 pH	0.00	0.00		1			09/06/19 15:37	ME	*	
Temperature	19.7 ⊂				1			09/06/19 15:37	ME	*	

Sample Comments

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Sample Type: SAMPLE

General Comments for METHOD SM4500-H+B, pH - Defined as a field parameter, measurement must be taken within 15 minutes of collection. Results are provided for information purposes only.



Quality Control

Preparation Batch: MET / 7372 Preparation Method: E200.8, ICP-MS Associated Lab IDs: Q1960745001

Analysis Method: E200.8, ICP-MS

LCRA Environmental Laboratory Services

3505 Montopolis Drive Austin, TX 78744 Phone: (512) 730-6022

Fax: (512) 730-6021

Method Reporting Limit Check (1332302)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Arsenic Total	ug/L	1	1	99.8	50 - 150
Copper Total	mg/L	.001	0	103	50 - 150
Lead Total	mg/L	.001	0	102	50 - 150
Manganese Total	mg/L	.001	0	106	50 - 150

Method Reporting Limit Check (1332303)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Aluminum Total	mg/L	.005	0	88.1	50 - 150
Zinc Total	mg/L	.005	.01	101	50 - 150



Quality Control (cont.)

 Preparation Batch:
 MET / 7368
 Analysis Method:
 E200.7 Metals, Trace Elements

 Preparation Method:
 E200.7 Metals, Trace Elements
 E200.7 Metals, Trace Elements

 Associated Lab IDs:
 Q1960745001
 Q1960745001

Method Reporting Limit Check (1331625)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Calcium Total	mg/L	.2	.23	114	50 - 150
Magnesium Total	mg/L	.2	.18	87.5	50 - 150
Sodium Total	mg/L	.2	.19	94.9	50 - 150
Method Reporting Limit Ch	eck (1331626)				
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Iron Total	mg/L	.05	.05	97.5	50 - 150



Preparation Batch: WETF	9 / 4739		Analys	is Method:	E365.4 P	hosphorus	, Total			
Preparation Method: E365.	4 Water Pre	p								
Associated Lab IDs: Q1960	0745001									
Limit of Quantitation Check (1	327994)									
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits					
Phosphorus, Total (As P)	mg/L	.02	.02	107	70 - 130					
Method Blank (1328010)										
Parameter	Results	Units	MRL	LOD	Qualifier					
Phosphorus, Total (As P)	<0.0200	mg/L	0.0200	0.00800						
Matrix Spike (1328011) Original	: Q1961148	8001								
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits					
Phosphorus, Total (As P)	mg/L	1	1	100	80 - 120					
Lab Control Sample (1328012);	Lab Contr	ol Sample L	Duplicate ((1328013)						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	
Phosphorus, Total (As P)	mg/L	1	1.02	102	90 - 110	1.01	101	.985	20	



Preparation Batch: WE	7 / 20415		Analys	is Method:	SM2320	B, Alkalinity
Preparation Method: SM2	320B, Alkalir	nity				
Associated Lab IDs: Q19	60745001					
Limit of Quantitation Check	1329251)					
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	
Total Alkalinity (CaCO3)	mg/L	20	20.6	103	70 - 130	
Method Reporting Limit Chec	k (1329252)					
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	
Total Alkalinity (CaCO3)	mg/L	20	20.5	103	50 - 150	
Lab Control Sample (1329257)					
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	
Total Alkalinity (CaCO3)	mg/L	100	93.9	93.9	90 - 110	
Method Blank (1329258)						
Parameter	Results	Units	MRL	LOD	Qualifier	
Total Alkalinity (CaCO3)	<20.0	mg/L	20.0	20.0		
Duplicate (1329259); Origina	l: Q19608170	011				
Parameter	Original	Duplicate	Units	RPD %	Limit	
Total Alkalinity (CaCO3)	200	200	mg/L	0	20	
Matrix Spike (1329260) Origin	al: Q196081	7011				
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	
Total Alkalinity (CaCO3)	mg/L.	100	279	78.7	70 - 130	



Preparation Batch:	WET / 20411	Analysis Method:	SM2510B, Conductivity @ 25°C
Preparation Method:	SM2510B, Conductivity @ 25°C	>	
Associated Lab IDs:	Q1960745001		

Lab Control Sample (1328495)

	-)				
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Specific Conductance	umho/c	1000	1000	100	70 - 130
Duplicate (1328496); Origina	al: Q19608170	004			
Parameter	Original	Duplicate	Units	RPD %	Limit
Specific Conductance	618	617	umho/c	.162	20
Method Blank (1328497)					
Parameter	Results	Units	MRL	LOD	Qualifier
Specific Conductance	<10.0	umho/c	10.0	10.0	



Preparation Batch: WET / 20397 Preparation Method: E300.0, Anions Associated Lab IDs: Q1960745001

Limit of Quantitation Check (1326116)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Chloride	mg/L	5	4	80	70 - 130
Fluoride	mg/L	.02	.02	119	70 - 130
Nitrite (as N)	mg/L	.02	.02	75	70 - 130
Nitrate (as N)	mg/L	.02	.02	94.5	70 - 130
Sulfate	mg/L	5	4.22	84.4	70 - 130

Laboratory Fortified Blank (1326115)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Chloride	mg/L	30	30.2	101	90 - 110
Fluoride	mg/L	1	1.03	103	90 - 110
Nitrite (as N)	mg/L	1	.92	92.2	90 - 110
Nitrate (as N)	mg/L	1	.99	98.7	90 - 110
Sulfate	mg/L	30	30.1	100	90 - 110

Analysis Method: E300.0, Anions

Method Reporting Limit Check (1326114)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Chloride	mg/L	1	.72	72	50 - 150
Fluoride	mg/L	.01	.01	53	50 - 150
Nitrite (as N)	mg/L	.01	.01	90	50 - 150
Nitrate (as N)	mg/L	.01	.01	124	50 - 150
Sulfate	mg/L	1	.8	79.5	50 - 150

Laboratory Reagent Blank (1326112)

Parameter	Results	Units	MRL	LOD	Qualifier
Chloride	<1.00	mg/L	1.00	0.500	
Fluoride	<0.0100	mg/L	0.0100	0.00500	
Nitrite (as N)	<0.0100	mg/L	0.0100	0.00500	
Nitrate (as N)	<0.0100	mg/L	0.0100	0.00500	
Sulfate	<1.00	mg/L	1.00	0.500	

Laboratory Fortified Matrix (1326123) Original: Q1960735001

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Chloride	mg/L	20	117	108	80 - 120
Fluoride	mg/L	1	1.75	95	80 - 120
Nitrite (as N)	mg/L	1	1.12	112	80 - 120
Nitrate (as N)	mg/L	1	1.01	101	80 - 120
Sulfate	mg/L	20	86.6	88.4	80 - 120

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Preparation Batch: WE	Г/20413		Analys	is Method:	SM2540C, TDS	
Preparation Method: SM2	540C, TDS					
Associated Lab IDs: Q19	60745001					
Method Blank (1328536)						
Parameter	Results	Units	MRL	LOD	Qualifier	
Total Dissolved Solids(TDS)	<25.0	mg/L	25.0	10.0		
Lab Control Sample (1328537)					
Paramotor	Unite	Spiked	Spike	Spike	Control	
	Units	Amount	Result	Recovery	Limits	
Total Dissolved Solids(TDS)	mg/L	400	403	101	80 - 120	
Matrix Spike (1328538) Origin	al: Q196081	7010				
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	
Total Dissolved Solids(TDS)	mg/L	400	736	104	70 - 130	
Duplicate (1328539); Origina	l: Q19608170	010				
Parameter	Original	Duplicate	Units	RPD %	Limit	
Total Dissolved Solids(TDS)	320	325	mg/L	1.55	20	



Preparation Batch: MEP / 9576 Preparation Method: E200.7 Prep Associated Lab IDs: Q1960745001

Laboratory Reagent Blank (1330538)

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Analysis Method:	E200.7 Metals, Trace Elements

Laboratory Reagent Bla	ink (1550550)					
Parameter	Results	Units	MRL	LOD	Qualifier	
Calcium Total	<0.200	mg/L	0.200	0.0700		
Iron Total	< 0.0500	mg/L	0.0500	0.0200		
Magnesium Total	<0.200	mg/L	0.200	0.0700		
Sodium Total	<0.200	mg/L	0.200	0.0700		

Laboratory Fortified Blank (1330539)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Calcium Total	mg/L	10	9.96	99.6	85 - 115
Iron Total	mg/L	1	.99	99.3	85 - 115
Magnesium Total	mg/L	10	9.91	99.1	85 - 115
Sodium Total	mg/L	10	9.84	98.4	85 - 115

Laboratory Fortified Matrix (1330541) Original: Q1961308006

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits
Calcium Total	mg/L	10	13.9	101	70 - 130
Iron Total	mg/L	1	1.03	103	70 - 130
Magnesium Total	mg/L	10	11	102	70 - 130
Sodium Total	mg/L	10	167	131	70 - 130



Preparation Batch: WET / 20429	Analysis Method:	SM4500-H+B, pH @ 25ºC
Preparation Method: SM4500-H+B, pH @ 25º	С	
Associated Lab IDs: Q1960745001		

Duplicate (1330339); Original: Q1959607001

	 •					
Parameter		Original	Duplicate	Units	RPD %	Limit
pН		7.95	7.95	pН	0	20
Temperature		19.7	19.6	С	.509	

QC Sample Comments

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Sample Type: Duplicate

General Comments for METHOD SM4500-H+B, pH - Defined as a field parameter, measurement must be taken within 15 minutes of collection. Results are provided for information purposes only.



Preparation Batch: MEP / 9577 Preparation Method: E200.8, ICP-MS Prep Associated Lab IDs: Q1960745001 Analysis Method: E200.8, ICP-MS

Laboratory Reagent Blank (1330549)

Parameter	Results	Units	MRL	LOD	Qualifier
Aluminum Total	<0.00500	mg/L	0.00500	0.00200	
Arsenic Total	<1.00	ug/L	1.00	0.400	
Copper Total	<0.00100	mg/L	0.00100	0.000400	
Lead Total	<0.00100	mg/L	0.00100	0.000400	
Manganese Total	<0.00100	mg/L	0.00100	0.000400	
Zinc Total	<0.00500	mg/L	0.00500	0.00200	

Laboratory Fortified Blank (1330550); Lab Fortified Blank Duplicate (1330551)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit
Aluminum Total	mg/L	.05	.05	96.3	85 - 115	.05	100	3.87	20
Arsenic Total	ug/L	50	48.5	97	85 - 115	48.4	96.7	.206	20
Copper Total	mg/L	.05	.05	95.9	85 - 115	.05	96.1	.209	20
Lead Total	mg/L	.05	.05	95.2	85 - 115	.05	97	1.87	20
Manganese Total	mg/L	.05	.05	99.5	85 - 115	.05	99.3	.402	20
Zinc Total	mg/L	.05	.05	98.6	85 - 115	.05	98.4	.203	20

Laboratory Fortified Matrix (1330552) Original: Q1961309006; Lab Fortified Matrix Duplicate (1330553)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit
Aluminum Total	mg/L	.05	.05	98.9	70 - 130	.05	95.6	3.49	20
Arsenic Total	ug/L	50	51.5	103	70 - 130	49.8	99.5	3.36	20
Copper Total	mg/L	.05	.06	93.7	70 - 130	.06	89.3	3.92	20
Lead Total	mg/L	.05	.05	99.3	70 - 130	.05	96.9	2.44	20
Manganese Total	mg/L	.05	.05	97.8	70 - 130	.05	95.6	2.11	20
Zinc Total	mg/L	.05	.06	96.8	70 - 130	.05	93.7	2.87	20



Quality Control Cross Reference

MET/7368 - E200.7 Metals, T	race Elements		
Lab ID	Sample ID	Prep Batch	Prep Method
Q1960745001	20 WELL	MEP/9576	E200.7 Prep
MET/7372 - E200.8, ICP-MS			
Lab ID	Sample ID	Prep Batch	Prep Method
Q1960745001	20 WELL	MEP/9577	E200.8, ICP-MS Prep
WET/20397 - E300.0, Anions			
Lab ID	Sample ID	Prep Batch	Prep Method
Q1960745001	20 WELL		
WET/20411 - SM2510B, Con	ductivity @ 25°C		
Lab ID	Sample ID	Prep Batch	Prep Method
Q1960745001	20 WELL		
WET/20413 - SM2540C, TDS			
Lab ID	Sample ID	Prep Batch	Prep Method
Q1960745001	20 WELL		
WET/20415 - SM2320B, Alka	linity		
Lab ID	Sample ID	Prep Batch	Prep Method
Q1960745001	20 WELL		
WET/20421 - E365.4 Phosph	orus, Total		
Lab ID	Sample ID	Prep Batch	Prep Method
Q1960745001	20 WELL	WETP/4739	E365.4 Water Prep
WET/20429 - SM4500-H+B, p	oH @ 25ºC		
Lab ID	Sample ID	Prep Batch	Prep Method
Q1960745001	20 WELL		

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Page 1 of 1

Environmental Laboratory Services Standard Terms and Conditions

Effective September 2016

Acceptance of Samples...The Lower Colorado River Authority (LCRA) Environmental Laboratory Services (ELS) will accept samples and perform services in accordance with these terms and conditions. No modifications to these terms and conditions will be valid or binding unless in writing and signed by authorized representatives of both the Customer and ELS.

ELS reserves the right to refuse or revoke receipt of any sample due to insufficient sample volume, improper sample container, unacceptable customer credit, or risk of handling for any health, safety, regulatory, environmental, holding time issues or any other reason, at the discretion of ELS.

ELS also reserves the right to terminate any work being done or work promised on samples accepted for ELS's sole convenience. In the event of such termination, ELS will notify all affected Customers as soon as possible.

Payment & Invoicing...Customer must pay for all services by check or credit card upon delivery of sample to ELS unless other billing arrangements are agreed to by ELS and Customer. Invoices will be issued monthly following the completion of services. All payments are due 30 days from receipt of the invoice. A one percent (1%) per month late fee will be assessed on unpaid invoices after the due date. Customers that have outstanding balances equal to or greater than 90 days must make payment in full at the time of sample delivery.

Quoted Fees...Written quoted fees for all services to be performed by the ELS will be honored for a period of thirty (30) days from the quotation date unless otherwise specified by ELS in writing.

Costs for Compliance...All costs associated with compliance with any subpoena for documents, testimony, or assistance, or for any other purpose relating to work performed by ELS for the Customer, will be paid by the Customer or requesting party. Such costs will include, but not be limited to, hourly charges for each staff member, travel and accommodations, mileage, and any other miscellaneous expenses incurred.

Use of Data...The Customer is solely responsible for determining what actions are required as a result of the data, information, recommendations, interpretations, and opinions provided by ELS. The Customer also assumes sole responsibility for determining whether the nature, type, and quantity of work requested by the Customer is adequate and sufficient for the Customer's intended purpose. Customer hereby indemnifies and releases ELS from and against any and all liabilities arising out of, related to, or resulting from Customer's incorrect or inappropriate use of any data or opinions provided to it by ELS.

Reports...ELS will deliver approved final reports and/or electronic data including any Customer-approved subcontract laboratory data by the agreed upon due date. Reports may not be reproduced, except in full, without prior written approval by ELS. Reports or copies of reports will not be provided to any person or representative other than the Customer without the Customer's written authorization, except as may be required by law.

Confidentiality...Strict confidentiality is maintained regarding all Customer transactions and results. Where information is lawfully subpoenaed, must be released to a regulatory or other legal entity with jurisdiction, or disclosure of documents is otherwise required by law, the Customer will be promptly notified.

Confidential, trade secret, and privileged information provided to ELS by Customer, including sample content, analysis, and Reports, <u>is protected</u> from public access by exceptions to the Texas Public Information Act ("PIA"), to which LCRA is subject. ELS will assert the appropriate exception to withhold Customer information requested under the PIA. Customer may be asked by ELS to provide assistance in asserting exceptions to the PIA (e.g., explanation of competitive position, treatment of trade secrets, etc.). Customer agrees to assist ELS in protection of Customer's information.

Sample Disclosures...Customer agrees that all samples delivered to the ELS will be accompanied by a properly completed chain-of-custody form disclosing the presence of any contaminated, toxic, or hazardous substances known or suspected to be contained in such samples. ELS shall reject any samples received without a valid chain of custody form.

Analytical Errors...Upon request by the Customer, ELS will reanalyze samples whenever test results are suspect. Should the results of the second analysis substantially agree with those of the first, the Customer will pay for the cost of the second analysis. However, if the result of the second analysis materially differs from the first, then Customer will not be charged for the second analysis. Holding Times...All samples must be delivered to ELS within one-half of the applicable holding time. ELS shall not assume any responsibility for missed holding times for samples submitted outside this criterion. To meet holding time for subcontract samples, ELS may make arrangements for the Customer to deliver samples directly to the subcontract lab.

Sample Retention & Disposal...Samples are stored for 30 days upon transmitting final analysis results to the Customer. After 30 days, samples are disposed of properly. However, Customer may request additional storage time at a storage fee of \$50 per month per sample.

Hazardous Waste...Any samples found to be or suspected of being hazardous or containing hazardous substances according to state and federal regulations will be disposed of at submitting Customer's expense.

Turnaround Time (TAT)...Turnaround times (TAT) are based on full "working days" which are defined as 8:00 A.M. to 5:00 P.M. Monday through Friday, excluding holidays. Standard TAT is 7 working days from the day starting after sample receipt. However, TAT may be longer depending upon the tests requested and the same matrix. TAT for samples subcontracted to a Customer-approved laboratory is based on the agreed target due date between all parties (i.e., the Customer, the ELS and the subcontract laboratory).

Expedited Service...Expedited service is available upon approval by ELS and written authorization from the Customer. Service charge amounts added to the total cost of service will be applied as follows: $s \circ r = t \circ 24$ brs: $4 \times cost of service$

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2 to 3 days:	3 X cost of service
4 to 6 days:	2 X cost of service

Non-Standard Services... On sample matrices or analytes for which no official or validated test method exists, usage of an accepted method for a different type of sample or analyte or method development, in some situations, may be offered. In such cases, no guarantee of the success of the method or warranty will be provided. The Customer will be notified of the alternate method proposed, and only after its approval, will analyses begin. Approval by the Customer of the alternate method obligates the Customer for payment for that work, regardless of result obtained.

Warranty...Where applicable, ELS will use analytical methodologies in accordance with the U.S. Environmental Protection Agency (EPA), state agency, or other recognized and approved source.

ELS warrants that it possesses and maintains all licenses, accreditations, and certifications that are required to perform services under these terms and conditions, provided that such requirements are documented in writing to ELS prior to sample delivery acceptance. ELS will notify the Customer in writing of any decertification or revocation of any license, or notice of either that affects work in progress.

The foregoing express warranty is exclusive and is given in lieu of all other warranties, whether express, implied, or statutory. The ELS disclaims any other warranties, whether express, implied, or statutory, including a warranty of fitness for particular purpose and warranty of merchantability. The ELS is not responsible for any of the purposes for which the Customer may use ELS test results.

Liability...Customer agrees that the maximum liability of ELS for all claims of any kind whether based on contract, indemnity, warranty, tort (including negligence & strict liability), or otherwise, arising out of, connected with, or resulting from the performance or breach thereof, or from any goods or services covered by or furnished under these terms and conditions or any extension or expansion, is limited to the amounts paid or payable by the Customer for the goods or services giving rise to such claims.

Texas Commission on Environmental Quality Water Supply Division Plan Review Team MC-159 P.O. Box 13087, Austin, Texas 78711-3087 Public Water System I.D. No._ TCEQ Log No. P-

The following list is a brief outline of the "Rules for Public Water Systems", 30 TAC Chapter 290 regarding proposed Water Supply Well Completion. Failure to submit the following items may delay project approval. Copies of the rules may be obtained from Texas Register, 1019 Brazos St, Austin, TX, 78701-2413, Phone: (512) 463-5561 or downloaded from the website: http://www.tceq.texas.gov/rules/indxpdf.html

Any well proposed as a source of water for a public water supply must have plans approved for construction by TCEQ. Please include the well construction approval letter with your submittal of well completion data listed below must be submitted for TCEQ evaluation. Based on this submitted data, interim approval may be given for use of the well.

1	. Ц	Site map(s)) at appropriate	scales sl	howing the f	following: [[\$290.41(c)(3)(A)]
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- (i) Final location of the well with coordinates;
- (ii) Named roadways;
- (iii) All property boundaries within 150 feet of the final well location and the property owners' names;
- (iv) Concentric circles with the final well location as the center point with radii of 10 feet, 50 feet, 150 feet, and ¼ mile;
 - (v) Any site improvements and existing buildings;
 - (vi) Any existing or potential pollution hazards; and
- (vii) Map must be scalable with a north arrow.

2. A copy of the recorded deed of the property on which the well is located showing the Public Water System (PWS) as the landowner, and/or any of the following: [§290.41(c)(1)(F)(iv)]

- Sanitary control easements (filed at the county courthouse and bearing the county clerk's stamp) covering all land within 150 feet of the well not owned by the PWS (for a sample easement see TCEQ Form 20698);
- (ii) For a political subdivision, a copy of an ordinance or land use restriction adopted and enforced by the political subdivision which provides an equivalent or higher level of sanitary protection to the well as a sanitary control easement; and/or
- (iii) A copy of a letter granting an exception to the sanitary control easement rule issued by TCEQ's Technical Review and Oversight Team.
- 3. Construction data on the completed well: [§290.41(c)(3)(A)]
 - (i) Final installed pump data including capacity in gallons per minute (gpm), total dynamic head (tdh) in feet, motor horsepower, and setting depth;
 - (ii) Bore hole diameter(s) (must be 3" larger than casing OD) and total well depth;
 - (iii) Casing size, length, and material (e.g. 200 If of 12" PVC ASTM F480 SDR-17);
 - (iv) Length and material of any screens, blanks, and/or gravel packs utilized;
 - (v) Cementing depth and pressure method (one of the methods in latest revision of AWWA Standard A-100, Appendix C, excluding the dump bailer and tremie methods);
 - (vi) Driller's geologic log of strata penetrated during the drilling of the well;
 -] (vii) Cementing certificate; and

Revised 11/18
Public Well Completion Data Checklist for Interim Approval (Step 2)

- (viii) Copy of the official State of Texas Well Report (some of the preceding data is included on the Well Report).
- 4. A U.S. Geological Survey 7.5-minute topographic quadrangle map (include quadrangle name and number) or a legible copy showing the location of the completed well; [§290.41(c)(3)(A)]
- 5. Record of a 36-hour continuous pump test on the well showing stable production at the well's rated capacity. Include the following: [§290.41(c)(3)(G)]
 - (i) Test pump capacity in gpm, tdh in feet, and horsepower of the pump motor;
 - (ii) Test pump setting depth;
 - (iii) Static water level (in feet); and
 - (iv) Draw down (in feet).
- 6. Three bacteriological analysis reports for samples collected on three successive days showing raw well water to be free of coliform organisms. Reports must be for samples of raw (untreated) water from the disinfected well and submitted to a laboratory accredited by TCEQ, accredited to perform these test; and [§290.41(c)(3)(F)(i)]
- 7. Chemical analysis reports for well water samples showing the water to be of acceptable quality for the most problematic contaminants listed below. Reports must come from a laboratory accredited by TCEQ; accredited to perform these tests. Maximum contaminant level (MCL) and secondary constituent level (SCL) units are in milligrams per liter (except arsenic which is in micrograms per liter). [§290.41(c)(3)(G) and§290.104 and §290.105]

Table 1: Primary Constituents with Maximum Contaminant Level (MCL)

	PRIMARY	MCL
	Nitrate	10 (as N)
	Nitrite	1 (as N)
-	Arsenic	10
	Fluoride	4.0

	SECONDARY	MCL
	Aluminum	0.2
-	Copper	1.0
-	Iron	0.3
-	Manganese	0.05
-	Zinc	5.0
Т	otal Dissolved Solids	1,000
	Fluoride	2.0
-	Lead	N/A
	Sulfate	300
	Chloride	300
	pH	> 7.0

Table 2: Secondary Constituents with Secondary Contaminant Level (SCL)

Public Well Completion Data Checklist for Interim Approval (Step 2)

Table 3	3: W	ater Q	uality	Parameters
---------	------	--------	--------	------------

PARAMETER	UNITS
Alkalinity as CaCO3	mg/L
Calcium as CaCO ₃	mg/L
- Sodium	mg/L

All systems located in a high-risk county (see page 3) shall submit radiological analysis reports for water samples showing the water to be of acceptable quality for the contaminants listed below. Reports must come from a TCEQ accredited laboratory for interim use of the well.

Table 4: Radionuclides with Maximum Contaminant L	evel ((MCL)
---	--------	-------

CONTAMINANT	MCL
Gross alpha	15 pCi/L
Radium-226/228	5 pCi/L
Beta particle	50 pCi/L
Uranium	30 µg/L

WHERE: pCi/L = pico curies per liter, $\mu g/L$ = micrograms per liter

Please be aware when you review your radiological data that if the report has gross alpha over 15 pCi/L and individual uranium isotopes are not reported, you will have to resample or reanalyze and resubmit radionuclide results. If you see gross alpha plus radium-228 over 5 pCi/L, and don't have radium-226, you will have to resample or reanalyze and resubmit complete results.

List Of Counties Where Radionuclide Testing Is Required

Please be aware that we have added the requirement for analysis for radionuclides for high risk counties. For elevated levels of any contaminants found in a test well, treatment or blending may be required.

		COUNTY		
Atascosa	Bandera	Bexer	Bosque	Brazoria
Brewster	Burnet	Concho	Culberson	Dallam
Dawson	Erath	Fort Bend	Frio	Garza
Gillespie	Gray	Grayson	Harris	Hudspeth
Irion	Jeff Davis	Jim Wells	Kendall	Kent
Kerr	Kleberg	Liberty	Llano	Lubbock
McCulloch	Mason	Matagorda	Medina	Midland
Montgomery	Moore	Parker	Pecos	Polk
Presidio	Refugio	San Jacinto	San Saba	Tarrant
Travis	Tyler	Upton	Val Verde	Victoria
Walker	Washington	Wichita	Williamson	Zavala

Table 5: List of Counties where Radionuclide Testing is Required

Revised 11/18

Page 3 of 3

Attachment 13: SOILS MAP



Attachment 14: SOILS ANALYSIS

Email information for report date: 4/4/24 16:15

H001145

AWR SERVICES INC

Attn: Mike Bamer mike@awrservices.net

500 N Capital of Texas Hwy Bldg 1 Suite 125 **AUSTIN, TX 78746**

Please-contact us for your sampling needs or if you have any questions. Some convenient contacts are listed below. You can also access your results and reports through our ClientConnect ™ portal on our website (www.aqua-techlabs.com).

For sampling guestions:

samplingbryan@aqua-techlabs.com (Bryan area) samplingaustin@agua-techlabs.com (Austin area)

reporting@aqua-techlabs.com (report questions)

Aqua-Tech values you as a customer and encourages you to speak with our staff at 979-778-3707 or the above emails if you have auestions.

Thank you for your business, June M. Brien **Executive Technical Director**

BRYAN FACILITY 635 Phil Gramm Boulevard Bryan, TX 77807 Phone: (979) 778-3707 Fax: (979) 778-3193



AUSTIN FACILITY 3512 Montopolis Dr. Suite A Austin, TX 78744 Phone: (512) 301-9559 Fax: (512) 301-9552

The analyses summarized in this report were performed by Aqua-Tech Laboratories, Inc. unless otherwise noted. Agua-Tech Laboratories, Inc. holds accreditation from the State of Texas in accordance with TNI and/or through the TCEQ Drinking Water Commercial Laboratory Approval Program.

The following abbreviations indicate certification status:

- NEL TNI accredited parameter.
- ANR Accreditation not offered by the State of Texas.
- Approval through the TCEQ Drinking Water Commercial DWP Laboratory Approval Program,
- INF Aqua-Tech Laboratories, Inc. is not accredited for this parameter. It is reported on an informational basis only.

Subcontracted data summarized in this report is indicated by "Sub" in the Lab column 5011 Sample 2024

General Definitions:

- NR Not Reported.
- RPD Relative Percent Difference
- % R Percent Recovery.
- dry Results with the "dry" unit designation are reported on a "dry weight" basis.
- SQL The Sample Quantitation Limit is the value below which the parameter cannot reliably be detected. The SQL includes all sample preparations, dilutions and / or concentrations,
- Adj MDL The Adjusted Method Detection Limit is the MDL value adjusted for any sample dilutions or concentrations .
 - MDL The Method Detection Limit is the lowest theoretical value that is statistically different from zero for a specific method, taking into account all preparation steps and instrument settings.

All samples are reported on an "as received" basis unless the designation "drv" is added to the reported unit.

Copies of Aqua-Tech Laboratories, Inc. procedures and individual sampling plans are available upon request. Note that samples are collected by Aqua-Tech Laboratories, Inc. personnel unless otherwise noted in the "Sample Collected" field of this report as "Client" or "CLT".

Samples included in this report were received in acceptable condition according to Aqua-Tech Laboratories. Inc. procedures and 40 CFR, Chapter I, Subchapter D, Part 136.3, TABLE II. - Required containers, preservation techniques, and holding times, unless otherwise noted in this report.

Record Retention:

All reports, raw data, and associated quality control data are kept on file for 10 years before being destroyed. Any client that would like copies of records must contact Aqua-Tech Laboratories, Inc. no later than six months prior to the scheduled disposal. An administrative fee for retrieval and distribution will apply.

This report was approved by:

June M. Brien June M. Brien, Technical Director

The results in this report apply only to the samples analyzed. This analytical report must be reproduced in its entirety unless written permission is granted by Aqua-Tech Laboratories, Inc.

corp@agua-techlabs.com

www.aqua-techlabs.com

Page 1 of 7 H001145 1 ATL 021924 FIN Is 04 04 24 1615



Certificate: T104704371-23-27



TCEQ Lab ID T104704371

BRYAN FACILITY

635 Phil Gramm Boulevard Bryan, TX 77807 Phone: (979) 778-3707 Fax: (979) 778-3193



AUSTIN FACILITY 3512 Montopolis Dr. Suite A Austin, TX 78744 Phone: (512) 301-9559 Fax: (512) 301-9552

Analytical Report

AWR SERVICES INC 4/4/24 16:15

Report Printed:

H001145

See attached subcontract report for additional analysis and fertilizer recommendations.

Cypress Ranch WWTP Soil 0-	-12 Inches	Collected: 02/13/24 09:10 t Received: 02/13/24 14:00 t	by CLIENT by Mark Asher		<i>Type</i> Comp		<i>Matri</i> x Solid	C-O-C # H001145		
Lab ID# H001145-01	Result	Units Notes	MDL	Adj MDL	SQL	Lab	Analyzed	Method	Batch	
General Chemistry							 Province and Province Pr Province Province P			an la construction de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción
% Solids	85.6	g/100g (%)	0.10	0.10	0.10	Austin	02/19/24 08:45 SR	SM2540 G 2015	M173540	NEL
Total Kjeldahl Nitrogen as N	1130	mg/kg dry	0.13	75.5	116	Bryan	02/20/24 14:06 KMA	SM4500-NH3 G 2011	M173600	ANR
Plant Available Parameters										nine promote Stationale
Total Nitrogen	1130	mg/kg dry wt.		N/A	N/A	Calc	04/04/24 16:02 PMY	Calculation	M175657	ANR
Please see the attached subcontract rep	port for subcontracted	data.								

Cypress Ranch WWTP Soil	12-24 Inches	Collected: 02/13/24 09:38 Received: 02/13/24 14:00	3 by CLIENT) by Mark Asher		<i>Type</i> Comp		<i>Matri</i> x Solid	C-O-C H0011	# 45	
Lab ID# H001145-02	Result	Units Notes	MDL	Adj MDL	SQL	Lab	Analyzed	Method	Batch	
General Chemistry										
% Solids	86.1	g/100g (%)	0.10	0.10	0.10	Austin	02/19/24 08:45 SR	SM2540 G 2015	M173540	nte de la construction de la construcción NEL
Total Kjeldahl Nitrogen as N	778	mg/kg dry	0.13	36.8	56.7	Bryan	02/20/24 14:06 KMA	SM4500-NH3 G 2011	M173600	ANR
Plant Available Parameters										
Total Nitrogen	781	mg/kg dry wt.		N/A	N/A	Calc	04/04/24 16:02 PMY	Calculation	M175657	ANR
Please see the attached subcontract r	eport for subcontracted	I data.								

Page 2 of 7 H001145_1 ATL 021924 FIN_Is 04 04 24 1615

BRYAN FACILITY 635 Phil Gramm Boulevard Bryan, TX 77807 Phone: (979) 778-3707 Fax: (979) 778-3193



AUSTIN FACILITY 3512 Montopolis Dr. Suite A Austin, TX 78744 Phone: (512) 301-9559 Fax: (512) 301-9552

Analytical Report

AWR SERVICES INC

4/4/24

Report Printed:

16:15 H001145

			G	General C	Chemistry - Quality C	Control								
	Result	Units Notes	MDL	SQL	Analyzed	Spike Amou	Source nt Result	%R	%R Li	mits	RPD	RPD Limit	Batch	
% Solids - SM2540	G 2015													Austin
Blank	<0.10	g/100g (%)	0.10	0.10	02/19/24 08:45 SR	alland talah t	이와 안 또 아파 말	Add Dillik and	na litanii2.Pa	io dalla (Bill)	albahan 2003		M173540	
Duplicate	85.8	%	0.100	0.100	02/19/24 08:45 SR		85.6				0.338	10	M173540	
Duplicate	85.8	g/100g (%)	0.10	0.10	02/19/24 08:45 SR		85.6				0.338	10	M173540	
Total Kjeldahl Nitro	ogen as N -	SM4500-NH3 G 2011												Bryan
Initial Cal Check	4.71	mg/L	h histor chuidtealte ciaiteadh àite	v milli Lissi	02/20/24 14:06 KMA	4.56	santa seria da seria Esta da seria	103	90 - 1	10	lan de C	er den den er	2402227	
Low Cal Check	0.22	mg/L			02/20/24 14:06 KMA	0.200		112	70 - 1	30			2402227	
Blank	<0.20	mg/kg wet	0.13	0.20	02/20/24 14:06 KMA								M173600	
LCS	4.19	mg/kg wet	0.13	0.20	02/20/24 14:06 KMA	4.00		105	91 - 1	16			M173600	
LCS Dup	4.22	mg/kg wet	0.13	0.20	02/20/24 14:06 KMA	4.00		105	91 - 1	16	0.738	10	M173600	
Matrix Spike	3460	mg/kg dry	75.5	116	02/20/24 14:06 KMA	2320	1130	100	88.2 -	119			M173600	
Matrix Spike Dup	3580	mg/kg dry	75.5	116	02/20/24 14:06 KMA	2320	1130	105	88.2 -	119	5.21	20	M173600	
				Samp	le Preparation Summ	nary					Exter	nal		
Sample		Method	Prepa	red	Lab	Bottle	Initial	Units	Final	Units	Facto	n r	Batch	2월일 사용을 통하 같은 것은 것은 것은 것을 통하는 것은 것을 통하는 것을 통하는 것을 통하는 것을 통하는 것을 통하는 것을 통하는 것을 통하는 것을 통하는 것을 통하는 것을 통하는 것을 통하는 것을 통하는 것을 통하는
H001145-01														
% Solids		SM2540 G 2015	2/19/2	4 8:45 SR	Austin	C	5.00	g	5.00	mL	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	alum et dale.	M173540	ud - Grøn furfurfull.
Subcontract		Sub Contract Data Entry	4/4/24	14:43 PM)	r Bryan	-	-	-	-	-	-		M175653	
Total Kjeldahl Nitrog	jen as N	SM4500-NH3 G 2011	2/20/2	4 9:16 CT	G Bryan	в	0.0503	g	25.0	mL	1		M173600	
Total Nitrogen		Calculation	4/4/24	16:02 PM)	(¹		1.00	g	1.00	mL	1		M175657	
H001145-02														

H001145-02										방법 전에 관계하는 것이다.
% Solids	SM2540 G 2015	2/19/24 8:45 SR	Austin	С	5.00	g	5.00	mL	1 1	M173540
Subcontract	Sub Contract Data Entry	4/4/24 14:43 PMY	Bryan	-	-	-	-	-	-	M175653
Total Kjeldahl Nitrogen as N	SM4500-NH3 G 2011	2/20/24 9:16 CTG	Bryan	в	0.102	g	25.0	mL	1	M173600
Total Nitrogen	Calculation	4/4/24 16:02 PMY			1.00	g	1.00	mL	1	M175657

Page 3 of 7 H001145_1 ATL 021924 FIN_Is 04 04 24 1615

QUA-TECH C	hain-of-Custody and	d Analysis Request	ALL AND A	Aqu	ia-Tech lab	oratories, Inc.	C-O-C #
Client / Project Name:	AWR SERVIC	ES INC		351	Austin 2 Montopotis Dr.	Bryan 635 Phil Gramm Blvd.	H001145
Name Mike Barner	DW Drinki	ng Water Begggott togking	in the state	Au	ustin, TX 78744 512.301.9559	Bryan, TX 77807 979.778.3707	Page 1 of 1
5 Address 500 N Capital of Texas 1	HwyBldg1S & NP Non-F O Solid	otable Water available upor request.	TCEQ LAB ID T104704371	: Te	est results meet all ac requirements unles	creditation/certification s stated otherwise.	rte_ATL COC 012723.rpt
O C Phone (512) 402-1990		dy Maintained dy Transfer I Inbroken		<u> </u>	Sample	Custody	
email	CT Corre	ted Temperature	Relin- quished	ľ	·····	Client Date 2/13	14 Iced / Refrig
Analyses Requested: "A" pre Nai	fix indicates Austin, all others Bryan or a me format: Analysis-Matrix-Technology-	Subcontracted, indicated by [SUB]	sign)	In	son later		Sealed
[NEL] = NELAP accredited parameter [SUB] = NELAP accredited subcontracted para	[CNR] = No NELAP ameter [INF] = Information	accreditation required or available	Receiv- ed (print & -A	~ /	forb new	Date 2-13-2	
By relinquishing the samples listed below to Aqua- method that is within ATL's NELAP fields of accredita	-Tech laboratories, Inc. (ATL), the client agree	s to the following terms. Samples will be analyzed	by a sign) (KN		ATL Field Time 1226	см/сти
a NELAP lab that is accredited for that method. Cl analyzed by a compendial method. If a specific meth	lients will be notified of the subcontract lab's o nod is required, the client will note the method	letails. Other analytes not requiring accreditation w in the "Analysis Requested" column. The client ap	Il be Relin- proves quished	y —		Cilient Date	Refrig
all metho A current list of ATL's M	od modifications documented by ATL or the su NELAC fields of accreditation and other method	bcontract lab. ds are available on request.	(print & sign)		N	ATL Field Time	См/сти
Comments:		- LAB RECEIPT - B	25 Receiv- ed			Client Date	Iced / Refrig
		Temperature - CT (C): U.8 Yes	(print & sign)				См/сти
		Preservation Correct: N/A	Relin- quished	<u> </u>	Mark Ashe	er ⊡client Date 02/13	1/24 Stored / Refrig
		Thermometer ID:	4 sign)			Time 14:	Sealed
	1 ¹	081280 	ed (print &		M	lark Asher Date 02/1	3/24 Cond Good
· · · · · · · · · · · · · · · · · · ·	Ctait	End 1	sign)	24	-	Lab Time 14.	См/сти
Field Sample ID	Date Time	Date Time	Сотрозие Туре	Sample Matrix	Container (Checke	d box indicates bottle arrived in lat Type - Preservative)	Lab ID
Cypress Ranch WWTP Soil 0-12 Inches	2/13/24 0905	1413/24 0935 x	Comp	s	B SOIL TKM	MU SL 0.5LP N 0.25LP	H001145-01
A TS SL Grav SM2540 G [NEL] K TAMU Plant Available Mehlich 3 CNR [SUB] N Total TAMU CALC ENTRY [CNR] P TAMU Plant Available Mehlich 3 CNR [SUB] SUB pH SL TAMU (1:2) CNR [SUB] Y Billing Ship to Sub-Contract Lab	Ca TAMU Plant Available Meh Mg TAMU Plant Available Meh Na TAMU Plant Available Meh S SL TAMU Plant Available Me TKN SLAUTO SM4500 NH3 (ich 3 CNR [SUB] [ANR] Cond SL (1:2) Prot lich 3 CNR [SUB] [ANR] N Total SL PKG TA ich 3 CNR [SUB] [ANR] NO3N TAMU Extra hlich 3 CNR [SUB] Solids, Dry Weight 5 [CNR] Y Billing N Total Ca	e TAMU CNR [SUB] MU [CNR] table Mehlich 3 CNR [SU c	B]	g c soiltsi	0.1L	
Cypress Ranch WWTP Soil 12-24 Inches	2/13/24 0912	2/13/24 0958	Comp	S		MU SL 0.5LP N 0.25LP	H001145-02
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Report generated for: Aqua-Tech Laboratories, Inc. 635 Phil Gramm Blvd BRYAN, TX 77807

Laboratory Number: 651441

Brazos County

Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU College Station, TX 77843-2478 (979)321-5960

Visit our website: http://soiltesting.tamu.edu

Sample received on: 2/20/2024 Printed on: 3/5/2024 Area Represented: 22.35 acres

Customer Sample ID:	H001145-01	Α								
Crop Grown:	TURF FAIR	WAYS	, ATHLETIC	C FIELD	S, ET	с.				
Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHigh	Excess.
pH	8.4	(6.2)	-	Mod. Al	kaline					
Conductivity	41	(-)	umho/cm	None		:	: 01	•		Fertilizer Recommended
Nitrate-N	3	(-)	ppm**	11						50 lbs N/acre
Phosphorus	2	(50)	ppm	III						50 lbs P2O5/acre
Potassium	306	(160)	ppm							0 lbs K20/acre
Calcium	24,455	(180)	ppm]	0 Ibs Ca/acre
Magnesium	322	(50)	ppm							0 lbs Mg/acre
Sulfur	165	(13)	ppm		ļ10100000					0 lbs S/acre
Sodium	15	(-)	ppm	11						
Iron										
Manganese										
Copper										
Boron				1	1		l i		l	
Limestone Requirement										0.00 tons 100ECCE/acre
	ar de la service Service de la service									
		$\begin{array}{c} & T \mathcal{B}_{1} & x \\ & T \mathcal{B}_{2} & x \\ & T $								
									VIII SANA NGAZING	
		93974								
			an an an an an an an an an an an an an a	1.4.9	1995 (M					

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Nitrogen: Apply suggested nitrogen rate and then apply 40 lbs/A of nitrogen every 4 to 6 weeks as needed.

Online fertilizer calculators to determine appropriate fertilizers and application rates. http://soiltesting.tamu.edu

Methods: pH and conductivity/ 2:1; nitrate-N/Cd-red.; P, K, Ca, Mg, Na, and S/Mehlich 3 by ICP; Fe, Zn, Mn, and Cu/DTPA by ICP; and B/hot water by ICP.

ProAnalysisVer. 2.19j

Page 5 of 7 H001145_1 ATL 021924 FIN_Is 04 04 24 1615



Report generated for: Aqua-Tech Laboratories, Inc. 635 Phil Gramm Blvd BRYAN, TX 77807

Laboratory Number: 651442

Brazos County

Soil Analysis Report

Soil, Water and Forage Testing Laboratory Department of Soil and Crop Sciences 2478 TAMU College Station, TX 77843-2478 (979)321-5960

Visit our website: http://soiltesting.tamu.edu

Sample received on: 2/20/2024 Printed on: 3/5/2024 Area Represented: 22.35 acres

Customer Sample ID:	H001145-02	A								
Crop Grown:	TURF FAIR	WAYS	, ATHLETIC	C FIELD	S, ETO	C .				
Analysis	Results	CL*	Units	ExLow	VLow	Low	Mod	High	VHigh	Excess.
pH Conductivity	8.4 44	(6.2) (-)	- umho/cm	Mod. Al None	kalinə		, CI			Fertilizer Recommended
Nitrate-N Phosphorus	3	(-)	ppm**	1						50 lbs N/acre
Potassium	267	(50)	ppm ppm							0 lbs K20/acre
Calcium	24,688	(180)	ppm						111	0 lbs Ca/acre
Magnesium	322	(50)	ppm)				0 lbs Mg/acre
Sulfur Sodium	175	(13)	ppm				EIXIJIXIJI	1111111111		0 lbs S/acre
Iron	10	(-)	ppm							
Zinc										
Manganese										
Copper Boron										
Limestone Requirement				1			: 1	:		0.00 tons 100ECCE/acre
ана 1997 — С. С. С. С. С. С. С. С. С. С. С. С. С.				T SALAN L'ANS AN	en ganesi Sevensela Sevensela	YAN)				
				ileitea Moltrich		9323 SASA				
		1.1.1								
	967-327-52-52 19	SEX457209				1992 1997	(1997-1998) (1997-1998)	(1596-94)		

*CL=Critical level is the point which no additional nutrient (excluding nitrate-N, sodium and conductivity) is recommended. **ppm=mg/kg

Nitrogen: Apply suggested nitrogen rate and then apply 40 lbs/A of nitrogen every 4 to 6 weeks as needed.

Online fertilizer calculators to determine appropriate fertilizers and application rates. http://soiltesting.tamu.edu

Methods: pH and conductivity/ 2:1; nitrate-N/Cd-red.; P, K, Ca, Mg, Na, and S/Mehlich 3 by ICP; Fe, Zn, Mn, and Cu/DTPA by ICP; and B/hot water by ICP.

ProAnalysisVer. 2.19j

Page 6 of 7 H001145_1 ATL 021924 FIN_Is 04 04 24 1615

All analyses must be partormed by a TNI approved method scatting by the TCGL Contact ATL's sample control and enable of the critical and enables of the critic	A	AQUA-TECH LABORATORIE	Chain-of-Custody	and Analysis Reque	est	ALCORE OF	Aqua-Tech la	ooratories, I	nc. C-O-C #
P TANU - Soil Lab g p Plastic Text Or Soil Plage 1 of 1 G G G Glass G G Glass Text Or Soil Plastic	A	Il analyses must be perfo custodian	ormed by a TNI approved method ce via voice and email if your methods	tified by the TCEQ. Contact AT a do not meet this criteria.	L's sample		Austin 3512 Montopolis Dr Suite A	Bryan 635 Phil Gramm Bl	vd.
Domments: Image: Sector document for the provided of the provide	SHIPPED TO	PTAMU - Soil LabpPlasticQ2610 F&B RoadGGlassCollege Station, TX 77845ZCMCustody MaintainedPhone: (979) 845-4816CTUCustody Transfer Unbroken ATLAqua-Tech Laboratories, Inc			T104704371 TX239 Relin- gushed	Page 1 of 1 sc_ATL TAMU 011921			
Lines balow document candition at receipt in tab (shipped to) listed above. Notice Cooler ID Temp Read (C) Corrected Temp (C) Thermometer ID Plaase hold MUM1411 Mathice Coolers for pick-up. Date Date Date MUM1411 Mathice Coolers for pick-up. Date Date Date Date Sample ID Sample ID Analysis Request (ATL findicate cooler number in parenthesis for each container - only required if more than one cooler Each ID Sample ID Site Plant Available P Plant Available NO3N Extractable (ATL findicate cooler number in parenthesis for each container - only required if more than one cooler Lab ID 1001145-01 Site Plant Available P Plant Available NO3N Extractable () H001145-01 [A] - [SUB] TAMU SL 112/213/22 09:10 Site Plant Available P Plant Available NO3N Extractable () H001145-02 [A] - [SUB] TAMU SL 12/32/2 09:38 Site Plant Available P Plant Available NO3N Extractable () H001145-02 [A] - [SUB] TAMU SL 13/22 09:38 Site Plant Available P Plant Available NO3N Extractable () H001145-02 [A] - [SUB] TAMU SL 13/24 09:38 PH Conductivity (1:2) NO3N Extractable () H001145-02 [A] - [SUB] TAMU SL 10/14 PH Conductivity (1:	Com	^{ments:} ase use Sample ID a	s PO# and email reports to re	porting@aqua-techlabs.c	om.	(print & sign) Receiv- ed (print & sign) Relin- quished (print & sign) Sign)	<u> </u>	Ctient Date	/350 □ Custody Sealed □ Iced / Refi □ CM / CTU □ Iced / Refi
Sample ID Sampled / Matrix Analysis Request (ATL indicates cooler number in parentheses for each container - only required if more than one cooler listed above.) Lab ID 1001145-01 Mehlich 3 - TAMU () H001145-01 [A] - [SUB] TAMU SL Lab ID 2/13/24 09:10 S SL Plant Available Na Plant Available P Plant Available Mg Plant Available NO3N Extractable K Plant Available () H001145-01 [A] - [SUB] TAMU SL 0.5LP 1001145-02 TAMU - 1:2 Soil Extract PH Conductivity (1:2) () H001145-02 [A] - [SUB] TAMU SL 0.5LP 2/13/24 09:38 S SL Plant Available P Plant Available NO3N Extractable NO3N Extractable () H001145-02 [A] - [SUB] TAMU SL 2/13/24 09:38 S SL Plant Available P Plant Available NO3N Extractable NO3N Extractable () H001145-02 [A] - [SUB] TAMU SL 2/13/24 09:38 S SL Plant Available P Plant Available NO3N Extractable 101 Ca Plant Available Mg Plant Available NO3N Extractable 101 Ca Plant Available Mg Plant Available NO3N Extractable 101 Ca Plant Available Mg Plant Available NO3N Extractable 11 Conductivity (1:2) P Int Available	<u> </u>	Lines below Cooler ID Temp	r document condition at receipt in la o Read (C) Corrected Temp MA MA	C) Thermometer ID P	lease hold colers for pick-up.	Receiv- ed (print & si(pri) Relin- quished (print & sign) Receiv- ed Sign)	riskim	Chernt Date Chernt Date Chernt Date ATL Field Trme Date Z Time	i lced / Refr CM / CTU i ced / Refr CM / CTU Sealed / 20/ 2-4 Ced / Refr CM / CTU CM / CTU
HOD1145-01 Methilich 3 - TAMU () HO01145-01 [A] - [SUB] TAMU SL 2/13/24 09:10 S SL Plant Available Mg Plant Available NO3N Extractable Noil TAMU - 1:2 Soil Extract 0.5LP PH Conductivity (1:2) () H001145-02 [A] - [SUB] TAMU SL 1001145-02 Methilich 3 - TAMU 2/13/24 09:38 S SL Plant Available P Plant Available NO3N Extractable () H001145-02 [A] - [SUB] TAMU SL 2/13/24 09:38 S SL Plant Available P Plant Available No Plant Available Mg Plant Available NO3N Extractable Vilay 2 Methilich 3 - TAMU () H001145-02 [A] - [SUB] TAMU SL 0.5LP S SL Plant Available P Plant Available NG Plant Available NO3N Extractable () H001145-02 [A] - [SUB] TAMU SL 0.5LP S SL Plant Available Mg Plant Available NO3N Extractable 0 il C a Plant Available Mg Plant Available K Plant Available 1 C a Plant Available K Plant Available 0.5LP	7 2 5	Sample ID ampled / Matrix	An	alysis Request		(ATL in each cont	idicates cooler number in ainer - only required if more	arentheses for e than one cooler	Lab ID
IO01145-02 Mehlicit 3 - TAMU () H001145-02 [A] - [SUB] TAMU SL 2/13/24 09:38 S SL Plant Available P Plant Available NO3N Extractable oil S SL Plant Available Mg Plant Available K Plant Available Ca Plant Available Mg Plant Available K Plant Available PH Conductivity (1:2) Conductivity (1:2)	1 2/1	01145-01 3/24 09:10	S SL Plant Available P P Na Plant Available Mg Ca Plant Available TA i pH Con	Mehlich 3 - TAMU ant Available NO3N Plant Available K Plant MU - 1:2 Soil Extract ductivity (1:2)	Extractable Available	() H0 0.5LP	01145-01 [A] - [SUB]	TAMU SL	
pH Conductivity (1·2)	2/1 2/1 001)1145-02 3/24 09:38	S SL Plant Available P Pl Na Plant Available Mg Ca Plant Available 74	Mehilich 3 - TAMU ant Available NO3N i Plant Available K Plant MU - 1:2 Soil Extract	Extractable Available	() H0 0.5LP	01145-02 [A] - [SUB]	TAMU SL	
	NA N4 ;		pH Con	ductivity (1·2)					

Attachment 15: EFFLUENT MONITORING DATA

WWTP				CYPRES	SS RANCH V	VCID #1	and the second second second second second second second second second second second second second second second	College States	
Parameter	BOD	CBOD	TSS	NH3-N	E.COLI	pН	NTU	FECAL	AER
Limitations	35-10	35-10	60-15	na	126	6-9	3.0	75	3000
1/3/2023	4	3	5	4.07	104.0	7.0	2.3	1	3930
1/4/2023		3				7.0	1.8	1	
1/10/2023	2	2	3	4.18		7.2	1.5	1	3900
1/11/2023		2				7.2	1.7	1	
1/17/2023	9	10	4	6.07		7.2	2.1	2	5950
1/18/2023		2				7.2	2.0	1	
1/24/2023	2	3	4	3.53		7.0	1.7	1	3400
1/25/2023		2				7.0	2.3	1	
	·····				-			ļ	
			•						<u> </u>
AVG	4.3	3.4	4.0	4.46	104.0	7.10	1.9	1.1	4295
MAX	9	10	5	6.07	104.0	7.2	2.3	2	5950
MIN	. 2	2	3	3.53	0	7.0	1.5	1	3400

WWTP	and an interaction of the second second second second second second second second second second second second s		TC MU) #10	And and a state of the second s		E
Parameter	BOD	TSS	рН	DO	F.COL.	AER	
Limitations	65-20	65-20	6-9	na	na	3000	
1/5/2023	12	15	7.3	6.9	100	2820	
1/12/2023	5	9		6.5	1		
1/19/2023	8	14		7.1	106	3140	
1/26/2023	14	53		6.5	1		
AVG	9.8	22.8	7.30	6.8	52.0	2980	
MAX	14	53	7.3	7.1	106	3140	

40% violations li	mits
30D & TSS Limits	Daily
28	28

BOD & TSS Weekly 42 42

Single Grab Limit 91 91

WWTP	Constraints of Constraints	alatini September	CYPRESS RANCH WCID #1								
Parameter	BOD	CBOD	TSS	NH3-N	E.COLI	рН	NTU	FECAL	AER		
Limitations	35-10	35-10	60-15	na	126	6-9	3.0	75	3000		
2/2/2023		8				7.3	8.2	1	An information of the Works of the Long		
2/3/2023	7	8	15	5.23	<1.0	7.4	7.1	1	4200		
2/7/2023	3	3	6	4.44	47.1	7.0	3.8	1	3470		
2/8/2023		5				7.0	3.7	1	***		
2/14/2023	3	3	9	4.23		7.0	3.8 Million	1	3870		
2/15/2023		4				7.2	2.9	1			
2/21/2023	3	3	6	4.56		7.0	3.7	8	3720		
2/22/2023		8	3			7.0	3.0	1	· · · · · ·		
2/28/2023	2	3	8	4.59		7.0	5.0	1	3220		
AVG	3.6	5.0	7.8	4.61	47.1	7.10	4.6	1.8	3696		
MAX	7	8	15	5.23	47.1	7.4	8.2	8	3870		
MIN	2	3	3	4.23	0	7.0	2.9	1	3220		

WWTP		HOLES HARD BUT HE	TC MU	D#10		
Parameter	BOD	TSS	рН	DO	F.COL.	AER
Limitations	65-20	65-20	6-9	na	na	3000
2/3/2023	61	280	6.4	6.0	<10	735
2/14/2023	14	44		8.6	570	
2/16/2023	14	62		69	10	
2/23/2023	18	- 37		8.0	18	4480
					<u> </u>	
AVG	26.8	105.8	6.40	7.5	199.3	2607.5
MAX	61	280	6.4	8.6	570	4480
MIN	14	37	6.4	6	10	735

40% violations limits BOD & TSS Limits Daily 28 28

BOD & TSS Weekly 42 42

Single Grab Limit 91 91

WWTP				CYPRE	SS RANCH V	VCID #1			
Parameter	BOD	CBOD	TSS	NH3-N	E.COLI	рН	NTU	FECAL	AER
Limitations	35-10	35-10	60-15	na	126	6-9	3.0	75	3000
3/1/2023		4				7.0	4.1	1	
3/7/2023	2	3	6	4.43	<1.0	7.1	3.6	1	4060
3/8/2023		3				7.0	3.5	1	
3/14/2023	2	1	5	0.17		7.0	3.2	1	3360
3/15/2023		2				7.0	2.8	1	
3/21/2023	2	2	1	0.62		7.1	1.0	1	3600
3/22/2023		2				7.0	1.0	1	
3/28/2023	2	1	1	0.39		7.0	1.0	1	3930
3/29/2023		2				7.0	1.0	60	
					1				
AVG	2.0	2.2	3.3	1.40	#DIV/0!	7.02	2.4	7.6	3738
MAX	2	4	6	4.43	0.0	7.1	4.1	60	3930
MIN	2	1	1	0.17	0	7.0	1.0	1	3360

WWTP		an an an an an an an an an an an an an a	TC MU	D #10	interest scotling Seed.	Constanting of the second second second second second second second second second second second second second s
Parameter	BOD	TSS	pН	DO	F.COL.	AER
Limitations	65-20	65-20	6-9	na	na	3000
3/2/2023	11	9	7.4	8.6	4	2010
3/9/2023	6	12		8.7	2	
3/16/2023	8	16		9.1	2	2700
3/23/2023	3	20		8.6	2	
3/30/2023	3	8		8.8	22	
AVG	6.2	13.0	7.40	8.8	6.4	2355
MAX	11	20	7.4	9.1	22	2700
MIN	3	8	7.4	8.6	2	2010

40% violations limits

BOD & TSS	Limits	Daily
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28	28
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BOD & TSS Weekly

42

Single Grab Limit

91 91

WWTP	TP CYPRESS RANCH WCID #1								
Parameter	BOD	CBOD	TSS	NH3-N	E.COLI	рН	NTU	FECAL	AER
Limitations	35-10	35-10	60-15	na	126	6-9	3.0	75	3000
4/4/2023	2	2	1	1.27	1.0	7.0	1.0	1	3480
4/5/2023		1				7.0	1.0	1	
4/11/2023	1	1	1	0.8		6.9	1.0	1	3760
4/12/2023		2				6.9	1.0	3	
4/18/2023	1	2	2	0.05		7.1	1.0	1	3770
4/19/2023		2				7.1	1.0	1	
4/25/2023	1	1	1	0.65		7.0	1.0	1	3720
4/26/2023		1				7.0	1.4	1	
								<u>.</u>	
······									
AVG	1.3	1.5	1.3	0.69	1.0	7.00	1.1	1.3	3683
MAX	2	2	2	1.27	1.0	7.1	1.4	3	3770
MIN	1	1	1	0.05	0	6.9	1.0	1	3720

WWTP			TC MUI	D #10	Contractions HCCUTTURAL	Contraction of the second
Parameter	BOD	TSS	рН	DO	F.COL.	AER
Limitations	65-20	65-20	6-9	na	na	3000
4/6/2023	3	10	7.5	8.7	50	1667
4/13/2023	5	11		9.1	4	
4/20/2023	11	15		9.0	1	1180
4/27/2023	10	18		9.1	1	
AVG	7.3	13.5	7.50	9.0	14.0	1423.5
MAX	11	18	7.5	9.1	50	1667
MIN	3	10	7.5	8.7	1	1180

40% violations limits

BOD & TSS Li	mits Daily
28	28

BOD & TSS Weekly

42 42

Single Grab Limit

WWTP	CYPRESS RANCH WCID #1								
Parameter	BOD	CBOD	TSS	NH3-N	E.COLI	pН	NTU	FECAL	AER
Limitations	35-10	35-10	60-15	na	126	6-9	3.0	75	3000
5/2/2023	3	2	1	1.98	517.0	7.0	1.0	2200	3320
5/3/2023		1				7.1	1.8	1	
5/9/2023	2	2	1	3.81		7.0	1.6	1	3560
5/10/2023		1				7.0	1.1	2	1
5/16/2023	2	2	1	0.75		7.0	2.1	1	3150
5/17/2023		3				7.1	1.8	1	
5/23/2023	2	2	1	2.47		7.0	1.9	1	4160
5/24/2023		3				7.0	1.0	1	
5/30/2023	1	1	1	0.05		7.1	1.0	1	4120
5/31/2023		2		-		7.0	1.0	1	
					-				
AVG	2.0	1.9	1.0	1.81	517.0	7.03	1.4	221.0	3662
MAX	3	3	1	3.81	517.0	7.1	2.1	2200	4160
MIN	2	1	1	0.75	0	7.0	1.0	1	3150

WWTP	en en en en en en en en en en en en en e		TC MUI	D #10		aluktor Marina da aluktor
Parameter	BOD	TSS	рН	DO	F.COL.	AER
Limitations	65-20	65-20	6-9	na	na	3000
5/4/2023	2	9	8.0	9.3	1	1253
5/11/2023	8	8		8.6	1	
5/18/2023	8	12		8.3	1	518
5/25/2023	. 8	38		9.8	1	
					· · · · · · · · · · · · · · · · · · ·	
A\/(C		16.0				
AVG	.5	10.8	8.00	9.0	1.0	885.5
MAX	8	38	8	9.8	1	1253
MIN	2	8	8	8.3	1	518

40% violations limits BOD & TSS Limits Daily 28 28

BOD & TSS Weekly 42 42

Single Grab Limit

WWTP		CYPRESS RANCH WCID #1											
Parameter	BOD	CBOD	TSS	NH3-N	E.COLI	рН	NTU	FECAL	AER				
Limitations	35-10	35-10	60-15	na	126	6-9	3.0	75	3000				
6/6/2023	2	1	1	0.58	1.0	6.9	1.0	1	4100				
6/7/2023		2		· · .		6.8	1.0	1					
6/13/2023	2	1	1	0.45		6.9	1.0	1	5000				
6/14/2023		1				6.9	1.0	1	<u> </u>				
6/20/2023	2	2	1	0.08		7.1	1.0		4030				
6/21/2023	-	2				7.2	1.0	1					
6/27/2023	2	2	1	1.34		7.2	1.5	1	4600				
6/28/2023		3				7.2	· 1.0	1	-				
								<u></u>					
AVG	2.0	1.8	1.0	0.61	1.0	7.03	1.1	1.0	4433				
MAX	2	3	1	1.34	1.0	7.2	1.5	1	5000				
MIN	2	1	1	0.08	0	6.8	1.0	1	4030				

WWTP	THE REAL PROPERTY AND		TC MU	D #10	CONTRACTOR OF STREET, ST.	
Parameter	BOD	TSS	pH	DO	F.COL.	AER
Limitations	65-20	65-20	6-9	na	na	3000
6/1/2023	9	7	7.3	5.8	2	2180
6/8/2023	5	6		5.9	1	
6/15/2023	5	10		5.6	1	2280
6/22/2023	3	9		5.7	4	
6/29/2023	7	18		6.1	1	
AVG	5.8	10.0	7.30	5.8	1.8	2230
MAX	9	18	7.3	6.1	4	2280
MIN	3	6	7.3	5.6	1	2180

40% violations limits BOD & TSS Limits Daily 28 28

BOD & TSS Weekly 42 42

Single Grab Limit 91 91

WWTP	State of the second	and a statistic terration of the state of th		CYPRE	SS RANCH	WCID #1	and and a second second second second second second second second second second second second second second se		
Parameter	BOD	CBOD	TSS	NH3-N	E.COLI	рН	NTU	FECAL	AER
Limitations	35-10	35-10	60-15	na	126	6-9	3.0	75	3000
7/4/2023	2	2	1	2.4	1.0	6.9	1.0	1	4350
7/5/2023		3				7.0	1.0	1	
7/11/2023	1	1	1	0.36		6.8	1.2	16	4670
7/12/2023		2				7.0	1.1	1	
7/18/2023	1	1	1	0.8		7.0	1.0	1	4750
7/19/2023		2				7.0	1.0	1	
7/25/2023	1	2	1	0.47		7.0	1.0	1	4380
7/26/2023		2				7.0	1.0	1	
		······							
AVG	1.3	1.9	1.0	1.01	1.0	6.96	1.0	2.9	4538
MAX	2	3	1	2.4	1.0	7	1.2	16	4750
MIN	1	1	1	0.36	0	6.8	1.0	1	4380

WWTP		Olmo-received and the second	TC MUI	D #10	on - De Brude Thirt - De Brude	
Parameter	BOD	TSS	рН	DO	F.COL. /	AER
Limitations	65-20	65-20	6-9	na	na	3000
7/6/2023	7	6	7.3	5.4	1	2647
7/13/2023	7	15		5.8	1	
7/20/2023	6	10		5.6	26	3460
7/27/2023	8	7		5.6	1	
AVG	7.0	9.5	7.30	5.6	7.3	3053.5
MAX	8	15	7.3	5.8	26	3460
MIN	6	6	7.3	5.4	1	2647

40% violations limits BOD & TSS Limits Daily

28 28

BOD & TSS Weekly

42 42

Single Grab Limit

WWTP	CYPRESS RANCH WCID #1								
Parameter	BOD	CBOD	TSS	NH3-N	E.COLI	pН	NTU	FECAL	AER
Limitations	35-10	35-10	60-15	na	126	6-9	3.0	75	3000
8/1/2023	1	1	1	0.38	1.0	7.0	1.0	1	4420
8/2/2023		1				7.0	1.0	1	
8/8/2023	1	1	1	0.44		7.0	1.0	1	4920
8/9/2023		2				7.0	1.0	1	
8/15/2023	1	1	1	0.34		7.0	1.0	2	5000
8/16/2023		2				7.2	1.0	1	
8/22/2023	1	1	1	0.64		6.9	1.4	1	5120
8/23/2023		1				7.0	1.0		
8/25/2023								58	
8/29/2023	1	1	1	0.4		7.0	1.0	1080	4970
8/30/2023		1				7.0	1.0	153	
								<u>_</u>	
AVG	1.0	1.2	1.0	0.44	1.0	7.01	1.0	129.9	4886
MAX	1	2	1	0.64	1.0	7.2	1.4	1080	5120
MIN	1	1	1	0.34	0	6.9	1.0	1	4920

WWTP		nin Talai seri seri din dinasi. Dinasi seri seri seri	TC MUI) #10		State of the second sec
Parameter	BOD	TSS	рН	DO	F.COL.	AER
Limitations	65-20	65-20	6-9	na	na	3000
8/3/2023	3	103	6.6	5.5	36	5960
8/10/2023	9	8		5.8	2	
8/17/2023	12	11		6.0	11	2540
8/24/2023	13	12		5.5	15	
8/31/2023	15	14				
AVG	10.4	29.6	6.60	5.7	16.0	4250
MAX	15	103	6.6	6.0	36	5960
MIN	3	8	6.6	5.5	2	2540

40% violations lim	its
BOD & TSS Limits D	aily
28	28

BOD & TSS Weekly 42 42

Single Grab Limit

WWTP	and the second	in the second second second second second second second second second second second second second second second	Cold States	CYPRES	SS RANCH	NCID #1			CONTRACTOR OF STREET
Parameter	BOD	CBOD	TSS	NH3-N	E.COLI	рН	NTU	FECAL	AER
Limitations	35-10	35-10	60-15	na	126	6-9	3.0	75	3000
9/5/2023	1	1	1	0.65	1.0	7.1	1.0	1	4850
9/6/2023	-	1				7.1	1.0	1	
9/12/2023	1	1	1	0.75		6.8	1.0	1	5370
9/13/2023		1				6.8	1.0	1	
9/19/2023	1	1	1 '	0.22		7.0	1.0	1	4720
9/20/2023		1				7.0	1.0	1	
9/26/2023	1	1	1	0.40		6.9	1.0	1	4850
9/27/2023		1				6.9	1.0	2	
AVG	1.0	1.0	1.0	0.51	1.0	6.95	1.0	1.1	4948
MAX	1	1	1	0.75	1.0	7.1	1	2	5370
MIN	1	1	1	0.22	0	6.8	1.0	1	4720

WWTP			TC MUI	D#10	and a state of the second second second second second second second second second second second second second s	and the second sec
Parameter	BOD	TSS	рН	DO	F.COL.	AER
Limitations	65-20	65-20	6-9	na	na	3000
9/7/2023	10	7	7.7	5.0	102	2320
9/14/2023	7	7		6.0	82	
9/21/2023	6	6		5.6	125	2130
9/28/2023	6	8		5.8	116	
AVG	7.3	7.0	7.70	5.6	106.3	2225
MAX	10	8	7.7	6.0	125	2320
MIN	6	6	7.7	5	82	2130

40% violations limits BOD & TSS Limits Daily 28 28

BOD & TSS Weekly 42 42

Single Grab Limit 91 91

WWTP				CYPRE	SS RANCH	WCID #1	and station from	Contraction of the State of the State of the State	Soleting of the second se
Parameter	BOD	CBOD	TSS	NH3-N	E.COLI	рН	NTU	FECAL	AER
Limitations	35-10	35-10	60-15	na	126	6-9	3.0	75	3000
10/3/2023	2	2	1	0.36	1.0	7.0	1.0	1	4800
10/4/2023		1				7.1	1.7	1	
10/10/2023	1	1	1	0.05		6.9	1.0	1	4650
10/11/2023		1				7.2	1.0	1	
10/17/2023	1	1	1	0.05		7.2	1.0	1	4650
10/18/2023		1				7.0	1.0	1	
10/24/2023	2	1	1	0.24		7.1	1.0	1	4370
10/25/2023		1				7.1	1.1	1	
10/31/2023	2	2	1	0.05		7.0	1.0	1	4400
AVG	1.6	1.2	1.0	0.15	1.0	7.07	1.1	1.0	4574
MAX	2	2	1	0.36	1.0	7.2	1.7	1	4650
MIN	1	1	1	0.05	0	6.9	1.0	1	4370

WWTP	and a state of the second second second second second second second second second second second second second s	or shales manager	TC MUI)#10		
Parameter	BOD	TSS	рН	DO	F.COL.	AER
Limitations	65-20	65-20	6-9	na	na	3000
10/5/2023	8	9	7.5	5.2	4	2073
10/12/2023	12	12		6.7	1	
10/19/2023	8	9		6.2	42	1980
10/26/2023	10	11		6.6	122	
				<u> </u>		
AVG	9.5	10.3	7.50	6.2	42.3	2026.5
MAX	12	12	7.5	6.7	122	2073
MIN	8	9	7.5	5.2	1	1980

40% violations limits BOD & TSS Limits Daily 28 28

BOD & TSS Weekly

42 42

Single Grab Limit

WWTP				CYPRES	SS RANCH	NCID #1		Danisaking Selatan Selatan Selatan	and a second second
Parameter	BOD	CBOD	TSS	NH3-N	E.COLI	pН	NTU	FECAL	AER
Limitations	35-10	35-10	60-15	na	126	6-9	3.0	75	3000
11/1/2023		4				7.2	1.4	1	
11/7/2023	2	2	1	1.1	1.0	7.2	1.1	1	4800
11/8/2023		1				7.0	1.0	1	
11/14/2023	1	1	1	1.1		7.2	1.0	1	4880
11/15/2023		1				7.1	1.0	1	
11/21/2023	1	1	1	1.01		7.0	1.0	1	5040
11/22/2023		1				7.0	1.1	1	
11/28/2023	1	1	1	0.24		7.2	1.0	1	4950
11/29/2023		1				7.0	1.0	1	
AVG	1.3	1.4	1.0	0.86	1.0	7.10	1.1	1.0	4918
MAX	2	4	1	1.1	1.0	7.2	1.4	1	5040
MIN	1	1	1	0.24	0	7.0	1.0	1	4880

WWTP	an an an an an an an an an an an an an a	and the second state of th	TC MUI	O #10	an tan sa sa sa sa sa sa sa sa sa sa sa sa sa	line te serve s
Parameter	BOD	TSS	рН	DO	F.COL.	AER
Limitations	65-20	65-20	6-9	na	na	3000
11/2/2023	8	8	7.7	11.0	4	
11/9/2023	7	9		5.6	86	
11/16/2023	8	11		6.7	22	2140
11/22/2023	4	12		7.6	4	
11/30/2023	7	8		7.4	1	
		<u>.</u>				
		· · · · · · · · · · · · · · · · · · ·				
AVG	6.8	9.6	7.70	7.7	23.4	2140
MAX	8	12	7.7	11.0	86	2140
MIN	4	8	7.7	5.6	1	2140

40% violations limits							
BOD & TSS Limits Daily							
28	28						
BOD & TSS Wee	kly						

42 42

Single Grab Limit 91 91

WWTP		Filling - State St	- Conservation of the second se	CYPRE	SS RANCH	NCID #1		Circles and the	
Parameter	BOD	CBOD	TSS	NH3-N	E.COLI	рН	NTU	FECAL	AER
Limitations	35-10	35-10	60-15	na	126	6-9	3.0	75	3000
12/5/2023	1	1	1	0.23	1.0	7.1	1.0	1	5100
12/6/2023		1				7.0	1.0	1	· · · · · · · · · · · · · · · · · · ·
12/12/2023	2	2	1	0.12		7.0	1.0	1	6120
12/13/2023		1				7.0	1.0	1	
12/19/2023	1	1	1	0.69		6.9	1.0	1	5950
12/20/2023		1				7.0	1.0	1	
12/27/2023		1		-		7.2	1.0	1	
12/28/2023	1	1	1	0.05		7.2	1.0	1	6700
n									
AVG	1.3	1.1	1.0	0.27	1.0	7.05	1.0	1.0	5968
MAX	2	2	1	0.69	1.0	7.2	1	1	6700
MIN	1	1	1	0.05	0	6.9	1.0	1	5950

WWTP		tille and an and	TC MUI	D#10	IN STORES	
Parameter	BOD	TSS	рН	DO	F.COL.	AER
Limitations	65-20	65-20	6-9	na	na	3000
12/7/2023	7	16	6.9	9.0	40	3133
12/14/2023	15	15	7.5	9.8	118	
12/21/2024	13	15	6.7	8.4	45	3630
1/19/1900	19	19	8.3	11.5	4	
						. <u></u>
AVG	13.5	16.3	7.35	9.7	51.8	3381.5
MAX	19	19	8.3	11.5	118	3630
MIN	7	15	6.7	8.4	4	3133

40% violations limits						
BOD & TSS Limits D	aily					
28	28					

BOD & TSS Weekly 42 42

Single Grab Limit

WWTP	SILL MARK	and the second s		CYPRES	SS RANCH V	VCID #1	and the second second second second second second second second second second second second second second second	and a second second second second second second second second second second second second second second second	
Parameter	BOD	CBOD	TSS	NH3-N	E.COLI	рН	NTU	FECAL	AER
Limitations	35-10	35-10	60-15	na	126	6-9	3.0	75	3000
1/2/2024	1	1	1	1.46	1.0	7.1	1.0	1	5500
1/3/2024		1				7.3	1.0	1	
1/9/2024	1	1	1	1.49		7.0	1.0	33	6050
1/10/2024		2				7.1	1.0	1	
1/16/2024	2	2	1	0.05		7.1	1.0	1	
1/17/2024		2				7.2	1.4	1	4830
1/23/2024	1	1	1	0.28		7.0	1.0	1	6050
1/24/2024		1				7.0	1.0	1	
1/30/2024	4	3	1			7.0	1.0	1	5200
1/31/2024		2				7.0	1.8	1	
AVG	1.8	1.6	1.0	0.82	1.0	7.08	1.1	4.2	5526
MAX	4	3	1	1.49	1.0	7.3	1.8	33	6050
MIN	1	1	1	0.05	0	7.0	1.0	1	4830

WWTP		Constanting of the second	TC MU	D#10		and the second sec	В
Parameter	BOD	TSS	рН	DO	F.COL.	AER	ĺ
Limitations	65-20	65-20	6-9	na	na	3000	
1/4/2024	13	15	6.9	7.6	62	3367	
1/11/2024	7	8		7.7	2		
1/19/2024	7	14		6.9	112	3230	
1/25/2024	14	10		7.7	9		
AVG	10.3	11.8	6.90	7.5	46.3	3298.5	
MAX	14	15	6.9	7.7	112	3367	
MIN	7	8	6.9	6.9	2	3230	

DD & TSS Limits	Daily
28	28

BOD & TSS Weekly 42 42

Single Grab Limit

WWTP	All and a second			CYPRES	S RANCH V	VCID #1		Construction of the second	and a second second second second second second second second second second second second second second second s
Parameter	BOD	CBOD	TSS	NH3-N	E.COLI	рН	NTU	FECAL	AER
Limitations	35-10	35-10	60-15	na	126	6-9	3.0	75	3000
2/6/2024	3	2	1	0.77	1.0	7.0	1.0	1	6050
2/7/2024		4				7.1	1.0	1	
2/13/2024	2	2	1	0.05		7.1	1.0	1	5900
2/14/2024		2				7.1	1.0	1	-
2/20/2024	2	1	1	0.81		7.3	1.4	1	6250
2/21/2024		2	1			7.2		1	
2/27/2024	2	2	1	1.18		7.2	1.0	1	5870
2/28/2024		1	1			7.1		1	
AVG	2.3	2.0	1.0	0.70	1.0	7.14	1.1	1.0	6018
MAX	3	4	1	1.18	1.0	7.3	1.4	1	6250
MIN	2	1	1	0.05	0	7.0	1.0	1	5870

WWTP		n an	TC MUI	D #10	Collection Collection	n of the second
Parameter	BOD	TSS	рН	DO	F.COL.	AER
Limitations	65-20	65-20	6-9	na	na	3000
2/1/2024	6	6	7.2	8.0	1	3720
2/8/2024	11	10		7.4	1	
2/15/2024	11	12		7.1	8	4658
2/22/2024	10	7		7.0	1	
2/29/2024	12	12		14.6	20	
AVG	10.0	9.4	7.20	8.8	6.2	4189
MAX	12	12	7.2	14.6	20	4658

40% violations limits			
BOD & TSS Limits Daily			
28	28		

BOD & TSS Weekly 42 42

Single Grab Limit 91 91

WWTP				CYPRES	SS RANCH N	NCID #1			
Parameter	BOD	CBOD	TSS	NH3-N	E.COLI	рН	NTU	FECAL	AER
Limitations	35-10	35-10	60-15	na	126	6-9	3.0	75	3000
3/5/2024	1	2	1	1.62	1.0	7.2	1.0	1	5500
3/6/2024		1				7.0	1.0	1	
3/12/2024	1	2	1	0.06		7.0	1.4	1	5350
3/13/2024		2				7.0	1.0	1	
3/19/2024	2	1	1	0.47	· "	7.0	1.0	1	6270
3/20/2024		2				7.1	1.0	1	
3/26/2024	2	2	1	1.28		7.1	1.0	1	6200
3/27/2024		2				7.2	1.0	1	
					_				<u> </u>
						ļ			
AVG	1.5	1.8	1.0	0.86	1.0	7.08	1.1	1.0	5830
MAX	2	2	1	1.62	1.0	7.2	1.4	1	6270
MIN	1	1	1	0.06	0	7.0	1.0	1	5350

WWTP			TCMU	D#10	Contraction of the second second second second second second second second second second second second second s	HUBBLE STORES
Parameter	BOD	TSS	pН	DO	F.COL.	AER
Limitations	65-20	65-20	6-9	na	na	3000
3/7/2024	10	7	7.1	6.3	1	3110
3/14/2024	7	8		6.2	2	
3/21/2024	6	6		7.0	44	4890
3/28/2024	5	6		7.7		
AVG	7.0	6.8	7.10	6.8	15.7	4000
MAX	10	8	7.1	7.7	44	4890

40% violations limits				
BOD & TSS Limits Daily				
28	28			

BOD & TSS Weekly 42 42

Single Grab Limit

WWTP	and the states		lithe of a second second second second second second second second second second second second second second s	CYPRES	SS RANCH V	NCID #1			-APROXIMATION -
Parameter	BOD	CBOD	TSS	NH3-N	E.COLI	рН	NTU	FECAL	AER
Limitations	35-10	35-10	60-15	na	126	6-9	3.0	75	3000
4/2/2024	1	2	1	2.29	1.0	7.2	1.4	1	6430
4/3/2024		2				7.1	1.2	1	
4/9/2024	2	2	1	1.24		7.2	1.0	1	7200
4/10/2024		1				7.2	1.0	1	
4/16/2024	1	1	1	1.84		7.2	1.0	1	7430
4/17/2024		3				7.2	1.0	1	
4/23/2024	4	3	· 1	0.58		7.0	1.0	1	6700
4/24/2024		1				7.1	1.0	1	
4/30/2024		1	1	1.63		7.1	1.0	1	7100
							L		
AVG	2.0	1.8	1.0	1.52	1.0	7.14	1.1	1.0	6972
MAX	4	3	1	2.29	1.0	7.2	1.4	1	7430
MIN	1	1	1	0.58	0	7.0	1.0	1	6700

WWTP		Alter Sales Sales and	TC MUI	D #10	chinal (Mar.	PONE Report
Parameter	BOD	TSS	рН	DO	F.COL.	AER
Limitations	65-20	65-20	6-9	na	na	3000
4/4/2024	11	7	7.3	7.6	2	4100
4/11/2024	5	5		8.8	2	
4/18/2024	3	3		6.0	2	4870
4/25/2024	3	4		6.0	2	
-						
AVG	5.5	4.8	7.30	7.1	2.0	4485
MAX	11	7	7.3	8.8	2	4870
MIN	3	3	7.3	6	2	4100

40% violations limits				
BOD & TSS Limits Daily				
28 28				

BOD & TSS Weekly 42 42

Single Grab Limit

Attachment 16: SERVICE AREA MAP



Candice Calhoun

From:	David Fusilier <dfusilier@atwell-group.com></dfusilier@atwell-group.com>
Sent:	Tuesday, June 18, 2024 11:28 AM
То:	Candice Calhoun
Cc:	Hank Smith
Subject:	RE: Application to Renew Permit No. WQ0014368001; Cypress Ranch Water Control and Improvement District No. 1
Attachments:	_RESPONSE - NOD ADMIN_CR WCID 1_PERMIT RENEWAL APPLICATION_WQ0014368001.pdf; ATTACHMENT 1_ADMIN REPORT 1.0_CORE DATA FORM_10400_2024-06-07_signed.pdf; ATTACHMENT 2_ADMIN REPORT 1.0_USGS MAP_Shingle Hills_2024_1 of 2_r.pdf; ATTACHMENT 2_ADMIN REPORT 1.0_USGS MAP_Pace Bend_20242 of 2_r.pdf; PLAIN LANGUAGE SUMMARY_CYPRESS RANCH WCID 1_WQ0014368001.docx; PLAIN LANGUAGE SUMMARY_CYPRESS RANCH WCID 1 _WQ0014368001.pdf
Follow Up Flag:	Follow up
Flag Status:	Completed

Hello Candice –

Please accept the attached documents as our formal response to the administrative NOD issued for the above permit.

This response includes:

- 1. NOD Response Letter.
- 2. Updated, Signed Core Data Form.
- 3. Updated Attachment 2 USGS Maps (both Shingle Hills and Pace Bend quad maps).
- 4. Plain Language Summary in both Word and PDF format.

Please note that the USGS Maps, Attachment 2, I sent to you earlier today had incorrect file names. I have corrected the file names and the corrected versions are attached to this email.

If you have any questions on the submitted material or need additional information please let us know.

Thank you, David

David Fusilier Senior Project Engineer ATWELL, LLC 512.584.8704 Office 512.925.6691 Mobile

From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Tuesday, June 18, 2024 10:12 AM
To: David Fusilier <dfusilier@atwell-group.com>
Subject: RE: Application to Renew Permit No. WQ0014368001; Cypress Ranch Water Control and Improvement District
No. 1

You are most welcome!



CONSULTING. ENGINEERING. CONSTRUCTION.

June 18, 2024

Candice Calhoun Applications Review and Processing Team (MC 148) Texas Commission on Environmental Quality Building F, Room 2101 12100 Park 35 Circle, Building F Austin, TX 78753

RE: Response to June 6, 2024 Administrative NOD for Application to Renew Existing Wastewater Permit Cypress Ranch WCID No. 1 TCEQ WQ Permit No. WQ0014368-001 CN # 601495393 RN # 103177556

Applications Review and Processing Team:

On behalf of Cypress Ranch Water Control and Improvement District (WCID) No. 1, please accept this letter and the associated attached as our response to the Administrative Notice of Deficiency (NOD) dated June 6, 2024 on the above reference Domestic Wastewater Permit Application.

The following is a listing of the items identified in the letter along with our response in bold text:

1. Core Data Form. Section 3, item 23-24: The physical address of the regulated entity provided does not match the physical address listed in the current permit. Please provide an updated Core Data Form to show the correct physical address.

An updated, signed Core Data Form with the physical address listed in the current permit is attached to this letter.

 Administrative Report 1.0. Section 13 – Attachments: The USGS Topographic Map provided was illegible. Please submit an e-copy of the USGS Topographic Map with the applicable items from the following requirements for USGS maps: Applicant's property boundary; Treatment facility boundary; Labeled point of discharge; Highlighted discharge route for 3 miles downstream or until it reaches a classified segment; 1 mile radius; Effluent disposal site(s); Sludge disposal/land application site; and all ponds.

An 8.5 x 11 version of the updated USGS Topographic Map, Attachment 2, is included as an attachment to this letter – there are actually two separate maps (Shingle Hills and Pace Bend quad maps). The electronic version of each map was emailed to <u>candice.calhoun@tceq.texas.gov</u> on June 18, 2024.

3. Please use the attached Plain Language Summary (PLS) Template to provide a plain language summary in English. Please provide the PLS in a Microsoft Word Document.

A Plain Language Summary (PLS) for this permit has been included as an attachment.

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

The draft NORI appears to be accurate.

If you should have any questions pertaining to this application or if you need further information, please feel free to contact me at (512) 904-0505 or <u>hsmith@atwell-group.com</u>.

Sincerely, Atwell, LLC

Hank Smith, PE

Director (CR WCID 1 District Engineer) TBPE Firm #12242



TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)						
New Permit, Registration or Authorization (<i>Core Data Form should be submitted with the program application.</i>)						
Renewal (Core Data Form should be submitted with the	Renewal (Core Data Form should be submitted with the renewal form) Other					
2. Customer Reference Number (if issued)	Follow this link to search	3. Regulated Entity Reference Number (if issued)				
· CN 601661085	<u>Central Registry**</u>	RN 103177556				

SECTION II: Customer Information

4. General Customer Information	r Information 5. Effective Date for Customer Information Updates (mm/dd/yyyy)					
□ New Customer	pdate to Customer Information xas Secretary of State or Texas Com	Chan Chan ptroller of Public	ge in Regulated Ent Accounts)	ity Ownership		
The Customer Name submitted here may	be updated automatically base	d on what is cu	urrent and active	with the Texas Se	cretary of State	
(SOS) or Texas Comptroller of Public Accou	ınts (CPA).					
6. Customer Legal Name (If an individual, pri	nt last name first: eg: Doe, John)	If new Customer, enter previous Customer below:				
Cypress Ranch Water Control and Improvement	District No. 1					
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits) N/A		9. Federal Tax II (9 digits) 20-047554	D 10. DUN applicable	10. DUNS Number (if applicable)	
11. Type of Customer: Corporat	tion	🗌 Individ	ridual Partnership: 🗌 General 🗌 Limit			
Government: 🗌 City 🗌 County 🔲 Federal 🗌	Local 🔲 State 🔀 Other	Sole Pr	Sole Proprietorship 🔲 Other:			
12. Number of Employees		13. Independently Owned and Operated?				
◎ 0-20	500 🔲 501 and higher	🖂 Yes 🗌 No				
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following						
Owner Operator Owner & Operator Occupational Licensee Responsible Party VCP/BSA Applicant						
102 North Railroad Avenue						
Address						
City Pflugerville	State TX	ZIP	78660	ZIP + 4		
16. Country Mailing Information (if outside	17. E-Mail Address (if applicable)					
18. Telephone Number	19. Extension or Co	ode	20. Fax N	umber (if applicable	?)	

form. See the Core Data Form instructions for additional guidance.

23. Street Address of	5116 Cypress Ranch Boulevard
the Regulated Entity:	

the Regulated Entity:								
<u>(No PO Boxes)</u>	City	Spicewood	State	ТХ	ZIP	78669	ZIP + 4	
24. County			I		<u> </u>			

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

End of Rose Grass Lane, On the North Side of Cypress Ranch Blvd, Approx. 0.5 miles west of Highway 71.

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity" is selected, a new permit application is also required.)

🗌 New Regulated Entity 🔄 Update to Regulated Entity Name 🔄 Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)

Cypress Ranch WWTP

25. Description to

(512) 251-1920

Physical Location:									
26. Nearest City	est City					Ne	Nearest ZIP Code		
Spicewood		ТХ			78669				
Latitude/Longitude are used to supply coording	required and ites where no	l may be addea one have been p	l/updated to meet provided or to gain	TCEQ Core accuracy)	e Data Stando).	ards. (Geocoding	of the Physico	al Address may be	
27. Latitude (N) In Decimal: 30.361826		30.361826	28. Longitude			N) In Decimal:	98.079	98.079515	
Degrees	Minutes		Seconds	Deg	grees	Minutes		Seconds	
29 Primary SIC Code	30	Secondary SIC	Code			. 32.1	Secondary NA	ndary NAICS Code	
(4 digits)	30. Secondary Sic code31. Primary NAICS Code(4 digits)(5 or 6 digits)(5 or 6 digits)								
4952				221320					
33. What is the Primary	Business of	this entity? (D	o not repeat the SIC	or NAICS des	scription.)				
Treatment of Domestic Wa	stewater								
34. Mailing	102 North Railroad Avenue								
Address:	City	Pflugerville	State	ТХ	ZIP	78660	ZIP + 4		
35. E-Mail Address:									
36. Telephone Number			37. Extension of	r Code	38. F	ax Number (if app	olicable)		
(512) 251-1920					(512) 251-8540				
Dam Safety	Districts	Edwards Aquifer	Emissions Inventory Air	🗌 Industrial Hazardous Waste					
-----------------------	--------------------------	------------------------	-------------------------	------------------------------	--				
Municipal Solid Waste	New Source Review Air	OSSF	Petroleum Storage Tank	D PWS					
Sludge	Storm Water	Title V Air	Tires	Used Oil					
Voluntary Cleanup	🛛 Wastewater	Wastewater Agriculture	Water Rights	Other:					
	R14368001								

SECTION IV: Preparer Information

40. Name:	DAVID FUSILIE	R		41. Title:	PROJECT ENGINEER
42. Telephone Number 43		43. Ext./Code	44. Fax Number	45. E-Mail Address	
(512) 925-6691			() -	dfusilier@atv	well-group.com

SECTION V: Authorized Signature

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

Company:	Cypress Ranch WCID No. 1 (ATWELL LLC)	Job Title:	DISTRICT ENGINEER (DIRECTOR)		
Name (In Print):	HANK SMITH			Phone:	(512) 904- 505
Signature:	1.15/			Date:	





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JUNE 2024

ATTACHMENT 2 USGS TOPOGRAPHIC MAP DOM. ADMINISTRATIVE REPORT 1.0 SECTION 13 (pg. 10 of 17)

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JUNE 2024 ATTACHMENT 2

USGS TOPOGRAPHIC MAP DOM. ADMINISTRATIVE REPORT 1.0 SECTION 13 (pg. 10 of 17)

TCEQ WQ PERMIT NO. WQ0014368001