

**NORTH TEXAS
GROUNDWATER
CONSERVATION
DISTRICT**

BOARD MEETING

**MUSTANG SUD ADMINISTRATIVE OFFICES
7985 FM 2931
AUBREY, TEXAS**

**TUESDAY
MAY 8, 2018
10:00 AM**

NOTICE OF PUBLIC MEETING

OF THE
BOARD OF DIRECTORS of the

NORTH TEXAS GROUNDWATER CONSERVATION DISTRICT
at the

Mustang SUD Administrative Offices
7985 FM 2931
Aubrey, Texas
Tuesday, May 8, 2018

Board Meeting

The regular Board Meeting will begin at 10:00 a.m.

Notice is hereby given that the Board of Directors of the North Texas Groundwater Conservation District ("District") may discuss, consider, and take all necessary action, including expenditure of funds, regarding each of the agenda items below:

Agenda:

1. Pledge of Allegiance and Invocation.
2. Call to order, establish quorum; declare meeting open to the public.
3. Public comment.
4. Consider and act upon approval of the minutes from the March 13, 2018, Board meeting.
5. Consider and act upon approval of invoices and reimbursements.
6. Receive reports from the following Committees*:
 - a. Budget and Finance Committee
 - 1) Receive Monthly Financial Information
 - b. Investment Committee
 - 1) Receive Quarterly Investment Report
 - c. Groundwater Monitoring and Database Committee
 - d. Management Plan Committee
 - 1) Receive Annual Report
 - 2) Receive Quarterly Report
7. Consider and act upon authorization to solicit proposals for 2018 audit services.
8. Update and possible action regarding the process for the development of Desired Future Conditions (DFCs).

9. Consider and act upon compliance and enforcement activities for violations of District rules.
 - a. Alpha Omega Water Well Service
 - b. Hydrous Americas Cable Park, LLC
10. General Manager's Report: The General Manager will update the board on operational, educational and other activities of the District.
11. Receive presentation regarding permanent rules development.
 - a. Consider and act upon action items for rules development
12. Open forum / discussion of new business for future meeting agendas.
13. Adjourn public meeting.

* Reports from District standing committees will include a briefing by each committee for the Board on the activities of the committee, if any, since the last regular Board meeting.

The above agenda schedule represents an estimate of the order for the indicated items and is subject to change at any time.

These public meetings are available to all persons regardless of disability. If you require special assistance to attend the meeting, please call (855) 426-4433 at least 24 hours in advance of the meeting to coordinate any special physical access arrangements.

For questions regarding this notice, please contact Velma Starks at (855) 426-4433, at ntqcd@northtexasqcd.org, or at 5100 Airport Drive, Denison, TX 75020.

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

ATTACHMENT 4

MINUTES OF THE BOARD OF DIRECTORS' BOARD MEETING
NORTH TEXAS GROUNDWATER CONSERVATION DISTRICT

TUESDAY MARCH 13, 2018

MUSTANG SUD ADMINISTRATIVE OFFICES
7985 FM 2931
AUBREY, TEXAS

Members Present: Allen Knight, Ronny Young, Joe Helmberger, Thomas Smith (arrived at 10:15 a.m.), David Flusche (arrived at 11:00 a.m.), Maurice Schwanke, and Ron Sellman

Members Absent: Evan Groeschel and Chris Boyd

Staff: Drew Satterwhite, Paul Sigle, Allen Burks, Theda Anderson, Carolyn Bennett, and Velma Starks

Visitors: Kristen Fancher, Fancher Law Firm
Pete Schulmeyer, Collier Consulting
Neal Welch, City of Sanger, Director Public Works

1. Pledge of Allegiance and Invocation

President Ronny Young led the group in the Pledge of Allegiance and provided the invocation.

2. Call to order, establish quorum; declare meeting open to the public

President Young called the meeting to order 10:09 a.m., established a quorum was present, and declared the meeting open to the public.

President Young presented Philip Sanders with service appreciation plaque and thanked him for his service on the board.

3. Administer Oath of Office

Carolyn Bennett administered the Oath of Office to new Board Member Maurice Schwanke.

New Board Member David Flusche arrived at 11:00 a.m. and was sworn in by Carolyn Bennett.

4. Public Comment

There were no citizens present requesting to appear before the Board of Director for public comment.

5. Consider and act upon approval of the minutes from the January 9, 2018 board meeting

Motion was made by Joe Helmberger to approve the minutes of the January 9, 2018 meeting. The motion was seconded by Allen Knight, and passed unanimously.

6. Consider and act upon approval of invoices and reimbursements

After review and brief discussion Joe Helmberger made the motion to approve Resolution No. 2018-03-13-1. Ron Sellman seconded the motion. Motion passed unanimously.

7. Receive reports from the following Committees*:

a. Budget and Finance Committee

1) Receive Monthly Financial Information

General Manager Drew Satterwhite reviewed the financial information with the Board.

b. Investment Committee

No Report

c. Groundwater Monitoring and Database Committee

General Manager Drew Satterwhite reported things are going well, they are rolling out modules that are being reviewed.

d. Management Plan Committee

1) Receive Annual Report

The report was presented to the Board. The Board requested that they have an opportunity to review it further and that it be placed on a next agenda to address any comments.

8. Update and possible action regarding the process for the Development of Desired Future Conditions (DFCs)

General Manager Drew Satterwhite updated the Board that all 11 Districts have had their public meetings. The next GMA-8 meeting will probably be scheduled in May or June.

9. Consider and act upon Well Monitoring Agreement.

General Manager Drew Satterwhite reported that the Management Plan states the District will establish additional monitoring wells. District Field Technicians have taken over the annual monitoring of the TWDB monitoring wells. There are 30 monitoring wells at this time. Public Water Systems will be addressed initially in the research for additional wells for monitoring. Private well owners may be asked in some areas. Thomas Smith made the motion to obtain monitoring wells and to accept the agreement drafted by District staff, with the District attorney reviewing the document. Joe Helmberger seconded the motion. Motion passed unanimously.

10. Consider and act upon compliance and enforcement activities for violations of District's Rules.

a. Hydrous Americas Cable Park, LLC

General Manager Drew Satterwhite reported that Hydrous Americas Cable Park, LLC is out of

compliance (1) failure to submit production reports and (2) failure to make payments. Kristen Fancher, Legal Counsel advised the Board that each violation was a \$500 dollar fine. Allen Knight made the motion to proceed with the enforcement of two violations at \$500 each for a total of \$1000.00 fine. Thomas Smith seconded the motion. Motion passed unanimously.

11. General Manager's Report: The General Manager will update the Board on operational, educational and other activities of the District.

- a. Update on oil and gas and disposal/injection well monitoring activities with the Railroad Commission of Texas

General Manager Drew Satterwhite informed the Board that additional information is being sought on one of the wells

The Rules Committee decided at their meeting that an actual test would be beneficial to the District in regards to spacing requirements. They decided that Lake Kiowa's wells would be used for a pumping test.

General Manager Drew Satterwhite did a presentation about the District's overall purpose at a conference for engineers, which was hosted by Kimley-Horn.

General Manager Satterwhite reported to the Board that the District has a total of 2113 well registrations, with 32 since January 2018.

12. Receive presentation regarding permanent rules development.

- a. Consider and act upon action items for rules development

Kristen Fancher, Legal Counsel provided a presentation addressing permanent rules. The Board discussed the presentation and then made motions on the various segments or tabled them.

Thomas Smith made the motion to take out the blanket exemption for DL&P, and get to Chapter 36 exemption levels with the exception of the 10 acre requirement. Allen Knight seconded the motion. Motion passed unanimously.

Thomas Smith made the motion for the spacing waivers to be sent by the party requesting to drill a well closer than allowed by the District Rules to registered well owners within a given radius for spacing. Waivers and mailing documentation are to be reviewed by District staff. Maurice Schwanke seconded the motion. Motion passed unanimously. The variance will be required to be placed in the Deed Records.

Allen Knight made the motion remove flushing from reporting and production fee exemptions. Ron Sellman seconded the motion. Motion passed unanimously.

The Board decided on the Historic Use Backup Data to pull more data on the five top producers, using 2010, before acting on the issue.

The Board decided to revisit the Historic use Claims Deadline at a later date.

Thomas Smith made the motion to adopt the drought buffer consideration at a percentage to be defined at a later date, and based on the Palmer Index. Ron Sellman seconded the motion. Motion passed unanimously.

Thomas Smith made the motion for deadline related to permitting new wells to be set at 365 days with District staff authorized to allow one (1) six-month extension. The deadline for drilling a well remains at 240 days, with District staff authorized to allow one extension. Joe Helmberger seconded. Motion passed unanimously.

The Board discussed criteria for production permit.

- Applicant to demonstrate how water will be used
- Limit on time period
 - Specificity – allow for a longer time, but may authorize less
 - Projections – possibly adjust permit to 10 years

It was the consensus of the Board to re-visit the criteria for production permit at a later date.

13. Open forum/discussion of new business for future meetings

14. Adjourn public meeting

President Young declared the meeting adjourned at 12:01 p.m.

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Recording Secretary

Secretary-Treasurer

ATTACHMENT 5

RESOLUTION NO. 2016-05-10-01

A RESOLUTION BY THE BOARD OF DIRECTORS OF THE NORTH TEXAS GROUNDWATER
CONSERVATION DISTRICT AUTHORIZING PAYMENT OF ACCRUED LIABILITIES FOR THE
MONTH OF MARCH AND APRIL 2018

The following liabilities are hereby presented for payment:

<u>Administrative Services</u>	<u>Amount</u>
GTUA - Mar	36,124.86
GTUA - April	23,618.68
<u>Consultant</u>	
WPS USA - Professional Services through March 2018	3,366.14
<u>Direct Costs</u>	
A1 Printing - 1 pkg of Purchase order forms in triplicate	110.00
<u>Dues & Subscriptions</u>	
Texas Water Conservation Association renewal 2018-2019	358.00
<u>Equipment</u>	
USA Bluebook - Parts for spacing tests at Lake Kiowa SUD	355.65
<u>GMA8</u>	
Cleburne Conference Center	225.00
<u>Legal</u>	
Kristin Fancher PLLC - February 2018 General Services	4,292.00
Kristin Fancher PLLC - March 2018 General Services	5,146.00
<u>Legal-Injection Well Monitoring</u>	
Sledge Law - March 2018 Professional Services	2,049.35
<u>Software Maintenance</u>	
Aquaveo-February	500.00
Aquaveo-March	500.00
GRAND TOTAL:	\$ <u>76,645.68</u>

On motion of _____ and seconded by _____ the
foregoing Resolution was passed and approved on this, the 10th day of May, 2018 by the following vote:

AYE:
NAY:

At a meeting of the Board of Directors of the North Texas Groundwater Conservation District

ATTEST:

President

Secretary/Treasurer

ATTACHMENT 6 A-1

Balance Sheet

For General Fund (00)

April 30, 2018

Assets

00-01-10001	Checking Account	148,882.68
00-01-10005	Index Account	205,802.16
00-01-10010	Investments	1,000,000.00
00-01-10025	Accounts Receivable	150,081.13
00-01-10048	A/R Strittmatter Irrigation	14,000.00
00-01-10050	A/R 440 Ranch	1,500.00
00-01-12001	PP Expense	1,488.00
	Total	<u>1,521,753.97</u>
	Total Assets	<u>\$ 1,521,753.97</u>

Liabilities and Fund Balance

00-01-23100	Accounts Payable	37,823.38
00-01-23150	Well Drillers Deposits	28,800.00
	Total	<u>66,623.38</u>
	Total Liabilities	<u>66,623.38</u>
00-01-35100	Fund Balance	1,292,708.63
00-01-35110	Current Year Excess of Revenue over Expenses	163,166.99
	Total	<u>1,455,875.62</u>
	Excess of Revenue Over Expenditures	(745.03)
	Total Fund Balances	<u>1,455,130.59</u>
	Total Liabilities and Fund Balances	<u>\$ 1,521,753.97</u>

North Texas Groundwater Conservation District
Statement of Revenue and Expenditures

5/4/2018 9:26am

Page 1

Revised Budget
 For General Fund (00)
 For the Fiscal Period 2018-4 Ending April 30, 2018


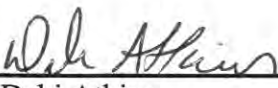
Account Number	Current Budget	Current Actual	Annual Budget	YTD Actual	Remaining Budget %
Revenues					
00-01-46001 Well Production Fees	\$ 0.00	\$ 0.00	\$ 698,000.00	\$ 132,196.57	81.06%
00-01-46003 Well Registration Fees	1,500.00	1,100.00	18,000.00	6,100.00	66.11%
00-01-46010 GMA8 Fees	0.00	0.00	10,000.00	0.00	100.00%
00-01-46015 Late Fees	0.00	0.00	0.00	3,513.50	0.00%
00-01-46100 Interest Inc	0.00	0.00	1,500.00	(2,002.36)	233.49%
Total General Fund Revenues	\$ 1,500.00	\$ 1,100.00	\$ 727,500.00	\$ 139,807.71	80.78%
Expenditures					
00-01-77011 Admin-Operations	\$ 0.00	\$ 1,281.00	\$ 0.00	\$ 3,164.00	0.00%
00-01-77012 Admin-Mileage	208.33	5.47	2,500.00	690.17	72.39%
00-01-77013 Admin-Secretarial	2,500.00	0.00	30,000.00	2,443.00	91.86%
00-01-77014 Admin-Project Coordinator	1,250.00	816.00	15,000.00	5,784.00	61.44%
00-01-77015 Admin-GM	4,583.33	4,232.00	55,000.00	19,412.00	64.71%
00-01-77016 Admin-Clerical	2,750.00	2,952.00	33,000.00	10,698.00	67.58%
00-01-77025 Accounting	2,083.33	955.50	25,000.00	7,875.00	68.50%
00-01-77027 Auditing	0.00	0.00	5,500.00	0.00	100.00%
00-01-77030 Advertising	83.33	0.00	1,000.00	0.00	100.00%
00-01-77150 Consulting- Hydrogeo	7,083.33	0.00	85,000.00	11,295.09	86.71%
00-01-77325 Direct Cost	333.33	198.42	4,000.00	1,632.22	59.19%
00-01-77450 Dues & Subscription	166.67	0.00	2,000.00	411.33	79.43%
00-01-77480 Equipment	0.00	355.65	2,000.00	355.65	82.22%
00-01-77500 Fees-GMA8	916.67	0.00	11,000.00	0.00	100.00%
00-01-77550 Field Tech	10,416.67	9,103.50	125,000.00	35,883.50	71.29%
00-01-77560 Field Permitting/Geologist	5,833.33	2,960.00	70,000.00	12,487.50	82.16%
00-01-77650 Fuel/Maintenance	250.00	358.51	3,000.00	1,396.80	53.44%
00-01-77800 Injection Well Monitoring	58.33	0.00	700.00	156.40	77.66%
00-01-77810 Insurance	0.00	0.00	4,000.00	745.00	81.38%
00-01-77970 Legal	4,166.67	0.00	50,000.00	18,244.00	63.51%
00-01-77975 Legal-Injection	833.33	0.00	10,000.00	2,049.35	79.51%
00-01-78010 Meetings & Conferences	375.00	202.22	4,500.00	1,109.58	75.34%
00-01-78310 Rent	200.00	394.01	2,400.00	994.01	58.58%
00-01-78600 Software Maint	833.33	200.00	10,000.00	3,143.87	68.56%
00-01-78610 Telephone	166.67	0.00	2,000.00	582.27	70.89%
Total General Fund Expenditures	\$ 45,091.65	\$ 24,014.28	\$ 552,600.00	\$ 140,552.74	74.57%
General Fund Excess of Revenues Over Expenditures	\$ (43,591.65)	\$ (22,914.28)	174,900.00	(745.03)	

ATTACHMENT 6 B-1

North Texas Groundwater Conservation District
Quarterly Investment Report
For the Quarter Ended
March 31, 2018

The investment portfolio of the North Texas Groundwater Conservation District is in compliance with the Public Funds Investment Act and the Investment Policy and Strategies.

Presented by North Texas Groundwater Conservation District Investment Officers:

	
Drew Satterwhite General Manager	Debi Atkins Finance Officer

Investment Holdings
March 31, 2018

Description	Ratings	Coupon/ Discount	Maturity Date	Settlement Date	Face Amount/Par Value	Book Value	Market Price	Market Value	Life (Day)	Yield
Independent (DDA)		0.05%	4/1/2018	3/31/2018	\$ 190,812.26	\$ 190,812.26	1.00	\$ 190,812.26	1	0.05%
Independent (ISS)		0.15%	1/1/2018	3/31/2018	205,802.16	205,802.16	1.00	205,802.16	1	0.15%
Landmark Bank		1.41%	5/16/2018	11/10/2017	500,000.00	500,000.00	100.00	500,000.00	46	1.41%
Landmark Bank		1.59%	11/16/2018	11/10/2017	500,000.00	500,000.00	100.00	500,000.00	230	1.59%
					<u>\$ 1,396,614.42</u>	<u>\$ 1,396,614.42</u>		<u>\$ 1,396,614.42</u>	<u>99</u>	
									<u>(1)</u>	

(1) Weighted average life - For purposes of calculating weighted average life, bank accounts, pools and money market funds are assumed to have an one day maturity.

Book/Market Value Comparison

Description	Coupon/ Discount	Maturity Date	December 31, 2017			March 31, 2018		
			Face Amount/ Par Value	Book/Market Value	Purchases/ Adjustments	Sales/Adjust/ Call Maturity	Face Amount/ Par Value	Book/Market Value
Independent (DDA)	0.05%	1/1/2018	\$ 144,113.81	\$ 144,113.81	46,698.45		\$ 190,812.26	\$ 190,812.26
Independent (ISS)	0.15%	1/1/2018	205,699.88	205,699.88	102.28		205,802.16	205,802.16
Landmark Bank	1.41%	5/16/2018	500,000.00	500,000.00			500,000.00	500,000.00
Landmark Bank	1.59%	11/16/2018	500,000.00	500,000.00			500,000.00	500,000.00
			<u>\$ 1,349,813.69</u>	<u>\$ 1,349,813.69</u>	<u>\$ 46,800.73</u>	<u>\$ -</u>	<u>\$ 1,396,614.42</u>	<u>\$ 1,396,614.42</u>

ATTACHMENT 6 D-2



COLLIN COUNTY - COOKE COUNTY - DENTON COUNTY

General Manager’s Quarterly Report

Date: March 31, 2018

North Texas GCD Management Plan

This quarterly briefing is being provided pursuant to the adopted Management Plan for the quarter ending March 31, 2018.

Well Registration Program:

Current number of wells registered in the District: 2115*

Aquifers in which the wells have been completed: Trinity and Woodbine

Well Inspection/Audit Program:

**2018
Well Inspections**

Month	Collin	Cooke	Denton	Total
January	0	0	28	28
February	21	7	2	30
March	6	7	45	58
April				
May				
June				
July				
August				
September				
October				
November				
December				
Total	27	14	75	116

* reflects 29 wells that were deleted by the staff in a data scrubbing effort. The deleted wells were applied for/registered, but were never actually drilled.

ATTACHMENT 7



AGENDA COMMUNICATION

DATE: May 3, 2018

SUBJECT: AGENDA ITEM NO. 7

CONSIDER AND ACT UPON AUTHORIZATION TO SOLICIT PROPOSALS FOR 2018 AUDIT SERVICES

ISSUE

The 5-year term for auditing services concluded with the 2017 fiscal year. The District needs to solicit for audit proposals in the near future.

BACKGROUND

In 2013, the Board had instructed the staff to solicit proposals for audit services for the fiscal year ending December 31, 2013 through fiscal year ending December 31, 2017. The staff initiated invitations to several firms in North Central Texas. As a result of that solicitation, four proposals were received. The audit selection committee reviewed the proposals and selected Hankins Eastup Deaton Tonn & Seay of Denton, Texas. This selection was confirmed at the February 2014 Board meeting.

The staff is now requesting direction from the Board whether to include our current auditors in the solicitation.

OPTIONS/ALTERNATIVES

The District has the option to exclude current audit firm in the next solicitation. The District also has the option to exclude the current Lead Auditor and therefore providing a fresh set of eyes from the current firm.

CONSIDERATIONS

The District staff is of the opinion that Hankins Eastup Deaton Tonn & Seay of Denton, Texas provided a thorough and quality audit for the last five years. However, some entities consider it a best practice to rotate auditors and/or audit firms every 5 years.

STAFF RECOMMENDATIONS

The staff requests that the Board provide guidance in this matter.

PREPARED AND SUBMITTED BY:

Drew Satterwhite, P.E., General Manager

PREPARED BY:

Debi Atkins, Finance Officer

ATTACHMENT 10

North Texas Groundwater Conservation District

Well Registration Summary
As of March-31-2018

Well Type	Total Registered Collin County	Total Registered Cooke County	Total Registered Denton County	Total NTGCD	New Registrations since Feb-28-2018
Agriculture	6	11	33	50	0
Commercial / Small Business	6	8	27	41	0
Domestic Use (household / lawn watering at residence)	74	321	581	978	24
Filling a pond or other surface impoundment**	42	14	63	120	0
Golf course irrigation	15	2	21	38	0
Industrial / Manufacturing	7	10	8	26	0
Irrigation	77	4	174	255	7
Leachate	0	0	0	0	0
Livestock Watering	7	58	39	104	1
Monitoring	0	0	0	0	0
Municipal / Public Water System	33	70	220	323	0
Other	9	6	31	46	0
Piezometer	0	0	0	0	0
Poultry	0	0	0	0	0
Solely to supply water for rig actively***	1	1	7	9	0
Supplying water for oil or gas production*	0	5	54	60	0
Not Specified	16	10	39	65	1
SUM	293	520	1297	2115	33

North Texas Groundwater Conservation District

Well Registration Summary

As of April-30-2018

Well Type	Total Registered Collin County	Total Registered Cooke County	Total Registered Denton County	Total NTGCD	New Registrations since Mar-31-2018
Agriculture	6	11	33	50	0
Commercial / Small Business	7	8	27	42	1
Domestic Use (household / lawn watering at residence)	74	328	585	989	12
Filling a pond or other surface impoundment**	42	14	65	122	2
Golf course irrigation	15	2	21	38	0
Industrial / Manufacturing	7	10	8	26	0
Irrigation	77	4	178	259	4
Leachate	0	0	0	0	0
Livestock Watering	7	58	39	104	0
Monitoring	0	0	0	0	0
Municipal / Public Water System	33	70	222	326	3
Other	10	6	31	47	1
Piezometer	0	0	0	0	0
Poultry	0	0	0	0	0
Solely to supply water for rig actively***	1	1	7	9	0
Supplying water for oil or gas production*	0	5	54	60	0
Not Specified	16	10	39	65	0
SUM	295	527	1309	2137	23

ATTACHMENT 11

**DRAFT OUTLINE OF
HYDROGEOLOGICAL REPORT GUIDELINES**

I. Introduction

- A. Hydrogeological Report must be included with an administratively complete application for any of the following:
 - (i) requests to drill and operate a proposed new well or well system with a proposed aggregate production capacity of greater than 200 gallons per minute;
 - (ii) requests to modify or increase an existing well or well system that would result in the existing well(s) being equipped to produce greater than 200 gallons per minute; and/or
 - (iii) variance to spacing for wells covered by (i) or (ii) above*
- B. Purpose of report is to provide the District with hydrogeological information addressing the impacts of the proposed well on existing wells and in relation to the Desired Future Condition for the aquifer
- C. Reports submitted pursuant to District Rule _____ and these guidelines are required to be stamped by a Professional Geoscientist or Professional Engineer licensed in the State of Texas

II. Required Content of Hydrogeological Reports

- A. Well Construction
 - 1. Details on all aspects of well
 - 2. Schematic well construction diagram
 - 3. Lithologic description of geology encountered during well drilling
 - 4. Location
 - (i) Maps showing location of property relative to county level and location of well relative to property boundaries and other relevant features
- B. Hydrogeologic Setting
 - 1. Identification of aquifer
 - 2. Surface and subsurface geology
 - (i) Occurrence of any significant groundwater recharge features such as outcrop, surface water bodies, caves, sinkholes, faults or other geologic features
 - (ii) Occurrence of hydrologic features, including streams or springs within ½ mile radius*
 - 3. Depth interval of proposed water bearing zone; identify target production zone
 - 4. Anticipated thickness of water bearing zone

5. Whether the target production zone is anticipated to be confined or unconfined
6. Estimates of thickness of confining layer at well site location
7. Aquifer parameters at the well site, including transmissivity, hydraulic conductivity and storativity based on the Texas Water Development Board (TWDB) approved Groundwater Availability Model for the aquifer
8. Identify all wells within 1-mile radius of the proposed well using publicly-available well databases. Include streams or springs within 1-mile radius

C. Water Quality

1. Discussion of known quality in the area based on literature, well reports, etc...

D. Interference Analysis

1. Quantitative analysis that shows the projected impacts from proposed production.
 - (i) Simulation results showing drawdown at 24 hours, 30 days, and 1 year (contoured with the smallest contour equal to 1 foot water level decline).
 - a. Discussion of the methodology used for estimating drawdown, including software that was used, the assumptions and/or solution method employed.
 - b. Illustration and/or maps showing the estimated cone of depression; if there is more than one well in the group, two maps should be included:
 - a. contours for impacts from pumping the proposed well only, and
 - b. contours for impacts from all wells in the system.
 - c. For well systems - discussion of the amount/degree of interference that each of the system wells may exert on other system wells
 - d. Discussion of the estimated impacts on existing wells in the area of influence

E. DFC/MAG Analysis

1. Discussion of the proposed pumping amount in relation to the MAG, as well as the impact of the proposed pumping on the adopted DFC

III. Post-Drilling Requirements

A. Mandatory requirements

Geophysical logs required to be submitted post completion (mandatory)

1. Geophysical logs to consist of a resistivity or induction curve and a spontaneous potential or gamma ray curve at a minimum. Geophysical logs performed in the initial open-borehole are required and will consist of

resistivity, self potential and gamma ray at a minimum. Wells cased with PVC require induction and gamma ray logs

2. All digital log files to be submitted in LAS format as well as printed

3.

B. Provide if available

a. Digital or tabulated data of water levels measured during drawdown, specific capacity, or pumping test

b. field parameters of specific conductivity, temperature and pH of measurements made during the drawdown or pumping test.

c. Any laboratory analysis completed on samples collected from the well after construction and development

C.

IV. Additional Construction Requirements

A. Measuring tube at least one inch in diameter to be installed from the well head to the bottom most screen interval in all new wells producing greater than 200 gpm

ADJOURN