

API No. <u>42-495-33706</u> Drilling Permit # <u>813551</u> SWR Exception Case/Docket No. _____		<b>RAILROAD COMMISSION OF TEXAS</b> <b>OIL &amp; GAS DIVISION</b> <b>APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER</b> <i>This facsimile W-1 was generated electronically from data submitted to the RRC.</i> <i>A certification of the automated data is available in the RRC's Austin office.</i>				<b>FORM W-1</b> 07/2004 Permit Status: <b>Approved</b>	
1. RRC Operator No. <b>945936</b>		2. Operator's Name (as shown on form P-5, Organization Report) <b>XTO ENERGY INC.</b>		3. Operator Address (include street, city, state, zip): <b>ATTN DEEANN KEMP</b> <b>500 WEST ILLINOIS STE 100</b> <b>MIDLAND, TX 79701-0000</b>			
4. Lease Name <b>UNIVERSITY BLK 21</b>		5. Well No. <b>1805H</b>					
GENERAL INFORMATION							
6. Purpose of filing (mark ALL appropriate boxes): <input checked="" type="checkbox"/> New Drill <input type="checkbox"/> Recompletion <input type="checkbox"/> Reclass <input type="checkbox"/> Field Transfer <input type="checkbox"/> Re-Enter <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Amended as Drilled (BHL) (Also File Form W-1D)							
7. Wellbore Profile (mark ALL appropriate boxes): <input type="checkbox"/> Vertical <input checked="" type="checkbox"/> Horizontal (Also File Form W-1H) <input type="checkbox"/> Directional (Also File Form W-1D) <input type="checkbox"/> Sidetrack							
8. Total Depth <b>13400</b>		9. Do you have the right to develop the minerals under any right-of-way ? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		10. Is this well subject to Statewide Rule 36 (hydrogen sulfide area)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
SURFACE LOCATION AND ACREAGE INFORMATION							
11. RRC District No. <b>08</b>		12. County <b>WINKLER</b>		13. Surface Location <input checked="" type="checkbox"/> Land <input type="checkbox"/> Bay/Estuary <input type="checkbox"/> Inland Waterway <input type="checkbox"/> Offshore			
14. This well is to be located <u>6.8</u> miles in a <u>W</u> direction from <u>Wink</u> which is the nearest town in the county of the well site.							
15. Section <b>18</b>		16. Block <b>21</b>		17. Survey <b>UL</b>		18. Abstract No. <b>A-U58</b>	
				19. Distance to nearest lease line: <b>200</b> ft.		20. Number of contiguous acres in lease, pooled unit, or unitized tract: <b>640.7</b>	
21. Lease Perpendiculars: <u>240</u> ft from the <u>NORTH</u> line and <u>500</u> ft from the <u>WEST</u> line.							
22. Survey Perpendiculars: <u>240</u> ft from the <u>NORTH</u> line and <u>500</u> ft from the <u>WEST</u> line.							
23. Is this a pooled unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		24. Unitization Docket No:		25. Are you applying for Substandard Acreage Field? <input type="checkbox"/> Yes         (attach Form W-1A) <input checked="" type="checkbox"/> No			
FIELD INFORMATION <b>List all fields of anticipated completion including Wildcat. List one zone per line.</b>							
26. RRC District No.	27. Field No.	28. Field Name (exactly as shown in RRC records)		29. Well Type	30. Completion Depth	31. Distance to Nearest Well in this Reservoir	
08	92100050	TWO GEORGES (BONE SPRING)		Oil Well	12500	17.00	
08	71052900	PHANTOM (WOLFCAMP)		Oil Well	12500	0.00	
BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)							
<b>Remarks</b> [FILER Feb 11, 2017 11:34 AM]: Amending permit TVD for addition of a non-productive, test only pilot hole. Pilot hole will be plugged in accordance to SWR14, KO made and completion zone as listed will be produced from only.				<b>Certificate:</b> I certify that information stated in this application is true and complete, to the best of my knowledge.			
				Stephanie Rabadue, Regulatory Analyst Name of filer _____ Date submitted <b>Feb 11, 2017</b>			
RRC Use Only				Data Validation Time Stamp: Feb 21, 2017 3:58 PM( 'As Approved' Version )			
				(432)6206714 Phone Stephanie_Rabadue@xtoenergy.com E-mail Address (OPTIONAL)			

Permit Status:	Approved
<i>The RRC has not approved this application. Duplication or distribution of information is at the user's own risk.</i>	

**RAILROAD COMMISSION OF TEXAS  
OIL & GAS DIVISION**

**APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER**

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A certification of the automated data is available in the RRC's Austin office.*

Permit #	813551
Approved Date:	Feb 21, 2017

1. RRC Operator No. 945936	2. Operator's Name (exactly as shown on form P-5, Organization Report) XTO ENERGY INC.	3. Lease Name UNIVERSITY BLK 21	4. Well No. 1805H
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**Lateral Drainhole Location Information**

5. Field as shown on Form W-1	TWO GEORGES (BONE SPRING) (Field # 92100050, RRC District 08)
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6. Section 18	7. Block 21	8. Survey UL / A-U58	9. Abstract	10. County of BHL WINKLER
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11. Terminus Lease Line Perpendiculars 200 ft. from the South line. and 500 ft. from the West line
12. Terminus Survey Line Perpendiculars 200 ft. from the South line. and 500 ft. from the West line
13. Penetration Point Lease Line Perpendiculars 840 ft. from the North line. and 500 ft. from the West line

5. Field as shown on Form W-1	PHANTOM (WOLFCAMP) (Field # 71052900, RRC District 08)
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6. Section 18	7. Block 21	8. Survey UL / A-U58	9. Abstract	10. County of BHL WINKLER
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11. Terminus Lease Line Perpendiculars 200 ft. from the South line. and 500 ft. from the West line
12. Terminus Survey Line Perpendiculars 200 ft. from the South line. and 500 ft. from the West line
13. Penetration Point Lease Line Perpendiculars 840 ft. from the North line. and 500 ft. from the West line

**RAILROAD COMMISSION OF TEXAS**  
**OIL & GAS DIVISION**

PERMIT TO DRILL, DEEPEN, PLUG BACK, OR RE-ENTER ON A REGULAR OR ADMINISTRATIVE EXCEPTION LOCATION

PERMIT NUMBER <div style="text-align: right;">813551</div>	DATE PERMIT ISSUED OR AMENDED (AMENDED)    Feb 21, 2017	DISTRICT <div style="text-align: center;">*    08</div>			
API NUMBER <div style="text-align: right;">42-495-33706</div>	FORM W-1 RECEIVED <div style="text-align: center;">Feb 11, 2017</div>	COUNTY <div style="text-align: center;">WINKLER</div>			
TYPE OF OPERATION <div style="text-align: center;">NEW DRILL</div>	WELLBORE PROFILE(S) <div style="text-align: center;">Horizontal</div>	ACRES <div style="text-align: center;">640.7</div>			
OPERATOR <div style="text-align: right;">945936</div> XTO ENERGY INC. ATTN DEEANN KEMP 500 WEST ILLINOIS STE 100 MIDLAND, TX 79701-0000		NOTICE This permit and any allowable assigned may be revoked if payment for fee(s) submitted to the Commission is not honored. <b>District Office Telephone No:</b> (432) 684-5581			
LEASE NAME <div style="text-align: center;">UNIVERSITY BLK 21</div>		WELL NUMBER <div style="text-align: center;">1805H</div>			
LOCATION <div style="text-align: center;">6.8 miles W direction from WINK</div>		TOTAL DEPTH <div style="text-align: center;">13400</div>			
Section, Block and/or Survey SECTION    18                                      BLOCK    21                                      ABSTRACT    U58 SURVEY    UL					
DISTANCE TO SURVEY LINES <div style="text-align: center;">240 ft. NORTH    500 ft. WEST</div>		DISTANCE TO NEAREST LEASE LINE <div style="text-align: center;">200 ft.</div>			
DISTANCE TO LEASE LINES <div style="text-align: center;">240 ft. NORTH    500 ft. WEST</div>		DISTANCE TO NEAREST WELL ON LEASE <div style="text-align: center;">See FIELD(s) Below</div>			
FIELD(s) and LIMITATIONS: <div style="text-align: center;">*    SEE FIELD DISTRICT FOR REPORTING PURPOSES    *</div>					
FIELD NAME LEASE NAME		ACRES NEAREST LEASE	DEPTH NEAREST LEASE	WELL # NEAREST WE	DIST
----- TWO GEORGES (BONE SPRING) UNIVERSITY BLK 21 -----		640.70 200	12,500 17	1805H 17	08
----- WELLBORE PROFILE(s) FOR FIELD: Horizontal -----					
RESTRICTIONS:    Lateral: TH1 Penetration Point Location Lease Lines:            840.0 F NORTH L 500.0 F WEST L Terminus Location BH County: WINKLER Section: 18                                      Block: 21                                      Abstract: Survey: UL / A-U58 Lease Lines:            200.0 F SOUTH L 500.0 F WEST L Survey Lines:            200.0 F SOUTH L 500.0 F WEST L					
----- PHANTOM (WOLFCAMP) UNIVERSITY BLK 21 -----		640.70 200	12,500 0	1805H 0	08
----- WELLBORE PROFILE(s) FOR FIELD: Horizontal -----					
RESTRICTIONS:    Permitted for oil only. Lateral: TH1 Penetration Point Location					

**RAILROAD COMMISSION OF TEXAS**  
**OIL & GAS DIVISION**

PERMIT TO DRILL, DEEPEN, PLUG BACK, OR RE-ENTER ON A REGULAR OR ADMINISTRATIVE EXCEPTION LOCATION

PERMIT NUMBER <b>813551</b>	DATE PERMIT ISSUED OR AMENDED (AMENDED) <b>Feb 21, 2017</b>	DISTRICT <b>* 08</b>
API NUMBER <b>42-495-33706</b>	FORM W-1 RECEIVED <b>Feb 11, 2017</b>	COUNTY <b>WINKLER</b>
TYPE OF OPERATION <b>NEW DRILL</b>	WELLBORE PROFILE(S) <b>Horizontal</b>	ACRES <b>640.7</b>
OPERATOR  <b>XTO ENERGY INC.</b>  <b>ATTN DEEANN KEMP</b> <b>500 WEST ILLINOIS STE 100</b> <b>MIDLAND, TX 79701-0000</b>		945936  <b>NOTICE</b> This permit and any allowable assigned may be revoked if payment for fee(s) submitted to the Commission is not honored. <b>District Office Telephone No:</b> <b>(432) 684-5581</b>
LEASE NAME <b>UNIVERSITY BLK 21</b>		WELL NUMBER <b>1805H</b>
LOCATION <b>6.8 miles W direction from WINK</b>		TOTAL DEPTH <b>13400</b>
Section, Block and/or Survey SECTION <b>◀ 18</b> BLOCK <b>◀ 21</b> ABSTRACT <b>◀ U58</b> SURVEY <b>◀ UL</b>		
DISTANCE TO SURVEY LINES <b>240 ft. NORTH    500 ft. WEST</b>		DISTANCE TO NEAREST LEASE LINE <b>200 ft.</b>
DISTANCE TO LEASE LINES <b>240 ft. NORTH    500 ft. WEST</b>		DISTANCE TO NEAREST WELL ON LEASE <b>See FIELD(s) Below</b>

FIELD(s) and LIMITATIONS:

\* SEE FIELD DISTRICT FOR REPORTING PURPOSES \*

FIELD NAME	ACRES	DEPTH	WELL #	DIST
LEASE NAME	NEAREST LEASE		NEAREST WE	
Lease Lines:                      840.0 F NORTH L 500.0 F WEST L Terminus Location BH County: WINKLER Section: 18                      Block: 21                      Abstract: Survey: UL / A-U58 Lease Lines:                      200.0 F SOUTH L 500.0 F WEST L Survey Lines:                      200.0 F SOUTH L 500.0 F WEST L				

**THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS**

This well shall be completed and produced in compliance with applicable special field or statewide spacing and density rules. If this well is to be used for brine mining, underground storage of liquid hydrocarbons in salt formations, or underground storage of gas in salt formations, a permit for that specific purpose must be obtained from Environmental Services prior to construction, including drilling, of the well in accordance with Statewide Rules 81, 95, and 97.

This well must comply to the new SWR 3.13 requirements concerning the isolation of any potential flow zones and zones with corrosive formation fluids. See approved permit for those formations that have been identified for the county in which you are drilling the well in.

The designated interval for one or more of the fields approved in this permit appears to overlap with the designated interval of another field or fields in this district. In the case of conflicting designated intervals you will be required to be consistent in field designation on this lease. Further, if the designated interval overlap of wells on this lease results in an actual or potential double assignment of reservoir and the applicant cannot conclusively demonstrate that there is no double assignment, the permitted well may not be assigned an allowable until the conflict is resolved. Because of the overlapping designated intervals in this area, issuance of this permit does not guarantee that the completion of the well will be approved or that the well will receive an allowable in any given field, even if that field is listed on the approved permit application.

**RAILROAD COMMISSION OF TEXAS  
OIL & GAS DIVISION  
SWR #13 Formation Data**

**WINKLER (495) County**

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
RUSTLER	725	725	possible flow; possible usable quality water	1	12/17/2013
COLBY-QUEEN	2,900	3,200		2	12/17/2013
YATES	2,280	3,200		3	12/17/2013
QUEEN-SEVEN RIVERS	2,700	3,400		4	12/17/2013
SAN ANDRES	3,600	4,400	high flows, H2S, corrosive	5	12/17/2013
HOLT	4,500	4,800		6	12/17/2013
DELAWARE	4,300	5,000		7	12/17/2013
GLORIETA	4,900	5,600		8	12/17/2013
CLEARFORK	4,750	6,200		9	12/17/2013
WICHITA ALBANY	6,600	6,850		10	12/17/2013
BRUSHY CANYON	7,300	7,300		11	12/17/2013
CHERRY CANYON	6,000	7,800		12	12/17/2013
CANYON	8,400	8,400		13	12/17/2013
BONE SPRINGS	9,000	9,800		14	12/17/2013
MONTOYA	10,300	10,300		15	12/17/2013
WADDELL	11,000	11,000		16	12/17/2013
WOLFCAMP	7,600	12,400		17	12/17/2013
ATOKA	12,900	12,900		18	12/17/2013
STRAWN	8,100	14,800		19	12/17/2013
PENNSYLVANIAN	8,000	15,500		20	12/17/2013
MISSISSIPPIAN	10,200	17,300		21	12/17/2013
DEVONIAN	7,900	17,800		22	12/17/2013
SILURIAN	8,500	18,000		23	12/17/2013
FUSSELMAN	9,700	18,800		24	12/17/2013
ELLENBURGER	9,500	21,400		25	12/17/2013

The above list may not be all inclusive, and may also include formations that do not intersect all wellbores. Formation "TOP" information listed reflects an estimated range based on geologic variances across the county. To clarify, the "Deep Top" is not the bottom of the formation; it is the deepest depth at which the "TOP" of the formation has been or might be encountered. This is a dynamic list subject to updates and revisions. It is the operator's responsibility to make sure that at the time of spudding the well the most current list is being referenced. Refer to the RRC website at the following address for the most recent information.  
<http://www.rrc.texas.gov/oil-gas/compliance-enforcement/rule-13-geologic-formation-info>

## GROUNDWATER PROTECTION DETERMINATION

Form GW-2



## Groundwater Advisory Unit

**Date Issued:** 16 February 2016**GAU Number:** 151121**Attention:** XTO ENERGY INC.  
ATTN ALAN CODY  
FORT WORTH, TX 76102**API Number:** 49533706  
**County:** WINKLER  
**Lease Name:** UNIVERSITY BLK 21**Operator No.:** 945936**Lease Number:**  
**Well Number:** 1805H  
**Total Vertical Depth:** 12500  
**Latitude:** 31.734320  
**Longitude:** -103.274100  
**Datum:** NAD27**Purpose:** Recompletion (RC)**Location:** Survey-UL; Abstract-U58; Block-21; Section-18

To protect usable-quality groundwater at this location, the Groundwater Advisory Unit of the Railroad Commission of Texas recommends:

The interval from the land surface to the base of the Allurossa, which is estimated to occur at a depth of 975 feet, must be protected.

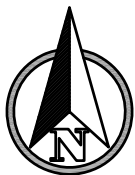
Please send Gamma Ray/Porosity log of this well when it is available.

Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. This recommendation is for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form W-14).

This determination is based on information provided when the application was submitted on 02/15/2016. If the location information has changed, you must contact the Groundwater Advisory Unit, and submit a new application if necessary. If you have questions, please contact us at 512-463-2741 or gau@rrc.texas.gov.

Groundwater Advisory Unit, Oil and Gas Division

Form GW-2 P.O. Box 12967 Austin, Texas 78771-2967 512-463-2741 Internet address: www.rrc.texas.gov  
Rev. 02/2014



0 500' 1000'  
1" = 1000 FEET

UNIVERSITY LAND  
SECTION 7, BLOCK 21

UNIVERSITY LAND  
SECTION 12,  
BLOCK 20

UNIVERSITY LAND  
SECTION 17, BLOCK 21

UNIVERSITY LAND  
SECTION 18, BLOCK 21

UNIVERSITY LAND  
SECTION 13, BLOCK 20

UNIVERSITY LAND  
SECTION 19, BLOCK 21

SURFACE HOLE LOCATION  
UNIVERSITY BLK 21 #1805H  
ELEV. 2817'

PP/TP1

BOTTOM HOLE  
LOCATION/TP2

XTO ENERGY INC.  
UNIVERSITY BLK 21  
640.7 CALLED ACRES

GENERAL NOTES

- COORDINATES SHOWN ARE BASED ON TEXAS PLANE COORDINATE SYSTEM OF NAD 27, TEXAS CENTRAL ZONE 4203
- VERTICAL DATUM IS NAVD 88
- LATITUDE AND LONGITUDE ARE NAD 27 AS SHOWN
- AREA, DISTANCES, AND COORDINATES ARE "GRID".
- UNITS ARE UNITED STATES SURVEY FOOT.
- ALL LEASE AND TRACT INFORMATION SHOWN HERE ON IS DONE SO BY LIMITED DEED RECORD INFORMATION ONLY. ALL ACREAGES SHOWN ARE BY DEED AND LEASE CALL, EXCEPT WHERE NOTED. THIS IS NOT IN ANY WAY A "BOUNDARY SURVEY".

DRIVING DIRECTIONS TO LOCATION:

FROM WINK, HEAD WEST ON FARM TO MARKET 1232 FOR 1.5 MILES. THEN TURN LEFT (WEST) ONTO COUNTY ROAD 201 FOR 5.6 MILES AND THE LOCATION WILL BE APPROXIMATELY 205 FEET ON THE LEFT (SOUTH).

I HEREBY STATE THAT THIS PLAT  
SHOWS THE SUBJECT SURFACE  
LOCATION AS STAKED ON THE GROUND.

MARK DILLON HARP  
REGISTERED PROFESSIONAL LAND SURVEYOR  
STATE OF TEXAS NO. 6445



WELL LOCATION INFORMATION:

SURFACE HOLE LOCATION:

NAD 83, TEXAS CENTRAL ZONE COORD'S  
Y = 10,606,657.08, X = 1,382,280.54  
LAT: N 31.73444°, LONG: W 103.27455°  
SHL: 500' FWL & 240' FNL  
SHL: 500' FWLL & 240' FNLL

NAD 27, TEXAS CENTRAL ZONE COORD'S  
Y = 764,080.86, X = 1,085,816.29  
LAT: N 31.73432°, LONG: W 103.27410°

TP1/PP LOCATION:

NAD 83, TEXAS CENTRAL ZONE COORD'S  
Y = 10,606,081.13, X = 1,382,448.74  
LAT: N 31.73287°, LONG: W 103.27396°  
TP1/PP: 500' FWLL & 840' FNLL

NAD 27, TEXAS CENTRAL ZONE COORD'S  
Y = 763,504.92, X = 1,085,984.49  
LAT: N 31.73274°, LONG: W 103.27351°

BOTTOM HOLE LOCATION/TP2:

NAD 83, TEXAS CENTRAL ZONE COORD'S  
Y = 10,602,003.47, X = 1,383,639.53  
LAT: N 31.72175°, LONG: W 103.26978°  
BHL/TP2: 200' FSL & 500' FWL  
BHL/TP2: 200' FSLL & 500' FWLL

NAD 27, TEXAS CENTRAL ZONE COORD'S  
Y = 759,427.32, X = 1,087,175.22  
LAT: N 31.72163°, LONG: W 103.26933°

PLAT OF:

A PROPOSED WELL LOCATION FOR:

XTO ENERGY INC.  
UNIVERSITY BLK 21 #1805H

SITUATED IN THE UNIVERSITY LAND, SECTION 18, BLOCK 21, BEING APPROXIMATELY 6.8 MILES WEST OF WINK IN WINKLER COUNTY, TEXAS.

**FSC INC**  
SURVEYORS+ENGINEERS

550 Bailey Ave., 205 - Fort Worth, TX 76107  
Ph: 817.349.9800 - Fax: 979.732.5271  
TBPE Firm 17957 | TBPLS Firm 10193887  
www.fscinc.net

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DATE: 10-19-2016  
DRAWN BY: BLC/AI  
CHECKED BY: BC/AP/DH  
FIELD CREW: DC/BK  
PROJECT NO: 2015121240  
SCALE: 1" = 1000'  
SHEET: 1  
REVISION: 2