

API No. <u>42-317-40613</u> Drilling Permit # <u>820427</u> SWR Exception Case/Docket No. <u>08-0302682</u> (R38)		<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>684474</b>		2. Operator's Name (as shown on form P-5, Organization Report) <b>QEP ENERGY COMPANY</b>			3. Operator Address (include street, city, state, zip): <b>ATTN SOUTHERN DIV REGULATORY</b> <b>1050 17TH ST SUITE 800</b> <b>DENVER, CO 80265-0000</b>		
4. Lease Name <b>UNIVERSITY 7-2730</b>			5. Well No. <b>N 16MB</b>				
<b>GENERAL INFORMATION</b>							
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 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>8755</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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
<b>SURFACE LOCATION AND ACREAGE INFORMATION</b>							
11. RRC District No. <b>08</b>		12. County <b>MARTIN</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>21.6</u> miles in a <u>NE</u> direction from <u>ANDREWS</u> which is the nearest town in the county of the well site.							
15. Section <b>30</b>	16. Block <b>7</b>	17. Survey <b>UL</b>		18. Abstract No. <b>A-U27</b>	19. Distance to nearest lease line: <u>100</u> ft.	20. Number of contiguous acres in lease, pooled unit, or unitized tract: <b>963</b>	
21. Lease Perpendiculars: <u>300</u> ft from the <u>FSL</u> line and <u>510</u> ft from the <u>FWL</u> line. 22. Survey Perpendiculars: <u>300</u> ft from the <u>FSL</u> line and <u>510</u> ft from the <u>FWL</u> line.							
23. Is this a pooled unit? <input checked="" type="checkbox"/> Yes <input 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				
<b>FIELD INFORMATION</b> List all fields of anticipated completion including Wildcat. List one zone per line.							
26. RRC District No.	27. Field No.	28. Field Name (exactly as shown in RRC records)			29. Well Type	30. Completion Depth	
08	85280300	SPRABERRY (TREND AREA)			Oil or Gas Well	8755	
<b>BOTTOMHOLE LOCATION INFORMATION</b> is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)							
<b>Remarks</b> [RRC STAFF Nov 30, 2016 1:12 PM]: There have been problems identified with this permit (see problem letter attachment). Notification sent.; [RRC STAFF Nov 30, 2016 1:15 PM]: Changed BHL survey line call to match plat. Changed BHL survey information to match plat and RRC GIS. Changed coordinate information to match plat.; [RRC STAFF Nov 30, 2016 2:01 PM]: Problems identified with this permit are resolved.; [RRC STAFF Nov 30, 2016 2:01 PM]: Revised P16 attached.					<b>Certificate:</b> I certify that information stated in this application is true and complete, to the best of my knowledge.  <div style="display: flex; justify-content: space-between;"> <div> <u>Kelly Hamden, Regulatory Analyst</u>            Name of filer   <u>(303)405-6630</u>            Phone         </div> <div> <u>Nov 15, 2016</u>            Date submitted   <u>Kelly.Hamden@qepres.com</u>            E-mail Address (OPTIONAL)         </div> </div>		
<b>RRC Use Only</b> Data Validation Time Stamp: Nov 30, 2016 4:09 PM( Current Version )							

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

Form W-1H 07/2004  
Supplemental Horizontal Well Information

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

*This facsimile W-1 was generated electronically from data submitted to the RRC.  
A certification of the automated data is available in the RRC's Austin office.*

Permit #	820427
Approved Date:	Nov 30, 2016

1. RRC Operator No. 684474	2. Operator's Name (exactly as shown on form P-5, Organization Report) QEP ENERGY COMPANY	3. Lease Name UNIVERSITY 7-2730	4. Well No. N 16MB
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#### Lateral Drainhole Location Information

5. Field as shown on Form W-1	SPRABERRY (TREND AREA) (Field # 85280300, RRC District 08)
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6. Section 27	7. Block 7	8. Survey UL	9. Abstract	10. County of BHL MARTIN
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11. Terminus Lease Line Perpendiculars 1 ft. from the FNL line. and 380 ft. from the FWL line
12. Terminus Survey Line Perpendiculars 2639 ft. from the FSL line. and 510 ft. from the FWL line
13. Penetration Point Lease Line Perpendiculars 1 ft. from the FSL line. and 380 ft. from the FWL 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 <b>820427</b>	DATE PERMIT ISSUED OR AMENDED <b>Nov 30, 2016</b>	DISTRICT <b>* 08</b>			
API NUMBER <b>42-317-40613</b>	FORM W-1 RECEIVED <b>Nov 15, 2016</b>	COUNTY <b>MARTIN</b>			
TYPE OF OPERATION <b>NEW DRILL</b>	WELLBORE PROFILE(S) <b>Horizontal</b>	ACRES <b>963</b>			
OPERATOR  <b>QEP ENERGY COMPANY</b>  ATTN SOUTHERN DIV REGULATORY 1050 17TH ST SUITE 800 DENVER, CO 80265-0000		684474  <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> (432) 684-5581			
LEASE NAME  <b>UNIVERSITY 7-2730</b>		WELL NUMBER  <b>N 16MB</b>			
LOCATION  <b>21.6 miles NE direction from ANDREWS</b>		TOTAL DEPTH  <b>8755</b>			
Section, Block and/or Survey SECTION <b>◀ 30</b> BLOCK <b>◀ 7</b> ABSTRACT <b>◀ U27</b> SURVEY <b>◀ UL</b>					
DISTANCE TO SURVEY LINES <b>300 ft. FSL    510 ft. FWL</b>		DISTANCE TO NEAREST LEASE LINE <b>100 ft.</b>			
DISTANCE TO LEASE LINES <b>300 ft. FSL    510 ft. FWL</b>		DISTANCE TO NEAREST WELL ON LEASE <b>See FIELD(s) Below</b>			
FIELD(s) and LIMITATIONS:  <p align="center">*    SEE FIELD DISTRICT FOR REPORTING PURPOSES    *</p> <p align="center">** THIS PERMIT IS GRANTED PURSUANT TO STATEWIDE RULE 38(h)(3) **</p> <p align="center">CASE NO. 08-0302682</p>					
FIELD NAME LEASE NAME		ACRES NEAREST LEASE	DEPTH NEAREST LEASE	WELL # NEAREST WE	DIST
----- <b>** SPRABERRY (TREND AREA)</b> <b>UNIVERSITY 7-2730</b> -----		<b>963.00</b> <b>100</b>	<b>8,755</b>	<b>N 16MB</b> <b>390</b>	<b>08</b>
----- WELLBORE PROFILE(s) FOR FIELD: <b>Horizontal</b> -----					
RESTRICTIONS:    Lateral: TH1 Penetration Point Location Lease Lines:                      1.0 F FSL L 380.0 F FWL L  Terminus Location BH County: MARTIN Section: 27                      Block: 7                      Abstract: Survey: UL Lease Lines:                      1.0 F FNL L 380.0 F FWL L Survey Lines:                      2639.0 F FSL L 510.0 F FWL L					
' ** ' PRECEDING FIELD NAME INDICATES RULE (R38)					
<p align="center"><b>THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS</b></p> <p>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.</p>					

**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;"><b>820427</b></div>	DATE PERMIT ISSUED OR AMENDED <div style="text-align: center;"><b>Nov 30, 2016</b></div>	DISTRICT <div style="text-align: center;"><b>* 08</b></div>
API NUMBER <div style="text-align: right;"><b>42-317-40613</b></div>	FORM W-1 RECEIVED <div style="text-align: center;"><b>Nov 15, 2016</b></div>	COUNTY <div style="text-align: center;"><b>MARTIN</b></div>
TYPE OF OPERATION <div style="text-align: center;"><b>NEW DRILL</b></div>	WELLBORE PROFILE(S) <div style="text-align: center;"><b>Horizontal</b></div>	ACRES <div style="text-align: center;"><b>963</b></div>
OPERATOR <div style="text-align: right;"><b>684474</b></div> <div style="text-align: center;"><b>QEP ENERGY COMPANY</b></div> <div style="text-align: center;">ATTN SOUTHERN DIV REGULATORY 1050 17TH ST SUITE 800 DENVER, CO 80265-0000</div>		NOTICE This permit and any allowable assigned may be revoked if payment for fee(s) submitted to the Commission is not honored. <div style="text-align: center;"><b>District Office Telephone No:</b> (432) 684-5581</div>
LEASE NAME <div style="text-align: center;"><b>UNIVERSITY 7-2730</b></div>		WELL NUMBER <div style="text-align: center;"><b>N 16MB</b></div>
LOCATION <div style="text-align: center;"><b>21.6 miles NE direction from ANDREWS</b></div>		TOTAL DEPTH <div style="text-align: center;"><b>8755</b></div>
Section, Block and/or Survey <div style="display: flex; justify-content: space-between;"> <div>SECTION  <b>30</b></div> <div>BLOCK  <b>7</b></div> <div>ABSTRACT  <b>U27</b></div> </div> <div style="display: flex; justify-content: space-between;"> <div>SURVEY  <b>UL</b></div> </div>		
DISTANCE TO SURVEY LINES <div style="text-align: center;"><b>300 ft. FSL    510 ft. FWL</b></div>		DISTANCE TO NEAREST LEASE LINE <div style="text-align: center;"><b>100 ft.</b></div>
DISTANCE TO LEASE LINES <div style="text-align: center;"><b>300 ft. FSL    510 ft. FWL</b></div>		DISTANCE TO NEAREST WELL ON LEASE <div style="text-align: center;"><b>See FIELD(s) Below</b></div>
FIELD(s) and LIMITATIONS: <div style="text-align: center; margin-top: 10px;"> <b>* SEE FIELD DISTRICT FOR REPORTING PURPOSES *</b>  <b>** THIS PERMIT IS GRANTED PURSUANT TO STATEWIDE RULE 38(h)(3) **</b>  <b>CASE NO. 08-0302682</b> </div>		
<div style="display: flex; justify-content: space-between; font-size: small;"> <div>FIELD NAME</div> <div>ACRES</div> <div>DEPTH</div> <div>WELL #</div> <div>DIST</div> </div> <div style="display: flex; justify-content: space-between; font-size: small;"> <div>LEASE NAME</div> <div>NEAREST LEASE</div> <div>NEAREST WE</div> </div> <p style="margin-top: 10px;">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.</p>		

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

**MARTIN (317) County**

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
SANTA ROSA	1,000	1,000		1	12/17/2013
YATES	2,200	2,700		2	12/17/2013
QUEEN	4,100	4,100		3	12/17/2013
GRAYBURG	3,950	4,300		4	12/17/2013
SAN ANDRES	3,500	4,700	Active CO2 flood; high flows; H2S; corrosive	5	12/17/2013
CISCO	8,500	8,500		6	12/17/2013
SPRABERRY	6,500	8,500		7	12/17/2013
DEAN	6,500	9,500		8	12/17/2013
WOLFCAMP	8,600	9,600		9	12/17/2013
PENNSYLVANIAN	9,400	10,600		10	12/17/2013
STRAWN	10,100	10,600		11	12/17/2013
MISSISSIPPIAN	11,100	11,100		12	12/17/2013
FUSSELMAN	10,600	11,600		13	12/17/2013
SILURIAN	11,600	12,100		14	12/17/2013
DEVONIAN	11,500	12,200		15	12/17/2013
ELLENBURGER	13,200	13,200		16	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:** 29 August 2016**GAU Number:** 159200**Attention:** QEP ENERGY COMPANY  
ATTN SOUTHERN DIV  
DENVER, CO 80265**API Number:** 31740531  
**County:** MARTIN  
**Lease Name:** UNIVERSITY 7-2730**Operator No.:** 684474**Lease Number:**  
**Well Number:** S 02LD  
**Total Vertical Depth:** 8100  
**Latitude:** 32.394210  
**Longitude:** -102.173814  
**Datum:** NAD27**Purpose:** New Drill**Location:** Survey-UL; Block-7; Section-27

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 a depth of 350 feet must be protected.

This recommendation is applicable for all wells drilled in this University 7-2730 Lease in Sections 27 and 30.

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 08/26/2016. 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](mailto:gau@rrc.texas.gov).

Groundwater Advisory Unit, Oil and Gas Division

