

API No. <u>42-383-39745</u> Drilling Permit # <u>820774</u> SWR Exception Case/Docket No. _____		RAILROAD COMMISSION OF TEXAS OIL & GAS DIVISION APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER <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>				FORM W-1 07/2004 Permit Status: Approved	
1. RRC Operator No. 766370		2. Operator's Name (as shown on form P-5, Organization Report) SEM OPERATING COMPANY LLC			3. Operator Address (include street, city, state, zip): SUITE 1850 2050 WEST SAM HOUSTON PKWY S HOUSTON, TX 77042-0000		
4. Lease Name UNIVERSITY 9			5. Well No. 2816WB				
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 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 9000		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			
SURFACE LOCATION AND ACREAGE INFORMATION							
11. RRC District No. 7C		12. County REAGAN		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>9.4</u> miles in a <u>NW</u> direction from <u>Big Lake</u> which is the nearest town in the county of the well site.							
15. Section 28		16. Block 9		17. Survey UL		18. Abstract No. A-	
				19. Distance to nearest lease line: 100 ft.		20. Number of contiguous acres in lease, pooled unit, or unitized tract: 5812.2	
21. Lease Perpendiculars: <u>7112</u> ft from the <u>NORTH</u> line and <u>7182</u> ft from the <u>EAST</u> line. 22. Survey Perpendiculars: <u>1782</u> ft from the <u>NORTH</u> line and <u>1904</u> ft from the <u>EAST</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 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	
7C	53613750	LIN (WOLFCAMP)			Oil or Gas Well	9000	
BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)							
Remarks See W1 Comments attached					Certificate: 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>Amber Moore</u> Name of filer </div> <div> <u>Nov 29, 2016</u> Date submitted </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <u>(432)2182001</u> Phone </div> <div> <u>amoore@sequitirenergy.com</u> E-mail Address (OPTIONAL) </div> </div>		
RRC Use Only							
Data Validation Time Stamp: Dec 16, 2016 9:37 AM(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

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

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Permit #	820774
Approved Date:	Dec 14, 2016

1. RRC Operator No. 766370	2. Operator's Name (exactly as shown on form P-5, Organization Report) SEM OPERATING COMPANY LLC	3. Lease Name UNIVERSITY 9	4. Well No. 2816WB
Lateral Drainhole Location Information			
5. Field as shown on Form W-1 LIN (WOLFCAMP) (Field # 53613750, RRC District 7C)			
6. Section 33	7. Block 9	8. Survey UL	9. Abstract
		10. County of BHL REAGAN	
11. Terminus Lease Line Perpendiculars 5 ft. from the South line. and 7368 ft. from the East line			
12. Terminus Survey Line Perpendiculars 5 ft. from the South line. and 2090 ft. from the East line			
13. Penetration Point Lease Line Perpendiculars 7942 ft. from the South line. and 7368 ft. from the East line			

Permit Status: **Approved**

*The RRC has not approved this application.
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the user's own risk.*

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

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

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W-1 Comments

Permit # **820774**

Approved Date: **Dec 14, 2016**

[RRC STAFF Dec 13, 2016 9:07 AM]: There have been problems identified with this permit (see problem letter attachment). Notification sent.; [RRC STAFF Dec 13, 2016 9:09 AM]: Changed distance to nearest lease line to match plat.; [RRC STAFF Dec 13, 2016 9:11 AM]: There have been problems identified with this permit (see problem letter attachment). Notification sent.; [RRC STAFF Dec 13, 2016 3:08 PM]: Problems identified with this permit are resolved.; [RRC STAFF Dec 13, 2016 3:09 PM]: Lease plat attached. Legible P16 attached.; [RRC STAFF Dec 13, 2016 3:10 PM]: There have been problems identified with this permit (see problem letter attachment). Notification sent.; [RRC STAFF Dec 13, 2016 3:16 PM]: There have been problems identified with this permit (see problem letter attachment). Notification sent.; [RRC STAFF Dec 14, 2016 7:20 AM]: Problems identified with this permit are resolved.; [RRC STAFF Dec 14, 2016 7:20 AM]: Revised P16 attached.

**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 820774	DATE PERMIT ISSUED OR AMENDED Dec 14, 2016	DISTRICT * 7C	
API NUMBER 42-383-39745	FORM W-1 RECEIVED Nov 29, 2016	COUNTY REAGAN	
TYPE OF OPERATION NEW DRILL	WELLBORE PROFILE(S) Horizontal	ACRES 5812.2	
OPERATOR SEM OPERATING COMPANY LLC SUITE 1850 2050 WEST SAM HOUSTON PKWY S HOUSTON, TX 77042-0000		NOTICE This permit and any allowable assigned may be revoked if payment for fee(s) submitted to the Commission is not honored. District Office Telephone No: (325) 657-7450	
LEASE NAME UNIVERSITY 9		WELL NUMBER 2816WB	
LOCATION 9.4 miles NW direction from BIG LAKE		TOTAL DEPTH 9000	
Section, Block and/or Survey SECTION ◀ 28 BLOCK ◀ 9 ABSTRACT ◀ SURVEY ◀ UL			
DISTANCE TO SURVEY LINES 1782 ft. NORTH 1904 ft. EAST		DISTANCE TO NEAREST LEASE LINE 100 ft.	
DISTANCE TO LEASE LINES 7112 ft. NORTH 7182 ft. EAST		DISTANCE TO NEAREST WELL ON LEASE See FIELD(s) Below	
FIELD(s) and LIMITATIONS: <p align="center">* SEE FIELD DISTRICT FOR REPORTING PURPOSES *</p>			
FIELD NAME LEASE NAME		ACRES NEAREST LEASE	DEPTH NEAREST WE
----- LIN (WOLFCAMP) UNIVERSITY 9 -----		5812.20 100	9,000 222
----- WELLBORE PROFILE(s) FOR FIELD: Horizontal -----			
RESTRICTIONS: Lateral: TH1 Penetration Point Location Lease Lines: 7942.0 F SOUTH L 7368.0 F EAST L Terminus Location BH County: REAGAN Section: 33 Block: 9 Abstract: Survey: UL Lease Lines: 5.0 F SOUTH L 7368.0 F EAST L Survey Lines: 5.0 F SOUTH L 2090.0 F EAST L			
<p align="center">THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS</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;">820774</div>	DATE PERMIT ISSUED OR AMENDED <div style="text-align: center;">Dec 14, 2016</div>	DISTRICT <div style="text-align: center;">* 7C</div>
API NUMBER <div style="text-align: right;">42-383-39745</div>	FORM W-1 RECEIVED <div style="text-align: center;">Nov 29, 2016</div>	COUNTY <div style="text-align: center;">REAGAN</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;">5812.2</div>
OPERATOR <div style="text-align: right;">766370</div> <div style="text-align: center;">SEM OPERATING COMPANY LLC</div> <div>SUITE 1850 2050 WEST SAM HOUSTON PKWY S HOUSTON, TX 77042-0000</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;">District Office Telephone No: (325) 657-7450</div>
LEASE NAME <div style="text-align: center;">UNIVERSITY 9</div>		WELL NUMBER <div style="text-align: center;">2816WB</div>
LOCATION <div style="text-align: center;">9.4 miles NW direction from BIG LAKE</div>		TOTAL DEPTH <div style="text-align: center;">9000</div>
Section, Block and/or Survey <div> SECTION 28 BLOCK 9 ABSTRACT </div> <div> SURVEY UL </div>		
DISTANCE TO SURVEY LINES <div style="text-align: center;">1782 ft. NORTH 1904 ft. EAST</div>		DISTANCE TO NEAREST LEASE LINE <div style="text-align: center;">100 ft.</div>
DISTANCE TO LEASE LINES <div style="text-align: center;">7112 ft. NORTH 7182 ft. EAST</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; margin-top: 20px;">* SEE FIELD DISTRICT FOR REPORTING PURPOSES *</div> <div style="margin-top: 20px;"> <div style="display: flex; justify-content: space-between;"> <div> FIELD NAME LEASE NAME </div> <div> ACRES NEAREST LEASE </div> <div> DEPTH NEAREST LEASE </div> <div> WELL # NEAREST WE </div> <div> DIST </div> </div> <p style="margin-top: 20px;">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> </div>		

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

REAGAN (383) County

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
GRAYBURG	1,500	2,500		1	12/17/2013
QUEEN	1,900	2,500		2	12/17/2013
SAN ANDRES	2,000	5,000	saltwater flow, possibly heavy	3	12/17/2013
CLEARFORK	3,300	4,000		4	12/17/2013
SPRABERRY	3,300	10,000		5	12/17/2013
STRAWN	9,300	10,200		6	12/17/2013
FUSSELMAN	8,800	11,000		7	12/17/2013
ELLENBURGER	8,700	10,500		8	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: 01 December 2016**GAU Number:** 163841**Attention:** SEM OPERATING COMPANY
SUITE 1850
HOUSTON, TX 77042**Operator No.:** 766370**API Number:**
County: REAGAN
Lease Name: UNIVERSITY 9
Lease Number:
Well Number: 2816WB
Total Vertical Depth: 9000
Latitude: 31.239341
Longitude: -101.607818
Datum: NAD27**Purpose:** New Drill**Location:** Survey-UL; Abstract-U198

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 650 feet must be protected.

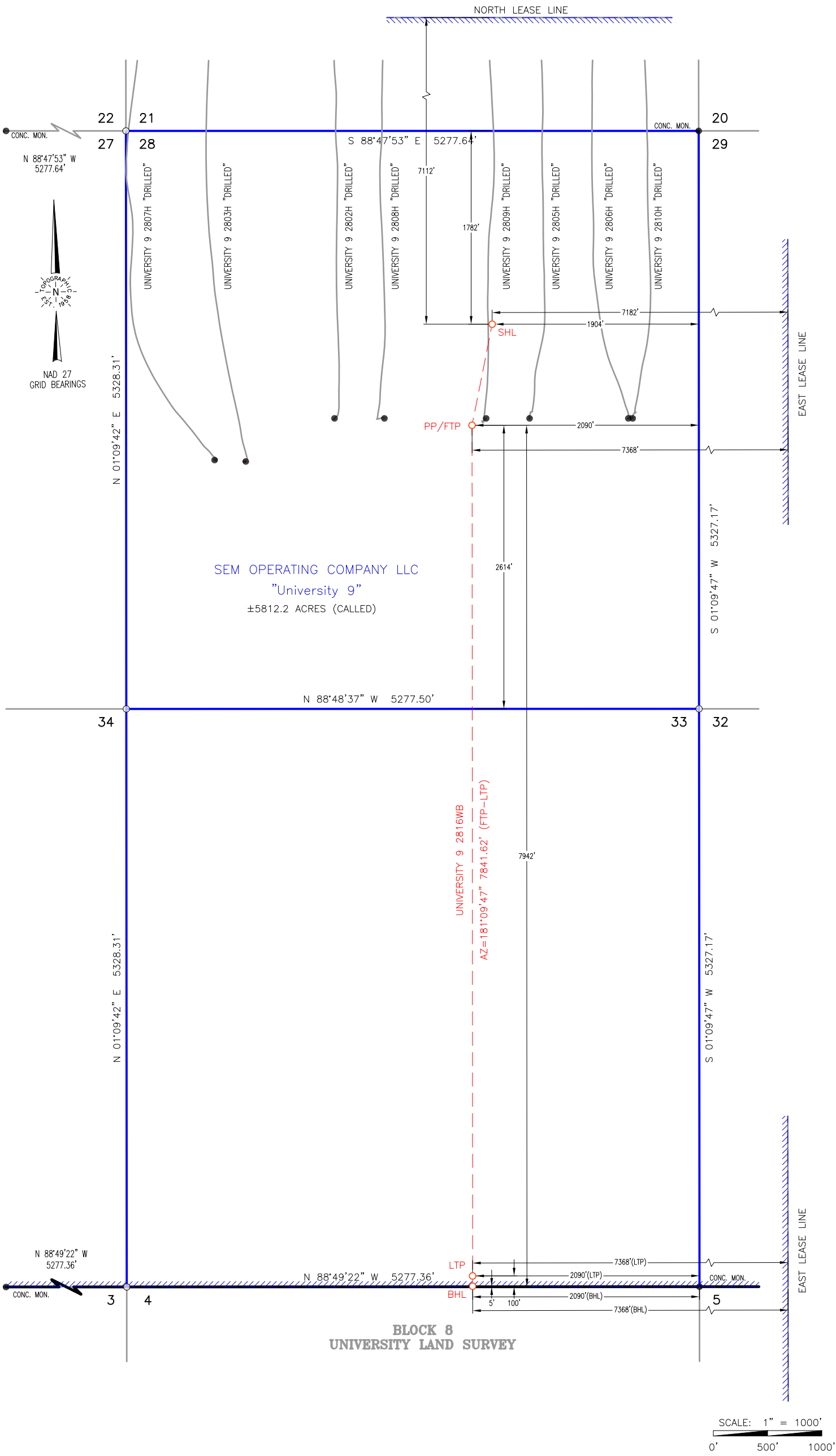
This recommendation is applicable to all wells within a radius of 600 feet of this location.

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 12/01/2016. 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



Surface Hole Location:
GROUND ELEVATION:
SHL Ground Elevation: 2663'
COORDINATES:
NAD 27 TX-C ZONE:
X = 1601706.28 Y = 574240.59
LAT.: N 31°14'21.63" LONG.: W 101°36'28.14"
LAT.: N 31.2393405 LONG.: W 101.6078175
NAD 83 TX-C ZONE:
X = 1898174.28 Y = 10416817.34
LAT.: N 31°14'22.17" LONG.: W 101°36'29.57"
LAT.: N 31.2394923 LONG.: W 101.6082152
SURVEY LINE PERPENDICULARS:
1782' FNL & 1904' FEL (SEC. 28)
UNIT LINE PERPENDICULARS:
7112' FNL & 7182' FEL
Penetration Point/
First Take Point:
COORDINATES:
NAD 27 TX-C ZONE:
X = 1601501.41 Y = 573313.06
LAT.: N 31°14'12.42" LONG.: W 101°36'30.38"
LAT.: N 31.2367840 LONG.: W 101.6084390
NAD 83 TX-C ZONE:
X = 1897969.40 Y = 10415889.82
LAT.: N 31°14'12.97" LONG.: W 101°36'31.81"
LAT.: N 31.2369359 LONG.: W 101.6088367
SURVEY LINE PERPENDICULARS:
2614' FSL & 2090' FEL (SEC. 28)
UNIT LINE PERPENDICULARS:
7942' FSL & 7368' FEL
Last Take Point:
COORDINATES:
NAD 27 TX-C ZONE:
X = 1601342.23 Y = 565473.06
LAT.: N 31°12'54.81" LONG.: W 101°36'31.18"
LAT.: N 31.2152244 LONG.: W 101.6086607
NAD 83 TX-C ZONE:
X = 1897810.19 Y = 10408049.83
LAT.: N 31°12'55.36" LONG.: W 101°36'32.61"
LAT.: N 31.2153771 LONG.: W 101.6090584
SURVEY LINE PERPENDICULARS:
100' FSL & 2090' FEL (SEC. 33)
UNIT LINE PERPENDICULARS:
100' FSL & 7368' FEL
Bottom Hole Location:
COORDINATES:
NAD 27 TX-C ZONE:
X = 1601340.30 Y = 565378.07
LAT.: N 31°12'53.87" LONG.: W 101°36'31.19"
LAT.: N 31.2149632 LONG.: W 101.6086634
NAD 83 TX-C ZONE:
X = 1897808.26 Y = 10407954.85
LAT.: N 31°12'54.42" LONG.: W 101°36'32.62"
LAT.: N 31.2151159 LONG.: W 101.6090611
SURVEY LINE PERPENDICULARS:
5' FSL & 2090' FEL (SEC. 33)
UNIT LINE PERPENDICULARS:
5' FSL & 7368' FEL

All Coordinates are in NAD 27 TX-C Zone unless otherwise noted.

REV#-BY	DATE REVISED	REV#-BY	DATE REVISED
MP	11-21-2016	1-XXX	XX/XX/XX

SPECIAL NOTES:

LEGEND	Unit Boundary
	Section Lines
	Block Line
	Powerline
	Pipeline
	Lease Road
	Calculated Corner

CERTIFICATION:

This well location shown on this permit plat was surveyed on the ground under my direct supervision. This plat is for Texas Railroad Commission permit purpose only and should not be considered a boundary survey.

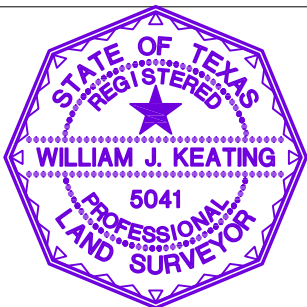
William J. Keating
Texas Reg. No. 5041



2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM

Texas FIRM Registration NO. 10042500

LO_UNIVERSTIY_9_2816WB_REV1



SEM OPERATING
COMPANY LLC

LEASE NAME & WELL NO.:
UNIVERSITY 9 #2816WB

TOPOGRAPHY & VEGETATION:
NATURAL MESQUITE PASTURE

NEAREST TOWN IN COUNTY:
±9.4 MILES NORTHWEST OF BIG LAKE, TEXAS

LOCATION DESCRIPTION:

SHL/PP/FTP: SECTION 28, BLOCK 9, UNIVERSITY LAND SURVEY
LTP/BHL: SECTION 33, BLOCK 9, UNIVERSITY LAND SURVEY
REAGAN COUNTY, TEXAS

Scale: 1" = 1000'	Surveyed: 11-09-2016	ORIGINAL DOC. SIZE: 11"x17"
COGO: 519-89429	Drawn By: MP; 11-10-2016	