



RAILROAD COMMISSION OF TEXAS

Form W-2

1701 N. Congress
P.O. Box 12967
Austin, Texas 78701-2967

Status: Approved
Date: 04/26/2018
Tracking No.: 189190

OIL WELL POTENTIAL TEST, COMPLETION OR RECOMPLETION REPORT, AND LOG

OPERATOR INFORMATION

Operator Name: SEM OPERATING COMPANY LLC **Operator No.:** 766370
Operator Address: SUITE 1850 2050 WEST SAM HOUSTON PKWY S HOUSTON, TX 77042-0000

WELL INFORMATION

API No.: 42-383-39869 **County:** REAGAN
Well No.: 2902WB **RRC District No.:** 7C
Lease Name: UNIVERSITY 9 **Field Name:** LIN (WOLFCAMP)
RRC Lease No.: 17639 **Field No.:** 53613750
Location: Section: 29, Block: 9, Survey: UL, Abstract:

Latitude: 31.238431 **Longitude:** -101.586222
This well is located 8.1 **miles in a** NW
direction from BIG LAKE,
which is the nearest town in the county.

FILING INFORMATION

Purpose of filing: Retest
Type of completion: Other/Recompletion
Well Type: Producing **Completion or Recompletion Date:** 11/28/2017

Type of Permit	Date	Permit No.
Permit to Drill, Plug Back, or Deepen	08/28/2017	826219
Rule 37 Exception		
Fluid Injection Permit		
O&G Waste Disposal Permit		
Other:		

COMPLETION INFORMATION

Spud date: 05/22/2017 **Date of first production after rig released:** 11/28/2017
Date plug back, deepening, recompletion, or drilling operation commenced: 07/08/2017 **Date plug back, deepening, recompletion, or drilling operation ended:** 08/02/2017
Number of producing wells on this lease in this field (reservoir) including this well: 14 **Distance to nearest well in lease & reservoir (ft.):** 3447.0
Total number of acres in lease: 5812.00 **Elevation (ft.):** 2677 GL
Total depth TVD (ft.): 8160 **Total depth MD (ft.):** 16531
Plug back depth TVD (ft.): 8160 **Plug back depth MD (ft.):** 16531
Was directional survey made other than inclination (Form W-12)? Yes **Rotation time within surface casing (hours):** 72.0
Recompletion or reclass? Yes **Is Cementing Affidavit (Form W-15) attached?** Yes
Type(s) of electric or other log(s) run: Gamma Ray (MWD) **Multiple completion?** No
Electric Log Other Description:
Location of well, relative to nearest lease boundaries **Off Lease :** No
of lease on which this well is located: 7381.0 **Feet from the** North **Line and**
430.0 **Feet from the** East **Line of the**
UNIVERSITY 9 **Lease.**

FORMER FIELD (WITH RESERVOIR) & GAS ID OR OIL LEASE NO.

Field & Reservoir **Gas ID or Oil Lease No.** **Well No.** **Prior Service Type**

PACKET: N/A

W2: N/A

FOR NEW DRILL OR RE-ENTRY, SURFACE CASING DEPTH DETERMINED BY:

GAU Groundwater Protection Determination **Depth (ft.):** 650.0 **Date:** 05/04/2017
SWR 13 Exception **Depth (ft.):**

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION

Date of test: 02/28/2018 **Production method:** Flowing
Number of hours tested: 24 **Choke size:** OPEN
Was swab used during this test? No **Oil produced prior to test:** 20464.00

PRODUCTION DURING TEST PERIOD:

Oil (BBLs): 891.00 **Gas (MCF):** 432
Gas - Oil Ratio: 484 **Flowing Tubing Pressure:** 405.00
Water (BBLs): 1734

CALCULATED 24-HOUR RATE

Oil (BBLs): 891.0 **Gas (MCF):** 432
Oil Gravity - API - 60.: 46.0 **Casing Pressure:** 220.00
Water (BBLs): 1734

CASING RECORD

Row	Type of Casing	Casing Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage Depth (ft.)	Multi - Stage Shoe Depth (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	Surface	13 3/8	17 1/2	745			CJ912	600	1081.0	SURF ACE	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	7522			J-55, L-80	1835	3825.0	2820	Calculation
3	Conventional Production	5 1/2	8 3/4	16526			HCP-110	3095	4791.0	SURF ACE	Circulated to Surface

LINER RECORD

Row	Liner Size (in.)	Hole Size (in.)	Liner Top (ft.)	Liner Bottom (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
N/A									

TUBING RECORD

Row	Size (in.)	Depth (ft.)	Packer Depth (ft.)/Type
1	2 7/8	7516	7504 / AS1X

PRODUCING/INJECTION/DISPOSAL INTERVAL

Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 8621	16428.0

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC.

Was hydraulic fracturing treatment performed? No

Is well equipped with a downhole actuation sleeve? No **If yes, actuation pressure (PSIG):**

Production casing test pressure (PSIG) prior to hydraulic fracturing treatment: 1500 **Actual maximum pressure (PSIG) during hydraulic fracturing:** 500

Has the hydraulic fracturing fluid disclosure been reported to FracFocus disclosure registry (SWR29)? No

Row	Type of Operation	Amount and Kind of Material Used	Depth Interval (ft.)
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FORMATION RECORD

<u>Formations</u>	<u>Encountered</u>	<u>Depth TVD (ft.)</u>	<u>Depth MD (ft.)</u>	<u>Is formation isolated?</u>	<u>Remarks</u>
GRAYBURG	Yes	1500.0	1500.0	Yes	ISOLATED BY CEMENT
QUEEN	Yes	1900.0	1900.0	Yes	ISOLATED BY CEMENT
SAN ANDRES - SALTWATER FLOW, POSSIBLY HEAVY	Yes	2000.0	2000.0	Yes	ISOLATED BY CEMENT
CLEARFORK	Yes	3300.0	3300.0	Yes	ISOLATED BY CEMENT
SPRABERRY	Yes	6775.0	6775.0	Yes	ISOLATED BY CEMENT
WOLFCAMP	Yes	7695.0	7695.0	Yes	ISOLATED BY CEMENT
STRAWN	No			No	DID NOT ENCOUNTER. TD IN WOLFCAMP FIELD.
FUSSELMAN	No			No	DID NOT ENCOUNTER. TD IN WOLFCAMP FIELD.
ELLENBURGER	No			No	DID NOT ENCOUNTER. TD IN WOLFCAMP FIELD.

Do the producing interval of this well produce H₂S with a concentration in excess of 100 ppm (SWR 36)? No

Is the completion being downhole commingled (SWR 10)? No

REMARKS

KOP: 7,615'

RRC REMARKS**PUBLIC COMMENTS:**

[RRC Staff 2018-03-22 08:38:07.688] EDL=7807 feet, max acres=320, LIN (WOLFCAMP) oil well

CASING RECORD :**TUBING RECORD:****PRODUCING/INJECTION/DISPOSAL INTERVAL :****ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC. :****POTENTIAL TEST DATA:****OPERATOR'S CERTIFICATION**

Printed Name: Mandi Prince
Telephone No.: (903) 705-0829

Title: Regulatory Assistant
Date Certified: 03/23/2018

GROUNDWATER PROTECTION DETERMINATION

Form GW-2



Groundwater Advisory Unit

Date Issued:	04 May 2017	GAU Number:	171662
Attention:	SEM OPERATING COMPANY SUITE 1850 HOUSTON, TX 77042	API Number:	
Operator No.:	766370	County:	REAGAN
		Lease Name:	UNIVERSITY 9
		Lease Number:	
		Well Number:	2913WA
		Total Vertical Depth:	8000
		Latitude:	31.235140
		Longitude:	-101.592273
		Datum:	NAD27

Purpose: New Drill
Location: Survey-UL; Block-9; Section-29

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 20 feet below the base of the Cretaceous-age beds must be protected. The base of the Cretaceous is estimated to occur at a depth between 625 and 650 feet.

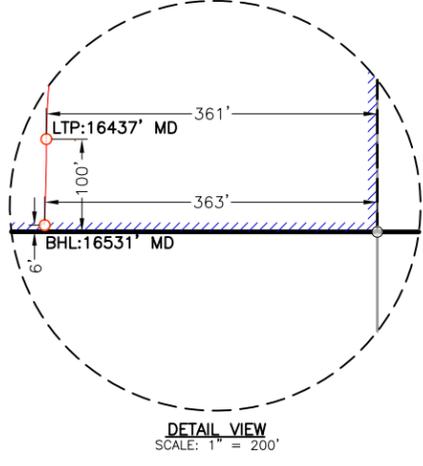
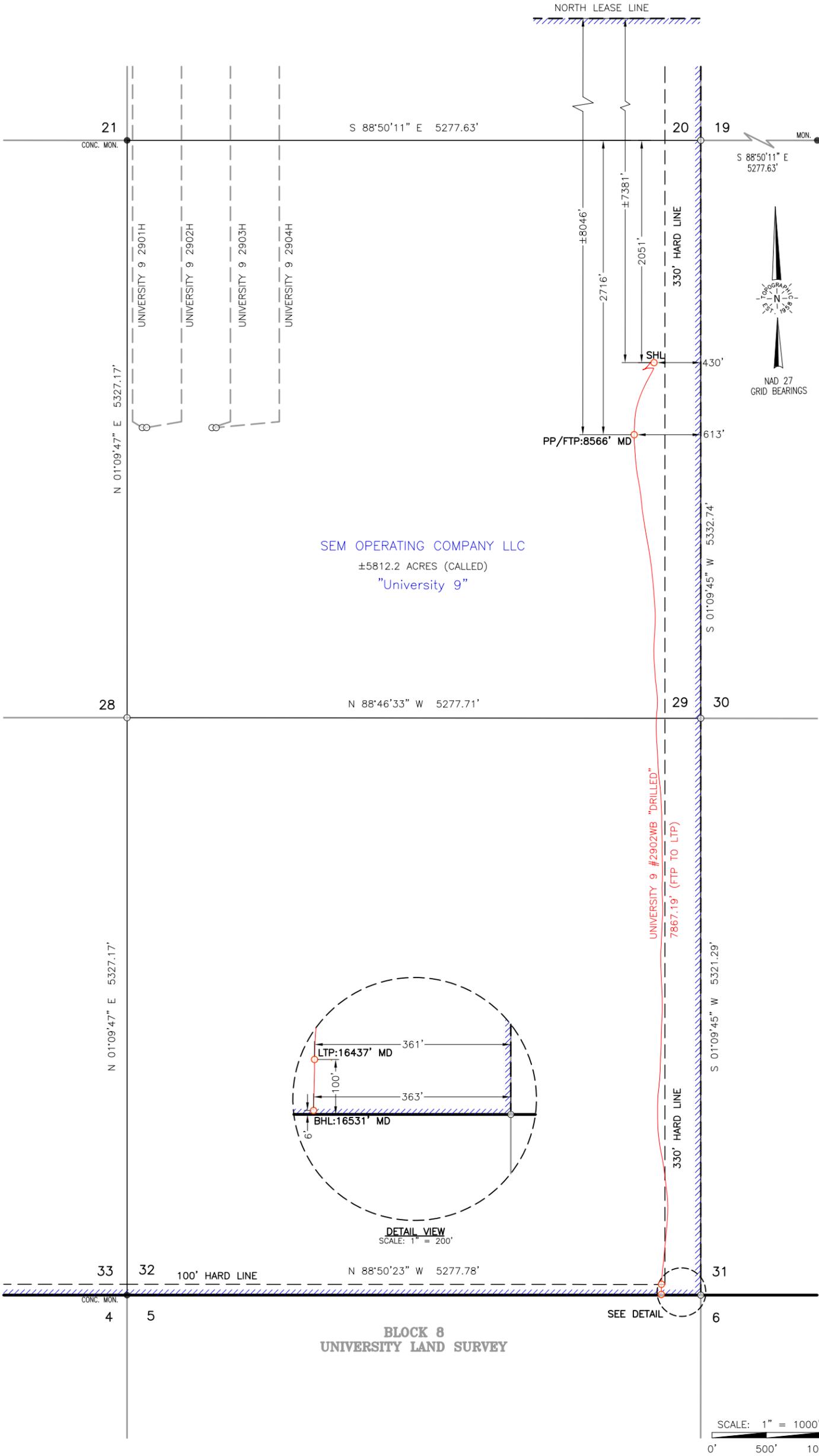
This recommendation is applicable for all wells drilled in this sec. 29.

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 05/04/2017. 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: 2677'
COORDINATES:
NAD 27 TX-C ZONE:
 X = 1608451.20 Y = 573833.19
 LAT.: N 31°14'18.35" LONG.: W 101°35'10.40"
 LAT.: N 31.2384311 LONG.: W 101.5862218
NAD 83 TX-C ZONE:
 X = 1904919.22 Y = 10416409.98
 LAT.: N 31°14'18.90" LONG.: W 101°35'11.83"
 LAT.: N 31.2385832 LONG.: W 101.5866190

SURVEY LINE PERPENDICULARS:
 2051' FNL & 430' FEL (SEC. 29)

UNIT LINE PERPENDICULARS:
 7381' FNL & 430' FEL

**Penetration Point/
First Take Point:**
COORDINATES:
NAD 27 TX-C ZONE:
 X = 1608255.07 Y = 573172.01
 LAT.: N 31°14'11.79" LONG.: W 101°35'12.57"
 LAT.: N 31.2366072 LONG.: W 101.5868255
NAD 83 TX-C ZONE:
 X = 1904723.09 Y = 10415748.81
 LAT.: N 31°14'12.33" LONG.: W 101°35'14.00"
 LAT.: N 31.2367594 LONG.: W 101.5872227

SURVEY LINE PERPENDICULARS:
 2716' FNL & 613' FEL (SEC. 29)

UNIT LINE PERPENDICULARS:
 8046' FNL & 613' FEL

Last Take Point:
COORDINATES:
NAD 27 TX-C ZONE:
 X = 1608347.39 Y = 565330.56
 LAT.: N 31°12'54.19" LONG.: W 101°35'10.49"
 LAT.: N 31.2150515 LONG.: W 101.5862476
NAD 83 TX-C ZONE:
 X = 1904815.38 Y = 10407907.37
 LAT.: N 31°12'54.74" LONG.: W 101°35'11.92"
 LAT.: N 31.2152044 LONG.: W 101.5866448

SURVEY LINE PERPENDICULARS:
 100' FSL & 361' FEL (SEC. 32)

UNIT LINE PERPENDICULARS:
 100' FSL & 361' FEL

Bottom Hole Location:
COORDINATES:
NAD 27 TX-C ZONE:
 X = 1608343.56 Y = 565236.41
 LAT.: N 31°12'53.25" LONG.: W 101°35'10.52"
 LAT.: N 31.2147925 LONG.: W 101.5862564
NAD 83 TX-C ZONE:
 X = 1904811.54 Y = 10407813.22
 LAT.: N 31°12'53.80" LONG.: W 101°35'11.95"
 LAT.: N 31.2149455 LONG.: W 101.5866536

SURVEY LINE PERPENDICULARS:
 6' FSL & 363' FEL (SEC. 32)

UNIT LINE PERPENDICULARS:
 6' FSL & 363' FEL

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

REV#-BY	DATE REVISED	REV#-BY	DATE REVISED
		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 under my direct supervision. All As-Drilled information provided by client. 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

STATE OF TEXAS REGISTERED PROFESSIONAL LAND SURVEYOR
 WILLIAM J. KEATING
 5041

TOPOGRAPHIC
 LOYALTY INNOVATION LEGACY
 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
 AD_UNIVERSTIY_9_2902WB

SEM OPERATING COMPANY LLC

LOCATION DESCRIPTION:
 SHL/PP/FTP: SECTION 29, BLOCK 9, UNIVERSITY LANDS SURVEY
 LTP/BHL: SECTION 32, BLOCK 9, UNIVERSITY LANDS SURVEY
 REAGAN COUNTY, TEXAS

Scale: 1" = 1000' | Surveyed: 12-14-17

COGO: 519-89429

LEASE NAME & WELL NO.:
UNIVERSITY 9 #2902WB "AS-DRILLED"
 TOPOGRAPHY & VEGETATION:
 NATURAL MESQUITE PASTURE
 NEAREST TOWN IN COUNTY:
 ±8.1 MILES NORTHWEST OF BIG LAKE, TEXAS

ORIGINAL DOC. SIZE: 11"x17"

Drawn By: IG; 12-15-2017