

API No. <u>42-103-36565</u> Drilling Permit # <u>826881</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>048351</b>		2. Operator's Name (as shown on form P-5, Organization Report) <b>BAM PERMIAN OPERATING, LLC</b>		3. Operator Address (include street, city, state, zip): <b>SUITE 110 PMB #53</b> <b>4416 BRIARWOOD AVE</b> <b>MIDLAND, TX 79707-0000</b>			
4. Lease Name <b>UNIVERSITY MORGAN</b>		5. Well No. <b>1</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 checked="" type="checkbox"/> Vertical <input 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>9600</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>CRANE</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>8.7</u> miles in a <u>NW</u> direction from <u>Crane</u> which is the nearest town in the county of the well site.							
15. Section <b>13</b>		16. Block <b>31</b>		17. Survey <b>UL</b>		18. Abstract No. <b>A-</b>	
				19. Distance to nearest lease line: <b>660</b> ft.		20. Number of contiguous acres in lease, pooled unit, or unitized tract: <b>160.3</b>	
21. Lease Perpendiculars: <u>660</u> ft from the <u>NORTH</u> line and <u>660</u> ft from the <u>EAST</u> line. 22. Survey Perpendiculars: <u>660</u> ft from the <u>NORTH</u> line and <u>660</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		
<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	31. Distance to Nearest Well in this Reservoir	
08	92505500	UNIVERSITY 31 WEST (U. DEVONIAN)		Oil Well	9600	0.00	
<b>BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS</b>							
<b>Remarks</b>     				<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>Blake Morphew</u>            Name of filer         </div> <div> <u>May 17, 2017</u>            Date submitted         </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <u>(432)413-9289</u>            Phone         </div> <div> <u>blake.morphew@gmail.com</u>            E-mail Address (OPTIONAL)         </div> </div>			
<b>RRC Use Only</b>							
Data Validation Time Stamp: May 26, 2017 8:02 PM( Current Version )							

**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 align="center">826881</div>	DATE PERMIT ISSUED OR AMENDED <div align="center">May 26, 2017</div>	DISTRICT <div align="center">* 08</div>			
API NUMBER <div align="center">42-103-36565</div>	FORM W-1 RECEIVED <div align="center">May 17, 2017</div>	COUNTY <div align="center">CRANE</div>			
TYPE OF OPERATION <div align="center">NEW DRILL</div>	WELLBORE PROFILE(S) <div align="center">Vertical</div>	ACRES <div align="center">160.3</div>			
OPERATOR <div align="center"> <b>BAM PERMIAN OPERATING, LLC</b>            SUITE 110 PMB #53            4416 BRIARWOOD AVE            MIDLAND, TX 79707-0000         </div>		048351	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> <div align="center">(432) 684-5581</div>		
LEASE NAME <div align="center">UNIVERSITY MORGAN</div>		WELL NUMBER <div align="center">1</div>			
LOCATION <div align="center">8.7 miles NW direction from CRANE</div>		TOTAL DEPTH <div align="center">9600</div>			
Section, Block and/or Survey <div>           SECTION ◀ 13                      BLOCK ◀ 31                      ABSTRACT ◀            SURVEY ◀ UL         </div>					
DISTANCE TO SURVEY LINES <div align="center">660 ft. NORTH    660 ft. EAST</div>		DISTANCE TO NEAREST LEASE LINE <div align="center">660 ft.</div>			
DISTANCE TO LEASE LINES <div align="center">660 ft. NORTH    660 ft. EAST</div>		DISTANCE TO NEAREST WELL ON LEASE <div align="center">See FIELD(s) Below</div>			
FIELD(s) and LIMITATIONS: <div align="center">* SEE FIELD DISTRICT FOR REPORTING PURPOSES *</div>					
FIELD NAME LEASE NAME		ACRES NEAREST LEASE	DEPTH NEAREST WE	WELL # NEAREST WE	DIST
----- UNIVERSITY 31 WEST (U. DEVONIAN) UNIVERSITY MORGAN		160.30 660	9,600  	1 0	08
<div align="center"> <b>THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS</b>          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.       </div>					

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

**CRANE (103) County**

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
RUSTLER	1,000	1,000		1	12/17/2013
YATES	1,200	3,000		2	12/17/2013
GRAYBURG	2,100	3,100	Active CO2 flood	3	12/17/2013
SAN ANDRES	1,850	3,500	Usable Quality Water/Active CO2 flood	4	12/17/2013
SAN ANGELO	3,600	3,700		5	12/17/2013
SEVEN RIVERS	1,300	3,970		6	12/17/2013
GLORIETA	2,700	4,200		7	12/17/2013
PERMIAN GENERAL	3,900	4,200		8	12/17/2013
QUEEN	2,100	4,370		9	12/17/2013
CLEARFORK	2,900	4,400		10	12/17/2013
MONTOYA	5,300	5,300		11	12/17/2013
TUBB	3,350	5,400		12	12/17/2013
WICHITA ALBANY	5,400	6,000		13	12/17/2013
FUSSELMAN	6,400	7,400		14	12/17/2013
WOLFCAMP	5,000	7,500		15	12/17/2013
WADDELL	6,100	7,600		16	12/17/2013
BEND	7,700	7,700		17	12/17/2013
PENNSYLVANIAN	7,200	8,000		18	12/17/2013
CISCO	7,400	8,500		19	12/17/2013
STRAWN	8,600	8,600		20	12/17/2013
DEVONIAN	4,900	9,700	Active CO2 flood	21	12/17/2013
ELLENBURGER	5,400	11,700		22	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:** 17 May 2017**GAU Number:** 171156**Attention:** BAM PERMIAN OPERATING,  
SUITE 110 PMB #53  
MIDLAND, TX 79707**Operator No.:** 048351**API Number:**  
**County:** CRANE  
**Lease Name:** University Morgan  
**Lease Number:**  
**Well Number:** 1  
**Total Vertical Depth:** 9500  
**Latitude:** 31.508479  
**Longitude:** -102.425556  
**Datum:** NAD27**Purpose:** New Drill**Location:** Survey-UL; Block-31; Section-13

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 Santa Rosa, which is estimated to occur at a depth of 800 feet, must be protected.

This recommendation is applicable for all wells drilled in this N/2 of sec. 13.

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).

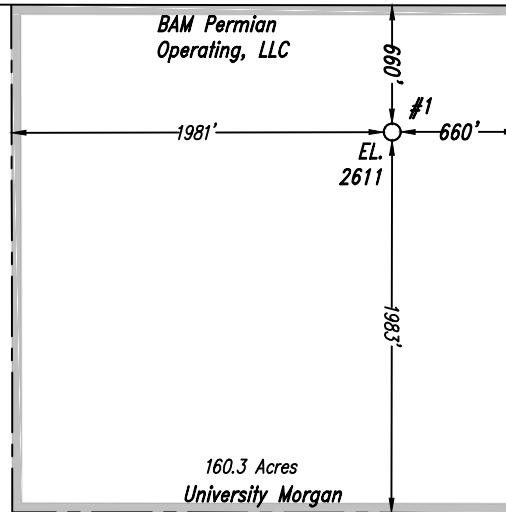
This determination is based on information provided when the application was submitted on 04/26/2017. If the location information has changed, you must contact the Groundwater Advisory Unit, and submit a new application if necessary. If you have questions, please contact us at 512-463-2741 or gau@rrc.texas.gov.

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

11	12
14	13

7
18



*Block 30,  
University Land*

23	24
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19

*Note: Lease description provided by client.*

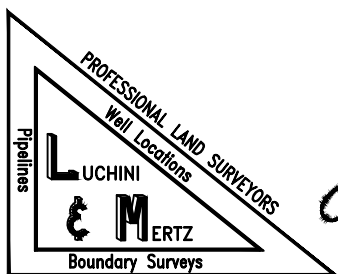
*X: 1348017.15      Latitude: 31.50848192°  
Y: 675981.98      Longitude: -102.42555587°  
NAD 83: Lat: 31.50861894°, Long: -102.42597681°  
660' FNL, 660' FEL – Section 13*



*J. B. Smith*

*April 21, 2017*

170421R-SC



P. O. Box 1963 Midland, Texas 79702 (432) 684-6728 Firm# 10086500

*Railroad Commission Drawing*

*#1 University Morgan  
BAM Permian Operating, LLC  
"University Morgan" Lease  
NE/4 of  
Section 13, Block 31,  
University Land Survey,  
Crane County, Texas*

Scale: 1" = 1000'