

API No. <u>42-105-42351</u> Drilling Permit # <u>821518</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>253385</b>		2. Operator's Name (as shown on form P-5, Organization Report) <b>EP ENERGY E&amp;P COMPANY, L.P.</b>		3. Operator Address (include street, city, state, zip): <b>ATTN JOSEPH ARAIZA</b> <b>PO BOX 4660</b> <b>HOUSTON, TX 77210-4660</b>			
4. Lease Name <b>UNIVERSITY SALT DRAW</b>		5. Well No. <b>3820KH</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>8999</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>7C</b>		12. County <b>CROCKETT</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>7.43</u> miles in a <u>SE</u> direction from <u>BARNHART</u> which is the nearest town in the county of the well site.							
15. Section <b>20</b>		16. Block <b>38</b>		17. Survey <b>UL</b>		18. Abstract No. <b>A-U262</b>	
				19. Distance to nearest lease line: <b>135</b> ft.		20. Number of contiguous acres in lease, pooled unit, or unitized tract: <b>34139.43</b>	
21. Lease Perpendiculars: <u>8319</u> ft from the <u>N</u> line and <u>12892</u> ft from the <u>W</u> line. 22. Survey Perpendiculars: <u>2576</u> ft from the <u>S</u> line and <u>1942</u> ft from the <u>W</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	
7C	53613750	LIN (WOLFCAMP)		Oil or Gas Well	8999	380.00	
<b>BOTTOMHOLE LOCATION INFORMATION</b> is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)							
<b>Remarks</b> [FILER Dec 21, 2016 9:38 AM]: This well is located within the University Central Drilling & Development Unit.  FTP - 7740' FNL & 13792' FWL; LTP - 135' FNL & 13791' FWL				<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>Jessica High, Regulatory Analyst II</u>            Name of filer   <u>(713)9976632</u>            Phone         </div> <div> <u>Dec 21, 2016</u>            Date submitted   <u>jessica.high@epenergy.com</u>            E-mail Address (OPTIONAL)         </div> </div>			
<b>RRC Use Only</b>							
Data Validation Time Stamp: Jan 11, 2017 9:35 AM( Current Version )							

Permit Status: <b>Approved</b>  <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

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 #	821518
Approved Date:	Jan 09, 2017

1. RRC Operator No. 253385	2. Operator's Name (exactly as shown on form P-5, Organization Report) EP ENERGY E&P COMPANY, L.P.	3. Lease Name UNIVERSITY SALT DRAW	4. Well No. 3820KH
Lateral Drainhole Location Information			
5. Field as shown on Form W-1      LIN (WOLFCAMP) (Field # 53613750, RRC District 7C)			
6. Section 11	7. Block 38	8. Survey UL	9. Abstract U253
10. County of BHL CROCKETT			
11. Terminus Lease Line Perpendiculars 60      ft. from the        N        line. and    13791    ft. from the        W        line			
12. Terminus Survey Line Perpendiculars 60      ft. from the        N        line. and    2254    ft. from the        E        line			
13. Penetration Point Lease Line Perpendiculars 7840    ft. from the        N        line. and    13792    ft. from the        W        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>821518</b>	DATE PERMIT ISSUED OR AMENDED <b>Jan 09, 2017</b>	DISTRICT <b>* 7C</b>	
API NUMBER <b>42-105-42351</b>	FORM W-1 RECEIVED <b>Dec 21, 2016</b>	COUNTY <b>CROCKETT</b>	
TYPE OF OPERATION <b>NEW DRILL</b>	WELLBORE PROFILE(S) <b>Horizontal</b>	ACRES <b>34139.43</b>	
OPERATOR  <b>EP ENERGY E&amp;P COMPANY, L.P.</b>  ATTN JOSEPH ARAIZA PO BOX 4660 HOUSTON, TX 77210-4660		253385  <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>(325) 657-7450</b>	
LEASE NAME  <b>UNIVERSITY SALT DRAW</b>		WELL NUMBER  <b>3820KH</b>	
LOCATION  <b>7.43 miles SE direction from BARNHART</b>		TOTAL DEPTH  <b>8999</b>	
Section, Block and/or Survey SECTION <b>◀ 20</b> BLOCK <b>◀ 38</b> ABSTRACT <b>◀ U262</b> SURVEY <b>◀ UL</b>			
DISTANCE TO SURVEY LINES <b>2576 ft. S    1942 ft. W</b>		DISTANCE TO NEAREST LEASE LINE <b>135 ft.</b>	
DISTANCE TO LEASE LINES <b>8319 ft. N    12892 ft. W</b>		DISTANCE TO NEAREST WELL ON LEASE <b>See FIELD(s) Below</b>	
FIELD(s) and LIMITATIONS: <p align="center"><b>* SEE FIELD DISTRICT FOR REPORTING PURPOSES *</b></p>			
FIELD NAME LEASE NAME		ACRES NEAREST LEASE	DEPTH NEAREST WE
----- <b>LIN (WOLFCAMP)</b> <b>UNIVERSITY SALT DRAW</b> -----		<b>34139.43</b> <b>135</b>	<b>8,999</b> <b>380</b>
----- WELLBORE PROFILE(s) FOR FIELD: <b>Horizontal</b> -----			
RESTRICTIONS:    Lateral: TH1 Penetration Point Location Lease Lines:            7840.0 F N L 13792.0 F W L  Terminus Location BH County: CROCKETT Section: 11                      Block: 38                      Abstract: U253 Survey: UL Lease Lines:                      60.0 F N L 13791.0 F W L Survey Lines:                      60.0 F N L 2254.0 F E L			
<p align="center"><b>THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS</b></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.			

**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;">821518</div>	DATE PERMIT ISSUED OR AMENDED <div style="text-align: center;">Jan 09, 2017</div>	DISTRICT <div style="text-align: center;">* 7C</div>
API NUMBER <div style="text-align: right;">42-105-42351</div>	FORM W-1 RECEIVED <div style="text-align: center;">Dec 21, 2016</div>	COUNTY <div style="text-align: center;">CROCKETT</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;">34139.43</div>
OPERATOR <div style="text-align: right;">253385</div> <div style="text-align: center;">EP ENERGY E&amp;P COMPANY, L.P.</div> <div style="text-align: center;">ATTN JOSEPH ARAIZA PO BOX 4660 HOUSTON, TX 77210-4660</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> (325) 657-7450</div>
LEASE NAME <div style="text-align: center;">UNIVERSITY SALT DRAW</div>		WELL NUMBER <div style="text-align: center;">3820KH</div>
LOCATION <div style="text-align: center;">7.43 miles SE direction from BARNHART</div>		TOTAL DEPTH <div style="text-align: center;">8999</div>
Section, Block and/or Survey <div style="display: flex; justify-content: space-between;"> <div>SECTION ◀ 20</div> <div>BLOCK ◀ 38</div> <div>ABSTRACT ◀ U262</div> </div> <div style="display: flex; justify-content: space-between;"> <div>SURVEY ◀ UL</div> <div></div> <div></div> </div>		
DISTANCE TO SURVEY LINES <div style="text-align: center;">2576 ft. S    1942 ft. W</div>		DISTANCE TO NEAREST LEASE LINE <div style="text-align: center;">135 ft.</div>
DISTANCE TO LEASE LINES <div style="text-align: center;">8319 ft. N    12892 ft. W</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>		
<div style="display: flex; justify-content: space-between;"> <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;"> <div>LEASE NAME</div> <div>NEAREST LEASE</div> <div>NEAREST WE</div> <div></div> <div></div> </div> <p>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**

**CROCKETT (105) County**

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
QUEEN	1,000	2,300		1	12/17/2013
SAN ANDRES	1,000	3,700		2	12/17/2013
LEONARD	3,100	4,200		3	12/17/2013
WOLFCAMP	3,400	6,300		4	12/17/2013
CANYON	4,000	8,800		5	12/17/2013
STRAWN	7,100	11,600		6	12/17/2013
DEVONIAN	8,900	11,900		7	12/17/2013
ELLENBURGER	6,500	13,400		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:** 30 December 2016**GAU Number:** 164940**Attention:** EP ENERGY E&P COMPANY,  
ATTN JOSEPH ARAIZA  
HOUSTON, TX 77210**Operator No.:** 253385**API Number:**  
**County:** CROCKETT  
**Lease Name:** UNIVERSITY SALT DRAW  
**Lease Number:** 18942  
**Well Number:** 3820GH  
**Total Vertical Depth:** 8999  
**Latitude:** 31.036960  
**Longitude:** -101.103695  
**Datum:** NAD27**Purpose:** New Drill**Location:** Survey-UL; Abstract-U262; Block-38; Section-20

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 of 800 feet.

This recommendation is applicable to all wells within a radius of 2000 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 12/21/2016. 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

NAD 83, Central Zone 4203  
Surface Hole Location (SHL Sec. 20)  
Latitude: 31.037129° N  
Longitude: 101.103828° W  
X=2055285.35  
Y=10341768.20  
Elev.=2612'  
2576' FSL & 1942' FWL

NAD 27, Central Zone 4203  
Surface Hole Location (SHL Sec. 20)  
Latitude: 31.036963° N  
Longitude: 101.103440° W  
X=1758818.31  
Y=499189.37  
Elev.=2613'  
2576' FSL & 1942' FWL

Point of Penetration (PP Sec. 20)  
Latitude: 31.038292° N  
Longitude: 101.100567° W  
X=1759721.19  
Y=499666.72  
2392' FNL & 2254' FEL

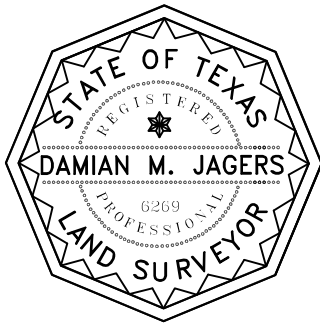
First Take Point (FTP Sec. 20)  
Latitude: 31.038567° N  
Longitude: 101.100569° W  
X=1759721.49  
Y=499766.72  
2292' FNL & 2254' FEL

Last Take Point (LTP Sec. 11)  
Latitude: 31.059477° N  
Longitude: 101.100663° W  
X=1759744.31  
Y=507371.65  
135' FNL & 2254' FEL

Bottom Hole Location (BHL Sec. 11)  
Latitude: 31.059684° N  
Longitude: 101.100664° W  
X=1759744.54  
Y=507446.65  
60' FNL & 2254' FEL

Unit Boundary Distance	
SHL	8319' FNL & 12892' FWL
PP	7840' FNL & 13792' FWL
FTP	7740' FNL & 13792' FWL
LTP	135' FNL & 13791' FWL
BHL	60' FNL & 13791' FWL

EP ENERGY E&P COMPANY, L.P.  
UNIVERSITY SALT DRAW  
34,139.427 ACRES (CALLED)



Well Name  
UNIVERSITY SALT DRAW 3820KH  
Drilling Field  
LIN (WOLFCAMP) FIELD  
Nearest Town  
7.43 MILES SOUTHEAST OF BARNHART, TEXAS

NOTE: This Plat does not, in anyway represent a "Boundary Survey", and does not comply with the current T.B.P.L.S. Minimum Standards of Procedures for Boundary Survey. Shown Acreages were furnished by others. The Information contained on this plat is intended for the sole use of EP ENERGY E&P COMPANY, L.P.

NOTE: Bearings and coordinates refer to the Texas Coordinate System of 1927, Central Zone (4203), as observed by GPS observations

I, Damian M. Jaggers do hereby certify that the above described well location was surveyed on the ground under my supervision, as shown.

*Damian M. Jaggers* 12/13/2016

DAMIAN M. JAGERS  
REGISTERED PROFESSIONAL LAND SURVEYOR  
TEXAS REGISTRATION NO. 6269

DATE



1503 DARTMOUTH ST., LONGVIEW, TX 75601  
Phone: 254-965-8686 Fax: 254-968-5715  
www.xtsurvey.com

EP ENERGY E&P COMPANY, L.P.

University Salt Draw 3820KH  
Block 38, Section 11  
Block 38, Section 20  
Block 38, Section 21  
Block 38, Section 30  
Crockett County, Texas