

API No. <u>42-105-42310</u> Drilling Permit # <u>810356</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. 253385		2. Operator's Name (as shown on form P-5, Organization Report) EP ENERGY E&P COMPANY, L.P.		3. Operator Address (include street, city, state, zip): ATTN CHELSEA CHAPMAN PO BOX 4660 HOUSTON, TX 77210-4660			
4. Lease Name UNIVERSITY EAST		5. Well No. 4110NH					
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 8999		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 CROCKETT		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>7.14</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 10		16. Block 41		17. Survey UL		18. Abstract No. A-U330	
				19. Distance to nearest lease line: 3210 ft.		20. Number of contiguous acres in lease, pooled unit, or unitized tract: 43372	
21. Lease Perpendiculars: <u>7107</u> ft from the <u>NORTH</u> line and <u>3618</u> ft from the <u>EAST</u> line. 22. Survey Perpendiculars: <u>1670</u> ft from the <u>NORTH</u> line and <u>1670</u> ft from the <u>WEST</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	31. Distance to Nearest Well in this Reservoir	
7C	53613750	LIN (WOLFCAMP)		Oil or Gas Well	7000	1284.00	
BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)							
Remarks [FILER Sep 15, 2015 3:23 PM]: This well is located within the University East Drilling & Development Unit. This well is part of a 3 well pad which includes the 4110MH and 4110OH. FTP = 7905' FNL & 3210' FEL LTP = 16,208' FNL & 3214' FEL; [RRC STAFF Sep 18, 2015 2:38 PM]: Changed distance to the nearest lease line per plat.				Certificate: I certify that information stated in this application is true and complete, to the best of my knowledge. LINDA RENKEN, Sr. Regulatory Analyst Name of filer <u>(713)9975138</u> Date submitted <u>Sep 15, 2015</u> Phone <u>linda.renken@epenergy.com</u> E-mail Address (OPTIONAL)			
RRC Use Only				Data Validation Time Stamp: Sep 21, 2015 9:00 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 #	810356
Approved Date:	Sep 18, 2015

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 EAST	4. Well No. 4110NH
Lateral Drainhole Location Information			
5. Field as shown on Form W-1 LIN (WOLFCAMP) (Field # 53613750, RRC District 7C)			
6. Section 15	7. Block 41	8. Survey UL / A-U335	9. Abstract
		10. County of BHL CROCKETT	
11. Terminus Lease Line Perpendiculars 16308 ft. from the North line. and 3214 ft. from the East line			
12. Terminus Survey Line Perpendiculars 1 ft. from the South line. and 2078 ft. from the West line			
13. Penetration Point Lease Line Perpendiculars 7196 ft. from the North line. and 3572 ft. from the East 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 810356	DATE PERMIT ISSUED OR AMENDED Sep 18, 2015	DISTRICT * 7C	
API NUMBER 42-105-42310	FORM W-1 RECEIVED Sep 15, 2015	COUNTY CROCKETT	
TYPE OF OPERATION NEW DRILL	WELLBORE PROFILE(S) Horizontal	ACRES 43372	
OPERATOR EP ENERGY E&P COMPANY, L.P. ATTN CHELSEA CHAPMAN PO BOX 4660 HOUSTON, TX 77210-4660		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 EAST		WELL NUMBER 4110NH	
LOCATION 7.14 miles SE direction from BARNHART		TOTAL DEPTH 8999	
Section, Block and/or Survey SECTION ◀ 10 BLOCK ◀ 41 ABSTRACT ◀ U330 SURVEY ◀ UL			
DISTANCE TO SURVEY LINES 1670 ft. NORTH 1670 ft. WEST		DISTANCE TO NEAREST LEASE LINE 3210 ft.	
DISTANCE TO LEASE LINES 7107 ft. NORTH 3618 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 EAST -----		43372.00 3210	7,000 1284
----- WELLBORE PROFILE(s) FOR FIELD: Horizontal -----			
RESTRICTIONS: Lateral: TH1 Penetration Point Location Lease Lines: 7196.0 F NORTH L 3572.0 F EAST L Terminus Location BH County: CROCKETT Section: 15 Block: 41 Abstract: Survey: UL / A-U335 Lease Lines: 16308.0 F NORTH L 3214.0 F EAST L Survey Lines: 1.0 F SOUTH L 2078.0 F WEST 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;">810356</div>	DATE PERMIT ISSUED OR AMENDED <div style="text-align: center;">Sep 18, 2015</div>	DISTRICT <div style="text-align: center;">* 7C</div>										
API NUMBER <div style="text-align: right;">42-105-42310</div>	FORM W-1 RECEIVED <div style="text-align: center;">Sep 15, 2015</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;">43372</div>										
OPERATOR <div style="text-align: right;">253385</div> <div style="text-align: center;">EP ENERGY E&P COMPANY, L.P.</div> <div style="text-align: center;">ATTN CHELSEA CHAPMAN 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. District Office Telephone No: <div style="text-align: center;">(325) 657-7450</div>										
LEASE NAME <div style="text-align: center;">UNIVERSITY EAST</div>		WELL NUMBER <div style="text-align: center;">4110NH</div>										
LOCATION <div style="text-align: center;">7.14 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 ◀ 10</div> <div>BLOCK ◀ 41</div> <div>ABSTRACT ◀ U330</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;">1670 ft. NORTH 1670 ft. WEST</div>		DISTANCE TO NEAREST LEASE LINE <div style="text-align: center;">3210 ft.</div>										
DISTANCE TO LEASE LINES <div style="text-align: center;">7107 ft. NORTH 3618 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;">* SEE FIELD DISTRICT FOR REPORTING PURPOSES *</div>												
<table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">FIELD NAME</td> <td style="width: 15%;">ACRES</td> <td style="width: 15%;">DEPTH</td> <td style="width: 10%;">WELL #</td> <td style="width: 10%;">DIST</td> </tr> <tr> <td>LEASE NAME</td> <td>NEAREST LEASE</td> <td></td> <td>NEAREST WE</td> <td></td> </tr> </table> <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>			FIELD NAME	ACRES	DEPTH	WELL #	DIST	LEASE NAME	NEAREST LEASE		NEAREST WE	
FIELD NAME	ACRES	DEPTH	WELL #	DIST								
LEASE NAME	NEAREST LEASE		NEAREST WE									

**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.state.tx.us/oil-gas/compliance-enforcement/rule-13-geologic-formation-info>

GROUNDWATER PROTECTION DETERMINATION

Form GW-2



Groundwater Advisory Unit

Date Issued: 15 September 2015**GAU Number:** 15141**Attention:** EP ENERGY E&P COMPANY,
ATTN CHELSEA CHAPMAN
HOUSTON, TX 77210**Operator No.:** 253385**API Number:**
County: CROCKETT
Lease Name: University East
Lease Number: 17576
Well Number: 4110MH
Total Vertical Depth: 8999
Latitude: 31.025092
Longitude: -101.156161
Datum: NAD27**Purpose:** New Drill**Location:** Survey-UL; Abstract-U330; Block-41; Section-10

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 900 feet must be protected.

This recommendation is applicable to all wells within a radius of 200 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 09/15/2015. 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

NAD 83, Central Zone 4203
Surface Hole Location (SHL Sec. 10)
Latitude: 31.025257° N
Longitude: 101.156486° W
X=2038762.71
Y=10337568.72
Elev.=2636'
1670' FNL & 1670' FWL

NAD 27, Central Zone 4203
Surface Hole Location (SHL Sec. 10)
Latitude: 31.025092° N
Longitude: 101.156097° W
X=1742295.58
Y=494990.28
Elev.=2636'
1670' FNL & 1670' FWL

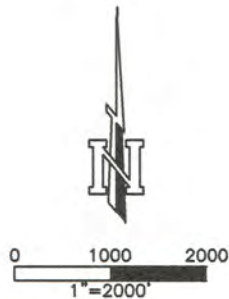
Point of Penetration (PP Sec. 10)
Latitude: 31.024847° N
Longitude: 101.155950° W
X=1742340.74
Y=494901.06
1759' FNL & 1715' FWL

First Take Point (FTP Sec. 10)
Latitude: 31.022900° N
Longitude: 101.154785° W
X=1742700.66
Y=494189.97
2469' FNL & 2078' FWL

Last Take Point (LTP Sec. 15)
Latitude: 31.000069° N
Longitude: 101.154685° W
X=1742670.43
Y=485886.55
101' FSL & 2078' FWL

Bottom Hole Location (BHL Sec. 15)
Latitude: 30.999794° N
Longitude: 101.154684° W
X=1742670.07
Y=485786.55
1' FSL & 2078' FWL

Unit Boundary Distance	
SHL	7107' FNL & 3618' FEL
PP	7196' FNL & 3572' FEL
FTP	7905' FNL & 3210' FEL
LTP	16208' FNL & 3214' FEL
BHL	16308' FNL & 3214' FEL



EP ENERGY

Well Name
UNIVERSITY EAST 4110NH
Topography and Vegetation
SCATTERED MESQUITE and CACTUS
Nearest Town
7.14 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. Jagers do hereby certify that the above described well location was surveyed on the ground under my supervision, as shown.

Damian M. Jagers 9/8/2015
Damian M. Jagers
REGISTERED PROFESSIONAL LAND SURVEYOR
TEXAS REGISTRATION NO. 6269



XTS
CROSS TIMBERS SURVEYING, LLC
1303 DARTMOUTH ST., LONGVIEW, TX 75801
Phone: 254-965-8888 Fax: 254-968-0715
email: cross@xtsbearing.com
web: www.xtsurvey.net

EP ENERGY E&P COMPANY, L.P.

University East 4110NH
Block 41, Section 10
Crockett County, Texas