

API No. <u>42-105-42313</u> Drilling Permit # <u>811281</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 CHELSEA CHAPMAN</b> <b>PO BOX 4660</b> <b>HOUSTON, TX 77210-4660</b>			
4. Lease Name <b>UNIVERSITY SALT DRAW</b>		5. Well No. <b>4101GH</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 checked="" 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>6.98</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>1</b>		16. Block <b>41</b>		17. Survey <b>UNIVERSITY LANDS</b>		18. Abstract No. <b>A-</b>	
				19. Distance to nearest lease line: <b>7622</b> ft.		20. Number of contiguous acres in lease, pooled unit, or unitized tract: <b>34139.43</b>	
21. Lease Perpendiculars: <u>8321</u> ft from the <u>NORTH</u> line and <u>8407</u> ft from the <u>WEST</u> line. 22. Survey Perpendiculars: <u>2567</u> ft from the <u>SOUTH</u> line and <u>2538</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	
7C	53613750	LIN (WOLFCAMP)		Oil or Gas Well	7000	668.00	
<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 11, 2015 2:42 PM]: This well is located within the University Salt Draw Drilling and Development Unit.  FTP = 8212' FNL & 7622' FWL LTP = 16245' FNL & 7623' FWL				<b>Certificate:</b> I certify that information stated in this application is true and complete, to the best of my knowledge. <b>LINDA RENKEN, Sr. Regulatory Analyst</b> Name of filer _____ Date submitted <b>Dec 11, 2015</b> <u>(713)9975138</u> <u>linda.renken@epenergy.com</u> Phone E-mail Address (OPTIONAL)			
<b>RRC Use Only</b>							
Data Validation Time Stamp: Dec 15, 2015 8:06 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**

**Form W-1H** 07/2004  
**Supplemental Horizontal Well Information**

**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 #	811281
Approved Date:	Dec 11, 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 SALT DRAW	4. Well No. 4101GH
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**Lateral Drainhole Location Information**

5. Field as shown on Form W-1	LIN (WOLFCAMP) (Field # 53613750, RRC District 7C)
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6. Section 12	7. Block 41	8. Survey UNIVERSITY LANDS	9. Abstract	10. County of BHL CROCKETT
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11. Terminus Lease Line Perpendiculars	16320 ft. from the North line. and 7623 ft. from the West line			
12. Terminus Survey Line Perpendiculars	1 ft. from the South line. and 2334 ft. from the West line			
13. Penetration Point Lease Line Perpendiculars	8307 ft. from the North line. and 8308 ft. from the West 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 <div style="text-align: right;"><b>811281</b></div>	DATE PERMIT ISSUED OR AMENDED (AMENDED) <b>Dec 11, 2015</b>	DISTRICT <div style="text-align: center;"><b>*    7C</b></div>			
API NUMBER <div style="text-align: right;"><b>42-105-42313</b></div>	FORM W-1 RECEIVED <div style="text-align: center;"><b>Dec 11, 2015</b></div>	COUNTY <div style="text-align: center;"><b>CROCKETT</b></div>			
TYPE OF OPERATION <div style="text-align: center;"><b>NEW DRILL</b></div>	WELLBORE PROFILE(S) <div style="text-align: center;"><b>Horizontal</b></div>	ACRES <div style="text-align: center;"><b>34139.43</b></div>			
OPERATOR  <div style="text-align: right;"><b>253385</b></div> <b>EP ENERGY E&amp;P COMPANY, L.P.</b>  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. <b>District Office Telephone No:</b> <div style="text-align: center;"><b>(325) 657-7450</b></div>			
LEASE NAME <div style="text-align: center;"><b>UNIVERSITY SALT DRAW</b></div>		WELL NUMBER <div style="text-align: center;"><b>4101GH</b></div>			
LOCATION <div style="text-align: center;"><b>6.98 miles SE direction from BARNHART</b></div>		TOTAL DEPTH <div style="text-align: center;"><b>8999</b></div>			
Section, Block and/or Survey SECTION <b>1</b> BLOCK <b>41</b> ABSTRACT <b>41</b> SURVEY <b>UNIVERSITY LANDS</b>					
DISTANCE TO SURVEY LINES <div style="text-align: center;"><b>2567 ft. SOUTH    2538 ft. EAST</b></div>		DISTANCE TO NEAREST LEASE LINE <div style="text-align: center;"><b>7622 ft.</b></div>			
DISTANCE TO LEASE LINES <div style="text-align: center;"><b>8321 ft. NORTH    8407 ft. WEST</b></div>		DISTANCE TO NEAREST WELL ON LEASE <div style="text-align: center;"><b>See FIELD(s) Below</b></div>			
FIELD(s) and LIMITATIONS: <div style="text-align: center;"><b>*    SEE FIELD DISTRICT FOR REPORTING PURPOSES    *</b></div>					
FIELD NAME LEASE NAME		ACRES NEAREST LEASE	DEPTH NEAREST WE	WELL # NEAREST WE	DIST
----- <b>LIN (WOLFCAMP)</b> <div style="text-align: center;"><b>UNIVERSITY SALT DRAW</b></div> -----		<div style="text-align: center;"><b>34139.43</b></div> <div style="text-align: center;"><b>7622</b></div>	<div style="text-align: center;"><b>7,000</b></div>	<div style="text-align: center;"><b>4101GH</b></div> <div style="text-align: center;"><b>668</b></div>	<div style="text-align: center;"><b>7C</b></div>
----- WELLBORE PROFILE(s) FOR FIELD: <b>Horizontal</b> -----					
RESTRICTIONS:    Lateral: TH1 Penetration Point Location Lease Lines:                      8307.0 F NORTH L 8308.0 F WEST L Terminus Location BH County: CROCKETT Section: 12                                      Block: 41                                      Abstract: Survey: UNIVERSITY LANDS Lease Lines:                      16320.0 F NORTH L 7623.0 F WEST L Survey Lines:                      1.0 F SOUTH L 2334.0 F WEST L					
<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.					

**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;">811281</div>	DATE PERMIT ISSUED OR AMENDED (AMENDED) Dec 11, 2015	DISTRICT <div style="text-align: center;">* 7C</div>										
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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;"> <b>EP ENERGY E&amp;P COMPANY, L.P.</b>                      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. <b>District Office Telephone No:</b> <div style="text-align: center;">(325) 657-7450</div>										
LEASE NAME <div style="text-align: center;">UNIVERSITY SALT DRAW</div>		WELL NUMBER <div style="text-align: center;">4101GH</div>										
LOCATION <div style="text-align: center;">6.98 miles SE direction from BARNHART</div>		TOTAL DEPTH <div style="text-align: center;">8999</div>										
Section, Block and/or Survey SECTION ⚡ 1                      BLOCK ⚡ 41                      ABSTRACT ⚡ SURVEY ⚡ UNIVERSITY LANDS												
DISTANCE TO SURVEY LINES <div style="text-align: center;">2567 ft. SOUTH    2538 ft. EAST</div>		DISTANCE TO NEAREST LEASE LINE <div style="text-align: center;">7622 ft.</div>										
DISTANCE TO LEASE LINES <div style="text-align: center;">8321 ft. NORTH    8407 ft. WEST</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>			FIELD NAME	ACRES	DEPTH	WELL #	DIST	LEASE NAME	NEAREST LEASE		NEAREST WE	
FIELD NAME	ACRES	DEPTH	WELL #	DIST								
LEASE NAME	NEAREST LEASE		NEAREST WE									
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.												

**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: 08 July 2015

GAU Number:

11186

Attention: EP ENERGY E&amp;P COMPANY, L.P.

ATTN CHELSEA CHAPMAN

HOUSTON, TX 77210

P-5#: 253385

API Number:

County:

CROCKETT

Lease Name:

University Salt Draw

RRC Lease Number:

Well Number:

4101DH

Total Vertical Depth:

8999

Latitude:

31.036887

Longitude:

-101.117949

Datum:

NAD27

Purpose: New Drill

Location: Survey-UL; Block-41; Section-1

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 825 feet must be protected.

This recommendation is applicable to all wells within a radius of 200 feet of this location.

This determination is based on information provided when the application was submitted on 07/07/2015. 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](mailto: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

Rev. 02/2014

Internet address: [www.rrc.texas.gov](http://www.rrc.texas.gov)

NAD 83, Zone 4203  
Surface Hole Location (SHL Sec. 1)  
Latitude: 31.037053° N  
Longitude: 101.118147° W  
X=2050801.14  
Y=10341772.17  
Elev.=2624'  
2565' FSL & 2538' FEL

NAD 27, Zone 4203  
Surface Hole Location (SHL Sec. 1)  
Latitude: 31.036888° N  
Longitude: 101.117758° W  
X=1754334.08  
Y=499193.45  
Elev.=2624'  
2565' FSL & 2538' FEL

Point of Penetration (PP Sec. 1)  
Latitude: 31.036924° N  
Longitude: 101.118074° W  
X=1754235.04  
Y=499207.30  
2579' FSL & 2637' FEL

First Take Point (FTP Sec. 1)  
Latitude: 31.037174° N  
Longitude: 101.120266° W  
X=1753549.21  
Y=499303.20  
2672' FSL & 2334' FWL

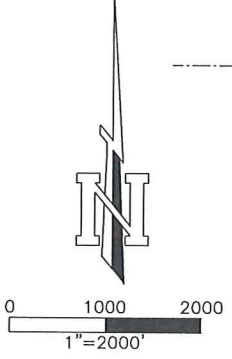
Last Take Point (LTP Sec.12 Blk.41)  
Latitude: 31.015087° N  
Longitude: 101.120162° W  
X=1753524.99  
Y=491270.43  
76' FSL & 2334' FWL

Bottom Hole Location  
(BHL Sec.12 Blk.41)  
Latitude: 31.014881° N  
Longitude: 101.120161° W  
X=1753524.79  
Y=491195.43  
1' FSL & 2334' FWL

EP ENERGY  
Lease Name and Well Number  
**UNIVERSITY SALT DRAW 4101GH**  
Topography and Vegetation  
SCATTERED MESQUITE and CACTUS  
6.98 MILES SOUTHEAST OF BARNHART, TEXAS

Unit Boundary Distance	
SHL	8321' FNL & 8407' FWL
PP	8307' FNL & 8308' FWL
FTP	8212' FNL & 7622' FWL
LTP	16245' FNL & 7623' FWL
BHL	16320' FNL & 7623' FWL


EP ENERGY  
E&P COMPANY, L.P.  
34,139.427 Acres (Called)  
"University Salt Draw"

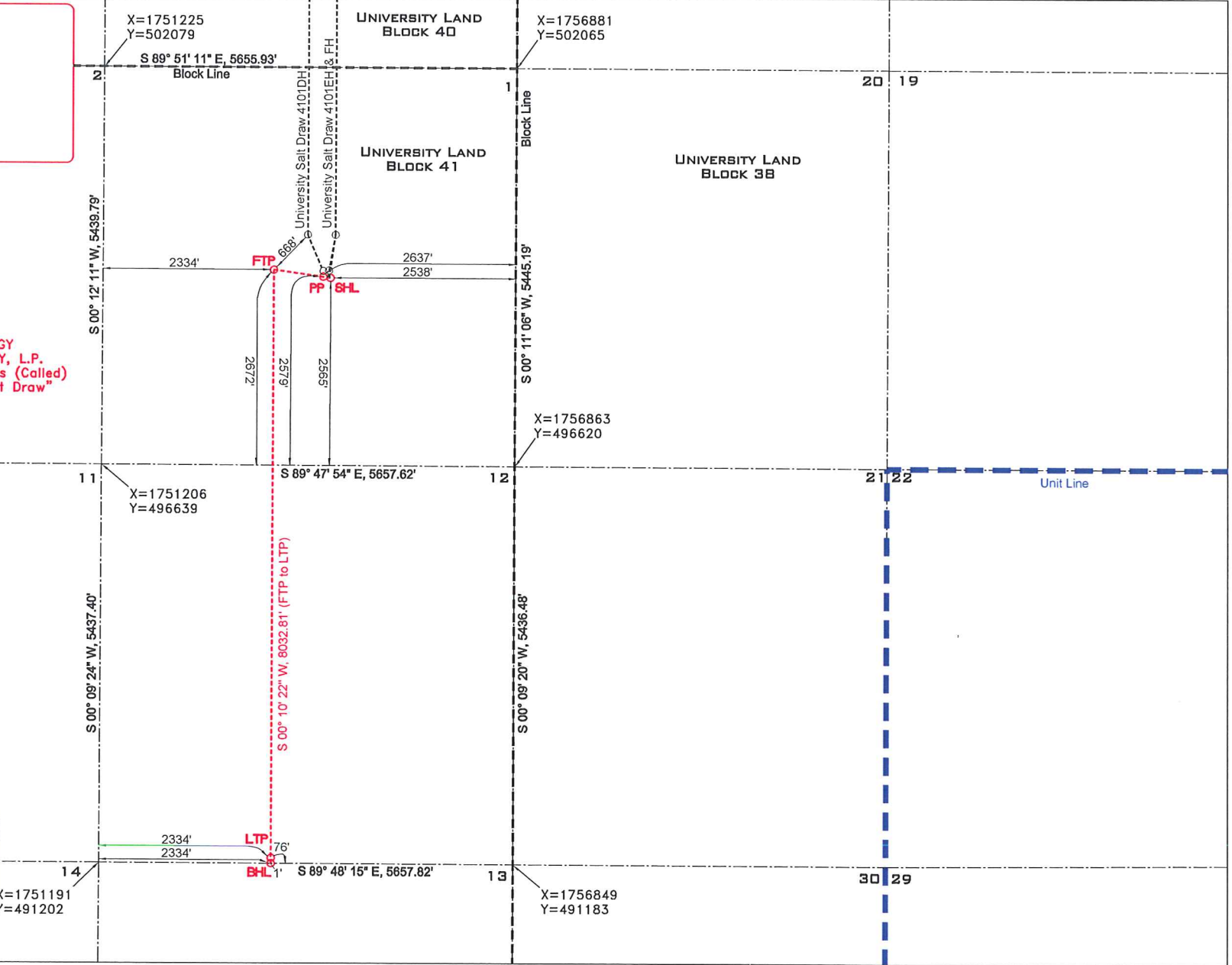
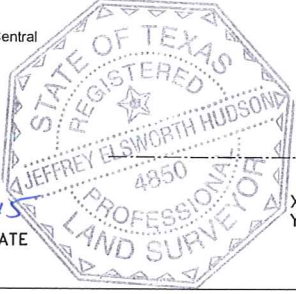


NOTE: This Plat does not, in anyway represent a "Boundary Survey", and does not comply with the current T.B.P.L.S. Minimum Standards of Procedures for Boundary Survey. Acreage shown herein were furnished by others. The information contained on this plat is intended for the sole use of EP ENERGY E&P COMPANY,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

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

I, Jeffrey Elsworth Hudson do hereby certify that the above described well location was staked on the ground under my supervision, as shown.

  
JEFFREY ELSWORTH HUDSON  
REGISTERED PROFESSIONAL LAND SURVEYOR  
TEXAS REGISTRATION NO. 4850  
DATE 11 Dec 2015



**KSA** Energy Services  
140 E. Tyler St. Ste 600 Longview, Texas 75601  
T. 903-236-7700 F. 903-236-7779  
www.ksaeng.com  
tbpls firm reg. no. 1011500

EP ENERGY E&P COMPANY, L.P.  
EPEN.178

University Salt Draw 4101GH  
Block 41, Section 1  
Crockett County, Texas