

API No. <u>42-475-37198</u> Drilling Permit # <u>823215</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>429574</b>		2. Operator's Name (as shown on form P-5, Organization Report) <b>JAGGED PEAK ENERGY LLC</b>			3. Operator Address (include street, city, state, zip): <b>1125 17TH STREET SUITE 2400</b> <b>DENVER, CO 80202-0000</b>		
4. Lease Name <b>UTL 2932-17</b>		5. Well No. <b>2H</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>12000</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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
<b>SURFACE LOCATION AND ACREAGE INFORMATION</b>							
11. RRC District No. <b>08</b>		12. County <b>WARD</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>8.2</u> miles in a <u>SW</u> direction from <u>WINK</u> which is the nearest town in the county of the well site.							
15. Section <b>12</b>		16. Block <b>17</b>		17. Survey <b>UNIVERSITY LAND</b>		18. Abstract No. <b>A-U51</b>	
				19. Distance to nearest lease line: <b>200</b> ft.		20. Number of contiguous acres in lease, pooled unit, or unitized tract: <b>640.7</b>	
21. Lease Perpendiculars: <u>1320</u> ft from the <u>NORTH</u> line and <u>500</u> ft from the <u>WEST</u> line. 22. Survey Perpendiculars: <u>1320</u> ft from the <u>NORTH</u> line and <u>500</u> ft from the <u>WEST</u> line.							
23. Is this a pooled unit? <input checked="" type="checkbox"/> Yes <input 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	71052900	PHANTOM (WOLFCAMP)		Oil or Gas Well	12000	894.00	
<b>BOTTOMHOLE LOCATION INFORMATION</b> is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)							
<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>Mike Paluso</u>            Name of filer         </div> <div> <u>Feb 13, 2017</u>            Date submitted         </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <u>(512)3278111</u>            Phone         </div> <div> <u>mpaluso@msmtx.com</u>            E-mail Address (OPTIONAL)         </div> </div>			
<b>RRC Use Only</b>							
Data Validation Time Stamp: Feb 22, 2017 2:19 PM( 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>
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**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 #	823215
Approved Date:	Feb 22, 2017

1. RRC Operator No. <b>429574</b>	2. Operator's Name (exactly as shown on form P-5, Organization Report) <b>JAGGED PEAK ENERGY LLC</b>	3. Lease Name <b>UTL 2932-17</b>	4. Well No. <b>2H</b>
<b>Lateral Drainhole Location Information</b>			
5. Field as shown on Form W-1 <b>PHANTOM (WOLFCAMP) (Field # 71052900, RRC District 08)</b>			
6. Section <b>32</b>	7. Block <b>17</b>	8. Survey <b>UNIVERSITY LAND</b>	9. Abstract
		10. County of BHL <b>WARD</b>	
11. Terminus Lease Line Perpendiculars <b>200</b> ft. from the <b>WEST</b> line. and <b>1320</b> ft. from the <b>NORTH</b> line			
12. Terminus Survey Line Perpendiculars <b>200</b> ft. from the <b>WEST</b> line. and <b>1320</b> ft. from the <b>NORTH</b> line			
13. Penetration Point Lease Line Perpendiculars <b>1320</b> ft. from the <b>NORTH</b> line. and <b>200</b> ft. from the <b>WEST</b> 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>823215</b>	DATE PERMIT ISSUED OR AMENDED <b>Feb 22, 2017</b>	DISTRICT <b>* 08</b>			
API NUMBER <b>42-475-37198</b>	FORM W-1 RECEIVED <b>Feb 13, 2017</b>	COUNTY <b>WARD</b>			
TYPE OF OPERATION <b>NEW DRILL</b>	WELLBORE PROFILE(S) <b>Horizontal</b>	ACRES <b>640.7</b>			
OPERATOR  <b>JAGGED PEAK ENERGY LLC</b> <b>1125 17TH STREET SUITE 2400</b> <b>DENVER, CO 80202-0000</b>		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> <b>(432) 684-5581</b>			
LEASE NAME  <b>UTL 2932-17</b>		WELL NUMBER  <b>2H</b>			
LOCATION  <b>8.2 miles SW direction from WINK</b>		TOTAL DEPTH  <b>12000</b>			
Section, Block and/or Survey SECTION <b>◀ 12</b> BLOCK <b>◀ 17</b> ABSTRACT <b>◀ U51</b> SURVEY <b>◀ UNIVERSITY LAND</b>					
DISTANCE TO SURVEY LINES <b>1320 ft. NORTH    500 ft. WEST</b>		DISTANCE TO NEAREST LEASE LINE <b>200 ft.</b>			
DISTANCE TO LEASE LINES <b>1320 ft. NORTH    500 ft. WEST</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 LEASE	WELL # NEAREST WE	DIST
----- <b>PHANTOM (WOLFCAMP)</b> <b>UTL 2932-17</b> -----		<b>640.70</b> <b>200</b>	<b>12,000</b>  	<b>2H</b> <b>894</b>	<b>08</b>
----- WELLBORE PROFILE(s) FOR FIELD: <b>Horizontal</b> -----					
RESTRICTIONS:    This is a hydrogen sulfide field. Hydrogen Sulfide Fields with perforations must be isolated and tested per State Wide Rule 36 and a Form H-9 filed with the district office. Fields with SWR 10 authority to downhole commingle must be isolated and tested individually prior to commingling production.  Lateral: TH1 Penetration Point Location Lease Lines:            1320.0 F NORTH L 200.0 F WEST L  Terminus Location BH County: WARD Section: 32                      Block: 17                      Abstract: Survey: UNIVERSITY LAND Lease Lines:                    200.0 F WEST L 1320.0 F NORTH L Survey Lines:                200.0 F WEST L 1320.0 F NORTH L					
THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS					

**RAILROAD COMMISSION OF TEXAS**  
**OIL & GAS DIVISION**

PERMIT TO DRILL, DEEPEN, PLUG BACK, OR RE-ENTER ON A REGULAR OR ADMINISTRATIVE EXCEPTION LOCATION

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<table style="width: 100%; border: none;"> <thead> <tr> <th style="text-align: left;">FIELD NAME</th> <th style="text-align: left;">ACRES</th> <th style="text-align: left;">DEPTH</th> <th style="text-align: left;">WELL #</th> <th style="text-align: left;">DIST</th> </tr> <tr> <th style="text-align: left;">LEASE NAME</th> <th style="text-align: left;">NEAREST LEASE</th> <th></th> <th style="text-align: left;">NEAREST WE</th> <th></th> </tr> </thead> <tbody> <tr> <td colspan="5"> <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> <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> <p>The designated interval for one or more of the fields approved in this permit appears to overlap with the designated interval of another field or fields in this district. In the case of conflicting designated intervals you will be required to be consistent in field designation on this lease. Further, if the designated interval overlap of wells on this lease results in an actual or potential double assignment of reservoir and the applicant cannot conclusively demonstrate that there is no double assignment, the permitted well may not be assigned an allowable until the conflict is resolved. Because of the overlapping designated intervals in this area, issuance of this permit does not guarantee that the completion of the well will be approved or that the well will receive an allowable in any given field, even if that field is listed on the approved permit application.</p> </td> </tr> </tbody> </table>			FIELD NAME	ACRES	DEPTH	WELL #	DIST	LEASE NAME	NEAREST LEASE		NEAREST WE		<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> <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> <p>The designated interval for one or more of the fields approved in this permit appears to overlap with the designated interval of another field or fields in this district. In the case of conflicting designated intervals you will be required to be consistent in field designation on this lease. Further, if the designated interval overlap of wells on this lease results in an actual or potential double assignment of reservoir and the applicant cannot conclusively demonstrate that there is no double assignment, the permitted well may not be assigned an allowable until the conflict is resolved. Because of the overlapping designated intervals in this area, issuance of this permit does not guarantee that the completion of the well will be approved or that the well will receive an allowable in any given field, even if that field is listed on the approved permit application.</p>				
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**RAILROAD COMMISSION OF TEXAS  
OIL & GAS DIVISION  
SWR #13 Formation Data**

**WARD (475) County**

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
RUSTLER	1,700	1,700		1	12/17/2013
YATES	2,000	2,800		2	12/17/2013
SEVEN RIVERS	2,375	2,375		3	12/17/2013
QUEEN	2,200	3,200		4	12/17/2013
GLORIETA	3,900	4,000		5	12/17/2013
SAN ANDRES	2,000	4,500	high flows, H2S, corrosive	6	12/17/2013
HOLT	4,600	4,800		7	12/17/2013
CLEARFORK	4,500	5,000		8	12/17/2013
DELAWARE	2,300	5,000		9	12/17/2013
TUBB	4,600	5,300		10	12/17/2013
WICHITA ALBANY	6,000	6,200		11	12/17/2013
CHERRY CANYON	4,800	7,800		12	12/17/2013
WADDELL	7,600	9,700		13	12/17/2013
BONE SPRINGS	4,700	9,800		14	12/17/2013
WOLFCAMP	6,000	12,750		15	12/17/2013
MONTOYA	14,500	14,500		16	12/17/2013
PENNSYLVANIAN	7,500	14,900		17	12/17/2013
ATOKA	12,000	15,000		18	12/17/2013
FUSSELMAN	6,400	17,500		19	12/17/2013
DEVONIAN	6,200	17,800		20	12/17/2013
ELLENBURGER	7,900	20,800		21	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>

Block 17, University Lands Survey  
Winkler County, Texas

31  
GRID N: (Y)10571228.883  
GRID E: (X)1392107.552

N 73°43'12" E 5280.96'

30  
GRID N: (Y)10572709.294  
GRID E: (X)1397176.765

N 73°43'12" E 5280.96'

11  
GRID N: (Y)10574189.703  
GRID E: (X)1402245.981

8

7

32

JAGGED PEAK ENERGY

29

JAGGED PEAK ENERGY

12

200'

N 16°14'51" W 2643.81'

LTP/BHL

Tract B  
320.35 Acres (Called)

S 73°43'10" W 10162.51' (FTP-LTP/BHL)

894'

Tract A  
320.35 Acres (Called)

200'

N 16°16'23" E 5283.99'

FTP

UTL 2932-17 #2H SHL/PP  
EL. 2727

SHL/PP-FTP  
S 73°43'01" W  
700.01'

UTL 2932-17-1H

GRID N: (Y)10568690.656  
GRID E: (X)1392847.252

Bottom Hole Location (BHL)/  
Last Take Point (LTP)  
GRID N: (Y)10570017.644  
GRID E: (X)1392668.859  
NAD'83 Lat/Long  
Lat: +31°38'04.221" N  
Lon: -103°14'17.048" W  
Lat: +31.634506° N  
Lon: -103.238069° W

Driving Directions To Location:  
From the intersection of Highway 115 and  
Farm-To-Market Road 1232 in Wink, Texas;  
Drive South on Hwy 115 5.1 miles to Little Joe Road,  
drive 2.9 miles to "Y" in road;  
Take left leg at "Y", drive 0.8 miles to lease road at Lat:  
31°39'42"99", Long: 103°1222.72";  
Turn left (South) on to lease road, drive 0.2 miles to dirt  
road;  
Turn left (South) on to dirt road, drive 1.1 miles to Lat:  
31°38'39.03", Long: 103°12'48.61";  
Location is left (East) 2,720 feet.

N 16°15'37" W 5285.81'

GRID N: (Y)10571653.556  
GRID E: (X)1402986.307

First Take Point (FTP)  
GRID N: (Y)10572866.614  
GRID E: (X)1402423.853  
NAD'83 Lat/Long  
Lat: +31°38'34.914" N  
Lon: -103°12'25.098" W  
Lat: +31.643032° N  
Lon: -103.206972° W

Surface Hole Location (SHL)/  
Penetration Point (PP)  
GRID N: (Y)10573062.886  
GRID E: (X)1403095.786  
NAD'83 Lat/Long  
Lat: +31°38'37.028" N  
Lon: -103°12'17.386" W  
Lat: +31.643619° N  
Lon: -103.204829° W

6

GRID N: (Y)10566152.428  
GRID E: (X)1393586.952

33

S 73°42'01" W 5282.14'

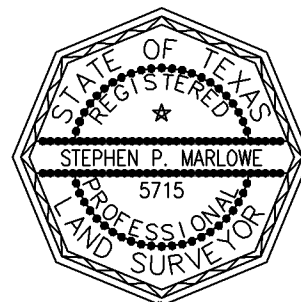
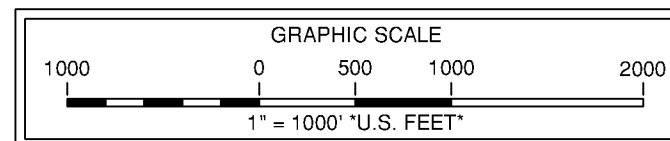
GRID N: (Y)10567634.919  
GRID E: (X)1398656.792

28

S 73°42'01" W 5282.15'

GRID N: (Y)10569117.408  
GRID E: (X)1403726.633

13



*Stephen P. Marlowe*  
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5715

Note: Well is located 8.2 miles South-Southwest of the city of Wink, Texas.  
Note: Survey Reconstruction filed in the Office of Pennell & Marlowe Land Surveyors, Inc.  
Note: Coordinates shown herein are on The Texas Coordinate System of 1983, Central Zone.  
Note: Bearings and distances are based on The Texas Coordinate System of 1983, Central Zone.  
Note: Example: (S-99999) indicates General Land Office file number.

December 13, 2016

161213B2-NRL

Revised: 01/28/2017-KRM  
USGS Quadrangle Sheet: Wink South, Tex.  
Railroad Commission Permit Plat

JAGGED PEAK ENERGY  
UTL 2932-17#2H  
1320' FROM NORTH LINE  
500' FROM WEST LINE  
UTL 2932-17 Lease  
640.7 Acres (Called) being the N/2 of  
Sections 29 & 32, Block 17  
University Lands Survey  
Winkler County, Texas

Scale: 1" = 1000'