

Permit Status: **Approved**

*The RRC has not approved this application.
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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 # **776153**

Approved Date: **Jan 09, 2014**

1. RRC Operator No. 153438	2. Operator's Name (exactly as shown on form P-5, Organization Report) CIMAREX ENERGY CO.	3. Lease Name UNIVERSITY 18-41 'B'	4. Well No. 3H
Lateral Drainhole Location Information			
5. Field as shown on Form W-1 PHANTOM (WOLFCAMP) (Field # 71052900, RRC District 08)			
6. Section 41	7. Block 18	8. Survey UL	9. Abstract
			10. County of BHL WARD
11. Terminus Lease Line Perpendiculars 200 ft. from the N line. and 691 ft. from the W line			
12. Terminus Survey Line Perpendiculars 200 ft. from the N line. and 1950 ft. from the E line			
13. Penetration Point Lease Line Perpendiculars 350 ft. from the S line. and 691 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 776153	DATE PERMIT ISSUED OR AMENDED Jan 09, 2014	DISTRICT * 08		
API NUMBER 42-475-36606	FORM W-1 RECEIVED Dec 20, 2013	COUNTY WARD		
TYPE OF OPERATION NEW DRILL	WELLBORE PROFILE(S) Horizontal	ACRES 320.5		
OPERATOR CIMAREX ENERGY CO. 153438		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: (432) 684-5581		
LEASE NAME UNIVERSITY 18-41 'B'		WELL NUMBER 3H		
LOCATION 13.9 miles NW direction from PYOTE		TOTAL DEPTH 11915		
Section, Block and/or Survey SECTION ← 41 BLOCK ← 18 ABSTRACT ← U120 SURVEY ← UL				
DISTANCE TO SURVEY LINES 350 ft. S 1950 ft. E		DISTANCE TO NEAREST LEASE LINE 200 ft.		
DISTANCE TO LEASE LINES 350 ft. S 1950 ft. E		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 LEASE	WELL # NEAREST WE	DIST
----- PHANTOM (WOLFCAMP) UNIVERSITY 18-41 'B'	320.50 200	11,915 30	3H 30	08
----- WELLBORE PROFILE(s) FOR FIELD: Horizontal -----				
RESTRICTIONS: Lateral: TH1 Penetration Point Location Lease Lines: 350.0 F S L 691.0 F W L Terminus Location BH County: WARD Section: 41 Block: 18 Abstract: Survey: UL Lease Lines: 200.0 F N L 691.0 F W L Survey Lines: 200.0 F N L 1950.0 F E L				
THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS				
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.				

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OIL & GAS DIVISION**

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

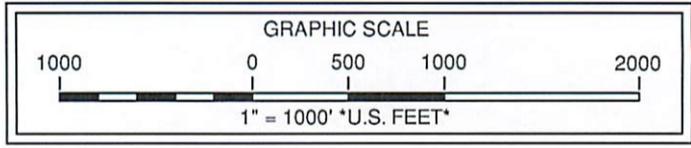
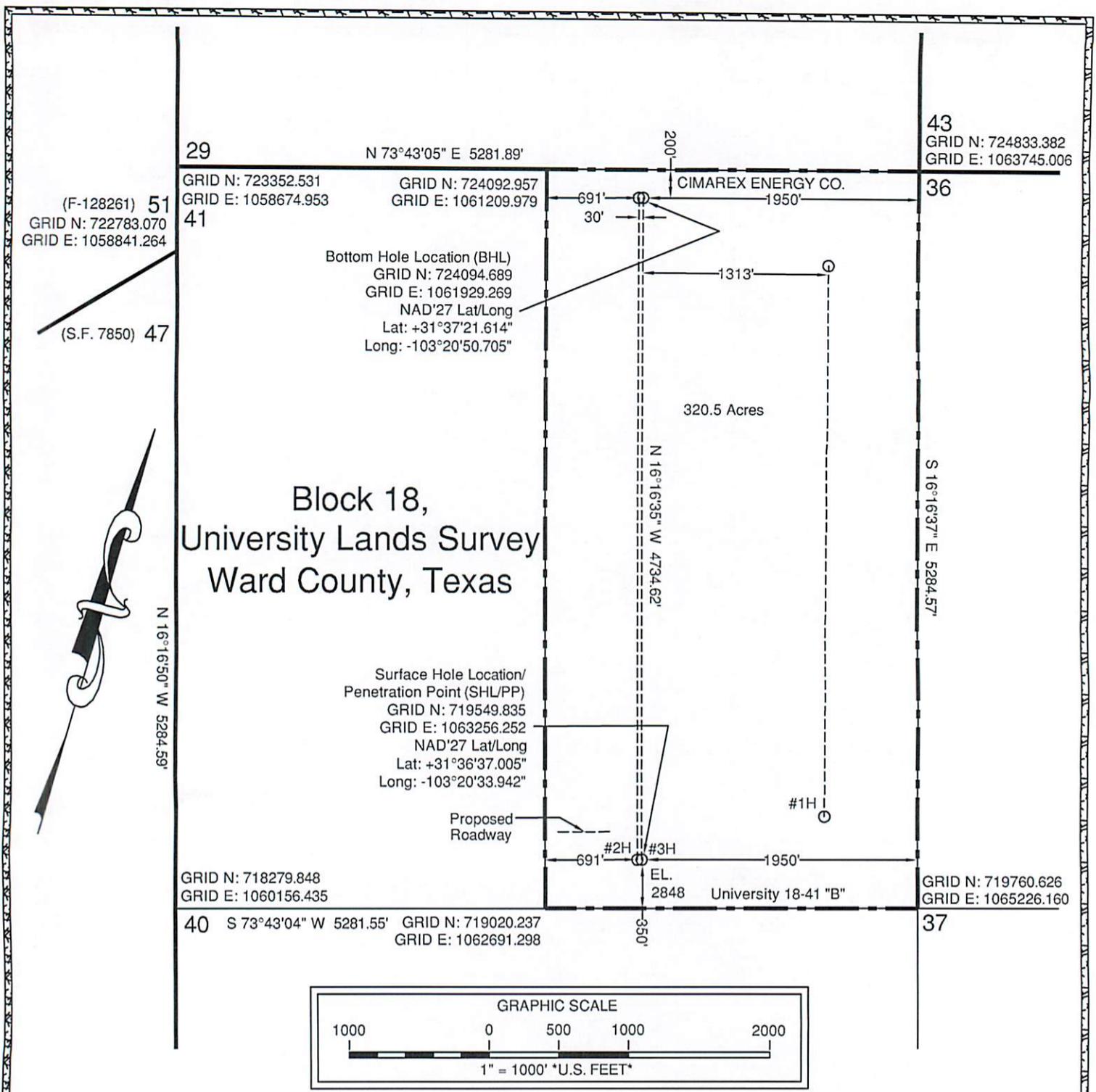
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FIELD NAME LEASE NAME	ACRES NEAREST LEASE	DEPTH NEAREST WE
		WELL # NEAREST WE
		DIST
This well must comply to the new SWR 3.13 requirements concerning the isolation of any potential flow zones and zones with corrosive formation fluids. See approved 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**

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

This is a dynamic table that will be updated continuously. It is the operators responsibility to make sure that at time of spudding the well the most current table is being referenced.



Driving Directions to Location:
 From the intersection of FM 2355 and Hwy 115 in Pyote, Texas;
 Drive West on FM 2355, 11.6 miles to a lease road at Lat: 31°34'56.48", Long: 103°17'31.85";
 Turn right (North) on to lease road, drive 2.5 miles to a lease road at Lat: 31°37'02.02, Long: 103°18'13.40";
 Turn left (West) on to lease road, drive 2.4 miles to Lat: 31°36'25.97", Long: 103°20'33.91";
 Location is right (North) 1120 feet.

Note: Well is located 13.9 miles Northwest of the city of Pyote, Texas.
 Note: Location of the #1H well was obtained from the TRRC Website.
 Note: Survey Reconstruction filed in the Office of Pennell & Marlowe Land Surveyors, Inc.
 Note: Bearings and distances are based on The Texas Coordinate System of 1927, Central Zone.
 Note: Coordinates shown herein are on The Texas Coordinate System of 1927, Central Zone.
 Note: Example: (S-99999) indicates General Land Office file number.



USGS Quadrangle Sheet: Soda Lake SE, Tex.
 Railroad Commission Permit Plat

CIMAREX ENERGY CO.
 University 18-41 "B" #3H
 350' FROM SOUTH LINE
 1950' FROM EAST LINE
 University 18-41 "B"
 320.5 Acres being the E/2 of
 Section 41, Block 18
 University Lands Survey
 Ward County, Texas

Stephen P. Marlowe
 REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5715

December 4, 2013
 131204M1-KLB

Scale: 1" = 1000"