

API No. 42-109-33082
 Drilling Permit # 824054
 SWR Exception Case/Docket No. _____

1. RRC Operator No. 153438
 2. Operator's Name (as shown on form P-5, Organization Report) CIMAREX ENERGY CO.
 3. Operator Address (include street, city, state, zip):
ATTN GENEVA HOLLOWAY
202 S CHEYENNE AVE STE 1000
TULSA, OK 74103-0000

4. Lease Name MEDWICK 32 FEDERAL COM
 5. Well No. 2H

GENERAL INFORMATION

6. Purpose of filing (mark ALL appropriate boxes):
 New Drill Recompletion Reclass Field Transfer Re-Enter
 Amended Amended as Drilled (BHL) (Also File Form W-1D)

7. Wellbore Profile (mark ALL appropriate boxes):
 Vertical Horizontal (Also File Form W-1H) Directional (Also File Form W-1D) Sidetrack

8. Total Depth 10222
 9. Do you have the right to develop the minerals under any right-of-way? Yes No
 10. Is this well subject to Statewide Rule 36 (hydrogen sulfide area)? Yes No

SURFACE LOCATION AND ACREAGE INFORMATION

11. RRC District No. 08
 12. County CULBERSON
 13. Surface Location Land Bay/Estuary Inland Waterway Offshore

14. This well is to be located 21.6 miles in a NW direction from Orla which is the nearest town in the county of the well site.

15. Section 1 16. Block 60 T1S 17. Survey T&P RR CO 18. Abstract No. A-2795 19. Distance to nearest lease line: 1 ft. 20. Number of contiguous acres in lease, pooled unit, or unitized tract: 1

21. Lease Perpendiculars: 1109 ft from the NORTH line and 1173 ft from the EAST line.
 22. Survey Perpendiculars: 1109 ft from the NORTH line and 1173 ft from the EAST line.

23. Is this a pooled unit? Yes No 24. Unitization Docket No: _____ 25. Are you applying for Substandard Acreage Field? Yes No (attach Form W-1A)

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	32. Number of Wells on this lease in this Reservoir
08	00018001	WILDCAT	Oil or Gas Well	10222	0.00	1

BOTTOM HOLE LOCATION INFORMATION IS REQUIRED FOR DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)

Remarks
 [FILER Mar 3, 2017 10:36 AM]: The SHL of this well will be located in Texas. There will be no perforated zones and no acreage will be allocated to this well in Texas. The well will be perforated and completed in New Mexico.

RRC Use Only Data Validation Time Stamp: Nov 17, 2017 2:36 PM (Current Version)

I certify that information stated in this application is true and complete, to the best of my knowledge.

Shelli Armstrong, Regulatory Analyst Mar 03, 2017
 Name of filer Date submitted
 (918)5607275 sarmstrong@cimarex.com
 Phone E-mail Address (OPTIONAL)

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

**Form W-1H
Supplemental Horizontal Well Information**

07/2004

Permit Status: **Approved**
The RRC has not approved this application. Duplication or distribution of information is at the user's own risk.

Permit # **824054**
Approved Date: **Mar 16, 2017**

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.

1. RRC Operator No. 153438	2. Operator's Name (exactly as shown on form P-5, Organization Report) CIMAREX ENERGY CO.	3. Lease Name MEDWICK 32 FEDERAL COM	4. Well No. 2H
5. Field as shown on Form W-1 WILDCAT (Field # 00018001, RRC District 08)			
6. Section 1	7. Block 60 T1S	8. Survey T&P RR CO	9. Abstract 2795
10. County of BHL CULBERSON			
11. Terminus Lease Line Perpendiculars 1 ft. from the North line, and 1477 ft. from the East line			
12. Terminus Survey Line Perpendiculars 1 ft. from the North line, and 1477 ft. from the East line			
13. Penetration Point Lease Line Perpendiculars 1 ft. from the North line, and 1173 ft. from the East line			

Railroad Commission of Texas

PERMIT TO DRILL, RE-COMplete, OR RE-ENTER ON REGULAR OR ADMINISTRATIVE EXCEPTION LOCATION

CONDITIONS AND INSTRUCTIONS

Permit Invalidation. It is the operator's responsibility to make sure that the permitted location complies with Commission density and spacing rules in effect on the spud date. The permit becomes invalid automatically if, because of a field rule change or the drilling of another well, the stated location is not in compliance with Commission field rules on the spud date. If this occurs, application for an exception to Statewide Rules 37 and 38 must be made and a special permit granted prior to spudding. Failure to do so may result in an allowable not being assigned and/or enforcement procedures being initiated.

Notice Requirements. Per H.B 630, signed May 8, 2007, the operator is required to provide notice to the surface owner no later than the 15th business day after the Commission issues a permit to drill. Please refer to subchapter Q Sec. 91.751-91.755 of the Texas Natural Resources Code for applicability.

Permit expiration. This permit expires two (2) years from the date of issuance shown on the original permit. The permit period will not be extended.

Drilling Permit Number. The drilling permit number shown on the permit MUST be given as a reference with any notification to the district (see below), correspondence, or application concerning this permit.

Rule 37 Exception Permits. This Statewide Rule 37 exception permit is granted under either provision Rule 37 (h)(2)(A) or 37(h)(2)(B). Be advised that a permit granted under Rule 37(h)(2)(A), notice of application, is subject to the General Rules of Practice and Procedures and if a protest is received under Section 1.3, "Filing of Documents," and/or Section 1.4, "Computation of Time," the permit may be deemed invalid.

Before Drilling

Fresh Water Sand Protection. The operator must set and cement sufficient surface casing to protect all usable-quality water, as defined by the Railroad Commission of Texas (RRC) Groundwater Advisory Unit (GWAU). Before drilling a well, the operator must obtain a letter from the Railroad Commission of Texas stating the depth to which water needs protection, Write: Railroad Commission of Texas, Groundwater Advisory Unit (GWAU), P.O. Box 12967, Austin, TX 78711-3087. File a copy of the letter with the appropriate district office.

Accessing the Well Site. If an OPERATOR, well equipment TRANSPORTER or WELL service provider must access the well site from a roadway on the state highway system (Interstate, U.S. Highway, State Highway, Farm-to-Market Road, Ranch-to-Market Road, etc.), an access permit is required from TxDOT. Permit applications are submitted to the respective TxDOT Area Office serving the county where the well is located.

Water Transport to Well Site. If an operator intends to transport water to the well site through a temporary pipeline laid above ground on the state's right-of-way, an additional TxDOT permit is required. Permit applications are submitted to the respective TxDOT Area Office serving the county where the well is located.

*NOTIFICATION

The operator is **REQUIRED** to notify the district office when setting surface casing, intermediate casing, and production casing, or when plugging a dry hole. The district office **MUST** also be notified if the operator intends to re-enter a plugged well or re-complete a well into a different regulatory field. Time requirements are given below. The drilling permit number **MUST** be given with such notifications.

During Drilling

Permit at Drilling Site. A copy of the Form W-1 Drilling Permit Application, the location plat, a copy of Statewide Rule 13 alternate surface casing setting depth approval from the district office, if applicable, and this drilling permit must be kept at the permitted well site throughout drilling operations.

***Notification of Setting Casing.** The operator **MUST** call in notification to the appropriate district office (phone number shown on permit) a minimum of eight (8) hours prior to the setting of surface casing, intermediate casing, AND production casing. The individual giving notification **MUST** be able to advise the district office of the drilling permit number.

***Notification of Re-completion/Re-entry.** The operator MUST call in notification to the appropriate district office (phone number shown on permit) a minimum of eight (8) hours prior to the initiation of drilling or re-completion operations. The individual giving notification MUST be able to advise the district office of the drilling permit number.

Completion and Plugging Reports

Hydraulic Fracture Stimulation using Diesel Fuel: Most operators in Texas do not use diesel fuel in hydraulic fracturing fluids. Section 322 of the Energy Policy Act of 2005 amended the Underground Injection Control (UIC) portion of the federal Safe Drinking Water Act (42 USC 300h(d)) to define "underground injection" to *EXCLUDE* "...the underground injection of fluids or propping agents (*other than diesel fuels*) pursuant to hydraulic fracturing operations related to oil, gas, or geothermal production activities." (italic and underlining added.) Therefore, hydraulic fracturing may be subject to regulation under the federal UIC regulations if diesel fuel is injected or used as a propping agent. EPA defined "diesel fuel" using the following five (5) Chemical Abstract Service numbers: 68334-30-5 Primary Name: Fuels, diesel; 68476-34-6 Primary Name: Fuels, diesel, No. 2; 68476-30-2 Primary Name: Fuel oil No. 2; 68476-31-3 Primary Name: Fuel oil, No. 4; and 8008-20-6 Primary Name: Kerosene. As a result, an injection well permit would be required before performing hydraulic fracture stimulation using diesel fuel as defined by EPA on any well in Texas. Hydraulic fracture stimulation using diesel fuel as defined by EPA on a well in Texas without an injection well permit could result in enforcement action.

Producing Well. Statewide Rule 16 states that the operator of a well shall file with the Commission the appropriate completion report within thirty (30) days after completion of the well or within ninety (90) days after the date on which the drilling operation is completed, whichever is earlier. Completion of the well in a field authorized by this permit voids the permit for all other fields included in the permit unless the operator indicates on the initial completion report that the well is to be a dual or multiple completion and promptly submits an application for multiple completion. All zones are required to be completed before the expiration date on the existing permit. Statewide Rule 40(d) requires that upon successful completion of a well in the same reservoir as any other well previously assigned the same acreage, proration plats and P-15s (if required) must be submitted with no double assignment of acreage.

Dry or Noncommercial Hole. Statewide Rule 14(b)(2) prohibits suspension of operations on each dry or non-commercial well without plugging unless the hole is cased and the casing is cemented in compliance with Commission rules. If properly cased, Statewide Rule 14(b)(2) requires that plugging operations must begin within a period of one (1) year after drilling or operations have ceased. Plugging operations must proceed with due diligence until completed. An extension to the one-year plugging requirement may be granted under the provisions stated in Statewide Rule 14(b)(2).

Intention to Plug. The operator must file a Form W-3A (Notice of Intention to Plug and Abandon) with the district office at least five (5) days prior to beginning plugging operations. If, however, a drilling rig is already at work on location and ready to begin plugging operations, the district director or the director's delegate may waive this requirement upon request, and verbally approve the proposed plugging procedures.

***Notification of Plugging a Dry Hole.** The operator MUST call in notification to the appropriate district office (phone number shown on permit) a minimum of four (4) hours prior to beginning plugging operations. The individual giving the notification MUST be able to advise the district office of the drilling permit number and all water protection depths for that location as stated in the Texas Commission on Environmental Quality letter.

DIRECT INQUIRIES TO: DRILLING PERMIT SECTION, OIL AND GAS DIVISION

PHONE
(512) 463-6751

MAIL:
PO Box 12967
Austin, Texas, 78711-2967

**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 824054	DATE PERMIT ISSUED OR AMENDED Mar 16, 2017	DISTRICT * 08
API NUMBER 42-109-33082	FORM W-1 RECEIVED Mar 03, 2017	COUNTY CULBERSON
TYPE OF OPERATION NEW DRILL	WELLBORE PROFILE(S) Horizontal	ACRES 1
OPERATOR CIMAREX ENERGY CO. ATTN GENE HOLLOWAY 202 S CHEYENNE AVE STE 1000 TULSA, OK 74103-0000		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 MEDWICK 32 FEDERAL COM		WELL NUMBER 2H
LOCATION 21.6 miles NW direction from ORLA		TOTAL DEPTH 10222
Section, Block and/or Survey SECTION ← 1 BLOCK ← 60 T1S ABSTRACT ← 2795 SURVEY ← T&P RR CO		
DISTANCE TO SURVEY LINES 1109 ft. NORTH 1173 ft. EAST		DISTANCE TO NEAREST LEASE LINE 1 ft.
DISTANCE TO LEASE LINES 1109 ft. NORTH 1173 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
WILDCAT MEDWICK 32 FEDERAL COM	1.00 1	10,222 0
		2H 08
WELLBORE PROFILE(s) FOR FIELD: Horizontal		
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: 1.0 F NORTH L 1173.0 F EAST L Terminus Location Lease Lines: 1.0 F NORTH L 1477.0 F EAST L Survey Lines: 1.0 F NORTH L 1477.0 F EAST L		
THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS		

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FIELD NAME LEASE NAME	ACRES NEAREST LEASE	DEPTH NEAREST WE
WELL # NEAREST WE		
DIST		
<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>		

**RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION
SWR #13 Formation Data**

CULBERSON (109) County

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
RUSTLER	450	450		1	12/17/2013
FORD-DELAWARE	2,500	2,500		2	12/17/2013
DELAWARE	2,600	3,400		3	12/17/2013
CHERRY CANYON	3,600	5,400		4	12/17/2013
BONE SPRINGS	6,150	6,150		5	12/17/2013
MISSISSIPPIAN	8,900	8,900		6	12/17/2013
WOLFCAMP	7,900	9,100		7	12/17/2013
ATOKA	11,600	11,600		8	12/17/2013
MORROW	11,800	11,800		9	12/17/2013
STRAWN	5,750	12,800		10	12/17/2013
SILURIAN	15,400	15,400		11	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>

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OIL & GAS DIVISION
SWR #13 Formation Data**

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DELAWARE	2,600	3,400		3	12/17/2013
CHERRY CANYON	3,600	5,400		4	12/17/2013
BONE SPRINGS	6,150	6,150		5	12/17/2013
MISSISSIPPIAN	8,900	8,900		6	12/17/2013
WOLFCAMP	7,900	9,100		7	12/17/2013
ATOKA	11,600	11,600		8	12/17/2013
MORROW	11,800	11,800		9	12/17/2013
STRAWN	5,750	12,800		10	12/17/2013
SILURIAN	15,400	15,400		11	12/17/2013

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