API No. 42-109-33079	079	RAIL	ILROAD CC	NOISSIMM(ROAD COMMISSION OF TEXAS		FORM W-1	[W-1 07/2004
Drilling Permit # R73788				UIL & GAD DIVISION			Permit Status:	Approved
SWR Exception Case/Docket No.		APPLICATION FOR This facsimile A certificati		O DRILL, RJ ted electronically fr ted data is availabl	PERMIT TO DRILL, RECOMPLETE, OR R <i>W-1</i> was generated electronically from data submitted to the RRC. on of the automated data is available in the RRC's Austin office.	PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER <i>W-1 was generated electronically from data submitted to the RRC.</i> <i>on of the automated data is available in the RRC's Austin office.</i>		•
1. RRC Operator No. 153438		 Operator's Name (as shown on form P-5, Organization Report) CIMAREX ENERGY CO. 	m P-5, Organization Report AREX ENERGY CO	Report) Y CO.		3. Operator Address (include street, city, state, zip): ATTN GENEA HOLLOWAY	le street, city, state, zip): HOLLOWAY	
4. Lease Name	MEDWIC	MEDWICK 32 FEDERAL COM		5. Well No.	Ŧ	202 S CHEYENNE AVE TULSA, OK 74103-0000	NE AVE STE 1000 03-0000	
GENERALINFORMATION	rids for the Light		at the second second second					
6. Purpose of filing (mark ALL appropriate boxes):	propriate boxes)		Recompletion	etion	Reclass	Field Transfer	C Re-Enter	
		L Amended	L Amend	ed as Drilled (BHL	Amended as Drilled (BHL) (Also File Form W-1D)	-ID)		
7. Wellbore Profile (mark ALL appropriate boxes):	propriate boxes)	Uertical	X] Horizontal (Also File Form W-1H)	File Form W-1H)	Directi	Directional (Also File Form W-1D)		□ Sidetrack
8. Total Depth 9. 8080 m	. Do you have the Do you have	9. Do you have the right to develop the \mathbf{X} \mathbf{Y}_{es} minerals under any right-of-way?	°² □	Is this well subject	to Statewide Rule 3	10. Is this well subject to Statewide Rule 36 (hydrogen sulfide arca)?	X Yes D No	0
SURFACE COCATION AND ACREAGE INFORMATION	ACREAGE	INFORMATION						
11. RRC District No. 08 12	12. County	CULBERSON	13. Surface Location	on 🛛 Land	□ Bay/Estuary	tuary 🗌 Inland Waterway	erway 🔲 Offshore	
14. This well is to be located	21.6	miles in a NW	direction from		Orla	which is the ne	which is the nearest town in the county of the well site.	he well site.
15. Section 16. Block 15. Control 15. 15. 15. 15. 15. 15. 15. 15. 15. 15.	15 17. Survey	ey T&P RR CO		18. Abstract No. A-279	95	 Distance to nearest lease line: 1. 	20. Number of contiguous acres in lease, pooled unit, or unitized tract:	acres in ed tract: 1
21. Lease Perpendiculars:	1071	ft from the NORT	T	line and13	1302 ft from the	the EAST	line.	
22. Survey Perpendiculars:	1071	ft from the NORTI	T	line and 1302	02 ft from the	the EAST	line.	
23. Is this a pooled unit? $\Box \gamma_{es}$	ss KN	24. Unitization Docket No:	25	5. Are you applying	25. Are you applying for Substandard Acreage Field?	reage Field?	(attach Form W-1A)	No No
FIELD INFORMATION	ist all fields	FIELD INFORMATION SITIAL fields of anticipated completion incl	ncluding Wildca	uding Wildcat. List one zone per line.	ie perine.			
26. RRC 27. Field No. District No.	28. Field Name	28. Field Name (exactly as shown in RRC records)		29. We	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	8080	0.00	1
			NOV 1 7 2017	017				
			RECEIVED					
BOTTOMHOLE LOCATIONA	INFORMATIC	BOTHOMHOLE LOCATION INFORMATION Is required for DIRECTIONAL		AL, AND AMEN	DED ÅS DRILLI	, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPEICATIONS		see W-1H attachment) a
Remarks [FILER Feb 14, 2017 4:12 PM]: be perf'd and completed in New	The SHL of thi Mexico.	Remarks [FILER Feb 14, 2017 4:12 PM]: The SHL of this well will be located in Texas. There will be no perfd zones. The well will be perfd and completed in New Mexico.	here will be no per	fd zones. The we		Certify that information stated in this application is true and complete, to the best of my knowledge.	Certificate: I in this application is true and o	complete, to the
					Name	Sheli Armstrong, Regulatory Analyst Name of filer		Feb 14, 2017 Date submitted
RRC Use Only Data Va	Data Validation Time Stamp:	tamp: Nov 17, 2017 2:34 PM(Current Version)	Current Version)		(91 Phone	307275	sarmstrong@cimarex.com E-mail Address (OPTIONAL)	narex.com

			1						_							
Form W-1H 07/2004	Supplemental Horizontal Well Information	Permit # 823288	Approved Date: Mar 10, 2017		4. Well No.	Ξ.			10. County of BHL	CULBERSON		line	line		line	
For	Supp	R RE-ENTER	arc.	<u> </u>		COM			t	CR / 7					st	
RAILROAD COMMISSION OF TEXAS	ON	COMPLETE, O	This facsimile W-1 was generated electronically from data submitted to the RRC.	A certification of the antomated data is available in the IMC 3 Austin office.		MEDWICK 32 FEDERAL COM	-				L	East	East		East	
NOISSIMM	OIL & GAS DIVISION	O DRILL, RE	ed electronically from	ea aaia is available	3. Lease Name	MEDWI						1620 ft. from the	320 ft. from the		1620 ft. from the	
ILROAD CO	OIL&	R PERMIT T	ile W-I was generate	מווטה טן ואר מעוטווענו	tation Report)			(C District 08)			Ĭ	line. and	line. and 1620		line. and1	
RAI		APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER	This facsimi	nifinan v	1. RRC Operator No. 2. Operator's Name (exactly as shown on form P-5, Organization Report)	CIMAREX ENERGY CO.		WILDCAT (Field # 00018001, RRC	8. Survey		-	North	North	ulars	North	
Annroved	neworlddy	The RRC has not approved this application. Duplication or distribution of information is	at the user's own risk.		2. Operator's Name (exact	CIN			7. Block	00 CI 1 DO	11. Terminus Lease Line Perpendiculars	ft. from the	12. Terminus Survey Line Ferpendiculars	13. Penetration Point Lease Line Perpendiculars	1 from the	
Domnit Ctatua.	rermit Status:	The RRC has not ap, Duplication or distri	at the use		1. RRC Operator No.	153438		5. Field as shown on Form W-1	6. Section		11. Terminus L			13. Penetration		

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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 the 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 (<u>other than diesel fluels</u>) 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 Nmae: 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. 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

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PERMIT TO DRILL, DEEPEN, PLUG BACK, OR RE-ENTER O	N A REGULAR OR ADMINISTRATIVE EXCEPTION LOCATION
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PERMIT NUMBER 823288		DATE PERMIT ISSUED OR AMENDED Mar 10, 2017	DISTRIC)8		
API NUMBER 42-109-3	33079	FORM W-1 RECEIVED Feb 14, 2017	COUNTY	CULBE	RSON		
TYPE OF OPERATION			ACRES				
NEW DRILL	1	WELLBORE PROFILE(S) Horizontal	ACRES		1		
OPERATOR		153438		NOT	ICE		
		155456	revoked i	it and any allow f payment for f Commission is	fee(s) sul	bmitted to	
ATTN GENEA HOLLOV 202 S CHEYENNE AVE TULSA, OK 74103-000	E STE 100	0	D	istrict Office 1 (432) 68-	-		
LEASE NAME			WELL NU	JMBER			
	VICK 32	FEDERAL COM	ļ		1H		
LOCATION 21.6 miles	s NW dir	ection from ORLA	TOTAL D	EPTH	808	0	
Section, Block and/or Survey							
section $\prec 1$		BLOCK 4 60 T1S ABSTR	аст ┥ 279	95			
SURVEY 4 T&P RR CO							
DISTANCE TO SURVEY LINES 1071 ft.		1302 ft. EAST	DISTANC	e to neare 1	ST LEA ft.	SE LINE	, ,
DISTANCE TO LEASE LINES 1071 ft.	NORTH	I 1302 ft. EAST	DISTANC	E TO NEARE See FIE			ASE
FIELD(s) and LIMITATIONS:	* SE	E FIELD DISTRICT FOR REPORTING	B PURPOS	ES *			
FIELD NAME LEASE NAME			ACRES NEAREST L	DEPTH EASE	WEL NEAR	L # EST WE	DIST
WILDCAT			1.00	8,080		1H	
MEDWICK 32 FEDI	ERAL CO	M	1	-,	0		
WELLBORE PROFILE(s) FOR	R FIELD: H	Iorizontal					-
isolated Fields w individu Lateral Penetrat Lease Terminus Lease	d and tes with SWR wally pri TH1	en sulfide field. Hydrogen Sulfide F ted per State Wide Rule 36 and a For 10 authority to downhole commingle m or to commingling production. t Location 1.0 F NORTH L 1620.0 F EAST L 1.0 F NORTH L 1620.0 F EAST L 1.0 F NORTH L 1620.0 F EAST L	m H−9 file	ed with the	distri		ce.
	THE FC	DLLOWING RESTRICTIONS APPLY TO	ALL FIEL	DS			

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 823288	DATE PERMIT ISSUED OR AMENDED Mar 10, 2017	DISTRICT * 08
API NUMBER 42-109-33079	FORM W-I RECEIVED Feb 14, 2017	COUNTY
TYPE OF OPERATION NEW DRILL	WELLBORE PROFILE(S) Horizontal	ACRES 1
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.
ATTN GENEA HOLLOWAY 202 S CHEYENNE AVE STE 10 TULSA, OK 74103-0000	000	District Office Telephone No: (432) 684-5581
LEASE NAME MEDWICK 32	2 FEDERAL COM	WELL NUMBER 1H
LOCATION 21.6 miles NW d	irection from ORLA	TOTAL DEPTH 8080
Section, Block and/or Survey SECTION	BLOCK ~ 60 T1S ABSTR	аст ┥ 2795
DISTANCE TO SURVEY LINES 1071 ft. NORTH	H 1302 ft. EAST	DISTANCE TO NEAREST LEASE LINE 1 ft.
DISTANCE TO LEASE LINES 1071 ft. NORT	H 1302 ft. EAST	DISTANCE TO NEAREST WELL ON LEASE See FIELD(s) Below
FIELD(s) and LIMITATIONS: * S	EE FIELD DISTRICT FOR REPORTING	PURPOSES *
FIELD NAME LEASE NAME		ACRES DEPTH WELL # DIST NEAREST LEASE NEAREST WE
well is to be used for brine mining, unde salt formations, a permit for that specific drilling, of the well in accordance with S This well must comply to the new SWR	rground storage of liquid hydrocarbons in sall purpose must be obtained from Environmen	any potential flow zones and zones with

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

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CULBERSON (109) County

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
RUSTLER	450	450		1	12/17/2013
FORD-DELAWAR E	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
АТОКА	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

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

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CULBERSON (109) County

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
RUSTLER	450	450		1	12/17/2013
FORD-DELAWAR E	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
АТОКА	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