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Form 3160-3 June 2015) UNITED STATE	UNITED STATES FEB 1 2 201						
DEPARTMENT OF THE	INTERIOR	TRICT II-ART	ESIA O.	DLease Serial No.			
BUREAU OF LAND MAN APPLICATION FOR PERMIT TO I	6. If Indian, Allotee or	Tribe Name					
a. Type of work: 🖌 DRILL	REENTER			7. If Unit or CA Agree	ment. Name and No.		
b. Type of Well: Oil Well 🔽 Gas Well 🔲 G	Other			8. Lease Name and We	ell No.		
c. Type of Completion: 🔲 Hydraulic Fracturing 🛛 🖌 S	Single Zone	Multiple Zone		SCOTER 6-31 FEDE			
Name of Operator CIMAREX ENERGY COMPANY			N	9. API-Well No. /	5-45723		
a. Address 600 N. Marienfeld St., Suite 600 Midland OK 79701	3b. Phone N (432)620-19	o. (include area cod 936	le)	10, Field and Pool, or WOLFCAMP / WOLF	Exploratory CAMP Purples		
Location of Well (Report location clearly and in accordance	with any State	requirements.*)	\frown	11. Sec., T. R. M. or B SEC 6 / T255 / R27F	lk. and Survey G r Area		
At surface SWSE / 390 FSL / 1410 FEL / LAT 32.152 At proposed prod zone, NWNE / 330 ENL / 2310 EEL /	922 / LONG -	104.225542 2 / 1 ONG -104 22	8669		. , , , , , , , , , , , , , , , , , , ,		
4. Distance in miles and direction from nearest town or post of	ffice*			12. County or Parish	13. State		
18 miles				EDDY	NM		
5. Distance from proposed* 390 feet location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No of ac	eres in lease	17. Spaci 319.35	ng,Unit dedicated to this	well		
8. Distance from proposed location*	19. Proposed	d Depth	20, BLM	/BIA Bond No. in file			
to nearest well, drilling, completed, 20 feet applied for, on this lease, ft.	8858 feet /	18687 feet	FED: NN	AB001188			
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approxi	mate date work will	start*	23. Estimated duration			
3311 reet	12/01/2017	hmente /		30 days	<u> </u>		
the following, completed in accordance with the requirements	of Onchora Oil	and Cos Order No.	l and the l	Judraulia Fracturina rula			
as applicable)			i, and the r	Tyuraune Fracturing fule	per 45 CFK 5102.5-5		
. Well plat certified by a registered surveyor. . A Drilling Plan.	\searrow	4. Bond to cover the Item 20 above).	e operation	ns unless covered by an e	xisting bond on file (see		
3. A Surface Use Plan (if the location is on National Forest Syst SUPO must be filed with the appropriate Forest Service Office	em Lands, the	 Operator certific Such other site sp BLM. 	cation. pecific info	rmation and/or plans as m	ay be requested by the		
5. Signature (Electronic Submission)	Name Aricka	(Printed/Typed) Easterling / Ph: (9	918)560-7	060 0	ate 6/23/2017		
itle Regulatory Analyst							
Approved by (Signature) (Electronic Submission)	Name Ty Alle	(Printed/Typed) en / Ph: (575)234-	5978	D 1	ate 2/21/2018		
Title / Wildlife Biologist							
Application approval does not warrant or certify that the application pplicant to conduct operations thereon.	ant holds legal o	or equitable title to the	nose rights	in the subject lease whic	h would entitle the		
Fitle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, of the United States any false, fictitious or fraudulent statements	make it a crime s or representati	e for any person kno- ions as to any matter	wingly and within its	willfully to make to any jurisdiction.	department or agency		
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*(Instructions on page 2) *(Instructions on page 2) *(Instructions on page 2)

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.



The Privacy Act of 1974 and regulation in 43 CFR 2,48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Additional Operator Remarks

Location of Well

1. SHL: SWSE / 390 FSL / 1410 FEL / TWSP: 25S / RANGE: 27E / SECTION: 6 / LAT: 32.152922 / LONG: -104.225542 (TVD: 0 feet, MD: 0 feet) PPP: SWSE / 992 FSL / 2180 FEL / TWSP: 25S / RANGE: 27E / SECTION: 6 / LAT: 32.1545806 / LONG: -104.2280278((TVD: 8714 feet, MD: 9386 feet) BHL: NWNE / 330 FNL / 2310 FEL / TWSP: 24S / RANGE: 27E / SECTION: 31 / LAT: 32.179992 / LONG: -104.2280602 (TVD: 8858 feet, MD: 18687 feet)

BLM Point of Contact

Name: Priscilla Perez Title: Legal Instruments Examiner Phone: 5752345934 Email: pperez@blm.gov

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CIMAREX ENERGY CO.
LEASE NO.:	NMNM100332
WELL NAME & NO.:	29H –SCOTER 6-31 FEDERAL COM
SURFACE HOLE FOOTAGE:	390'/S & 1410'/E
BOTTOM HOLE FOOTAGE	330'/N & 2310'/E
LOCATION:	Section 6 T.25 S., R.27E., NMP
COUNTY:	EDDY County, New Mexico



H2S	∩ Yes	ه No	
Potash	• None	C Secretary	C R-111-P
Cave/Karst Potential	C Low	C Medium	• High
Variance	C None	• Flex Hose	⊂ Other
Wellhead	Conventional	Multibowl	⊂ Both
Other	□ 4 String Area	Capitan Reef	F WIPP

A. Hydrogen Sulfide

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

- 1. The 13-3/8 inch surface casing shall be set at approximately 425 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. Additional cement maybe required. Excess calculates to 12%.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of <u>8</u> <u>hours</u> or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)

Page 1 of 7

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

• Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

- In <u>High Cave/Karst Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- 3. The minimum required fill of cement behind the 7 inch production casing is:
 - Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. Additional cement maybe required. Excess calculates to 20%.
- 4. The minimum required fill of cement behind the 4-1/2 inch production liner is:
 - Cement should tie-back 100' into the previous casing. Operator shall provide method of verification. Additional cement maybe required. Excess calculates to 8%.

C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
- 2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.
- Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8 intermediate casing shoe shall be 3000 (3M) psi.
- 4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 7 production casing shoe shall be 5000 (5M) psi.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

Eddy County Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- <u>Wait on cement (WOC) for Potash Areas:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least <u>24 hours</u>. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. <u>Wait on cement (WOC) for Water Basin:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least <u>8 hours</u>. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

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8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the

plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, no tests shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug. The results of the test shall be reported to the appropriate BLM office.
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes. This test shall be performed prior to the test at full stack pressure.
- g. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

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D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

Waste Minimization Plan (WMP)

In the interest of resource development, submission of additional well gas capture development plan information is deferred but may be required by the BLM Authorized Officer at a later date.

ZS 011718

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1. Geological Formations

TVD of target 8,858	Pilot Hole TD N/A
MD at TD 18,687	Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	0	N/A	
Salado	1258	N/A	
Castille	1880	N/A	
Bell Canyon	2085	Hydrocarbons	
Cherry Canyon	3050	Hydrocarbons	
Brushy Canyon	4103	Hydrocarbons	
Bone Spring	5622	Hydrocarbons	
Bone Spring A Shale	5743	Hydrocarbons	
Bone Spring C Shale	6075	Hydrocarbons	
1st Bone Spring	6581	Hydrocarbons	
2nd Bone Spring	7075	Hydrocarbons	
3rd Bone Spring	8391	Hydrocarbons	
Wolfcamp	8741	Hydrocarbons	

2. Casing Program

Hole Size	Casing Depth From	Casing Depth To	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	425	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	3.81	8.90	15.78
12 1/4	0	2065	9-5/8"	36.00	J-55	LT&C	1.84	-	
8 3/4	0	8109	7"	26.00	L-80	LT&C	1.43	1.91	2.22
8 3/4	8109	10278	7"	26.00	L-80	BT&C	1.31	1.75	31.02
6	8109	18687	4-1/2"	11.60	L-80	BT&C	1.25	1.54	30.73
		•		BLM	Minimum Si	afety Factor	1.125	1	1.6 Dry 1.8 Wet

TVD was used on all calculations.

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Cimarex Energy Co., Scoter 6-31 Federal Com 29H

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Ν
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	Ν
If yes, does production casing cement tie back a minimum of 50' above the Reef?	N
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	Ν
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	Ν
Is 2nd string set 100' to 600' below the base of salt?	N
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	N
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	N
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	Ν

3. Cementing Program

Casing	# Sks	Wt. Ib/gal	Yld ft3/sack	H2O gal/sk	500# Comp. Strength (hours)	omp. Slurry Description gth rs)				
Surface	76	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite				
	195	14.80	1.34	6.32	9.5	Tail: Class C + LCM				
Intermediate	393	12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Ben	tonite			
	121	14.80	1.34	6.32	9.5	9.5 Tail: Class C + LCM				
Production	322	10.30	3.64	22.18		Lead: Tuned Light + LCM	<u> </u>			
	277	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bento	onite + Fluid Loss + Dispersant + SMS			
Completion System	611	14.20	1.30	5.86 14:30 Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SM						
Casing String				тос			% Excess			
Surface						0				
Intermediate				1		0				
Production						1865				
Completion System					10278					

4. Pressure Control Equipment

A variance is requested for the use of a diverter on the surface casing. See attached for schematic.									
BOP installed and tested before drilling which hole?	Size	Min Required WP	Туре		Tested To				
12 1/4	13 5/8	2M	Annular	×	50% of working pressure				
			Blind Ram						
			Pipe Ram		2М				
			Double Ram	x					
			Other						
8 3/4	13 5/8	3M	Annular	x	50% of working pressure				
			Blind Ram						
			Pipe Ram		ЗМ				
			Double Ram	x					
			Other						
6	13 5/8	5M	Annular	x	50% of working pressure				
			Blind Ram						
			Pipe Ram		5M				
			Double Ram	x					
			Other						

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

X Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.							
	х	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.					
		N	Are anchors required by manufacturer?				

5. Mud Program

Depth	Туре	Weight (ppg)	Viscosity	Water Loss
				N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid? PVT/Pason/Visual Monitoring

6. Logging and Testing Procedures

Logging, Coring and Testing		
Will run GR/CNL fromTD to surface (horizontal well - vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.		
No logs are planned based on well control or offset log information.		
Drill stem test?		
Coring?		

Additional Logs Planned	Interval

7. Drilling Conditions

Condition	
BH Pressure at deepest TVD	5066 psi
Abnormal Temperature	No

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

X H2S is present

X H2S plan is attached

8. Other Facets of Operation

PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CIMAREX ENERGY CO.
LEASE NO.:	NMNM100332
WELL NAME & NO.:	29H –SCOTER 6-31 FEDERAL COM
SURFACE HOLE FOOTAGE:	390'/S & 1410'/E
BOTTOM HOLE FOOTAGE	330'/N & 2310'/E
LOCATION:	Section 6 T.25 S., R.27E., NMP
COUNTY:	EDDY County, New Mexico

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Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

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I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

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V. SPECIAL REQUIREMENT(S)

Watershed/Water Quality:

The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The berm shall be maintained through the life of the well and after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion.

Tank Battery:

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain $1\frac{1}{2}$ times the content of the largest tank. Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production:

Construction:

In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately.

No Blasting:

No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

Pad Berming:

- The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.
- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g., caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.

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- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised. (Any access road crossing the berm cannot be lower than the berm height.)
- Following a rain event, all fluids will vacuumed off of the pad and hauled off-site and disposed at a proper disposal facility.

Tank Battery Liners and Berms:

Tank battery locations and all facilities will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing, or equivalent, to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ¹/₂ times the content of the largest tank.

Leak Detection System:

A method of detecting leaks is required. The method could incorporate gauges to measure loss, situating values and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

Automatic Shut-off Systems:

Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:

Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

Directional Drilling:

Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

Lost Circulation:

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cavebearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

Abandonment Cementing:

Upon well abandonment in cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

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Pressure Testing:

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The operator will perform annual pressure monitoring on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

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Exclosure Fencing

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

G. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

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Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: 400' + 100' = 200' lead-off ditch interval 4%

Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

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Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Exclosure Netting (Open-top Tanks)

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

Open-Vent Exhaust Stack Exclosures

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures

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Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, <u>Shale Green</u> from the BLM Standard Environmental Color Chart (CC-001: June 2008).

B. PIPELINES

BURIED PIPELINE STIPULATIONS

A copy of the application (Grant, APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, <u>et seq</u>. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, <u>et seq</u>.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of

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the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized right-ofway.

6. The pipeline will be buried with a minimum cover of 36 inches between the top of the pipe and ground level.

7. The maximum allowable disturbance for construction in this right-of-way will be $\underline{30}$ feet:

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed <u>20</u> feet. The trench is included in this area. (Blading is defined as the complete removal of brush and ground vegetation.)
- Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed <u>30</u> feet. The trench and bladed area are included in this area. (Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.)
- The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately <u>6</u> inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

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9. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

(x) seed mixture 1	() seed mixture 3
() seed mixture 2	() seed mixture 4
() seed mixture 2/LPC	() Aplomado Falcon Mixture

13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.

16. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

17. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

18. <u>Escape Ramps</u> - The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

- a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.
- b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the Grant and attachments, including stipulations, survey plat(s) and/or map(s), shall be on location during construction. BLM personnel may request to review a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC § 2601 *et seq.* (1982) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (*see* 40 CFR, Part 702-799 and in particular, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. Holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601, *et seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way Holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way Holder on the Right-of-Way. This provision applies without regard to whether a release is caused by Holder, its agent, or unrelated third parties.

4. Holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. Holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

- a. Activities of Holder including, but not limited to: construction, operation, maintenance, and termination of the facility;
- b. Activities of other parties including, but not limited to:
 - (1) Land clearing
 - (2) Earth-disturbing and earth-moving work
 - (3) Blasting
 - (4) Vandalism and sabotage;
- c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

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5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of Holder, regardless of fault. Upon failure of Holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he/she deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of Holder. Such action by the Authorized Officer shall not relieve Holder of any responsibility as provided herein.

6. All construction and maintenance activity shall be confined to the authorized rightof-way width of <u>20</u> feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline shall be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or right-of-ways.

7. No blading or clearing of any vegetation shall be allowed unless approved in writing by the Authorized Officer.

8. Holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline shall be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of <u>24</u> inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

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12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

16. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, powerline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

17. Surface pipelines shall be less than or equal to 4 inches and a working pressure below 125 psi.

C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

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1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 <u>et seq</u>. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, <u>et seq</u>. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, <u>et seq</u>.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their

Page 18 of 21

former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:

- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.

VIII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

Page 19 of 21

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

IX. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Page 20 of 21
Seed Mixture 1 for Loamy Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed shall be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed shall be planted using a drill equipped with a depth regulator to ensure proper depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture shall be evenly and uniformly planted over the disturbed area (small/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed shall be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre shall be doubled. The seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	<u>lb/acre</u>
Plains lovegrass (Eragrostis intermedia)	0.5
Sand dropseed (Sporobolus cryptandrus)	1.0
Sideoats grama (Bouteloua curtipendula)	5.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT



Operator Certification

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: Aricka Easterli	ng	Signed on: 06/21/2017
Title: Regulatory Analy	yst	
Street Address: 202 S	3. Cheyenne Ave, Ste 1000	
City: Tulsa	Zip : 74103	
Phone: (918)560-7060)	
Email address: aeast	erling@cimarex.com	
Field Repre	sentative	
Representative Na	ne:	
Street Address:		
City:	State:	Zip:

Phone:

Email address:

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Zip: 79701

APD ID: 10400015092

Operator Name: CIMAREX ENERGY COMPANY

Well Name: SCOTER 6-31 FEDERAL COM

Well Type: CONVENTIONAL GAS WELL

Submission Date: 06/23/2017



Application Data Report

Show Final Text

7

Well	Number: 29H	
Well	Work Type: Drill	

Section 1 - General			
APD ID: 10400015092	Tie to previous NOS?	10400012606	Submission Date: 06/23/201
BLM Office: CARLSBAD	User: Aricka Easterling	Tit	le: Regulatory Analyst
Federal/Indian APD: FED	Is the first lease penet	rated for product	tion Federal or Indian? FED
Lease number: NMNM100332	Lease Acres: 478.44		
Surface access agreement in place?	Allotted?	Reservation	:
Agreement in place? NO	Federal or Indian agre	ement:	
Agreement number:			
Agreement name:			
Keep application confidential? YES			
Permitting Agent? NO	APD Operator: CIMAR	EX ENERGY COM	MPANY
Operator letter of designation:			

Operator Info

Operator Organization Name: CIMAREX ENERGY COMPANY

Operator Address: 600 N. Marienfeld St., Suite 600

Operator PO Box:

Operator City: Midland State: OK

Operator Phone: (432)620-1936

Operator Internet Address: tstathem@cimarex.com

Section 2 - Well Information

Well in Master Development Plan? NO	Mater Development Plan name:						
Well in Master SUPO? NO	Master SUPO name:						
Well in Master Drilling Plan? NO	Master Drilling Plan name:						
Well Name: SCOTER 6-31 FEDERAL COM	Well Number: 29H	Well API Number:					
Field/Pool or Exploratory? Field and Pool	Field Name: WOLFCAMP	Pool Name: WOLFCAMP					

Is the proposed well in an area containing other mineral resources? USEABLE WATER

Well Number: 29H

Desc	ribe c	other	miner	als:															
Is the	e prop	osed	well i	in a H	elium	prod	uctio	n area?	N Use E	Existing W	ell Pac	d? NO	Ne	ew s	surface o	listurl	bance	?	
Туре	of W	ell Pa	d: MU	ILTIPL	E WE	ELL			Multij	Multiple Well Pad Name: Number: W2E2									
Well	Class	: HOF	RIZON	ITAL					Numb	SCOTER 6-31 FEDERAL COM Number of Legs:									
Well	Work	Туре	: Drill																
Well	Туре		VENT		L GAS	S WEI	_L												
Desc	Describe Well Type:																		
Well	Well sub-Type: EXPLORATORY (WILDCAT)																		
Describe sub-type:																			
Distance to town: 18 Miles Distance to nearest well: 20 FT Distance to lease line: 390 FT																			
Rese	Reservoir well spacing assigned acres Measurement: 319.35 Acres																		
Well	Well plat: Scoter_6_31_Fed_Com_29H_C102_Plat_06-21-2017.pdf																		
Well	Well work start Date: 12/01/2017 Duration: 30 DAYS																		
	Section 3 - Well Location Table																		
Surv	ey Ty _l	pe: RE	ECTAI	NGUL	AR														
Desc	ribe S	Survey	/ Туре	e:															
Datu	m: NA	D83							Vertic	al Datum:		88							
Surv	ey nu	mber:																	
		ator		ator				ot/Tract		a				0	umber	6			
	NS-Foot	NS Indic	EW-Foot	EW Indic	Twsp	Range	Section	Aliquot/L	Latitude	Longitud	County	State	Meridian	Lease Type	Lease N	Elevatior	QW	DVT DVT	
SHL Leg #1	390		141 0	FEL	25S	27E	6	Aliquot SWSE	32.15292 2	- 104.2255 42	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 100332	331 1	0	0	
KOP Leg #1	390	itar.	141 0	FEL	25S	27E	6	Aliquot SWSE	32.15292 2	- 104.2255 42	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 100332	- 479 8	810 9	810 9	
PPP	992		218	FEL	25S	27E	6	Aliquot	32.15458	 -	EDD	NEW	NEW	F	NMNM	-	938	871	

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Leg

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FMSS

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Drilling, Plan Data Report

01/04/2019

APD ID: 10400015092

Submission Date: 06/23/2017

Operator Name: CIMAREX ENERGY COMPANY

Well Name: SCOTER 6-31 FEDERAL COM

Well Type: CONVENTIONAL GAS WELL

Well Number: 29H



Show Final Text

Well Work Type: Drill

Section 1 - Geologic Formations

J.

Formation			True Vertical	Measured		: .	Producing
ID	Formation Name	Elevation	Depth .	Depth	Lithologies	Mineral Resources	Formation
1	RUSTLER	3308.9	0	0		USEABLE WATER	No
2	SALADO	2050.9	1258	1258		NONE	No
3	CASTILE	1428.9	1880	1880		NONE	No
4	BELL CANYON	1223.9	2085	2085		NATURAL GAS,OIL	No
5	CHERRY CANYON	258.9000000 000001	3050	3050		NATURAL GAS,OIL	No
6	BRUSHY CANYON	- 794.0999999 999999	4103	4103		NATURAL GAS,OIL	No
7	BONE SPRING	-2313.1	5622	5622		NATURAL GAS,OIL	No
8	BONE SPRING A ZONE	-2434.1	5743	5743		NATURAL GAS,OIL	No
9	BONE SPRING C ZONE	-2766.1	6075	6075		NATURAL GAS,OIL	No
10	BONE SPRING 1ST	-3272.1	6581	6581		NATURAL GAS,OIL	No
11	BONE SPRING 2ND	-3766.1	7075	7075		NATURAL GAS,OIL	No
12	BONE SPRING 3RD	-5082.1	8391	8391		NATURAL GAS,OIL	No
13	WOLFCAMP	-5405.1	8714	8714		NATURAL GAS,OIL	Yes

1

Section 2 - Blowout Prevention

Well Name: SCOTER 6-31 FEDERAL COM

Well Number: 29H

Pressure Rating (PSI): 2M Rating Depth: 425

Equipment: Exhibit "E-1". A BOP consisting of three rams, including one blind ram and two pipe rams and one annular preventer. An accumulator that meets the requirements in Onshore Order #2 for the pressure rating of the BOP stack. A rotating head may be installed as needed. A Kelly clock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

Requesting Variance? YES

Variance request: Co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached (Please see Exhibit F, F-1, F-2, F-3). The hose is not required by the manufacturer to be anchored. In the event the specific hose is not available, one of equal or higher rating will be used. Variance to include Hammer Union connections on lines downstream of the buffer tank only.

Testing Procedure: BOP's will be tested by an independent service company. The ram preventers, choke manifold, and safety valves will be tested as follows: Prior to drilling out the surface casing, BOPE pressure tests will be 250 psi low and 2000 psi high. Prior to drilling out the intermediate casing, BOPE pressure tests will be 250 psi low and 3000 psi high. Prior to drilling out the production casing, BOPE pressure tests will be 250 psi low and 5,000 psi high. The Annular Preventer will be tested to 250 psi low and 1000 psi high prior to drilling out the surface casing, 250 psi low and 1500 psi high prior to drilling out the intermediate casing, 250 psi low and 1500 psi high prior to drilling out the intermediate casing. The System may be upgraded to a higher pressure but still tested to the working pressures listed. If the system is upgraded all the components installed will be functional and tested.

Choke Diagram Attachment:

Scoter_6_31_Fed_Com_29H_Choke_2M3M_06-21-2017.pdf

BOP Diagram Attachment:

Scoter_6_31_Fed_Com_29H_BOP_2M_06-21-2017.pdf

Pressure Rating (PSI): 3M

Rating Depth: 2065

Equipment: Exhibit "E-1". A BOP consisting of three rams, including one blind ram and two pipe rams and one annular preventer. An accumulator that meets the requirements in Onshore Order #2 for the pressure rating of the BOP stack. A rotating head may be installed as needed. A Kelly clock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

Requesting Variance? YES

Variance request: Co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached (Please see Exhibit F, F-1, F-2, F-3). The hose is not required by the manufacturer to be anchored. In the event the specific hose is not available, one of equal or higher rating will be used. Variance to include Hammer Union connections on lines downstream of the buffer tank only.

Testing Procedure: BOP's will be tested by an independent service company. The ram preventers, choke manifold, and safety valves will be tested as follows: Prior to drilling out the surface casing, BOPE pressure tests will be 250 psi low and 2000 psi high. Prior to drilling out the intermediate casing, BOPE pressure tests will be 250 psi low and 3000 psi high. Prior to drilling out the production casing, BOPE pressure tests will be 250 psi low and 5,000 psi high. The Annular Preventer will be tested to 250 psi low and 1000 psi high prior to drilling out the surface casing, 250 psi low and 1500 psi high prior to drilling out the intermediate casing, 250 psi low and 1500 psi high prior to drilling out the intermediate casing, 250 psi low and 2500 psi high prior to drilling out the production casing. The System may be upgraded to a higher pressure but still tested to the working pressures listed. If the system is upgraded all the components installed will be functional and tested.

Choke Diagram Attachment:

Scoter_6_31_Fed_Com_29H_Choke_2M3M_06-21-2017.pdf

BOP Diagram Attachment:

Scoter_6_31_Fed_Com_29H_BOP_3M_06-21-2017.pdf

Well Name: SCOTER 6-31 FEDERAL COM

Well Number: 29H

Pressure Rating (PSI): 5M Rating Depth: 10278

Equipment: Exhibit "E-1". A BOP consisting of three rams, including one blind ram and two pipe rams and one annular preventer. An accumulator that meets the requirements in Onshore Order #2 for the pressure rating of the BOP stack. A rotating head may be installed as needed. A Kelly clock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

Requesting Variance? YES

Variance request: Co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached (Please see Exhibit F, F-1, F-2, F-3). The hose is not required by the manufacturer to be anchored. In the event the specific hose is not available, one of equal or higher rating will be used. Variance to include Hammer Union connections on lines downstream of the buffer tank only.

Testing Procedure: BOP's will be tested by an independent service company. The ram preventers, choke manifold, and safety valves will be tested as follows: Prior to drilling out the surface casing, BOPE pressure tests will be 250 psi low and 2000 psi high. Prior to drilling out the intermediate casing, BOPE pressure tests will be 250 psi low and 3000 psi high. Prior to drilling out the production casing, BOPE pressure tests will be 250 psi low and 5,000 psi high. The Annular Preventer will be tested to 250 psi low and 1000 psi high prior to drilling out the surface casing, 250 psi low and 1500 psi high prior to drilling out the intermediate casing, 250 psi low and 1500 psi high prior to drilling out the intermediate casing, 250 psi low and 2500 psi high prior to drilling out the production casing. The System may be upgraded to a higher pressure but still tested to the working pressures listed. If the system is upgraded all the components installed will be functional and tested.

Choke Diagram Attachment:

Scoter_6_31_Fed_Com_29H_Choke_5M_06-21-2017.pdf

BOP Diagram Attachment:

Scoter_6_31_Fed_Com_29H_BOP_5M_06-21-2017.pdf

Section 3 - Casing	
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Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	425	0	425	-5547	-5972	425	OTH ER	48	STC	3.8	8.9	BUOY	15.7 8	BUOY	15.7 8
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	2065	0	2065	-5547	-7612	2065	J-55	36	LTC	1.84	3.21	BUOY	6.09	BUOY	6.09
3	PRODUCTI ON	8.75	7.0	NEW	API	N	0	8109	0	8109	-5547	- 13656	8109	L-80	26	LTC	1.43	1.91	BUOY	2.22	BUOY	2.22
4	PRODUCTI ON	8.75	7.0	NEW	API	N	8109	10278	8109	10278	- 13656	- 15825	2169	L-80	26	BUTT	1.31	1.75	BUOY	31.0 2	BUOY	31.0 2
5	COMPLETI ON SYSTEM	6	4.5	NEW	API	N	8109	18687	8109	18687	- 13656	- 24234	10578	P- 110	11.6	витт	1.25	1.54	BUOY	30.7 3	BUOY	30.7 3

Well Number: 29H

Casing Attachments

Casing ID: 1 String Type: SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Scoter_6_31_Fed_Com_29H_Casing_Assumptions_06-21-2017.pdf

Casing ID: 2 String Type: INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Scoter_6_31_Fed_Com_29H_Casing_Assumptions_06-21-2017.pdf

Casing ID: 3 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Scoter_6_31_Fed_Com_29H_Casing_Assumptions_06-21-2017.pdf

Well Number: 29H

Casing Attachments

Casing ID: 4 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Scoter_6_31_Fed_Com_29H_Casing_Assumptions_06-21-2017.pdf

Casing ID: 5 String Type: COMPLETION SYSTEM

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Scoter_6_31_Fed_Com_29H_Casing_Assumptions_06-21-2017.pdf

Section	4 - Ce	emen	t								
String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	425	76	1.72	13.5	130	50	Class C	Bentonite
SURFACE	Tail		0	425	195	1.34	14.8	260	25	Class C	LCM
INTERMEDIATE	Lead		0	2065	393	1.88	12.9	737	50	35:65 (poz:C)	Salt, Bentonite
INTERMEDIATE	Tail		0	2065	121	1.34	14.8	161	25	Class C	LCM
PRODUCTION	Lead		0	8109	190	6.18	9.2	1169	25	Class C	Extender, Salt, Strength Enhancement, LCM,

Well Name: SCOTER 6-31 FEDERAL COM

Well Number: 29H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Se Altip PP Fluid Loss, Retarder
PRODUCTION	Tail		0	8190	277	1.3	14.2	359	10	50:50 (poz:H)	Salt, Bentonite,Fluid Loss, Dispersant, SMS
PRODUCTION	Lead		8109	1027 8	190	6.18	9.2	1169	25	Class C	Extender, Salt, Strength Enhancement, LCM, Fluid Loss, Retarder
PRODUCTION	Tail		8109	1027 8	277	1.3	14.2	359	10	50:50 (poz:H)	Salt, Bentonite, Fluid loss, Dispersant, SMS
COMPLETION SYSTEM	Lead		8109	1868 7	611	1.3	14.2	794	10	50:50 (Poz:H)	Salt, Bentonite, Fluid Loss, Dispersant, SMS

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: Sufficient mud materials will be kept on location at all times in order to combat lost circulation or unexpected kicks. In order to run DSTs, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs. **Describe the mud monitoring system utilized:** PVT/Pason/Visual Monitoring

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	Н	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	425	SPUD MUD	8.3	8.5							
2065	1027 8	OTHER : FW/Cut Brine	8.5	9							

Well Name: SCOTER 6-31 FEDERAL COM

Well Number: 29H

55 Top Depth	Bottom Depth	SALT SATURATED	6 Min Weight (Ibs/gal)	0 Max Weight (Ibs/gal)	Density (Ibs/cu ft)	Gel Strength (lbs/100 sqft)	На	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1027 8	1868 7	OIL-BASED MUD	10.5	11							

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

No DST Planned

List of open and cased hole logs run in the well:

CNL,DS,GR

Coring operation description for the well:

N/A

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5066

Anticipated Surface Pressure: 5066

Anticipated Bottom Hole Temperature(F): 160

Anticipated abnormal pressures, temperatures, or potential geologic hazards? YES

Describe:

Lost circulation may be encountered in the Delaware mountain group. Abnormal pressure as well as hole stability issues may be encountered in the Wolfcamp.

Contingency Plans geoharzards description:

Lost circulation material will be available, as well as additional drilling fluid along with the fluid volume in the drilling rig pit system. Drilling fluid can be mixed on location or mixed in vendor mud plant and trucked to location if needed. Sufficient barite will be available to maintain appropriate mud weight for the Wolfcamp interval. **Contingency Plans geohazards attachment:**

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Scoter_6_31_Fed_Com_29H_H2S_Plan_06-21-2017.pdf

Well Name: SCOTER 6-31 FEDERAL COM

Well Number: 29H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Scoter_6_31_Fed_Com_29H_Directional_plan_06-21-2017.pdf

Other proposed operations facets description:

No gas Capture plan will be attached as this is a Gas well. Per 3162.3 drilling applications, require all Oil wells submit a Waste Minimization plan.

Other proposed operations facets attachment:

Scoter_6_31_Fed_Com_29H_Drilling_Plan_06-21-2017.pdf

Scoter_6_31_Fed_Com_29H_Flex_Hose_06-21-2017.pdf

Other Variance attachment:













Scoter 6-31 Federal Com 29H Casing Assumptions

Casing Program

Hole Size	Casing Depth From	Casing Depth To	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	425	13-3/8*	48.00	H-40/J-55 Hybrid	ST&C	3.81	8.90	15.78
12 1/4	0	2065	9-5/8 *	36.00	J-55	LT&C	1.84	3.21	6.09
8 3/4	0	8109	7	26.00	L-80	LT&C	143	1.91	2.22
8 3/4	8109	10278	T	26.00	L-80	BT&C	1.31	1.75	31.02
6	8109	18687	4-1/2"	11.60	L-80	BT&C	1.25	1.54	30.73
	-	•	•	BLM	Minimum Sa	fety Factor	1.125	1	1.6 Dry 1.8 Wet

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Scoter 6-31 Federal Com 29H Casing Assumptions

Casing Program

Hole Size	Casing Depth From	Casing Depth To	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	425	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	3.81	8.90	15.78
12 1/4	0	2065	9-5/8"	36.00	J-55	LT&C	1.84	3.21	6.09
8 3/4	0	8109	7	26.00	L-80	LT&C	1.43	1.91	2.22
8 3/4	8109	10278	T	26.00	L-80	BT&C	1.31	1.75	31.02
6	8109	18687	4-1/2"	11.60	L-80	BT&C	1.25	1.54	30.73
	•	.	.	BLM	Minimum Sa	fety Factor	1.125	1	1.6 Dry 1.8 Wet

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 $I\!I\!I\!B.1h$

Scoter 6-31 Federal Com 29H

Casing Assumptions

Casing Program

Hole Size	Casing Depth From	Casing Depth To	Casing Size	Weight (Ib/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	425	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	3.81	8.90	15.78
12 1/4	0	2065	9-5/8"	36.00	1-55	LT&C	1.84	3.21	6.09
8 3/4	0	8109	T	26.00	L-80	LT&C	143	1.91	2.22
8 3/4	8109	10278	7	26.00	L-80	BT&C	1.31	175	31.02
6	8109	18687	4-1/2	11.60	L-80	BT&C	1.25	1.54	30.73
	•			BLM	Minimum Sa	fety Factor	1.125	1	1.6 Dry 1.8 Wet

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Scoter 6-31 Federal Com 29H Casing Assumptions

Casing Program

Hole Size	Casing Depth From	Casing Depth To	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	425	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	3.81	8.90	15.78
12 1/4	0	2065	9-5/8"	36.00	J-55	LT&C	1.84	3.21	6.09
8 3/4	0	8109	7	26.00	L-80	LT&C	1.43	1.91	2.22
8 3/4	8109	10278	т	26.00	L-80	BT&C	1.31	1.75	31.02
6	8109	18687	4-1/2"	11.60	L-80	BT&C	1.25	1.54	30.73
	-			BLM	Minimum Sa	ifety Factor	1.125	1	1.6 Dry 1.8 Wet

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1 h

Scoter 6-31 Federal Com 29H Casing Assumptions

Casing Program

Hole Size	Casing Depth From	Casing Depth To	Casing Size	Weight (Ib/ft)	Grade	Conn.	SF Celiapse	SF Burst	SF Tension
17 1/2	0	425	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	3.81	8.90	15.78
12 1/4	0	2065	9-5/8"	36.00	J-55	LT&C	1.84	3.21	6.09
8 3/4	0	8109	T	26.00	L-80	LT&C	1.43	1.91	2.22
8 3/4	8109	10278	r	26.00	L-80	BT&C	1.31	1.75	31.02
6	8109	18687	4-1/2 ⁻	11.60	L-80	BT&C	1.25	1.54	30.73
				BLM	Minimum Sa	fety Factor	1.125	1	1.6 Dry 1.8 Wet

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Hydrogen Sulfide Drilling Operations Plan Scoter 6-31 Federal Com 29H Cimarex Energy Co. UL: O, Sec. 6, 25S, 27E Eddy Co., NM

- 1 <u>All Company and Contract personnel admitted on location must be trained by a qualified</u> <u>H2S safety instructor to the following:</u>
 - A. Characteristics of H₂S
 - B. Physical effects and hazards
 - C. Principal and operation of H2S detectors, warning system and briefing areas.
 - D. Evacuation procedure, routes and first aid.
 - E. Proper use of safety equipment & life support systems
 - F. Essential personnel meeting Medical Evaluation criteria will receive additional training on the proper use of 30 minute pressure demand air packs.

H₂S Detection and Alarm Systems:

- A. H2S sensors/detectors to be located on the drilling rig floor, in the base of the sub structure/cellar area, on the mud pits in the shale shaker area. Additional H2S detectors may play placed as deemed necessary.
- В.

Β.

- An audio alarm system will be installed on the derrick floor and in the top doghouse.
- 3 Windsock and/or wind streamers:
 - A. Windsock at mudpit area should be high enough to be visible.
 - Windsock on the rig floor and / or top doghouse should be high enough to be visible.
- 4 Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag indicates normal safe condition. Yellow flag indicates potential pressure and danger. Red flag indicates danger (H₂S present in dangerous concentration). Only H2S trained and certified personnel admitted to location.
- 5 Well control equipment:
 - A. See exhibit "E-1"
- 6 Communication:
 - A. While working under masks chalkboards will be used for communication.
 - B. Hand signals will be used where chalk board is inappropriate.
 - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.
- 7 Drillstem Testing:

No DSTs r cores are planned at this time.

- 8 Drilling contractor supervisor will be required to be familiar with the effects H₂S has on tubular goods and other mechanical equipment.
- 9 If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H2S scavengers if necessary.

H₂S Contingency Plan Scoter 6-31 Federal Com 29H Cimarex Energy Co. UL: O, Sec. 6, 25S, 27E Eddy Co., NM

Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must:

- « Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- « Evacuate any public places encompassed by the 100 ppm ROE.
- « Be equipped with H₂S monitors and air packs in order to control the release.
- « Use the "buddy system" to ensure no injuries occur during the 432-620-1975
- « Take precautions to avoid personal injury during this operation.
- « Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- « Have received training in the:
 - Detection of H₂S, and
 - · Measures for protection against the gas,
 - Equipment used for protection and emergency response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas.

Characteristics of H₂S and SO₂

Please see attached International Chemical Safety Cards.

Contacting Authorities

Cimarex Energy Co. of Colorado's personnel must liaise with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. Cimarex Energy Co. of Colorado's response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

H₂S Contingency Plan Emergency Contacts Scoter 6-31 Federal Com 29H Cimarex Energy Co. UL: O, Sec. 6, 25S, 27E Eddy Co., NM

Cimprov Enorgy Co. of Colors	do.	800 060 4790		
Contract Energy Lo. of Colora		800-969-4789		
co. Office and After-fiburs w				
Key Personnel				
Name	Title	Office		Mobile
Larry Seigrist	Drilling Manager	432-620-1934		580-243-8485
Charlie Pritchard	Drilling Superintendent	432-620-1975	-	432-238-7084
Roy Shirley	Construction Superintendent			432-634-2136
<u>Artesia</u>				
Ambulance		911		
State Police		575-746-2703		
City Police		575-746-2703		
Sheriff's Office		575-746-9888		<u></u>
Fire Department	· · · · - · · · · · · · · · · · · · · ·	575-746-2701	-	
Local Emergency Planning	Committee	575-746-2122		
New Mexico Oil Conservat	ion Division	575-748-1283		
<u>Carlsbad</u>				
Ambulance		911		
State Police		575-885-3137		
City Police		575-885-2111		
Sheriff's Office		575-887-7551		
Fire Department		575-887-3798		
Local Emergency Planning	Committee	575-887-6544		
US Bureau of Land Manage	ement	575-887-6544		
C F -				
Santa Fe	Commission (Contro En)	FOF 476 0600		
New Mexico Emergency Re	esponse Commission (Santa Fe)	505-476-9600		
New Mexico Emergency Re	esponse Commission (Santa Fe) 24 Hrs	505-827-9126		
New Mexico State Emerge	ncy Operations Center	505-470-9035		
National				
National Emergency Rospo	nse Center (Washington, D.C.)	800-424-8802		
mational cities Bency Respu	mae center (washington, b.c.)	000-724-0002		
Medical				
Flight for Life - 4000 24th 9	t.: Lubbock. TX	806-743-9911		
Aerocare - R3 Box 49F Lui	abock. TX	806-747-8923		
Med Flight Air Amh - 2301	Yale Blvd S.F., #D3: Albuquerque, NM	505-842-4433		
SB Air Med Service - 2505	Clark Carr Loop S.E.; Albuquerque, NM	505-842-4949		
Other				
Boots & Coots IWC		800-256-9688	or	281-931-8884
Cudd Pressure Control		432-699-0139	or	432-563-3356
Halliburton		5/5-/40-2/5/		

Schlumberger

Cimarex Scoter 6-31 Federal Com 29H Rev0 RM 12June17 Proposal Geodetic Report (Non-Def Plan)



Report Date: Client: Field: Structure / Slot: Weil: Borshole: UWI / API8: Survey Name: Survey Date: Tort / AHD / DDI / E Coordinate Refere Location Lat / Long Location Lat / Long CRS Grid Converg Grid Scale Factor: Version / Patch:	June 14, 2017 - 10:56 AM Cimarex NM Eddy County (NAD 83) Cimarex Scotor 8-31 Føderal Com 29H / Ci Com 29H Cimarex Scotor 8-31 Føderal Com 29H Original Borehole Unknown / Unknown Cimarex Scotor 6-31 Føderal Com 29H Rev June 12, 2017 DI / ERD Rattio: 136.780 */ 10285.167 ft / 6.472 / 1.161 Sførence System: NADB3 New Mexico State Plane, Eastern Z Long: N 32* 9' 10.52164*, W 104* 13' 31.94664* N/E Y/X: N 419385.290 ftUS, E 574696.350 ftUS vergence Angle: 0.0574 * ctor: 0.99991037 h: 2.10.302.0		9H / Cimarex Scoter 6-3 19H 19H Rev0 RM 12June17 161 16tern Zone, US Feet 94684* US	1 Federal	Survey / DLS Com Vertical Section A Vertical Section O TVD Reference Da TVD Reference Da Seabed / Ground 8 Magnetic Declinat Total Gravity Modol: Total Magnetic File Magnetic Dip Angi Declination Date: Magnetic Declinat North Reference: Grid Convergence Total Corr Mag No North: Locat Coord Refer	putation: dmuth: digin: tum: vation: ievation: ievation: strength: id Strength: e: on Model: Used: rth->Grid enced To:	Minimum Curvatt 0.310 ° (Grid Nor 0.000 ft, 0.000 ft RKB 3338.700 ft abov 3311.700 ft abov 7.466 ° 998.4344mgn (8. GARM 48030.151 nT 59.885 ° 30.801 151 nT 50.801 151 nT 50.	ıre / Lubinski th) e MSL e MSL 80665 Based) nce Point				
Comments	MD (ft)	inci (*)	Azim Grid (*)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft	DLS	Northing (ftUS)	Easting (ftUS)	Latitude (N/S * * *)	Longitude (E/W • ' '')
SHL (390' FSL, 1410' FEL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00) N/A	419385.29	574696.35	N 32 9 10.52 V	V 104 13 31.95
	100.00	0.00	299.50	100.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52 V	V 104 13 31.95
	200.00	0.00	299.50	200.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52 V	V 104 13 31.95
	300,00	0.00	299.50	300.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52 V	V 104 13 31.95
	400.00	0.00	299.50	400.00	0.00	0.00	0.00	0.00	419303.29	574696.35	N 32 8 10,52 9	V 104 13 31.95
	500.00	0.00	299.30	500.00	0,00	0.00	0.00	0.00	419303.29	574080.33	N 32 8 10.52 W	V 104 13 31.95
	700.00	0.00	200.50	700.00	0.00	0.00	0.00	0.00	410395.20	574608 35	N 32 8 10.52 W	V 104 13 31.85
	800.00	0.00	200.50	800.00	0.00	0.00	0.00	0.00	410385.20	574608 35	N 32 0 10.52 V	V 104 13 31 05
	900.00	0.00	200.50	900.00	0.00	0.00	0.00	0.00	419385 29	574698 35	N 32 9 10 52 V	V 104 13 31 95
	1000.00	0.00	299.50	1000.00	0.00	0.00	0.00	0.00	419385 29	574696 35	N 32 9 10 52 V	V 104 13 31 95
	1100.00	0.00	299.50	1100.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52 V	V 104 13 31.95
	1200.00	0.00	299.50	1200.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52 V	V 104 13 31.95
	1300.00	0.00	299.50	1300.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52 V	V 104 13 31.95
	1400.00	0.00	299.50	1400.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10,52 V	V 104 13 31.95
	1500.00	0.00	299.50	1500.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52 V	V 104 13 31.95
	1600.00	0.00	299.50	1600.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10,52 V	V 104 13 31.95
	1700.00	0.00	299.50	1700.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52 V	V 104 13 31.95
	1800.00	0.00	299.50	1800.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52 V	N 104 13 31.95
	1900.00	0.00	299.50	1900.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52 V	V 104 13 31.95
	2000.00	0.00	299.50	2000.00	0,00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52 V	N 104 13 31.95
	2100.00	0.00	299.50	2100.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52 V	N 104 13 31.95
	2200.00	0.00	299.50	2200.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52 V	N 104 13 31.95
	2300.00	0.00	299.50	2300.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52 V	N 104 13 31.95
	2400.00	0.00	299.50	2400.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52 V	N 104 13 31.95
	2500.00	0.00	299.50	2500.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52 V	N 104 13 31.95

Drilling Office 2.10.302.0

...Original Borehole/Cimarex Scoter 6-31 Federal Com 29H Rev0 RM 12June17

6/14/2017 2:36 PM Page 1 of 5

•	MD	Incl	Azim Grid	TVD	VSEC	NS	EW	DLS	Northing	Easting	Latitude	Longitude
Comments	(ft)	ሮነ	(*)	(作)	(ft)	(ft)	(ft)	(*/100ft)	(RUS)	(RUS)	(N/S * ' ")	(E/W •••")
	2600.00	0.00	299.50	2600.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52	W 104 13 31.95
	2700.00	0.00	299.50	2700.00	0.00	0.00	0.00	0.00	419385,29	574696.35	N 32 9 10.52	W 104 13 31.95
	2800.00	0.00	299.50	2800.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52	W 104 13 31.95
	2900.00	0.00	299.50	2900.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52	W 104 13 31.95
	3000.00	0.00	299.50	3000.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52	W 104 13 31.95
	3100.00	0.00	299.50	3100.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52	W 104 13 31.95
	3200.00	0.00	299.50	3200.00	0.00	0.00	0.00	0.00	419385 29	574696 35	N 32 9 10 52	W 104 13 31.95
	3300.00	0.00	299.50	3300.00	0.00	0.00	0.00	0.00	419385 29	574696 35	N 32 9 10 52	W 104 13 31.95
	3400.00	0.00	299.50	3400.00	0.00	0.00	0.00	0.00	419385 29	574696 35	N 32 9 10 52	W 104 13 31 95
	3500.00	0.00	299.50	3500.00	0.00	0.00	0.00	0.00	419385 29	574696 35	N 32 9 10 52	W 104 13 31.95
	3600.00	0.00	299.50	3600.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52	W 104 13 31.95
	3700.00	0.00	299.50	3700.00	0.00	0.00	0.00	0.00	419385 29	574696 35	N 32 9 10 52	W 104 13 31.95
	3800.00	0.00	299.50	3800.00	0.00	0.00	0.00	0.00	419385 29	574696 35	N 32 9 10 52	W 104 13 31 95
	3900.00	0.00	209.50	3900.00	0.00	0.00	0.00	0.00	419385 29	574696 35	N 32 9 10 52	W 104 13 31 95
	4000.00	0.00	200.50	4000.00	0.00	0.00	0.00	0.00	419385 29	574696 35	N 32 9 10.52	W 104 13 31 95
	4100.00	0.00	200.50	4100.00	0.00	0.00	0.00	0.00	410385 20	574696 35	N 32 9 10 52	W 104 13 31 95
	4700.00	0.00	200.50	4200.00	0.00	0.00	0.00	0.00	410385 20	574606 35	N 32 0 10.52	W 104 13 31 95
	4200.00	0.00	299.00	4200.00	0.00	0.00	0.00	0.00	410385.20	574606 35	N 32 010.52	W 104 13 31 95
	4300.00	0.00	288.30	4300,00	0.00	0.00	0.00	0.00	410395 20	574030.35	N 32 0 10.52	W 104 13 31 05
	4400.00	0.00	289.30	4400,00	0.00	0.00	0.00	0.00	410305.28	574080.33	N 32 010.52	W 104 13 31.65
	4500.00	0.00	200.50	4500.00	0.00	0.00	0.00	0.00	410303.20	574050,33	N 32 010.32	W 104 13 31.85
	4600.00	0.00	299.50	4000,00	0.00	0.00	0.00	0.00	418363,28	574080.35	N 32 B 10.32	W 104 13 31.05
	4700.00	0.00	299.50	4700.00	0.00	0.00	0.00	0.00	419303.29	574090.35	N 32 910.52	W 104 13 31,85
	4800.00	0.00	299.50	4800.00	0.00	0.00	0.00	0.00	419303.29	574690.35	N 32 910.32	W 104 13 31.95
	4900.00	0.00	299.50	4900.00	0.00	0.00	0.00	0.00	419365.29	5/4090.35	N 32 910.52	W 104 13 31.95
	5000.00	0.00	299.50	5000.00	0.00	0.00	0.00	0.00	419383.29	574690.33	N 32 9 10.32	W 104 13 31.95
	5100.00	0.00	299.50	5100.00	0.00	0.00	0.00	0.00	419365.29	574690.35	N 32 9 10.52	W 104 13 31.95
	5200.00	0.00	299.50	5200.00	0.00	0.00	0.00	0.00	419365.29	574696,35	N 32 9 10.52	W 104 13 31.95
	5300.00	0.00	299.50	5300.00	0.00	0.00	0.00	0.00	419385.29	574696,35	N 32 910.52	W 104 13 31.95
	5400.00	0.00	299.50	5400.00	0.00	0.00	0.00	0.00	419363.29	574690.35	N 32 9 10.52	W 104 13 31,95
	5500.00	0.00	299,50	5500.00	0.00	0.00	0.00	0.00	419365.29	574690.35	N 32 0 10.52	W 104 13 31.95
	5600.00	0.00	299.50	5600.00	0.00	0.00	0.00	0.00	419385.29	574090.35	N 32 9 10.52	W 104 13 31,95
	5700.00	0.00	299.50	5700.00	0.00	0.00	0.00	0,00	419365.29	5/4696.35	N 32 910.52	W 104 13 31.95
	5800.00	0.00	299.50	5800.00	0.00	0.00	0.00	0.00	419365.29	5/4696.35	N 32 9 10.52	W 104 13 31.95
	5900.00	0.00	299.50	5900.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52	W 104 13 31,95
	6000.00	0.00	299.50	6000.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52	W 104 13 31.95
	6100.00	0.00	299.50	6100.00	0,00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52	W 104 13 31.95
	8200.00	0.00	299.50	6200.00	0.00	0.00	0,00	0.00	419385.29	574696.35	N 32 9 10.52	W 104 13 31.95
	6300.00	0.00	299.50	6300.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52	W 104 13 31.95
	6400.00	0.00	299.50	6400.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52	W 104 13 31.95
	6500.00	0.00	299.50	6500.00	0.00	0.00	0.00	0.00	419385.29	574696,35	N 32 910.52	W 104 13 31.95
	6600.00	0.00	299.50	6600.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52	W 104 13 31.95
	6700.00	0.00	299.50	6700.00	0.00	0.00	0.00	0.00	419385.29	5/4696.35	N 32 910.52	W 104 13 31.95
	6800.00	0.00	299.50	6800.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52	W 104 13 31.95
	6900.00	0,00	299.50	6900.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52	W 104 13 31.95
	7000.00	0.00	299.50	7000.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52	W 104 13 31.95
	7100.00	0.00	299.50	7100.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52	W 104 13 31.95
	7200.00	0.00	299.50	7200.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52	W 104 13 31.95
	7300.00	0.00	299.50	7300.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52	W 104 13 31.95
	7400.00	0.00	299.50	7400.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52	W 104 13 31.95
	7500.00	0.00	299.50	7500.00	0.00	0.00	0.00	0.00	419385.29	574898.35	N 32 910.52	W 104 13 31.95
	7600.00	0.00	299.50	7600.00	0,00	0.00	0.00	0.00	419385.29	574696,35	N 32 910.52	W 104 13 31,95
	7700.00	0.00	299.50	7700.00	0.00	0.00	0.00	0.00	419385.29	5/4696.35	N 32 910.52	W 104 13 31.95
	7800.00	0.00	299.50	7800.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52	VV 104 13 31.95
	7900.00	0.00	299.50	7900.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52	VV 104 13 31.95
	8000.00	0.00	299.50	8000.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52	W 104 13 31.95
	8100.00	0.00	299.50	8100.00	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 910.52	vv 104 13 31.95
KOP - Build	8108.90	0.00	299,50	6108,90	0.00	0.00	0.00	0.00	419385.29	574696.35	N 32 9 10.52	W 104 13 31.95
12"/100' DLS												
	8200.00	10.93	299.50	8199,45	4.23	4.27	-7.54	12.00	419389.56	5/4688.81	N 32 910.56	W 104 13 32.03

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Comments	MD (ft)	inci (*)	Azim Grid	TVD (R)	VSEC	NS (ft)	EW (ft)	DLS (*/100ff)	Northing (ftUS)	Easting (fills)	Latitude	Longitude
	8300.00	22.93	299.50	8294.94	18.40	18.58	-32.84	12.00	419403.87	574663.51	N 32 9 10.71	W 104 13 32 33
	8400.00	34.93	299.50	6382.30	41.95	42.36	-74.87	12 00	419427 65	57462149	N 32 9 10 94	W 104 13 32 82
	8500.00	46.93	299,50	8457.71	73.85	74.56	-131.79	12.00	419459.85	574564.57	N 32 9 11.26	W 104 13 33.48
	8600.00	58.93	299.50	8517.88	112.69	113.78	-201.11	12.00	419499.06	574495.26	N 32 9 11.65	W 104 13 34.28
	8700.00	70,93	299.50	8560.17	156.79	158.31	-279.80	12.00	419543.58	574416.57	N 32 9 12.09	W 104 13 35.20
Build 4*/100' DLS	8733.90	75.00	299.50	8570.10	172.59	174.26	-308.01	12.00	419559.54	574388.37	N 32 9 12.25	W 104 13 35.53
	8800.00	75.37	302.21	8587.00	205.07	207.03	-362.86	4.00	419592.30	574333.52	N 32 9 12.57	W 104 13 36.16
	8900.00	76.00	306.29	8611.73	259.15	261.55	-442.94	4.00	419646.82	574253.45	N 32 913.11	W 104 13 37.10
	9000.00	76.69	310.34	8635.35	318.97	321.78	-519,16	4.00	419707.04	574177.24	N 32 913.71	W 104 13 37.98
	9100.00	77.45	314.37	8657.73	384.23	387.43	-591,17	4,00	419772.69	574105.24	N 32 914.36	W 104 13 38.82
	9200.00	78.26	318.38	8878.78	454.62	458.19	-658.60	4,00	419843.43	574037.81	N 32 9 15.06	W 104 13 39.60
	9300.00	79.13	322.36	8698.39	529.78	533.69	-721.13	4.00	419918.93	573975.28	N_32 9 15.81	W 104 13 40.33
Kiddennoki a	a orace	×	- 9967C	Night and the second	2012C	C(14)69	2409.0	· · · · · · · · · · · · · · · · · · ·		5/60202	的现在分词	1406783000
	9400.00	80.08	326.31	8716.45	609.36	613.59	•778.46	4.00	419998.82	573917.96	N 32 9 16.60	W 104 13 40.99
	9500.00	81.02	330.25	8732.89	692.97	697.48	-830.31	4.00	420082.70	573866.12	N 32 917.43	W 104 13 41.60
	9600,00	82.03	334.16	8/4/.63	780.20	/84.96	-876.41	4.00	420170.17	573820.02	N 32 918.30	W 104 13 42.13
	9700.00	83,08	338.06	8760,59	870.63	875.60	-916,56	4,00	420260.81	573779.87	N 32 919.19	W 104 13 42.60
	9800.00	84.16	341.93	8771.70	963.81	968.97	-950.55	4.00	420354.17	573745.88	N 32 920.12	W 104 13 42.99
	9900.00	85.26	345.79	8780.92	1059.29	1064.60	-978.22	4.00	420449.79	5/3/18.22	N 32 921.07	W 104 13 43.31
	10000.00	86.39	349.64	8788.21	1156.60	1162.03	-989.43	4.00	420547,21	573697.01	N 32 922.03	W 104 13 43.56
	10100.00	67.53	333.40	0793.31	1200.20	1200.78	-1014,08	4.00	420043.90	573052.30	N 32 923.01	W 104 13 43.73
Landian Daint	10200.00	80.00	357.31	8796.82	1304.04	1300.39	-1022.10	4.00	420/45.55	5/36/4.34	N 32 923.99	W 104 13 43.82
Caloring Poun	10270.39	80.50	0.31	9709.15	1433.10	1430.74	-1023.73	4.00	420623.90	573672.72	N 32 924.77	W 104 13 43.84
	10300.00	80.50	0.31	9709 97	1434.79	1400.33	-1023.01	0.00	420045.51	573673 38	N 32 924.90	W 104 13 43.04
	10500.00	90.50	0.31	9700.59	1654.70	1000.00	1023.00	0.00	420845.50	573873.30	N 32 823.87	W 104 13 43.03
	10500.00	80.50	0.31	8800.30	1754.70	1760.34	-1022,01	0.00	421043.40	573674 48	N 32 920.90	W 104 13 43.62
	10700.00	80.50	0.31	8801.01	1854.78	1860 34	-1021.80	0.00	421145.47	573675.03	N 32 020.00	W 104 13 43.01
	10800.00	89.50	0.31	8801 72	1954 78	1960 33	-1021.42	0.00	421245.40	573875 58	N 32 020.04	W 104 13 43.01
	10900.00	89.59	0.31	8802 43	2054.78	2060.33	-1020.32	0.00	421445 43	573676 12	N 32 93092	W 104 13 43 79
	11000.00	89.59	0.31	8803 15	2154 78	2160.32	-1019 77	0.00	421545 42	573676 67	N 32 93191	W 104 13 43 78
	11100.00	89.59	0.31	8803.86	2254.77	2260.32	-1019 22	0.00	421645 40	573677 22	N 32 9 32 90	W 104 13 43 78
	11200.00	89.59	0.31	8804.58	2354.77	2360.32	-1018.68	0.00	421745.39	573677.77	N 32 933.89	W 104 13 43.77
	11300.00	89,59	0.31	8805.29	2454.77	2460.31	-1018.13	0.00	421845.38	573678.31	N 32 9 34.88	W 104 13 43.76
	11400.00	89.59	0.31	8806.00	2554.77	2560.31	-1017.58	0.00	421945.36	573678.86	N 32 935.87	W 104 13 43.75
	11500.00	89.59	0.31	8806.72	2654.76	2660.30	-1017.03	0.00	422045.35	573679,41	N 32 936.86	W 104 13 43.75
	11600.00	89.59	0.31	8807.43	2754.76	2760.30	-1016.48	0.00	422145.34	573679.96	N 32 937.85	W 104 13 43.74
	11700.00	89.59	0.31	8808.14	2854.76	2860.30	-1015.94	0,00	422245.32	573680.51	N 32 938.83	W 104 13 43.73
	11800.00	89.59	0.31	6808.86	2954.75	2960.29	+1015.39	0.00	422345.31	573681.05	N 32 939.82	W 104 13 43.72
	11900.00	89.59	0.31	8809.57	3054.75	3060.29	-1014.84	0.00	422445.30	573681.60	N 32 940.81	W 104 13 43.72
	12000.00	89.59	0.31	8810.28	3154.75	3160.28	-1014.29	0.00	422545.28	573682.15	N 32 941.80	W 104 13 43.71
	12100.00	89.59	0.31	8811.00	3254.75	3260.28	-1013.74	0.00	422645.27	573682.70	N 32 942.79	W 104 13 43.70
	12200.00	89.59	0,31	8811.71	3354.74	3360.28	-1013.20	0.00	422745.26	573683.25	N 32 943.78	W 104 13 43.69
	12300.00	89.59	0.31	8812.42	3454.74	3460.27	-1012.65	0.00	422845.24	573683.79	N 32 944.77	W 104 13 43.69
	12400.00	89.59	0.31	8813.14	3554.74	3560.27	-1012.10	0.00	422945.23	573684.34	N 32 945.76	W 104 13 43.68
	12500.00	89.59	0.31	8813.85	3654.74	3660.26	-1011.55	0.00	423045.22	573684.89	N 32 946.75	W 104 13 43.67
	12600.00	89.59	0.31	8814.57	3/54./3	3760.26	-1011.00	0.00	423145.20	573685.44	N 32 947.74	W 104 13 43.66
	12700.00	89.59	0.31	8815.28	3854.73	3860.26	-1010.46	0.00	423245.19	573685.99	N 32 948.73	W 104 13 43.66
	12800.00	69.59	0.31	0010.99	3934.73	3900.25	-1009.91	0.00	423343.18	573660.33	N 32 848.72	W 104 13 43.03
	12900.00	89.59	0.31	8917.42	4034.73	4000.25	-1008.30	0.00	423443.17 423545.15	573687.08	N 32 9 50./1	W 104 13 43.04
	13100.00	89.59	0.31	8818 13	4134.72	4100.24	-1008.01	0.00	423043.13	573688 10	N 32 051.70	W 104 13 43.03
	13200.00	89.59	0.31	8818.85	4354 72	4360 24	-1007 72	0.00	423745 13	573688 73	N 32 952.00	W 104 13 43 69
	13300.00	89.59	0.31	8819.56	4454.72	4460.23	-1007 17	0.00	423845 11	573689 27	N 32 9 54 67	W 104 13 43 61
	13400.00	89.59	0.31	8820.27	4554.71	4560.23	-1006 62	0.00	423945 10	573689 82	N 32 9 55 66	W 104 13 43 60
	13500.00	89.59	0.31	8820.99	4654.71	4660.22	-1006.07	0.00	424045 09	573690.37	N 32 9 56 65	W 104 13 43.60
	13600.00	89.59	0.31	8821.70	4754.71	4760.22	-1005.52	0.00	424145.07	573690.92	N 32 9 57.63	W 104 13 43.59
	13700.00	89.59	0.31	8822.42	4854.71	4860.21	-1004.98	0.00	424245.06	573691.47	N 32 958.62	W 104 13 43.58

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Commente	MD	Incl	Azim Grid	TVD	VSEC	NS	EW	DLS	Northing	Easting	Latitude	Longitude
Comments	(作)	<u> </u>	(<u>)</u>	(ft)	(ft)	(ft)	(ft)	(*/100ft)	(ftUS)	(RUS)	(N/S • · ···)	<u>(E/W • • • •)</u>
	13800.00	89.59	0.31	8823.13	4954.70	4960.21	-1004.43	0.00	424345.05	573692.01	N 32 9 59.61	W 104 13 43.57
	13900.00	89.59	0.31	8823.64	5054.70	5060.21	-1003.88	0,00	424445.03	573692.56	N 3210 0.60	W 104 13 43.57
	14000.00	89.59	0.31	8824.56	5154.70	5160.20	-1003.33	0.00	424545.02	573693.11	N 3210 1.59	W 104 13 43.50
	14100.00	89.59	0.31	8825.27	5254.70	5260.20	-1002.78	0.00	424645.01	573693.66	N 32 10 2.58	W 104 13 43.55
	14200.00	89.59	0.31	8825.98	5354.69	5360.19	-1002.24	0.00	424/44.99	573694.21	N 3210 3.57	W 104 13 43.54
	14300.00	89.59	0.31	8826.70	5454,69	5460.19	-1001.69	0.00	424644.98	573094.75	N 32 10 4.30	W 104 13 43.54
	14400.00	89.59	0.31	8827.41	5554.69	5560.19	-1001.14	0.00	424844.87	573095.30	4 32 10 3.33	W 104 13 43.53
	14500.00	89.59	0.31	8828.12	5654,69	5660.18	-1000.59	0.00	420044.90	573695.60	N 32 10 0.34	W 104 13 43.52
	14600.00	89.59	0.31	8828.84	5/54.08	5760.18	-1000.04	0.00	420144.84	573690.40 1	4 32 10 7.33	W 104 13 43.51
	14/00.00	89.59	0.31	8829.55	5654.08	5000.17	-999.00	0.00	420244.80	573090.84	1 32 10 8.32	W 104 13 43.51
	14800.00	89.59	0.31	8830.26	5954.68	5960.17	-996.90	0.00	425344.91	573697.48	4 32 10 9,51	W 104 13 43.30
	14900.00	89.59	0.31	8830.98	6054.68	6060.17	-998.40	0.00	420444.90	573696.04	N 32 10 10.30	W 104 13 43.48
	15000.00	89.59	0.31	8831.09	6154.67	6160.10	-997.00	0.00	420044.00	573600 14	32 10 11.45	W 104 13 43.40
	15100.00	89.39	0.31	0032.41	6254.07	6260.10	-987.30	0.00	425044.07	573600 68	32 10 12.40	W 104 13 43 47
	15200.00	89.59	0.31	0033.1Z	0334.07	6360.15	-990.70	0.00	425744.80	573700 23 #	32 10 13.47	W 104 13 43 46
	15300.00	69.59	0.31	0033.03	6664.68	6560.15	-990.21	0.00	425044.05	573700.25	32 10 15 45	W 104 13 43 45
	15400.00	69.59	0.31	8835.36	6654.66	6660 14	-995 11	0.00	426044.82	573701 33	32 10 16 44	W 104 13 43 45
	15500.00	69.39	0.31	8835.07	8754.66	6760 14	-004 56	0.00	426144 81	573701.88	32 10 17 42	W 104 13 43 44
	15000.00	69.39	0.31	8836.60	6854.66	6860 13	-994.02	0.00	426244 80	573702.42	32 10 18 41	W 104 13 43 43
	15800.00	80.50	0.31	8837 40	6954.65	6960 13	-993 47	0.00	426344 78	573702.97	32 10 19 40	W 104 13 43 42
	15000.00	80.50	0.31	8938 11	7054 65	7060 13	-992.47	0.00	426444 77	573703 52	N 32 10 20 39	W 104 13 43 42
	16000.00	89.59	0.31	8838 83	7154.65	7160 12	-992 37	0.00	426544 76	573704 07	N 32 10 21.38	W 104 13 43.41
	16100.00	89.59	0.31	8839 54	7254 65	7260 12	-991 82	0.00	426644.74	573704.62	32 10 22.37	W 104 13 43.40
	16200.00	80.50	0.31	8840 25	7354 64	7360 11	-991 28	0.00	426744.73	573705.16	N 32 10 23.36	W 104 13 43.39
	16300.00	89.59	0.31	8840 97	7454 64	7460 11	-990.73	0.00	426844.72	573705.71	32 10 24.35	W 104 13 43.39
	16400.00	80.50	0.31	8841 68	7554 64	7560 11	-990.18	0.00	426944.70	573706.26	32 10 25.34	W 104 13 43.38
	16500.00	89.59	0.31	8842 40	7654 64	7660 10	-989.63	0.00	427044.69	573706.81	N 32 10 26.33	W 104 13 43.37
	16600.00	89.59	0.31	8843.11	7754.63	7760.10	-989.08	0.00	427144.68	573707.36	32 10 27.32	W 104 13 43.36
	16700.00	89.59	0.31	8843.82	7854.63	7860.09	-988.54	0.00	427244.66	573707.90	N 32 10 28.31	W 104 13 43.36
	16800.00	89.59	0.31	8844.54	7954.63	7960.09	-987.99	0.00	427344.65	573708.45	32 10 29.30	W 104 13 43 35
	16900.00	89.59	0.31	8845.25	8054.62	8060.09	-987.44	0.00	427444.64	573709.00	32 10 30.29	W 104 13 43.34
	17000.00	89.59	0.31	8845.96	8154.62	8160.08	-986.89	0.00	427544.62	573709.55	N 32 10 31.28	W 104 13 43.33
	17100.00	89.59	0.31	8846.68	8254.62	8260.08	-986.34	0.00	427644.61	573710.10	N 32 10 32.27	W 104 13 43.33
	17200.00	89.59	0.31	8847.39	8354.62	8360.07	-985.80	0.00	427744.60	573710.64 I	N 32 10 33.26	W 104 13 43.32
	17300.00	89.59	0.31	8848.10	8454.61	8460.07	-985.25	0.00	427844.58	573711.19	N 32 10 34.25	W 104 13 43.31
	17400.00	89.59	0.31	8848.82	8554.61	8560.07	-984.70	0.00	427944.57	573711.74	N 32 10 35.24	W 104 13 43.30
	17500.00	89.59	0.31	8849.53	8654.61	8660.06	-984.15	0.00	428044.56	573712.29	N 32 10 36.22	W 104 13 43.30
	17600.00	89.59	0.31	8850.25	8754.61	8760.06	-983.60	0.00	428144.54	573712.84	N 32 10 37.21	W 104 13 43.29
	17700.00	89.59	0.31	8850.96	8854.60	8860.05	-983.06	0.00	428244.53	573713.38	N 32 10 38.20	W 104 13 43.28
	17800.00	89.59	0.31	8851.67	8954.60	8960.05	-982.51	0.00	428344.52	573713.93 I	N 32 10 39.19	W 104 13 43.27
	17900.00	89.59	0.31	8852.39	9054.60	9060.04	-981.96	0.00	428444.50	573714.48	N 32 10 40,18	W 104 13 43.27
	18000.00	89.59	0.31	8853.10	9154.60	9160.04	-981.41	0.00	428544.49	573715.03	N 32 10 41.17	W 104 13 43.26
	18100.00	89.59	0.31	8853.81	9254.59	9260.04	-980.88	0.00	428644.48	573715.58 I	N 32 10 42.16	W 104 13 43.25
	18200.00	89.59	0.31	8854.53	9354,59	9360.03	-980.32	0.00	428744.47	573716.12	N 32 10 43.15	W 104 13 43.24
	18300.00	89.59	0.31	8855.24	9454.59	9460.03	-979.77	0.00	428844.45	573718.67	32 10 44.14	W 104 13 43.24
	18400.00	89.59	0.31	8855.95	9554.59	9560.02	-979.22	0.00	428944.44	573717.22	N 32 10 45.13	W 104 13 43.23
	18500.00	89.59	0.31	8856.67	9654.58	9660.02	-978.67	0.00	429044.43	5/3/1/.//	N 32 10 46,12	W 104 13 43.22
	18600.00	89.59	0.31	8857.38	9754.58	9760.02	-978.12	0,00	429144.41	573718.31	N 32 10 47.11	W 104 13 43.21
Cimarex Scoter												
Com 29H	18686 72	89 59	0.31	8858.00	9841 30	9846 73	977 65	0.00	429231.12	573718.79	N 32 10 47,97	W 104 13 43.21
PRHI 1330'	10000.14	00.00	0.01	0000.00								
FNL, 2310' FEL]												

Drilling Office 2.10.302.0

Survey Type: Non-Def Plan

...Original Borehole\Cimarex Scoter 6-31 Federal Com 29H Rev0 RM 12June17

6/14/2017 2:36 PM Page 4 of 5

Comments	MD (ft)	Inci (*)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (R)	EW (ft)	DLS (*/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S * ' ")	Longitude (E/W ••••)
Survey Error Model: Survey Program:	ISCWS	5A Rev 0 *** 3-	D 95.000% Conf	lidence 2.7955 sig	ma							
Description		Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Holo Size (in)	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type		Borshols / Survey	
			1 0.000 25.000		1/100.000	30.000	30.000		NAL_MWD_PLUS_0.5_DEG- Depth Only		Original Borehole / Cimarex Scoter 6-31 Federal Com 29H Rev0 RM 12June17	
		1	25.000	18686.719	1/100.000	30.000	30,000		NAL_MWD_PLUS	_0.5_DEG	Original Borehol Scoter 6-31 Fede	e / Cimarex ral Com 29H

6/14/2017 2:36 PM Page 5 of 5

Drilling Office 2.10.302.0

...Original Borehole\Cimarex Scoter 6-31 Federal Com 29H Rev0 RM 12June17



1. Geological Formations

TVD of target 8,858Pilot Hole TD N/AMD at TD 18,687Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	0	N/A	
Salado	1258	N/A	
Castille	1880	N/A	
Bell Canyon	2085	Hydrocarbons	
Cherry Canyon	3050	Hydrocarbons	
Brushy Canyon	4103	Hydrocarbons	
Bone Spring	5622	Hydrocarbons	
Bone Spring A Shale	5743	Hydrocarbons	
Bone Spring C Shale	6075	Hydrocarbons	
1st Bone Spring	6581	Hydrocarbons	
2nd Bone Spring	7075	Hydrocarbons	
3rd Bone Spring	8391	Hydrocarbons	
Wolfcamp	8741	Hydrocarbons	

2. Casing Program

Hole Size	Casing Depth From	Casing Depth To	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	425	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	3.81	8.90	15.78
12 1/4	0	2065	9-5/8"	36.00	J-55	LT&C	1.84	3.21	6.09
8 3/4	0	8109	7"	26.00	L-80	LT&C	1.43	1.91	2.22
8 3/4	8109	10278	7"	26.00	L-80	BT&C	1.31	1.75	31.02
6	8109	18687	4-1/2"	11.60	L-80	BT&C	1.25	1.54	30.73
<u> </u>	•			BLM	Minimum Sa	afety Factor	1.125	1	1.6 Dry 1.8 Wet

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Cimarex Energy Co., Scoter 6-31 Federal Com 29H

	Y or N					
Is casing new? If used, attach certification as required in Onshore Order #1	Y					
Does casing meet API specifications? If no, attach casing specification sheet.						
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N					
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y					
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y					
Is well located within Capitan Reef?	N					
If yes, does production casing cement tie back a minimum of 50' above the Reef?	N					
Is well within the designated 4 string boundary.	Ν					
Is well located in SOPA but not in R-111-P?	Ν					
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	N					
Is well located in R-111-P and SOPA?	N					
If yes, are the first three strings cemented to surface?	N					
Is 2nd string set 100' to 600' below the base of salt?	N					
Is well located in high Cave/Karst?	N					
If yes, are there two strings cemented to surface?	N					
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	N					
Is well located in critical Cave/Karst?	N					
If yes, are there three strings cemented to surface?	N					

3. Cementing Program

Completion System

Casing	# Sks	Wt. Ib/gal	Yld ft3/sack	H2O gal/sk	500# Comp. Strength (hours)	Slurry Description		
Surface	76	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite		
	195	14.80	1.34	6.32	9.5	Tail: Class C + LCM		
Intermediate	393	12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Ben	tonite	
	121	14.80	1.34	6.32	9.5	Tail: Class C + LCM		
Production	190	9.20 14.20	6.18	28.80	14:30	Lead: Class C + Extender + Salt + Strength Enhancement + LCM + Fluid Loss + Retarder Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS		
Completion System	611	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS		
		•		· · · · · · · · · · · · · · · · · · ·	•			
Casing String			тос			% Excess		
Surface				0				
Intermediate			1	0				
Production			1	1865				

10278

10

4. Pressure Control Equipment

A variance is requested for the use of a diverter on the surface casing. See attached for schematic.					
BOP installed and tested before drilling which hole?	Size	Min Required WP	Туре		Tested To
12 1/4	13 5/8	2М	Annular	x	50% of working pressure
			Blind Ram		
			Pipe Ram		2M
			Double Ram	x	
			Other		
8 3/4	13 5/8	3M	Annular	x	50% of working pressure
			Blind Ram		
			Pipe Ram		ЗМ
			Double Ram	x	
			Other		
6	13 5/8	5M	Annular	x	50% of working pressure
			Blind Ram		
			Pipe Ram		5M
			Double Ram	x	
			Other		

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

X	 Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i. 						
X	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.						
	N Are anchors required by manufacturer?						
5. Mud Program

Depth	Туре	Weight (ppg)	Viscosity	Water Loss
0' to 425'	FW Spud Mud	8.30 - 8.80	28	N/C
425' to 2065'	Brine Water	9.70 - 10.20	30-32	N/C
2065' to 10278'	FW/Cut Brine	8.50 - 9.00	30-32	N/C
10278' to 18687'	Oil Based Mud	10.50 - 11.00	50-70	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring

6. Logging and Testing Procedures

Log	ging, Coring and Testing
×	Will run GR/CNL fromTD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
	No logs are planned based on well control or offset log information.
	Drill stem test?
	Coring?

Additional Logs Planned Interval

7. Drilling Conditions

Condition	
BH Pressure at deepest TVD	5066 psi
Abnormal Temperature	No

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.
X H2S is present
X H2S plan is attached

8. Other Facets of Operation

Exhibit F – Co-Flex Hose Scoter 6-31 Federal Com 29H Cimarex Energy Co. 6-25S-27E Eddy, NM



Midwest Hose & Specialty, Inc. INTERNAL HYDROSTATIC TEST REPORT Customer: Oderoo Inc Odyd-271 Oderoo Inc Odyd-271 HOSE SPECIFICATIONS Type: Stainless Steel Armor Choke & Kill Hose IDC 4 INCHES BURST PRESSURE IDCOUPLINGS WORKING PRESSURE 15,000 OKC OKC OKC OKC OKC OKC OKC Type of Coupling: Swage-It MORE Ested with water of ambient temperature. THE HELD AT TEST PRESSURE OKC OKC OKC OKC OKC Type of Coupling: Swage-It More Ested with water of ambient temperature. THE HELD AT TEST PRESSURE OKC <td col<="" th=""><th>Exhibit F-1 – Co-Flex Hose Hydrostatic Te Scoter 6-31 Federal Com 29H Cimarex Energy Co. 6-25S-27E Eddy, NM</th><th></th><th>N"</th><th>led</th><th></th></td>	<th>Exhibit F-1 – Co-Flex Hose Hydrostatic Te Scoter 6-31 Federal Com 29H Cimarex Energy Co. 6-25S-27E Eddy, NM</th> <th></th> <th>N"</th> <th>led</th> <th></th>	Exhibit F-1 – Co-Flex Hose Hydrostatic Te Scoter 6-31 Federal Com 29H Cimarex Energy Co. 6-25S-27E Eddy, NM		N "	led	
INTERNAL HYDROSTATIC TEST REPORT Customer: Oderco Inc Oderco Inc <td< th=""><th colspan="6">Midwest Hose & Specialty, Inc.</th></td<>	Midwest Hose & Specialty, Inc.					
Udered inc odyd-2/1 HOSE SPECIFICATIONS Type: Stainless Steel Armor Choke & Kill Hose LD. 4 INCHES O.D. 9 INCHES WORKING PRESSURE TEST PRESSURE BURST PRESSURE 10,000 PSI 0 PSI 10,000 PSI 15,000 PSI 0 PSI COUPLINGS Stem Part No. OKC OKC OKC OKC OKC OKC Type of Coupling: Swage-It Swage-It Hose assembly pressure tested with water at amblent temperature. TIME HELD AT TEST PRESSURE ACTUAL BURST PRESSURE: 15 MIN. 0 Hose Assembly Serial Number: Hose Serial Number: 79793 OKC Comments: Date: 3/8/2011 Tested:	INTERNAL Customer:	HYDROST	ATIC TEST	P.O. Number:		
HOSE SPECIFICATIONS Type: Stainless Steel Armor Hose Length: 45ft. I.D. 4 INCHES 0.D. 9 INCHES WORKING PRESSURE TEST PRESSURE BURST PRESSURE 10.000 PSI 0 PSI 10,000 PSI 15,000 PSI 0 PSI COUPLINGS Stem Part No. OKC				loaya-2	<u>/1</u>	
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COUPLINGS Stem Part No. Ferrule No. OKC OKC OKC OKC Type of Coupling: Swage-It PROCEDURE Mose assembly pressure tested with water at amblent temperature. TIME HELD AT TEST PRESSURE ACTUAL BURST PRESSURE: 15 MIN. 0 Hose Assembly Serial Number: Tested: 79793 OKC Comments: Tested: 3/8/2011 Tested:	10,000 PSI	15,000	PSI	0	PSI	
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Date: 3/8/2011 Tested: 1. Arian State Approved: 1. Arian State Level for	Comments:					
	Date: 3/8/2011	Tested:	Arien france.	Approved:	lef-	



Cer ustomer: DE Nes Order 79793 We hereby cer	Midwes & Specia rtificate of (<u>EM</u> SPECIFICA Dat	it Hose alty, Inc. Conformit	9 O ODYD-271 /8/2011	
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Supplier: Midwest Hose & Specialty, Inc. 10640 Tanner Road Houston, Texas 77041				
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- Journal Blancia		Date	3/8/2011	
	Supplier: Midwest Hose 10640 Tanner Houston, Texas	Supplier: Midwest Hose & Specialty, I 10640 Tanner Road Houston, Texas 77041	Supplier: Midwest Hose & Specialty, Inc. 10640 Tanner Road Houston, Texas 77041	Supplier: Midwest Hose & Specialty, Inc. 10640 Tanner Road Houston, Texas 77041 mments: Toved: Date: 3/8/2011



Exhibit F -3– Co-Flex Hose Scoter 6-31 Federal Com 29H Cimarex Energy Co. 6-25S-27E Eddy, NM

Specification Sheet Choke & Kill Hose

The Midwest Hose & Specialty Choke & Kill hose is manufactured with only premium componets. The reinforcement cables, inner liner and cover are made of the highest quality material to handle the tough drilling applications of today's industry. The end connections are available with API flanges, API male threads, hubs, hammer unions or other special fittings upon request. Hose assembly is manufactured to API 7K. This assembly is wrapped with fire resistant vermculite coated fiberglass insulation, rated at 2000 degrees with stainless steel armor cover.

Working Pressure:	5,000 or 10,000 psi working pressure
Test Pressure:	10,000 or 15,000 psi test pressure
Reinforcement:	Multiple steel cables
Cover:	Stainless Steel Armor
Inner Tube:	Petroleum resistant, Abrasion resistant
End Fitting:	API flanges, API male threads, threaded or butt weld hammer unions, unibolt and other special connections
Maximum Length:	110 Feet
ID:	2-1/2", 3", 3-1/2". 4"
Operating Temperature:	-22 deg F to +180 deg F (-30 deg C to +82 deg C)

P.O. Box 96558 - 1421 S.E. 29th St. Oklahoma City, OK 73143 * (405) 670-6718 * Fax: (405) 670-6816



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

APD ID: 10400015092

Operator Name: CIMAREX ENERGY COMPANY

Well Name: SCOTER 6-31 FEDERAL COM

Well Type: CONVENTIONAL GAS WELL

Submission Date: 06/23/2017

Well Number: 29H Well Work Type: Drill

মিত্রিমিত্রি মিত্রা বেগর মের্গির্বুর সিত্র মাতৃরা মের্গব্য বিজ্ঞালের

01/04/2019

SUPO Data Report

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? NO

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

Scoter_6_31_Fed_Com_29H_Access_Road_ROW_06-21-2017.pdf

Scoter_East_6_31_Fed_Com_CTB_Access_Road_06-21-2017.pdf

Feet

New road type: COLLECTOR

Length: 358

Width (ft.): 30

Max slope (%): 2

Max grade (%): 6

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 15

New road access erosion control: The side slopes of any drainage channels or swales that are crossed will be recontoured to original grade and compacted and mulched as necessary to avoid erosion. Where steeper slopes cannot be avoided, water bars or silt fence will be constructed, mulch/rip-rap applied, or other measures employed as necessary to control erosion. Hay bales, straw waddles or silt fence may also be installed to control erosion as needed. All disturbed areas will be seeded with a mix appropriate for the area unless specified otherwise by the landowner. **New road access plan or profile prepared?** NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Access surfacing type: GRAVEL

Well Name: SCOTER 6-31 FEDERAL COM

Well Number: 29H

Access topsoil source: ONSITE

Access surfacing type description:

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: Push off and stockpile alongside the location.

Access other construction information: The operator will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations or other events. Access miscellaneous information:

Number of access turnouts:

Access turnout map:

Drainage Control

New road drainage crossing: CULVERT,LOW WATER

Drainage Control comments: To control and prevent potentially contaminated precipitation from leaving the pad site, a perimeter berm and settlement pond will be installed. Contaminated water will be removed from pond, stored in waste tanks, and disposed of at a state approved facility. Standing water or puddles will not be allowed. Drainage ditches would be established and maintained on the pad and along access roads to divert water away from operations. Natural drainage areas disturbed during construction would be re-contoured to near original condition prior to construction. Erosion Control Best Management Practices would be used where necessary and consist of seeding, fiber rolls, water bars, silt fences, and temporary diversion dikes. Areas disturbed during construction that are no longer needed for operations would be used where necessary and construction. Erosion Control Best Management Practices would be used where not be construction. Erosion Control Best Management Practices to near original condition prior to constructions would be obliterated, re-contoured to near original condition prior to construction. Erosion Control Best Management Practices would be used where necessary and consist of seeding, fiber rolls, water bars, silt fences, and temporary diversion dikes. Areas disturbed during construction. Erosion Control Best Management Practices would be used where necessary and consist of seeding, fiber rolls, water bars, silt fences, and temporary diversion dikes. Areas disturbed during construction that are no longer needed for operations diversion dikes. Areas disturbed during construction would be obliterated, re-contoured, and reclaimed to near original condition to re-establish natural drainage.

Road Drainage Control Structures (DCS) description: n/a

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Scoter_6_31_Fed_Com_29H_One_Mile_and_Existing_wells_06-21-2017.pdf

Existing Wells description:

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description:

Operator Name: CIMAREX ENERGY COMPANY	
Well Name: SCOTER 6-31 FEDERAL COM	Well Number: 29H
Production Facilities map:	
Scoter_East_6_31_Fed_Com_CTB_layout_06-21-2017	.pdf
Section 5 - Location and Types o	f Water Supply
Water Source Table]
Water source use type: INTERMEDIATE/PRODUC SURFACE CASING Describe type:	TION CASING, Water source type: MUNICIPAL
Source latitude:	Source longitude:
Source datum:	
Water source permit type: WATER RIGHT	
Permit Number:	
Source land ownership: FEDERAL	
Water source transport method: PIPELINE, TRUCI	KING
Source transportation land ownership: FEDERAL	

Source volume (gal): 210000

Water source volume (barrels): 5000

Water source and transportation map:

Scoter_6_31_Fed_Com_29H_Drilling_Water_Route_20170908082227.pdf

Water source comments:

New water well? NO

New Water Well Info

Well latitude:	Well Longitude:	Well datum:
Well target aquifer:		
Est. depth to top of aquifer(ft):	Est thickness of ac	quifer:
Aquifer comments:		
Aquifer documentation:		
Well depth (ft):	Well casing type:	
Well casing outside diameter (in.):	Well casing inside di	ameter (in.):
New water well casing?	Used casing source:	
Drilling method:	Drill material:	
Grout material:	Grout depth:	
Casing length (ft.):	Casing top depth (ft.)):

Source volume (acre-feet): 0.6444655

Well Name: SCOTER 6-31 FEDERAL COM

Well Number: 29H

Well Production type:

Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Construction Materials description: The drilling and testing operations will be conducted on a watered and compacted native soil grade. Soft spots will be covered with scoria, free of large rocks (3" diameter). Upon completion as a commercial producer the location will be covered with scoria, free of large rocks (3" dia.) from an existing privately owned gravel pit. In the event no caliche is found onsite, caliche will be hauled in from BLM approved Caliche pit in Sec. 7-24S-27E or Sec 25-23S-31E.

Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drilling Fluids, drill cuttings, water and other waste produced from the well during drilling operations.

Amount of waste: 15000 barrels

Waste disposal frequency : Weekly

Safe containment description: N/A

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL

FACILITY Disposal type description:

Disposal location description: Haul to R360 commercial disposal.

Waste type: GARBAGE

Waste content description: Garbage and trash produced during drilling and completion operations

Amount of waste: 32500 pounds

Waste disposal frequency : Weekly

Safe containment description: n/a

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL FACILITY

Disposal type description:

Disposal location description: Windmill Spraying Service hauls trash to Lea County Landfill

Reserve Pit

Well Name: SCOTER 6-31 FEDERAL COM

Well Number: 29H

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.) Reserve pit width (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? NO

Description of cuttings location

Cuttings area length (ft.)

Cuttings area width (ft.) Cuttings area volume (cu. yd.)

Cuttings area depth (ft.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Scoter_6_31_Fed_Com_29H_Wellsite_Layout_06-21-2017.pdf

Comments:

Well Name: SCOTER 6-31 FEDERAL COM

Well Number: 29H

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: SCOTER 6-31 FEDERAL COM

Multiple Well Pad Number: W2E2

Recontouring attachment:

Drainage/Erosion control construction: To control and prevent potentially contaminated precipitation from leaving the pad site, a perimeter berm and settlement pond will be installed. Contaminated water will be removed from pond, stored in waste tanks, and disposed of at a state approved facility. Standing water or puddles will not be allowed. Drainage ditches would be established and maintained on the pad and along access roads to divert water away from operations. Natural drainage areas disturbed during construction would be re-contoured to near original condition prior to construction. Erosion Control Best Management Practices would be used where necessary and consist of seeding, fiber rolls, water bars, silt fences, and temporary diversion dikes. Areas disturbed during construction. Erosion Control Best Management Practices would be used where necessary and consist of Seeding, fiber rolls, water bars, silt fences, and temporary diversion dikes. Areas disturbed during construction. Erosion Control Best Management Practices would be used where necessary and consist of seeding, fiber rolls, water bars, silt fences, where necessary and consist of seeding, fiber rolls, water bars, silt fences would be used where necessary and construction. Erosion Control Best Management Practices would be used where necessary and consist of seeding, fiber rolls, water bars, silt fences, and temporary diversion dikes. Areas disturbed during construction that are no longer needed for operations would be used where necessary and consist of seeding, fiber rolls, water bars, silt fences, and temporary diversion dikes. Areas disturbed for operations would be obliterated, re-contoured, and reclaimed to near original condition to re-establish natural drainage.

Drainage/Erosion control reclamation: All disturbed and re-contoured areas would be reseeded according to specifications. Approved seed mixtures would be certified weed free and consist of grasses, forbs, or shrubs similar to the surrounding area. Compacted soil areas may need to be obliterated and reclaimed to near natural conditions by recontouring all slopes to facilitate and re-establish natural drainage.

Wellpad long term disturbance (acres): 2.6	Wellpad short term disturbance (acres): 3.8
Access road long term disturbance (acres): 0	Access road short term disturbance (acres): 0.247
Pipeline long term disturbance (acres): 0	Pipeline short term disturbance (acres): 3.794766
Other long term disturbance (acres): 0	Other short term disturbance (acres): 4.714
Total long term disturbance: 2.6	Total short term disturbance: 12.555766

Disturbance Comments: Battery pad 4.17 acres, Temp water line .195 acres (1420' X 6'), Power .349 acres, SWD 3435', Sales 244', Flow 1831'

Reconstruction method: After well plugging, all disturbed areas would be returned to the original contour or a contour that blends with the surrounding landform including roads unless the surface owner requests that they be left intact. In consultation with the surface owners it will be determined if any gravel or similar materials used to reinforce an area are to be removed, buried, or left in place during final reclamation. Salvaged topsoil, if any, would be re-spread evenly over the surfaces to be re-vegetated. As necessary, the soil surface would be prepared to provide a seedbed for re-establishment of desirable vegetation. Site preparation may include gouging, scarifying, dozer track-walking, mulching, or fertilizing. Reclamation, Re-vegetation, and Drainage: All disturbed and recontoured areas would be reseeded using techniques outlined under Phase I and II of this plan or as specified by the land owner. Approved seed mixtures would be certified weed free and consist of grasses, forbs, or shrubs similar to the surrounding area. Compacted soil areas may need to be obliterated and reclaimed to near natural conditions by re-contouring all slopes to facilitate and re-establish natural drainage. **Topsoil redistribution**: Salvaged topsoil, if any, would be re-spread evenly over the surfaces to be re-vegetated.

Soil treatment: As necessary, the soil surface would be prepared to provide a seedbed for re-establishment of desirable vegetation. Site preparation may include gouging, scarifying, dozer track-walking, mulching or fertilizing. **Existing Vegetation at the well pad:**

Existing Vegetation at the well pad attachment:

Well Name: SCOTER 6-31 FEDERAL COM

Well Number: 29H

Existing Vegetation Community at the road attachment: Existing Vegetation Community at the pipeline: Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO Non native seed description: Seedling transplant description: Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed	Table
------	-------

Seed type:

Seed name:

Source name:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre:

Seed source:

Source address:

Proposed seeding season:

Seed St	Total pounds/Acre:	
Seed Type	Pounds/Acre	

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name:

Last Name:

Well Name: SCOTER 6-31 FEDERAL COM

Well Number: 29H

Phone:

Email:

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: n/a

Weed treatment plan attachment:

Monitoring plan description: n/a

Monitoring plan attachment:

Success standards: n/a

Pit closure description: n/a

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: WELL PAD Describe: Surface Owner: BUREAU OF LAND MANAGEMENT Other surface owner description: BIA Local Office: BOR Local Office: COE Local Office: DOD Local Office: NPS Local Office: State Local Office: VISFWS Local Office: USFWS Local Office: USFWS Local Office: USFS Region: USFS Forest/Grassland:

USFS Ranger District:

Operator Name: CIMAREX ENERGY COMPANY Well Name: SCOTER 6-31 FEDERAL COM

Well Number: 29H

Section 12 - Other Information

Right of Way needed? YES

Use APD as ROW? YES

ROW Type(s): 281001 ROW - ROADS,288100 ROW - O&G Pipeline,288101 ROW - O&G Facility Sites,288103 ROW - Salt Water Disposal Pipeline/Facility,289001 ROW- O&G Well Pad,FLPMA (Powerline)

ROW Applications

SUPO Additional Information:

Use a previously conducted onsite? YES

Previous Onsite information: Onsite with BLM (Jeff Robertson) and Cimarex (Barry Hunt) on 3/28/17. Locations were moved 500' east due to rancher water pipeline (Lisa Ogden) and large drainage area. 500' E/W x 560' N/S pad. V-Door East. Top soil east. Interim reclamation: All sides. Construct a ditch and berm along the entire north side of pad to divert drainages and run-off around the NW corner of pad. E-line staked from SW corner, west, to tie-in to approved and not yet built E-line at Scoter 6 Fed #3H. Gas lift/Production line staked from NE corner, north, then west, to parallel the #2H lines, to the battery.

Other SUPO Attachment

Scoter_6_31_Fed_Com_29H_Interim_Reclamation_06-21-2017.pdf Scoter_6_31_Fed_Com_29H_Powerline_ROW_06-21-2017.pdf Scoter_6_31_Fed_Com_29H_Public_Access_Road_06-21-2017.pdf Scoter_6_31_Fed_Com_29H_Road_Description_06-21-2017.pdf Scoter_6_31_Fed_Com_29H_Temp_water_route_06-21-2017.pdf Scoter_6_31_Fed_Com_29H_Topo_Map_06-21-2017.pdf Scoter_East_6_31_Fed_Com_CTB_Gas_Sales_ROW_06-21-2017.pdf Scoter_East_6_31_Fed_Com_CTB_Powerline_ROW_06-21-2017.pdf Scoter_East_6_31_Fed_Com_CTB_Powerline_ROW_06-21-2017.pdf Scoter_East_6_31_Fed_Com_CTB_SWD_ROW_06-21-2017.pdf Scoter_6_31_Fed_Com_29H_Flowline_ROW_06-23-2017.pdf Scoter_6_31_Fed_Com_29H_SUPO_06-23-2017.pdf



ROAD RIGHT-OF-WAY DESCRIPTION

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT IN THE SE 1/4 SE 1/4 OF SECTION 6, T255, R27E, N.M.P.M., WHICH BEARS N58'29'45"W 1230.14' FROM THE SOUTHEAST CORNER OF SAID SECTION 6, THENCE S44'22'23"W 99.26' TO A POINT IN THE SE 1/4 OF SAID SECTION 6, WHICH BEARS N62'54'53"W 1255.99' FROM THE SOUTHEAST CORNER OF SAID SECTION 6. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A TRANSVERSE MERCATOR PROJECTION WITH A CENTRAL MERIDIAN OF W103'53'00". CONTAINS 0.068 ACRES MORE OR LESS.

SCOTER 6-31 FEDERAL COM W2E2			
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 6, T25S, R27E	BRASS CAP WITH 2 1/2" IRON PIPE	N 32°09'58.69"	W 104*14'16.85"
N 1/4 COR. SEC. 6, T255, R27E	BRASS CAP WITH 1" IRON PIPE	N 32*09'58.84"	W 104*13'47.56"
NE COR. SEC. 6, T255, R27E	BRASS CAP WITH 1 1/2" IRON PIPE	N 32"09'58.93"	W 104*13'16.71"
E 1/4 COR. SEC. 6, T255, R27E	BRASS CAP WITH 1" IRON PIPE	N 32"09'33.04"	W 104*13'16.08"
SE COR. SEC. 6, T25S, R27E	BRASS CAP WITH 2" IRON PIPE	N 32*09'06.81"	W 104*13'15.46"
S 1/4 COR. SEC. 6, T25S, R27E	BRASS CAP WITH 1" IRON PIPE	N 32*09'06.54"	W 104*13'46.25"
SW COR. SEC. 6, T25S, R27E	BRASS CAP WITH 2" IRON PIPE	N 32°09'06.27"	W 104*14'16.75"
W 1/4 COR. SEC. 6, T255, R27E	BRASS CAP WITH 1" IRON PIPE	N 32*09'32.48"	W 104°14'16.81"

SCOTER 6-31 FEDERAL COM W2E2 ACCESS ROAD				
NUMBER STATION LATITUDE (NAD 83) LONGITUDE (NAD 83				
BEGIN	0+00	N 32*09'13.14"	W 104°13'27.68"	
END	0+99.26	N 32°09'12.43"	W 104*13'28.48"	





	SCOTER EAST 6-31 FEDERA	COM CTB	
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 6, T25S, R27E	BRASS CAP WITH 2 1/2" IRON PIPE	N 32°09'58.69"	W 104*14'16.85"
N 1/4 COR. SEC. 6, T255, R27E	BRASS CAP WITH 1" IRON PIPE	N 32*09'58.84"	W 104°13'47.56"
NE COR. SEC. 6, T255, R27E	BRASS CAP WITH 1 1/2" IRON PIPE	N 32*09'58.93"	W 104*13'16.71"
E 1/4 COR. SEC. 6, T25S, R27E	BRASS CAP WITH 1" IRON PIPE	N 32°09'33.04"	W 104*13'16.08"
SE COR. SEC. 6, T25S, R27E	BRASS CAP WITH 2" IRON PIPE	N 32*09'06.81"	W 104*13'15.46"
S 1/4 COR. SEC. 6, T25S, R27E	BRASS CAP WITH 1" IRON PIPE	N 32*09'06.54"	W 104°13'46.25"
SW COR. SEC. 6, T255, R27E	BRASS CAP WITH 2" IRON PIPE	N 32*09'06.27"	W 104*14'16.75"
W 1/4 COR. SEC. 6, T25S, R27E	BRASS CAP WITH 1" IRON PIPE	N 32*09'32.48"	W 104*14'16.81"

SCOTER EAST 6-31 FEDERAL COM CTB ACCESS ROAD "A"				
NUMBER STATION LATITUDE (NAD 83) LONGITUDE (NA				
BEGIN	0+00	N 32°09'23.29"	W 104°13'40.84"	
END	1+30.38	N 32°09'22.14"	W 104°13'41.51"	

SCOTER EAST 6-31 FEDERAL COM CTB ACCESS ROAD "B"				
NUMBER STATION LATITUDE (NAD 83) LONGITUDE (NAI				
BEGIN	0+00	N 32°09'21.66"	W 104°13'36.99"	
END	1+28.87	N 32°09'20.52"	W 104°13'37.65"	

ROAD "A" RIGHT-OF-WAY DESCRIPTION

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT IN THE NW 1/4 SE 1/4 OF SECTION 6, T25S, R27E, N.M.P.M., WHICH BEARS N15'32'13"E 1756.27' FROM THE SOUTH 1/4 CORNER OF SAID SECTION 6, THENCE S26'21'51"W 130.38' TO A POINT IN THE NW 1/4 SE 1/4 OF SAID SECTION 6, WHICH BEARS N14'40'30"E 1628.39' FROM THE SOUTH 1/4 CORNER OF SAID SECTION 6. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A TRANSVERSE MERCATOR PROJECTION WITH A CENTRAL MERIDIAN OF W103'53'00". CONTAINS 0.090 ACRES MORE OR LESS.

ROAD "B" RIGHT-OF-WAY DESCRIPTION

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT IN THE NW 1/4 SE 1/4 OF SECTION 6, T25S, R27E, N.M.P.M., WHICH BEARS N27'42'27"E 1723.87' FROM THE SOUTH 1/4 CORNER OF SAID SECTION 6, THENCE S26'33'26"W 128.87' TO A POINT IN THE NW 1/4 SE 1/4 OF SAID SECTION 6, WHICH BEARS N27'48'02"E 1595.03' FROM THE SOUTH 1/4 CORNER OF SAID SECTION 6. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A TRANSVERSE MERCATOR PROJECTION WITH A CENTRAL MERIDIAN OF W103'53'00". CONTAINS 0.089 ACRES MORE OR LESS.

BEGINNING OF ROAD "A" BEARS N15'32'13"E 1756.27' FROM THE SOUTH 1/4 CORNER OF SECTION 6, T25S, R27E, N.M.P.M.

END OF ROAD "A" BEARS N14'40'30"E 1628.39' FROM THE SOUTH 1/4 CORNER OF SECTION 6, T25S, R27E, N.M.P.M.

BEGINNING OF ROAD "B" BEARS N27'42'27"E 1723.87' FROM THE SOUTH 1/4 CORNER OF SECTION 6, T25S, R27E, N.M.P.M.

END OF ROAD "B" BEARS N2748'02"E 1595.03' FROM THE SOUTH 1/4 CORNER OF SECTION 6, T25S, R27E, N.M.P.M. $\begin{array}{c} \frac{\text{CERTIFICATE}}{\text{THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND} \\ \text{THE ACTUAL SUBCTON THE SOUND UPON WHICH IT IS BASED WERE FRANCE THE SOUND UPON WHICH IT IS BASED WERE FRANCE THAT AARGENNISBLE FOR THIS SUBVEY THE SUBVEY THAT THIS SUBVEY THE SUBVEY THAT THIS SUBVEY THE SUBVEY THAT THIS SUBVEY THAT THIS SUBVEY THE SUBVEY THAT THIS SUBVEY THAT THIS SUBVEY THAT THIS SUBVEY THAT THIS SUBVEY THE SUBVEY THAT THE SUBVEY TO THE SUBVEY THAT THE SUBVEY TO THE SUBVEY THAT THAT THE SUBVEY THAT THE SUBVEY THAT THAT THAT$

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Sheet 2 of 2

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FILE: 61698-A2

NOTEN: Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103*53'00*



UELS, LLC Corporate Office * 85 South 200 East Vernal, UT 84078 * (435) 789-1017 SCOTER EAST 6-31 FEDERAL COM CTB SECTION 6, T25S, R27E, N.M.P.M. EDDY COUNTY, NEW MEXICO SURVEYED BY M.P., B.D. 05-13-17 SCALE DRAWNERYH. 05-29-17 N/A ACCESS ROAD R-O-W Exhibit P-2

CIMAREX ENERGY CO







SCOTER EAST 6-31 FEDERAL COM CTB W 1/2 SE 1/4, SECTION 6, T25S, R27E, N.M.P.M. EDDY COUNTY, NEW MEXICO



UELS, LLC Corporate Office * 85 South 200 East Vernal, UT 84078 * (435) 789-1017
 SURVEYED BY
 M.P., B.D.
 05-13-17
 SCALE

 DRAWN BY
 S.F.
 05-25-17
 AS SHOWN

 TYPICAL CROSS SECTIONS
 EXHIBIT
 P



BEGINNING AT THE INTERSECTION OF OLD CAVERN HIGHWAY AND AN EXISTING ROAD TO THE SOUTHEAST (LOCATED AT NAD83 LATITUDE N32.156844° AND LONGITUDE W104.228819°) PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 275' TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHWEST; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 131' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM THE INTERSECTION OF OLD CAVERN HIGHWAY AND AN EXISTING ROAD TO THE SOUTHEAST (LOCATED AT NAD83 LATITUDE N32.156844° AND LONGITUDE W104.228819°) TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 406'.



UELS, LLC Corporate Office * 85 South 200 East Vernal, UT 84078 * (435) 789-1017

SCOTER EAST 6-31 FEDERAL COM CTB W 1/2 SE 1/4, SECTION 6, T25S, R27E, N.M.P.M. EDDY COUNTY, NEW MEXICO				
SURVEYED BY	M.P., B.D.	05-10-17		
DRAWN BY	V.L.D.	05-19-17		
ROAD DESCRIPTION Exhibit P				

CIMAREX ENERGY CO





DHIlling Water Route #1. Scotter 6-31 Paderal Com 29H Chinares Encress (Col 26-24S-28F Eddy Chy, NM **OVIINO** ALE OF R Tyrin Telli onlo Roedrunner Rd Pulley Road Fresh Weiter Station ? Turn right onto US-285 N. Head west on Pulley Rd Scoter 6-31 Fed Com 29H Atum right onto Old Cavern Hw Keep right Legend Dulley Road Fresh Water Station Google cari Route







NOTES:

- Fill quantity includes 5% for compaction.
- Cut/Fill slopes 1 1/2:1 (Typ. except where noted)



CIMAREX ENERGY CO.



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 SURVEYED BY
 M.P., B.D.
 05-10-17
 SCALE

 DRAWN BY
 S.F.
 05-23-17
 AS SHOWN

 TYPICAL CROSS SECTIONS
 EXHIBIT D







Pad will be reclaimed after cessation of drilling operations. Please see Surface Use Plan for pad reclamation plans.

Ν



Exhibit D-1 Interim Reclamation Diagram Scoter 6-31 Federal Com W2E2 pad Cimarex Energy Co. Sec 6-25S-27E Eddy Cty, NM



POWER LINE RIGHT-OF-WAY DESCRIPTION

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT IN THE SW 1/4 SE 1/4 OF SECTION 6, T25S, R27E, N.M.P.M., WHICH BEARS N83'42'41"E 870.72' FROM THE SOUTH 1/4 CORNER OF SAID SECTION 6, THENCE N89'36'18"E 188.13' TO A POINT IN THE SW 1/4 SE 1/4 OF SAID SECTION 6, WHICH BEARS N84'45'27"E 1058.03' FROM THE SOUTH 1/4 CORNER OF SAID SECTION 6. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A TRANSVERSE MERCATOR PROJECTION WITH A CENTRAL MERIDIAN OF W103'53'00". CONTAINS 0.130 ACRES MORE OR LESS.

SCOTER 6-31 FEDERAL COM W2E2			
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 6, T25S, R27E	BRASS CAP WITH 2 1/2" IRON PIPE	N 32°09'58.69"	W 104*14'16.85"
N 1/4 COR. SEC. 6, T255, R27E	BRASS CAP WITH 1" IRON PIPE	N 32°09'58.84"	W 104°13'47.56"
NE COR. SEC. 6, T255, R27E	BRASS CAP WITH 1 1/2" IRON PIPE	N 32*09'58.93"	W 104°13'16.71"
E 1/4 COR. SEC. 6, T25S, R27E	BRASS CAP WITH 1" IRON PIPE	N 32*09'33.04"	W 104°13'16.08"
SE COR. SEC. 6, T255, R27E	BRASS CAP WITH 2" IRON PIPE	N 32°09'06.81"	W 104°13'15.46"
S 1/4 COR. SEC. 6, T25S, R27E	BRASS CAP WITH 1" IRON PIPE	N 32°09'06.54"	W 104*13'46.25"
SW COR. SEC. 6, T25S, R27E	BRASS CAP WITH 2" IRON PIPE	N 32°09'06.27"	W 104°14'16.75"
W 1/4 COR. SEC. 6, T25S, R27E	BRASS CAP WITH 1" IRON PIPE	N 32°09'32.48"	W 104°14'16.81"

SCOTER 6-31 FEDERAL COM W2E2 POWER LINE					
NUMBER	NUMBER STATION LATITUDE (NAD 83) LONGITUDE (NAD 8				
BEGIN	0+00	N 32°09'07.51"	W 104°13'36.19"		
END	1+88.13	N 32"09'07.53"	W 104°13'34.00"		

CERTIFICATE THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVICION THIS CROUND UPON WHICH IT IS BASED WERT FERTOR (PDB) IN COR UNDER MY DIRECT SUPARVENT: THAT LAKEES (INSIDE FOR THE CHIDARY OF A CHINE SUPERVICES THE THIS SUR THE N NEW 58 MINIMU MEXICO CT TO THE BEST BEGINNING OF POWER LINE BEARS N83'42'41"E 870.72' FROM THE SOUTH 1/4 CORNER OF SECTION 6, T25S, R27E, N.M.P.M. 05-27 ESS IONAL SUR END OF POWER LINE BEARS N84'45'27"E 1058.03' FROM THE SOUTH 1/4 CORNER OF SECTION 6, T25S, R27E, N.M.P.M. FILE: 61696-A2 Sheet 2 of 2 **CIMAREX ENERGY CO.** NOTES: • Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103*53'00* SCOTER 6-31 FEDERAL COM W2E2 SECTION 6, T25S, R27E, N.M.P.M. EDDY COUNTY, NEW MEXICO

SURVEYED BY

DRAWN BY

M.P., B.D.

POWER LINE R-O-W

05-10-17

05-20-17

SCALE

EXHIBIT H

UELS, LLC Corporate Office * 85 South 200 East Vernal, UT 84078 * (435) 789-1017


BEGINNING AT THE INTERSECTION OLD CAVERN HIGHWAY AND AN EXISTING ROAD TO THE SOUTHEAST (LOCATED AT NAD83 LATITUDE N32.156844° AND LONGITUDE W104.288819°) PROCEED IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 0.4 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE DAVINCI EAST 7-18 FEDERAL CTB; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 375' TO THE BEGINNING OF THE PROPOSED ACCESS ROAD TO THE SOUTHWEST; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 99' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM THE INTERSECTION OF OLD CAVERN HIGHWAY AND AN EXISTING ROAD TO THE SOUTHEAST (LOCATED AT NAD83 LATITUDE N32.156844° AND LONGITUDE N32.156844°) TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 0.5 MILES.



SURVEYED BY	M.P., B.D.	05-10-17		
DRAWN BY	V.L.D.	05-19-17		
ŖO	AD DESCI	RIPTION	N	

CIMAREX ENERGY CO



UELS, LLC Corporate Office * 85 South 200 East Vernal, UT 84078 * (435) 789-1017



Total Estimated Length = 1420' From DaVinci Frac Pit to each location shown





	-	SCOTER EAST 6-31	FEDER	AL COM CTB		·	
SECTION CORNER		SECTION CORNER DESC.		LATITUDE	(NAD 83)	LONGI	TUDE (NAD 83)
NW COR, SEC. 6, T255, R	27E BRAS	S CAP WITH 2 1/2" IRON P	IPE	N 32°09'58.69"		W 104°14'16.85"	
N 1/4 COR. SEC. 6, T255,	R27E BRA	BRASS CAP WITH 1" IRON PIPE		N 32°09'58.84"		W 104°13'47.56"	
NE COR. SEC. 6, T25S, R	27E BRASS	BRASS CAP WITH 1 1/2" IRON PIPE N 32*09'58.93"		W 10	04*13'16.71"		
E 1/4 COR. SEC. 6, T255, I	R27E BRA	SS CAP WITH 1" IRON PIPI	 Е	N 32*09'33.04"		W 10	04°13'16.08"
SE COR. SEC. 6, T255, R	27E BRA	SS CAP WITH 2" IRON PIPI	 E	N 32°09'06.81"		W 10	04°13'15.46"
S 1/4 COR. SEC. 6, T255, I	R27E BRA	SS CAP WITH 1" IRON PIPI	 E	N 32°09'06.81 W 104'13'44		04°13'46.25"	
SW COR. SEC. 6, T255, R	27E BRA	SS CAP WITH 2" IRON PIPI	 E	N 32°09	06.27"	W 10	04*14'16.75"
W 1/4 COR. SEC. 6. T255.	R27E BRA	SS CAP WITH 1" IRON PIP	E	N 32°09	32.48"	W 104°14'16.81"	
	NUMBER BEGIN	SCOTER EAST 6-31 FEDERA STATION 0+00	L COM	CTB SALES PIPELIN TTUDE (NAD 83) 32°09'21.31"	E LONGITUDE W 104°13'	(NAD 83) 42.18"	
↓	1	0+25.05	N	32°09'21.42"	W 104°13'	42.45"	
i ——	2	2+21.92		32°09'23.17"	W 104°13'	41.43	
	END	2+43.84	N	32-09-23.36	W 104-13	41.32	
END OF PROPOS SALES PIPELINE RIGHT-OF-WAY (At Existing Gas Pip (4) (Cimarex)) END OF SAL	SED beline ES LINE SEG 91 Jo Detail "A" No Scale	Existing Road Existing Co Pipeline (4 (Cimarez) Existing Cas Pipeline (4) (Cimarez) Proposed Access R Proposed Scoler East 6–31 Federal COM CTB BEGINNING O SALES PIPELI RIGHT-OF-W (At Edge of Pro East 6–31 Fede	1 13) F PR(NNE KAY posed crai COM	DPOSED Scoter 4 CTB)	<u>CERTIFICATE</u> THIS IS TO CERTIFICATE THE ACTURE S	RTIFY THAT TH	IS EASEMENT PLAT AND
			FIL	E: 6 1 7 0 0-A2	IS BASED WER DIRECT SUDA THIS SURVEY, MINIMUL STA MEXICU AND BEST OF MY	VERVOUSE VIENTIASSING VIENTIASI	Hy IN OR UNDER MY ARGUSTONESILE FOR THE GENETIE HEALTHY HEALTHY SUPERING AND AND SUPERING AND AND SUPERING AND AND AND SUPERING AND AND AND AND SUPERING AND AND AND AND AND AND SUPERING AND
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				SCOTER E SECTI EDDY	AST 6-31 FE ON 6, T25S, I COUNTY, N	DERAL O R27E, N.N NEW MEX	COM CTB 1.P.M. KICO
	UEI	LS, LLC	S	URVEYED BY	M.P., B.D.	05-13	-17 SCALE
UINTAH	Corporate Offic Vernal, UT 840	e * 85 South 200 East 078 * (435) 789-1017	S	DRAWN BY	B.D.H. ELINE R-O	-W 1	-1/ I N/A Exhibit P-4









	SCOTER EAST 6-31 FEDERAL	СОМ СТВ	
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 6, T25S, R27E	BRASS CAP WITH 2 1/2" IRON PIPE	N 32°09'58.69"	W 104*14'16.85"
N 1/4 COR. SEC. 6, T255, R27E	BRASS CAP WITH 1" IRON PIPE	N 32°09'58.84"	W 104°13'47.56"
NE COR. SEC. 6, T25S, R27E	BRASS CAP WITH 1 1/2" IRON PIPE	N 32°09'58.93"	W 104°13'16.71"
E 1/4 COR. SEC. 6, T25S, R27E	BRASS CAP WITH 1" IRON PIPE	N 32°09'33.04"	W 104°13'16.08"
SE COR. SEC. 6, T25S, R27E	BRASS CAP WITH 2" IRON PIPE	N 32°09'06.81"	W 104*13'15.46"
S 1/4 COR. SEC. 6, T25S, R27E	BRASS CAP WITH 1" IRON PIPE	N 32°09'06.54"	W 104°13'46.25"
SW COR. SEC. 6, T255, R27E	BRASS CAP WITH 2" IRON PIPE	N 32°09'06.27"	W 104°14'16.75"
W 1/4 COR. SEC. 6, T25S, R27E	BRASS CAP WITH 1" IRON PIPE	N 32°09'32.48"	W 104*14'16.81"

	SCOTER EAST 6-31 FEDERAL COM CTB SWD PIPELINE					
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)			
BEGIN	0+00	N 32°09'21.18"	W 104°13'42.26"			
1	1+54.38	N 32°09'21.83"	W 104°13'43.89"			
2	10+08.40	N 32°09'13.83"	W 104°13'47.09"			
3	15+45.40	N 32°09'08.67"	W 104°13'48.54"			
4	16+00.79	N 32°09'08.13"	W 104°13'48.65"			
5	16+28.75	N 32°09'07.85"	W 104°13'48.60"			
6	16+62.94	N 32°09'07.59"	W 104°13'48.34"			
END	17+72.10	N 32°09'06.52"	W 104°13'48.45"			





	SCOTER EAST 6-31 FE	EDERAL COM CTB	
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
NW COR. SEC. 7, T255, R27E	BRASS CAP W/2" IRON PIPE	N 32°09'06.27"	W 104°14'16.75"
N1/4 COR. SEC. 7, T255, R27E	BRASS CAP W/ 1" IRON PIPE	N 32°09'06.54"	W 104*13'46.25"
NE COR. SEC. 7, T25S, R27E	BRASS CAP W/2" IRON PIPE	N 32°09'06.81"	W 104°13'15.46"
E1/4 COR. SEC. 7, T25S, R27E	BRASS CAP W/ 1" IRON PIPE	N 32"08'40.58"	W 104*13'15.36"
SE COR. SEC. 7, T25S, R27E	BRASS CAP W/2" IRON PIPE	N 32°08'14.39"	W 104*13'15.27"
SW COR. SEC. 7, T255, R27E	BRASS CAP W/ 2" IRON PIPE	N 32°08'13.86"	W 104°14'16.64"
W 1/4 COR. SEC. 7, T255, R27E	BRASS CAP W/ 1" IRON PIPE	N 32°08'40.07"	W 104°14'16.69"

	SCOTER EAST 6-31 FED	ERAL COM CTB SWD PIPELINE	
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)
BEGIN	17+72.10	N 32°09'06.52"	W 104°13'48.45"
1	18+00.05	N 32°09'06.24"	W 104°13'48.48"
2	18+49.85	N 32°09'05.99"	W 104°13'48.97"
3	20+37.43	N 32°09'04.18"	W 104°13'49.47"
4	21+81.02	N 32°09'02.98"	W 104°13'50.36"
5	22+41.72	N 32°09'02.40"	W 104°13'50.54"
6	23+10.50	N 32°09'01.75"	W 104°13'50.27"
7	23+87.15	N 32°09'01.00"	W 104°13'50.28"
8	24+62.46	N 32°09'00.34"	W 104°13'50.69"
9	25+30.10	N 32°08'59.91"	W 104°13'51.29"
END	34+34.59	N 32°08'51.24"	W 104°13'53.92"





FLOW LINE RIGHT-OF-WAY DESCRIPTION

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT IN THE SE 1/4 SE 1/4 OF SECTION 6, T25S, R27E, N.M.P.M., WHICH BEARS N64'24'47"W 1322.86' FROM THE SOUTHEAST CORNER OF SAID SECTION 6, THENCE N00'25'01"W 409.05'; THENCE N61'52'37"W 410.01'; THENCE N62'27'22"W 267.42'; THENCE S26'22'06"W 458.94'; THENCE N63'37'10"W 240.17'; THENCE N26'30'28"E 44.96' TO A POINT IN THE SW 1/4 SE 1/4 OF SAID SECTION 6, WHICH BEARS N23'21'38"E 1146.13' FROM THE SOUTH 1/4 CORNER OF SAID SECTION 6. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A TRANSVERSE MERCATOR PROJECTION WITH A CENTRAL MERIDIAN OF W103'53'00". CONTAINS 1.261 ACRES MORE OR LESS.

	SCOTER 6-31 FEDERAL CO	DM W2E2		
SECTION CORNER	SECTION CORNER DESC.	LATITUDE (NAD 83)	LONGITUDE (NAD 83	
NW COR. SEC. 6, T255, R27E	BRASS CAP WITH 2 1/2" IRON PIPE	N 32°09'58.69"	W 104*14'16.85"	
N 1/4 COR. SEC. 6, T25S, R27E	BRASS CAP WITH 1" IRON PIPE	N 32*09'58.84"	W 104*13'47.56"	
NE COR. SEC. 6, T255, R27E	BRASS CAP WITH 1 1/2" IRON PIPE	N 32°09'58.93"	W 104°13'16.71"	
E 1/4 COR. SEC. 6, T255, R27E	BRASS CAP WITH 1" IRON PIPE	N 32*09'33.04"	W 104°13'16.08"	
SE COR. SEC. 6, T25S, R27E	BRASS CAP WITH 2" IRON PIPE	N 32°09'06.81"	W 104*13'15.46"	
S 1/4 COR. SEC. 6, T25S, R27E	BRASS CAP WITH 1" IRON PIPE	N 32*09'06.54"	W 104*13'46.25"	
SW COR. SEC. 6, T25S, R27E	BRASS CAP WITH 2" IRON PIPE	N 32°09'06.27"	W 104°14'16.75"	
W 1/4 COR. SEC. 6, T25S, R27E	BRASS CAP WITH 1" IRON PIPE	N 32°09'32.48"	W 104*14'16.81"	

	SCOTER 6-31 FEDERAL COM W2E2 (ROW 1) FLOW LINE				
NUMBER	STATION	LATITUDE (NAD 83)	LONGITUDE (NAD 83)		
BEGIN	0+00	N 32°09'12.42"	W 104°13'29.35"		
1	4+09.05	N 32°09'16.47"	W 104°13'29.40"		
2	8+19.07	N 32*09'18.37"	W 104*13'33.61"		
3	10+86.49	N 32*09'19.59"	W 104°13'36.38"		
4	15+45.43	N 32"09'15.51"	W 104°13'38.73"		
5	17+85.59	N 32*09'16.56"	W 104*13'41.24"		
END	18+30.55	N 32*09'16.96"	W 104*13'41.01"		

BEGINNING OF FLOW LINE BEARS N64"24'47"W 1322.86' FROM THE SOUTHEAST CORNER OF SECTION 6, T25S, R27E, N.M.P.M.

END OF FLOW LINE BEARS N23'21'38"E 1146.13' FROM THE SOUTH 1/4 CORNER OF SECTION 6, T25S, R27E, N.M.P.M.

THE ACTUAL SUR ERFORMUD BY ROUND UPON WHICH IT DIRECT SU SIBLE FOR THIS SUR MINIMU MEXICO THE NEW CT TO THE BES1 05 -2 ESS IONAL SUR

Sheet 2 of 2

CERTIFICATE THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND

FILE: 61692-A2 NOTES: Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00° **CIMAREX ENERGY CO.** SCOTER 6-31 FEDERAL COM W2E2 (ROW 1) SECTION 6, T25S, R27E, N.M.P.M. EDDY COUNTY, NEW MEXICO

UELS, LLC Corporate Office * 85 South 200 East Vernal, UT 84078 * (435) 789-1017

SURVEYED BY M.P., B.D. 05-10-17 SCALE DRAWN BY 05-23-17 N/A FLOW LINE R-O-W? SEXHIBIT G-1

Surface Use Plan – Scoter 6-31 Federal Com 29H

The following surface use plan of operations will be followed and carried out once the APD is approved. No other disturbance will be created other than what is submitted in this surface use plan without approval. If any other disturbance is needed after the APD is approved, a BLM approved sundry notice or right of way application will be submitted for approval prior to any new surface disturbance.

1. Existing Roads:

- Please see Exhibit B and C-1 for existing access road planned to be used to access the proposed project.
- Cimarex Energy will improve or maintain existing roads in a condition the same as or better than before the operations began. Cimarex Energy will repair pot holes, etc. All existing structures on the entire access route such as cattle guards, other range improvement projects, culverts, etc. will be properly repaired or replaced if they are damaged or have deteriorated beyond practical use.
- Cimarex Energy will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment
 operations, or other events.
- Cimarex Energy will obtain written BLM approval prior to the application of surfactants, binding agents, or other dust suppression chemicals on the roadways.
- The maximum width of the driving surface will be 15.' The road will be crowned and ditched with a 2% slope from the tip of the crown to the edge of the driving surface. The ditches will be 1' deep with 3:1 slopes. The driving surface will be made of 6" rolled and compacted caliche.
- Existing access road route to the proposed project is depicted on the public access point map if applicable. Improvements to the driving surface will be done where necessary. No new surface disturbance will be done, unless otherwise noted in the New or Reconstructed Access Roads section of the surface use plan.

2. New or reconstructed access roads

Road to well pad:

- Cimarex Energy plans to construct 99' of new on-lease access road to service the well.
 - Please see Exhibit C-2.
 - Improvements to the driving surface will be done where necessary. No new surface disturbance will be done without prior approval from the BLM.

Road to battery pad:

- Cimarex Energy plans to construct 259' of new on-lease access road to service the off pad battery.
 - Please see Exhibit P-2.
 - Improvements to the driving surface will be done where necessary. No new surface disturbance will be done without prior approval from the BLM.

The maximum width of the driving surface for all roads above will be 15'. The roads will be crowned and ditched with a 2% slope from the tip of the crown to the edge of the driving surface. The ditches will be 1' deep with 3:1 slopes. The driving surface will be made of 6" rolled and compacted caliche.

The operator will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or other events.

3. Well Radius Map

Please see Exhibit A for wells within one mile of the proposed well SHL and BHL.

4. Proposed or Existing Production Facility

- If on completion, the well is a producer the Scoter East 6-31 Federal Com CTB tank battery will be constructed and the necessary production equipment will be installed.
- Scoter East 6-31 Federal Com CTB Tank Battery Specifications
 - Please see Exhibit P for location information
 - Please see section 2 for new road information
 - Gas Pipeline Specifications:
 - Cimarex plans to construct an on lease gas pipeline to service this battery location.
 - Please see Exhibit P-4 for proposed pipeline route.
 - Three pipelines: 12" LP Steel, 8" HP Steel, 4" HP Steel
 - Pipeline Length: 244'
 - Pipeline will be buried and will require a construction width of 30'.
 - MAOP: 1440psi
 - Anticipated working pressure: 12"; 300 psi; 8" & 4": 1100 psi.

• Salt Water Disposal Specifications:

- Cimarex plans to construct an off lease SWD pipeline to service this battery location.
- Please see Exhibit P-5 for proposed pipeline route.
- Two pipelines; 4" Surface poly & 12" Buried poly. Both pipelines follow the same route.
- Length: 3435'
- MAOP: 4" line: 120 psi; 12" line: 300 psi
- Anticipated Working Pressure: 4" line: 110 psi; 12" line: 225 psi
- A ROW application will be submitted to the BLM for the proposed route.

5. Flowlines Pipelines

- Cimarex Energy plans to construct flowlines to service the well.
 - Pipelines will be buried and require a construction width of 30".
 - o Flowline:
 - Four 6" HP steel for oil, gas, and water production
 - Length: 1831'
 - MAOP: 1500 psi.; Anticipated working pressure: 200-300 psi.
 - Please see Exhibit G-1 for proposed on lease route
 - Flow Route will tie into Flow Connection Area on Battery pad. Please see Exhibit G-2 for Flow line connection corridor.

6. Power Lines:

- Cimarex Energy plans to construct an on lease powerline to service the Scoter East 6-31 Federal Com CTB Battery and the Scoter 6-31 Federal Com W2E2 well pad.
 - Overhead power line from an existing power source located in the SE/4 of Section 6, 25S, 27E to the Scoter East 6-31 Federal Com CTB Battery.
 - o Length: 435'
 - o Poles: 2
 - o Specifications: 480 volt, 4 wire, 3 phase.
 - Please see Exhibit H & P-6 for proposed route

7. Water Resources

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- A temporary surface fresh water pipeline(s) will be utilized for this project.
 - o Cimarex plans to lay the fresh water surface pipeline(s) prior to commencement of the simulation job.
 - 10" lay-flat surface pipeline
 - The surface pipeline(s) will follow the road from a frac pit to the well.
- Length: 1420'
- Operating pressure: <140 psi.
- Fresh water will be purchased from a 3rd party
- Please see Exhibit K for proposed route

8. Construction Material

If possible, native caliche will be obtained from the excavation of drill site. The primary way of obtaining caliche will be by "turning over" the location. This means caliche will be obtained from the actual well site. A caliche permit will be obtained from BLM prior to pushing up any caliche. 2400 cu yds is the max amount of caliche needed for pad and roads. Amount will vary for each pad. The procedure below has been approved by BLM personnel:

- The top 6 inches of topsoil is pushed off and stockpiled along the side of the location.
- An approximate 120' x 120' area is used within the proposed well site to remove caliche.
- Subsoil is removed and piled alongside the 120' by 120' area within the pad site.
- When caliche is found, material will be stockpiled within the pad site to build the location and road.
- Then subsoil is pushed back in the hole and caliche is spread accordingly across entire location and road.
- Once well is drilled, the stockpiled top soil will be used for interim reclamation and spread along areas where caliche is picked up and the location size is reduced. Neither caliche nor subsoil will be stockpiled outside of the well pad. Topsoil will be stockpiled along the edge of the pad as depicted in Exhibit D – Rig Layout Diagram.

In the event that no caliche is found onsite, caliche will be hauled in from BLM-approved caliche pit.

11. Methods of Handling Waste

- Drilling fluids, produced oil, and water from the well during drilling and completion operations will be stored safely and disposed of properly in a NMOCD approved disposal facility.
- Garbage and trash produced during drilling and completion operations will be collected in a trash container and disposed of properly at a state approved disposal facility. All trash on and around well site will be collected for disposal.
- Human waste and grey water will be properly contained and disposed of properly at a state approved disposal site.
- After drilling and completion operations, trash, chemicals, salts, frac sand and other waste will be removed and disposed of properly at a state approved disposal site.
- The well will be drilled utilizing a closed loop system. Drill cuttings will be properly disposed of into steel tanks and taken to an NMOCD approved disposal facility.

12. Ancillary Facilities:

No camps or airstrips to be constructed.

13. Well Site Layout:

- Exhibit D: Rig Layout
- Exhibit D-2: Well Site layout plat
- Mud pits in the closed circulation system will be steel pits and the cuttings will be stored in steel containment pits.
- Cuttings will be stored in steel pits until they are hauled to a state-approved disposal facility.
- If the well is a producer, those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements. Exhibit D-1: Interim Reclamation Diagram.

14. Interim and Final Reclamation

- Rehabilitation of the location will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.
- In areas planned for interim and final reclamation, surfacing materials will be removed and returned to a mineral pit or recycled to repair or build roads and well pads.
- Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These
 may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After
 the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent
 possible. Revegetation procedures will comply with BLM standards.
- If the well is a dry hole, the pad and road area will be re-contoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.
- Should the well be a producer, those areas of the location not essential to production facilities and operations will be reclaimed and seeded per BLM requirements. Exhibit D-1 illustrates the proposed Interim Reclamation.

15. Surface Ownership:

- The wellsite is on surface owned by Bureau of Land Management, 620 E Greene St, Carlsbad, NM 88220, 575-234-5972.
- A copy of Surface Use Agreement has been given to the surface owner.
- The land is used mainly for farming, cattle ranching, recreational use, and oil and gas production.

16. Other Information:

- Topography consists of a sloping plane with loose tan sands. Vegetation is mainly yucca, mesquite and shin oak.
- Archeological survey will be conducted for the well pad/location and proposed road and the arch report will be filed with the BLM.
- There are no known dwellings within 1½ miles of this location.

17. On Site Notes and Information:

Onsite with BLM (Jeff Robertson) & Cimarex (Barry Hunt) on March 28, 2017. Locations were moved 500' east due to rancher water pipeline (Lisa Ogden) and large drainage area. 500' E/W x 560' N/S pad. V-Door East. Top soil east. Interim reclamation: All sides. Construct a ditch and berm along the entire north side of pad to divert drainages and run-off around the NW corner of pad. E-line staked from SW corner, west, to tie-in to approved and not yet built E-line at Scoter 6 Fed #3H. Gas lift/Production line staked from NE corner, north, then west, to parallel the #2H lines, to the battery. SCOTER EAST 6-31 FEDERAL COM CTB Center Point = 1310 FSL & 2136 FEL, Sec. 6, T. 25S R. 27E Top soil north (Seed in place). Access road NE corner and NW corner to the north to the #2H lease road. E-line to north to existing line. 400' x 400' pad.



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT



Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO **Produced Water Disposal (PWD) Location:** PWD surface owner: Lined pit PWD on or off channel: Lined pit PWD discharge volume (bbl/day): Lined pit specifications: Pit liner description: Pit liner manufacturers information: Precipitated solids disposal: Decribe precipitated solids disposal: Precipitated solids disposal permit: Lined pit precipitated solids disposal schedule: Lined pit precipitated solids disposal schedule attachment: Lined pit reclamation description: Lined pit reclamation attachment: Leak detection system description: Leak detection system attachment: Lined pit Monitor description: Lined pit Monitor attachment: Lined pit: do you have a reclamation bond for the pit? Is the reclamation bond a rider under the BLM bond? Lined pit bond number: Lined pit bond amount: Additional bond information attachment:

PWD disturbance (acres):

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

PWD disturbance (acres):

PWD disturbance (acres):

Injection well type: Injection well number: Assigned injection well API number? Injection well new surface disturbance (acres): Minerals protection information: **Mineral protection attachment: Underground Injection Control (UIC) Permit?**

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location: PWD surface owner: Surface discharge PWD discharge volume (bbl/day): Surface Discharge NPDES Permit? Surface Discharge NPDES Permit attachment: Surface Discharge site facilities information: Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location: PWD surface owner: Other PWD discharge volume (bbl/day): Other PWD type description: Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

Injection well name:

Injection well API number:

PWD disturbance (acres):

PWD disturbance (acres):



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB001188

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Bond Info Data Report

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment: