Form 3160-5 (June 2015) UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT					FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2018 5. Lease Serial No.				
Do not use thi	NOTICES AND REPO s form for proposals to I. Use form 3160-3 (AP	drill or to re	-enter an		6. If Indian, Allottee or Tribe Name				
			HOBBS	OCD	7 If Unit or CA/Agree	mont Nom	a and/or No		
SUBMIT IN 1	2018	7. If Unit or CA/Agreement, Name and/or No.							
1. Type of Well ☑ Oil Well □ Gas Well □ Oth		8. Well Name and No. JULIET FEDERAL COM 1H							
2. Name of Operator CENTENNIAL RESOURCE P		9. API Well No. 30-025-43385-00-X1							
3a. Address 1001 17TH STREET SUITE 1 DENVER, CO 80202	o. (include area code) 99-1482	ode) 10. Field and Pool or Exploratory Area RED HILLS-BONE SPRING, NORTH							
4. Location of Well (Footage, Sec., T		11. County or Parish, State							
Sec 22 T24S R34E NENW 40		LEA COUNTY, NM							
12. CHECK THE AF	PPROPRIATE BOX(ES)	TO INDICA	TE NATURE O	F NOTICE,	REPORT, OR OTH	IER DAT	ГА		
TYPE OF SUBMISSION			TYPE OF	FACTION					
Notice of Intent	Acidize	Dee	epen	Product	tion (Start/Resume)	U Wat	er Shut-Off		
Subsequent Report	Alter Casing		draulic Fracturing	Reclam			l Integrity		
	□ Casing Repair □ Change Plans	_	w Construction	Recomp			Onshore Order Varian		
☐ Final Abandonment Notice	Convert to Injection		g and Abandon g Back	U Water I	rarily Abandon ce				
Attach the Bond under which the wor following completion of the involved testing has been completed. Final Al determined that the site is ready for f Centennial is submitting this s is proposing using a 5M annu Please see the attached Well	l operations. If the operation re bandonment Notices must be fi inal inspection. sundry to request a variar lar, rather than a 10M an	esults in a multipled only after all note to the 10M	le completion or reco requirements, inclué	ompletion in a ling reclamation	new interval, a Form 316 on, have been completed a	0-4 must b	e filed once		
If you have any questions, ple	ease feel free to contact u	S.	SEE	ATTA	CHED FOR				
CONDITIONS OF ADDDOVAT						AT.			
OCD I									
 I hereby certify that the foregoing is Con 	true and correct. Electronic Submission # For CENTENNIAL nmitted to AFMSS for proc	397171 verifie RESOURCE F essing by PR	d by the BLM We RODUCTION, set SCILLA PEREZ o	II Information nt to the Hot n 12/18/2017	n System bbs (18PP0372SE)				
Name(Printed/Typed) MELISSA	ALUKE		Title SR. RE	GULATORY	ANALYST				
Signature (Electronic S	lectronic Submission) Date 12/06/2017								
	THIS SPACE F	OR FEDER	AL OR STATE	OFFICE U	SE				
			THEFTER			D	40/00/0047		
Approved By_ZQTA_STEVENS Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.			TitlePETROLEUM ENGINEER Date 12/20/2017 Office Hobbs Date 12/20/2017						
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent	U.S.C. Section 1212, make it a	crime for any p s to any matter v	erson knowingly and	willfully to m	ake to any department or	agency of	the United		
(Instructions on page 2) ** BLM REV	ISED ** BLM REVISE	D ** BLM R	EVISED ** BLN		D ** BLM REVISE	D **			

Centennial Resource Development - Well Control Plan

Component	OD (inches)	Preventer	RWP
Drillpipe	4	Upper VBR: 3.5 – 5.5	10M
		Lower VBR: 3.5 - 5.5	
Heavyweight Drillpipe	4	Upper VBR: 3.5 – 5.5	10M
		Lower VBR: 3.5 – 5.5	
Drill collars and MWD tools	4 3/4	Upper VBR: 3.5 – 5.5	10M
		Lower VBR: 3.5 - 5.5	
Mud Motor	4 3/4	Upper VBR: 3.5 – 5.5	10M
		Lower VBR: 3.5 – 5.5	
Production Casing	5.5 & 5	Upper VBR: 3.5 – 5.5	10M
		Lower VBR: 3.5 – 5.5	
All	0-135/8	Annular	5M
Open-hole	-	Blind rams	10M

A. Component and Preventer Compatibility Table

VBR = Variable Bore Rams

RWP = Rated Working Pressure

MWD = Measurement While Drilling (directional tools)

B. Well Control Procedures

I. General Procedures While Drilling:

- 1. Sound alarm (alert crew).
- 2. Space out drill-string.
- 3. Shut down pumps and stop rotary.
- 4. Open HCR
- 5. Shut-in well utilizing upper VBRs.
- 6. Close choke
- 7. Confirm shut-in.

8. Notify rig manager and Centennial company representative.

9. Call Centennial drilling engineer

- 10. Read and record
 - I. Shut-in drillpipe pressure (SIDPP) and shut-in casing pressure (SCIP).
 - II. Pit gain
 - III. Time
- 11. Regroup, identify forward plan

II. General Procedure While Tripping

- 1. Sound alarm (alert crew).
- 2. Stab full opening safety valve and close
- 3. Space out drillstring.
- 4. Open HCR
- 5. Shut-in well utilizing upper VBRs
- 6. Close choke
- 7.Confirm shut-in.
- 8. Notify rig manager and Centennial company representative.

9. Call Centennial drilling engineer

- 10. Read and record:
 - I. SIDPP AND SICP
 - II. Pit gain
 - III. Time
- 11. Regroup and identify forward plan.

III. General Procedure While Running Casing

1. Sound alarm (alert crew)

- 2. Stab full opening safety valve and close
- 3. Space out string.
- 4. Open HCR
- 5. Shut-in well utilizing upper VBRs.
- Close choke
- 7. Confirm shut-in.
- 8. Notify rig manager and Centennial company representative.

9. Call Centennial drilling engineer

- 10. Read and record:
 - I. SIDPP AND SICP
 - II. Pit gain
 - III. Time
- 11. Regroup and identify forward plan.

IV. General Procedure With No Pipe In Hole (Open Hole)

- 1. Sound alarm (alert crew)
- 2. Open HCR
- 3. Shut-in with blind rams
- 4. Close choke
- 5. Confirm shut-in
- 6. Notify rig manager and Centennial company representative.
- 7. Call Centennial drilling engineer
- 8. Read and record:
 - I. SIDPP AND SICP
 - II. Pit gain
 - III. Time
- 9. Regroup and identify forward plan.

V. General Procedures While Pulling BHA Thru BOP Stack

- 1. Prior to pulling last joint of drillpipe thru stack:
 - I. Perform flow check, if flowing
 - a. Sound alarm, alert crew
 - b. Stab full opening safety valve and close
 - c. Space out drillstring with tool joint just beneath the upper pipe ram.
 - d. Open HCR
 - e. Shut-in utilizing upper VBRs
 - f. Close choke
 - g. Confirm shut-in
 - h. Notify rig manager and Centennial company representative.
 - i. Call Centennial drilling engineer
 - j. Read and record:
 - i. SIDPP and SICP
 - ii. Pit gain
 - iii. Time
 - II. Regroup and identify forward plan
- 2. With BHA in the BOP stack and compatible ram preventer and pipe combo immediately available:
 - a. Sound alarm, alert crew
 - b. Stab full opening safety valve and close
 - c. Space out drillstring with tool joint just beneath the upper pipe ram.
 - d. Open HCR
 - e. Shut-in utilizing upper VBRs
 - f. Close choke
 - g. Confirm shut-in
 - h. Notify rig manager and Centennial company representative.
 - i. Call Centennial drilling engineer
 - j. Read and record:
 - i. SIDPP and SICP
 - ii. Pit gain
 - iii. Time
 - II. Regroup and identify forward plan

- 3. With BHA in the BOP stack and no compatible ram preventer and pipe combo immediately available:
 - I. Sound alarm, alert crew.
 - II. If possible to pick up high enough, pull string clear of the stack and follow Open Hole (III) scenario.
 - III. If impossible to pick up high enough to pull the string clear of the stack:
 - a. Stab crossover, make up one joint/stand of drill pipe and full opening safety valve and close.
 - b. Space out drillstring with tool joint just beneath the upper pipe ram.
 - c. Open HCR
 - d. Shut-in utilizing upper VBRs.
 - e. Close choke
 - f. Confirm shut-in
 - g. Notify rig manager and Centennial company representative.
 - h. Call Centennial drilling engineer
 - i. Read and record:
 - i. SIDPP and SICP
 - ii. Pit gain
 - iii. Time
 - IV. Regroup and identify forward plan.

** If annular is used to shut-in well and pressure builds to OR is expected to get to 50% of RWP, confirm space-out and swap to upper VBRs for shut-in.

PECOS DISTRICT CONDITIONS OF APPROVAL

All pervious COAs still apply expect the following: TABLE OF CONTENTS

Special Requirements

Communitization Agreement Lesser Prairie-Chicken Timing Stipulations

Drilling

Cement Requirements H2S Requirements Logging Requirements Waste Material and Fluids

I. SPECIAL REQUIREMENT(S)

Communitization Agreement

A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales. In addition, the well sign shall include the surface and bottom hole lease numbers. If the Communitization Agreement number is known, it shall also be on the sign. If not, it shall be placed on the sign when the sign is replaced.

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken:

Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

II. DRILLING

A. DRILLING OPERATIONS 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)
 - 🛛 Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

- 1. Hydrogen Sulfide has been reported as a hazard in formations deeper than the proposed depth. It is recommended that monitoring equipment be onsite for potential Hydrogen Sulfide. If Hydrogen Sulfide is encountered, report measurements and formations to the BLM.
- 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. If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.
- 3. 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 is located, this does not include the dog house or stairway area.
- 4. 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.

B. CASING

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.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) for Water Basin:

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.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possibility of water flows in the Salado and Castile. Possibility of lost circulation in the Red Beds, Rustler, and Delaware.

- 1. The **13 3/8** inch surface casing shall be set at approximately **1270** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, set casing at least 25 feet above the salt.
 - 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 is to include the lead cement slurry.
 - 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.

Formation below the 13 3/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe and the mud weight for the bottom of the hole. Report results to BLM office.

2. The minimum required fill of cement behind the 7 5/8 inch intermediate casing is:

Cement to surface. If cement does not circulate see B.1.a, c-d above.

Formation below the 7-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office. Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

The 5-1/2 inch production casing shall be set at 11500 feet.

- 3. The minimum required fill of cement behind the $5-1/2 \ge 5$ inch production casing is:
 - a. Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. Additional cement maybe required. Excess cement calculates only -12%.
- 4. 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.

C. 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 53.
- 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.
- 1. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
- 2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **10,000 (10M)** psi.

Variance approved to use a 5M annular. The annular must be tested to full working pressure (5000 psi.)

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. Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.
 - e. 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.
- 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. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.
 - c. 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.
 - d. The results of the test shall be reported to the appropriate BLM office.
 - 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 if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. 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.

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