Form 3160-5 (June 2015)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31 201

SUNDRY Do not use th	NOTICES AND REPOR' is form for proposals to di II. Use form 3160-3 (APD)	TS ON WING BBS		Lease Serial No. NMNM15317 If Indian, Allottee o	r Tribe Name
		AUG 1 9	2019 7	If Unit or CA/Agree	ement, Name and/or No.
SUBMITIN	TRIPLICATE - Other instru	• •	1		
Type of Well     Gas Well □ Otl	ED 8	Well Name and No. VALIANT 24 FED	COM 714H		
Name of Operator     EOG RESOURCES INC     Contact: EMILY FOLLIS     E-Mail: emily_follis@eogresources.com				. API Well No. 30-025-46228-0	0-X1
3a. Address 1111 BAGBY SKY LOBBY2 HOUSTON, TX 77002				10. Field and Pool or Exploratory Area UNKNOWN	
4. Location of Well (Footage, Sec., 7	., R., M., or Survey Description)		1	1. County or Parish, S	State
Sec 24 T25S R32E NWSE 20 32.114433 N Lat, 103.624496		LEA COUNTY, I	NM		
12. CHECK THE AI	PPROPRIATE BOX(ES) T	O INDICATE NATURE	OF NOTICE, RI	EPORT, OR OTH	IER DATA
TYPE OF SUBMISSION		ТҮРЕ (	OF ACTION		
- Nation of Land	☐ Acidize	☐ Deepen	□ Production	(Start/Resume)	☐ Water Shut-Off
☑ Notice of Intent	☐ Alter Casing	☐ Hydraulic Fracturing	Reclamatio	n	■ Well Integrity
☐ Subsequent Report	☐ Casing Repair	■ New Construction	☐ Recomplete	е	Other
☐ Final Abandonment Notice	☐ Change Plans	□ Plug and Abandon	☐ Temporaril	y Abandon	Change to Original A PD
_	☐ Convert to Injection	☐ Plug Back	☐ Water Disp	osal	10
determined that the site is ready for f EOG respectfully requests an changes: Well number change from 604 Target formation change from BHL change to T-25-S R-32-E	amendment to our approve IH to 714H Third Bone Spring Sand to	Wolfcamp agg	_	s 0-09 sz	59309P, UPR WC
14. I hereby certify that the foregoing is	Electronic Submission #47	7113 verified by the BLM W		/stem	
	nmitted to AFMSS for process	1			
Name (Printed/Typed) BEN HOC	HER	Title REGU	LATORY ASSO	<u>C.</u>	<del></del>
Signature (Electronic S	Submission)	Date 08/07/	2019		
	THIS SPACE FOR	FEDERAL OR STATE	OFFICE USE		
Approved By JEROMY PORTER		TitlePFTROI	EUM ENGINEEI	<del></del>	Date 08/09/2019
Conditions of approval, if any, are attache certify that the applicant holds legal or equivalent would entitle the applicant to conductive the applicant to conduct the applicant the applicant to conduct the applicant to conduct the applicant to conduct the applicant to conduct the applicant the applicant to conduct the applicant the ap	d. Approval of this notice does no uitable title to those rights in the su	t warrant or			
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent				to any department or	agency of the United

(Instructions on page 2)
\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*



#### Revisions to Operator-Submitted EC Data for Sundry Notice #477113

**Operator Submitted** 

APDCH SR

NMNM15317 Lease:

Agreement:

Sundry Type:

Operator:

EOG RESOURCES INC PO BOX 2267 MIDLAND, TX 79702 Ph: 432-636-3600

Admin Contact:

EMILY FOLLIS SR REGULATORY ADMINISTRATOR E-Mail: emily\_follis@eogresources.com

Ph: 432-636-3600

**Tech Contact:** 

BEN HOCHER REGULATORY ASSOC.

E-Mail: Ben\_Hocher@eogresources.com

Ph: 432-636-3600

Location:

State:

LEA COUNTY County:

Field/Pool:

97903 WC-025 G-08 S253235

Well/Facility:

VALIANT 24 FED COM 714H Sec 24 T25S R32E 2048FSL 1423FEL

**BLM Revised (AFMSS)** 

APDCH NOI

NMNM15317

EOG RESOURCES INC 1111 BAGBY SKY LOBBY2 HOUSTON, TX 77002 Ph: 7136517000

EMILY FOLLIS SR REGULATORY ADMINISTRATOR E-Mail: emily\_follis@eogresources.com

Ph: 432-636-3600

BEN HOCHER REGULATORY ASSOC. E-Mail: Ben\_Hocher@eogresources.com

Ph: 432-636-3600

NM LEA

UNKNOWN

VALIANT 24 FED COM 714H Sec 24 T25S R32E NWSE 2048FSL 1423FEL 32.114433 N Lat, 103.624496 W Lon

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

HOBBS OCD

AUG 1 2 2019

RECEIVED

**OPERATOR'S NAME:** 

EOG RESOURCES, INC.

LEASE NO.: | NMNM015317

WELL NAME & NO.: **SURFACE HOLE FOOTAGE:** 

Valiant 24 FED COM 714H 2048' FSL & 1423' FEL

BOTTOM HOLE FOOTAGE

100' FSL & 1650' FEL

LOCATION:

Section 24, T. 25 S., R 32 E., NMPM

**COUNTY:** Lea County, New Mexico

COA

H2S	<b>C</b> Yes	€ No	
Potash	• None	Secretary	<b>ℂ</b> R-111-P
Cave/Karst Potential	€ Low		<b>C</b> High
Variance	○ None	Flex Hose	○ Other
Wellhead	Conventional	Multibowl	<b>○</b> Both
Other		Capitan Reef	<b>□</b> WIPP
Other	Fluid Filled	Cement Squeeze	Pilot Hole
Special Requirements	■ Water Disposal	<b>▼</b> COM	□ Unit

#### All Previous COAs Still Apply, Except for the Following:

#### A. CASING

- 1. The 9-5/8 inch surface casing shall be set at approximately 1045 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - 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 8 hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - 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.

## Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

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

Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage.

#### **First Stage**

• Operator will cement to 7,521 feet with intent to reach the top of Brushy Canyon.

#### **Second Stage**

• Operator will perform bradenhead squeeze. Cement to surface. If cement does not circulate see B.1.a, c-d above.

# Operator has proposed to pump down 9-5/8" X 7-5/8" annulus. Operator must run Echo-meter to verify fluid top and the volume of displacement fluid above the cement slurry in the annulus.

- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

#### **B. 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. BOP Break Testing is not permitted on this well.
- 3. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.
  - 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.

#### C. SPECIAL REQUIREMENT (S)

#### **Communitization Agreement**

- The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

JJP08092019

### **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)
  - \( \text{Chaves and Roosevelt Counties} \)
     \( \text{Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.} \)
     \( \text{During office hours call (575) 627-0272.} \)
     \( \text{After office hours call (575)} \)

  - ☐ Lea County
    Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)

- 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 2<sup>nd</sup> 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.
- 2. Wait on cement (WOC) for Potash Areas: 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 24 hours. WOC time will be recorded in the driller's log.

- 3. 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 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.
- 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.
- 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: 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. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
  - 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. 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.
  - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength.

whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

- 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. The results of the test shall be reported to the appropriate BLM office.
- f. 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.
- g. 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.
- h. 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.

#### 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.