Form 3160-5 (August 2007)

## **UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

ogp Artasia 2012

FORM APPROVED OMB No 1004-0137 Expires July 31, 2010

5. Lease Serial No. MMM-0556863

SUNDRY NOTICES AND REPORTS ON WENDS CD ARTES And Indian, Allottee or Tribe Name

	Use Form 3160-3 (A							
SUBMIT IN TRIPLICATE – Other instructions on page 2.					7 If Unit of CA/Agreement, Name and/or No NM70992X			
1. Type of Well					8 Well Name and No			
Oil Well Gas Well Other					Nash Unit #51H			
2 Name of Operator XTO Energy Inc.					9. API Well No. 30-015-38365			
3a. Address 200 N. Loraine, Ste 800, Midland, TX 79701	3b. Phone No. (		(include area cod	· · · · · · · · · · · · · · · · · · ·				
				Nash Draw, Brushy Canyon				
4 Location of Well (Footage, Sec., TR., M., or Survey Description) SURFACE LOCATION 660' FSL & 210' FWL Sec. 18, T23S, R30-E, UL-M BOTTOMHOLE LOCATION: 1980' FNL & 340' FWL Sec. 14, 23S, 29E (E)					11. Country or Parish, State Eddy County, New Mexico			
12. CHEC	K THE APPROPRIATE BO	X(ES) TO INDI	CATE NATURE	E OF NOTIC	CE, REPORT OR C	THER I	DATA	
TYPE OF SUBMISSION			TY	PE OF ACT	ION			
Notice of Intent			n re Treat	_	Production (Start/Resume) Water Shut-Off Reclamation Well Integrity			
Subsequent Report	Casing Repair  Change Plans	=	Construction and Abandon		mplete porarily Abandon		Other	
Final Abandonment Notice	Convert to Injection	Plug E			r Disposal			
Attach the Bond under which the v following completion of the involv testing has been completed. Final determined that the site is ready for Change in Plans - 7" casing DV Too	ed operations. If the operation Abandonment Notices must be final inspection )	on results in a mi oe filed only afte	ultiple completio r all requirement	n or recomp	letion in a new inte	rval, a F	Form 3160-4 must be filed once	
This Sundry is being submitted for a to alleviate the loss circulation and a Other changes to the cement progra	pproval to place the DV to annular pack off problems	ool at 4750' ± in	the 7" casing v		SEE AT	ГАСІ	HED FOR	ıpt
Stage 1 cement around the shoe     With Stage 2 cement, through the annulus from 4750' - 4000'     Reduce circulating rate through D	- the Lead cement volume DV Tool at 4750', the Lea				CONDIT aCem-H slurry	ION	S OF APPROVAL	
Most recently with the DV Tool at 55 opened and circulation begins; the closing suspended in the annulus. State casing because the suspended cerrors	cement (above the DV Too age 2 cement volumes are	ol) is lifted toward then pumped a	rds the surface and the DV Too	During this closed. S	s procedure circu tage 3 cement ca t squeezing in the	lation ha	as been lost with the cement e pumped down the 7" x 9-5/	
XTO Energy recommends these init	•	ate this issue.	<b>^</b>	Klad	e 8/3/12			
14 I hereby certify that the foregoing is to Name (Printed/Typed) Chip Amrock	Title Senior D	NM	d for record 10CD neer	NPF	ROVEU			
Signature (hp (m	rock		Date 07/19/20	)12	15	<u>n</u>	25 2012	

Title 18 U S C Section 1001 and Title 43 U S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

Office

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

PETROLEUM ENGIN

entitle the applicant to conduct operations thereon

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

Approved by

## CONDITIONS OF APPROVAL

OPERATOR'S NAME: | XTO Energy Inc.

LEASE NO.: NMNM556863

WELL NAME & NO.: Nash Unit #51H SURFACE HOLE FOOTAGE: 660' FSL & 210' FWL BOTTOM HOLE FOOTAGE 660' FSL & 340' FEL

LOCATION: Section 18, T. 23 S., R 30 E., NMPM

COUNTY: | Eddy County, New Mexico

# Original COA still applies with the following changes:

## A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

# **⊠** Eddy County

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

- 1. Due to recent H2S encounters in the salt formation, it is recommended that monitoring equipment be onsite for potential Hydrogen Sulfide prior to drilling out the surface shoe. If Hydrogen Sulfide is encountered, please report measurements and formations to the BLM.
- 2. 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) will 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. 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.).

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

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. 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.

R-111-P Potash High cave/karst Possible lost circulation in the Delaware and Bone Spring formations.

- 1. The 13-3/8 inch surface casing shall be set at approximately 225 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. This casing must not be set in the salt since that is not a competent formation and Onshore Order II requires casing to be set across a competent formation. If the salt is penetrated the casing is to be set 25 feet above the salt. Fresh water mud to setting depth, brine mud below.
  - 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.					
2.	The m	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. Casing is required to be set a minimum of 100' below the salt and not more than 600' below the salt. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to R-111-P potash area and cave/karst.					
3.	The m	ninimum required fill of cement behind the 7 inch production casing is:					
	a.	First stage to DV tool at, cement shall:					
	×	Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.					
	b.	Second stage above DV tool at, cement shall:					
	×	Cement to 4000'. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to R-111-P potash area and cave/karst.					
	c.	Third stage pump down 7" x 9-5/8", cement shall:					
		Cement from surface to 4000'. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to R-111-P potash area and cave/karst.					
-	-	to shall run a CBL on the 7 inch casing from setting depth to surface to evaluate revised cement job					
4.	The m	ninimum required fill of cement behind the 4-1/2 inch production liner is:					
		No cement required; operator is using the Halliburton swell packer completion system. Liner tie-back of 150 feet is approved.					
. 5.		dband drill pipe is rotated inside casing, returns will be monitored for metal. If 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.

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

### 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 RP 53 Sec. 17.
- 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.
  - a. For surface casing only: If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.
- 3. 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. Operator is using a 5M and testing as a 3M.
- 4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. 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.
  - a. 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 (18 hours) or potash (24 hours) prior to initiating the test.
  - b. The results of the test shall be reported to the appropriate BLM office.
  - c. 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.
  - d. 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.

## 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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