

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
NMOIL CONSERVATION  
ARTESIA DISTRICT

OCD-ARTESIA

FORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*5. Lease Serial No.  
NMNM01119 ✓

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

NM94450x

8. Well Name and No.  
AVALON DELAWARE UNIT 546 ✓9. API Well No.  
30-015-24048 ✓10. Field and Pool or Exploratory Area  
AVALON UNIT

11. County or Parish, State

EDDY COUNTY, NM

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

RECEIVED

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other: INJECTION2. Name of Operator  
XTO ENERGY, INCContact: STEPHANIE RABADUE  
E-Mail: stephanie\_rabadue@xtoenergy.com3a. Address  
500 W. ILLINOIS ST STE 100  
MIDLAND, TX 797013b. Phone No. (include area code)  
Ph: 432-620-6714

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 31 T20S R28E Mer NMP 1980FSL 1980FEL ✓

## 12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input checked="" type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

XTO Energy, Inc. would like to perform a casing repair with the following procedure:

1. MIRU. Set equipment. NU 5K BOPE. PT & FT BOPE.
2. TIH w/ mule shoe cplg, 1 jt tbg & RBP. Wrk thru parted csg @ 1,856'. Set RBP below TOC @ 3,980'. Spot 4 sxs sand on top of RBP.
3. Load csg and attempt to circulate to surface. TOH. If unable to circ well we may need to shoot squeeze holes @ 3,950' & spot cement fr/3,950' ? 3,027'. Note; Open hole fr/9-5/8' shoe @ 3,027' TOC @ 3,980'.
4. Obtain exception for single barrier well control from manager.
5. ND BOPE. ND tubing head. If csg is landed on a mandrel then NU 11? BOPE. Pull casing. If casing is landed in slips then spear casing & pull slips. Casing weight 32,000#. Strip on 11? BOPE.
6. MIRU casing crew & LD machine. TOH & LD casing.

APPROVED

SEE ATTACHED FOR  
CONDITIONS OF APPROVALSUBJECT TO LIKE  
APPROVAL BY STATEJC 11-8-17  
Accepted for record - NMOCD

14. I hereby certify that the foregoing is true and correct. Electronic Submission #390616 verified by the BLM Well Information System For XTO ENERGY, INC, sent to the Carlsbad	
Name (Printed/Typed) STEPHANIE RABADUE	Title REGULATORY ANALYST
Signature (Electronic Submission)	Date 10/03/2017

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <i>Paul R. Swartz</i> 10/23/2017	Title TPET	Date
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.		BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE
Office		

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.

(Instructions on page 2)

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

**Additional data for EC transaction #390616 that would not fit on the form**

**32. Additional remarks, continued**

7. Inspect parted casing and determine what is best way to repair. If threads are backed off we may want to go in with a mule shoed cplg & screw back into casing. If csg appears to have corrosion we may want to go in and either do a chemical back-off or chemical cut.
8. TIH casing patch & new casing. Set slips & or land casing in a mandrel.
9. NU tubing head.
10. PT csg to 500 psig w/chart.
11. TIH on-off tl. Circ sand off top of RBP. Rls RBP. TOH.

## **Conditions of Approval**

**XTO Energy, INC.  
Avalon Delaware Unit - 546, API 3001524048  
T20S-R28E, Sec 31, 1980FSL & 1980FEL  
October 23, 2017**

- 1. Within 90 days of these conditions of approval for the processed Electronic Submission #390616 notice of intent begin wellbore operations**
- 2. Operator is required to have the BLM approved NOI procedure with applicable conditions of approval on location for this workover operation.**
- 3. Pull csg from just above 3980, run a belled lead splice just below a DV Tool on new 5 1/2" 17# J55 LT&C csg and circulate cement to surface.**
- 4. Approval is for casing replacement only, prior to P&A or installing a liner BLM approval of a notice of intent Form 3160-5 sundry is required.**
- 5. Well is located within the Capitan Reef protection area requiring 4 casing strings, with cement covering the production casing 50 feet above the Capitan Reef top.**
- 6. Well also is located within the High Cave Karst protection area requiring cement circulated to surface over two casing strings.**
- 7. Subject to like approval by the New Mexico Oil Conservation Division.**
- 8. After the casing replacement attach to a [pswartz@blm.gov](mailto:pswartz@blm.gov) email an electronic copy (Adobe Acrobat Document) cement bond log record from 8900' or below to top of cement taken with 0psig casing pressure.**
- 9. Surface disturbance beyond the existing pad shall have prior approval.**
- 10. A closed loop system is required. The operator shall properly dispose of drilling/circulating contents at an authorized disposal site. Tanks are required for all operations, no excavated pits.**
- 11. Functional H<sub>2</sub>S monitoring equipment shall be on location.**
- 12. Blow Out Prevention Equipment 3000 (3M) to be used. All BOPE and workover procedures shall establish fail safe well control. Ram(s) for the work string(s) used is required equipment. Manual BOP closure system including a blind ram and pipe ram(s) designed to close on all (hand wheels or automatic locking devices) equipment installed regardless of BOP design. Function test the installed BOPE to 500psig when well conditions allow. Related equipment, (choke manifolds, kill trucks, gas vent or flare lines, etc.) employed when needed for reasonable well control requirements.**
- 13. All waste (i.e. trash, salts, chemicals, sewage, gray water, etc.) created by work over 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. Portojohns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.**

14. After setting the top plug and before perforating, **perform a charted casing integrity test from 8900' to 1200psig minimum.** Document the pressure test on a one hour full rotation calibrated (within 6 months) recorder chart registering within 25 to 85 per cent of its full range. **Verify all annular casing vents are plumbed to the surface and open during this pressure test. Call BLM 575-200-7902 and arrange for a BLM witness of that pressure test.** Include a copy of the chart in the subsequent sundry for this workover.
15. File intermediate **subsequent sundry** Form 3160-5 within 30 days of any interrupted workover procedures and a complete workover subsequent sundry.
16. Submit the BLM Form 3160-4 **Recompletion Report** within 30 days of the date all BLM approved procedures are complete.

#### **Well with a Packer - Operations**

- 1) Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established. Repair that seal when replacing more than five barrels of packer fluid within 30 days.
- 2) The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with minimum 200 psig differential between tubing and casing pressure (at test time) but no more than 70% of casing burst pressure as described by Onshore Order 2.III.B.1.h. (The tubing or reservoir pressure may need reduced). Verify all annular casing vent valves are open to the surface during this pressure test.
- 3) Document the pressure test on a one hour full rotation calibrated (within 6 months) recorder chart registering within 25 to 85 per cent of its full range. Greater than 10% pressure leakoff viewed as a failed MIT. Less than 10% pressure leakoff will be evaluated site specifically and may restrict injection approval.
- 4) Arrange 24 hours before the test for BLM to witness. In Eddy County, phone 575-361-2822. Leave a voice mail or email with the API#, workover purpose, and a contact information.
- 5) Relate the MIT activity on subsequent Sundry Form 3160-5. Include a copy of the recorded MIT pressure chart. List the name of the BLM witness, and date of notification. NMOCD may retain the original recorded MIT chart.
- 6) Submit a (Sundry Form 3160-5) subsequent report (daily reports) describing all wellbore activity and Mechanical Integrity Test. Include workover activity, and the setting depths and descriptions of installed equipment.
- 7) NMOCD Administrative Order compliance required. Submit documentation of that authorization.
  - a) Approved injection pressure compliance is required.
  - b) If injection exceeds the approved pressure you are required to reduce that pressure.
  - c) When injection pressure is within 50 psig of the maximum pressure, install automation equipment that will prevent exceeding that maximum. Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment within 30 days.

- 8) Report unexplained significant variations of rate or pressure within 5 days of notice.
- 9) Monitor the casing/tubing annulus for communication with injection fluid or loss of casing integrity. A BLM inspector may request verification of a full annular fluid level at any time.
- 10) Maintain the annulus full of packer fluid at atmospheric pressure. Installation of equipment that will display continuous open to the air packer fluid level above the casing vent is required for this disposal well.**
- 11) Notify the BLM's authorized officer ("Paul R. Swartz" <[pswartz@blm.gov](mailto:pswartz@blm.gov)>, cell phone 575-200-7902) before injection begins to arrange for approval of the annular monitoring system.**
- 12) Loss of packer fluid above five barrels per month indicates a developing problem. Notify BLM Carlsbad Field Office, Petroleum Engineering within 5 days.
- 13) A suggested format for monthly records documenting that the casing annulus is fluid filled is available from the BLM Carlsbad Field Office.

Operator: XTO Energy, Inc.

Surface Lease: NM01119

Case No: NM94450x

Subsurface Concerns for Casing Designs:

Well Status: SWD

Spud date: 8/7/1982

Plug'd Date:

Reentry Date:

BHL: NM01119  
Unit Agreement

Well: AVALON DELAWARE UNIT-546

API: 3001524048

@ Srfce: T20S-R28E,31.1980s1980e

@ M TD: T20S-R28E,31.1980s1980e

Estate: FIF

CWDW, R of W:

OCD Admn Order, date: SWD-469, 04/08/92

Frmtn, Depths, psig: Wolfcamp, 1800psig

KB: 3249

GL: 3231

Corr: 18

08/09/82

590, 17.5"hole, 13.375"54.5# J55 ST&C csg, Mix 600sx circ 120sx

(980 T Capitan)

1856 Leaks or casing part?

3027, 12.25"hole, 9.625" 36# K55 LT&C csg, Mix 1250sx circ 150sx

3980 TOC temp

(4876 Bone Springs)

4938 DV Tool

???? TOC

(8994 Wolfcamp)

<9004-130>

(9704 Cisco)

(10039 Strawn)

(10366 Atoka)

(10736 Morrow)

(11452 Barnett)

(11753 Mississippian)

11820PBD

11901, 8.75"hole, 5.5" 20# L80 LT&C csg,, 1780sx total thru DV Tool(s), circ 34sx

DV Tool(s)@: 4938, STG#-5xCirc: #1-0, #2-0

10/03/82

Diagram last updated: 10/11/2017