

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED  
OMB NO 1004-0135  
Expires July 31, 2010**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.*

DEC 28 2011

Bureau of Land Management  
Farmington Field Office**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1 Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5 Lease Serial No NMNM03554
2 Name of Operator XTO ENERGY INC		6 If Indian, Allottee or Tribe Name
3a Address 382 ROAD 3100 AZTEC, NM 87410		7 If Unit or CA/Agreement, Name and/or No
3b Phone No (include area code) Ph: 505-333-3164		8 Well Name and No BREECH C 244G
4 Location of Well (Footage, Sec, T, R, M, or Survey Description) Sec 14 T26N R6W 660FNL 945FWL 36.492690 N Lat, 107.442910 W Lon		9 API Well No 30-039-30652-00-X1
		10 Field and Pool, or Exploratory Multiple--See Attached
		11 County or Parish, and State RIO ARriba COUNTY, NM

## 12. CHECK 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"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
BP	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

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 shall 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 shall be filed once testing has been completed. Final Abandonment Notices shall 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. received verbal approval on 12/22/2011 from Troy Saylers w/BLM @ 11:00 a.m. and from Brandon Powell w/NMOCD @ 1:30 p.m. to proceed with the attached remedial cement procedure.

RCVD DEC 30 '11

OIL CONS. DIV.

DIST. 3

**BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS**

14. I hereby certify that the foregoing is true and correct	
Electronic Submission #126694 verified by the BLM Well Information System For XTO ENERGY INC, sent to the Farmington Committed to AFMSS for processing by TROY SALYERS on 12/28/2011 (12TLS0073SE)	
Name (Printed/Typed) DOLENA (DEE) JOHNSON	Title REGULATORY COMPLIANCE TECH
Signature (Electronic Submission)	Date 12/22/2011

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By TROY SALYERS	Title PETROLEUM ENGINEER	Date 12/28/2011
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.		Office Farmington

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.

\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*

NMOCD 4

MTG: \_\_\_\_\_  
TWD: \_\_\_\_\_

**BREECH C #244G**  
**Sec. 14, T 26 N, R 6 W**  
**Rio Arriba County, New Mexico**  
**December 22, 2011**

**Dakota, Mancos, Mesaverde Completion**

**AFE#:** DK: 808354, MC: 808355, MV: 808357

**API#:** 30-039-30652

**Formation:** Basin Dakota, Mancos, Mesaverde

**Surface Casing:** 8-5/8", 24# J-55 csg 0' to 504'. Cemented with 370 sx Class G cmt (15.2#, 1.21 cu ft/sk, Circ 30 bbls to surface.

**Production Casing:** 5-1/2", 17# S-90 csg 0' to 7,756', DV tool at 6,328'. PBTD 7,664'. Cement 1st stage w/250 sx cmt. Circ 14 bbls cmt. DV tool failed during Cmt Job and doesn't PT. TOC 5,850' CBL. Sqz perfs at 5,770'. Squeeze with 675sx foamed 50/50poz and 100 sx 50/50 poz cmt. TOC 5,280' CBL Capacity = 0.6528 gal/ft = 0.0155 bbl/ft. Internal Yield = 7,740 psig, 90% 6,966 psig, **Max pressure 80% 5,000 psig**. CBP at 5,290'

**Purpose:** Remedial cement, Frac Mesaverde and DHC

**Remedial Cement Job:**

1. **Notify BLM at least 24 hours in advance of plans to conduct remedial cement operations at (505)-599-8907 so that a BLM representative can witness remedial cement operations. If you don't hear from an inspector contact BLM Engineer Troy Salyers at (505)-360-9815.**
2. MIRU PU, ND WH, NU BOP
3. MIRU WL RU Full lubricator and WL.
4. PT to 2,000 psig. Perforate squeeze holes with a 3-1/8" select fire csg gun from 5,160' to 5,161' with 4 JSPF, 90 deg phasing (Titan pcg 3111-311BH or similar, 11 gm charges, 0.5" dia., 15" penetration, 4holes).
5. Attempt to establish circulation with rig pump and 2% KCL water, monitoring TCA for pressure. Report injection rate, injection pressure and TCA pressures to XTO engineering department. Contact HES cementing for cement volumes.
6. TIH with 5-1/2" Composite Cement retainer(CCR), 2-3/8" tbg to 5,090'. Set CCR at 5,090'
7. MIRU cement crew, and materials. Establish injection rate. Squeeze perforation at 5,160'.

8. Pump cement as follows:  
200 SK 50/50 POZ W/ 0.2% Versaset + 0.2% Halad 9. Mix cement at 13.5 ppg, yield 1.28 ft<sup>3</sup>/sk, mix water 5.4 gal/sk
- A. NU Halliburton Cement head.
  - B. Pump 25 bbls fresh water w/ clayfix II
  - C. Pump 200 sx at a rate of 4 bpm to 2 bpm.
  - D. Displace with 19 bbls fresh water, 1 bbls short of cement retainer.
  - E. Unsting from cement retainer, pull 1 joint 2-3/8" tbg reverse circulate. TOH with 2-3/8"
  - F. WOC min 12 hours.
  - G. TIH with 4-7/8 Bit and scraper drill out cement retainer, cement and CO to CBP at 5,900'
  - H. Schedule an 8 caliper sector CBL to evaluate cement bond and/or TOC.
  - I. RDMO cement equipment.
9. Evaluate temp survey and CBL, send in to BLM and NMOCD. **Minimum TOC requirements are 1050' (50' above Nacimiento formation top).** If additional remedial cement work is necessary discuss plans with BLM and NMOCD. Once remedial cement meets regulatory requirements **continue with Mesaverde frac.**

**Mesaverde Frac:**

10. ND WH, NU frac valve. PT frac valve to 5,000 psig. Release pressure. **Insure Surface equipment is rated for 5,000 psig working pressures**
11. MIRU WLU. RU full lubricator.
12. RIH with 5-1/2" CBP and set at 5,590', be sure not to set in casing collars (5,562' and 5,607'). PT to 2,000 psig. Perforate Mesaverde with a 3-1/8" select fire csg gun with 1 JSPF (Owen HSC-3125-302 or similar, 10 gm charges, 0.34" dia., 21.42" penetration, 28 holes). **Perforate first hole with 2,000 psig on casing.** POH with csg gun. RDMO WLU. Correlate Mesaverde depths with Weatherford Compact Triple Combo Quicklook log dated October 17, 2011.

#### Mesaverde Perforations

PERF	CCL	PERF	CCL	PERF	CCL	PERF	CCL
5,160'		5,270'		5,296'		5,355'	
5,162'		5,272'		5,298'		5,363'	
5,164'		5,276'		5,300'		5,367'	
5,247'		5,282'		5,302'		5,417'	
5,249'		5,284'		5,330'		5,421'	
5,262'		5,289'		5,332'		5,429'	
5,264'		5,291'		5,353'		5,432'	

13. MIRU frac and acid equip.
14. Review Quality Assurance Tests and review that required water, chemicals, sand are available for job. Perform bucket tests. Discuss job execution with service company to insure that everyone is on the same game plan.
15. Hold Safety meeting.
16. BD Mesaverde perfs with 2% KCl water and EIR. Acidize with 1,000 gals of 15% NEFE HCl acid (FE control, surf & Cl additives) + 40 – 1.1 SG Green bioball ball sealers at 12 BPM down 5-1/2" csg. Max TP 4,500 psig. Flush with 5,500 gals 2% KCl water. Surge off balls. Wait 30 min for bio-balls to begin dissolving. Begin N2 cool down.

17. Frac the Mesaverde perfs from 5,160' – 5,432' down 5-1/2" casing at 35 BPM with 104,283 foam gals 70Q, N2 foamed, 25 lbs XL gelled, 2% KCl water (Delta 200) carrying 65,000 lbs 20/40

Preferred rock sand & 25,000 lbs SLC sand. Flush with 4,950 gals 2% KCL water (two bbl short top perf). Record ISIP, 5 min, 10 min, 15 min SIP. (Run foamer at 5 gal/M) **Max pressure 5,000 psig.**

**Mesaverde Nitrogen Frac Schedule:**

Stage	Rate (BPM)	Fluid	Stage Foam Volume (gal)	Stage Fluid Volume (gal)	Proppant Conc (ppg)	Stage Proppant Total (lbs)	Cum Proppant Total (lbs)	Proppant Type
Load & Break	5	2% KCL	5,000	5,000				
Acid	5	15% NEFE	1,500	1,500				
Flush	10	2% KCL	5,500	5,500				
Pad	35	25# 70Q XL N2	20,000	6,000	0	0	0	
0.25#	35	25# 70Q XL N2	10,000	3,034	0.25	2500	2500	20/40 Preferred rocks
0.5#	35	25# 70Q XL N2	10,000	3,068	0.5	5000	7500	20/40 Preferred rocks
0.75#	35	25# 70Q XL N2	10,000	3,102	0.75	7500	15000	20/40 Preferred rocks
1#	35	25# 70Q XL N2	10,000	3,136	1	10000	25000	20/40 Preferred rocks
2#	35	25# 70Q XL N2	11,000	3,599	2	22000	47000	20/40 Preferred rocks
3#	35	25# 70Q XL N2	6,000	2,045	3	18000	65000	20/40 Preferred rocks
3#	35	25# 70Q XL N2	8,333	2,840	3	25000	90000	20/40 SLC
Flush	35	2% KCL water	4,950	4,950	0	0		
		Total	104,283	45,774				

**65,000 lbs 20/40 preferred rock sand, 25,000 lbs 20/40 SLC and 1,402 MSCF N2 DH**

18. RDMO Frac crew.
19. SWI 4 hours or overnight to allow SLC to setup.
20. MIRU Flow back equipment. Open well up and flow back well thru a choke manifold to flowback tank overnight or until well loads up. Start with 8/64" ck. Increase choke size as appropriate.
21. MIRU PU and AFU.
22. ND frac vlv & WH. NU BOP.
23. TIH with 4-3/4" bit, SN & 2-3/8" tbg.
24. CO frac sand and DO CIBP's at 5,900', and CO to PBTd 7,664'. Circ clean..
25. RDMO AFU.
26. TOH with tubing, SN, bit
27. TIH with NC, SN and 231 jts 2-3/8", 4.7#, J-55 EUE 8rd tubing. Land EOT at ±7,400', SN at ±7,399'. ND BOP. NU WH.
28. RU swab. Swab well until clean fluid is obtained and well kicks off.
29. Open well up and flow back well thru a choke manifold to flowback tank until nitrogen dissipates and no sand appears to be flowing. Start with 8/64" ck. Increase choke size as appropriate.

30. RDMO PU. Flow and test well as necessary.
31. Verify that Test allowable C-104 "Green Completion" is approved, Schedule 1st delivery so that the well can be delivered once sellable gas is producing.
32. Report rates and pressures to Matt Gusdorf.

**REGULATORY REQUIREMENTS:**

1. NOI to BLM with completion changes, remedial cement changes, and operation time frame.
2. CBL to BLM after remedial cement job
3. Completion Reports to BLM & NMOCD
4. Test allowable C-104, Final C-104

**SERVICES:**

1. Rig/AFU
2. Frac Crew
3. Perforating CO
4. Frac Valve CO
5. Cement CO

**EQUIPMENT LIST:**

**12 – 400 bbls Frac Tanks filled with 2% KCL water**

**231 - jts 2-3/8" 4.3# J-55 Tbg.**

**Halliburton frac liner & 2 jts 2-7/8" N-80 tbg**

**Contact list :**

XTO Office:	505-333-3100
Jerry Schlenz	505-330-3246
Danny Thomson	505-793-6964
Daniel Carney	505-215-2685
Vic Morrow	505-486-4993
Matt Gusdorf	505-320-1228