

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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.*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other: COAL BED METHANE		5. Lease Serial No. NMSF078899
2. Name of Operator XTO ENERGY INC		6. If Indian, Allottee or Tribe Name
3a. Address ENGLEWOOD, CO 80155		7. If Unit or CA/Agreement, Name and/or No. NMNM119486
3b. Phone No. (include area code) Ph: 505-333-3215		8. Well Name and No. BERGER A 2S
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 21 T26N R11W SESE 665FSL 775FEL 36.468136 N Lat, 108.003126 W Lon		9. API Well No. 30-045-32985-00-S1
		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
		11. County or Parish, and State SAN JUAN 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 type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" 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 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. intends to plug and abandon this well per the attached procedure and will be using a Closed Loop System. Please also see the attached current and proposed wellbore diagrams.

**OIL CONS. DIV DIST. 3**

**JAN 11 2016**

Approved as to plugging  
of the well bore. Liability  
under bond is retained until  
surface restoration is completed.

Notify NMOCD 24 hrs  
prior to beginning  
operations

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**



**H<sub>2</sub>S POTENTIAL EXIST**

14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #326262 verified by the BLM Well Information System For XTO ENERGY INC, sent to the Farmington Committed to AFMSS for processing by JACK SAVAGE on 01/04/2016 (16JWS0076SE)	
Name (Printed/Typed) RHONDA SMITH	Title REGULATORY CLERK
Signature (Electronic Submission)	Date 12/14/2015

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By JACK SAVAGE	Title PETROLEUM ENGINEER	Date 01/04/2016
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**

*RV*

*9*



BRB \_\_\_\_\_  
MTG \_\_\_\_\_  
Approved \_\_\_\_\_

**Berger A #2S**  
**Sec 21, T 26 N, R 11 W**  
**San Juan County, New Mexico**  
**12/11/2015**

**Plug and Abandon Procedure**

**AFE Number:** 1507770  
**Spud Date:** 3/11/2006  
**Surface Casing:** 9-5/8", 36#, J-55 csg @ 242'. Cmt'd w/210 sx. Circ 23 bbls cmt to surf.  
**Intermediate Casing:** 7", 20#, J-55 csg @ 1,382'. Cmt'd w/185 sx. Circ 14 bbls cmt to surf.  
**Production Casing:** 4-1/2", 11.6#, J-55 csg @ 3,022'. Cmt'd w/20 sx. Did not circ cmt to surf.  
*Capacity: .0155 bbls/ft or .6528 gal/ft*  
**Production Tubing:** 2-3/8" string  
**Perforations:** Fruitland Coal: 1,751' – 2,955'  
**PBTD:** 3,017'  
**Recent Production:** 0 mcfpd, 0 bwpd, 0 bopd (INA).  
**Note:** Communication between intermediate and production casing string found on BH test

*\*Notify NMOCD & BLM 24 hours prior to beginning plugging operations\**

1. Check for COA's and approved NOI before beginning operations.
2. Test rig anchors.
3. Set flowback tank.
4. MIRU completion rig. Review JSA.
5. Kill well.
6. TOH & LD rods and pump.
7. ND WH. NU & FT BOP.
8. TOH tubing.
9. TIH 3-7/8" bit & 3-7/8" string mill to 1,150' MD. TOH.
10. TIH 4-1/2" CR and set @  $\pm 1,100'$  TVD or  $\pm 1,105'$  MD. PT tubing. Sting out of CR and circulate hole clean.
11. PT casing and CR to 550 psig. If casing does not test, contact engineer.
12. MIRU cement truck. Review JSA.

*\*If Casing does not pressure test. All plugs must be tagged until a successful test.\**

13. **Perforation Isolation Plug (1,100' TVD – 1,050' TVD):** Pump 8 sx Class "B" cement (15.6 ppg, 1.18 cuft/sx yield) down tubing and spot a plug from 1,100' TVD – 1,050' TVD (volume calculated with 50' excess). WOC. Tag plug.
14. **Fruitland Top Plug (950' – 834'):** Perforate 3 squeeze holes at 950'. Establish injection rate into squeeze holes. Set 4-1/2" CICR at 900'. Pump 36 sx Class "B" cement (15.6 ppg, 1.18 cuft/sx yield). Squeeze 23 sx outside casing and leave 13 sx inside casing from 950' – 834' (volume calculated with 50' excess inside and 100% excess). WOC. Tag plug.
15. **Kirtland and Ojo Alamo Top Plug (574' – 360'):** Perforate 3 squeeze holes at 574'. Establish injection rate into squeeze holes. Set 4-1/2" CICR at 524'. Pump 63 sx Class "B" cement (15.6 ppg, 1.18 cuft/sx yield). Squeeze 43 sx outside casing and leave 20 sx inside casing from 574' – 960' (volume calculated with 50' excess inside and 100% excess). WOC. Tag plug.
16. Attempt to pressure test casing fr/574' – surface. If casing doesn't pressure test, tag subsequent plugs.
17. **Surface Casing Shoe & Surface Plug (292' – Surface):** Perforate 3 squeeze holes at 292'. Establish injection rate into squeeze holes. Pump 84 sx Class "B" cement (15.6 ppg, 1.18 cuft/sx yield). Squeeze 58 sx outside casing and leave 26 sx inside casing from 292' – surface (volume calculated with 50' excess inside and 100% excess).
18. RDMO WLU.
19. RDMO cement truck.
20. WOC 4 hours.
21. Cut off WH. Fill in casing as needed with cement. Install above ground P&A marker.
22. Cut off anchors and reclaim location.

## Checklist

### Regulatory:

1. NOI to P&A on form C-103
2. Submit a post-work sundry on form C-103 which details the P&A work and location work within 30 days of completing all required restoration work.

### Equipment:

1. 1 flowback tank
2. 3 – 4-1/2" cement retainers
3. 191 sx Class "B" cement
4. 1 above ground marker

### Services:

1. Completion rig
2. Cement truck

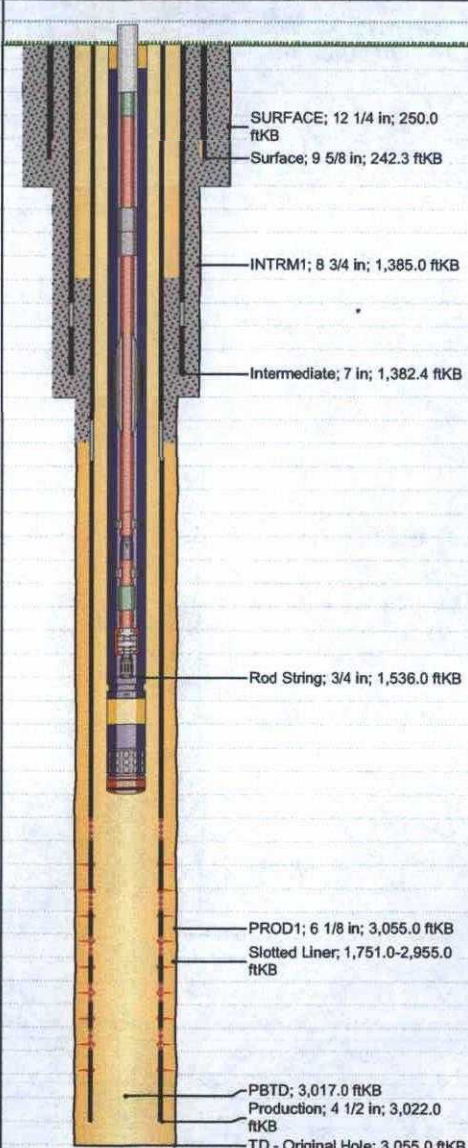




## Downhole Well Profile - with Schematic

Well Name: Berger A 02S

API/UWI 30045329850000	XTO Accounting ID 68314	Permit Number	State/Province New Mexico	County San Juan
Location T26N-R11W-S21	Spud Date 3/11/2006 00:00	Original KB Elevation (ft) 6,241.00	Ground/Corrected Ground Elevation (ft) 6,228.00	KB-Ground Distance (ft) 13.00

MD (ftKB)	TVD (ftKB)	Incl (°)	Vertical schematic (actual)
9.8	9.8	0.0	
21.0	21.0	0.1	
42.0	42.0	0.2	
242.5	242.4	0.9	
341.9	341.8	0.7	
516.1	516.0	0.6	
1,340.9	1,290.2	47.5	
1,380.9	1,314.7	52.7	
1,384.8	1,317.1	53.2	
1,417.0	1,336.8	57.3	
1,422.2	1,339.8	58.0	SURFACE; 12 1/4 in; 250.0 ftKB Surface; 9 5/8 in; 242.3 ftKB  INTRM1; 8 3/4 in; 1,385.0 ftKB  Intermediate; 7 in; 1,382.4 ftKB  Rod String; 3/4 in; 1,536.0 ftKB  PROD1; 6 1/8 in; 3,055.0 ftKB Slotted Liner; 1,751.0-2,955.0 ftKB  PBTD; 3,017.0 ftKB Production; 4 1/2 in; 3,022.0 ftKB TD - Original Hole; 3,055.0 ftKB
1,491.1	1,369.2	67.9	
1,516.4	1,379.9	71.5	
1,518.0	1,380.4	71.6	
1,536.1	1,385.0	73.0	
1,548.6	1,388.2	73.9	
1,585.6	1,397.7	76.7	
1,738.2	1,424.9	82.9	
1,751.0	1,426.1	84.1	
2,016.4	1,435.1	87.4	
2,291.0	1,437.2	90.0	
2,610.6	1,438.7	89.4	
2,885.2	1,440.3	90.2	
3,020.3	1,440.2	89.5	
3,055.1	1,440.5	89.5	

Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)	Top (ftKB)	Btm (ftKB)
Sucker Rod w/Molded Guides	3/4		D	2	50.00	1,441.0	1,491.0
Shear Tool - 21K	3/4			1	0.50	1,491.0	1,491.5
Sucker Rod w/Guides	3/4		97	1	25.00	1,491.5	1,516.5
Lift Sub	1			1	1.00	1,516.5	1,517.5
Spiral Rod Guide	3/4			1	0.50	1,517.5	1,518.0
Rod Insert Pump	1 1/2			1	12.00	1,518.0	1,530.0
Gas Anchor	3/4			1	6.00	1,530.0	1,536.0

Other In Hole				
Run Date	Des	OD (in)	Top (ftKB)	Btm (ftKB)

Perforations			
Date	Top (ftKB)	Btm (ftKB)	Zone
	1,751.0	2,955.0	Fruitland Coal, Original Hole

Stimulations & Treatments						
Frac #	Top Perf (ftKB)	Bottom Perf (ftKB)	AIR (bbl/min)	MIR (bbl/min)	TWP (bbl)	Total Proppant (lb)





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MD (ftKB)	TVD (ftKB)	Incl (°)	Vertical schematic (actual)
9.8	9.8	0.0	
21.0	21.0	0.1	
42.0	42.0	0.2	
242.5	242.4	0.9	
341.9	341.8	0.7	
516.1	516.0	0.6	
1,340.9	1,290.2	47.5	
1,380.9	1,314.7	52.7	
1,384.8	1,317.1	53.2	
1,417.0	1,336.8	57.3	
1,422.2	1,339.8	58.0	
1,491.1	1,369.2	67.9	
1,516.4	1,379.9	71.5	
1,518.0	1,380.4	71.6	
1,536.1	1,385.0	73.0	
1,548.6	1,388.2	73.9	
1,585.6	1,397.7	76.7	
1,738.2	1,424.9	82.9	
1,751.0	1,426.1	84.1	
2,016.4	1,435.1	87.4	
2,291.0	1,437.2	90.0	
2,610.6	1,438.7	89.4	
2,885.2	1,440.3	90.2	
3,020.3	1,440.2	89.5	
3,055.1	1,440.5	89.5	

Wellbores							
Wellbore Name Original Hole		Parent Wellbore Original Hole		Wellbore API/UWI			
Start Depth (ftKB)		Profile Type		Kick Off Depth (ftKB)			
13.0							
Section Des	Size (in)	Act Top (ftKB)		Act Btm (ftKB)			
SURFACE	12 1/4	13.0		250.0			
INTRM1	8 3/4	250.0		1,385.0			
PROD1	6 1/8	1,385.0		3,055.0			
Zones							
Zone Name	Top (ftKB)	Btm (ftKB)		Current Status			
Fruitland Coal	1,751.0	2,955.0					
Casing Strings							
Csg Des	Set Depth (ftKB)	OD (in)	Wt/Len (lb/ft)	Grade			
Surface	242.3	9 5/8	36.00	J-55			
Intermediate	1,382.4	7	20.00	J-55			
Production	3,022.0	4 1/2	11.60	J-55			
Cement							
Des	Type		String				
Surface Casing Cement	Casing		Surface, 242.3ftKB				
Intermediate Casing Cement	Casing		Intermediate, 1,382.4ftKB				
Production Casing Cement	Casing		Production, 3,022.0ftKB				
Tubing Strings							
Tubing Description Tubing - Production		Run Date 2/20/2013		Set Depth (ftKB) 1,586.0			
Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)	Top (ftKB)	Btm (ftKB)
Tubing Sub	2 3/8	4.70	J-55	1	8.10	13.0	21.1
Tubing	2 3/8	4.70	J-55	46	1,514.85	21.1	1,536.0
Seat Nipple	2 3/8			1	0.75	1,536.0	1,536.7
Tubing Sub	2 3/8	4.70	J-55	1	12.00	1,536.7	1,548.7
Tubing	2 3/8	4.70	J-55	1	32.90	1,548.7	1,581.6
Perforated Sub	2 3/8			1	4.10	1,581.6	1,585.7
Bull Plug	2 3/8			1	0.30	1,585.7	1,586.0
Rod Strings							
Rod Description Rod String		Run Date 2/20/2013			Set Depth (ftKB) 1,536.0		
Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)	Top (ftKB)	Btm (ftKB)
Polished Rod	1 1/4			1	16.00	10.0	26.0
Rod Sub	3/4		D	3	16.00	26.0	42.0
Sucker Rod	3/4		D	12	300.00	42.0	342.0
4-Sinker Bars w/5 - 7/8 stbs	1 1/4		C	4	120.00	342.0	462.0
2-Sinker Bars w/1 - 7/8 stbs	1 1/4		C	2	54.00	462.0	516.0
Sucker Rod w/Molded Guides	3/4		D	37	925.00	516.0	1,441.0

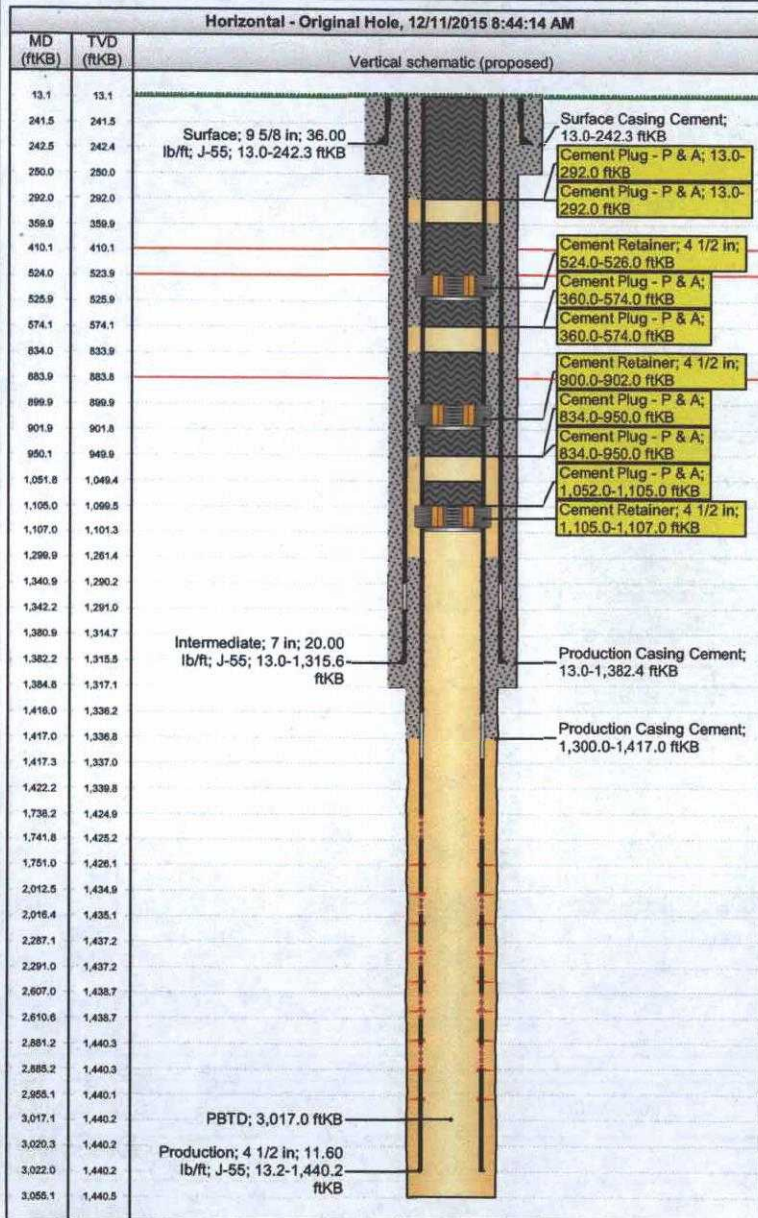




# XTO - Proposed P&A Wellbore Diagram

Well Name: Berger A 02S

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Location T26N-R11W-S21	Spud Date 3/11/2006 00:00	Original KB Elevation (ft) 6,241.00	Ground/Corrected Ground Elevation (ft) 6,228.00	KB-Ground Distance (ft) 13.00



Des	OD (in)	Top (ftKB)	Blm (ftKB)
Cement Retainer	4 1/2	900.0	902.0
Cement Retainer	4 1/2	524.0	526.0

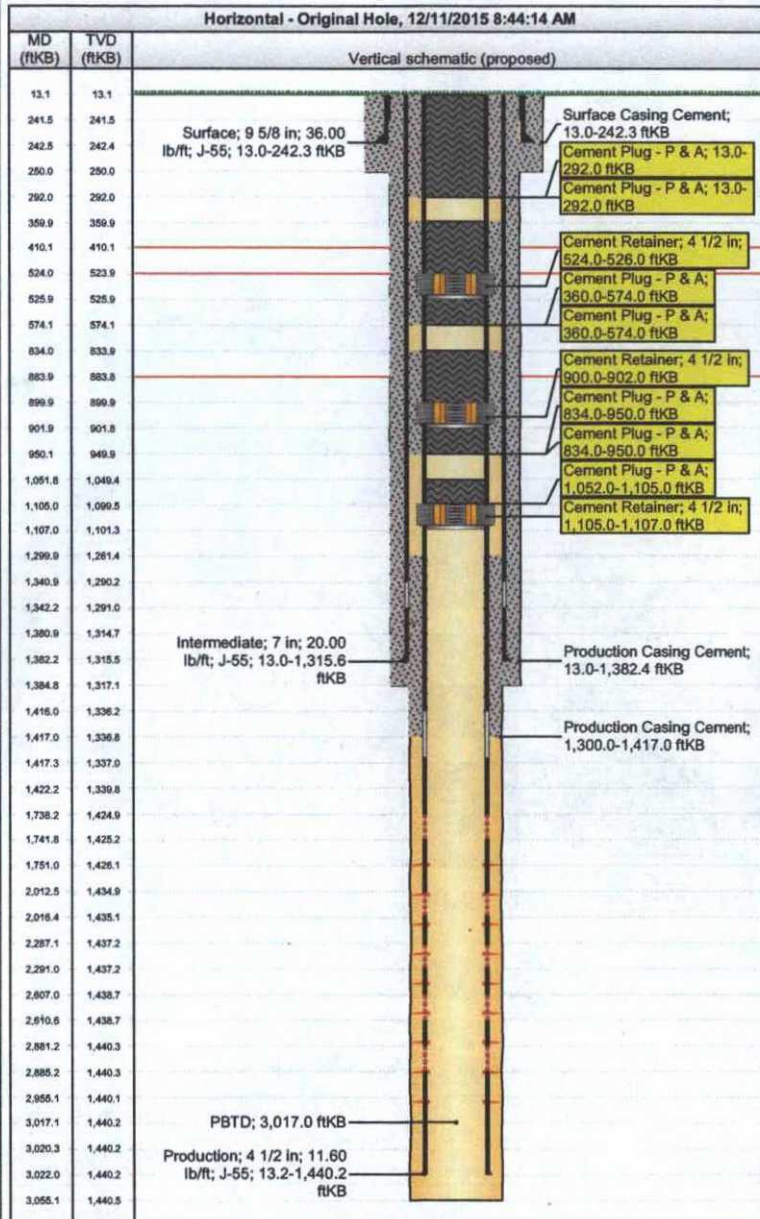




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Location T26N-R11W-S21	Spud Date 3/11/2006 00:00	Original KB Elevation (ft) 6,241.00	Ground/Corrected Ground Elevation (ft) 6,228.00	KB-Ground Distance (ft) 13.00



Formations				
Formation Name Nacimiento	Final Top MD (ftKB) 13.0	Final Bottom MD (ftKB) 410.0		
Formation Name Ojo Alamo	Final Top MD (ftKB) 410.0	Final Bottom MD (ftKB) 524.0		
Formation Name Kirtland	Final Top MD (ftKB) 524.0	Final Bottom MD (ftKB) 884.0		
Formation Name Fruitland Coal	Final Top MD (ftKB) 884.0	Final Bottom MD (ftKB)		
Wellbores				
Wellbore Name Original Hole		Parent Wellbore Original Hole		
Start Depth (ftKB) 13.0	Profile Type	Kick Off Depth (ftKB)		
Casing Strings				
Csg Des	Set Depth (ftKB)	OD (in)	Wt/Len (lb/ft)	Grade
Surface	242.3	9 5/8	36.00	J-55
Intermediate	1,382.4	7	20.00	J-55
Production	3,022.0	4 1/2	11.60	J-55
Cement				
Des	Type	String	Com	
Surface Casing Cement	Casing	Surface, 242.3ftKB		
Production Casing Cement	Casing	Production, 3,022.0ftKB		
Intermediate Casing Cement	Casing	Intermediate, 1,382.4ftKB		
Cement Plug - P & A	Plug	Production, 3,022.0ftKB	Plug 1: Pump 8 sx f/1,105' MD (1,100' TVD) to 1,052' MD (1,050' TVD)	
Cement Plug - P & A	Casing	Production, 3,022.0ftKB	Plug 2: (outside) Pump 23 sx f/950' - 834'	
Cement Plug - P & A	Plug	Production, 3,022.0ftKB	Plug 2: (inside) Pump 13 sx f/950' - 834'	
Cement Plug - P & A	Casing	Production, 3,022.0ftKB	Plug 3: (outside) Pump 43 sx f/574' - 360'	
Cement Plug - P & A	Plug	Production, 3,022.0ftKB	Plug 3: (inside) Pump 20 sx f/574' - 360'	
Cement Plug - P & A	Casing	Production, 3,022.0ftKB	Plug 4: (outside) Pump 58 sx f/292' - surf	
Cement Plug - P & A	Plug	Production, 3,022.0ftKB	Plug 4: (inside) Pump 26 sx f/292' - surf	
Perforations				
Date	Top (ftKB)	Btm (ftKB)	Zone	
	1,751.0	2,955.0	Fruitland Coal, Original Hole	
Other In Hole				
Des	OD (in)	Top (ftKB)	Btm (ftKB)	
Cement Retainer	4 1/2	1,105.0	1,107.0	



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
FARMINGTON DISTRICT OFFICE  
6251 COLLEGE BLVD.  
FARMINGTON, NEW MEXICO 87402

Attachment to notice of  
Intention to Abandon:

Re: Permanent Abandonment  
Well: Berger A 2S

CONDITIONS OF APPROVAL

1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."

2. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 564-7750.

3. The following modifications to your plugging program are to be made:

- a) Set plug #2 (1270-1170) ft. inside/outside to cover the Fruitland top. BLM picks top of Fruitland at 1220 ft.
- b) Set Plug #3 (607-367) ft. inside/outside to cover the Kirtland and Ojo Alamo tops. BLM picks top of Kirtland at 557 ft. BLM picks top of Ojo Alamo at 417 ft.

H<sub>2</sub>S has not been reported in this section, however, low concentrations of H<sub>2</sub>S (11 ppm – 27 ppm GSV) have been reported in wells within a 1 mile radius of this location.

Operator must run a CBL to verify cement top. Submit the electronic copy of the log for verification to the following addresses: [jwsavage@blm.gov](mailto:jwsavage@blm.gov) [tsalyers@blm.gov](mailto:tsalyers@blm.gov) [Brandon.Powell@state.nm.us](mailto:Brandon.Powell@state.nm.us)

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements.

Office Hours: 7:45 a.m. to 4:30 p.m.