Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

FORM APPROVED
OMB NO. 1004-013:
Expires: July 31, 201

5. Lease Serial No. NMSF079232

	HO HOLD AND INLI				THIOTOTOLOL		
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.					6. If Indian, Allottee or Tribe Name		
SUBMIT IN TRIPLICATE - Other instructions on reverse side. 1. Type of Well Gas Well Other					7. If Unit or CA/Agreement, Name and/or No. 8. Well Name and No. BOLACK C LS 16A		
3a. Address ENGLEWOOD, CO 80155	3b. Phone No. (include Ph: 505-333-3206			10. Field and Pool, or Exploratory BLANCO MESAVERDE OTERO CHACRA			
4. Location of Well (Footage, Sec., T	1)	100		11. County or Parish, and State			
Sec 33 T27N R8W NESE 156 36.527210 N Lat, 107.681820				SAN JUAN CO	UNTY, NM		
12. CHECK APPI	ROPRIATE BOX(ES) TO	O INDICATE NATU	JRE OF	NOTICE, REPO	RT, OR OTHE	R DATA	
TYPE OF SUBMISSION		,	TYPE O	F ACTION			
D Notice of Latent	☐ Acidize	☐ Deepen		☐ Production (Start/Resume)	☐ Water Shut-Off	
Notice of Intent ■ Notice of Intent	☐ Alter Casing	☐ Fracture Tre	eat	☐ Reclamation	1	☐ Well Integrity	
☐ Subsequent Report	☐ Casing Repair	■ New Constr	uction	☐ Recomplete		Other	
☐ Final Abandonment Notice	☐ Change Plans	☑ Plug and Al	oandon	□ Temporarily	Abandon		
BP	☐ Convert to Injection	☐ Plug Back		☐ Water Disposal			
ATO Energy Inc. requests to p System will be used. Please s Per Onshore Order 1 Sec. III.I	olug and abandon this we see attached Current and					ONS. DIV DIST. 3	
that was approved with this we plan/s on record.	ells original APD. The atta Notify NMO Prior to be	ached plan will super	rsede/rep	olace all other	E OF THIS	OV 09 2015	
SEE ATTACH	IFD FOR	ions ACTION I	OOES NO	T RELIEVE THE	LESSEE AND		
		OPERATO	DR FROM	A OBTAINING AN REQUIRED FOR	OPERATIONS		
CONDITIONS OF	APPROVAL	ON FEDE	RAL ANI	D INDIAN LANDS			
14. I hereby certify that the foregoing is	true and correct. Electronic Submission # For XTO B	321254 verified by the	BLM We	ell Information Sys	stem		
Cor	For XTO I mmitted to AFMSS for pro	ENERGY INC, sent to cessing by JACK SAV	the Farm	ington 11/03/2015 (16JW	S0023SE)		
Name (Printed/Typed) KRISTEN	D LYNCH	Title	REGUI	LATORY ANALY	ST		
Signature (Electronic S	Submission)	Date	10/23/2	2015	Y. W. 11		
	THIS SPACE FO	OR FEDERAL OR	STATE	OFFICE USE			
Approved By_JACK_SAVAGE		TitleP	ETROLE	EUM ENGINEER		Date 11/03/201	
onditions of approval, if any, are attached trify that the applicant holds legal or equals the would entitle the applicant to condu	itable title to those rights in the	not warrant or e subject lease	Farming				

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **



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.

LWA	
MTG	
Approved _	

PLUG AND ABANDONMENT PROCEDURE

June 25, 2014

Bolack C LS #16A

	Blanco Mesaverde / Otero Chacra
	1565' FSL, 1025' FEL, Section 33, T27N, R8W, San Juan County, New Mexico
	API 30-045-26662 / Lat: N Long: W
ote:	All cement volumes use 100% excess outside pipe and 50' excess inside. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class B, mixed at 15.6 ppg with a 1.18 cf/sx yield.
1.	Install and test location rig anchors. Comply with all NMOCD, BLM, and Operator safety regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. Record casing, tubing and bradenhead pressures. NU relief line and blow down well. Kill well with water as necessary and at least pump tubing capacity of water down the tubing. ND wellhead and NU BOP. Function test BOP.
2.	Rods: YesX, No, Unknown, Size2-3/8", Length5585' Packer: Yes, NoX_, Unknown, Type If well has rods or a packer, then modify the work sequence in Step #2 as appropriate. Round tri 4.5" gauge ring to 5162'
3.	Plug #1 (Mesaverde perforations and top, 5162' – 4498'): TIH and set 4.5" cement retainer at 5162'. Load casing with water and circulate well clean. Pressure tests tubing to 1000#. Mix 55 sxs Class B cement above CR to isolate the Mesaverde interval. TOH.
4.	Plug #2 (Chacra perforations and top, 3786' – 3736'): TIH and set 4.5" cement retainer at 3786'. Load casing with water and circulate well clean. Pressure test casing to 1000#. If the casings do not test, then spot or tag subsequent plugs as appropriate. Mix 8 sxs Class B cement above CR to isolate the Chacra interval. PUH.
5.	Plug #3 (7" shoe, 4.5" liner top and Pictured Cliffs top, 3400' – 2819'): Mix and pump 60 sxs Class B cement and spot a balanced plug inside casing to cover through the Pictured Cliff top. PUH
6.	Plug #4 (Fruitland, Kirtland, and Ojo Alamo top, 2663' – 2095'): Mix and pump 116 sxs Class B cement and spot a balanced plug inside casing to cover through the Ojo Alamo top. PUH.

 Plug #6 (Surface plug, 368' - Surface): Mix and pump approximately 79 sxs cement and spot a balanced plug inside casing. Shut in well and WOC.

7. Plug #5 (Nacimiento top, 890' - 790'): Mix and pump 29 sxs Class B cement and spot a

balanced plug inside casing to cover the Nacimiento top. PUH.

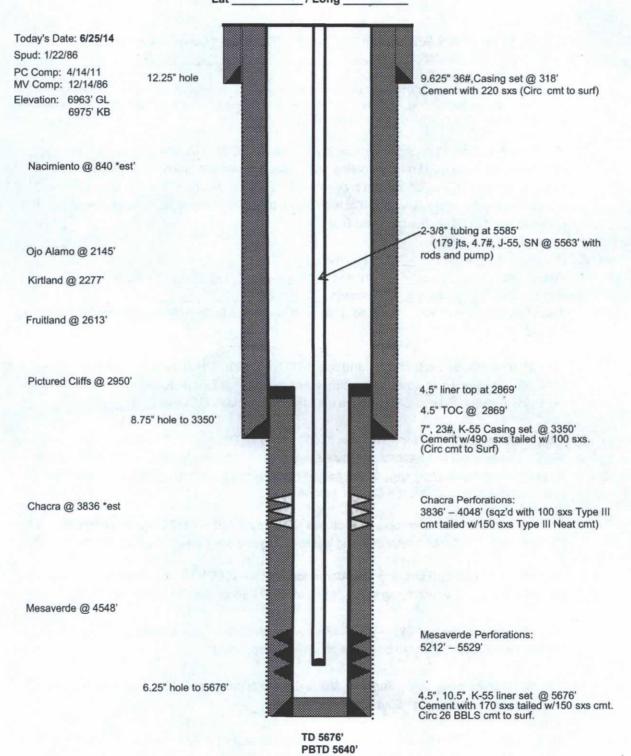
11. ND BOP and cut off wellhead below surface casing flange. Install P&A marker with cement to comply with regulations. RD, MOL and cut off anchors. Restore location per BLM stipulations.

Bolack C LS #16A

Current

Blanco Mesaverde /Otero Chacra 1565' FSL, 1025' FEL, Section 33, T-27-N, R-8-W,

San Juan County, NM / API #30-045-26662 Lat _____ / Long _____



Bolack C LS #16A Proposed P&A

Blanco Mesaverde /Otero Chacra 1565' FSL, 1025' FEL, Section 33, T-27-N, R-8-W,

San Juan County, NM / API #30-045-26662 Lat ______ / Long _____

Today's Date: 6/25/14

Spud: 1/22/86

PC Comp: 4/14/11

MV Comp: 12/14/86

Elevation: 6963' GL

6975' KB

Nacimiento @ 840 *est'

Ojo Alamo @ 2145'

Kirtland @ 2277'

Fruitland @ 2613'

Pictured Cliffs @ 2950'

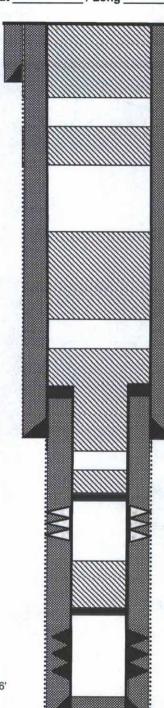
8.75" hole to 3350'

12.25" hole

Chacra @ 3836 *est

Mesaverde @ 4548'

6.25" hole to 5676'



TD 5676' PBTD 5640' Plug #6: 368' - 0' Class B cement, 79 sxs

9.625" 36#,Casing set @ 318' Cement with 220 sxs (Circ cmt to surf)

> Plug #5: 890' - 790' Class B cement, 29 sxs

Plug #4: 2663' - 2095' Class B cement, 116 sxs

4.5" liner top at 2869'

Plug #3: 3400' - 2819' Class B cement, 60 sxs

4.5" TOC @ 2869'

7", 23#, K-55 Casing set @ 3350' Cement w/490 sxs tailed w/ 100 sxs. (Circ cmt to Surf)

Cmt Retainer @ 3786'

Plug #2: 3786' - 3736' Class B cement, 8 sxs

Chacra Perforations: 3836' – 4048' (sqz'd with 100 sxs Type III cmt tailed w/150 sxs Type III Neat cmt)

> Plug #1: 5162' - 4498' Class B cement, 55 sxs

Cmt Retainer @ 5162'

Mesaverde Perforations: 5212' – 5529'

4.5", 10.5", K-55 liner set @ 5676' Cement with 170 sxs tailed w/150 sxs cmt. Circ 26 BBLS cmt to surf.

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: Bolack C LS #16A

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 #3 (2749-2003) ft. to cover the Fruitland, Kirtland, and Ojo Alamo tops. BLM picks top of Ojo Alamo at 2053 ft. BLM picks top of Fruitland at 2699 ft.
 - b) Set plug #5 (1003-903) ft. to cover the Nacimiento top. BLM picks top of Nacimiento at 953

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.

GENERAL REQUIREMENTS FOR PERMANENT ABANDONMENT OF WELLS ON FEDERAL AND INDIAN LEASES FARMINGTON FIELD OFFICE

- 1.0 The approved plugging plans may contain variances from the following <u>minimum general</u> requirements.
 - 1.1 Modification of the approved plugging procedure is allowed only with the prior approval of the Authorized Officer, Farmington Field Office.
 - 1.2 Requirements may be added to address specific well conditions.
- 2.0 Materials used must be accurately measured. (densimeter/scales)
- 3.0 A tank or lined pit must be used for containment of any fluids from the wellbore during plugging operations and all pits are to be fenced with woven wire. These pits will be fenced on three sides and once the rig leaves location, the fourth side will be fenced.
 - 3.1 Pits are not to be used for disposal of any hydrocarbons. If hydrocarbons are present in the pit, the fluids must be removed prior to filling in.
- 4.0 All cement plugs are to be placed through a work string. Cement may be bull-headed down the casing with prior approval. Cement caps on top of bridge plugs or cement retainers may be placed by dump bailer.
 - 4.1 The cement shall be as specified in the approved plugging plan.
 - 4.2 All cement plugs placed inside casing shall have sufficient volume to fill a minimum of 100' of the casing, or annular void(s) between casings, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.
 - 4.3 Surface plugs may be no less than 50' in length.
 - 4.4 All cement plugs placed to fill annular void(s) between casing and the formation shall be of sufficient volume to fill a minimum of 100' of the annular space plus 100% excess, calculated using the bit size, or 100' of annular capacity, determined from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.
 - 4.5 All cement plugs placed to fill an open hole shall be of sufficient volume to fill a minimum of 100' of hole, as calculated from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug. In the absence of a caliper log, an excess of 100% shall be required.
 - 4.6 A cement bond log (CBL) is required to be ran if one had not been previously ran or cement did not circulate to surface during the primary cement job or subsequent cement job.

- 5.0 All cement plugs spotted across, or above, any exposed zone(s), when; the wellbore is not full of fluid or the fluid level will not remain static, and in the case of lost circulation or partial returns during cement placement, shall be tested by tagging with the work string.
 - 5.1 The top of any cement plug verified by tagging must be at or above the depth specified in the approved plan, without regard to any excess.
 - 5.2 Testing will not be required for any cement plug that is mechanically contained by use of a bridge plug and/or cement retainer, if casing integrity has been established.
 - 5.3 Any cement plug which is the only isolating medium, for a fresh water interval or a zone containing a prospectively valuable deposit of minerals, shall be tested by tagging.
 - 5.4 If perforations are required below the surface casing shoe, a 30 minute minimum wait time will be required to determine if gas and/or water flows are present. If flow is present, the well will be shut-in for a minimum of one hour and the pressure recorded. Short or long term venting may be necessary to evacuate trapped gas. If only a water flow occurs with no associated gas, shut well in and record the pressures. Contact the Engineer as it may be necessary to change the cement weight and additives.
- 6.0 Before setting any cement plugs the hole needs to be rolled. All wells are to be controlled by means of a fluid that is to be of a weight and consistency necessary to stabilize the wellbore. This fluid shall be left in place as filler between all plugs.
 - 6.1 Drilling mud may be used as the wellbore fluid in open hole plugging operations.
 - 6.2 The wellbore fluid used in cased holes shall be of sufficient weight to balance known pore pressures in all exposed formations.
- 7.0 A blowout preventer and related equipment (BOPE) shall be installed and tested prior to working in a wellbore with any exposed zone(s); (1) that are over pressured, (2) where the pressures are unknown, or (3) known to contain H_2S .
- 8.0 Within 30 days after plugging work is completed, file a Sundry Notice, Subsequent Report of Abandonment (Form 3160-5), five copies, with the Field Manager, Bureau of Land Management, 6251 College Blvd., Suite A, Farmington, NM 87402. The report should show the manner in which the plugging work was carried out, the extent, by depth(s), of cement plugs placed, and the size and location, by depth(s), of casing left in the well. Show date well was plugged.
- 9.0 All permanently abandoned wells are to be marked with a permanent monument as specified in 43 CFR 3162.6(d). Unless otherwise approved.
- 10.0 If this well is located in a Specially Designated Area (SDA), compliance with the appropriate seasonal closure requirements will be necessary.

All of the above are minimum requirements. Failure to comply with the above conditions of approval may result in an assessment for noncompliance and/or a Shut-in Order being issued pursuant to 43 CFR 3163.1. You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to administrative review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.