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Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR

FEB 27 20 2

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

BUREAU OF LAND MANAGEMENT Farmington Field					5. Lease Serial No. .NOsG_0611-1749		
Do not use this	NOTICES AND REPO form for proposals Use Form 3160-3 (A	to drill or to l	re-enter an		ঠ্যুবর Indian, Allottee d Navajo Allotment	r Tribe Name	
SUBMIT IN TRIPLICATE - Other instructions on page 2.					7. If Unit of CA/Agreement, Name and/or No.		
1. Type of Well					NMNM-121010		
Oil Well Gas Well Other					8. Well Name and No. Bisti Otero 25 #1		
2. Name of Operator Pro NM Energy, Inc.					9. API Well No. 30-045-34731		
3a. Address c/o Walsh Engineering 7415 East Main St, Farmington, NM 87402	3b. Phone No. <i>(include area code)</i> 505-327-4892			10. Field and Pool or Exploratory Area Basin Dakota			
4 Location of Well (Footage, Sec., T. 980' FNL & 1910' FWL, Section 25, T25N, R11	i)	11. Country or Parish, State San Juan County, NM					
12 CHE	CK THE APPROPRIATE BO	OX(ES) TO INDIC	CATE NATURE	OF NOTIO	CE, REPORT OR OTH	ER DATA	
TYPE OF SUBMISSION	TYPE OF ACT				ION		
Notice of Intent	Acidize Alter Casing	Deeper Fractur	ı e Treat	=	uction (Start/Resume) amation	Water Shut-Off Well Integrity	
Subsequent Report	Casing Repair Change Plans		onstruction nd Abandon	\equiv	omplete porarily Abandon	OtherPay add - Upper Dakota	
Final Abandonment Notice	Convert to Injection	Plug B	ack	☐ Wate	er Disposal		
the proposal is to deepen direction Attach the Bond under which the	nally or recomplete horizonta work will be performed or proved operations. If the operations abandonment Notices must	lly, give subsurfactoride the Bond Noing ion results in a mu	ce locations and it is on file with Billiple completion	measured and LM/BIA. If no recomp	nd true vertical depths of Required subsequent repletion in a new interval	l, a Form 3160-4 must be filed once	
						RCVD FEB 28 '12	
Pro NM Energy, Inc. plans to perforate and fracture stimulate the Upper Dakota Sands in 2 stages as f					follows:	OIL CONS. DIV.	
Set CIBP at 5960' (above existing Dakota perforations).						DIST. 3	
1st stage: Perforate 5920' - 5932'	(4 spf), total of 48 holes.	Stimulate with 70	,000 lbs of 20/4	40 premiur	m sand in 70 Quality	(nitrogen) xlinked foam.	
Set frac plug at ~ 5900'.							
2nd stage: Perforate (selectively) froam.	rom 5882' - 5854' (4 spf), t	otal of 44 holes.	Stimulate w/ 6	6,000 lbs	of 20/40 premium sai	nd in 70 Quality (nitrogen) xlinked	
Flowback through 1/4" choke, until 5920'. Return well to production.	"closure". Clean out sand	and frac plug. (Clean out dowr	to CIBP a	at 5960'. Flow test w	ell. Re-run tubing and land at ~	
See attached procedure for details							
				HEEL	Lorenation ;	to Ps	
14. I hereby certify that the foregoing is John C. Thompson	true and correct. Name (Print	,					
			Title Engineer	/Agent			

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Original Signed: Stephen Mason

Office

FEB 27 2012

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.

Date 02/21/2011

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

Signature



PRO New Mexico Energy

Workover Procedure

Revised - January 23, 2012

Well

Bisti Otero 25-1

Field:

Basin DK

Location:

Sec. 25, T25N, R11W

San Juan, New Mexico

Elevation: 6555' GL

By: John Thompson

Purpose

P&A Lower Dakota. Complete upper Dakota sands

Procedure

Prior to moving in

- 1. File Sundry notice w/ NMCCD. 22 m
- 2. Schedule operations in coordination w/ stimulation company.
- 3. Check anchors and notify surface owners (if necessary) prior to move in. Movein, rig up pulling unit and air/foam unit. Move in related surface equipment (Flowback tank, flowlines, BOP equipment.)

P&A Lower Dakota

- 4. Pressure test tubing/pump prior to TOH w/ rods & pump.
- 5. ND WH & NU BOP.
- 6. TOH w/ tubing.
- 7. PU 5-1/2" casing scraper & TIH to ~ 6000'. TOH & lay down scraper.
- 8. TIH w/ Cast Iron Bridge Plug. Set CIBP at 5960'. Pressure test plug/casing to 1500 psi hold pressure for 30 min (record results on chart). If pressure test is OK proceed with upper Dakota stimulation. If not, pick up 5-1/2" casing packer and isolate leak in casing.

Perforate & Frac Upper Dakota

- 9. ND BOP & remove well head. Install 5K frac valve & RU flowback tank/lines.
- 10. Perforate Upper Dakota formation at the following depths: 5920' 5932'. 4 spf, 90° phasing, 12 ft net pay, 48 holes total.

- 11. Rig up frac crew. Ball off the Dakota with 500 gal of 15% HCl with inhibitor, iron sequestering agent and de-emulsifying surfactant and drop 60 7/8" (1.3 sp.gr.) balls equally during the acid. Maximum Pressure is 3,800 psi. Add 2 gal/1000 gal of mutual solvent (CESI Chemical MA-844W or equivalent "wetting agent" to aid in flowback) in the flush water. Run a 4-3/4" junk basket and retrieve or knock off balls.
- 12. Stimulation Upper Dakota with 70,000# of 20/40 in 70 Quality cross linked gel system. Base fluid will be 2% KCl water, all stages will contain mutual solvent (CESI Chemical MA-844W or equivalent "wetting agent" to aid in flowback).
- 13. Displace sand to top perforation.
- 14. RIH & set frac plug at ~ 5900'.
- 15. Pressure test casing to 3500 psi.
- 16. Perforate 2^{nd} stage of the Upper Dakota formation at the following depths: 5882' 5885', 5869' 5871', 5848' 5854'. 4 spf, 90° phasing, 11 ft net pay, 44 holes total.
- 17. Ball off the Dakota with 1000 gal of 15% HCl with inhibitor, iron sequestering agent and de-emulsifying surfactant and drop 120 7/8" (1.3 sp.gr.) balls equally during the acid. Maximum Pressure is 3,800 psi. Add 2 gal/1000 gal of mutual solvent (CESI Chemical MA-844W or equivalent "wetting agent" to aid in flowback) in the flush water. Run a 4-3/4" junk basket and retrieve or knock off balls.
- 18. Stimulation Upper Dakota with 66,000# of 20/40 in 70 Quality cross linked gel system. Base fluid will be 2% KCl water, all stages will contain mutual solvent (CESI Chemical MA-844W or equivalent "wetting agent" to aid in flowback).
- 19. Rig down stimulation company and open well through $\frac{1}{4}$ " choke to flowback tank. Allow well to flowback until pressure falls below 100 psi. Bleed off remaining pressure through 2", kill w/ 2% KCl water if necessary.
- 20. Remove frac valve & install well head. NU BOP.

Clean out after frac

- 1. Haul in and spot air package.
- 2. TIH with a 4-3/4" bit on 2-3/8" tubing.
- 3. Clean out frac sand to the BP at 5941' with air-mist.

 Caution: downhole fires caused by air drilling can be probable monitor mist rates at all times to minimize risk
 - 4. TOH and lay down the bit and bit sub.
- 5. If well will flow on it's own, RIH w/rods & then TOH laying down rod string.
- 6 TIH with an expendable check on the bottom of the 2-3/8" tubing and land the tubing at~ 5920' KB.
- 7. Nipple down the BOP and nipple up the wellhead. Pump off the check and blow the well around up the tubing.
- 8. If well does not flow, land tubing w/ seating nipple below 5932' & re-run pump & rods.
- 9. Turn well over to production

John C. Thompson Engineer