Form 3160-3 (February 2005)			_OMB No		
UNITED STATE		16 P	1112.30	uch 31, 2007	
DEPARTMENT OF THE BUREAU OF LAND MA	3		5 Lease Serial No. SF-078899		
	111.	CEIVE	6 If Indian, Allotee	or Tribe Name	
APPLICATION FOR PERMIT TO	DRILL OR REENTER				
la Type of work  DRILL  REENT	rér		7 If Unit or CA Agree		4.
14 Type (1 Walk				<u>-74050-01</u>	
lb Type of Well	Single Zone   Multi	ple Zone	8 Lease Name and W Oneda No. 1E	eli No	
2 Name of Operator			9 API Well No		
Pro NM Energy, Inc.			30-04 10 Field and Pool, or Ex	5-34145	
3a Address 460 St. Michael's Drive, Suite 300 Santa Fe, NM 87505	3b Phone No (include area code) (505) 988-4171		10 Field and Pool, or Ex West Kutz PC /	$\frac{5-54(45)}{\text{exploratory}}$ Basin Dakota $\frac{5600}{\text{s}}$ And Survey or Area	hGallegos
4 Location of Well (Report location clearly and in accordance with a	any State requirements*)		II Sec, TRM or Bik	and Survey or Area	FS/PC
At surface 1480' FSL, 690' FWL			Sec. 8, T26N, R		•
At proposed prod zone Same					
14 Distance in miles and direction from nearest town or post office*			12 County or Parish San Juan	13 State NM	
15 Distance from proposed* location to nearest property or lease line, it (Also to nearest drig unit line, if any)	16 No of acres in lease		ng Unit dedicated to this will $\omega$ Z 320	ell	
18 Distance from proposed location*	19 Proposed Depth	20 BLM/	BIA Bond No on file		
to nearest well, drilling, completed, applied for, on this lease, it	6252'	B036	41 NM 204	18	
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 6147' GL	22 Approximate date work will sta 06/01/2007	rt*	23 Estimated duration 30 Days		
	24. Attachments				
The following, completed in accordance with the requirements of Onsh	ore Oil and Gas Oider No 1, must be a	ttached to the	us form		
<ol> <li>Well plat certified by a registered surveyor</li> <li>A Drilling Plan</li> </ol>	4 Bond to cover t Item 20 above)	he operatio	ons unless covered by an e	existing bond on file (see	
3 A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office)			ormation and/or plans as r	nay be required by the	
25 Signature Dana J. Delneuthal	Name (Printed/Typed)  Dana L. Delventhal			Date 01/12/2007	
Title Agent 14.					
Approved by (Signature)	Name (Printed Typed)		1	Date 5/28/6	(2)
Title T AFM	Office FEO				
Application approval does not warrant of certify that the applicant hol conduct operations thereon Conditions of approval, if any, are attached	ds legal or equitable title to those righ	ts in the sul	oject lease which would en	title the applicant to	
Title 18 USC Section 1001 and Title 43 USC Section 1212, make it a States any false, fictitious or fraudulent statements or representations as	crime for any person knowingly and v s to any matter within its jurisdiction	willfully to n	nake to any department or	agency of the United	

\*(Instructions on page 2)

Obtain a pit permit from NMOCD prior to constructing location

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT

WN 1 6 2008

This action is subject to technical and procedural review pursuant to 43 CFR 3165 3 and appeal pursuant to 43 CFR 3165 4



DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

DISTRICT I 1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised October 12, 2005

DISTRICT II 1301 W. Grand Ave., Artesia, N.M. 88210

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. 12: 30 Santa Fe, NM 87505

State Lease - 4 Copies Fee Lease - 3 Copies

Submit to Appropriate District Office

DISTRICT III 1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV

RECEIVED

☐ AMENDED REPORT

# 1220 South St. Francis Dr., Santa Fe. NM 87505 WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number	773/6 Pool Code 5.	Gallegos FS	<sup>3</sup> Pool Name	
30:045.3	59195 <b>79680</b> / 71599 Wee	st Kutz Pictured	Cliffs / Basi	in Dakota
<sup>4</sup> Property Code	<sup>6</sup> Propert	y Name		Well Number
9417	ONE	1-E		
OGRID No.	<sup>8</sup> Operato	r Name		* Elevation
018118	PRO NEW MEX	ICO ENERGY		6147

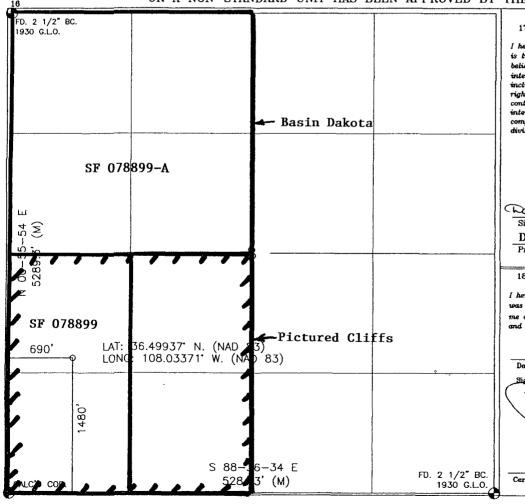
<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	8	26-N	11-W		1480	SOUTH	690	WEST	SAN JUAN

<sup>11</sup> Bottom Hole Location If Different From Surface

					200401011		JIII Dallaco		
UL or lot no.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
18 Dedicated Acre	5		13 Joint or	Infill	" Consolidation C	ode	16 Order No.		
160	/ 320		Y		<u> </u>				

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



#### 17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Dava J. Deluenthal 1/12/07 Signature

Dana L. Delventhal, Agent Printed Name

#### 18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat I herewy was plotted from field me or under my supervising and that to rect to the play of my thing was plotted from field notes of actual surveys made by That the same is true



Certificate Number

## **Drilling Program**

# 1. Formation Tops

The estimated tops of important geologic markers are:

Formation Name	GL Depth	KB Depth	SS Elev.
Pictured Cliffs	1462'	1477'	4685'
Mesaverde	2347'	2362'	3800'
Mancos Shale	4177'	4192'	1970'
Gallup	5027'	5042'	1120'
Greenhorn	5907'	5922'	240'
Graneros	5957'	5972'	190'
Dakota	6057'	6072'	90'
Total Depth (TD)	6237'	6252'	-90'

<sup>\*</sup>All elevations reflect the ungraded ground level of 6147'.

## 2. Notable Zones

### Oil and Gas Zones

Pictured Cliffs (1477') Mesaverde (2362') Gallup (5042') Graneros (5972') Dakota (6072')

The primary objectives are the West Kutz Pictured Cliffs and the Basin Dakota formations. Completion may require fracturing. The entire wellbore will be cased. Water zones will be protected with casing, cement, and weighted mud. Oil and gas shows will be tested for commercial potential based on the well site geologist's recommendations.

### 3. Pressure Control

BOP systems will follow Onshore Order No. 2. The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. A typical model is shown on the attached page.

Once out from under the surface casing, a minimum 3000 psi BOP and choke manifold system will be used. BOP controls will be installed before drilling the surface casing plug and used until the well is completed or abandoned.

Pressure tests to 2,500 psi will be conducted with a BOP tester. All BOP mechanical and pressure tests will be recorded on the driller's log. BOPs will be inspected and operated at least daily to assure good mechanical working order. The inspection will be recorded on the daily drilling report.

# 4. Casing and Cement

<u>Hole Size</u>	$\underline{\mathrm{OD}}$	Weight (lb/ft)	<u>Grade</u>	<u>Depth</u>
12 1/4"	8 5/8"	23.00	J-55	320'
7 7/8"	5 1/2"	15.50	J-55	6252'

Surface casing will be cemented to surface with 225 sx (265.5 cf) of Class B cement containing 2% CaCl and 1/4 #/sk cello flakes. Production casing will be cemented to surface in twostages: 1<sup>st</sup> stage: 500 sx (1030 cf) of Class B cement containing 2% Sodium Metasilicate and 1/4 #/sk cello flakes followed by 100 sx (118 cf) of Class B cement containing 2% CaCl and 1/4 #/sk cello flakes. 2<sup>nd</sup> stage: 275 sx (567 cf) of Class B cement containing 2% Sodium Metasilicate and 1/4 #/sk cello flakes followed by 100 sx (118 cf) of Class B cement containing 2% CaCl and 1/4 #/sk cello flakes.

The total cement volume for the surface casing is 265.5 cf. The total cement volume for the production casing is 1833 cf. The entire wellbore will be cased. Water zones will be protected with casing, cement, and weighted mud.

### 5. Mud Program

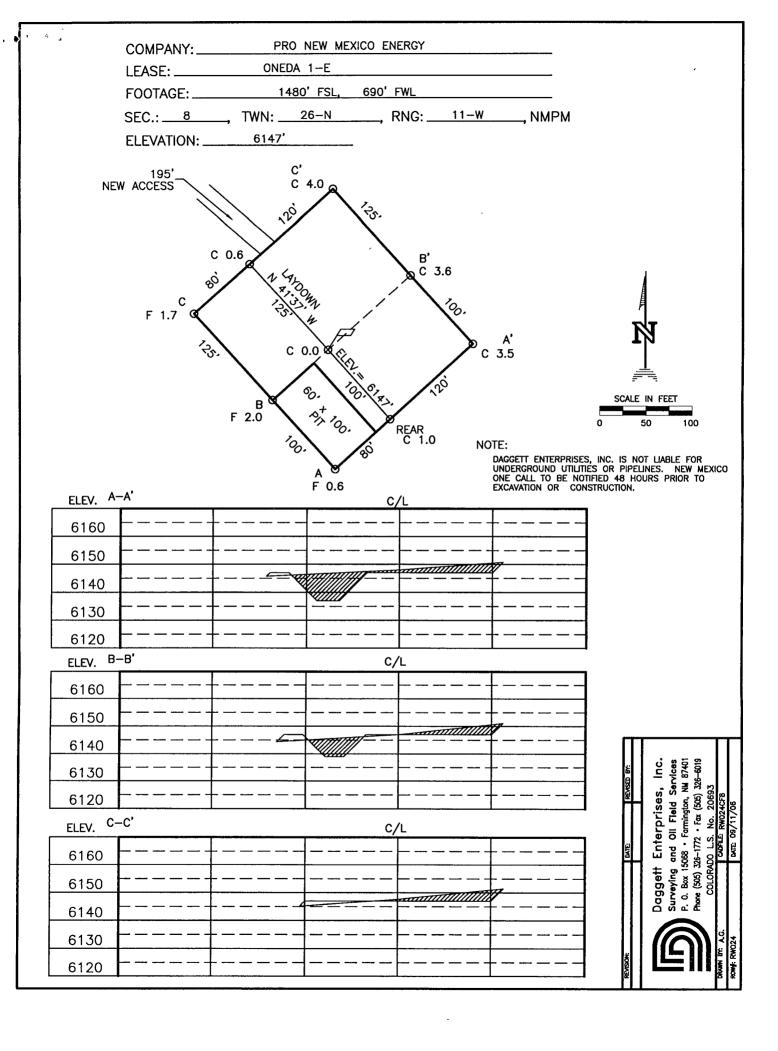
The proposed mud program is:

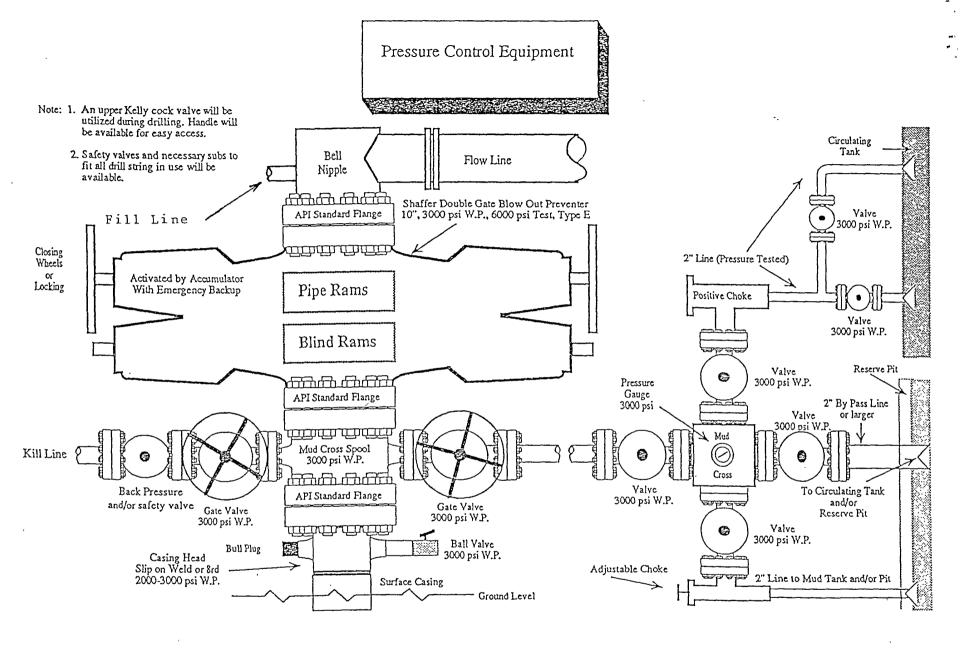
<u>Depth</u>	<u>Type</u>	ppg	<u>Vis(cp)</u>	<u>F1(cc)</u>
0-320'	Spud mud and Gel Lime	8.8	50	N/A
320'-4000'	Spud mud and Gel Lime	8.8	50	N/A
4000'-TD	LSND	9.2	45	10

### 6. Coring, Testing, and Logging

No cores are planned. The following logs are likely to be run:

Dual Induction, Formation Density, Compensated Neutron, SP, Gamma Ray





Note: This equipment is designed to meet requirements for a 3-M rating standard per 43 CFR part 3160 (amended). Proper operation and testing of equipment will be caried out per standard. 2,000 psi equipment can be substituted in the drawing to meet minimum requirements per standard.

Pro NM Energy, Inc. Oneda No. 1E 1480' FSL, 690' FWL Sec. 8, T26N, R11W