Form 3160-3 (April 2004)

IIII **0 8** 2008

FORM APPROVED OMB No. 1004-0137 Expires March 31, 2007

UNITED STATES	002 00 2000		Ехрис
DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	Bureau of Land Manage	nen	Lease Serial N NMNM-104
ION FOR PERMIT TO DRILL OF	R REENTER	6.	If Indian, Allo

DEPARTMENT OF THE L	NIERIOR Bureau of Land	Manage	ment NMNM-104606		
BUREAU OF LAND MANAGEMENT Farmington Field Office APPLICATION FOR PERMIT TO DRILL OR REENTER			6. If Indian, Allotee or Tribe Name N/A		
la. Type of work: ☐ DRILL			7. If Unit or CA Agreement, Name and No. N/A		
lb. Type of Well: ☐ Oil Well ☐ Gas Well ✔ Other	Single Zone Multip	ple Zone	8. Lease Name and W MONUMENT #		
2. Name of Operator COLEMAN OIL & GAS, INC.			9. API Well No. 30-045-21912		
3a. Address P. O. DRAWER 3337 FARMINGTON, NM 87499			10. Field and Pool, or Exploratory SWD; ENTRADA		
4. Location of Well (Report location clearly and in accordance with any	v State requirements.*)		11. Sec., T. R. M. or Blk	c. and Survey or Area	
At surface 1656' FNL & 942' FEL	•		17-24N-10W N	15 04V 10W NO 4DV	
At proposed prod. zone SAME			17-2411-1077 111	VIF IVI	
14. Distance in miles and direction from nearest town or post office*			12. County or Parish	13. State	
10 AIR MILES NW OF NAGEEZI, NM		1	SAN JUAN	NM	
15. Distance from proposed* location to nearest property or lease line; ft. (Also to nearest drig., unit line, if any) 984'	16. No. of acres in lease	17. Spacin	g Unit dedicated to this we	onct 28:09 Cons. Div. nict s	
18. Distance from proposed location*	19. Proposed Depth	20. BLM/I	BIA Bond No. on file	F H E T B U F	
to nearest well, drilling, completed, applied for, on this lease, ft. 781' (17 #41)	7,460'	BLM	BLANKET NM-2817		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will sta	rt*	23. Estimated duration		
6,769' GLThis action is subject to technical and	12/31/2008		4 WEEKS	RATIONS AUTHORIZED ARE	
and appeal pursuant to 43 CFR 3165.3	24. Attachments		SUBJECT TO (COMPLIANCE WITH ATTACH	
The following, completed in accordance with the requirements of Onshor	e Oil and Gas Order No.1, shall be a	ttached to th	is form: "GENERAL RE	QUIREMENTS".	
Well plat certified by a registered surveyor. A Drilling Plan.	4. Bond to cover t Item 20 above).	he operation	ns unless covered by an e	existing bond on file (see	
3. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).		specific info	ormation and/or plans as 1	may be required by the	
25. Signature	Name (Printed/Typed)		[]	Date	
to bool	BRIAN WOOD			07/04/2008	
Title CONSULTANT	PHONE: (505) 466-8120	FAX	X: (505) 466-9682		
Approved by (Signature) Manlea (ore)	Name (Printed/Typed)			Date / 5/23/89	
Title AFM	Office FF				
Application approval does not warrant or certify that the applicant hold conduct operations thereon.	s legal or equitable title to those righ	nts in the sub	ject lease which would en	title the applicant to	

Conditions of approval, if any, are attached

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.

expired-get new order prior to injecting
NOTIFY AZTEC OCD 24 HRSBLM'S APPROVAL OR ACCEPTANCE OF THIS PRIOR TO CASING & CEMENACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS AUTHORIZATION REQUIRED FOR OPERATIONS

NOV 0 2 2009

NO+ Posted. Currently Preorgard

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

N 89°21'42" W

State of New Mexico Energy, Minerals & Natural Resources Department

Revised October 12, 2005

Form C-102

Submit to Appropriate District Office 1301 W. Grand Avenue, Artesia, N.M. 88210 OIL CONSERVATION DIVISION ECENTED State Lease - 4 Copies
1220 South St. Francis Dr.

Fee Lease - 3 Copies Fee Lease - 3 Copies 1000 Rio Brazos Rd., Aztec, N.M. 87410 Santa Fe, N.M. 87505 DISTRICT IV JUL **08** 2008 1220 S. St. Francis Dr., Santa Fe, N.M. 87505 ☐ AMENDED REPORT WELL LOCATION AND ACREAGE DEDICATION APPROPRIES ¹API Number ² Pool Code ³ Pool Name 96436 SWD: 30-045-21912 **ENTRADA** Well Number Property Code ⁵Property Name 37896 MONUMENT OGRID No. ⁸Operator Name Elevation 4838 COLEMAN OIL & GAS, INC. 6769 ¹⁰ Surface Location Feet from the North/South line Feet from the East/West line UL or lot no. Section Lot Idn Township Range County 17 24 N 10 W 1656 NORTH 942 **EAST** SAN JUAN Н ¹¹Bottom Hole Location If Different From Surface Lot Idn Feet from the North/South line Feet from the UL or lot no. Section Township East/West line County 12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No. 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 2617.92' 16 S 89°28'46" E 2651.251 N 87°13'46" E ¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, 63 and that this organization either owns a working interest or unleased mineral interest in the land including the 2635. proposed bottom hole location or has a right to drill this 1656 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 orde heretofore entered by the di ₹ 7-4-08 ш NAD 83 8 LAT: 36.316050° N Signatur BRIAN WOOD 0°50' 0°03' 942 LONG: 107.913017° W Printed Name S SECTION 17 18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. 2699 1/15/08 EN MEXIN Date of Survey Signature and ш ₹ 0°04'57" ū 0°02

N 89°52'47" W

2677.20

2626.941

1. ESTIMATED FORMATION TOPS

<u>GL Depth</u>	KB Depth	<u>Elevation</u>					
0'	10'	6,769'					
current plug: 5' - 50'							
		6,180'					
678'	688'	6,091'					
1,143'	1,153'	5,626'					
)' - 1,500'							
1,384'	1,394'	5,385'					
1,610'	1,620'	5,159'					
)' - 1,900'	,	·					
1,745'	1,755'	5,024'					
2,126'	2,136'	4,643'					
2,836'	2,846'	3,933'					
3,805'	3,815'	2,964'					
0 - 4,100'							
4,011'	4,021'	2,758'					
4,846'	4,856'	1,923'					
Gallup sandstone 4,846' 4,856' 1,923' current plug: 4,900' - 5,100'							
5,756'	5,766'	1,013'					
current plug: 5,800' - 6,100'							
•		963'					
5,852'	5,862'	917'					
6,100'	6,110'	669'					
6,135'	6,145'	634'					
6,690'	6,700'	79'					
	7,070'	-291'					
	, .	-331'					
	•	-591'					
7,460'	7,470'	-691'					
	0' g: 5' - 50' 589' 678' 1,143' 1' - 1,500' 1,384' 1,610' 1,745' 2,126' 2,836' 3,805' 0 - 4,100' 4,011' 4,846' 1' - 5,100' 5,756' 1' - 6,100' 5,852' 6,100' 5,852' 6,100' 7,060' 7,100' 7,360'	0' 10' g: 5' - 50' 599' 50' - 550' 599' 678' 688' 1,143' 1,153' 0' - 1,500' 1,384' 1,394' 1,610' 1,620' 0' - 1,900' 1,745' 2,136' 2,836' 2,846' 3,805' 3,805' 3,815' 0 - 4,100' 4,021' 4,856' 1' - 5,100' 5,756' 5,766' 5,852' 5,862' 5,862' 6,100' 6,110' 6,145' 6,690' 7,060' 7,070' 7,100' 7,360' 7,370'					

Well was drilled by Lynco Oil Corporation in 1975 to 6,100' as a Dakota test and subsequently plugged and abandoned in 1975. No long string was run.



2. NOTABLE ZONES

Gas & Oil Zones	<u>Water Zones</u>	<u>Coal Zone</u>
Fruitland	Nacimiento	Fruitland
Pictured Cliffs	Ojo Alamo	
Gallup	Fruitland	
Dakota	Entrada	

3. PRESSURE CONTROL (See PAGES 3 & 4)

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. Diagrams of a typical 2,000 psi follow on the next two pages. Annular or double ram type 2,000 psi (minimum) double gate BOP stack will be installed. Blind rams and casing will be tested to \approx 750 psi for 30 minutes before drilling out of the surface casing. All pipe rams and the choke assembly will be tested to \approx 750 psi for 30 minutes each.

Pipe rams will be actuated at least once each day and blind rams actuated once each trip to test proper functioning. An upper kelly cock valve with handle and drill string safety valves to fit each drill string will be maintained and available on the rig floor. Maximum expected bottom hole pressure will be <3,230 psi.

4. CASING & CEMENT

<u>Hole Size</u>	<u>O. D.</u>	Pounds per foot	<u>Grade</u>	Coupling	<u>Age</u>	Depth Set
12-1/4"	8-5/8"	20	Α	ST&C	1975	0' - 227'
7-7/8"	5-1/2"	15.5	K-55	LT&C	New	0' - 6,200'
7-7/8"	5-1/2"	17	K-55	LT&C	New	6,200' - 7,460'

Surface casing was cemented with 100 sacks (118 cubic feet), which circulated to the surface.



Production casing will be cemented to the surface in two stages. Stage collar will be set at $\approx 4,061$ '. A cement guide shoe and self fill insert float collar will be used. The float will be placed one joint above the shoe. Five centralizers will be spaced every other joint above the shoe. Three centralizers will be set across the stage collar and three will be spaced evenly across the Ojo Alamo.

Stage #1:

- 1) circulate the hole with \geq 150% hole volume with mud
- 2) precede cement with ≈20 barrels of fresh water
- 3) lead with ≈455 sacks (823.55 cubic feet) Class G 35/65 poz with 2% GEL D-20, 5 pounds per sack gilsonite + 0.1% D46 + 1% S-1 + 1/4 pound per sack D29 (yield = 1.81 cubic feet per sack; slurry weight = 12.4 pounds per gallon)
- 4) tail with ≈100 sacks (126 cubic feet) Class G 50/50 poz with 2% gel D-20 + 5 pounds per sack gilsonite + 0.1% D46 + 1% S-1 + 1/4 pound per sack D29 (yield = 1.26 cubic feet per sack; slurry weight = 13.5 pounds per gallon)
- 5) total stage 1 cement volume = 949.55 cubic feet (≈60% excess on open hole, calculated on cement volumes on lower stage)

Stage #2:

- 1) open stage tool and circulate minimum 4 hours
- 2) circulate hole with ≥150% hole volume with mud
- 3) precede cement with 20 barrels of fresh water
- 4) lead with \approx 402 sacks (1049.22 cubic feet) Class G with 3% D79 + 1/4 pound per sack D29 (yield = 2.61 cubic feet per sack; slurry weight = 11.7 pounds per gallon)
- 5) tail with \approx 50 sacks (63.00 cubic feet) Class G 50/50 poz with 2% gel D-20 + 5 pounds per sack Gilsonite + 0.1% D46 + 1% S-1 + 1/4 pound per sack D29 (yield = 1.26 cubic feet per sack; slurry weight = 13.5 pounds per gallon)
- 6) total stage cement volume = 1,112.22 cubic feet (≈60% excess on open hole, calculated on cement volumes on upper stage)



5. MUD PROGRAM

<u>Interval</u>	Type	<u>Weight</u>	<u>Viscosity</u>	Fluid Loss
0' - 227'	Spud	8.4 - 9.0	40 - 50	no control
227' - 7460'	Non-dispersed	8.4 - 9.0	30 - 60	6 cc or less

6. CORES, TESTS, & LOGS

No cores or drill stem tests are planned. These logs will be run from the base of the surface casing to TD:

Porosity log - triple litho density with GR and CAL Induction log - array induction with GR and SP cement bond log

7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, nor hydrogen sulfide are expected.

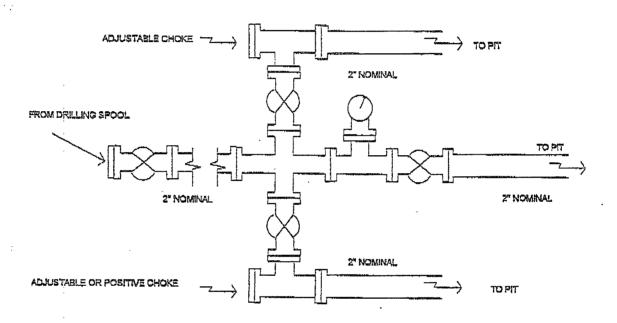
8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take about two weeks to drill out the plugs and complete the well.

*Location (1656' FNL & 942') shown in header is as surveyed in 2008. State records from 1975 show location as 1650' FNL & 990' FEL before construction and drilling. However, there is no survey plat in New Mexico Oil Conservation Division on line records.

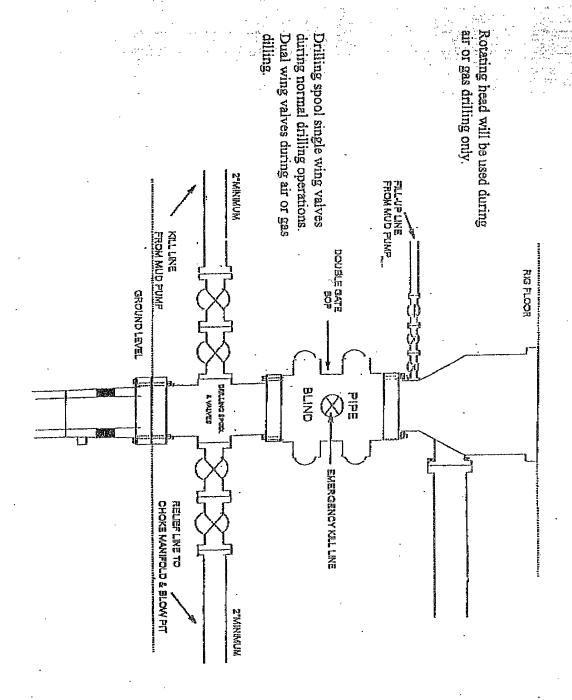


Choke Manifold Configuration 2M System



Minimum choke manifold installation from surface to Total Depth. 2" minimum, 2000psi working pressure equipment with two chokes.

BOP Configuration 2M psi System



13.5/8" and 11" Bore, 2000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams: A Schaffer Type 50 or equivalent rotating head to be installed on the top of the BOP. All equipment is 2000psi working pressure/ or greater,