Form 3160-3

SUBMIT IN TRIPLICATE*

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
2003 Feb 14
070 FARMINGTON, NM

5. LEASE DESIGNATION AND SERIAL NO.: SF078243

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME, WELL NO.: Owen No. 2C

9. API WELL NO.: 30045 31398

10. FIELD AND POOL, OR WILDCAT: Blanco Mesa Verde

11. SEC., T., R., M., OR BLK AND SURVEY OR AREA: Section 19, T31N, R12W, NMPM

12. COUNTY: San Juan

13. STATE: New Mexico

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: *Roddy Production Company Inc.*

3. ADDRESS AND TELEPHONE NO.: P. O. Box 2221, Farmington, NM, 87499 (505) 325-5750

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1270'FNL - 2020'FEL, Section 19, T31N, R12W, NMPM
At proposed prod. zone: same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 7 miles northwest of Flora Vista, NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 1270'

16. NO. OF ACRES IN LEASE: 318.24

17. NO. OF ACRES ASSIGNED TO THIS WELL: 318.24 N/2

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 1300'

19. PROPOSED DEPTH: 5183

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5941'GL

22. APPROX. DATE WORK WILL START*: February, 2003

FEB 2003

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12.250"	8.625",J-55	24	320'	247.8 cf, circulate to surface
7.875"	4.500",J-55	10.5	5183'	1773.5 cf in two stages,circulate to surface
				DV tool set at 3500'

min 320 300'

Roddy Production Company Inc. proposes to spud in the Nacimiento formation. Drill 12.250" surface hole to 300' using fresh water mud. Run and cement surface casing with adequate volume to circulate to surface. WOC 12 hours. Nipple up casing head and BOPE. Pressure test BOPE to minimum of 600 psig for 15 minutes. Drill 7.875" hole to Total Depth using fresh water mud. No abnormal pressure or poisonous gas is anticipated. Run open hole logs from TD to surface casing shoe. Run and cement production casing in two stages with adequate cement volume to circulate to surface. Release drilling rig. Move in completion rig. Run cased hole correlation logs. Pressure test casing to 3000 psig for 15 minutes. Perforate select Mesa Verde intervals and stimulate with fresh water base fluid and 1500 # per foot sand. Install production equipment.

Surface is Federal, BLM.

This is a re-drill of the Owen 2B, that was P&A'd on 2/10/03. Roddy will use the existing location and access road wthout additional surface disturbance. Roddy plans to drill this well immediately, so prompt approval would be beneficial.

HOLD C104 FOR change in status to Owen #2B

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Robert C. Fulton TITLE Agent DATE February 14, 2003

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval 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.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY /s/ David J. Mankiewicz TITLE AFM DATE 2/14/03

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".

NMOCD

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

RECEIVED
2003 FEB 14 AM 9:31
070 FARMINGTON, NM

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-045-31398	72319	BLANCO MESAVERDE

[4] Property Code	[5] Property Name	[6] Well Number
25717	OWEN	2C

[7] OGRID No.	[8] Operator Name	[9] Elevation
36845	RODDY PRODUCTION COMPANY, INC.	5941'

[10] Surface Location

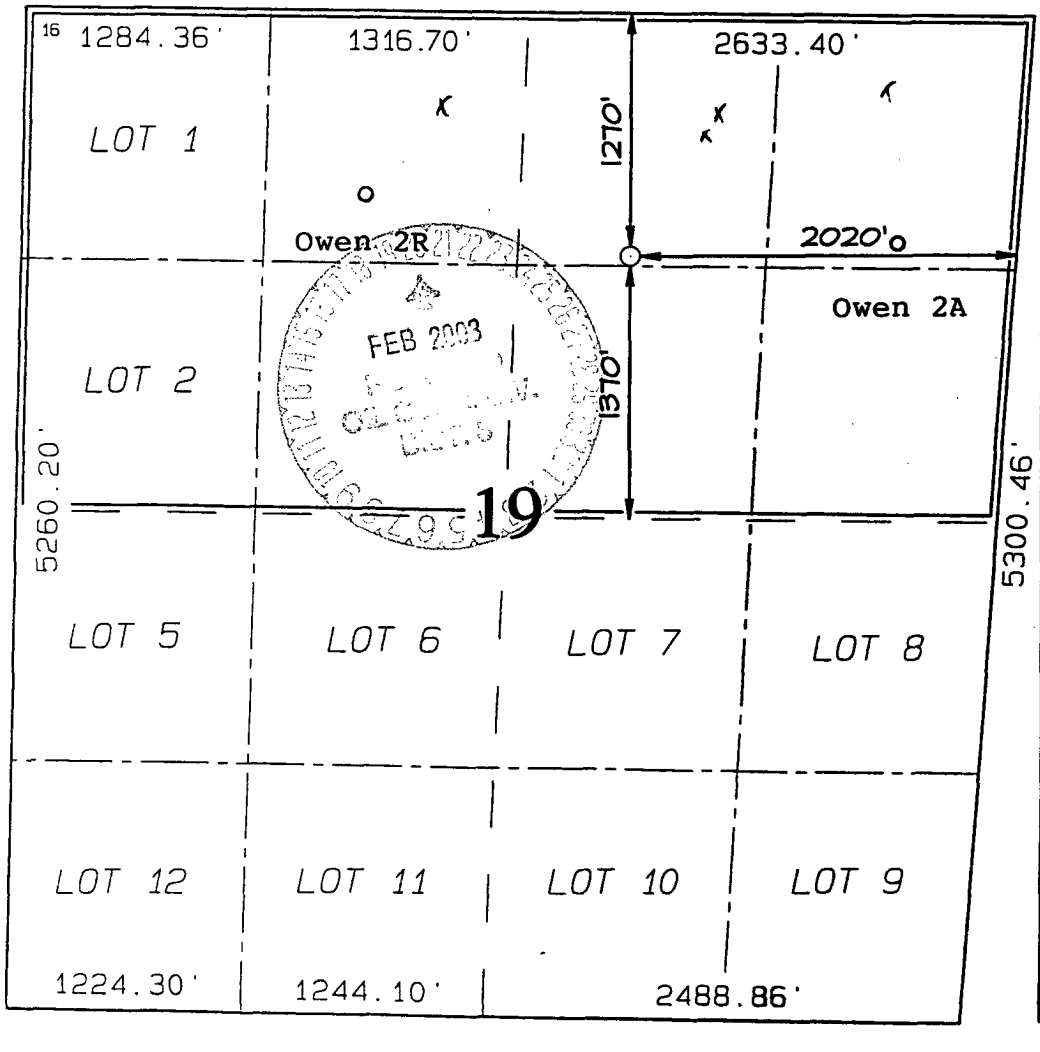
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	19	31N	12W		1270	NORTH	2020	EAST	SAN JUAN

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
318.24 Acres - (N/2)	Y		

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

Signature

Robert E. Fielder
Printed Name

Agent
Title

February 14, 2003
Date

[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.

Survey Date: FEBRUARY 10, 2003

Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269

Owen No. 2C
1270 ' FNL & 2020 ' FEL
Section 19, T31N, R12W, NMPM
San Juan County, New Mexico

TEN POINT PROGRAM

1. **Surface Formation:** NACIMIENTO

2. **Surface Elevation:** 5941' GL.

3. **Estimated Formation Tops:**

Formation	Top	Expected Production
Nacimiento	Surface	
Ojo Alamo	478 '	
Kirtland	553 '	
Fruitland	1797'	
Basal Fruitland Coal	2113'	Gas
Pictured Cliffs	2302'	Gas
Lewis	2374'	
Mesa Verde	2720'	
Huerfanito	3020'	
Cliff House	3852'	Gas / water
Menefee	4078'	Gas
Point Lookout	4640'	Gas
Mancos	4988'	
TOTAL DEPTH	5183'	

4. **Casing and Cementing Program:**

320' MINIMUM 8¾

A string of 8 ⅝", 24 ppf, J or K - 55, ST&C casing will be run to 300 '± in a 12 ¼" hole and cemented in place in a single stage with 210 sacks of Class B cement with 3 % $CaCl_2$ and 0.25 pps celloflake (yield = 1.18 cf / sk). This volume is 100 % excess to circulate to surface assuming a gauge hole. If the cement does not circulate to surface, the cement will be topped off through a string on 1" pipe run in the 9 ⅝" by 12 ¼" annulus. Minimum clearance between the couplings and hole is 1.3125". Prior to drilling out the shoe the casing and BOPE will be tested to a minimum of 600 psig for 15 minutes. Safety factors used in the design of this casing were: burst = 1.1; collapse = 1.125; and tension = 1.8 or 100,000 lb. overpull, whichever is greater.

4. **Casing and Cementing Program:**- continued

Production casing will be 4 1/2", 10.5 ppf, J or K - 55, ST&C casing run from surface to Total Depth in a 7 7/8" hole. This string will be cemented to the surface in two stages. A mechanical DV tool will be set at approximately 3500 feet. The first stage will be with 400 sacks of 50/50 Class B Poz containing 2% gel, 0.6% FLA, 5 pps gilsonite and 0.25 pps celloflake (yield = 1.44 cf / sk). Slurry volume assumes 50 % excess over gauge hole volume. Circulate and WOC between stages for 4 hours. Cement stage two with 550 sacks 35/65 Class B Poz containing 6% gel, 5 pps gilsonite, 0.25 pps celloflake and 2% CaCl (yield = 2.07 cf / sk). Follow with 50 sacks Class B with 1% CaCl (yield = 1.19 cf / sk). This volume assumes a 50% excess over gauge hole volume. Cement volume is subject to change after review of the open hole caliper log. Minimum clearance between the casing and hole is 1.438". Safety factors used in the design of this casing were: burst = 1.1; collapse = 1.125; and tension = 1.8 or 100,000 lb. overpull, whichever is greater.

Cetralizers: Surface string: 3 - 8 5/8" X 12 ¼" regular centralizers run in middle of shoe joint and then spaced evenly between shoe joint and 100 '. Production Casing String: 20 - 4 1/2" X 7 7/8" regular centralizers and 5 - 4 1/2" X 7 7/8" turbolizers will be spaced such that a minimum of two are located above and below the Basal Fruitland Coal; a minimum of one turbolizer will be run just below the base and another just above the base of the Ojo Alamo.

Float Equipment: Surface string: Cement nose guide shoe. Production casing string: Cement nose float shoe and auto fill float collar. A 4 ½" mechcanical DV tool will be set at approximately 3500'.

Following the completion of each cementing operation, a sundry notice detailing the cement volumes and densities will be submitted.

5. **Pressure Control Equipment:**

A minimum of a 3M psi BOP well control system will be utilized. BOPE will be installed and pressure tested to a minimum of 600 psig before drilling out the surface casing shoe and then will be checked daily for correct mechanical operation. Blind rams will be operated on each trip out of the hole. 4 1/2" rams will be installed before running the production casing string.

A full opening drill pipe safety valve will be on the drill floor at all times and will be capable of fitting all connections.

6. **Mud Program:**

A fresh water, low solids, non - dispersed mud system will be used to drill the surface and production hole sections. Sufficient materials will be on location at all times to maintain mud properties and control any unforeseen lost circulation or abnormal pressure problems that may be encountered in the Fruitland or Pictured Cliffs formations. The mud volume in the rig pits will be visually monitored on a routine basis.

Mud property guidelines:

Interval - ft.	Mud Weight - ppg	Viscosity-sec/qt	Water Loss-cc's
0 - 300	8.4 - 8.6	40 - 50	NC
300 - 3800	8.4	water & benex	
3800 - 5183	8.4 - 8.8	40 - 50	8 - 10

7. **Auxiliary Equipment:**

None.

8. **Logging Program:**

A Dual Induction and Formation Density / Compensated Neutron log suite will be run from TD to the surface casing shoe. Deep induction curve will be merged onto the porosity log.

Coring Program:

No cores are planned.

Testing Program:

No tests are planned.

Stimulation Program:

Perforate select Menefee and Pt. Lookout intervals with 1 JSPF and fracture stimulate with approximately 1500 lbs of frac sand per foot of perforated interval in slick fresh water base system.

9. **Abnormal Pressure:**

None expected.

Estimated Bottom Hole Pressure:

900 psig.