UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
2003 MAY -2 PM 12:54
070 Farmington, NM

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
DRILL

5. Lease Number
NMNM01772A
Unit Reporting Number

1b. Type of Well
GAS

6. If Indian, All. or Tribe

2. Operator
BURLINGTON RESOURCES Oil & Gas Company

7. Unit Agreement Name

3. Address & Phone No. of Operator
PO Box 4289, Farmington, NM 87499

(505) 326-9700

8. Farm or Lease Name
Neudecker
9. Well Number
7M

4. Location of Well
1505'FNL, 1845'FWL

Latitude 36° 43.6969, Longitude 107° 50.3117

10. Field, Pool, Wildcat
Otero Chacra/Blanco Mesaverde/Basin Dakota
11. Sec., Twn, Rge, Mer. (NMPM)
F Sec.13, T-29-N, R-10-W
API # 30-045- 31664

14. Distance in Miles from Nearest Town
1 mile to P.O. in Blanco

12. County San Juan **13. State** NM

15. Distance from Proposed Location to Nearest Property or Lease Line
1505'

16. Acres in Lease

17. Acres Assigned to Well
Cha: NW/
MV: W/319.8, DK: W/~~320~~ 319.8

18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease
946'

19. Proposed Depth
6800'

20. Rotary or Cable Tools
Rotary

21. Elevations (DF, FT, GR, Etc.)
5720' GR

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

24. Authorized by: Peggy Cole
Regulatory/Compliance Supervisor

Date 3-11-03

PERMIT NO. _____ **APPROVAL DATE** _____

APPROVED BY J. L. **TITLE** _____ **DATE** MAY 29 2003

Archaeological Report to be submitted
Threatened and Endangered Species Report to be submitted
NOTE: This format is issued in lieu of U.S. BLM Form 3160-3
Title 18 U.S.C. Section 1001, makes 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 presentations as to any matter within its jurisdiction.

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
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, N.M. 88211-0719

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

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

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 87504-2088

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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- 31664	82329/72319/71599	Otero Chacra/Blanco Mesaverde/Basin Dakota

4 Property Code	5 Property Name	6 Well Number
7355	NEUDECKER	7M

7 OGRID No.	8 Operator Name	9 Elevation
14538	BURLINGTON RESOURCES OIL & GAS INC.	5720

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
F	13	29-N	10-W		1505	NORTH	1845	WEST	SAN JUAN

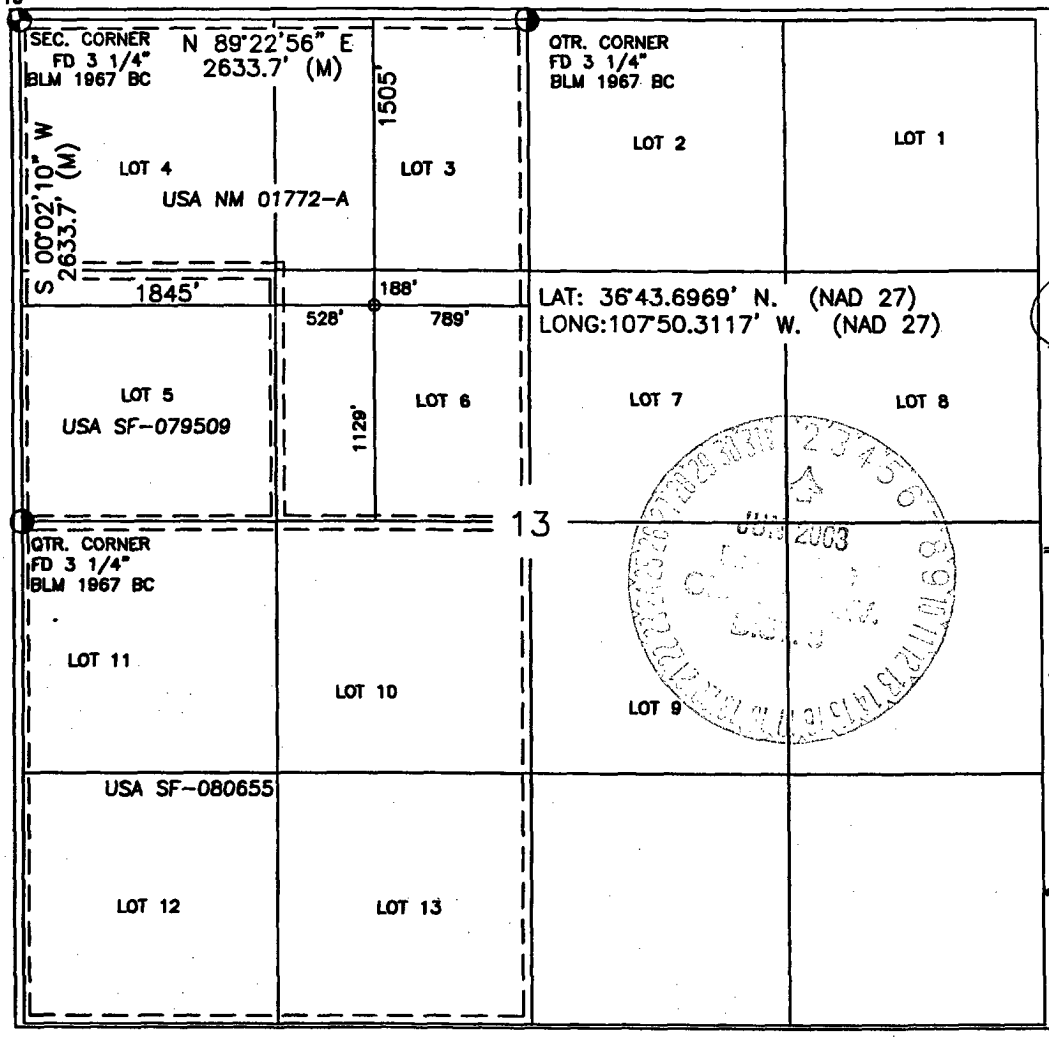
11 Bottom Hole Location If Different From Surface

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.
Cha: NW/168.4 MV:W/319.8, DK:W/320			

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

16



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Peggy Cole
Signature

Peggy Cole
Printed Name

Regulatory Supervisor
Title

3-11-03
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.

DAVID A. JOHNSON
NEW MEXICO
14827
REGISTERED PROFESSIONAL SURVEYOR

Date of Survey

Signature and Seal of Professional Surveyor:

14827
Certificate Number

OPERATIONS PLAN

Well Name: Neudecker #7M
Location: 1505'FNL, 1845'FWL, Sec 13, T-29-N, R-10-W
San Juan County, NM
Latitude 36° 43.6969'N, Longitude 107° 50.3117'W
Formation: Otero Chacra/Blanco Mesaverde/Basin Dakota
Elevation: 5720'GL

Formation Tops:	***Top***	***Bottom***	***Contents***
Surface	San Jose	1052'	
Ojo Alamo	1052'	1082'	aquifer
Kirtland	1082'	1797'	gas
Fruitland	1797'	2117'	gas
Pictured Cliffs	2117'	2282'	gas
Lewis	2282'	2757'	gas
Intermediate TD	**2382'**		
Huerfanito Bentonite	2757'	3132'	gas
Chacra	3132'	3787'	gas
Massive Cliff House	3787'	3912'	gas
Menefee	3912'	4417'	gas
Massive Point Lookout	4417'	4782'	gas
Mancos	4782'	5622'	
Gallup	5622'	6377'	gas
Greenhorn	6377'	6439'	
Graneros	6439'	6500'	
Dakota	6500'	6762'	gas
Morrison	6762'		
TD	**6800'**		

Logging Program:
Cased hole - CBL-CCL-GR - TD to surface
Open hole - Platform Express: DIL/GR - TD to surface casing,
Density/Neutron/Porosity w/RT - TD to 6275'; 4650' to 3700',
Bulk Density/Correction - TD to 6275'; 4650' to 3700'
Mudlog from 6100' to TD
Cores - none

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 120'	Spud	8.4-9.0	40-50	no control
120- 2382'	LSND	8.4-9.0	30-60	no control
2382- 6800'	Air/N2	n/a	n/a	n/a

Pit levels will be visually monitored to detect gain or loss of fluid control.

Casing Program (as listed, the equivalent, or better):

Hole Size	Depth Interval	Csg.Size	Wt.	Grade
12 1/4"	0' - 120'	9 5/8"	32.3#	H-40
8 3/4"	0' - 2382'	7"	20#	J-55
6 1/4"	2282' - 6800'	4 1/2"	10.5#	J-55

Tubing Program:

0' - 6800'	2 3/8"	4.7#	J-55

BOP Specifications, Wellhead and Tests:

Surface to Intermediate TD -
11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out surface casing, rams and casing will be tested to 600 psi for 30 minutes.

Intermediate TD to Total Depth -
11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out intermediate casing, rams and casing will be tested to 1500 psi for 30 minutes.

Surface to Total Depth -
2" nominal, 2000 psi minimum choke manifold (Reference Figure #3).

Completion Operations -
7 1/16" 2000 psi double gate BOP stack (Reference Figure #2). After nipple-up prior to completion, pipe rams, casing and liner top will be tested to 2000 psi for 15 minutes.

Wellhead -
9 5/8" x 7" x 2 3/8" x 2000 psi tree assembly.

General -
- Pipe rams will be actuated once each day and blind rams will be actuated once each trip to test proper functioning.
- An upper kelly cock valve with handle available and drill string valves to fit each drill string will be available on the rig floors at all times.
- BOP pit level drill will be conducted weekly for each drilling crew.
- All BOP tests and drills will be recorded in daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

Cementing:

9-5/8" surface casing - cement with 32 sxs Class A, B Portland Type I, II cement (38 cu.ft. of slurry, bring cement to surface through 3/4" line) or equivalent. WOC 24 hours for pre-set holes or 8 hours for conventionally set holes before pressure testing or drilling out from under surface casing.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

7" intermediate casing -
Lead w/199 sx Premium Lite with 3% calcium chloride, 0.25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate. Tail with 90 sx Type III cmt w/1% calcium chloride, 0.25 pps celloflake, 0.2% fluid loss (547 cu.ft. of slurry, 50% excess to circulate to surface). WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL or temperature survey will be run to determine TOC. Test casing to 1500 psi for 30 minutes.

7" intermediate casing alternative two stage: Stage collar at 1697'. First stage: Tail w/119 sx Type III cmt w/1% calcium chloride, 0.25 pps celloflake, 0.2% fluid loss. Second stage: w/180 sx Premium Lite with 3% calcium chloride, 0.25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate. (547 cu.ft. of slurry, 50% excess to circulate to surface).

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every other joint off bottom, to the base of the Ojo Alamo at 1082'. Two turbolating centralizers at the base of the Ojo Alamo at 1082'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production Liner -
Pump 306 sxs Premium Lite HS FM w/0.25 pps celloflake, 0.3% CD-32, 6.25 pps LCM-1, 1% fluid loss, 6% gel, 7 pps CSE (606 cu.ft., 30% excess to circulate liner). WOC a minimum of 18 hrs prior to completing.

Note: If open hole logs are run, cement volumes will be based on 25% excess over caliper volumes.

Cement float shoe on bottom with float collar spaced on top of float shoe.

Note: To facilitate higher hydraulic stimulation completion work, no liner hanger will be used. In its place, a long string of 4 1/2" casing will be run and cemented with a minimum of 100' of cement overlap between the 4 1/2" x 7" casing strings. After completion of the well, a 4 1/2" retrievable bridge plug will be set below the top of cement in the 4 1/2" x 7" overlap. The 4 1/2" casing will then be backed off above the top of cement in the 4 1/2" x 7" overlap and laid down. The 4 1/2" bridge plug will then be retrieved and the production tubing will be run to produce the well.

- If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/ mud contamination or cement hydration.

Special Drilling Operations (Gas/Mist Drilling):

The following equipment will be operational while gas/mist drilling:

- An anchored blooie line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the wellhead.
- The blooie line will be equipped with an automatic igniter or pilot light.
- Compressors will be located a minimum of 100' from the wellhead in the opposite direction from the blooie line.
- Engines will have spark arresters or water cooled exhaust.
- Deduster equipment will be utilized.
- The rotating head will be properly lubricated and maintained.
- A float valve will be utilized above the bit.
- Mud circulating equipment, water, and mud materials will be sufficient to maintain control of the well.

Additional Information:

- The Chacra, Dakota, and Mesa Verde formations will be completed and commingled.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal	300 psi
Pictured Cliffs	600 psi
Mesa Verde	700 psi
Dakota	1000 psi

- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered.
- The northwest quarter is dedicated to the Chacra and the west half of Section 13 is dedicated to the Mesa Verde and Dakota in this well.
- This gas is dedicated.

Jean Corrigan
Drilling Engineer

April 9, 2003