

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
DRILL —

5. Lease Number
SF-078115
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 87498
(505) 326-9700

8. Farm or Lease Name
Grenier
9. Well Number
#11F

4. Location of Well
965' FNL, 500' FWL
Latitude 36° 54.2, Longitude 108° 03.4

10. Field, Pool, Wildcat
Basin Dakota
11. Sec., Twn, Rge, Mer. (NMPM)
0 Sec. 13, T-31-N, R-12-W
API # 30-045-30466

14. Distance in Miles from Nearest Town
8.5 miles to Aztec, NM P.O.

12. County
San Juan
13. State
NM

15. Distance from Proposed Location to Nearest Property or Lease Line
500'

16. Acres in Lease

17. Acres Assigned to Well
314.53

18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease
577'

19. Proposed Depth
7409' —
This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.

20. Rotary or Cable Tools
Rotary

21. Elevations (DF, FT, GR, Etc.)
6231' GR

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

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

24. Authorized by: [Signature]
Regulatory/Compliance Supervisor

Date 10-20-00

PERMIT NO. _____

APPROVAL DATE _____

APPROVED BY /s/ Jim Lovato

TITLE _____

DATE MAR 13

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.

80 Acre Infill pit
NSL approved R-11532

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

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 30-045- 30466		² Pool Code 71599	³ Pool Name Basin Dakota
⁴ Property Code 18530	⁵ Property Name GRENIER		⁶ Well Number 11F
⁷ DGRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS INC.		⁹ Elevation 6231'

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
D	13	31-N	12-W		965	NORTH	500	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 W/314.53					¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No. R-11582

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 BLM 1951 B.C.

FD 3 1/2" BLM 1951 B.C.

N 89-36-15 E

2457.04' (M)

965'

LOT 4

LOT 3

USA SF-078115

LAT: 36°54.2' N
LONG: 108°03.4' W

500'

N 06-45-07 E

2584.64' (M)

MCGRAIL, M.H.

FD 3 1/2" BLM 1951 B.C.

LOT 2

LOT 1

LOT 5

MAR 2001
RECEIVED
OIL CON. DIV.
DIST. 3

LOT 6

LOT 7

HARPER, M.H.

MCGRAIL, M.H.

17 OPERATOR CERTIFICATION

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

Signature Peggy Cole

Printed Name Peggy Cole

Title Regulatory Supervisor

Date 10-20-00

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

Date of Survey 9-18-00

Signature and Seal of Professional Surveyor ROY A. RUSH

Certificate Number 8894

BURLINGTON RESOURCES OIL & GAS INC.

GRENIER 11F

NW/4 SEC.13, T-31-N, R-12-W, N.M.P.M.

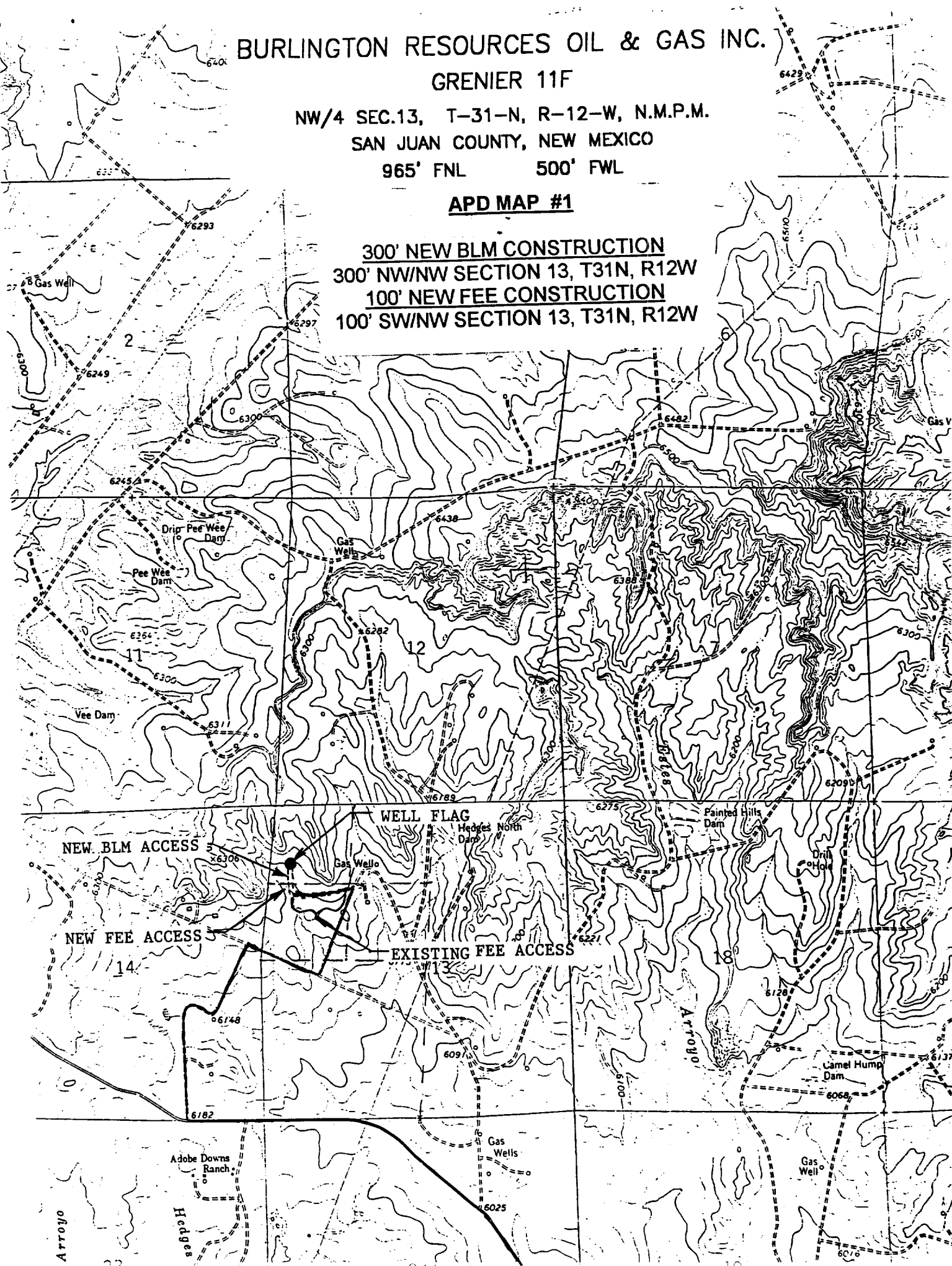
SAN JUAN COUNTY, NEW MEXICO

965' FNL

500' FWL

APD MAP #1

300' NEW BLM CONSTRUCTION
300' NW/NW SECTION 13, T31N, R12W
100' NEW FEE CONSTRUCTION
100' SW/NW SECTION 13, T31N, R12W



OPERATIONS PLAN

Well Name: Grenier #11F
Location: 965' FNL, 500' FWL, Sec.13, T-31-N, R-12-W
San Juan County, NM
Latitude 36° 54.2, Longitude 108° 03.4
Formation: Basin Dakota
Elevation: 6231' GL

<u>Formation</u>	<u>Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface		San Jose	1108'	
Ojo Alamo		1108'	1184'	aquifer
Kirtland		1184'	2104'	gas
Fruitland		2104'	2759'	
Pictured Cliffs		2759'	2929'	gas
Lewis		2929'	3467'	gas
Mesaverde		3467'	3855'	gas
Chacra		3855'	4369'	gas
Massive Cliff House		4369'	4537'	gas
Menefee		4537'	5048'	gas
Massive Point Lookout		5048'	5450'	gas
Mancos Shale		5450'	7114'	gas
Greenhorn		7114'	7224'	gas
Dakota		7224'	7409'	gas
TD		7409'		

Logging Program:

Open hole logs - GR/ILD/DEN/NEUT
Cased hole logs - CBL/GR - TD to surface.
Cores - none

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 320'	Spud	8.4-8.9	40-50	no control
320-7409'	LSND	8.4-9.0	40-60	8-12

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

Casing Program:

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg.Size</u>	<u>Wt.</u>	<u>Grade</u>
12 1/4"	0' - 320'	8 5/8"	24.0#	WC-50
7 7/8"	0' - 7409'	4 1/2"	10.5#	J-55

Tubing Program:

0' - 7409' 2 3/8" 4.7# J-55 EUE

BOP Specifications, Wellhead and Tests:

Surface to 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.

2" nominal, 2000 psi minimum choke manifold (Reference Figure #3).

Completion Operations -

6" 2000 psi double gate BOP stack (Reference Figure #2).
After nipple-up prior to completion, pipe rams and casing top will be tested to 3000 psi for 15 minutes.

Surface to Total Depth -

2" nominal, 2000 psi minimum choke manifold (Reference Figure #3).

Wellhead -

8 5/8" x 4 1/2" x 2 3/8" x 3000 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.
- A BOP pit level drill will be conducted weekly for each drilling crew.
- All of the BOP tests and drills will be recorded in the daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

Cementing:

8 5/8" surface casing -

Cement to surface w/336 sx Class "G" cement w/3% calcium chloride and 1/4#/sx cellophane flakes (396 cu.ft. of slurry, 200% excess to circulate to surface.) WOC 8 hr prior to drilling out surface casing. Test casing to 600 psi for 30 minutes.

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

Production Casing - 4 1/2"

4 1/2" production casing -

Lead w/807 sx Litecrete, 0.11% dispersant. Tail w/346 sx 50/50 Class "G" poz w/5% gel, 0.25 pps celloflakes, 5 pps gilsonite, 0.25% fluid loss, 0.15% dispersant, 0.1% retarder (2532 cu. ft. of slurry, 50% excess.) *Circ.*

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

Float shoe on bottom. Three centralizers run every other joint above shoe. Thirty-five centralizers - one every 4th joint to the base of the Ojo Alamo @ 1184'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1184'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.