UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. **Type of Work**
DRILL

1b. **Type of Well**
GAS

5. **Lease Number**
SF-079045
Unit Reporting Number

6. **If Indian, All. or Tribe**

2. **Operator**
BURLINGTON RESOURCES Oil & Gas Company

7. **Unit Agreement Name**
Northeast Blanco Unit

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

(505) 326-9700

8. **Farm or Lease Name**
Northeast Blanco Unit

9. **Well Number**
57M

4. **Location of Well**
~~2455~~' FSL, ~~625~~ 1480 FEL
L GO
Latitude 36° 53.1, Longitude 107° 34.2

10. **Field, Pool, Wildcat**
Blanco Mesaverde/Basin Dakota

11. **Sec., Twn, Rge, Mer. (NMPM)**
O Sec.21, T-31-N, R-7-W

API # 30-045- 30282

14. **Distance in Miles from Nearest Town**
8 mi from Navajo Dam P.O.

12. **County**
San Juan

13. **State**
NM

15. **Distance from Proposed Location to Nearest Property or Lease Line**
625'

16. **Acres in Lease**

17. **Acres Assigned to Well**
320 E/2

18. **Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease**
1300'

19. **Proposed Depth**
8050'

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.)**
~~6494~~' GL
6379

22. **Approx. Date Work will Start**

23. **Proposed Casing and Cementing Program**
See Operations Plan attached

PLANNED OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

24. **Authorized by:** Peggy Cole
Regulatory/Compliance Administrator — 6-13-00
Date

APR 2001
RECEIVED
070 FARMINGTON NM
OIL CON. DIV.
DIST. 3

PERMIT NO. _____ **APPROVAL DATE** _____

APPROVED BY /s/ Lee Otteni **TITLE** _____ **DATE** APR 17

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.

NMOCD

submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

1. **Type of Well**
GAS

5. **Lease Number**
SF-079045

6. **If Indian, All. or Tribe Name**

7. **Unit Agreement Name**
Northeast Blanco Unit

2. **Name of Operator**
BURLINGTON RESOURCES OIL & GAS COMPANY

8. **Well Name & Number**
Northeast Blanco U#57M

3. **Address & Phone No. of Operator**
PO Box 4289, Farmington, NM 87499 (505) 326-9700

9. **API Well No.**
30-045-

4. **Location of Well, Footage, Sec., T, R, M**
660'FSL, 1980'FEL, Sec.21, T-31N-N, R-7-W, NMPM

10. **Field and Pool**
Basin DK/Blanco MV

11. **County and State**
San Juan Co, NM

12. **CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA**

Type of Submission	Type of Action		
_x_ Notice of Intent	___ Abandonment	___ Recompletion	___ Plugging Back
___ Subsequent Report	___ Casing Repair	___ Altering Casing	___ Other -
___ Final Abandonment	___ Change of Plans	___ New Construction	___ Non-Routine Fracturing
	___ Water Shut off	___ Conversion to Injection	

13. **Describe Proposed or Completed Operations**

The location of the subject well has been moved from 2455'FSL, 625'FEL to 660'FSL, 1980'FEL. Attached is the revised C-102 plat.

APR 2001
RECEIVED
070 FARMINGTON NM

14. **I hereby certify that the foregoing is true and correct.**

Signed Peggy Cole Title Regulatory Supervisor Date 12/21/00

TLW

(This space for Federal or State Office use)
APPROVED BY /s/ Lee Otteni Title _____ Date APR 17
CONDITION OF APPROVAL, if any:

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 representations as to any matter within its jurisdiction.

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

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

¹API Number	²Pool Code	³Pool Name
30-045- 30282	71599/72319	Basin Dakota/Blanco Mesaverde

⁴Property Code	⁵Property Name	⁶Well Number
23785	NORTHEAST BLANCO UNIT	57M

⁷OGRID No.	⁸Operator Name	⁹Elevation
14538	BURLINGTON RESOURCES OIL & GAS COMPANY	6379'

¹⁰ Surface Location

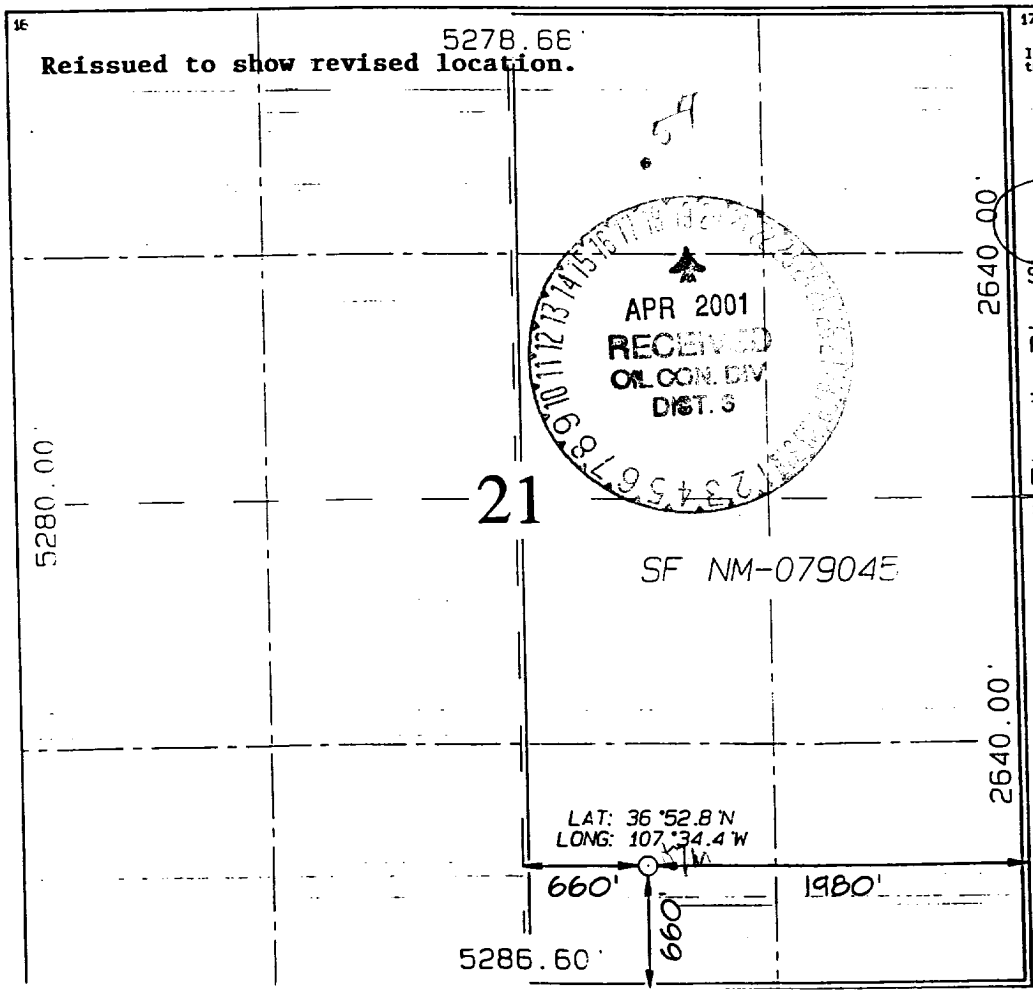
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	21	31N	7W		660	SOUTH	1980	EAST	SAN JUAN

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.
E/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



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

Regulatory Supervisor
Title

12-21-00
Date

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this pla was plotted from field notes of actual surveys made by m or under my supervision, and that the same is true and correct to the best of my belief.

OCTOBER 30, 2000
Date of Survey

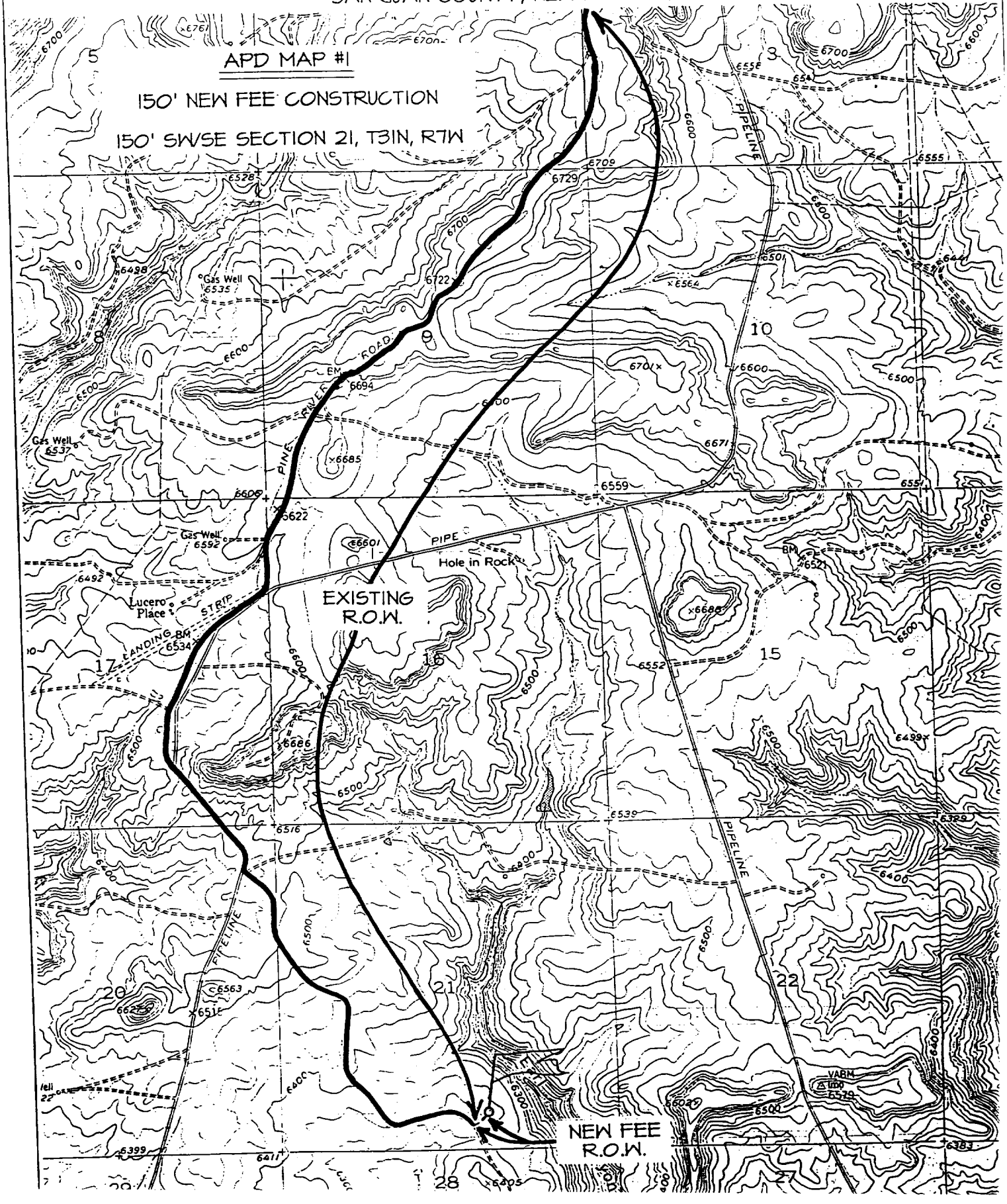
Signature and Seal of Professional Surveyor

NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED PROFESSIONAL SURVEYOR

Certificate Number 6857

BURLINGTON RESOURCES OIL & GAS COMPANY NORTHEAST BLANCO UNIT #57M

660' FSL & 1980' FEL, SECTION 21, T31N, R7W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO



OPERATIONS PLAN

Well Name: Northeast Blanco Unit #57M
Location: 2455'FSL, 625'FEL, Sec 21, T-31-N, R-7-W
San Juan County, NM
Latitude 36° 53.1, Longitude 107° 34.2
Formation: Blanco Mesaverde/Basin Dakota
Elevation: 6434'GL

Formation Tops:	***Top***	***Bottom***	***Contents***
Surface	San Jose	2261'	
Ojo Alamo	2261'	2366'	aquifer
Kirtland	2366'	2836'	gas
Fruitland	2836'	3196'	gas
Pictured Cliffs	3196'	3396'	gas
Lewis	3396'	4076'	gas
Intermediate TD	**3496'**		
Mesa Verde	4076'	4496'	gas
Chacra	4496'	5266'	gas
Massive Cliff House	5266'	5296'	gas
Menefee	5296'	5576'	gas
Massive Point Lookout	5576'	5911'	gas
Mancos	5911'	6896'	gas
Gallup	6896'	7636'	gas
Greenhorn	7636'	7696'	gas
Graneros	7696'	7806'	gas
Dakota	7806'		gas
TD	**8050'**		

Logging Program:
Cased hole - CBL-CCL-GR - TD to surface
Open hole - IEL-GR, CNL-CDL - TD to intermediate casing
Cores - none
Mud log - 7000' to TD

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-9.0	40-50	no control
200- 3496'	LSND	8.4-9.0	30-60	no control
3496- 8050'	Gas	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
14 3/4"	0' - 200'	11 3/4"	42.0#	H-40
10 5/8"	0' - 3496'	8 5/8"	32.0#	K-55
7 7/8"	3396' - 8050'	5 1/2"	15.5#	K-55

Tubing Program:

0' -5911'	1 1/2"	2.90#	J-55
0' -8050'	1 1/2"	2.76#	J-55

BOP Specifications, Wellhead and Tests:
Surface to Intermediate TD -
11" 3000 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" 3000 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, 3000 psi minimum choke manifold (Reference Figure #2).

Completion Operations -

7 1/16" 3000 psi double gate BOP stack (Reference Figure #3). After nipple-up prior to completion, pipe rams, casing and liner top will be tested to 3000 psi for 15 minutes.

Wellhead -

11 3/4" x 8 5/8" x 1 1/2" x 1 1/2" 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.
- 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:

11 3/4" surface casing - cement with 221 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (260 cu.ft. of slurry, 200% excess to circulate to surface). WOC 8 hrs. 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.

8 5/8" intermediate casing -
Lead w/467 sx Class "B" w/3% Econolite, 10 pps gilsonite/sx and 0.25 pps flocele/sx. Tail w/90 sx Class "B" 50/50 poz w/2% gel, 2% calcium chloride, 5 pps Gilsonite/sx, 0.25 pps flocele/sx (1469 cu.ft. of slurry, 100% excess to circulate to surface.) WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL will be run during completion operations to determine TOC. Test casing to 1500 psi for 30 minutes.

8 5/8" intermediate casing alternative two stage: Stage collar at 2736'. First stage: cement with w/253 sx Class "B" 50/50 poz w/2% gel, 2% calcium chloride, 5 pps Gilsonite/sx, 0.25 pps Flocele. Second stage: 396 sx Class "B" with 6% gel, 2% calcium chloride, 1/4# Cellophane/sx, 5# Gilsonite/sx (1469 cu.ft., 100% 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 2366'. Two turbolating centralizers at the base of the Ojo Alamo at 2366'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

5 1/2" Production Liner -

Cement to cover minimum of 100' of 5 1/2" x 8 5/8" overlap. Lead with 801 sx 50/50 Class "B" Poz with 3% gel, 0.3% Halad-344, 0.4% Halad-413, 0.15% HR-5, 0.25# flocele/sx, 5# gilsonite/sx, (1129 cu.ft.), 40% excess to cement 5 1/2" x 8 5/8" overlap). WOC a minimum of 18 hrs prior to completing.

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

Note: To facilitate higher hydraulic stimulation completion work, no liner hanger will be used. In its place, a long string of 5 1/2" casing will be run and cemented with a minimum of 100' of cement overlap between the 5 1/2" x 8 5/8" casing strings. After completion of the well, a 5 1/2" retrievable bridge plug will be set below the top of cement in the 5 1/2" x 8 5/8" overlap. The 5 1/2" casing will then be backed off above the top of cement in the 5 1/2" x 8 5/8" overlap and laid down. The 5 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 Mesaverde and Dakota formations will be completed and dualled.
- 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	2500 psi

- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered.
- The east half of Section 21 is dedicated to the Mesaverde and Dakota in this well.
- This gas is dedicated.

Drilling Engineer

6/19/00
Date