

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 NMSF-079519A Unit Reporting Number MV-8910009490 DK-891000949A	
1b. Type of Well GAS	6. If Indian, All. or Tribe	
2. Operator BURLINGTON RESOURCES Oil & Gas Company	7. Unit Agreement Name San Juan 28-5 Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 28-5 Unit 9. Well Number 86N	
4. Location of Well 1570' FSL, 1910' FWL 1665' 1885' Latitude 36° 38.6, Longitude 107° 19.8	10. Field, Pool, Wildcat Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) K Sec. 23, T-28-N, R-5-W API # 30-039- 26956	
14. Distance in Miles from Nearest Town 40 miles from Blanco	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1570'	17. Acres Assigned to Well MV - 320 S/2 DK - 320 W/2	
16. Acres in Lease		
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 719'		
19. Proposed Depth 8525'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 7150' GR 7134	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u><i>Deputy Cole</i></u> Regulatory/Compliance Supervisor	Date <u>2-6-02</u>	

PERMIT NO. _____

APPROVAL DATE _____

APPROVED BY *W. J. [Signature]*

TITLE *Pet. Eng*

DATE **10/25/02**

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.

NMOC

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

1. Type of Well
GAS

2. Name of Operator

**BURLINGTON
RESOURCES**

OIL & GAS COMPANY

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. Location of Well, Footage, Sec., T, R, M

1665' FSL, 1885' FWL, Sec. 23, T-28-N, R-5-W, NMPM

5. Lease Number
NMSF-079519A

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

San Juan 28-5 Unit

8. Well Name & Number

San Juan 28-5 U #86N

9. API Well No.

30-039-

10. Field and Pool

Blanco MV/Basin DK

11. County and State

Rio Arriba Co, NM

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

Type of Submission

Type of Action

☒ Notice of Intent

☐ Abandonment

☒ Change of Plans

☐ Subsequent Report

☐ Recompletion

☐ New Construction

☐ Final Abandonment

☐ Plugging Back

☐ Non-Routine Fracturing

☐ Casing Repair

☐ Water Shut off

☐ Altering Casing

☐ Conversion to Injection

☒ Other -

13. Describe Proposed or Completed Operations

The location of the subject well has been changed from 1570' FSL, 1910' FWL. Attached are a new C-102 plat, topographic map and cut and fill diagram.

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

Signed Peggy Cole Title Regulatory Supervisor Date 7/24/02
no

(This space for Federal or State Office use)

APPROVED BY [Signature] Title Pet. Eng. Date 10/25/02
CONDITION OF APPROVAL, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NMOCD

RECEIVED
 2002 JUL 26 PM 2:20
 OFFICE OF THE ATTORNEY GENERAL

DISTRICT I
1626 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
611 South First, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brancos Ed., Aztec, N.M. 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039- 26956	² Pool Code 72319/71599	³ Pool Name Blanco Mesaverde/Basin Dakota
⁴ Property Code 7460	⁵ Property Name SAN JUAN 28-5 UNIT	⁶ Well Number 86N
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS, INC.	⁹ Elevation 7134'

¹⁰ Surface Location

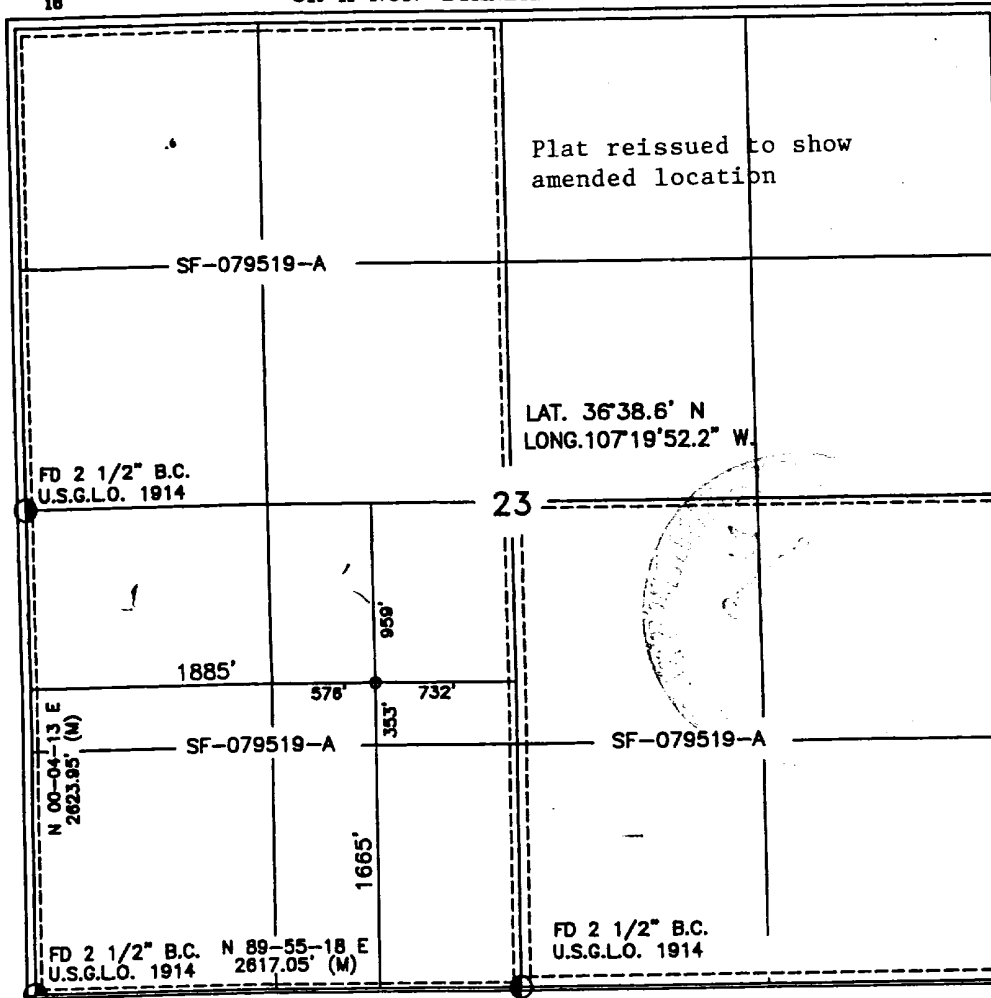
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	23	28-N	5-W		1665	SOUTH	1885	WEST	RIO ARriba

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 MV-S/320 DK-W/320			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

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

Date

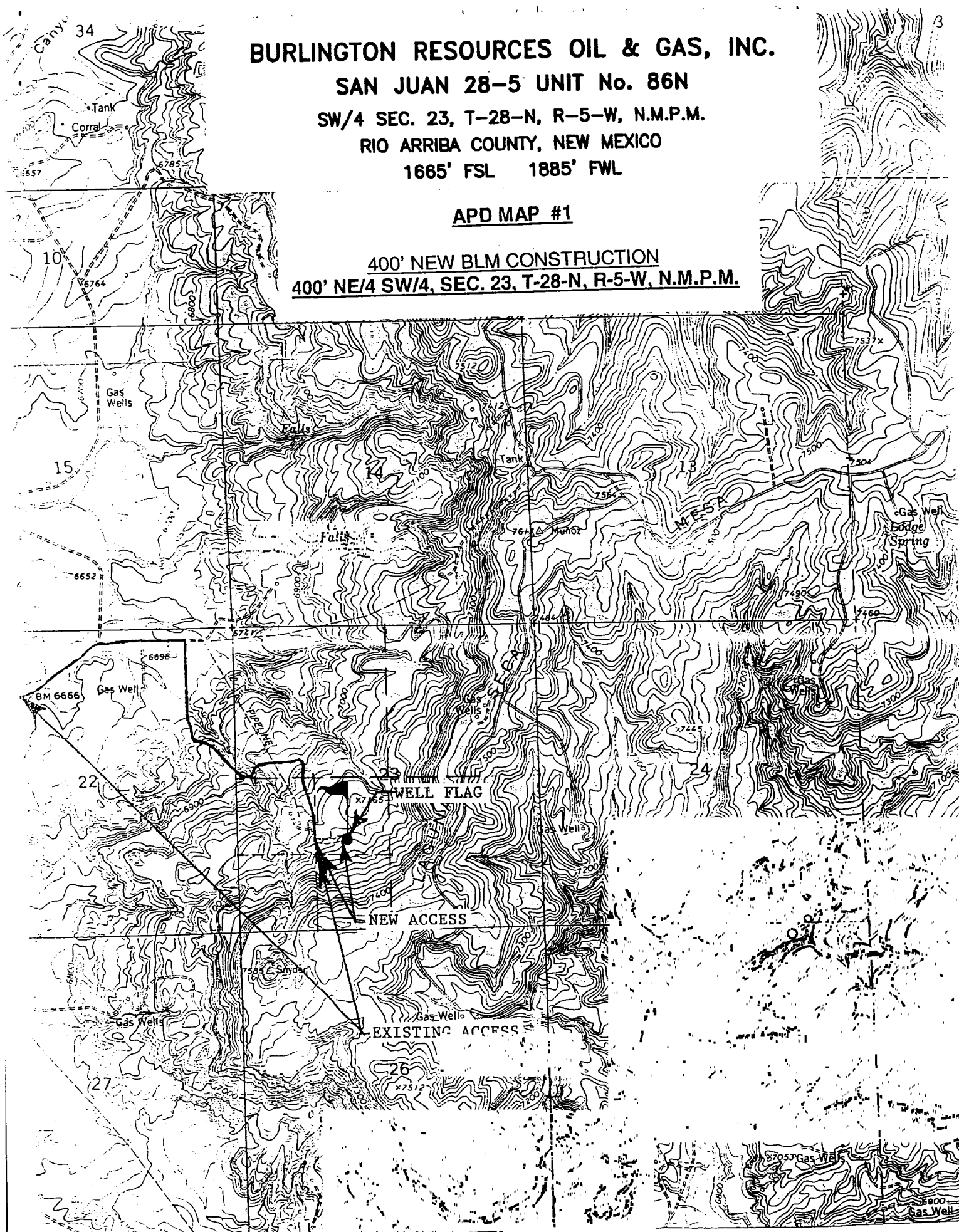
7-24-02

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 R. JOHNSON
NEW MEXICO
Date of Survey
Signature of Professional Surveyor
REGISTERED PROFESSIONAL SURVEYOR
14827
Certificate Number

400' NEW BLM CONSTRUCTION
400' NE/4 SW/4, SEC. 23, T-28-N, R-5-W, N.M.P.M.



OPERATIONS PLAN

Well Name: San Juan 28-5 Unit #86N
~~1570' FSL, 1910' FWL~~, Section 23, T-28-N, R-5-W
Rio Arriba County, New Mexico
Latitude 36° 38.6, Longitude 107° 19.8
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 7150' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	3402'	
Ojo Alamo	3402'	3567'	aquifer
Kirtland	3567'	3702'	gas
Fruitland	3702'	4082'	
Pictured Cliffs	4082'	4197'	gas
Lewis	4197'	4702'	gas
Intermediate TD	4297'		
Huerfanito Bentonite	4702'	5062'	gas
Chacra	5062'	5902'	gas
Cliff House	5902'	5932'	
Menefee	5932'	6227'	gas
Point Lookout	6227'	6652'	gas
Mancos	6652'	7447'	gas
Gallup	7447'	8193'	gas
Greenhorn	8193'	8257'	gas
Graneros	8257'	8308'	gas
Dakota	8308'		
TD	8525'		

Logging Program:

Mud logs - none
Open hole - none
Cased hole - CBL-CCL-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- 200'	Spud	8.4-9.0	40-50	no control
200- 4297'	LSND	8.4-9.0	30-60	no control
4297- 8525'	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):

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
12 1/4"	0' - 200'	9 5/8"	32.3#	WC-50
8 3/4"	0' - 4297'	7"	20.0#	J-55
6 1/4"	4197' - 8525'	4 1/2"	10.5#	K-55

Tubing Program:

0' - 8525'

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 2000 psi for 15 minutes.

Wellhead -

9 5/8" x 7" 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.
- 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 159 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (188 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.

7" intermediate casing -

Lead w/456 sx 50/50 Class "G" TXI Liteweight cement with 2% calcium chloride, 2.5% sodium metasilicate, 10 pps Gilsonite and 0.5 pps Celloflake. Tail w/90 sx Class "G" 50/50 poz w/2% gel, 2% calcium chloride, 5 pps Gilsonite, 0.25 pps Celloflake (1297 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.

See attached alternative intermediate lead slurry.

7" intermediate casing alternative two stage: Stage collar 3062'. First stage: cement with w/163 sx Class "G" 50/50 poz w/2% gel, 2% calcium chloride, 5 pps gilsonite, 0.25 pps Celloflake. Second stage: 420 sx 50/50 Class "G"/TXI Liteweight with 2% calcium chloride, 2.5% sodium metasilicate, 10 pps Gilsonite, 0.25 pps Celloflake (1297 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 3567'. Two turbolating centralizers at the base of the Ojo Alamo at 3567'. 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 -

Cement to cover minimum of 100' of 4 1/2" x 7" overlap. Lead with 432 sx 50/50 Class "G" Poz with 5% gel, 0.25 pps Celloflake, 5 pps Gilsonite (622 cu.ft.), 40% excess to cement 4 1/2" x 7" overlap). WOC a minimum of 18 hrs prior to completing.

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

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

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 Mesaverde and Dakota 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	2500 psi
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered.
- The south half of Section 23 is dedicated to the Mesaverde and the west half of Section 23 is dedicated to the Dakota in this well.
- This gas is dedicated.

Brennan D. Shurt
Drilling Engineer

2/7/02
Date