

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED

1a. Type of Work DRILL	5. Lease Number SF-080713B Unit Reporting Number 070 Farmington, NM
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator <b>BURLINGTON RESOURCES</b> Oil & Gas Company	7. Unit Agreement Name San Juan 30-6 Unit
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 30-6 Unit 9. Well Number 428
4. Location of Well 2205' FSL, 190' FWL Latitude 36° 48.7, Longitude 107° 26.4	10. Field, Pool, Wildcat Basin Dakota & Blanco Mesaverde 11. Sec., Twn, Rge, Mer. (NMPM) L Sec. 14, T-30-N, R-6-W API # 30-039-76770
14. Distance in Miles from Nearest Town 15 miles from Gobernador	12. County Rio Arriba 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 190'	
16. Acres in Lease	17. Acres Assigned to Well 320 W/2
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 1300'	
19. Proposed Depth 5945'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6388' 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: <u>Benny Calc</u> Regulatory/Compliance Supervisor	Date 6-28-01

PERMIT NO. \_\_\_\_\_ APPROVAL DATE 11/5/01  
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

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.

HOLD C104 FOR NSL in Basin Dakota

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

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

2001 SEP -7 PM 3:47

☐ AMENDED REPORT

070 Farming, N.M.

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039 26770		*Pool Code 72319/71599	*Pool Name Blanco Mesaverde/Basin Dakota
*Property Code 7469	*Property Name SAN JUAN 30-6 UNIT		*Well Number 42M
*GRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP		*Elevation 6388'

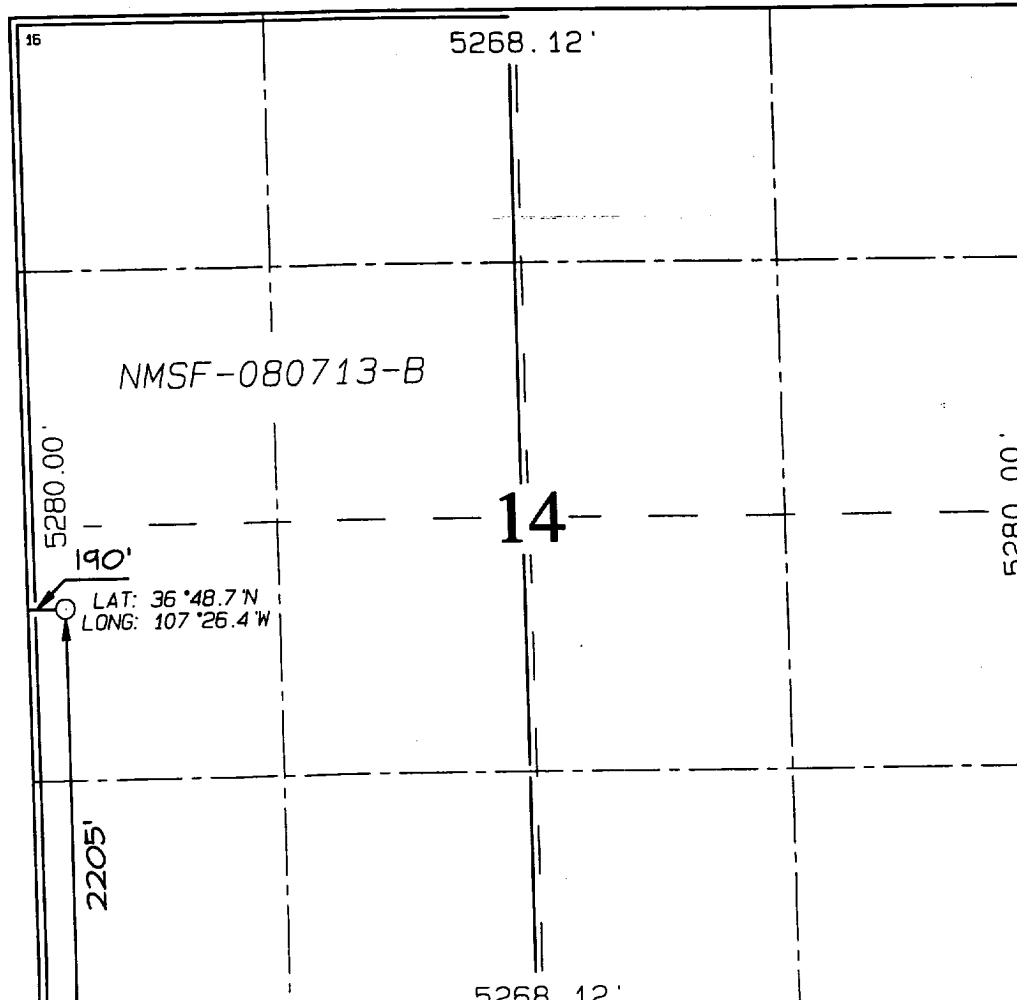
<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	14	30N	6W		2205	SOUTH	190	WEST	RIO ARriba

<sup>11</sup> 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
<sup>12</sup> Dedicated Acres MV-W/320 DK-W/320		<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> 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



<sup>17</sup> 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

9-6-01

Date

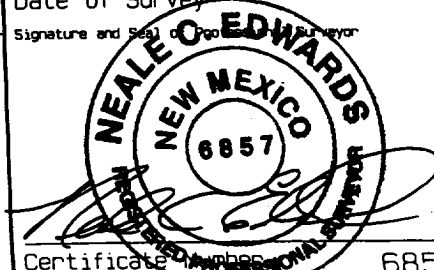
<sup>18</sup> SURVEYOR CERTIFICATION

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

MAY 15, 2001

Date of Survey

Signature and Seal of Surveyor



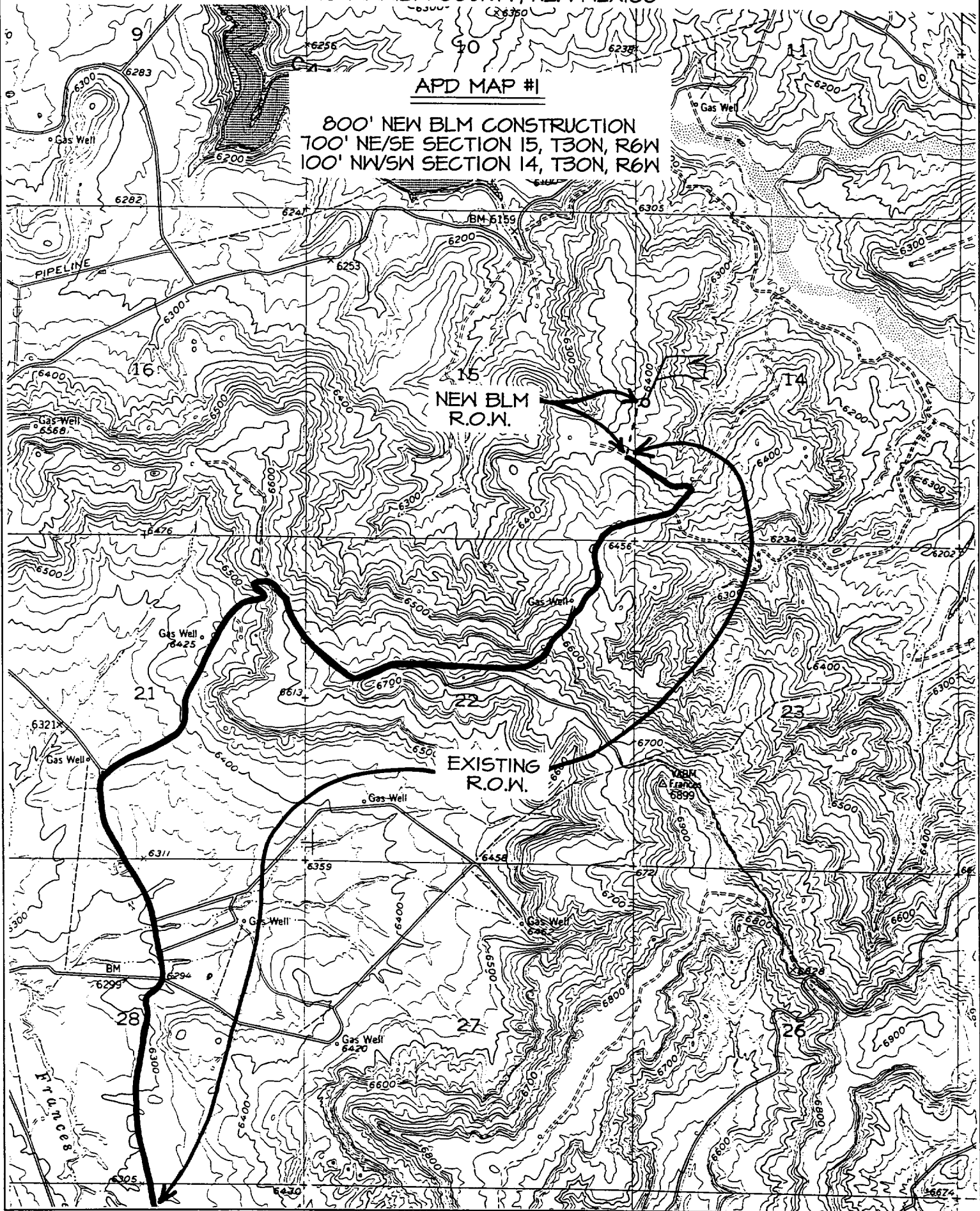
Certificate Number 6857

BURLINGTON RESOURCES OIL & GAS COMPANY SAN JUAN 30-6 UNIT #42B

2205' FSL & 190' FWL, SECTION 14, T30N, R6W, N.M.P.M.  
RIO ARriba COUNTY, NEW MEXICO

APD MAP #1

800' NEW BLM CONSTRUCTION  
700' NE/SE SECTION 15, T30N, R6W  
100' NW/SW SECTION 14, T30N, R6W



submitted in lieu of Form 3160-5

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

Sundry Notices and Reports on Wells

2001 SEP -7 PM 3:47

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

2205' FSL, 190' FWL, Sec.14, T-30-N, R-6-W, NMPM

5. Lease Number

SF-080713B

6. If Indian, All. or  
Tribe Name

7. Unit Agreement Name

San Juan 30-6 Unit

8. Well Name & Number

San Juan 30-6 U #42M

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

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment

Type of Action

☐ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☒ Other -

☒ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut off

☐ Conversion to Injection

13. Describe Proposed or Completed Operations

It is intended to add the Dakota formation to the previously submitted Application for Permit to Drill. Attached is a new C-102 plat, operations plan, blow out preventer diagram and facilities lay out plan. The well name has been changed from the San Juan 30-6 Unit #42B.

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

Signed Jim Lovato Title Regulatory Supervisor Date 9/6/01  
no

(This space for Federal or State Office use)

APPROVED BY /s/ Jim Lovato Title \_\_\_\_\_ Date NOV - 5

CONDITION OF APPROVAL, if any:

## OPERATIONS PLAN

**Well Name:** San Juan 30-6 Unit #42M  
**Location:** 2205' FSL, 190' FWL, Section 14, T-30-N, R-6-W  
Rio Arriba County, New Mexico  
Latitude 36° 48.7, Longitude 107° 26.4  
**Formation:** Blanco Mesa Verde/Basin Dakota  
**Elevation:** 6388' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	2430'	
Ojo Alamo	2430'	2525'	aquifer
Kirtland	2525'	2852'	
Fruitland	2852'	3195'	gas
Pictured Cliffs	3195'	3390'	gas
Lewis	3390'	4015'	gas
Intermediate TD	3490'		
Huerfano Bentonite	4015'	4380'	gas
Chacra	4380'	5215'	gas
Massive Cliff House	5215'	5250'	gas
Menefee	5250'	5545'	gas
Point Lookout	5545'	5930'	gas
Mancos	5930'	6820'	gas
Gallup	6820'	7530'	gas
Greenhorn	7530'	7575'	gas
Graneros	7575'	7715'	gas
Dakota	7715'		gas
TD	7830'		

### 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- 300'	Spud	8.4-9.0	40-50	no control
300- 3490'	LSND	8.4-9.0	30-60	no control
3490- 7830'	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' - 300'	9 5/8"	32.3#	WC-50
8 3/4"	0' - 3490'	7"	20.0#	J-55
6 1/4"	3390' - 7830'	4 1/2"	10.5#	K-55

### Tubing Program:

0' - 7830'      2 3/8"      4.7#      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 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 239 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (282 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/362 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 (1049 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 2752'. First stage: cement with w/173 sx Class "G" 50/50 poz w/2% gel, 2% calcium chloride, 5 pps gilsonite, 0.25 pps Celloflake. Second stage: 321 sx 50/50 Class "G"/TXI Liteweight with 2% calcium chloride, 2.5% sodium metasilicate, 10 pps Gilsonite, 0.25 pps Celloflake (1049 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 2525'. Two turbolating centralizers at the base of the Ojo Alamo at 2525'. 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 443 sx 50/50 Class "G" Poz with 5% gel, 0.25 pps Celloflake, 5 pps Gilsonite (638 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 west half of Section 14 is dedicated to the Mesaverde and Dakota in this well.
- This gas is dedicated.

Brennan D. Whit  
Drilling Engineer

9/7/2001  
Date