8

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2001 MAY 31 PM 3:57

1a. Type of Work
DRILL

5. Lease Number
SF-079382

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
San Juan 30-6 Unit

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

(505) 326-9700

DEC 2001

8. Farm or Lease Name
San Juan 30-6 Unit

9. Well Number
74B

4. Location of Well
1040' FSL, 680' FEL

Latitude 36° 47.6, Longitude 107° 32.0

10. Field, Pool, Wildcat
Blanco MV/Basin DK

11. Sec., Twn, Rge, Mer. (NMPM)
P Sec. 23, T-30-N, R-7-W

API # 30-039-26762

14. Distance in Miles from Nearest Town
42 miles from Blanco

12. County
Rio Arriba

13. State
NM

15. Distance from Proposed Location to Nearest Property or Lease Line
680'

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
1315'

19. Proposed Depth
7700'

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.)
6225' GR

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

[illegible] ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

24. Authorized by: Peggy Cole
Regulatory/Compliance Supervisor

5-25-01
Date

PERMIT NO.

APPROVAL DATE 11/29/01

APPROVED BY /s/ Jim Lovato

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.

NMOC

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

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

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

2001 MAY 31 PM 3: 57

Form C-102
Revised August 15, 2000

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number 30-039-26762	[2] Pool Code 72319/71599	[3] Pool Name Blanco Mesaverde/Basin Dakota
[4] Property Code 7469	[5] Property Name SAN JUAN 30-6	[6] Well Number 74B
[7] OGRID No. 14538	[8] Operator Name BURLINGTON RESOURCES OIL AND GAS, INC.	[9] Elevation 6225'

[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
P	23	30-N	7-W		1040'	SOUTH	680'	EAST	RIO ARRIBA

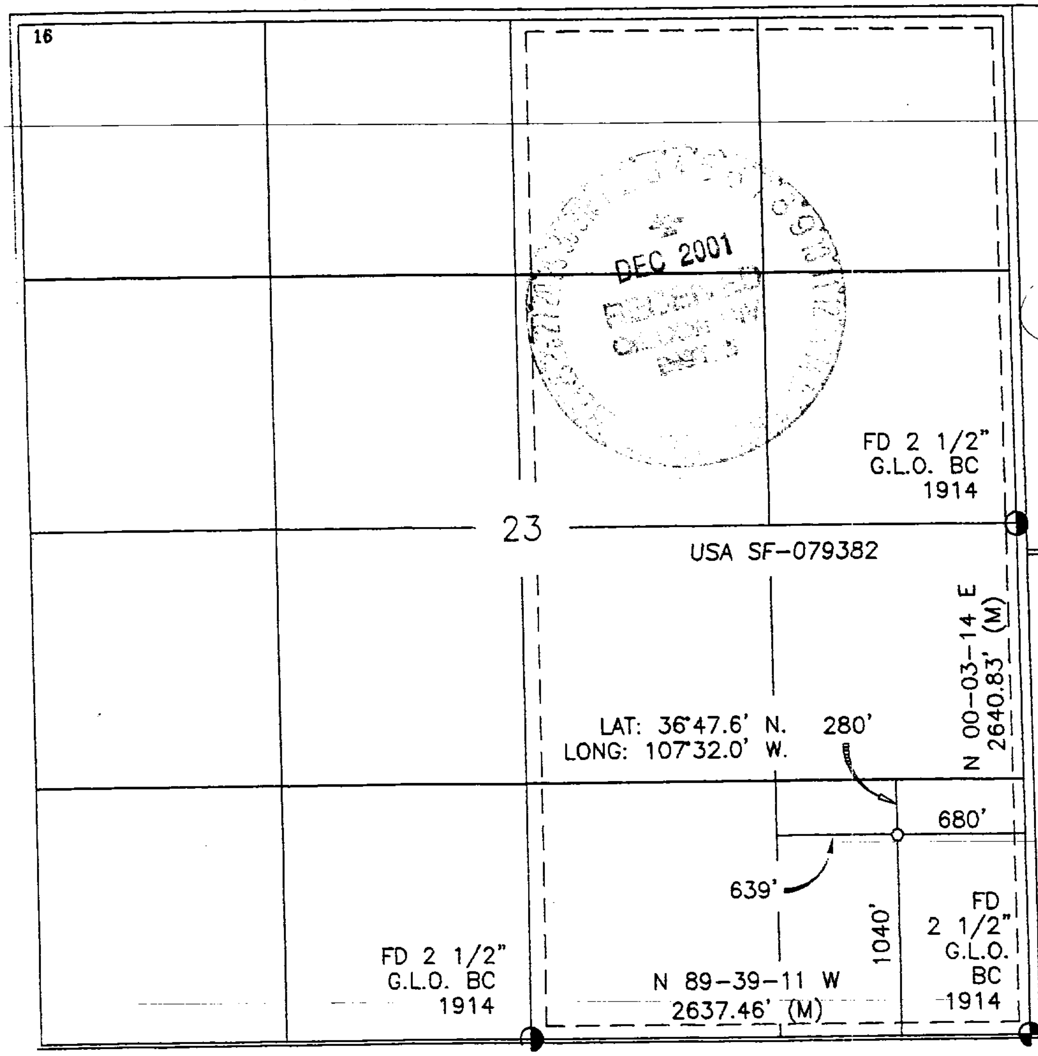
[11] Bottom Hole Location If Different From Surface

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-E/320 DK-E/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



DEC 2001
RECEIVED
OIL CON. DIV.
DIST. 3

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

5-25-01
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.

4-24
Date of Survey

Signature and Seal of Professional Surveyor

ROY A. RUSH
8894

8894
Certificate Number

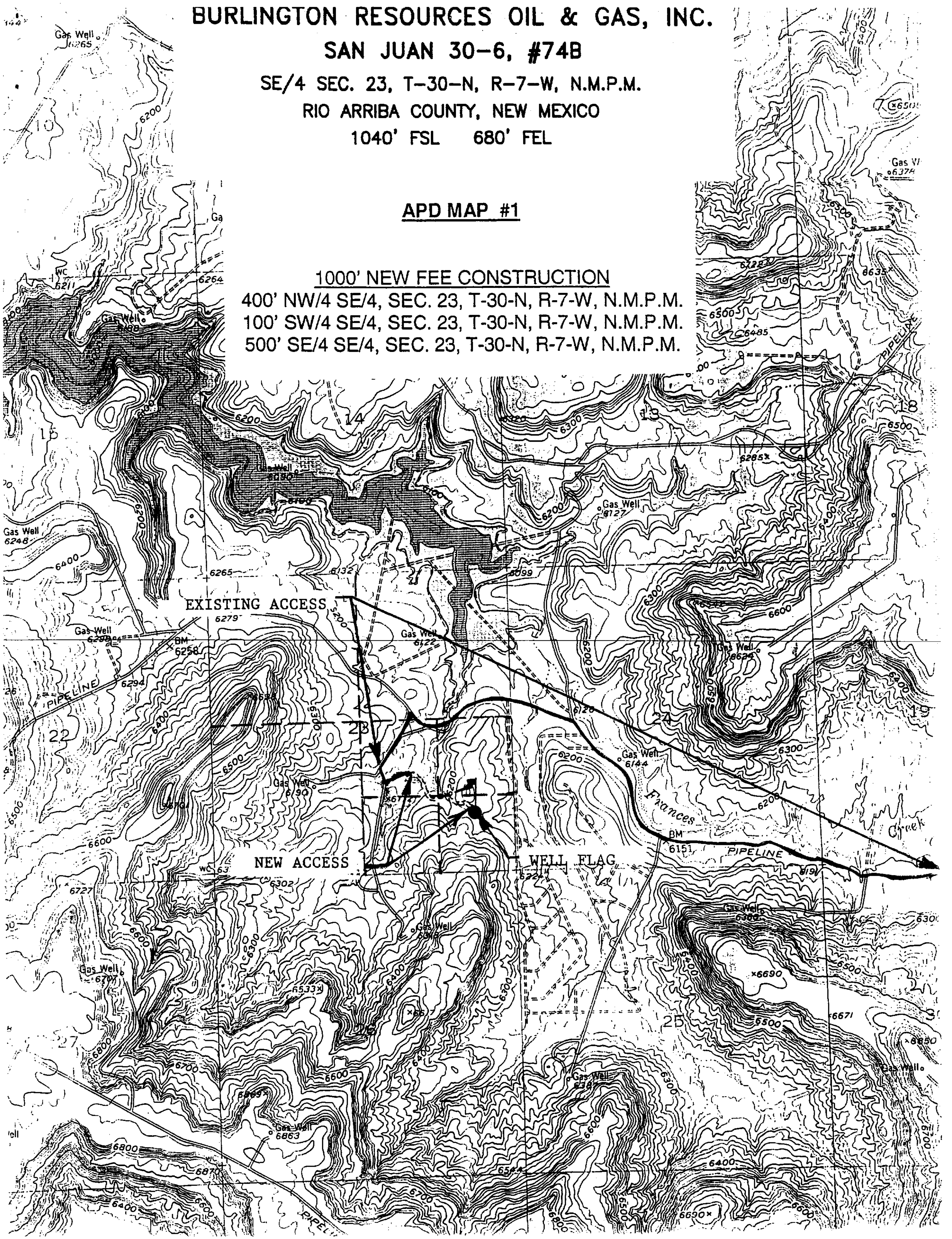
BURLINGTON RESOURCES OIL & GAS, INC.

SAN JUAN 30-6, #74B

SE/4 SEC. 23, T-30-N, R-7-W, N.M.P.M.
RIO ARRIBA COUNTY, NEW MEXICO
1040' FSL   680' FEL

APD MAP #1

<u>1000' NEW FEE CONSTRUCTION</u>
400' NW/4 SE/4, SEC. 23, T-30-N, R-7-W, N.M.P.M.
100' SW/4 SE/4, SEC. 23, T-30-N, R-7-W, N.M.P.M.
500' SE/4 SE/4, SEC. 23, T-30-N, R-7-W, N.M.P.M.



OPERATIONS PLAN

Well Name: San Juan 30-6 Unit #74B
Location: 1040'FSL, 680'FEL, Sec 23, T-30-N, R-7-W
Rio Arriba County, NM
Latitude 36° 47.6, Longitude 107° 32.0
Formation: Blanco Mesaverde/Basin Dakota
Elevation: 6225' GL

Formation Tops:	***Top***	***Bottom***	***Contents***
Surface	San Jose	2107'	
Ojo Alamo	2107'	2287'	aquifer
Kirtland	2287'	2712'	gas
Fruitland	2712'	3172'	gas
Pictured Cliffs	3172'	3312'	gas
Lewis	3312'	3827'	gas
Intermediate TD	**3412'**		
Mesa Verde	3827'	4177'	gas
Chacra	4177'	4997'	gas
Massive Cliff House	4997'	5037'	gas
Menefee	5037'	5347'	gas
Massive Point Lookout	5347'	5717'	gas
Mancos	5717'	6617'	gas
Gallup	6617'	7347'	gas
Greenhorn	7347'	7407'	gas
Graneros	7407'	7495'	gas
Dakota	7495'		gas
TD	**7700'**		

Logging Program:

Mud logs - none
Open hole - DIL-GR, TD to 200', CNL-CDL, ML, CMR - TD to 3827'
Cased hole - CBL-CCL-GR - TD to surface
Cores - none

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-9.0	40-50	no control
200- 3412'	LSND	8.4-9.0	30-60	no control
3412- 7700'	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' - 200'	9 5/8"	32.3#	WC-50
8 3/4"	0' - 3412'	7"	20.0#	J-55
6 1/4"	3312' - 7700'	4 1/2"	10.5#	K-55

Tubing Program:

0' - 7700'	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 159 sx Class "G" 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/403 sx 50/50 Class "G" TXI Liteweight cement with 2.5% sodium metasilicate, 5 pps Gilsonite and 0.5 pps flocele. Tail w/90 sx Class "G" 50/50 poz w/2% gel, 2% calcium chloride, 5 pps Gilsonite, 0.5 pps Flocele (1155 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 2612′. First stage: cement with w/212 sx Class "G" 50/50 poz w/2% gel, 2% calcium chloride, 5 pps gilsonite, 0.5 pps Flocele. Second stage: 343 sx 50/50 Class "G"/TXI Liteweight with 2.5% sodium metasilicate, 5 pps Gilsonite, 0.5 pps Flocele (1155 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 2287′. Two turbolating centralizers at the base of the Ojo Alamo at 2287′. 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 438 sx 50/50 Class "G" Poz with 5% gel, 0.25 pps flocele, 5 pps Gilsonite (631 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 shoe joint.

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 east half of Section 23 is dedicated to the Mesaverde and Dakota in this well.
- This gas is dedicated.

Mike Wardinsky
Drilling Engineer

5/30/01
Date

Alternative Intermediate Lead Slurry

Dowell-
Class G: D49(50:50) w/ 2.5% D79, 2% S1, 10pps D24, .5pps D29, .2%D46

where: D49-TXI Light weight Cement
D79-Sodium Metasilicate
S1-Calcium Chloride
D24-Gilsonite
D46-Antifoam Agent

Properties-
Density:11.4 lb/gal
Yield:2.58 cu ft./sk
Water:14.55 gal/sk
Thick Time 70 b.c.(deg F): 4:06(101)
Free Water:0
Fluid Loss:462ml/30 min
CS(crush)@24hr:394
CS(crush)@48hr:550

Halliburton-

Class H 47#/sk, 37#/sk Blended Silicalite, 3% Bentonite, 4% Calcium Chloride

Properties-
Density:11.4 lb/gal
Yield:2.42 cu.ft./sk
Water:14.02 gal/sk
Thick Time(70 bc): 11:00+
Fluid Loss: 702 cc/30min
Free Water: 0%
Compressive Strength (@25:19) :500
Compressive Strength (@48:00) :630