UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2005 MAR 21 PM 2 35

RECEIVED
070 FARMINGTON NM

1a. **Type of Work**
Deepen

5. **Lease Number**
SF-080670
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 27-4 Unit

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

(505) 326-9700

8. **Farm or Lease Name**
San Juan 27-4 Unit
9. **Well Number**
#4A

4. **Location of Well**
850' FSL, 1775' FEL

Latitude 36*31.52'N, Longitude 107*17.32'W

10. **Field, Pool, Wildcat**
Blanco Mesaverde/Basin Dakota
11. **Sec., Twn, Rge, Mer. (NMPM)**
Sec. 31, T27N, R04W
API # 30-039-22114

14. **Distance in Miles from Nearest Town**
12 MILES

12. **County**
Rio Arriba

13. **State**
NM

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

16. **Acres in Lease**
320

17. **Acres Assigned to Well**
~~319.81~~ S/2 - MV/DK
322.

18. **Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease**
300'

19. **Proposed Depth**
8345'

20. **Rotary or Cable Tools**
Rotary

21. **Elevations (DF, FT, GR, Etc.)**
7176' GR

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

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

24. **Authorized by:** _____
Regulatory Associate

4/18/05
Date

JUL 2005
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OIL CONS. DIV.
DIST. 3

PERMIT NO. _____

APPROVAL DATE _____

APPROVED BY _____ **TITLE** Acting Field Manager Mineral **DATE** 7/6/05

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

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-102
Permit 9251

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DIST. 3

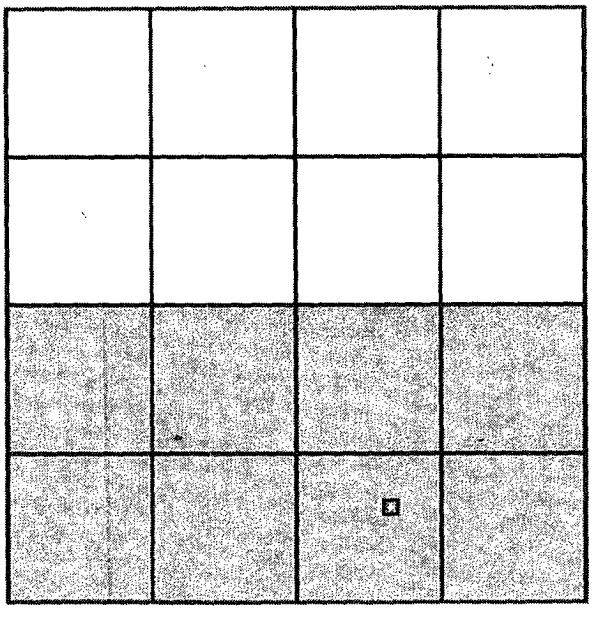
WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Name	Pool Code
	BASIN DAKOTA (PRORATED GAS)	71599
Property Code	**Property Name**	**Well No.**
7452	SAN JUAN 27 4 UNIT	004A
OGRID No.	**Operator Name**	**Elevation**
14538	BURLINGTON RESOURCES OIL & GAS CO	7176

Surface And Bottom Hole Location

UL or Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
O	31	27N	04W		850	S	1775	E	Rio Arriba

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
~~319.81~~ 322			



OPERATOR CERTIFICATION

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

Electronically Signed By: Mulana Mungus
Title: Regulatory Associate II
Date: 4/18/05

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.

Surveyed By: Fred Kerr Jr.
Date of Survey: 06/23/1979
Certificate Number: 3950

San Juan 27-4 Unit #4A Sundry Procedure
Unit O, Section 31, T27N, R04W

1. MIRU completion rig. TOOH with tubing.
2. Set retrievable bridge plug at +/- 5580'.
3. Pressure test casing to 1000 psi for 15 minutes. TOOH with bridge plug.
4. Lay in acid soluble cement across entire Mesaverde interval. WOC.
5. Drill out cement. Test casing to 500 psi for 15 minutes. Repeat cement work until pressure test holds.
6. Drill out shoe. Drill Dakota formation to approximately 8400' with mud logger to call final total depth. TOOH.
7. TIH with 3-1/2" flush joint pipe and set at total depth.
8. Cement with 20 sxs of type III cement (1.39 yield, 14.5 ppg). WOC. Run CBL. TOC @ 7165'.
9. Perforate and fracture stimulate the Dakota formation. Flow back Dakota.
10. Set composite plug 50' above top Dakota perforation.
11. Chemical cut 3-1/2" casing at +/- 6510'.
12. Acidize Mesaverde interval to restore production.
13. Drill out composite plug above the Dakota. Clean out to PBTD.
14. Land 2-1/16" IJ tubing.
15. RDMO rig. Return well to production as a commingled MV/DK producer.

OPERATIONS PLAN FOR SAN JUAN 27-4 UNIT #4A

Well: San Juan 27-4 Unit #4A
Location: T-27-N, R-4-W, Sect. 31, Unit O; 850' FSL, 1775' FEL
Rio Arriba County, NM
Latitude 36° 31.52' Longitude 107° 17.32'

Formation: **Blanco Mesaverde and Basin Dakota**

Formation Tops:	Top	Bottom	Contents
Surface	San Jose		----
Ojo Alamo	3415'	3575'	aquifer
Kirtland	3575'	3739'	gas
Fruitland	3739'	3965'	gas
Pictured Cliffs	3965'	4020'	gas
Lewis	4020'	4445'	gas
Huerfanito Bentonite	4445'	4908'	gas
Chacra	4908'	5522'	gas
Upper Cliff House	5522'	5626'	gas
Massive Cliff House	5626'	5739'	gas
Menefee	5739'	6090'	gas
Massive Point Lookout	6090'	6599'	gas
Mancos	6599'	7252'	gas
Gallup	7252'	8056'	gas
Greenhorn	8056'	8114'	gas
Graneros	8114'	8135'	gas
Two Wells	8135'	8270'	gas
Cubero	8270'	8307'	gas
Lower Cubero	8307'	8330'	gas
Oak Canyon	8330'		gas
Total Depth	8345'		

Logging program:
Cased hole - CBL-CCL-GR - TD to 6900'

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
6569' – 8345'	Air/Nitrogen	n/a	n/a	n/a

Casing Program:

Hole Size	Depth Interval	Csg.Size	Wt.	Grade
3-7/8"	~6510' – 8345'	3-1/2" Flush	9.3#/'	L-80

Tubing Program:	Tbg.Size	Wt.	Grade
0' – total depth	2-1/16"	3.25#	J-55

Operations:
It is intended to deepen the subject well to the Dakota formation by the following procedure:

1. MIRU completion rig. TOOH with tubing.
2. Set retrievable bridge plug at +/- 5580'.
3. Pressure test casing to 1000 psi for 15 minutes. TOOH with bridge plug.
4. Lay in acid soluble cement across entire Mesaverde interval. WOC.
5. Drill out cement. Test casing to 500 psi for 15 minutes. Repeat cement work until pressure test holds.
6. Drill out shoe. Drill Dakota formation to approximately 8345' with mud logger to call final total depth. TOOH.
7. TIH with 3-1/2" flush joint pipe and set at total depth.
8. Cement with 26 sxs of type III cement (1.39 yield, 14.5 ppg). WOC. Run CBL. TOC @ 6935'.
9. Perforate and fracture stimulate the Dakota formation. Flow back Dakota.
10. Set composite plug 50' above top Dakota perforation.
11. Chemical cut 3-1/2" casing at +/- 6510'.
12. Acidize Mesaverde interval to restore production.

13. Drill out composite plug above the Dakota. Clean out to PBTD.
14. Land 2-1/16" IJ tubing.
15. RDMO rig. Return well to production as a commingled MV/DK producer.

BOP Specifications, Wellhead and Tests:

Surface to Total Depth:

2" nominal, 3000 psi minimum choke manifold (Reference Figure #3).

Completion Operations:

7 1/16" 3000 psi double gate BOP stack (Reference Figure #4). After nipple-up prior to completion, pipe rams will be tested to 3000 psi for 15 minutes.

Wellhead:

9 5/8" x 7" x 4 1/2" x 2 1/16" x 2000 psi tree assembly.

General Information:

- 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.
- All BOP tests and drills will be recorded in daily drilling reports.
- Blind and pipe rams will be equipped with hand wheels.

Cementing:

3-1/2" Production Liner

Cement to cover minimum of 1200' above the Dakota formation. Minimum TOC @ 6935'. 26 sxs type III cement (1.39 yield, 14.5 ppg). WOC a minimum of 18 hrs prior to completing.

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.
- 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/or Dakota formations will be completed and commingled if both formations are completed.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

  Dakota 2200 psi

Angela Ibara *4/25/05*

Sr. Staff Engineer Date

San Juan 27-4 Unit #4A

850' FSL , 1775' FEL
Unit O, Section 31, T27N, R04W
Rio Arriba County, NM

LAT: 36 deg 31.52 min LONG: 107 deg 17.32 min

GL = 7,176' KB= 7,187'

Current Wellbore Diagram

Surface Casing:

9-5/8"	36#	K-55
Set @	309'	
TOC @	circ to surf	

Intermediate Casing:

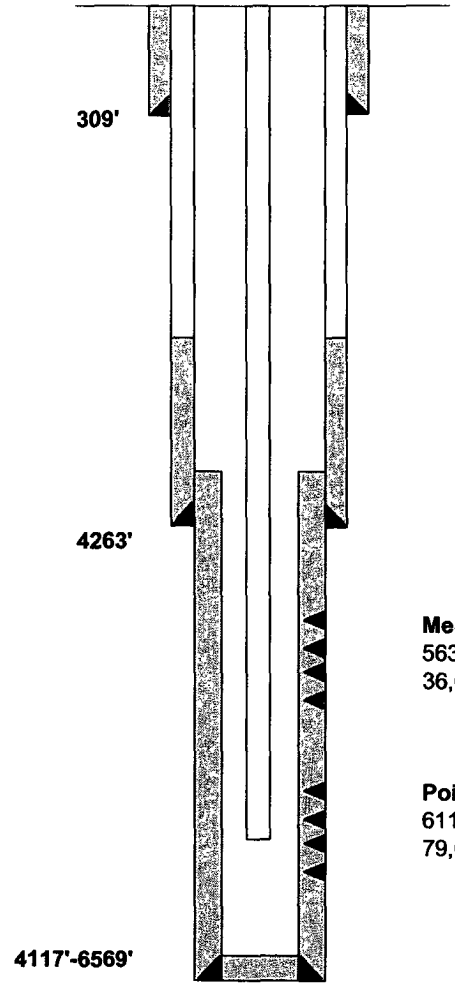
7"	23#/20#	N-80/K-55
Set @	4,263'	150 sxs
TOC @	3150' TS	

Tubing:

2-3/8"	4.7#	J-55
Set @	6440	
SN @	6409	

Production Liner:

4-1/2"	10.5#	K-55
Set @	4117'-6569'	
TOC @	Lnr top - sqz	



Ojo Alamo	3,415'
Kirtland	3,575'
Fruitland	3,739'
Pictured Cliffs	3,965'
Heur Bent.	4,445'
Chacra	4,908'
Cliffhouse	5,626'
Menefee	5,739'
Point Lookout	6,090'
Mancos	6,599'
Gallup	7,252'
Greenhorn	8,056'
Graneros	8,114'
Two Wells	8,135'

Menefee/Cliff House
5630' - 5736'
36,000# sand, 84,000 gal slickwater

Point Lookout
6117' - 6462'
79,000# sand, 158,000 gal slickwater

PBTD= 6,551'
TD= 6,569'

PLO: 6117', 23', 36', 41', 46', 60', 66', 80', 86', 6220', 26', 38', 55', 75', 6322', 56', 66', 6418', 6424', 6442', 6462'

CH/MN: 5630', 37', 44', 50', 76', 82', 89', 5711', 36'

ARI 04/25/05

San Juan 27-4 Unit #4A

850' FSL , 1775' FEL
Unit O, Section 31, T27N, R04W
Rio Arriba County, NM

LAT: 36 deg 31.52 min LONG: 107 deg 17.32 min
GL = 7,176' KB= 7,187'

Proposed Wellbore Diagram

Surface Casing:

9-5/8"	36#	K-55
Set @	309'	
TOC @	circ to surf	

Intermediate Casing:

7"	23#/20#	N-80/K-55
Set @	4,263'	150 sxs
TOC @	3150' TS	

Tubing:

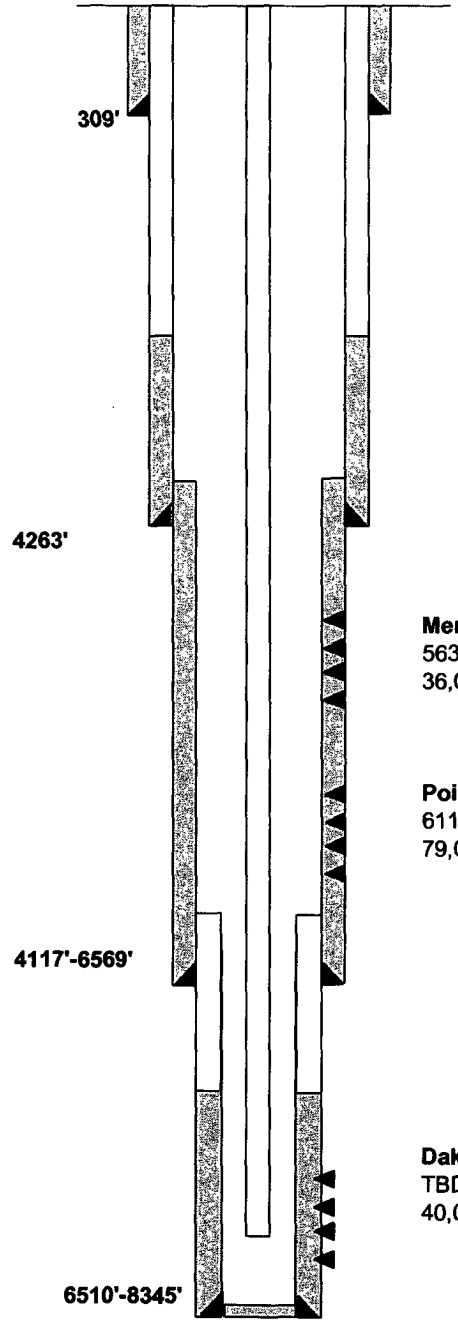
2-1/16"	3.25	J-55 IJ
Set @	TBD	
SN @	TBD	

Production Liner:

4-1/2"	10.5#	K-55
Set @	4117'-6569'	
TOC @	Lnr top - sqz	

Proposed Production Liner:

3-1/2" FLS	0	0
Set @	6510'-8345'	
TOC @	6,935'	



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Two Wells	8,135'

Menefee/Cliff House
5630' - 5736'
36,000# sand, 84,000 gal slickwater

Point Lookout
6117' - 6462'
79,000# sand, 158,000 gal slickwater

Dakota
TBD
40,000# TLC, slickwater

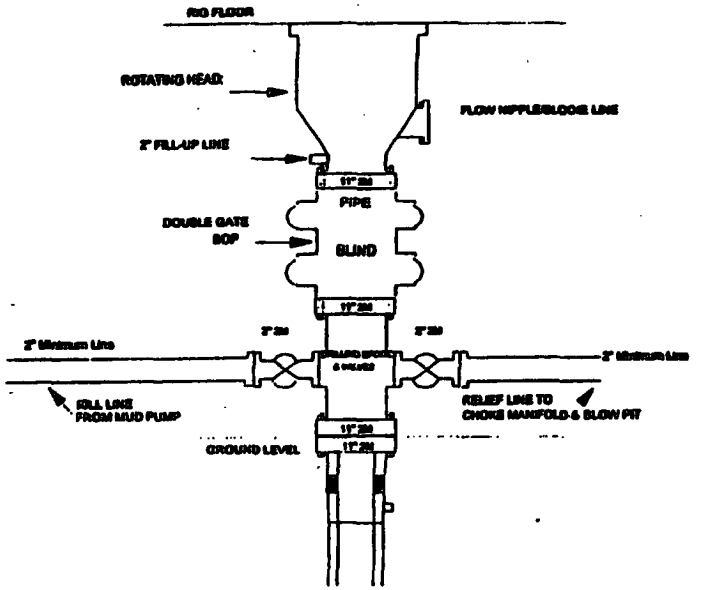
PBTD= 8,344'
TD= 8,345'

ARI 04/25/05

Burlington Resources

Drilling Rig

2000 psi System



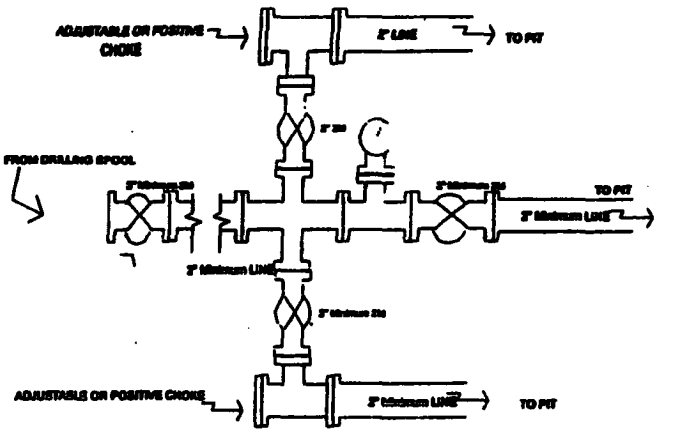
BOP installation from Surface Casing Point to Total Depth. 11" Bore 10" Nominal, 2000 psi working pressure double gate BOP to be equipped with blind rams and pipe rams. A 500 psi rotating head on top of ram preventers. All BOP equipment is 2,000 psi working pressure

Figure #1

4-20-01

BURLINGTON RESOURCES

Drilling Rig
Choke Manifold Configuration
2000 psi System

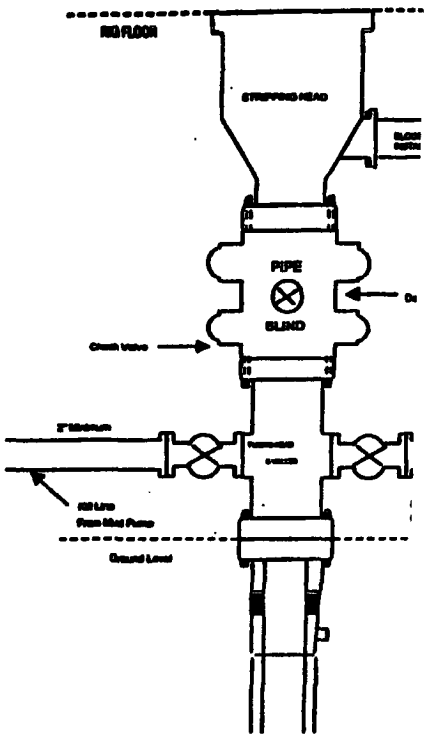


Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

BURLINGTON RESOUR

Completion/Workover Ri
BOP Configuration
2,000 psi System



Minimum BOP installation for all Completi Operations. 7-1/16" bore, 2000 psi minim pressure double gate BOP to be equipped pipe rams. A stripping head to be installe the BOP. All BOP equipment is 2000 psi pressure or greater excluding 500 psi strip

Figure 4

4-20-01