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** SF-080675 **Unit Reporting Number** **DK - SW-157** **MV – SCR-379**
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 Com **9. Well Number** 34M
4.	**Location of Well** 1110' FNL, 1940' FEL Latitude 36° 32.0, Longitude 107° 14.2	**10. Field, Pool, Wildcat** Blanco MV/Basin DK **11. Sec., Twn, Rge, Mer. (NMPM)** B Sec. 34, T-27-N, R-4-W **API # 30-039-** 27436
14.	**Distance in Miles from Nearest Town** 22 miles from Gobernador	**12. County** Rio Arriba **13. State** NM
15.	**Distance from Proposed Location to Nearest Property or Lease Line** 1110'	
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** 800'	
19.	**Proposed Depth** 8422'	**20. Rotary or Cable Tools** Rotary
21.	**Elevations (DF, FT, GR, Etc.)** 7175' GR	**22. Approx. Date Work will Start**
23.	**Proposed Casing and Cementing Program** See Operations Plan attached	

MAY 2004 RECEIVED OIL CONS. DIV. DIST. 3

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.

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

24. **Authorized by:** Peggy Cole — Regulatory/Compliance Administrator — 2-23-00 Date

PERMIT NO. _____ **APPROVAL DATE** _____

APPROVED BY [signature] **TITLE** AFM **DATE** 5-24-04

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

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

1 API Number	2 Pool Code	3 Pool Name
30-039- 27436	72319/71599	Blanco Mesaverde/Basin Dakota

4 Property Code	5 Property Name	6 Well Number
20056	SAN JUAN 27-4 UNIT COM	34M

7 OGRID No.	8 Operator Name	9 Elevation
14538	BURLINGTON RESOURCES OIL & GAS COMPANY	7175'

10 Surface Location

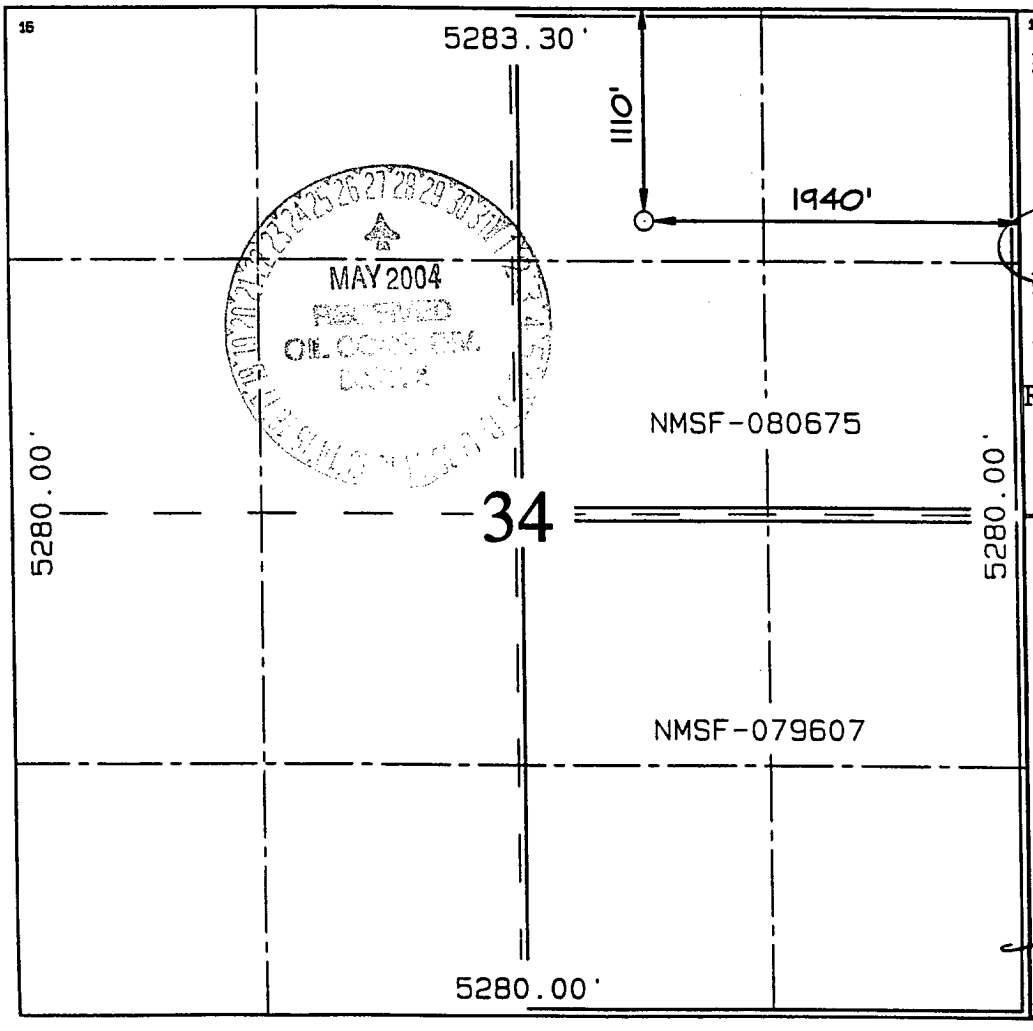
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	34	27N	4W		1110	NORTH	1940	EAST	RIO ARRIBA

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	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

Peggy Cole
Printed Name

Regulatory Administrato
Title

2-25-00
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.

DECEMBER 9, 1999
Date of Survey

Signature and Seal of Professional Surveyor

NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED PROFESSIONAL SURVEYOR

Certificate Number 6857

submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

Sundry Notices and Reports on Wells

2004 FEB 25 PM 12: 26

070 Farmington, NM

1. **Type of Well**
GAS

5. **Lease Number**
NMSF-080675

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

7. **Unit Agreement Name**

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

San Juan 27-4 Unit

8. **Well Name & Number**
San Juan 27-4 U Com #34M

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

9. **API Well No.**
30-039- 27434

4. **Location of Well, Footage, Sec., T, R, M**
1110'FNL, 1940'FEL, Sec.34, T-27-N, R-4-W, NMPM

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

13. **Describe Proposed or Completed Operations**

Attached is a new operations plan and multi-point surface use plan for the subject well.

MAY 2004
RECEIVED
OIL CONS. DIV.
DIST. 3

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

Signed Nancy Oltmanns Title Senior Staff Specialist Date 1/30/04

no

(This space for Federal or State Office use)
APPROVED BY BJ Mankiewicz Title AFM Date 5-24-04
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

OPERATIONS PLAN

Well Name: San Juan 27-4 Unit Com #34M
Location: 1110'FNL, 1940' FEL, Section 34, T-27-N, R-4-W
Rio Arriba County, New Mexico
Latitude 36° 32.0, Longitude 107° 14.2
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 7175'GL

Formation Tops:	***Top***	***Bottom***	***Contents***
Surface	San Jose	3457'	
Ojo Alamo	3457'	3577'	aquifer
Kirtland	3577'	3841'	gas
Fruitland	3841'	3973'	
Pictured Cliffs	3973'	4072'	gas
Lewis	4072'	4482'	gas
Intermediate TD	**4172'**		
Huerfanito Bentonite	4482'	4963'	gas
Chacra	4963'	5731'	gas
Cliff House	5731'	5827'	
Menefee	5827'	6162'	gas
Point Lookout	6162'	6672'	gas
Mancos	6672'	7303'	gas
Gallup	7303'	8112'	gas
Greenhorn	8112'	8171'	gas
Graneros	8171'	8201'	gas
Dakota	8201'	8336'	gas
Upper Cubero	8336'	8397'	gas
Oak Canyon	8397'		
TD	**8422'**		

Logging Program:
Mud Logs/Coring/DST -
Mud logs - none
Coring - none
DST - none
Open hole - none
Cased hole - Gamma Ray, CCL, CBL - surface to TD

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 120'	Spud Mud/Air/Air Mist	8.4-9.0	40-50	no control
120- 4172'	LSND	8.4-9.0	30-60	no control
4172- 8422'	Air/Air Mist/Nitrogen	n/a	n/a	n/a

Casing Program (as listed, the equivalent, or better):

Hole Size	Depth Interval	Csg.Size	Wt.	Grade
12 1/4"	0' - 120'	9 5/8"	32.3#	H-40
8 3/4"	0' - 4000'	7"	20.0#	J-55
8 3/4"	4000' - 4322'	7"	23.0#	L-80
6 1/4"	0' - 7800'	4 1/2"	10.5#	J-55
6 1/4"	7800' - 8422'	4 1/2"	11.6#	N-80

Tubing Program: 0' - 8422' 2 3/8" 4.7# J-55

BOP Specifications, Wellhead and Tests:

Surface to Intermediate TD -

11" 2000 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" 2000 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, 2000 psi minimum choke manifold (Reference Figure #3).

Completion Operations -

7 1/16" 2000 psi double gate BOP stack (Reference Figure #2). 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 4 ½" x2 3/8" x 2000 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 drill crew.
- All BOP tests & 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 pre-set drilled-

Cement with 24 sacks Type I, II cement with 20% flyash mixed at 14.5 ppg, 1.61 cu ft per sack yield. (38 cu.ft. of slurry, bring cement to surface). Wait on cement for 24 hours for pre-set holes before pressure testing or drilling out from under surface. Test casing to 600 psi for 30 minutes.

9 5/8" surface casing conventionally drilled -

Cement with 88 sacks Type III cement with 0.25 pps Celloflake, 3% calcium chloride. (113 cu.ft., 200% excess, bring cement to surface). Wait on cement appropriate time until cement achieves 250 psi compressive strength at 60 degrees F. prior to nipple up of BOPE. Wait on cement for 8 hrs for conventionally set holes before pressure testing or drilling out from under surface.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

7" intermediate casing -

Lead with 381 sacks Premium Lite cement with 3% calcium chloride, 0.25 pps Celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate. Tail w/90 sacks Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss (935 cu.ft., 50% excess to circulate to surface.) WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL or a temperature survey will be run to determine TOC. Test casing to 1500 psi for 30 minutes.

7" intermediate casing alternative two stage: Stage collar set 300' above the top of the Fruitland. First stage: Lead with 9 sacks Premium Lite cmt w/3% calcium chloride, 0.25 pps Celloflake, 0.4% fluid loss, 5 pps LCM-1, 0.4% sodium metasilicate. Tail with 90 sacks with Type III cement with 1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss. Second stage: cement with 372 sacks with Premium Lite cement with 3% calcium chloride, 0.25 pps Celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate (935 cu. ft., 50% 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 @ 3577'. Two turbolating centralizers at the base of the Ojo Alamo 3577'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production Casing -
Cement to cover minimum of 100' of 4 1/2" x 7" overlap. Cement with 292 sacks Premium Lite HS w/ 0.25 pps Celloflake, 0.3% CD-32, 6.25 pps LCM-1 and 1% FL-52. (579 cu.ft., 30% excess to cement 4 1/2" x 7" overlap). WOC a minimum of 18 hrs prior to completing.

Cement float collar stacked on top of float shoe.

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

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. The liner hanger will have a rubber packoff.

- 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 (Air/Mist Drilling):

The following equipment will be operational while air/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.
- 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 Mesa Verde and Dakota formation will be completed and commingled.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

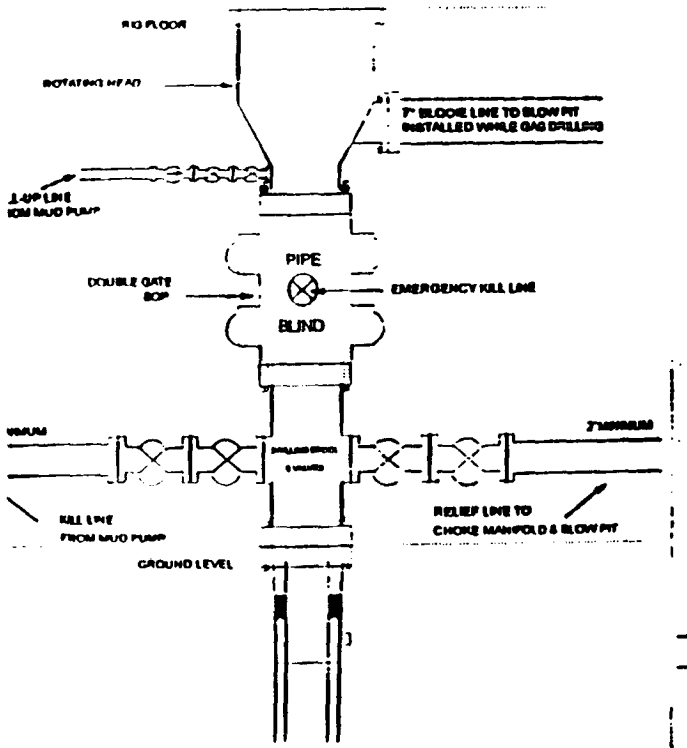
Fruitland Coal	300 psi
Pictured Cliffs	600 psi
Mesa Verde	700 psi
Dakota	2500 psi

- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The east half of Section 34 is dedicated to the Mesa Verde and the Dakota.
- This gas is dedicated.

Sean Corrigan
Drilling Engineer

February 24, 2004
Date

BOP Configuration
2M psi System

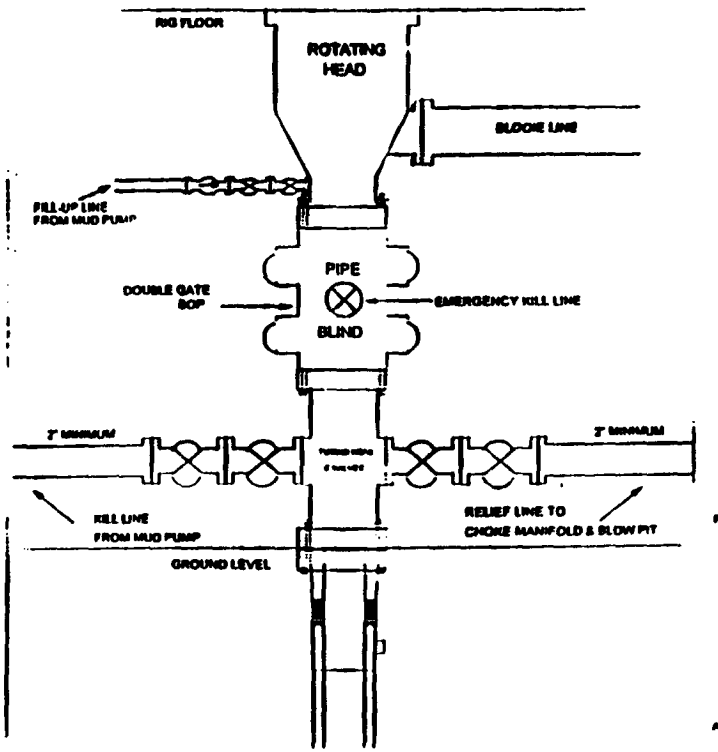


1" Bore, 2000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 or equivalent rotating head to be installed on the top of the BOP. All equipment is 2000psi working pressure or greater

FIGURE #1

BURLINGTON RESOURCES

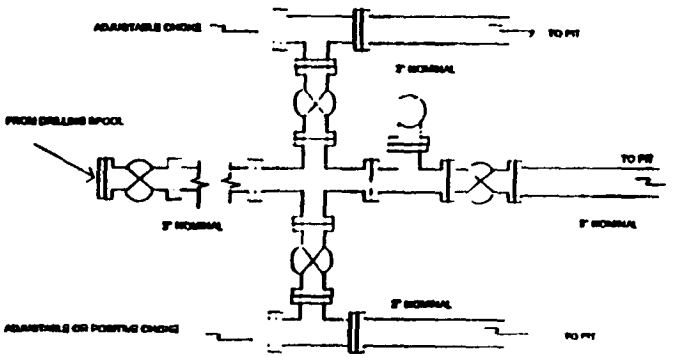
BOP Configuration
2M psi System



Minimum BOP installation for Completion operations. 7 1/16" Bore (6" Nominal), 2,000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams

FIGURE #2

Choke Manifold Configuration
2M System

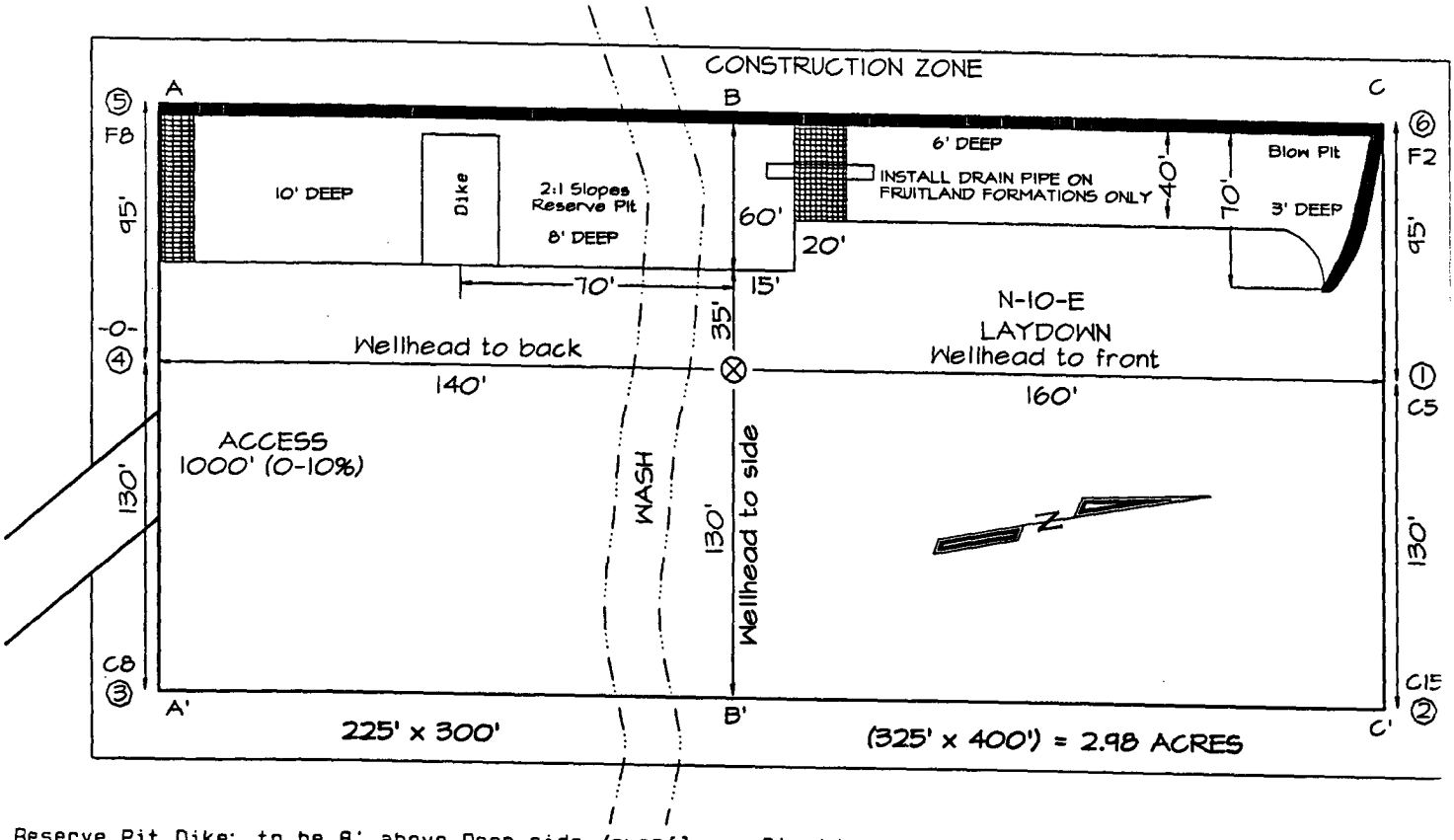


Minimum choke manifold installation from surface to Total Depth.
2" minimum, 2000psi working pressure equipment with two chokes

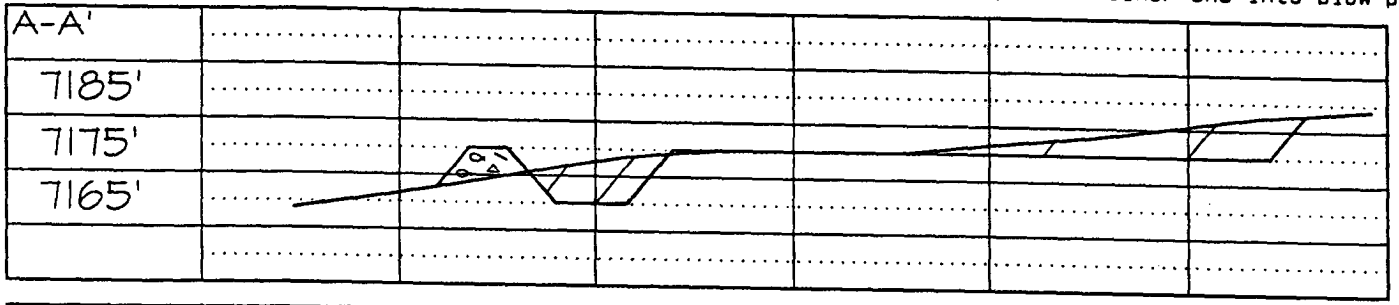
Figure #3

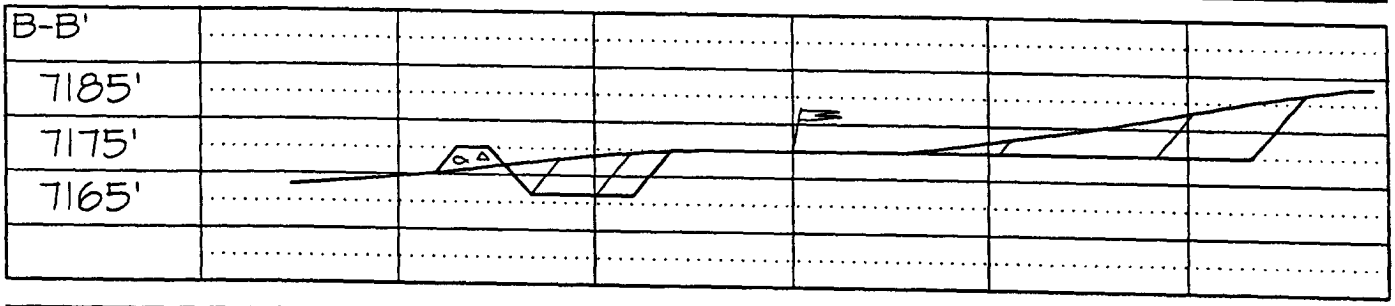
PLAT #1

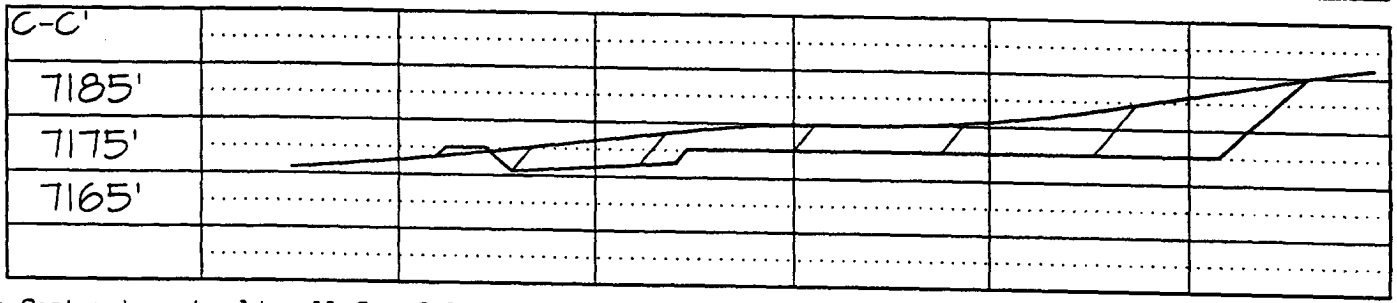
BURLINGTON RESOURCES OIL & GAS COMPANY
SAN JUAN 27-4 UNIT COM #34M, 1110' FNL & 1940' FEL
SECTION 34, T27N, R4W, NMPM, RIO ARRIBA COUNTY, NEW MEXICO
GROUND ELEVATION: 7175' DATE: DECEMBER 9, 1999



Reserve Pit Dike: to be 8' above Deep side (overflow - 3' wide and 1' above shallow side).
Blow Pit: overflow pipe halfway between top and bottom and to extend over plastic liner and into blow pit







Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or ca
on well pad and/or access road at least two (2) working days prior to construction