

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

NMOC D

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

*API Number 30-039- 27017		*Pool Code 72319/71599	*Pool Name Blanco Mesaverde/Basin Dakota
*Property Code 7454	*Property Name SAN JUAN 27-5 UNIT		*Well Number 166M
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP		*Elevation 6521'

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	31	27N	5W		660	SOUTH	995	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

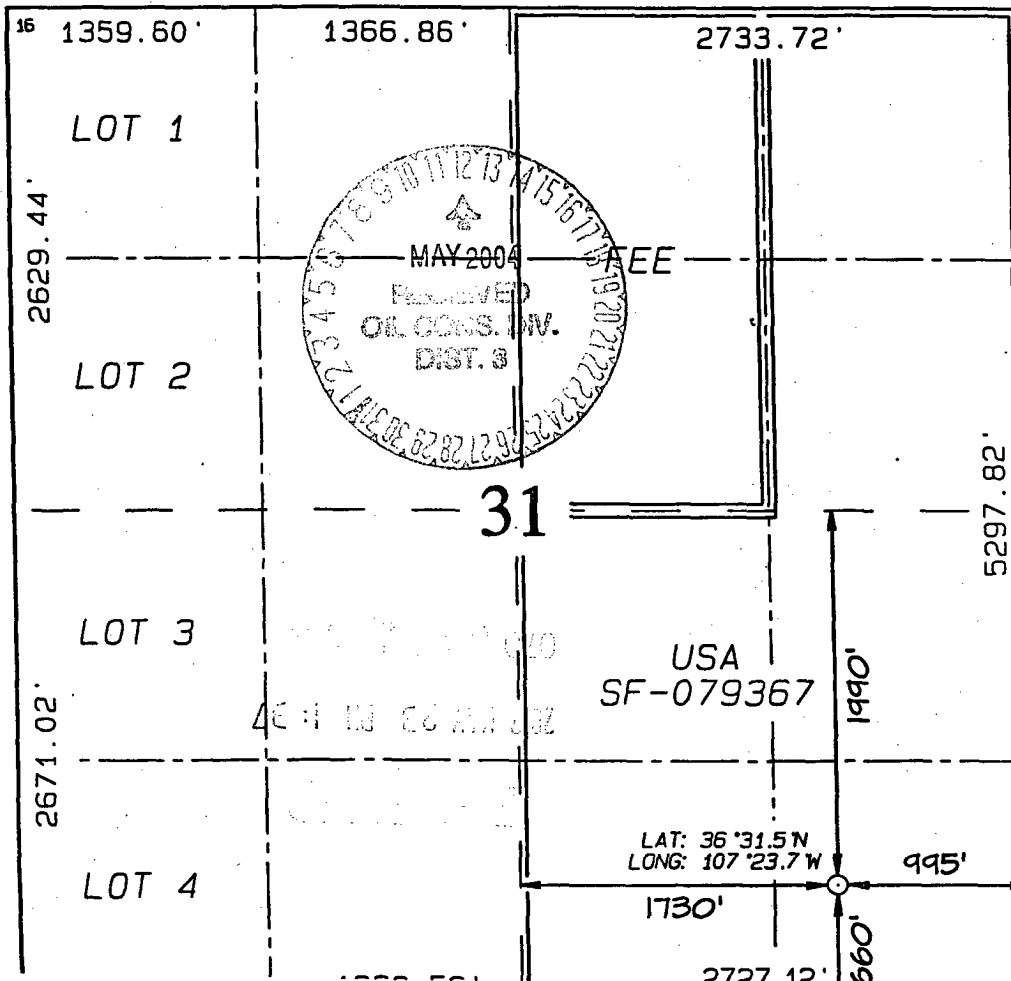
¹² Dedicated Acres
MV-E/320
DK-E/320

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



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

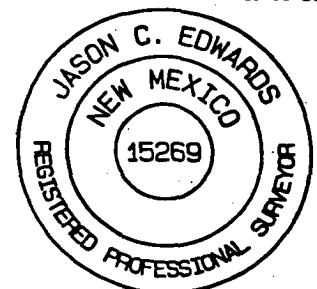
12-12-01
Date

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.

Survey Date: SEPTEMBER 1, 200

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

RECEIVED

2004 FEB 23 PM 4:00

070 Farmington, NM

1. Type of Well
GAS

2. Name of Operator

BURLINGTON

RESOURCES OIL & GAS COMPANY LP

3. Address & Phone No. of Operator

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

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

660' FSL, 995' FEL, Sec. 31, T-27-N, R-5-W, NMPM

5. Lease Number
NMSF-079367

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

San Juan 27-5 Unit

8. Well Name & Number

San Juan 27-5 U #166M

9. API Well No.

30-039-27017

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 ☒ Change of Plans
☐ Recompletion ☐ New Construction
☐ Plugging Back ☐ Non-Routine Fracturing
☐ Casing Repair ☐ Water Shut off
☐ Altering Casing ☐ Conversion to Injection
☒ Other -

13. Describe Proposed or Completed Operations

Attached is a revised operations plan for the subject well.



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

Signed Kenny Oltsman Title Senior Staff Specialist Date 2/18/04

(This space for Federal or State Office use)

APPROVED BY David J. Mankiewicz Title _____ Date MAY - 7 2004
CONDITION OF APPROVAL _____

NMOCD

OPERATIONS PLAN

Well Name: San Juan 27-5 Unit #166M
Location: 660' FSL, 995' FEL, Section 31, T-27-N, R-5-W
Rio Arriba County, New Mexico
Latitude 36° 31.5, Longitude 107° 23.7
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 6521' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	2498'	
Ojo Alamo	2498'	2718'	aquifer
Kirtland	2718'	2869'	gas
Fruitland	2869'	3173'	
Pictured Cliffs	3173'	3273'	gas
Lewis	3273'	3638'	gas
Intermediate TD	3373'		
Huerfanito Bentonite	3638'	4138'	gas
Chacra	4138'	4833'	gas
Cliff House	4833'	4953'	
Menefee	4953'	5353'	gas
Point Lookout	5353'	5793'	gas
Mancos	5793'	6497'	gas
Gallup	6497'	7283'	gas
Greenhorn	7283'	7343'	gas
Graneros	7343'	7373'	gas
Dakota	7373'	7598'	gas
Oak Canyon	7598'		
TD	7598'		

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:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 120'	Spud Mud/Air/Air Mist	8.4-9.0	40-50	no control
120- 3373'	LSND	8.4-9.0	30-60	no control
3373- 7598'	Air/Air Mist/Nitrogen	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' - 120'	9 5/8"	32.3#	H-40
8 3/4"	0' - 3373'	7"	20.0#	J-55
6 1/4"	0' - 7598'	4 1/2"	10.5#	J-55

Tubing Program: 0' - 7598' 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 1/2" x 2 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 296 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 (754 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 27 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 269 sacks with Type III cement with 1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss (754 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 @ 2718'. Two turbolating centralizers at the base of the Ojo Alamo 2718'. 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/Casing -

Cement to cover minimum of 100' of 4 1/2" x 7" overlap. Cement with 291 sacks Premium Lite HS w/ 0.25 pps Celloflake, 0.3% CD-32, 6.25 pps LCM-1 and 1% FL-52. (577 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:

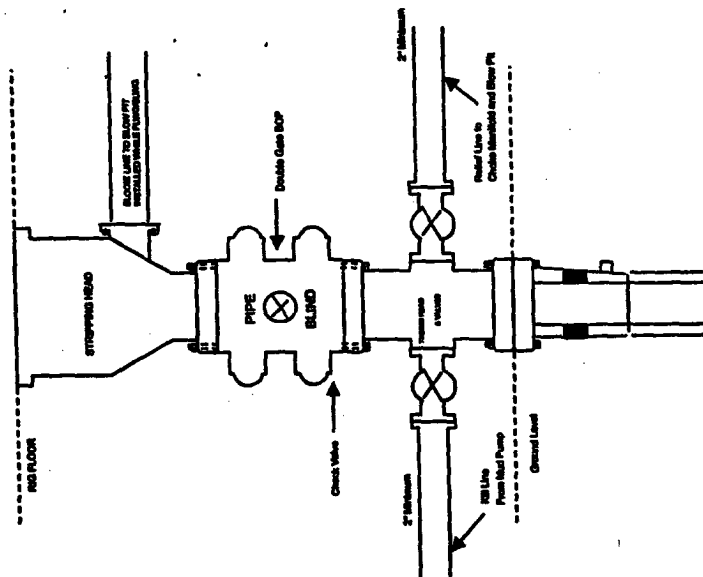
- The Mesa Verde and Dakota formation will be completed and commingled.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

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 31 is dedicated to the Mesa Verde and the Dakota in this well.
- This gas is dedicated.

Sean Corrigan
Drilling Engineer

February 20, 2004
Date

Completion/Workover Rig
BOP Configuration
3,000 psi System

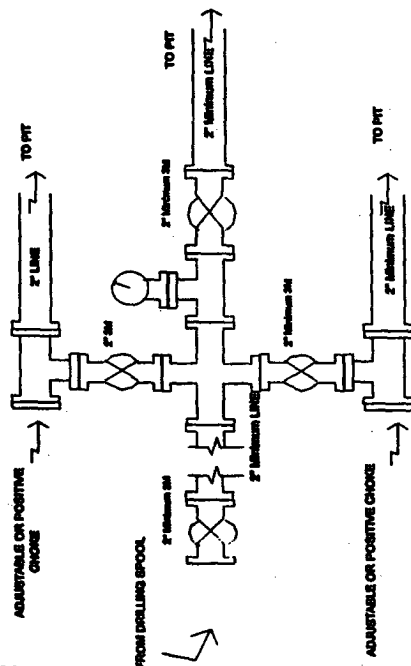


Minimum BOP Installation for all Completion/Workover Operations. 7-1/16" bore, 3000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment is 3000 psi working pressure or greater excluding 600 psi stripping head.

Figure #3

4-20-01

Drilling Rig
Choke Manifold Configuration
3000 psi System

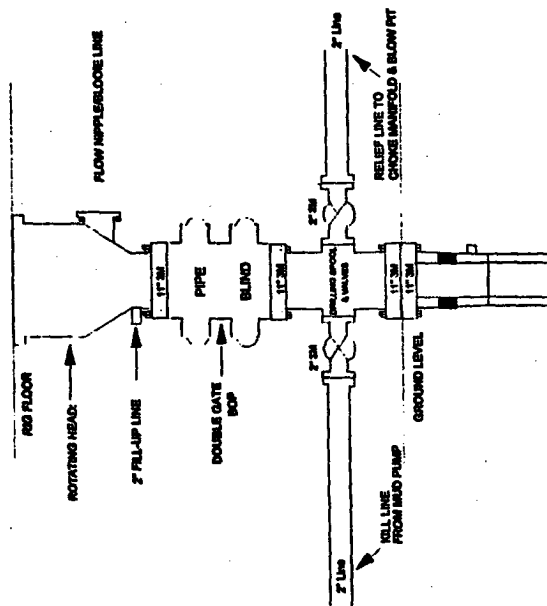


Choke manifold Installation from Surface Casing Point to Total Depth. 3,000psi working pressure equipment with two chokes.

Figure #2

4-20-01

Drilling Rig
3000 psi System



BOP Installation from Surface Casing Point to Total Depth. 11" Bore 10" Nominal, 3000 psi working pressure double gate BOP to be equipped with blind rams and pipe rams. All BOP equipment is 3,000 psi working pressure.

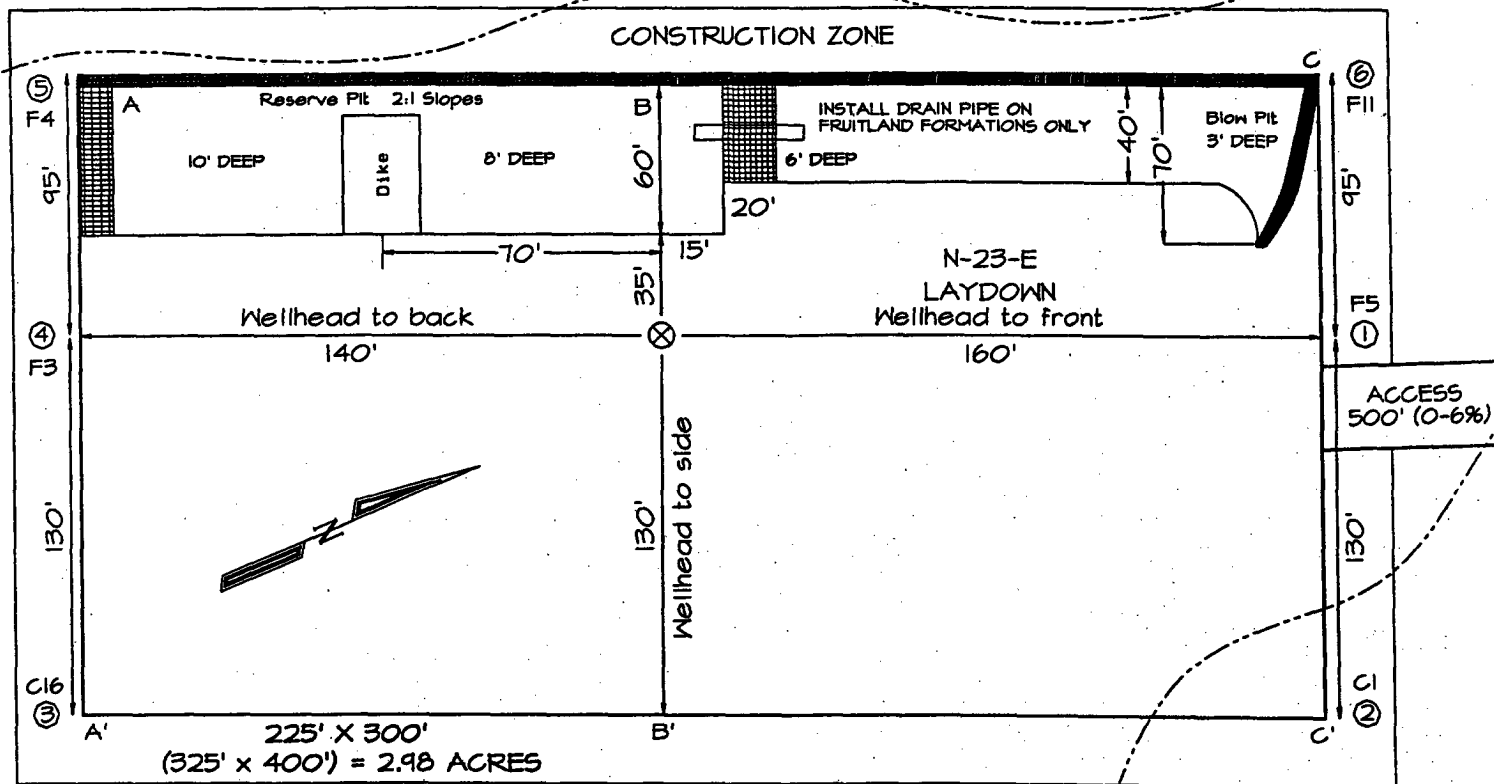
Figure #1

4-20-01

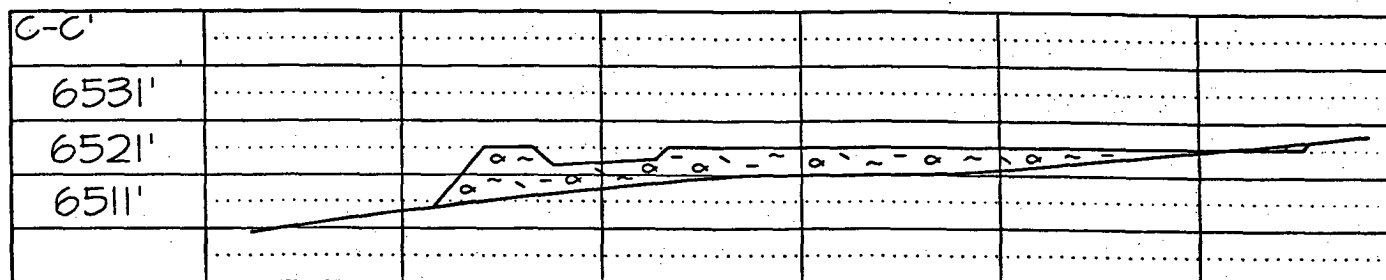
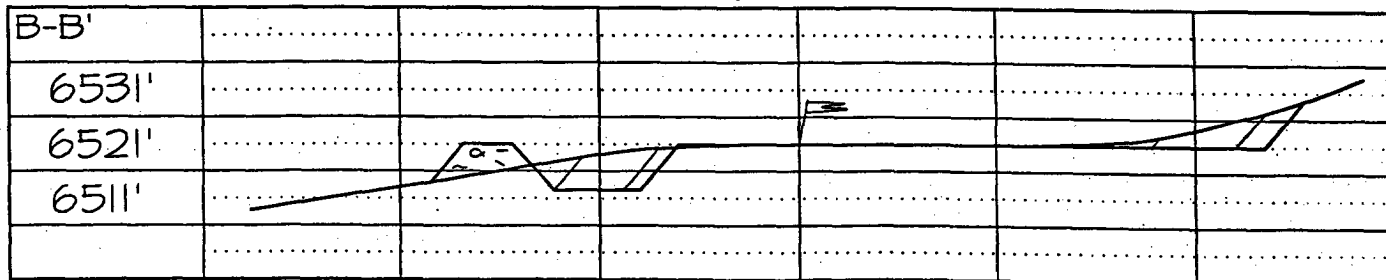
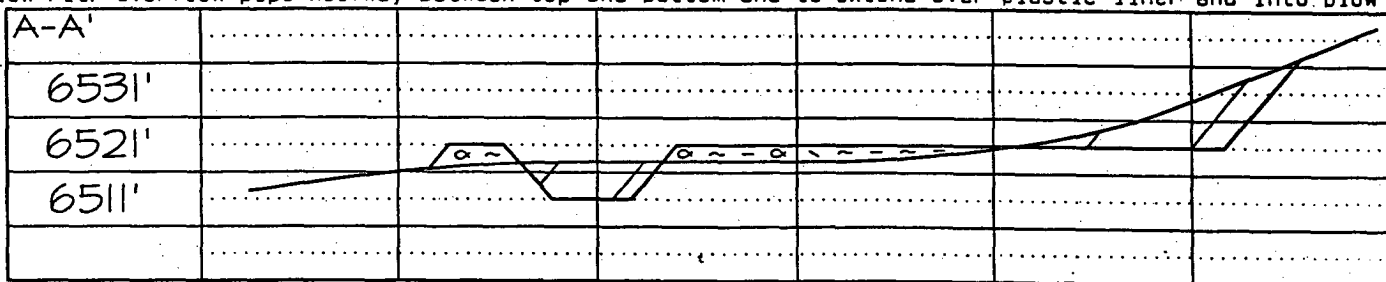
PLAT #1

BURLINGTON RESOURCES OIL & GAS COMPANY
SAN JUAN 27-3 UNIT #166M, 660' FSL & 995' FBL
SECTION 31, T27N, R5W, NMPM, RIO ARriba COUNTY, NM
GROUND ELEVATION: 6521' DATE: SEPTEMBER 1, 2001

LATITUDE: 36°31'32"
LONGITUDE: 107°23'39"
DATUM: NAD1927



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 cable on well pad and/or access road at least two (2) working days prior to construction.