

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work  
DRILL

1b. Type of Well  
GAS

2. 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  
1240' FSL, 1355' FEL  
Latitude 36° 47.39, Longitude 107° 32.07

5. Lease Number  
NMSF-079382  
Unit Reporting Number

6. If Indian, All. or Tribe

7. Unit Agreement Name  
San Juan 30-6 Unit

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

9. Well Number  
404S

10. Field, Pool, Wildcat  
Basin Fruitland Coal

11. Sec., Twn, Rge, Mer. (NMPM)  
① Sec. 23, T-30-N, R-7-W  
API # 30-039- 27688

12. County  
Rio Arriba

13. State  
NM

14. Distance in Miles from Nearest Town  
11 miles from Navajo City

15. Distance from Proposed Location to Nearest Property or Lease Line  
1240'

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  
650'

19. Proposed Depth  
3186'

20. Rotary or Cable Tools  
Rotary

21. Elevations (DF, FT, GR, Etc.)  
6202' GR

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program  
See Operations Plan attached

24. Authorized by: Nancy Oltmanns  
Senior Staff Specialist

Date 10-14-03

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE 5-12-04

Archaeological Report attached

Threatened and Endangered Species Report attached

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.

No notification required under Order R-8768-F

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

NMOCD

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



### OPERATIONS PLAN

**Well Name:** San Juan 30-6 Unit #404S  
**Location:** 1240' FSL, 1355' FEL, Section 23, T-30-N, R-7-W  
Latitude 36° 47.39, Longitude 107° 32.07  
Rio Arriba County, NM  
**Formation:** Basin Fruitland Coal  
**Elevation:** 6202' GR

Formation:	Top	Bottom	Contents
Surface	San Jose	2084'	
Ojo Alamo	2084'	2319'	aquifer
Kirtland	2319'	2689'	gas
Fruitland	2689'	2874'	gas
Intermediate casing	2824'		
Top of Coal	2874'	3101'	
Base of Coal	3101'		
Pictured Cliffs	3144'		
Total Depth	3186'		

**Logging Program:**

Open hole - None  
Mud log - TD to 2824'

**Coring Program:** none

**Mud Program:**

Interval	Type	Weight	Vis.	Fluid Loss
0- 120'	Spud/Air/Air Mist	8.4-9.0	40-50	no control
120-2824'	Non-dispersed	8.4-9.0	30-60	no control
2824-3186'	Air/Mist			no control

**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' - 2824'	7"	20.0#	J-55
6 1/4"	2824' - 3186'	open hole		

**Alternate 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' - 2824'	7"	20.0#	J-55
6 1/4"	2784' - 3186'	5 1/2"	15.5#	J-55

**Tubing Program:**

0' - 3186'      2 3/8"      4.7#      J-55

**Float Equipment:** 9 5/8" surface casing - saw tooth guide shoe. Centralizers will be run in accordance with Onshore Order #2.

7" intermediate casing - guide shoe and self-fill float collar. Standard centralizers run every other joint above shoe. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 2319'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

**Wellhead Equipment:** 9 5/8" x 7" x 2 3/8" x 11" 2000 psi xmas tree assembly.

**Cementing:**

9 5/8" surface casing -

Pre-Set Drilled Cement with 23 sx Type I, II cement with 20% flyash mixed at 14.5 ppg, 1.61 cu ft per sack yield. (37 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.

Conventionally Drilled:

Cement with 88 sx Type III cement with 0.25 pps Celloflake, 3% CaCl. (113 cu ft of slurry, 200% excess, bring cement to surface) Wait on cement for 8 hrs for conventionally set holes before pressure testing or drilling out from under surface.

**Wait on cement until cement establishes 250 psi compressive strength prior to nipple up of BOP.**

7" intermediate casing - lead w/241 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 with 90 sacks Type III cement with 1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss (637 cu.ft., 50% excess to circulate to surface).

5 1/2" liner - will not be cemented if run.

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

**BOP and tests:**

Surface to intermediate TD - 11" 2000 psi (minimum) double gate BOP stack (Reference Figure #1). Prior to drilling out surface casing, test BOP and casing to 600 psi/30 min.

Intermediate TD to Total Depth - 7 1/6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to drilling out intermediate casing, test BOP and casing to 1500 psi for 30 minutes; all pipe rams and casing to 1500 psi for 30 minutes each.

From surface to TD - choke manifold (Reference Figure #3).

Pipe rams will be actuated at least once each day and blind rams actuated once each trip to test proper functioning. An upper kelly cock valve with handle and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

**Additional information:**

- The Fruitland Coal formation will be completed.
- Anticipated pore pressure for the Fruitland is 500 psi.
- This gas is dedicated.
- The east half of Section 23 is dedicated to this well.

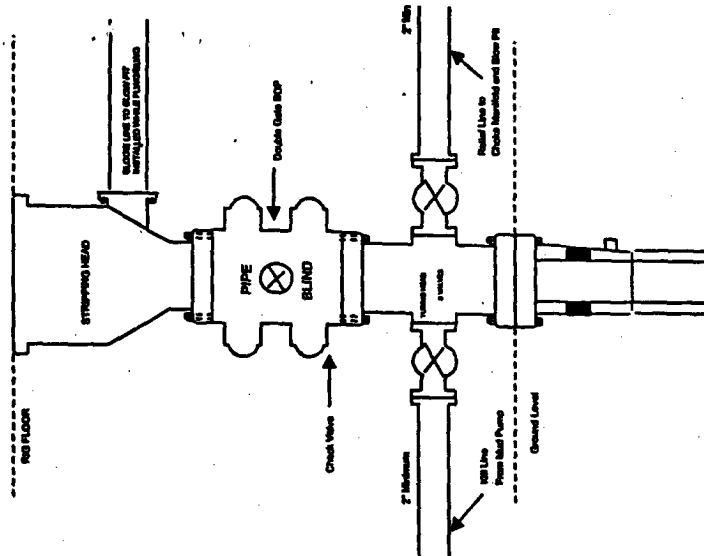
Drilling Engineer:



Date:

3-1-04

Completion/Workover Rig  
BOP Configuration  
2,000 psi System

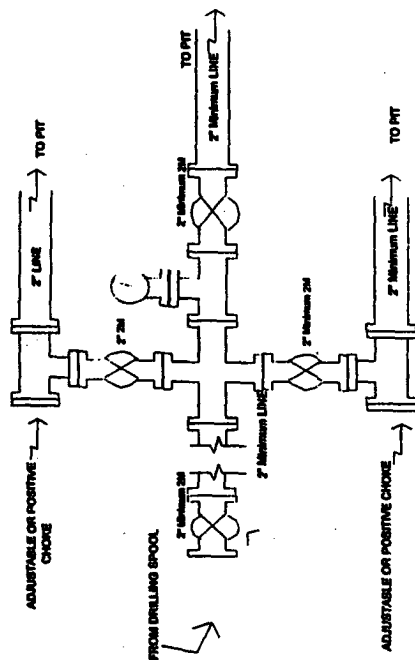


Minimum BOP Installation for all Completion/Workover Operations. 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment is 2000 psi stripping head, pressure or greater excluding 500 psi stripping head.

Figure #2

4-20-01

Drilling Rig  
Choke Manifold Configuration  
2000 psi System

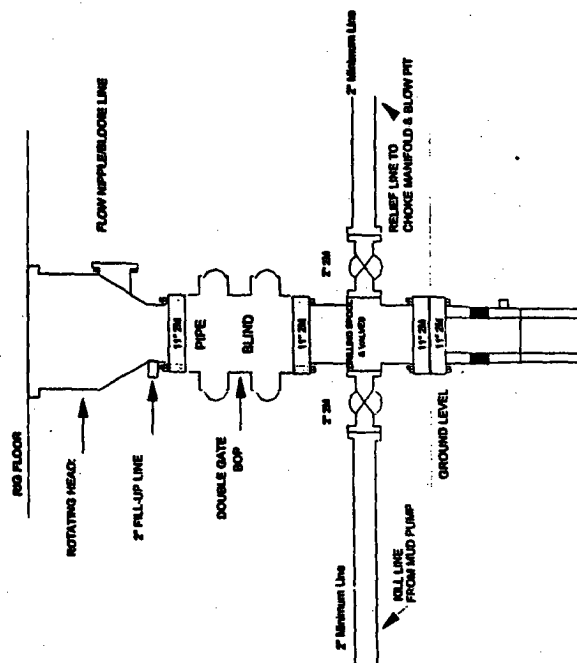


Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

4-20-01

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

10-01

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED *Amendment*

## Sundry Notices and Reports on Wells

2004 APR 27 PM 5:42

Lease Number

SF-079382

If Indian, All. or  
Tribe Name

070 FARMINGTON, NM

1. Type of Well  
GAS

2. Name of Operator

**BURLINGTON  
RESOURCES**

OIL &amp; GAS COMPANY

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 826-9700

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

1240' FSL, 1355' FEL, Sec. 23, T30N, R7W, NMPM

7. Unit Agreement Name

8. Well Name & Number

San Juan 30-6 Unit #404S

9. API Well No.

30-045-03927488

10. Field and Pool

Basin Fruitland Coal

11. County and State

Rio Arriba, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

## Type of Submission

## Type of Action

☒ Notice of Intent

☐ Abandonment

☒ Change of Plans

☐ Subsequent Report

☐ Recompletion

☐ New Construction

☐ Final Abandonment

☐ Plugging Back

☐ Non-Routine Fracturing

☐ Casing Repair

☐ Water Shut off

☐ Altering Casing

☐ Conversion to Injection

☐ Other

13. Describe Proposed or Completed Operations

The BOP configuration has been revised for the subject well according to the following and attached diagram:

BOP and tests:

Surface to intermediate TD - 11" 2000 psi (minimum) double gate BOP stack (Reference Figure #1). Prior to drilling out surface casing, test BOPE to 600 psi for 30 min.

Intermediate TD to Total Depth - 7 1/6" 2000 psi (minimum) completion BOP stack (Reference Figure #2). Prior to drilling out intermediate casing, test BOPE and casing to 1500 psi for 30 minutes.

From surface to 7" TD - a choke manifold will be installed in accordance with Onshore Order No. 2 (Reference Figure #3). When the cavitation completion rig drills the production hole, the completion rig configuration will be used (Reference Figure #4).

Pipe rams will be actuated at least once each day and blind rams actuated once each trip to test proper functioning. An upper kelly cock valve with handle and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

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

Signed Tammy Hunsatt Title Regulatory Specialist Date 04/013/04  
fsb

(This space for Federal or State Office use)

APPROVED BY [Signature] Title AFM Date 5-12-04

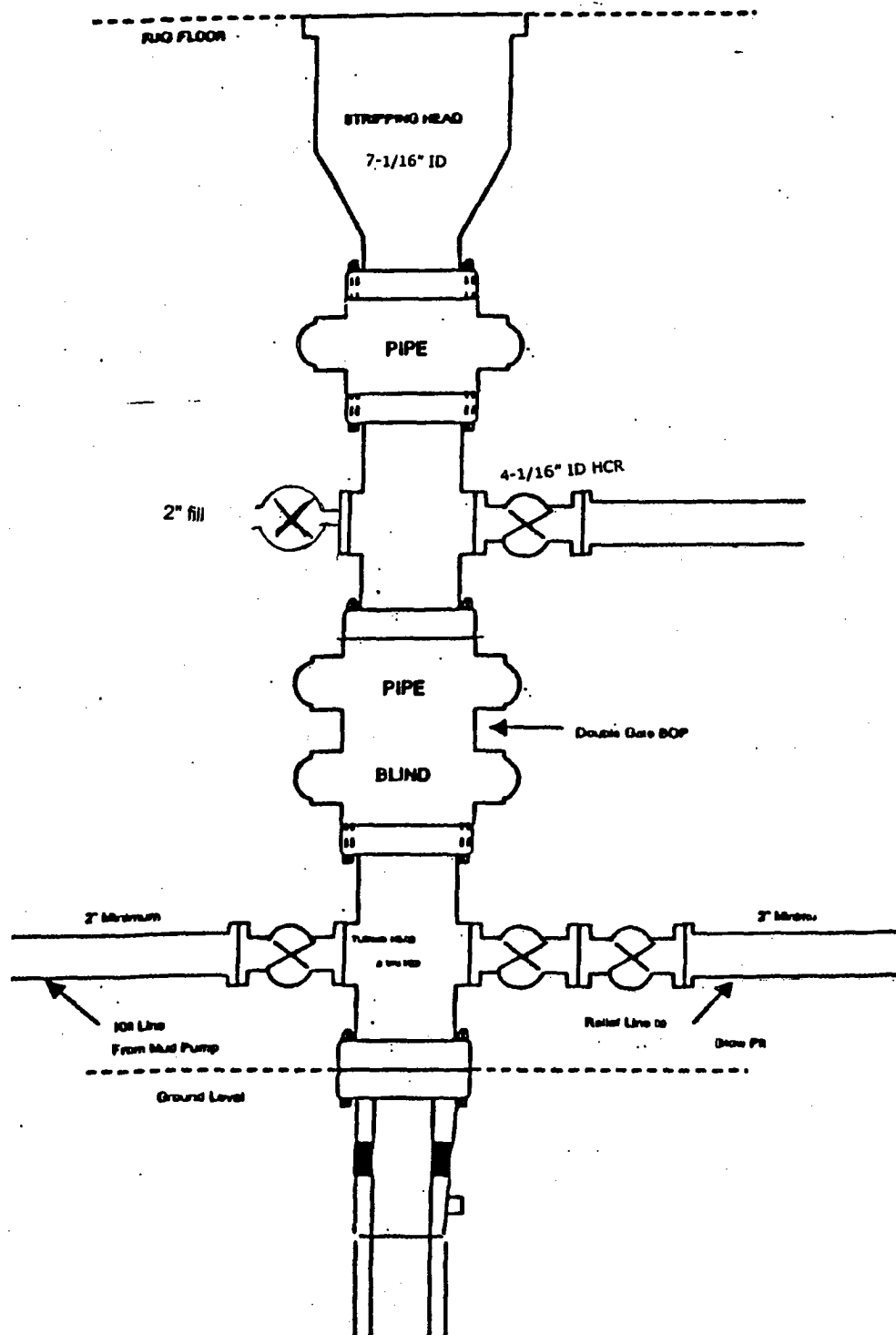
CONDITION OF APPROVAL, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

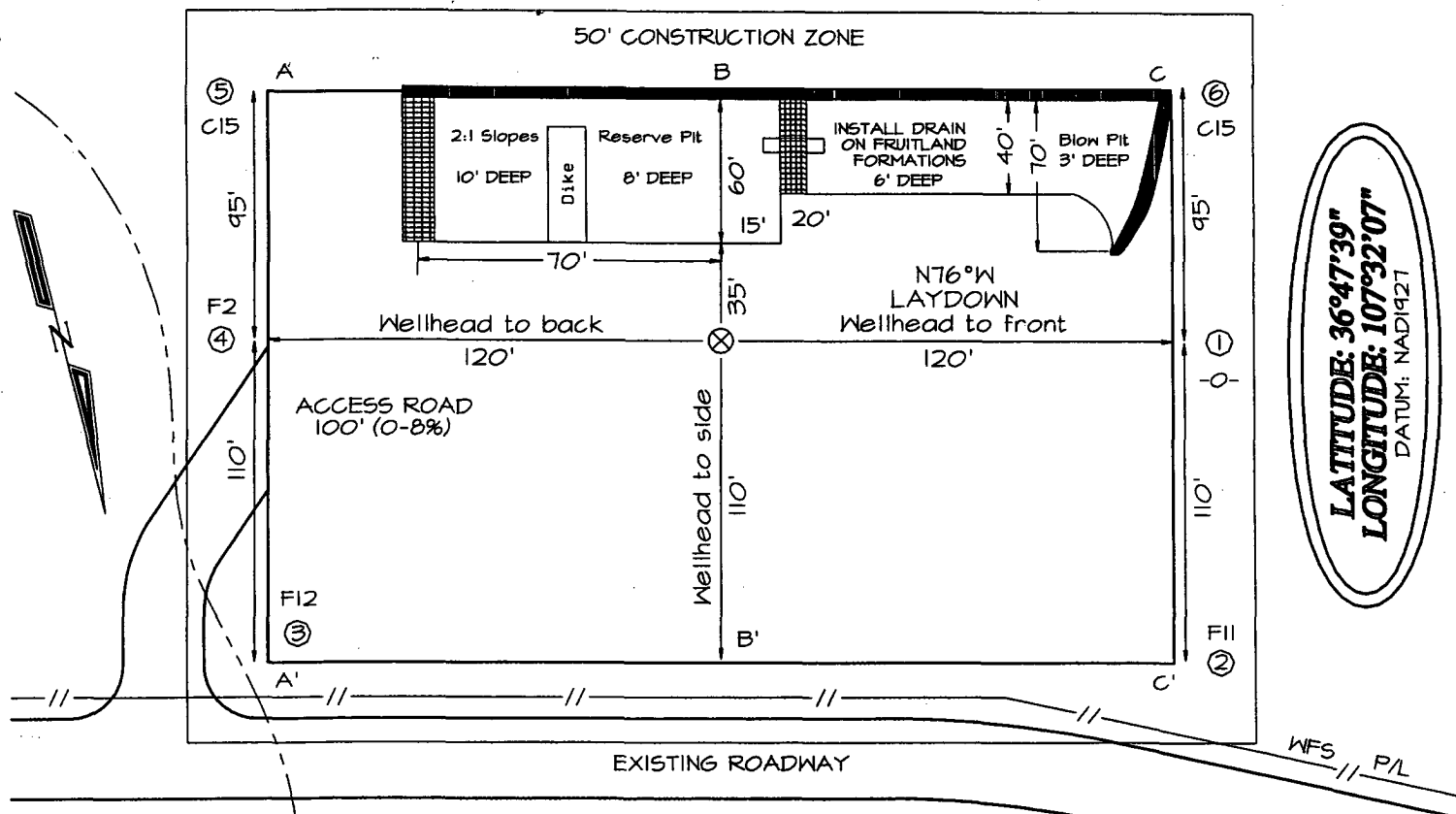
NMOC

# BURLINGTON RESOURCES

Figure #4  
Cavitation Rig  
BOP Configuration  
2,000 psi Minimum System



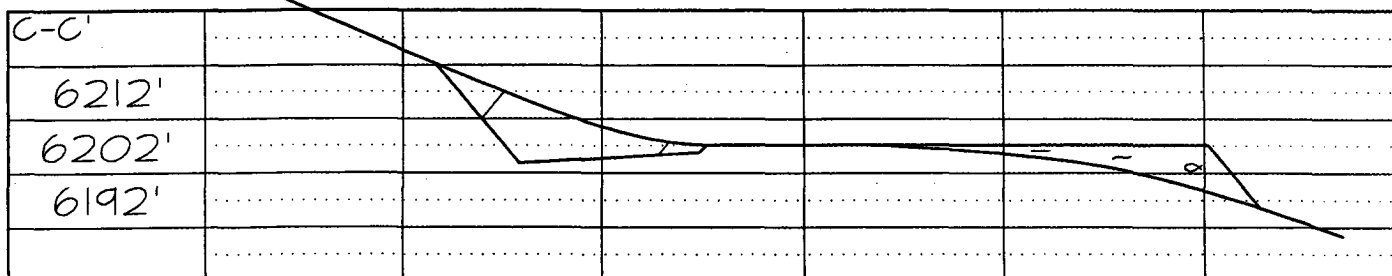
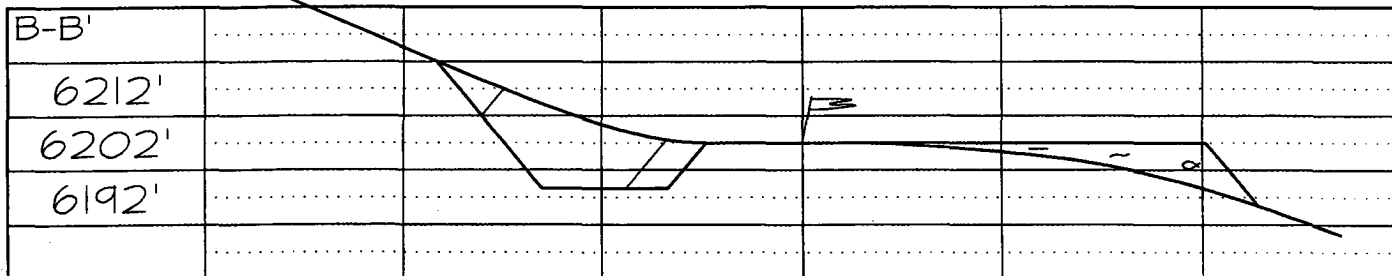
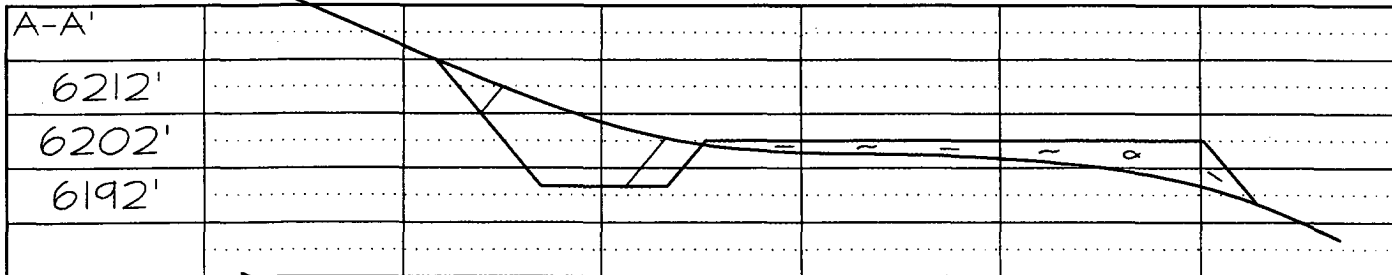
1240' FSL & 1355' FEL, SECTION 23, T30N, R7W, NMPM, RIO ARriba COUNTY, NM  
GROUND ELEVATION: 6202' DATE: AUGUST 14, 2003



LATITUDE: 36°47'39"  
LONGITUDE: 107°32'07"  
DATUM: NAD1927

205' X 240' 305' X 340' = 2.38 ACRES

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