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-101
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1 Operator Name and Address.	2 OGRID Number
WILLIAMS PRODUCTION COMPANY c/o Walsh Engr. & Prod. Corp. 7415 E. Main Farmington, New Mexico 87402 (505) 327-4892	120782
	3 API Number 30 - 039 - 25776

4 Property Code	5 Property Name	6 Well No.
~~008480~~ 17033	Rosa Unit	148A

7 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	2	31N	6W		870	South	1705	West	Rio Arriba

8 Proposed 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

356.60 9 Proposed Pool 1	10 Proposed Pool 2
Blanco Mesa Verde 72319	

11 Work Type Code	12 Well Type Code	13 Cable/Rotary	14 Lease Type Code	15 Ground Level Elevation
N	G	R	S	6249'
16 Multiple	**17 Proposed Depth**	**18 Formation**	**19 Contractor**	**20 Spud Date**
No	6040'	Mancos	Big A Well Ser.	April 1998

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4	9 5/8	36#	500	130	Surface
8 3/4	7	20#	3535	273 + 100	Surface
6/1/4	4 1/2	10.5#	3435 - 6040	258	3435

22 Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Williams Production Company proposes to drill a vertical well and test the Mesa Verde Formation at the above described location in accordance with the attached operations plan.

RECEIVED
FEB - 3 1998
OIL CON. DIV.
DIST. 3

23 I hereby certify that the information given above is true and complete to the best of my knowledge and belief.	OIL CONSERVATION DIVISION
Signature: Paul C. Thompson	Approved by: Ernie Busch 2-5-98
Printed name: Paul C. Thompson	Title: DEPUTY OIL & GAS INSPECTOR, DIST. #3
Title: Agent	Approval Date: FEB - 5 1998 Expiration Date: FEB - 5 1999
Date: 2/2/98 Phone: (505) 327-4892	Conditions of Approval Attached ☐

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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
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-039-25776	72319	Blanco Mesa Verde

[4] Property Code	[5] Property Name	[6] Well Number
~~17033~~ ~~008480~~	ROSA UNIT	148A

[7] OGRID No.	[8] Operator Name	[9] Elevation
120782	WILLIAMS PRODUCTION COMPANY	6249'

[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
N	2	31N	6W		870	South	1705	West	RIO ARRIBA

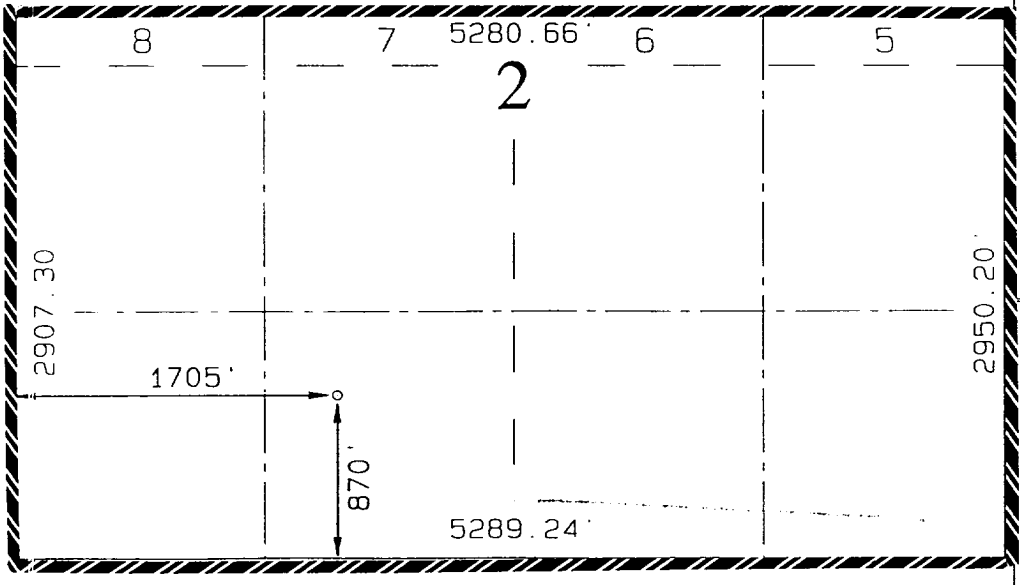
[11] Bottom Hole Location If Different From Surface

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.
356	I	U	

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



[17] OPERATOR CERTIFICATION

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

Paul C. Thompson
Signature

Paul C. Thompson
Printed Name

Agent
Title

2/2/98
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.

NOVEMBER 13, 1997
Date of Survey

Signature and Seal of Professional Surveyor

NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED PROFESSIONAL SURVEYOR

6857
Certificate Number

RECEIVED
FEB - 3 1998
OIL CON. DIV.
DIST. 3

WILLIAMS PRODUCTION COMPANY
OPERATIONS PLAN

DATE: 1/21/98

WELLNAME:	ROSA UNIT #148A	**FIELD:**	Blanco MV
LOCATION:	SE/4 SW/4 Sec.2, T31N, R6W Rio Arriba Co., NM	**SURFACE:**	BLM
ELEVATION:	6249' GR	**MINERALS:**	State
TOTAL DEPTH:	6040'	**LEASE #**	E-289

I. **GEOLOGY:** Surface formation - San Jose

A. **FORMATION TOPS:**

Ojo Alamo	2260'	Cliff House	4960'
Kirtland	2380'	Menefee	5310'
Fruitland	2860'	Point Lookout	5540'
Pictured Cliffs	3060'	Mancos	5910'
Lewis	3420'	Total Depth	6040'

B. **LOGGING PROGRAM:** IND/GR, CDL/SNL. Log the Pictured Cliffs from TD to the Kirtland. Log the Mesa Verde from TD to 500' above the Cliff House.

C. **NATURAL GAUGES:** Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

II. **DRILLING**

A. **MUD PROGRAM:** Clear water with benex to 7" casing point. LSND to log and run pipe.

B. **BOP TESTING:** While drill pipe is in use, the pipe rams will be tested not less than once each day. The blind rams will be tested once each trip. The drum brakes will inspected and tested each tour. All tests and inspections will be recorded in the tour book as to time and results.

III. **MATERIALS**

A. **CASING PROGRAM:**

CASING TYPE	HOLE SIZE	DEPTH	CASING SIZE	WT. & GRADE
Surface	12-1/4"	500'	9-5/8"	36# K-55
Intermediate	8-3/4"	3535'	7"	20# K-55
Prod. Liner	6-1/4"	3435'-6040'	4-1/2"	10.5# K-55

B. **FLOAT EQUIPMENT:**

1. SURFACE CASING: 9-5/8" notched regular pattern guide shoe.

2. INTERMEDIATE CASING: 7" cement nose guide shoe with a self- fill insert float. Place float one(1) joint above the shoe and five(5) centralizers, spaced every other joint, starting with the float collar. Place turbulent centralizers, at 120' intervals, starting at 2289' to the surface. Total centralizers = 5 regular and 19 turbulent.

3. PRODUCTION CASING: 4-1/2" whirler type cement nose guide shoe with a latch collar on top of 20' joint. Place 20' marker joint above 4960'.

C. CEMENTING:

1. SURFACE: Use 130 sx (157 cu.ft.) of class "B" with 3% CaCl2 and 1/4# of cello-flake/sk (Yield = 1.19 cu.ft./sk, Weight = 15.6 #/gal.). Use 100% excess to circulate the surface. WOC 12 hours. Test to 1500#.

2. INTERMEDIATE: Lead - 273 sx (574 cu.ft.)of class "B" 65/35 poz with 10% gel and 1/4# cello-flake/sk (Yield = 2.1 cu.ft./sk, Weight = 12.1 #/gal.). Tail – 100sx (174 cu.ft.) of class "B" with 4% gel, 1/4# cello-flake/sk, 0.5% FL-25 and 2% CaCl2 (Yield = 1.74 cu.ft./sk, Weight = 13.5#/gal.). Use 100 excess in lead and 75% excess in tail to circulate to surface. Total volume = 748 cu.ft. WOC 12 hours. Run a temperature survey after 8 hours if cement is not circulated. Test to 1500#.

3. PRODUCTION LINER: 258 sx (448 cu.ft.) of class "B" with 4 % gel, 1/4# cello-flake/sk, 0.5% FL-25 and 2 % CaCl2 (Yield = 1.74 cu.ft./sk, Weight = 13.5 #/gal.) Displace cement at a minimum of 8 BPM. Use 60% excess in lead and tail to cover liner top. Total volume 448 cuft. WOC 12 hours. Run a temperature survey after 8 hours if liner top is not circulated.

IV COMPLETION

A. CBL

1. Run Cement Bond Log across all intervals to be perforated and find Top of Cement behind all casing strings.

B. PRESSURE TEST

1. Pressure test 7" & 4-1/2" casing to 3300# for 15 minutes.

C. STIMULATION

1. Stimulate with approximately 100,000# of 20/40 sand in slick water.
2. Isolate Point Lookout with a RBP.
3. Perforate the Menefee/Cliff House as determined from the open hole logs.
4. Stimulate with approximately 80,000# of 20/40 sand in slick water.
5. Test each zone before removing bridge plugs.

D. RUNNING TUBING

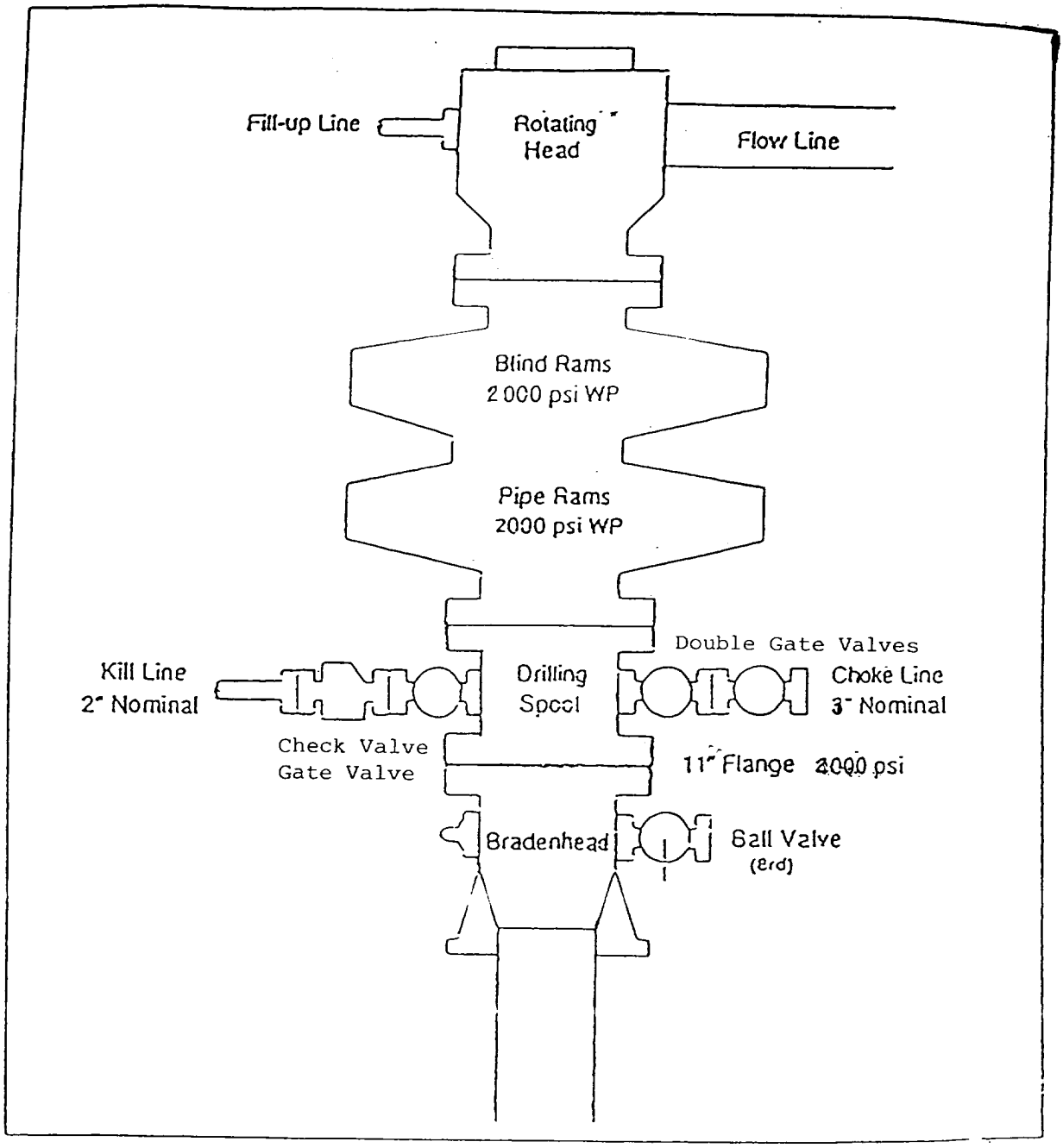
1. *Mesa Verde:* Run 2-3/8", 4.7#, J-55, EUE tubing with a SN (1.91" ID) on top of bottom joint. Land tubing approximately 25' above the bottom Point Lookout perforation.

Lance A. Hobbs
Engineer, Production & Drilling

file:#91App

EXHIBIT 1

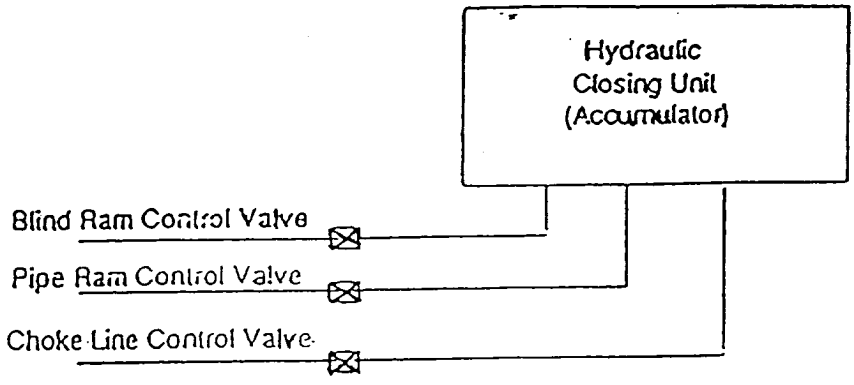
BOP STACK ARRANGEMENT

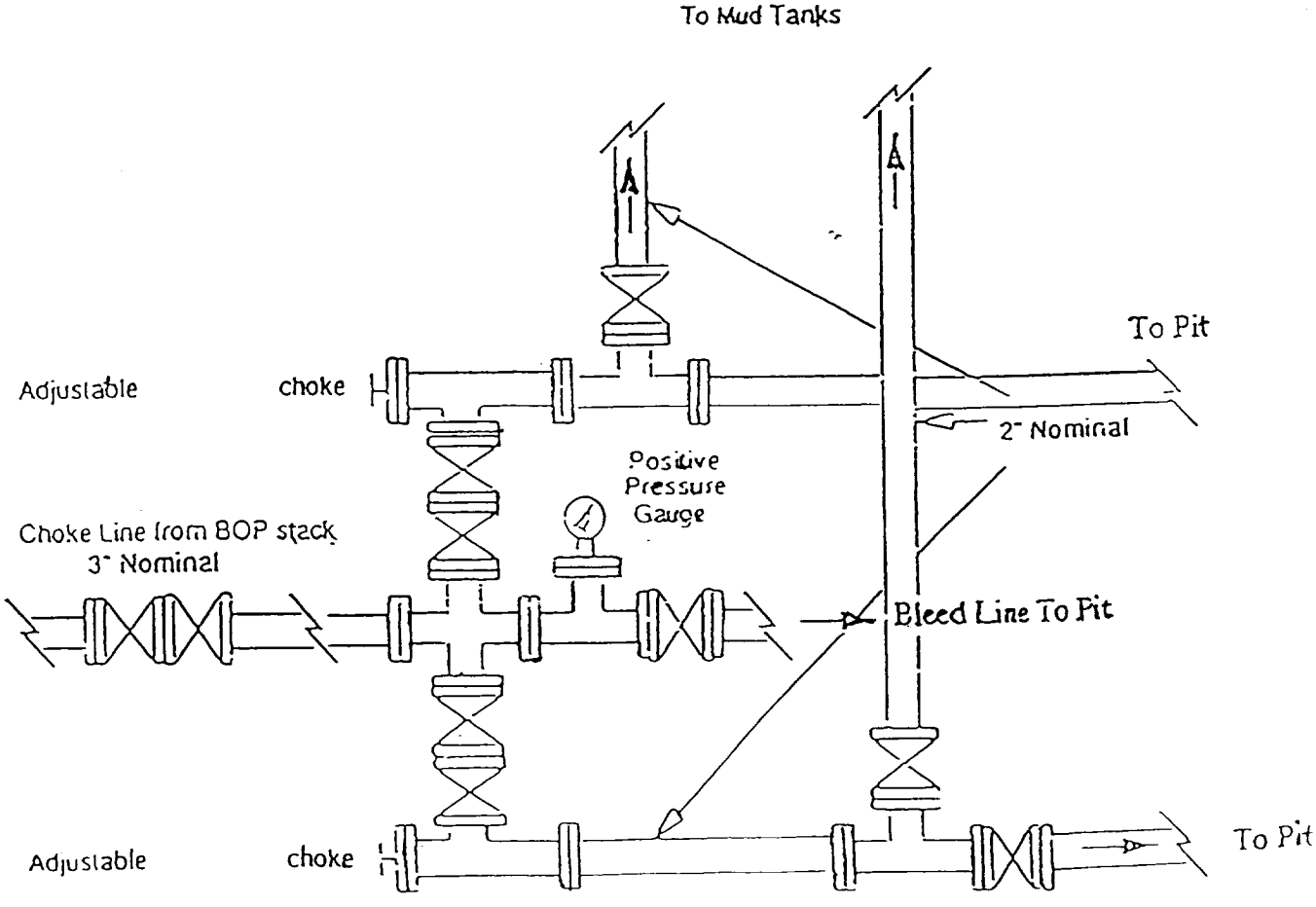


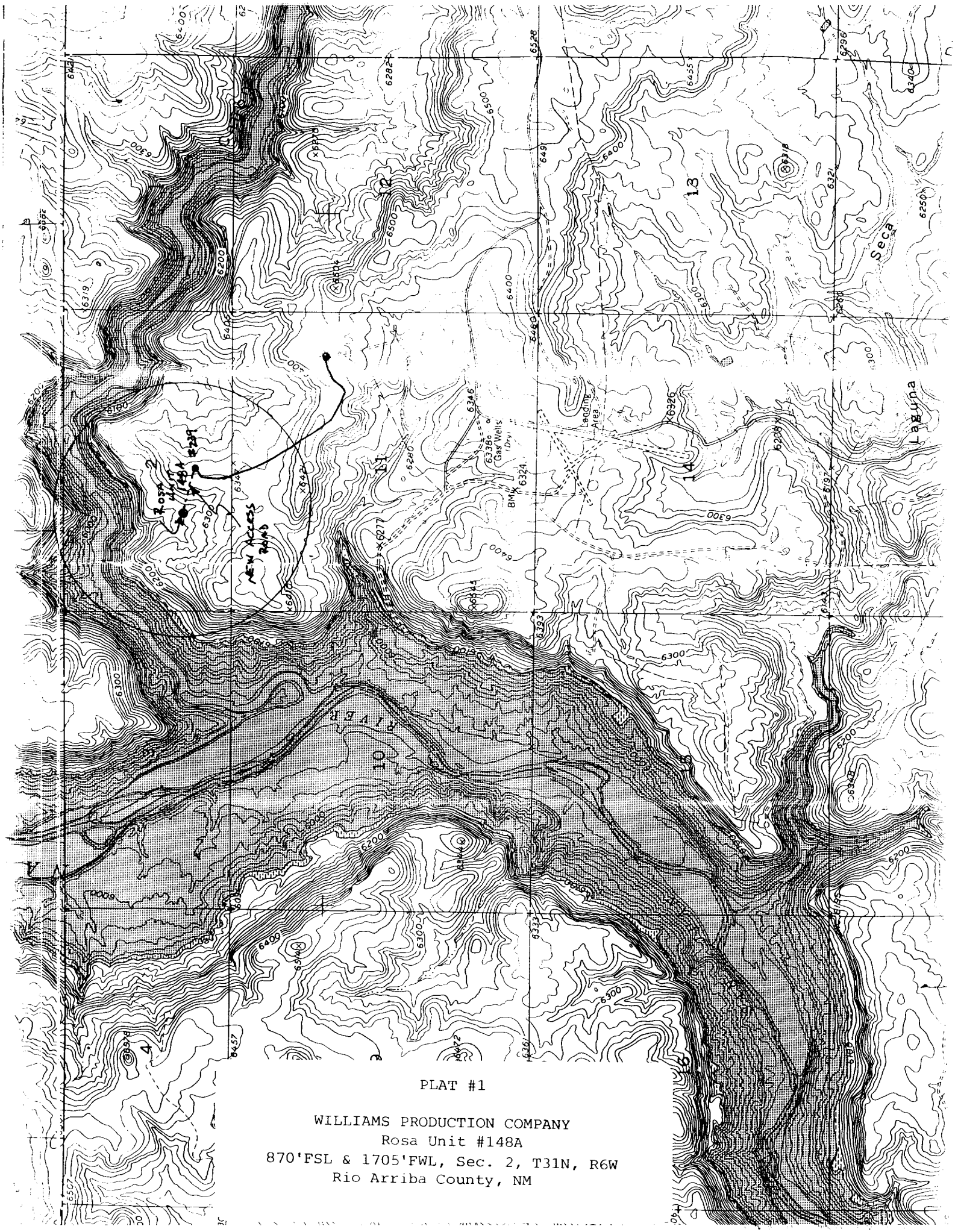
All ram type preventers and related equipment will be hydraulically tested at nipple-up and after any use under pressure to 1500 psi. The blind rams will be hydraulically activated and checked for operational readiness each time pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling report. The BOP equipment will include a kelly cock with handle, floor safety valve with change overs for each tool joint in the string, and choke manifold all rated to 2000 psi.

EXHIBIT 2

Choke Manifold & Accumulator Schematic



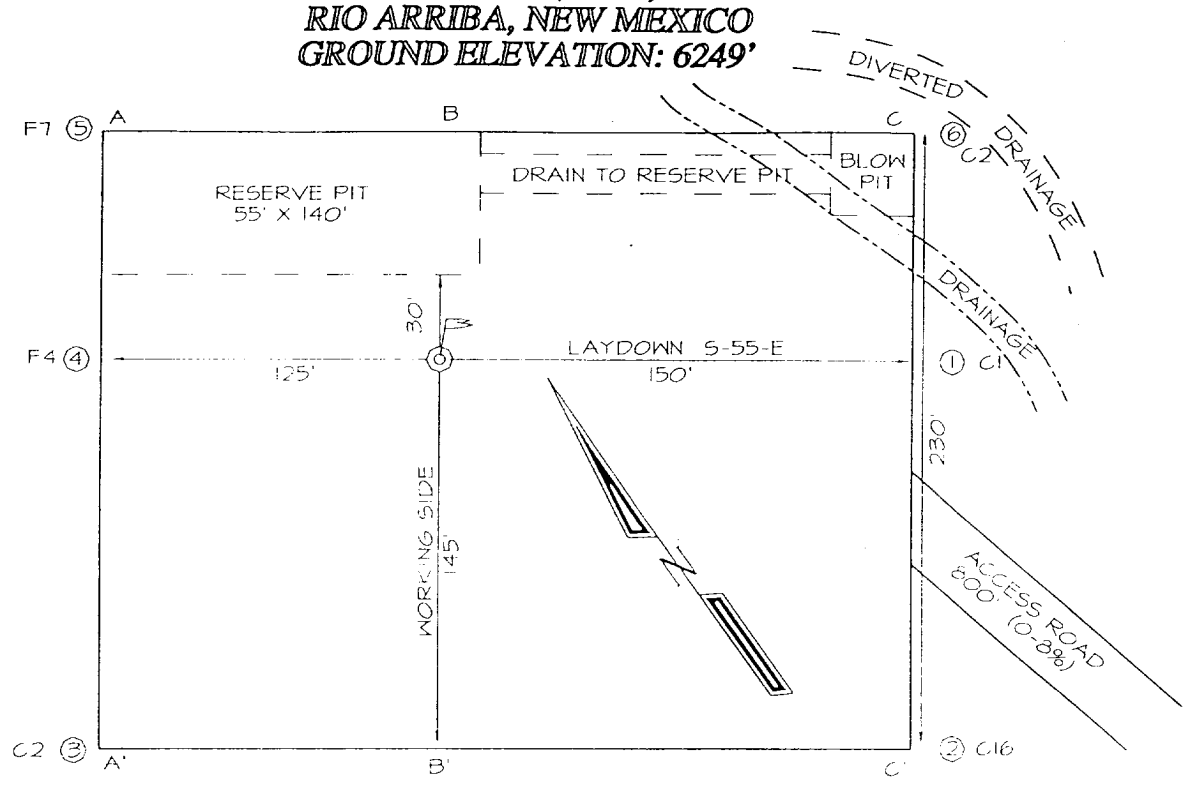


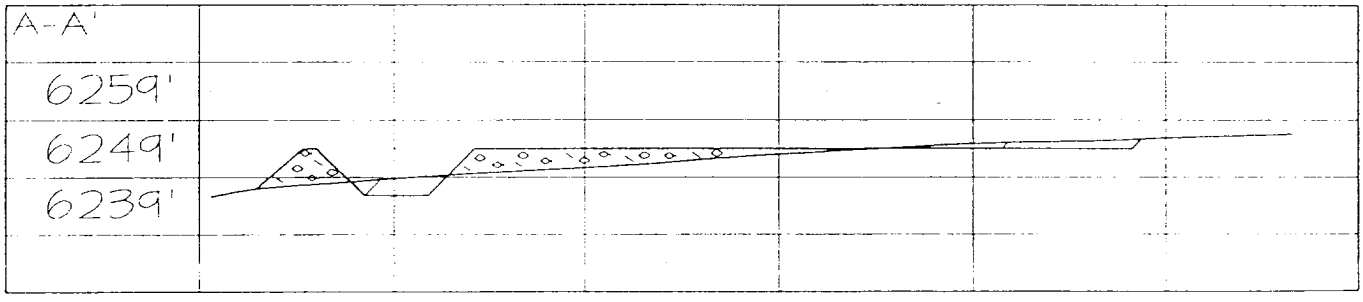


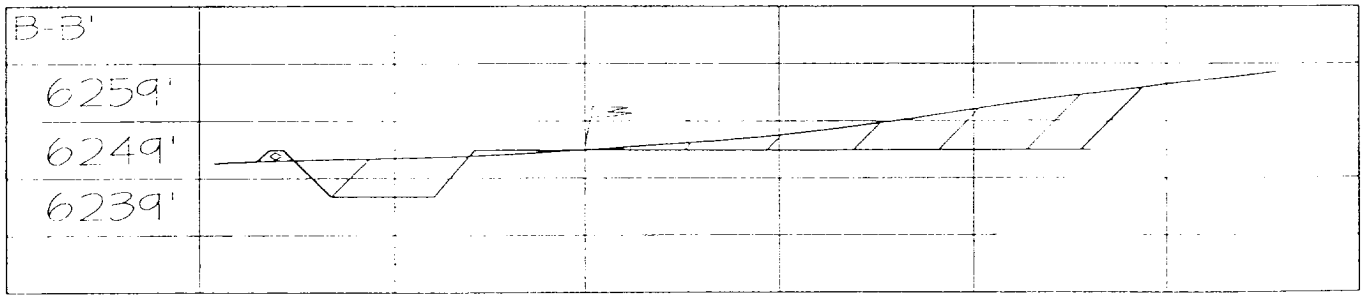
PLAT #1

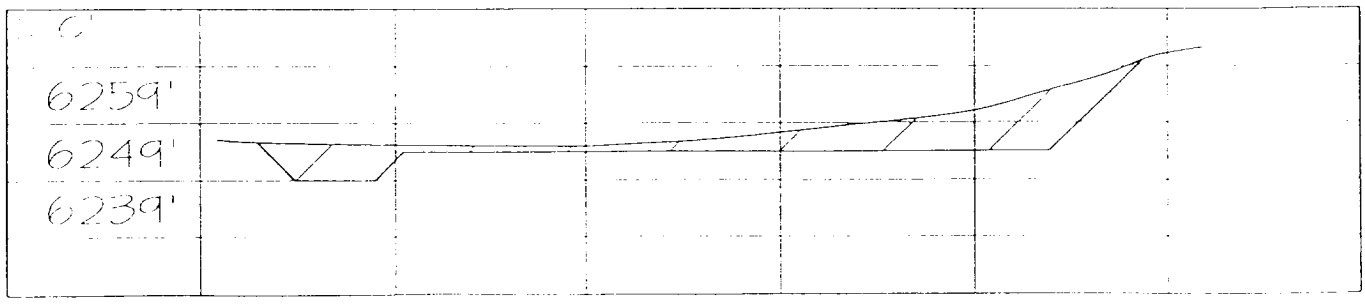
WILLIAMS PRODUCTION COMPANY
Rosa Unit #148A
870'FSL & 1705'FWL, Sec. 2, T31N, R6W
Rio Arriba County, NM

WILLIAMS PRODUCTION COMPANY
...OSA UNIT #148A, 870' FSL & 1...' FWL
SECTION 2, T31N, R6W, NMPM
RIO ARRIBA, NEW MEXICO
GROUND ELEVATION: 6249'









FILENAME 3162NT | SHEET 2 OF 2 | MCE SURVEYS, INC. | DRAWN BY BRA | CHECKED BY MT