

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 21, 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

Operator Name and Address. WILLIAMS PRODUCTION COMPANY c/o Walsh Engr. & Prod. Corp. 7415 E. Main Farmington, New Mexico 87402		OGRID Number 120782
		API Number 30-039-25580
Property Code 008480 17033	Property Name Rosa Unit	Well No. 26A

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
0	32	31N	5W		860	South	1465	East	R.A.

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
72319									
Proposed Pool 1 Blanco Mesa Verde E/320					Proposed Pool 2 Basin Dakota E/320				

Work Type Code N	Well Type Code M	Cable/Rotary R	Lease Type Code S	Ground Level Elevation 6495
Multiple Y	Proposed Depth 8182	Formation Dakota	Contractor N/A	Spud Date May 1996

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
13 3/4	10 3/4	32.75 H-40	300 320	200	Surface
9 7/8	7 5/8	26.4 K-55	3770	620 & 210	Surface
6 3/4	5 1/2	17.0 N-80	8182	335 & 100	3670

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 plans to drill a vertical well and test the Mesa Verde and Dakota according to the attached Operations Plan.

RECEIVED
MAY 23 1996

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

Signature: *Paul C. Thompson*

Printed name: Paul C. Thompson

Title: Agent

Date: 3/19/96

Phone: (505) 327-4892

OIL CONSERVATION DIVISION

Approved by:

Title:

DEPUTY OIL & GAS INSPECTOR, DIST. #3

Approval: MAY 24 1996

Expiration: MAY 24 1997

Conditions of Approval

Attached ☐

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OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-1
Revised February 21, 1996
Instructions on back
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

* APT Number 30-039-25580		* Pool Code 72319	* Pool Name Blanco Mesa Verde
* Property Code 008480-17033	* Property Name Rosa Unit		* Well Number 26A
* OGRID No. 120782	* Operator Name Williams Production Co.		* Elevation 6495'

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
0	32	31 N	5 W		860	South	1465	East	R.A.

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 E/320	13 Joint or Infill Y	14 Consolidation Code U	15 Order No.
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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	5280.00'		26 7	7 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature: Paul C. Thompson Printed Name: Paul C. Thompson Agent Title: 3/19/96 Date:	
	32				8 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. 12-04-95 Date of Survey: 12-04-95 Signature and Seal of Professional Surveyor: RENE C. EDWARDS 0857 6852 Certificate Number:
	5280.00'				
5280.00'		5280.00'		1465'	
5280.00'		5280.00'		860'	

RECEIVED
MAY 23 1996
OIL CON. DIV.
DIST. 3

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Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-10
Revised February 21, 1990
Instructions on back
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-25580		Pool Code 71599	Pool Name Basin Dakota
Property Code 008480 17033	Property Name Rosa Unit		Well Number 26A
OGRID No. 120782	Operator Name Williams Production Co.		Elevation 6495'

10 Surface Location

UL or lot no. 0	Section 32	Township 31 N	Range 5 W	Lot Idn	Feet from the 860	North/South line South	Feet from the 1465	East/West line East	County R.A.
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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
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12 Dedicated Acres 320	13 Joint or Infill Y	14 Consolidation Code U	15 Order No.
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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	5280.00'	32	5280.00'	17 OPERATOR CERTIFICATION: I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature: Paul C. Thompson Printed Name: Paul C. Thompson Title: Agent Date: 3/19/96
5280.00'	RECEIVED MAY 23 1996 OIL CON. DIV. DIST. 3	32	5280.00'	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. 12-04-95 Date of Survey Signature and Seal of Professional Surveyor: HELEN C. EDWARDS 0857 6857 Certificate Number
			860'	1465'

WILLIAMS PRODUCTION COMPANY
OPERATIONS PLAN

DATE: 2/1/96 (revised 3/8/96)

WELLNAME: ROSA UNIT #26A **FIELD:** Blanco MV/ Basin DK

LOCATION: SW/4 SE/4 Sec. 32, T31N, R5W **SURFACE:** State of NM
San Juan Co., NM

ELEVATION: 6495' GR **MINERALS:** State

TOTAL DEPTH: 8182' **LEASE #** E-347

I. GEOLOGY: Surface formation - San Jose

A. FORMATION TOPS:

Ojo Alamo	2617'	Point Lookout	5757'
Kirtland	2772'	Mancos	5922'
Fruitland	3137'	Gallup	6487'
Pictured Cliffs	3352'	Greenhorn	7767'
Lewis	3622'	Graneros	7822'
Cliff House	5492'	Dakota	7932'
Menefee	5547'	Total Depth	8182'

B. LOGGING PROGRAM: IND/GR, CDL/SNL. Log the Dakota from 8182' to 300' above the top of the Greenhorn and the Mesa Verde from 6000' to 300' above the Cliff House.

C. NATURAL GAUGES: Gauge any noticeable increases in gas flow. Gauge well @ 6000' and before TOH for logs @ 8182'. Record all gauges in Tour book and on morning reports.

II. DRILLING

A. MUD PROGRAM: Included in footage bid.

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 be 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:

<u>CASING TYPE</u>	<u>HOLE SIZE</u>	<u>DEPTH</u>	<u>CASING SIZE</u>	<u>WT. & GRADE</u>
Surface	13-3/4"	300'	10-3/4"	32.75# H-40
Intermediate	9-7/8"	3770'	7-5/8"	26.4# K-55
Production	6-3/4"	8182'	5-1/2"	17.0# N-80

B. FLOAT EQUIPMENT:

1. **SURFACE CASING:** 10-3/4" notched regular pattern guide shoe.
2. **INTERMEDIATE CASING:** 7-5/8" 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 2617' to the surface. Total centralizers: 5 regular and 19 turbulent.
3. **PRODUCTION CASING:** 5-1/2" whirler type cement nose guide shoe with a latch collar on top of 20' joint. Place 20' marker joint on top of 10th joint and one above 5492'.

C. CEMENTING:

1. **SURFACE:** Use 200 sx (240cu.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 - 620 sx (1288 cu.ft.) of class "B" 65/35 poz with 8% gel and 1/4# cello-flake/sk (Yield = 2.1 cu.ft./sk, Weight = 12.1 #/gal.). Tail - 210 sx (249 cu.ft.) of class "B", 1/4# cello-flake/sk and 2% CaCl₂ (Yield = 1.20 cu.ft./sk, Weight = 15.6#/gal.). Use 100% excess in Lead and 75% in tail to circulate to surface. Total volume = 1537 cu.ft. WOC 12 hours. Run a temperature survey after 8 hours if cement is not circulated. Test to 1500#.
3. **PRODUCTION CASING:** Use 335 sx (452 cu.ft.) of class "B" 50/50 poz with 4% gel, 6-1/4# fine gilsonite/sk and 0.5% CF-14 (Yield = 1.35 cu.ft./sk, Weight = 13.4 #/gal.). Tail 100sx (150 cu.ft.) of class "H" with 35% silica flour, 1/4# cello-flake/sk, 1.8% FL-62 and 0.2% A-2 (Yield = 1.50 cf/sk, Weight 15.9 #/gal). Displace cement at a minimum of 10 BPM. Use 60% excess in lead and tail to circulate 100' into intermediate casing. Total volume = 602 cu ft. WOC 12 hours. Run a temperature survey after 8 hours to determine TOC behind 5-1/2" casing.

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 7-5/8 to 3300# & 5-1/2" casing to 6000# for 15 minutes.

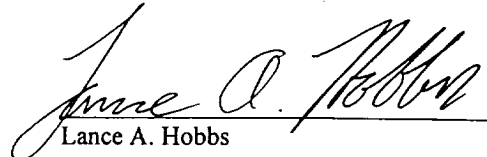
C. STIMULATION

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

D. RUNNING TUBING

1. Dakota: Run 1-1/2", 2.9#, J-55 EUE tubing with 1/2 mule shoe on bottom, SN with pump-out plug on top of adeem joint and 5 Seal Units. Land tubing approximately 100' below top Dakota perf.

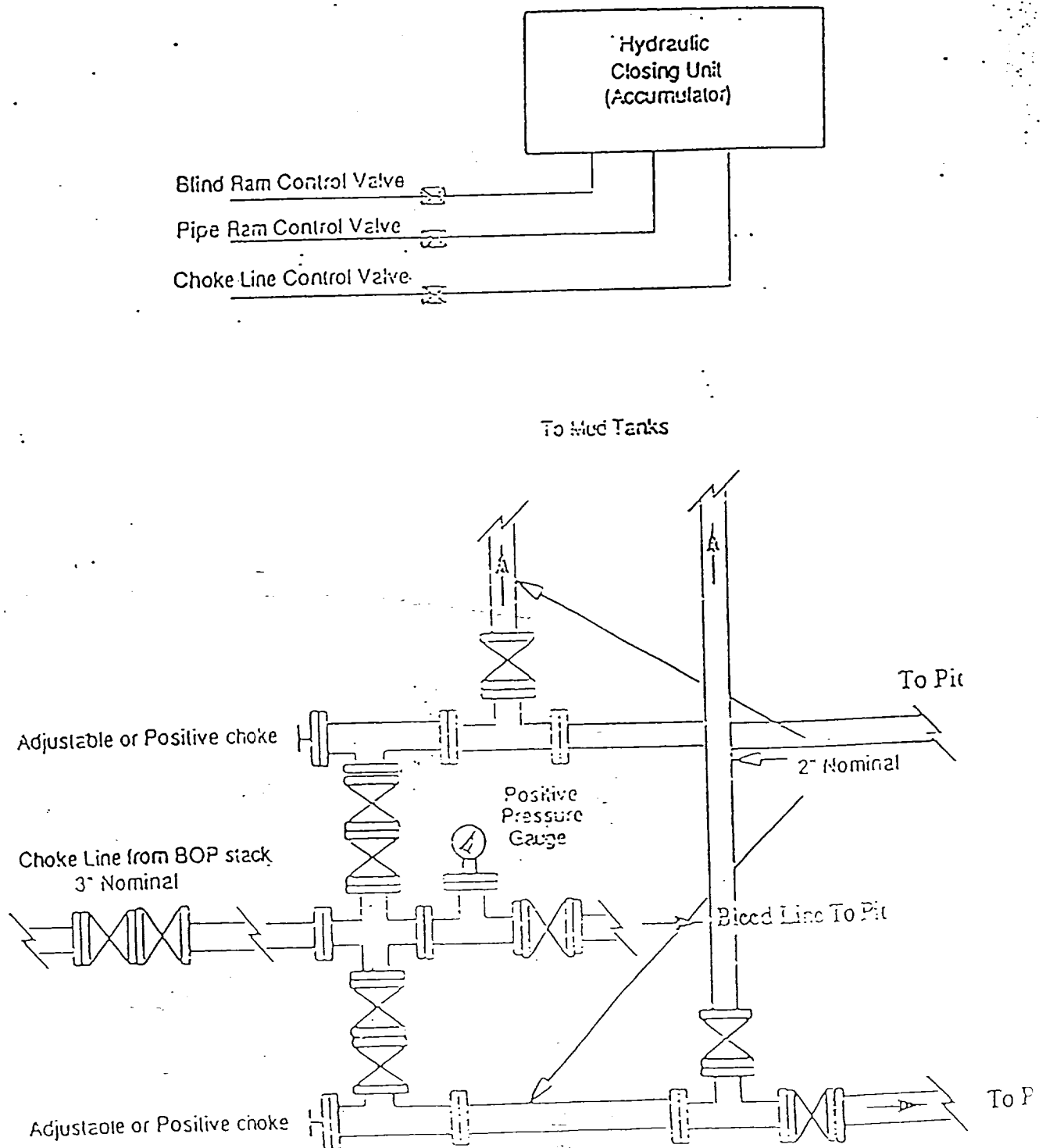
1. Mesa Verde: Run 1-1/4", 2.3#, J-55, IJ tubing with a bull plugged perforated nipple on bottom and a SN with pump-out plug on top of bottom joint. Land tubing approximately 25' above the bottom Point Lookout perforation.



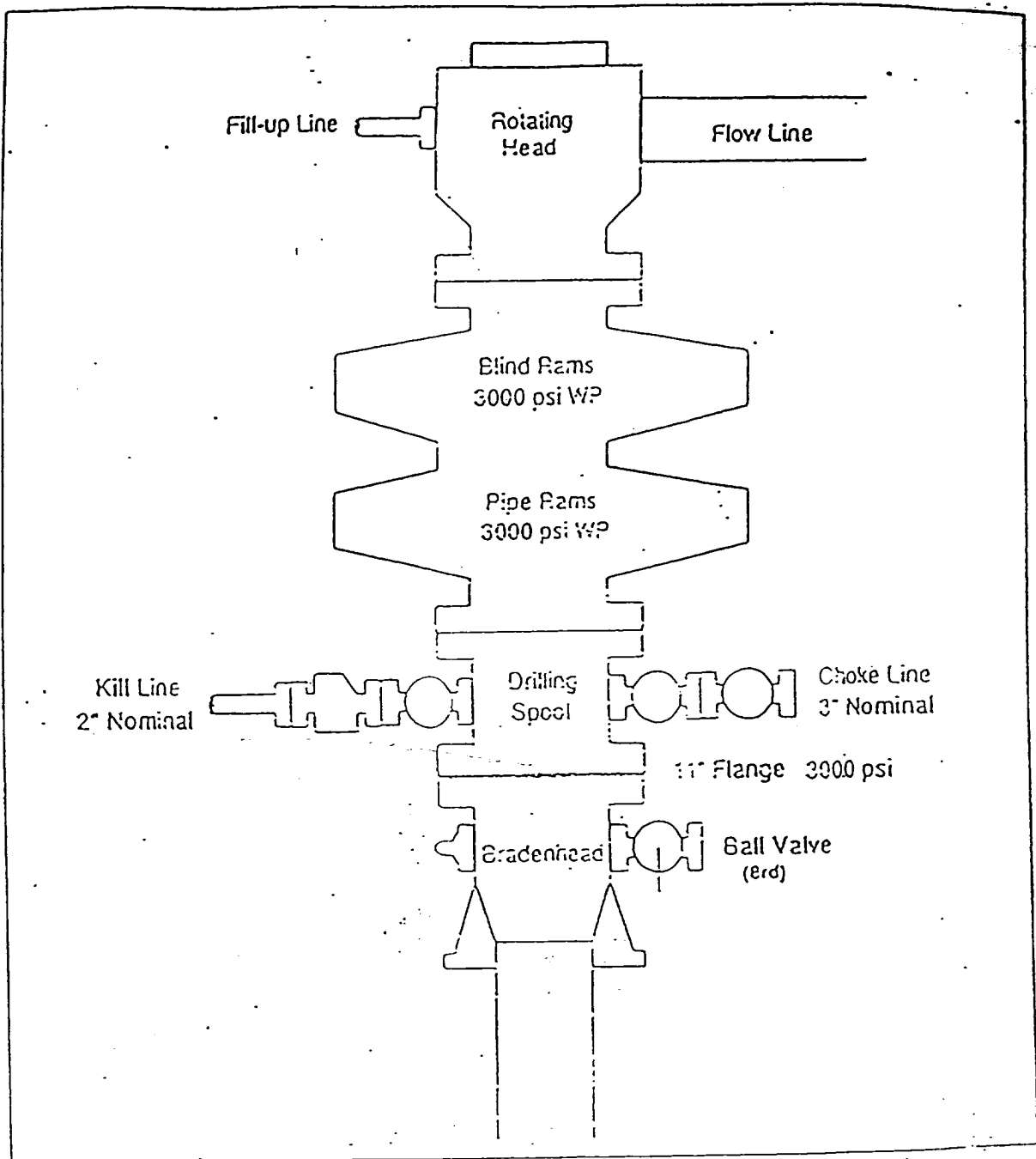
Lance A. Hobbs
Engineer, Production & Drilling

file:#26Aopp

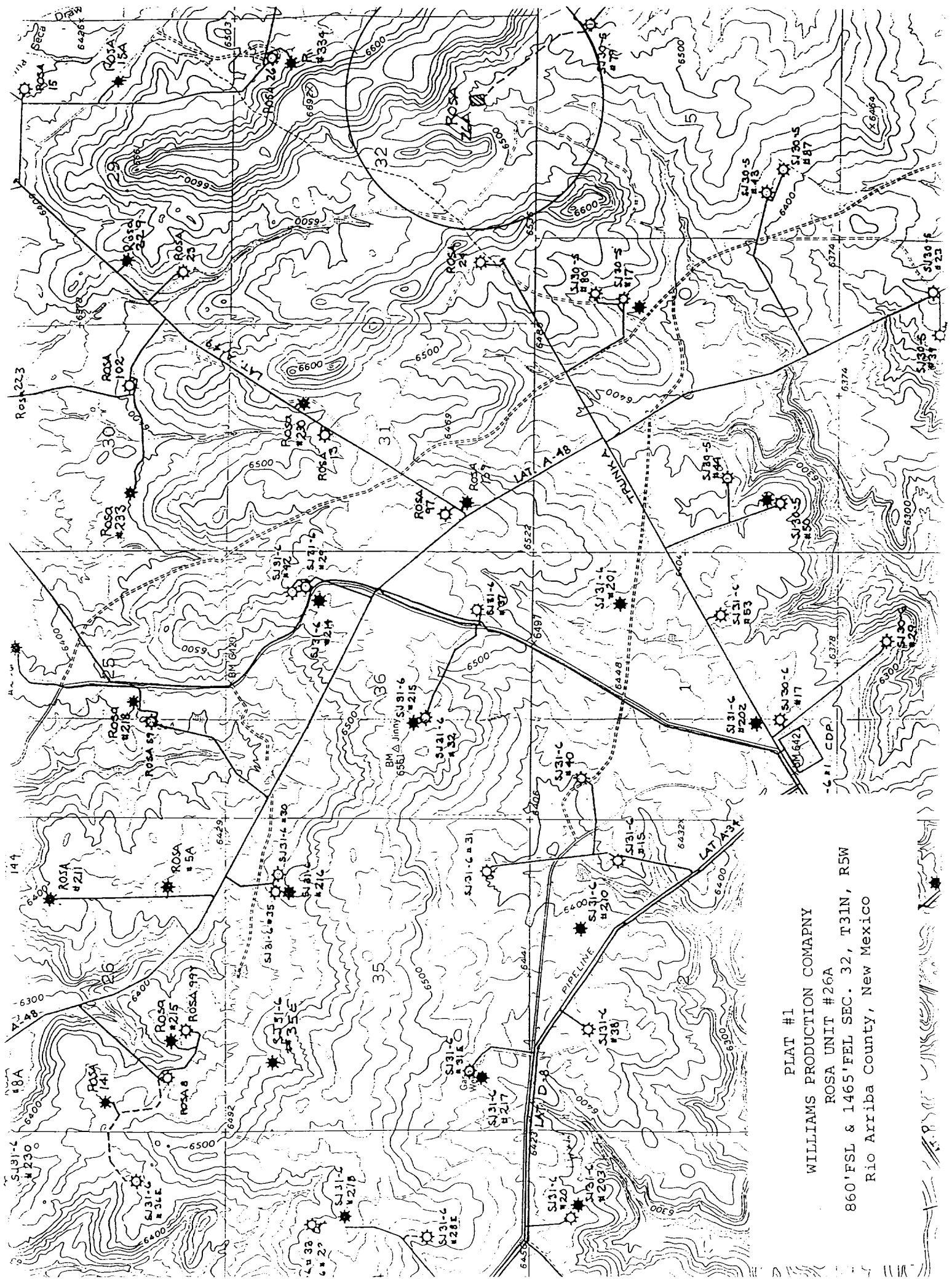
Choke Manifold & Accumulator Schematic



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 key cock with handle, floor safety valve with change overs for each tool joint in the string, and choke manifold all rated to 3000 psi.



PLAT #1

WILLIAMS PRODUCTION COMPANY

ROSA UNIT #26A

860'FSL & 1465'FEL SEC. 32, T31N, R5W

Rio Arriba County, New Mexico