

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 S. 1st Street, Artesia, NM 88210-2834
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-101
Revised October 18, 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, PLUG BACK, OR ADD A ZONE

¹ Operator name and Address Phillips Petroleum Company 5525 Highway 64, NBU 3004 Farmington, NM 87401		² OGRID Number 017654
⁴ Property Code 009258	⁵ Property Name San Juan 30-5 Unit	³ API Number 30-0 39-26200
		⁶ Well No. 220R

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	8	30N	5W		800'	South	1845'	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
N									

⁹ Proposed Pool 1					¹⁰ Proposed Pool 2				
Basin Fruitland Coal					71629				

¹¹ Work Type Code	¹² Well Type Code	¹³ Cable/Rotary	¹⁴ Lease Type Code	¹⁵ Ground Level Elevation
N	G	R	P	6270'
¹⁶ Multiple	¹⁷ Proposed Depth	¹⁸ Formation	¹⁹ Contractor	²⁰ Spud Date
N	3010'	Fruitland Coal	Key Energy	Oct 1999

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#, K/J-55	350'	185 sx C1 H	surface
8-3/4"	7"	20#, J/K-55	2890'	L-334 sx P07	
				T-100 sx C1 H	surface
6-1/4"	5-1/2"	15.5# J-55	2870' - 3010'	**	

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

** The 6-1/4" interval from the 7" casing shoe to the base of the coal may be underreamed to 9-1/2".

If the coal is cleated a 5-1/2" 15.5# liner will be run in the open hole without being cemented. If the coal is not cleated the well will be stimulated and open hole completed.

See attached for BOP equipment, mud program and cathodic protection.

If this well proves to be a good well, the 30-5 Unit #220 will be converted to a pressure observation well

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Patsy Clugston*
Printed name: Patsy Clugston

Title: Regulatory Assistant

OIL CONSERVATION DIVISION

Approved by: *Ernest Busch* 7-1-99

Title: DEPUTY OIL & GAS INSPECTOR, DIST. #3

Approval Date: JUL - 1 1999 Expiration Date: JUL - 1 2000

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State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 18, 1994
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State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-26200		¹ Pool Code 71629	¹ Pool Name Basin Fruitland Coal
⁴ Property Code 009258	⁵ Property Name SAN JUAN 30-5		⁶ Well Number 220R
⁷ OGRID No. 017654	⁸ Operator Name PHILLIPS PETROLEUM COMPANY		⁹ Elevation 6270'

¹⁰ Surface Location

UL or lot no. N	Section 8	Township 30N	Range 5W	Lot Idn	Feet from the 800'	North/South line SOUTH	Feet from the 1845'	East/West line WEST	County RIO ARriba
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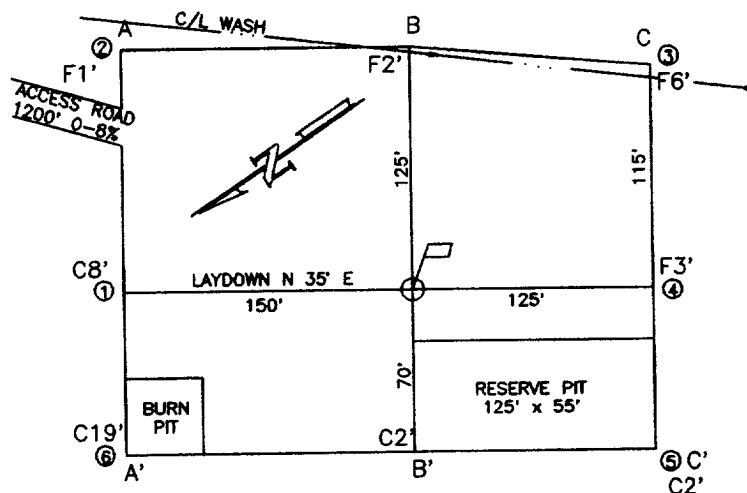
¹¹ Bottom Hole Location If Different From Surface

UL or lot no. N	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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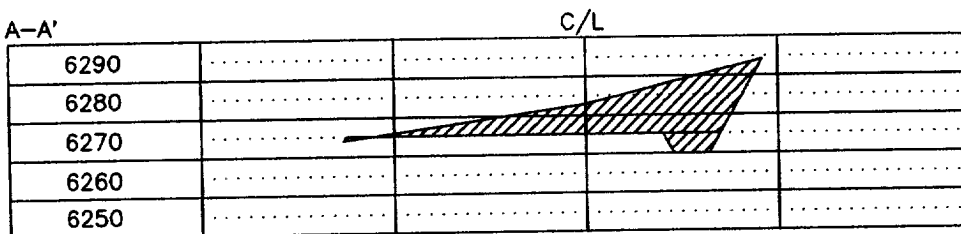
¹² Dedicated Acres 320 W/2	¹³ Joint or Infill I	¹⁴ Consolidation Code U	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

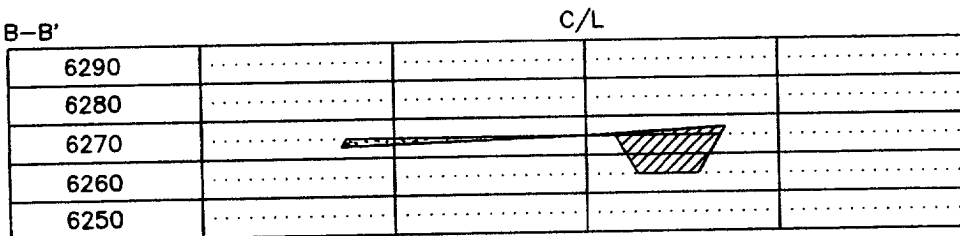
16 N89°58"E 5280.00' SF-078997 240 acres Section 8 1845' 800' EAST		5279.34' 5280.00' RECEIVED JUN 30 1999 OIL CON. DIV. DIST. 3		17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <i>Patsy Clugston</i> Signature Patsy Clugston Printed Name Regulatory Assistant Title June 28, 1999 Date	
5280.00' N00°01"E		5280.00' N00°01"E		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. 04/21/99 Date of Survey Signature and Seal of Professional Surveyor: <i>Henry P. Broadhurst, Jr.</i> Certificate Number	



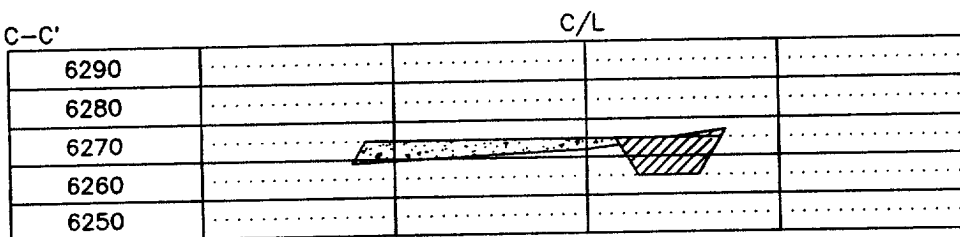
ELEVATION A-A'



B-B'



C-C'



COMPANY: PHILLIPS PETROLEUM COMPANY

LEASE: SAN JUAN 30-5 UNIT No.220R

FOOTAGE: 800' FSL. 1845' FWL UNIT N

SEC. 8 TWN. 30 N RNG. 05 W N.M.P.M.

COUNTY, RIO ARriba STATE, N.M.

ELEVATION: 6270

LATITUDE: 36-49-20

LONGITUDE: 107-23-00



PHILLIPS PETROLEUM COMPANY
FARMINGTON, NEW MEXICO

SURVEYED: 4/21/99

REV. DATE:

APP. BY K.R.

DRAWN BY: T.G.

DATE DRAWN: 4/23/99

FILE NAME: P004801

UNITED
FIELD SERVICES INC.

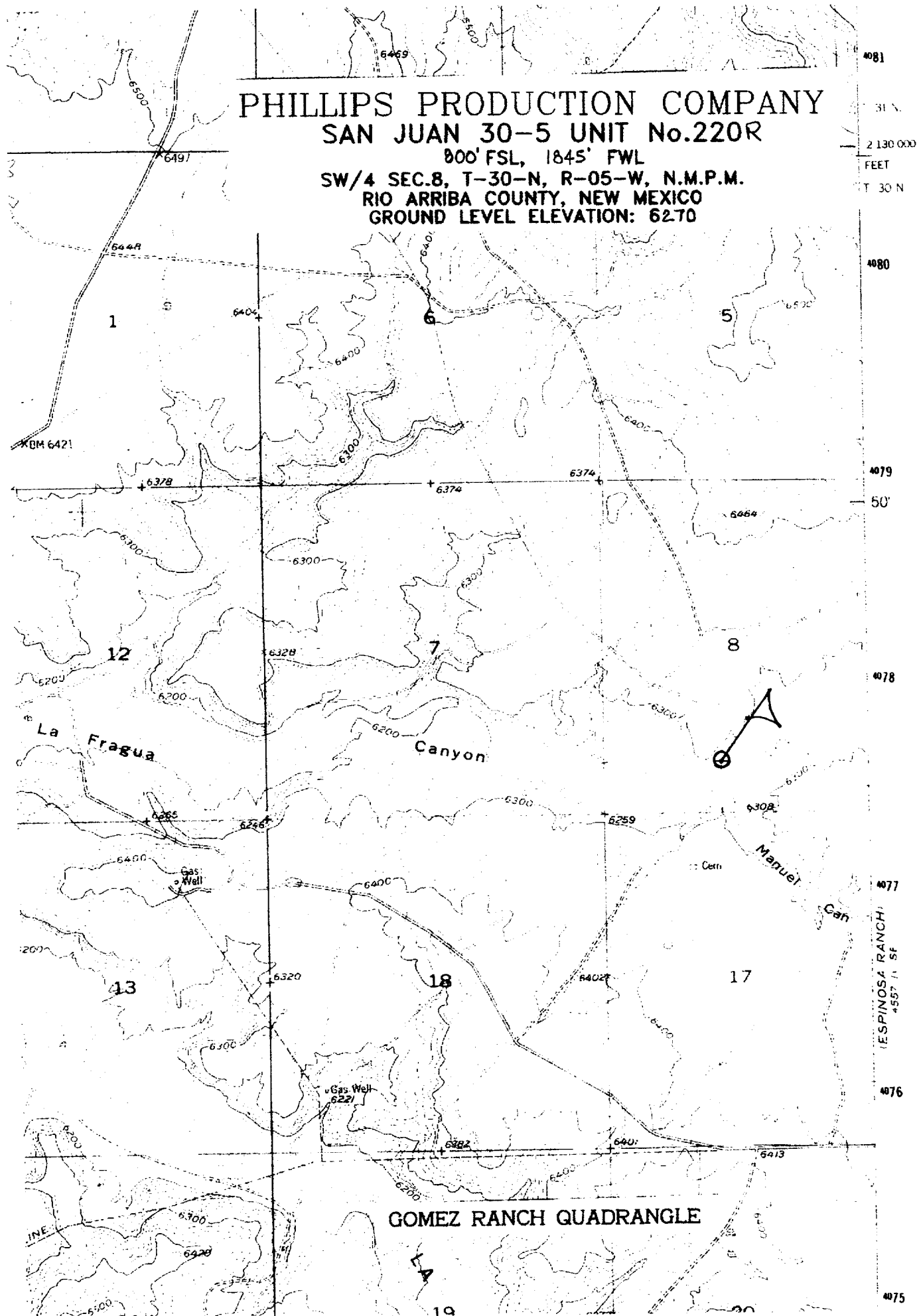
P.O. BOX 3651
FARMINGTON, NM 87499
OFFICE: (505)334-0408

DATE: _____

SW/4 SEC.8, T-30-N, R-05-W, N.M.P.M.

RIO ARRIBA COUNTY, NEW MEXICO

GROUND LEVEL ELEVATION: 6270



San Juan 30-5 #220R

SURFACE CASING :

Drill Bit Diameter	12.25 "	
Casing Outside Diameter	9.625 "	8.913
Casing Weight	36	ppf
Casing Grade	K-55	
Shoe Depth	350 '	
Cement Yield	1.2	cuft/sk
Excess Cement	100	%

Hole / Casing Annulus Capacity 0.0558 bbl/ft 0.3132 cuft/ft

Cement Required 182.7 sx

SHOE 350 ', 9.625 ", 36 ppf, K-55

INTERMEDIATE CASING :

Drill Bit Diameter	8.75 "	
Casing Outside Diameter	7 "	6.455
Casing Weight	20	ppf
Casing Grade	K-55	
Shoe Depth	2890 '	
Lead Cement Yield	2.1	cuft/sk
Lead Cement Excess	100	%
Tail Cement Length	389 '	
Tail Cement Yield	1.2	cuft/sk
Tail Cement Excess	100	%

Casing / Casing Annulus Capacity 0.0296 bbl/ft 0.1660 cuft/ft

Hole / Casing Annulus Capacity 0.0268 bbl/ft 0.1503 cuft/ft

Lead Cement Required 334.1 sx

Tail Cement Required 100.0 sx

LINER TOP 2870 '

SHOE 2890 ', 7 ", 20 ppf, K-55

LINER BOTTOM 3805 '

BOP AND RELATED EQUIPMENT CHECK LIST

2M SYSTEM:

2 hydr. rams (pipe & blind) or hydr. ram and annular with blind ram on bottom

Kill Line (2-inch minimum)

1 kill line valve (2-inch minimum)

1 choke line valve

2 chokes (refer to diagram in attachment 1) on choke manifold

Upper kelly cock valve in open position with handle available

Safety valve (in open position) and subs to fit all drill strings in use (with handle available)

Pressure gauged on choke manifold

2 inch minimum choke line

Fill-up line above the uppermost preventer

The BOPs will be pressure tested according to Onshore Order #2 III, A 1 and 30% safety factor.

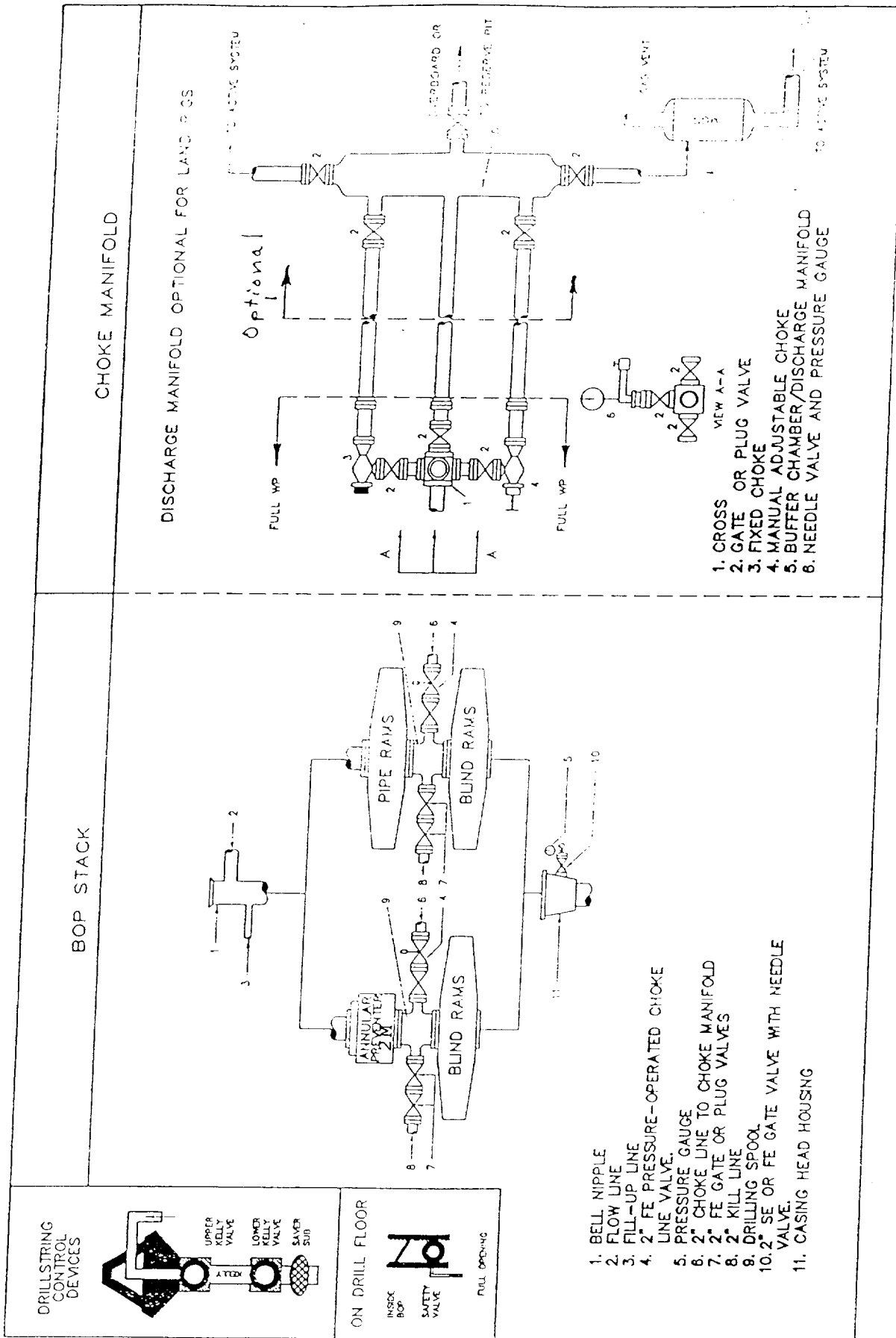
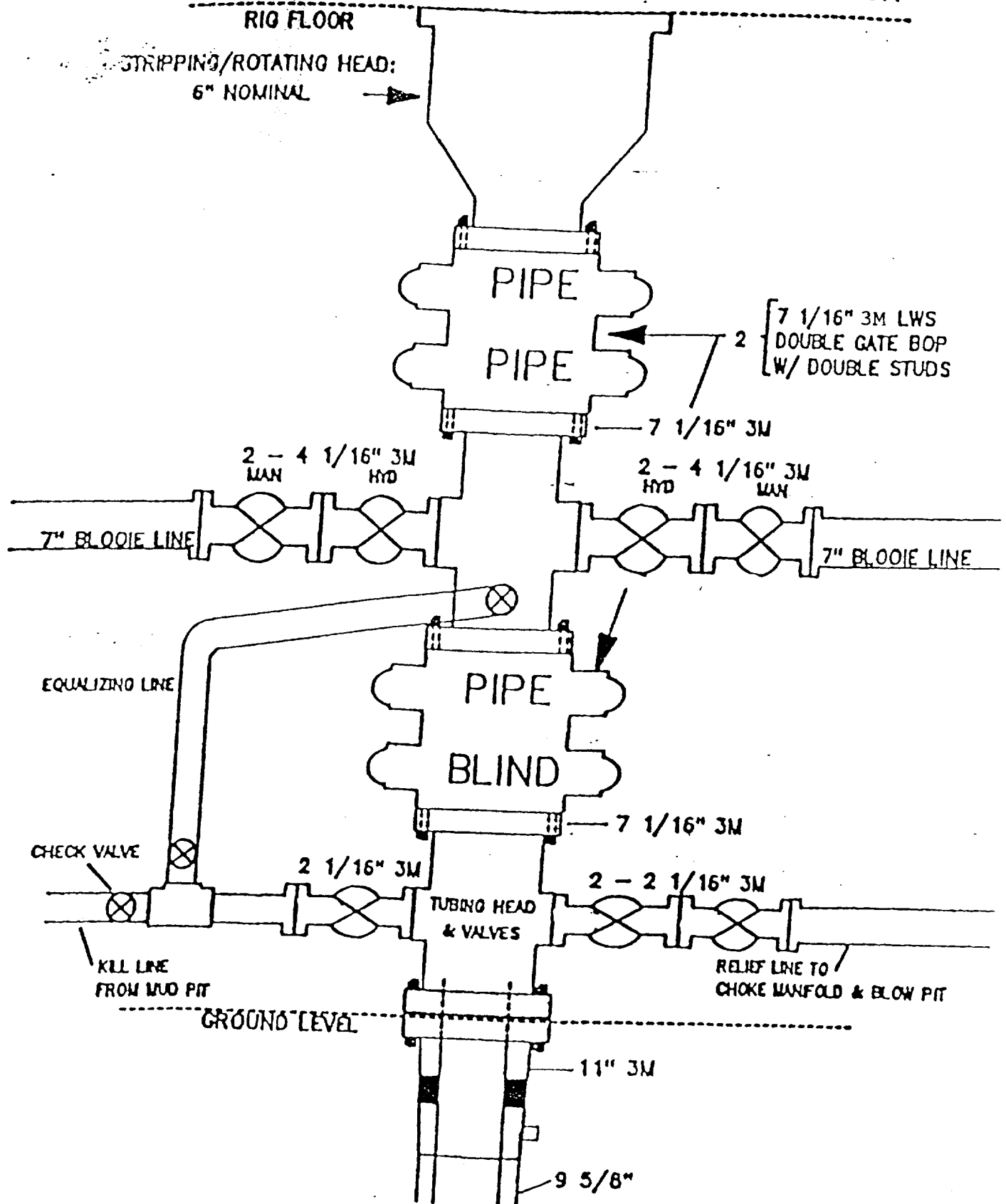


Fig 2.4. Class 2 BOP and Choke Manifold.

COMPLETION BOP/WELLHEAD CONFIGURATION



**San Juan 30-5 Unit #220R
Unit O, 800' FSL & 1845' FWL
Section 8, T30N, R5W; Rio Arriba County, NM**

Cathodic Protection

Phillips proposes to drill a cathodic protection deep well groundbed for the subject well. Will drill a 6-7/8" hole to an anticipated minimum depth of 300' (maximum depth of 500'). Cement plugs will not be used unless more than one water zone is encountered. Prior drilling history for the area indicates only one zone to that depth. If more than one water zone is encountered, notification will be made and details of cement and casing will be provided.

All drilling activity will remain on existing well pad and "Tierra Dynamic Company" of Farmington will be doing the drilling for Phillips.

PROPOSED MUD PROGRAM
 SAN JUAN 30-5 # Unit
 Well No. 220R
 Rio Arriba County, NM

DEPTH	MUD WEIGHT	VISCOSITY	FLUID LOSS	CL-PPM	% SOLIDS	ADDITIVES
0 - 350' +/-	Spud Mud 8.5 - 8.7 ppg Lime and Gel	27 - 50	-	-	-	Bentonite & Lime
350' +/- to 2890' +/-	8.34 - 8.8 ppg	27 - 40	NC	1200 PPM	-	Water & Polymer

350' - 2890' +/- Clear water with Polymer sweeps as required to keep hole conditioned.

2890' - TD Circulate hole with produced water and air.

Note: Estimated BHP is 600 psi