Form 3160-5 UNIT	ED STATES	FORM APPROVED Budget Bureau No. 1004-0135
June 1990) DEPARTMEN	r of the interior	Expires: March 31, 1993
RECEIVE BUREAU OF L	AND MANAGEMENT	5. Lease Designation and Serial No.
SUMBON, NOTICES AN	D REPORTS ON WELLS	SF-080412-A
SUPPLIES AN	or to doopen or reentry to a different reservoir	6. If Indian, Allottee or Tribe Name
Do not use this joint for proposals to drill	or to deepen or reentry to a different reservoir. PERMIT - " for such proposals	
USE APPLICATION FOR	DE AND IN	7. If Unit or CA, Agreement Designation
070 FARMING TOTAL SUBMIT	IN TRIPLICATE DE LO LE LA	
1. Type of Well	100 MAY = 2 199/	San Juan 32-8 Unit
Oil X Gas	DU PIAT 2 10	8. Well Name and No.
2. Name of Operator	OIL COM, DIV.	SJ 32-8 #253
Phillips Petroleum Company		9. API Well No.
2 Address and Telephone No.	চাপ্তাত হ	30-045- 29960
5525 Highway 64, NBU 3004, Fa	rmington, NM 87401 505-599-3454	10. Field and Pool, or exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey De	scription)	Danim Frankland Cool
Unit G, 1824' FNL & 1757' FE	L	Basin Fruitland Coal 11. County or Parish, State
Section 27, T32N, R8W		San Juan. NM
		· · · · · · · · · · · · · · · · · · ·
12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT.	OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
- W	Abandonment	Change of Plans
Notice of Intent	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
Suosequent Report		Water Shut-Off
Final Abandonment Notice	Casing Repair	
Final Abandonniem Nonco	Aftering Casing	Conversion to Injection
	X other <u>casing/cement change</u>	Oispose Water (Note: Report results of multiple completion on Well
		Completion or Recompletion Report and Log form.)
3. Describe Proposed or Completed Operations (Clearly state all	pertinent details, and give pertinent dates, including estimated date of startitical depths for all markers and zones pertinent to this work.)*	ng any proposed work. If well is difectionally drilled
Rive anomittaes recommend was assessed as	·	
	ing and coment design from what	Mac
Phillips proposes changes in the	ne casing and cement design from what	was
submitted on the original APD.		
1. The 7" casing will be 20# .	1.55 (not 23#)	
2. The lead slurry on the 7"	casing will be changed to 325 sx 65/3	35 Class B/POZ cement with
3#/cv Gilsonite 1/4#/SX C	ello-Flake and 12% del (Dentonite) mix	ked at 12.0 ppg with a
vield of 2.2 cu ft/sx. The	e tail cement will remain as APD'd.	
-		
3. A 5-1/2" 15.5# J-55 liner	will be run in the open hole without	being cemented for the
production casing.		
•		
14. I hereby certify that the foregoing is frue reld correct	An Title Regulatory Assistant	Date 4-24-97
Signed Albu Start	Title Medication & Modification	Date 1917
(This space for Federal & State office use)		WK 3 0 mail
Approved by State of the State	Title San Miller	Date
Conditions of approval, if any:		
Title 18 U.S.C. Section 1001, makes it a crime for any pers	on knowingly and willfully to make to any department or agency of the Unit	ed States any false, fictitious or fraudulent statements
or representations as to any matter within its jurisdiction.		

Form 3160-3 (July 1992)

SUBMIT IN TRIPLICATE*

FORM APPROVED OMB NO. 1004-0136 Expires: February 28, 1995

UNITED STATES DEPARTMENT OF THE INTERIOR

(Other instructions on reverse side)

	DEPARTME	NT OF TH	E IN	TERIOR	ie)	5. LEASE DE	SIGNATION AN	D SERIAL NO.
	BUREAU OF		SF-080	412-A				
ADDI	ICATION FOR	·				6. IF INDIAN	, ALLOTTEE O	R TRIBE NAME
la. TYPE OF WORK	ICATION FOR	LEUWII I	O DI	ILL ON DEEP E	<u> </u>	7. UNIT AGR	EEMENT NAM	E
DR DR		San lu	an 22 0	Unit				
b. TYPE OF WELL OIL	LE		an 32-8 Lease name,					
WELL 2. NAME OF OPERATOR	GAS WELL X OTHER			SINGLE X MULTIPIZONE ZONE		61.22	വ്യാ	
Phillips Petro	leum Company					SJ 32- 9. API WELL		
3. ADDRESS AND TELEPHONE 5525 Highway 6	_{в No.} 4, NBU 3004, Fa	rminaton N	IM 87	401 505-59	9-3454	10 FIELD A	ND POOL, OR W	W DOAT
LOCATION OF WELL (Repo	ort location clearly and in accord				J 0.10.1	IO. TIELD AI	TO FOOL, OK W	ILDCAI
At surface Init G 1824' I	FNL & 1757' FEL					Basin	Fruitla	nd Coal
At proposed prod. zone	4 1,0, 122					AND SUR	VEY OR AREA	
Same as above	DIRECTION FROM NEAREST TO	WN OR POST OFFICE*		 		12. COUNTY	2N, R8W	13. STATE
0 11 miles NE o	of Navajo Dam Po	ost Office				San Ju		NM
15. DISTANCE FROM PROPOSI LOCATION TO NEAREST			l	OF ACRES IN LEASE	17. NO. OF TO THIS			
PROPERTY OR LEASE LINE (Also to nearest drlg. unit	line, if any) 1/3/			5.94 acres	 	·	E/2	
18. DISTANCE FROM PROPOSI TO NEAREST WELL, DRILL	ed location* Ling, completed, 8 lease, ft. @ 310()' (#202)	1	DPOSED DEPTH	rota	Y OR CABLE TO	DOLS	
I. ELEVATIONS (Show whet				to technical and			X. DATE WORK	K WILL START*
6733' (unprepai	red around level	procedural revi	iew pu	rsuant to 43 CFR 3169	5.3	2nd	Qtr. 19	97
3.		and appeal pul PROPOSED CASING	r suant 3 AND C	TO 43 OFR 9165.4. EMENTING PROGRAM				THORIZED A
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOO	OT	SETTING DEPTH			REMENT	
2-1/4"	9-5/8"	36#, J-55		260'	 		@ 177 c	
-3/4"	7"	23#, J-55		3415		500 sx Cl B (@ 1055 cu 150 sx Cl B (@ 177 cu.		
-1/2"	5-1/2"	15.5# or 2	12#	@ 3600'	** -150 :	SX CI B	(@ 1//	cu. ft.)
-1/2	3-1/2	15.5# 01 2		@ 3000				
being ceme	al is cleated a ented. al is not cleate						•	
				a magain	7		ه پختی	
BOP Equipment	and Mud Program	ı - See att	ached		/Em		Č	-3 ****
				111 MAY - 2 199	$_{7}$ $ U $			بر دار
See attached W	WFS Pipeline Sur	vey.		2 100	l legación			그 교유
				OIII, (2007) 1	מתווש		;	
N ABOVE SPACE DESCRIE	BE PROPOSED PROGRAM;	If proposal is to dee	nen. give	data on preschi plaductive non	ンロビっ re and propos	ed new produc	ctive zone. If n	roposal is to deill o
	tinent data on subsurface location							×
SIGNED Talsa	p Cluzi	ten 1	ITLE RE	egulatory Assist	ant	DA	_{re} April	1, 1997
(This space for Federal o	r State office use)					ADEO	9 A 1571	
PERMIT NO.				APPROVAL DATE		PER	303	5 1
Application approval does not CONDITIONS OF APPROV	t warrant or certify that the applicant h	oolds legal or equitable titl	e to those t	rights in the subject lease which would	ientitle the appl	icant to conduct	operations thereor	L
APPROVED BY 57	vo 200	<i>r</i> тп	nle ·	Bashwa n	-	DATE _	PR 3 0	Amary Box 4

DISTRICT I P.O. Box 1980, Hobbs, N.M. 88241-1980

State of New Mexico Energy, Minerals & Natural Resources Department

Revised Febuary 21, 1994 Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies RECEIVED

DESTRICT II P.O. Drawer DD, Artesia, N.M. 88211-0719

DISTRICT III 1000 Rio Brazos Rd., Axtec, N.M. 87410

PO Box 2088, Santa Fe, NM 87504-2086

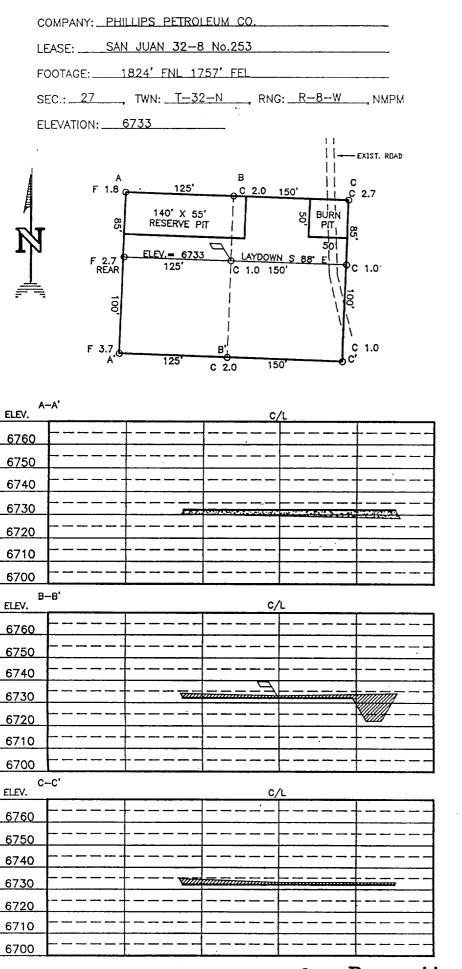
OIL CONSERVATION DIVISION

P.O. Box 2088 Santa Fe, NM 87504-2088

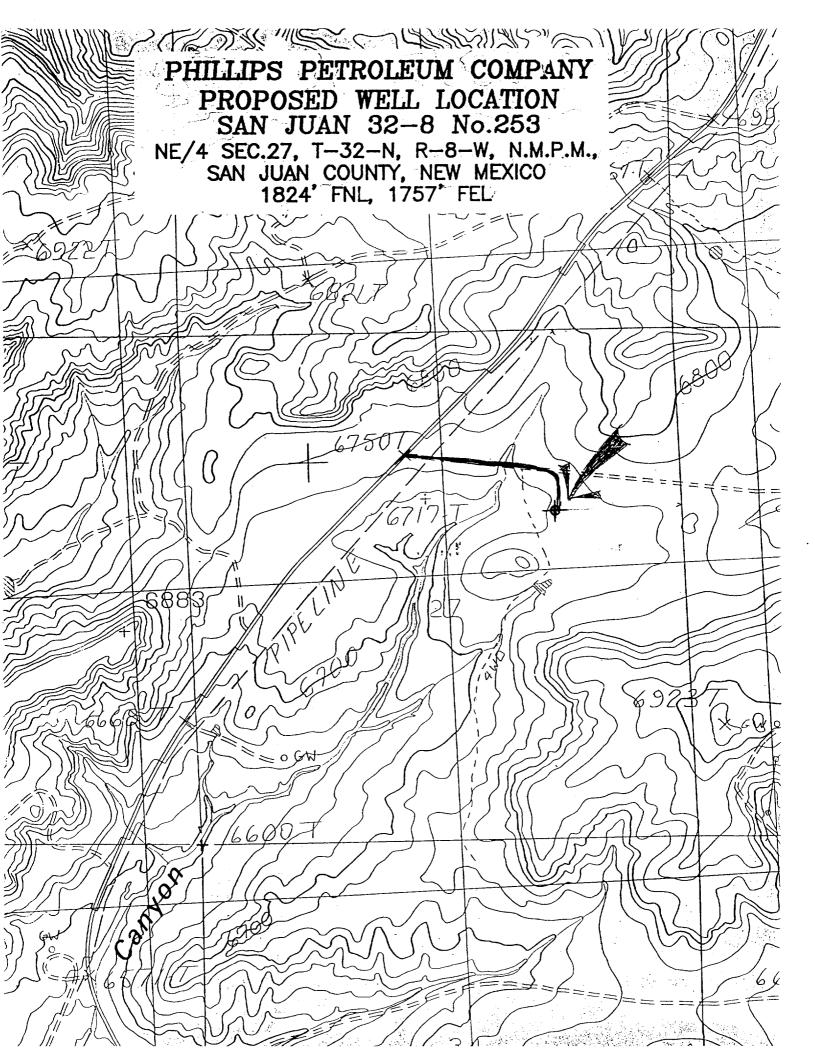
STREET - 1 PM 3: 26 AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

			MEIT I	JOCATIO	N AND	AU.	REAGE DED				
¹API 1	lumber		² Pool Code ⁶ Pool Name								
				71629_		Ва	asin Fruit	land Coal			
⁴ Property Co	de			Property Name *Well Number							
009261	l				SAN JU						253
OGRID No.					•Оре	erator 1	Name			•	Elevation
017654				PH			OLEUM CO.				6733
							Location				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from	the	North/South line	Feet from the	East/Ve	st line	County
G	27	T32N	R8W		1824		NORTH	1757	EA	<u>st</u>	SAN JUAN
			"Botte	om Hole	Locati				*		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from	the	North/South line	Feet from the	East/Ve	st line	County
G			<u> </u>					<u></u>	<u> </u>		<u></u>
Dedicated Acres	1	or Infill 14	Consolidatio	n Code 140	rder No.						
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				7	-4		•	628			a
77 Table 1					1824		_	1 0	/ \	1/	()
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							1	Signature			
		Section	on 27			4	1757*	Richar Printed Nam		red	
					-6-		1707			oduct	ion Spvr
		1621			SF-080	412	-A	March	-		
	Mos							Date	<u> </u>	<i>J J I</i>	
	3///				7.		$\overline{}$	18 SUR	VEYOR	CERT	IFICATION
LEG!	~ 19	<i>∑</i> (7				_	All hereby certify	that the w	ell location	shown on this plat
10/15	- 4	an in	ño.	1				was plotted from	n field note	s of actua	l surveys made by n e same is true and
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ON WAY	> D/1				~			Date of Surv		o Karlonal	18/10
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				1				6	889	4 E35161	AL LOUP
								Z Certificate Nu	mber		







SURFACE USE PLAN

Phillips Petroleum Company, San Juan 32-8 Unit, Well No. 253, SW/4 NE/4, Section 27, T-32-N, R-8-W, San Juan County, New Mexico. (Federal Lease No. SF-080412-A).

This plan is to accompany "Application for Permit to Drill" the subject well which is located approximately 11 miles NE of Navajo Dam post office, New Mexico. The following is a discussion of pertinent information concerning the possible effect which the proposed drilling well may have on the environment of the well and road sites and surrounding acreage. A copy will be posted on the derrick floor so that all contractors and sub-contractors will be aware of all items of this plan.

1. To reach the proposed location, start from Aztec, New Mexico and go east on NM 173, approximately 24 miles to Navajo Lake Dam. Turn north on Hwy. 511 and travel approximately 11 miles to mile post 26. Turn east 1/4 mile, turn south to well location.

Planned Access Roads:

- A. The access road is shown on the attached map. All roads used to access the proposed location shall be maintained in the same or better condition than presently found. The access road is to be classified "Temporary Resource Road."
- B. Turnouts: None
- C. Culverts, Cuts and Fills: See Cut and Fill Sketch. Culverts as needed.
- D. Surfacing Material: Natural materials at well site.
- E. Gates, Cattle Guard, Fences: As required.
- F. Proposed Road: Approximately 400' of new access from existing lease road.
- G. Drainage: Will be provided as needed.
- 3. Locations of Existing Wells: SJ 32-8 #202;1155 FSL & 1135 FWL Sec 27, T30N, R8W
- 4. Locations of Tank Batteries, Production Facilities, Production Gathering, and Service Lines: In the event of production, production facilities will be located on the drill pad. The actual placement of this equipment will be determined when the well's production characteristics can be evaluated after completion. The condensate tank will be enclosed by a dike. Upon completion of drilling, the location and surrounding area will be cleared of debris.

The flow-line from Well No. 253 is to run from a measurement point on location to an existing pipeline. See attached WFS pipeline survey for exact footages.

5. **Water Supply Source:** Will be provided by the drilling contractor and trucked to the drilling site. See Attachment No. 1 - WATER SUPPLY SOURCES.

6. **Source of Construction Materials:**

No additional construction materials will be required to build the proposed location. The dirt from the reserve pit will be back-sloped and saved for use when the trench is rehabilitated.

7. Methods for Handling Waste Disposal:

- A. A Conventional Drilling System will be used. The drill cuttings, fluids and completion fluids will be placed in the reserve pit. The reserve pit will be fenced with wire mesh on three sides away from the pad during drilling and the fourth side fenced as soon as the rig moves out. The reserve pit will be back filled, leveled and contoured so as to prevent any materials being carried into the watershed. Upon completion, the pad will be leveled, contoured, and re-seeded with the appropriate seed mixture.
- B. All garbage and trash will be placed in specially constructed wire mesh containers. Upon cleanup, the refuse in the containers will be hauled to an approved landfill site.

All produced water will be collected in tanks until hauled to an approved disposal system, or separate disposal applications will be submitted for appropriate approval.

8. Ancillary Facilities: None

9. **Well Site Layout**: Attached sketch shows the relative location and dimensions of the well pad, and cuttings trench. Location will be 275 ' x 185'.

10. Plans for Restoration of Surface:

Pits will be filled and leveled as soon as practical. If the well is productive, drilling pad will remain as well service pad. If dry hole, the pad will be ripped per regulations. Reserve pit dirt will be saved to be used during restoration of the pit area.

11. Other Information:

Α.	Terrain:	See Archaeological Survey
В.	Soil:	See Archaeological Survey
C.	Vegetation:	See Archaeological Survey
D.	Surface Use:	See Archaeological Survey
E.	Ponds & Stre	ams: See Archaeological Survey
F.	Water Wells:	Water well is located in Section 27 approx. 500' from proposed site

G. Residences and Buildings: There are no occupied residences or buildings within one quarter of a mile of the proposed well location.

H. Arroyos, Canyons, Etc: See Archaeological Survey

I. Well Sign: Sign identifying and locating the well will be maintained at drill site

with the spudding of the well.

J. Archaeological Resources: See Archaeological Survey.

12. **Operator's Representatives:** Field personnel who can be contacted concerning compliance of the "Surface Use Plan" is as follows:

W. D. Jaap 5525 Hwy. 64

Farmington, NM 87401 Phone: 505-599-3485 or

R. A. Allred 5525 Hwy. 64

Farmington, NM 87401 Phone: 505-599-3403

13. Surface Ownership: Louis E. Randle, Jr., P.O. Box 681248, Indianapolis, IN 46268

14. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Phillips Petroleum Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

R. A. Allred

Typed or Printed Name

Signature

Date

PHILLIPS PETROLEUM COMPANY

Preliminary 7/07/93

Well 1	Name: <u>San Juan 32-8 #2</u>	.53
DRIL	LING PROGNOSIS	
1.	Location of Proposed Well	Unit G, 1824' FNL & 1757' FEL, Sec. 27 T32N, R8W, San Juan Co., NM
2.	Unprepared Ground Elevat	ion: <u>6733'</u>
3.	The geological name of the	e surface formation is <u>San Jose</u> .
4 .	Type of drilling tools will b	e <u>rotary.</u>
5.	Proposed drilling depth is _	<u>3600'</u> .
6.	The estimated tops of impo	rtant geologic markers are as follows:
	Ojo Alamo - 2260' Kirtland - 2320' Fruitland - 3270' Top Coal - 3435'	Base Coal - 3525' Picture Cliffs - 3545' Int. Casing - 3415' T.D 3600'
7.	The estimated depths at v expected to be encountered	which anticipated water, oil, gas, or other mineral bearing formations are are as follows:
	Oil	Per: 2260'-2320' None 3435'-3525'
8.	The proposed casing progra	am is as follows:
	Surface String 9-5 Intermediate String 7 Production String * 5-1/2"	
9.	Cement Program:	
		sx CL "B" cement w/2% CaCl2 & 1/4#/sk Cello-Seal; 15.6 ppg @ 1.17 ft ³ /sx (@ 177 cf ft); quantity sufficient to circulate cement to surface.
	<u>Flake</u>	150 sx (@ 177 cu ft) Cl "B" w/1/4# Cele-Flake/sk. Aniticipate cement to

Liner =

- If the coal is cleated a 5-1/2" 23#, P-110 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.

Centralizer Program:

Surface:

Centralizer at 10' above shoe. Top of 2nd Joint. Top of 4th Joint.

Intermediate: Centralizer at 10' above shoe. Top of 2nd Jt., Top of 4th Jt. Top of 6th Jt., Top of 8th

Jt.

Turbulator at 1 Jt. Below Ojo Alamo.

Turbulator at top of next joint. Turbulator at top of next joint.

- 10. The minimum specifications for pressure control equipment which are to be used, a schematic diagram thereof showing sizes, pressure ratings (or) API series and the testing procedure and testing frequency are enclosed within the APD packet.
- 11. The proposed mud program is enclosed within the APD packet.
- 12. The testing, logging, and coring programs are as follows: If conditions warrants, the well will be logged, but nothing else is planned for this well. Special Tests:
- 13. Anticipate no abnormal pressure or temperatures to be encountered or any other potential hazards such as Hydrogen Sulfide Gas. The bottom hole pressure expected on this well @ 1200 psi. Low risk H₂S equipment will be used.
- 14. The anticipated starting date is sometime in 2nd Qtr 1997 with duration of drilling operations for approximately 20 days thereafter.

Contact person and number - Richard Allred (505) 599-3403.

WATER SUPPLY SOURCE

Surface Use Plan San Juan Unit Wells

Attachment No. 1

Depending on which drilling contractor is used, the water for drilling and completion operations will come from one of the following locations:

- 1. San Juan River at Blanco Bridge, NW SE SE Section 18, T-29-N, R-9-W.
- 2. 29-6 Waterhole in Unit L, Section 28, T-29-N, R-6-W.
- 3. Navajo Reservoir, SW NW SE Section 14, T-30-N, R-7-W.
- 4. Sims Mesa (S.J. #14) NW SW Section 35, T-31-N, R-7-W.
- 5. La Jara Water Hole, Unit M, Section 11, T-30-N, R-6-W.
- 6. Pine River
- 7. City of Ignacio
- 8. Produced Water

PROPOSED MUD PROGRAM SAN JUAN 32-8 UNIT Well No. 253 San Juan County, NM

ADDIVITES	Bentonite	Drispac Lime, Soda Ash	Drispac, Soad Ash Caustc Soda Bentonite
\$ SOLIDS			Low Solids
CL-PPM		1200 PPM	
FLUID LOSS		NC	20 cc/ml
VISCOSITY		45-65 Sec/Qt	35-50 Sec/Qt
MUD WEIGHT	Spud Mud Lime and Gel	8.0 - 9.0 ppg 45-65 sec/Qt	9.0 - 9.5 PPG
DEPTH	0-260 Ft.	260-3000	3000-TD

Polymer mud and water with seeps every 500' or less if hole conditions dictates. 260' - 3000'

Fresh water mud withCaCl₃ & Polymer, low solids Mud Wt. 9.0 to 9.5 PPG, as necessary to control well.

3000'- TD

Start mud up 100' above Fruitland.

		pun i të	PS PETROLEU	M GATHER	METOYO BAT			V	VILLIAMS CAS	PROCESSII	VG T
	LINE		ILLIPS - SJ				SCA	E1"=1000'		765.0-5	<u>i-1</u>
	FRGH	0+00 = P.0	O.T. ON EXIS		LIPS PIPELI	NE		N BY RSL	CATE	3/24/9	7
				. DWG.)		4100		жер ву РВ		3/19/97	
	COUNTY	SAN JUA		TAT2 A=S.E	NEW MEX			EDVED			
	SECTION			3C N	RANCE	W	APP	ROVEB	R/Y NU.		
	NOTE BEARINGS ARE BASED ON A GRID BEARING. AS MEASURED ALONG THE NORTH LINE OF SECTION 27, 1-32-N, R-B-V, NMPH BEARS, N 88'16'52' V	21 28	22 27 27	32-N 1962 BLM BRASS CA 2879	RANCE	26/11 LT.	1.04' RT. 1 (4'D × 10'V) 0'06' RT.	1967	R/V NO.	2 2	
		28	27 34		0+00 = P.O.T. EXISTING PHII S 48°56'09' 0+76.3 \$ 11°5	3 + 47,4 \(\triangle \) \(\frac{52^4}{55^9}\) \(\frac{52^4}{55^9}\) \(\frac{52^4}{5455^7}\) \(\frac{52^4}{5455^7}\) \(\frac{52^4}{65^9}\)	6+29.7 <u>A 33°0</u> N 86°31'57' 9+99.5 ¢ WASI 11+61.2 <u>A</u> 14°2	\$ 79.07.57 12+01.0 \$ WAS 12+82.6 1/32 12+82.0 \$ 132 EDGE OF W N 82*02*31* 14+12.1 \$ WEL	27 		
l	ADDITION TOU		DATE	ME	ter no.	FORMAT:	IGN	METER NO.		ATION	
AS-BUILT PIPE DATA	AFFLICATION 1190.		DATE								
1		IVISION		OVNER			LEASE	FEET	WITEZ	ACRES	RODS
CONERSKIP	0+00 TD			AS L. JEN				555.7		0.765	33.679
3		12+22.6		RSHEL ST				666.9		0.919	40.418 11.485
<u> </u>	12+22.6	U 14+12.1	HUNTI	NGTON RAN	NCHE2	 	1 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	189.5	0.036	0.261	1 11.407
<u> </u>							 				
1	3/24/97 RSL	21	SUED FOR RE			ļ	<u> </u>				apo_
NQ.	DATE BY		REVISION DESCRIPTI	DN	APP.	NO. DATE	BY	R	EVISION DESCRIPTION		(₩₽. (0000045 ĭ DW:

BOP AND RELATED EQUIPMENT CHECK LIST

3M 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.

drilling\BOPck.lst

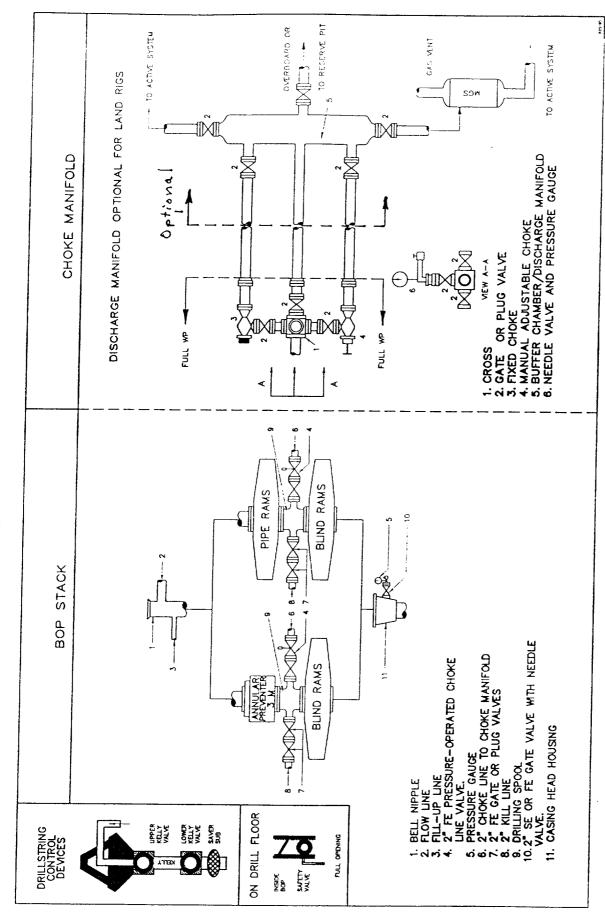
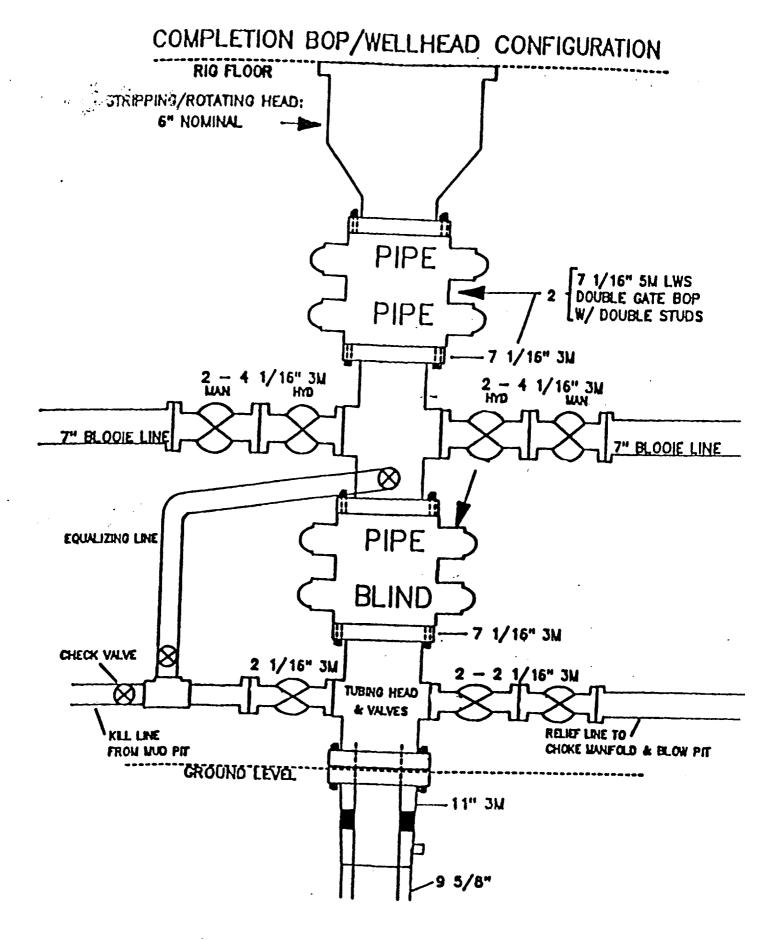


Fig. 2.4. Class 2 BOP and Choke Manifold.



2.8 TESTING BLOWOUT PREVENTER EQUIPMENT

2.8.1 Pressure Test Frequency

All rams, annulars, valves, choke and kill lines, choke manifold, kelly valves, and safety valves should be pressure tested at the following frequencies:

- 1. On installation of blowout preventers.
- 2. After setting casing and before drilling cement.
- 3. Every 7 days or on first trip out of hole after 7 days since previous pressure test.
- 4. After any component of the blowout preventer assembly is disassembled, replaced, or repaired (this includes lines, valves, or choke manifold). In this case, the component changed may be the only component tested.
- 5. Any time the Wellsite Supervisor requests testing.
- 6. In addition to the above tests, **subsea BOPs** shall be tested on test stump, prior to installation or reinstallation of the blowout preventer assembly. Operating chambers are to be tested in addition to all pipe rams, valves etc.

2.8.2 Function Test Frequency

Surface BOPS

All rams, annulars, valves, and other items specified below, should be function-tested at the following intervals:

- 1. On initial installation from all control panels.
- 2. After each trip out of hole alternating between driller's and remote control panel but not more than once every twenty-four (24) hours. Close pipe/blind rams only.

NOTE: Pipe rams will only be closed with pipe in the hole.

Sub-Surface BOPs

All rams, pipe ram locks, fail-safe valves, or other subsea items specified below should be function-tested at the following intervals:

- 1. Prior to running the assembled blowout preventer stack, function test all components with both control pods from the driller's and remote control panels.
- 2. After initial installation of the blowout preventer stack or after any control components have been repaired or replaced. Function test all components, except wellhead connector, using both control pods from the driller's and remote control panels.
- 3. Blind/shear rams each trip out of the hole alternating between the driller's and remote control panels.

NOTE: Do not leave blind/shear rams closed while out of the hole.

2.8.3 Test Pressures

The following Tables 2.3 and 2.4 shall be used to identify which test is appropriate and at what pressure shall be applied for surface and subsea BOPs.

Table 2.3 SURFACE BOPE PRESSURE TEST						
TEST	INTERVAL					
Low Pressure	Test to 200-300 psi prior to each high pressure test.					
Initial Installation	Test all rams, annulars, valves, choke manifold, kelly valves, and safety valves to the lesser of the following pressures.					
	 Rated working pressure of the component in the blowout preventer assembly with the exception of annular preventer which is to be tested to 70% of the rated working pressure. 					
	The API rated casing burst pressure of the last casing to be utilized in the well with the BOP assembly being tested.					
	Rated working pressure of the casing head.					
	• If "Cup Tester" is used, do not exceed 80% of the API rated burst pressure of the casing.					
Repair	Repaired or replaced components are to be tested to the same pressures used in the Initial Test.					
Subsequent Test and After Setting	Test all rams, annulars, valves, choke and kill lines, choke manifold, kelly valves, and safety valves, to the lesser of the following pressures.					
Casing	• 50% of the rated working pressure of the component to be tested.					
	• 80% of the API rating of the casing burst pressure then in the well.					
	Test blind rams during internal casing pressure test. (Refer to drilling program for test pressures.)					
Accumulator and BOP Operating Chambers	Test to the manufacturer's rated working pressure, with a fluid that meets or exceeds the manufacturer's recommended practices. Test the accumulator for time to pump up to specifications. A accumulator performance test as per Section 2.8.7 should be performed on initial installation and subsequently as deemed necessary.					

	Table 2.4 SUBSURFACE BOPE PRESSURE TEST							
TEST	INTERVAL							
Low Pressure	Test to 200-300 psi prior to each high pressure test.							
Test Stump	Test all rams, annulars, fail-safe valves, operating chambers, choke manifold, kelly valves, and safety valves to the lesser of the following pressures.							
	Rated working pressure of the component in the blowout preventer assembly with the exception of annular preventer which is to be tested to 70% of the rated working pressure.							
	The API rated casing burst pressure of the last casing to be utilized in the well with the BOP assembly being tested.							
Initial Installation	Test connector seal, choke line, and kill line to that pressure specified for testing the pipe rams during the stump test. Test remainder of the BOP stack to that pressure specified during weekly tests.							
Repair Test	Same as Stump Test. Surface component repairs or replacements can be tested separately.							
Subsequent Test and After Setting Casing	Test all rams, annulars, fail-safe valves, choke and kill lines, choke manifold, kelly valves, and safety valves, to the lesser of the following pressures:							
Cubing	• 50% of the rated working pressure of the component to be tested.							
	• 80% of the API rating of the casing burst pressure then in the well.							
	• Test blind rams during internal casing pressure test. (Refer to drilling program for test pressures).							

NOTE: When testing Subsea BOPs, the actuating pressure on the ramlocks should be bled prior to testing the rams. In a drive-off situation there would be no pressure on these wedgelocks. Wedgelocks do not always work, and wear could result in loss of ability to hold pressure.

2.8.4 Blowout Preventer Test Practices

All pressure tests shall be witnessed by Wellsite Supervisor on location. Charts shall be certified by the Wellsite Supervisor. All tests shall be recorded on Phillips' Daily Drilling Report, the IADC Report, and the Phillips BOP Test Form. A reproducible copy of the Phillips BOP Test Forms can be found in Chapter 9.

Drilling Contractor form can be acceptable if comparable to the Phillips BOP form.

Hold all low-pressure tests for three minutes and high pressure tests for ten minutes or until the Wellsite Supervisor is satisfied that there are no leaks.

The following items should be addressed:

- 1. Prior to testing, all lines and valves will be thoroughly flushed to ensure that the system is clear. Test all opening and closing control lines to 1500 psi and inspect for leaks.
- 2. If necessary, run a stand of drill collars below the test plug to properly seat the test tool.
- 3. Precautions should be taken to avoid pressuring the casing below the test tool.
- 4. The running string is to be full of fluid (or antifreeze solution) for immediate indication of test tool leakage.
- 5. All pipe rams, blind/shear rams, blind rams, annular preventers, valves, fail-safe valves, choke and kill lines are to be tested at the frequencies and pressures outlined in this section.
- 6. Drillpipe safety valve and lower and upper kelly valves, inside BOP are to be tested from below at pressures and frequencies outlined in this section.
- 7. Test fluids are to be bled back to pump unit in a safe manner.