Form 3160-5 (August 1999)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

### SUNDRY NOTICES AND REPORTS ON WELLS

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

5. Lease Serial No.

C.L	<b>7</b> 0	u	п	u	_	

Do not use this form for	6. If Indian, Al	lottee or Tribe Name			
abandoned well. Use For	rm 3160-3 (APD) for such	proposals.	1. 111		
SUBMIT IN TRIPLICATE -	Other instructions on	reverse side		7. If Unit or CA	MAgreement, Name and/or No.
1. Type of Well Oil Well X Gas Well Other				San Juan 3 8. Well Name a	
2. Name of Operator				SJ 32-8 Un	
Phillips Petroleum Company  3a. Address		Bb. Phone No. (include ar	rea code)	9. API Well No 30-045-304	
5525 Highway 64, NBU 3004, Farmingt		505-599-3454			Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Surve	ry Description)			Blanco Mes	averde
Unit E, 1450' FNL & 195' FWL Section 24, T31N, R8W				11. County or	
				San Juan,	NM
12. CHECK APPROPRI	ATE BOX(ES) TO INC	ICATE NATURE OF NO	TICE, REPORT,	OR OTHER DA	TA
TYPE OF SUBMISSION		TYF	PE OF ACTION		
X Notice of Intent	Acidize	Deepen	Production	(Start/Resume)	Water Shut-Off
	Alter Casing	Fracture Treat	Reclamation	on	Well Integrity
Subsequent Report	Casing Repair	New Construction	Recomplet	te	X Other <u>Changing</u>
Final Abandonment Notice	X Change Plans	Plug and Abandon	Temporari	ly Abandon	APD to add DK and
	Convert to Injection	Plug Back	Water Dis	posal	will commingle
The APD for this well was approve a DK/MV commingle well. The well name on it.  The new drilling prognois is attained and the estimated BHP is 240 casing design worksheet.	l name will chang ached and the new	e to 32-8 #15M ar depth of this we	nd all futur ell is 8085'	e paperwork . The BOP	will have this will stay the
				M. M	19 2001
14. I hereby certify that the foregoing is true and correct Name (Printed Syped)		Title	· · · · · ·	S. M. E	1/2/1/1/2/
Name (crimear tipea)	Patsy Clugston	Sr.	Regulatory	<u>Proration</u>	<u> Clerk</u>
Talsy Cheston		Date 3/1	3/01		
THI	IS SPACE FOR FED	ERAL OR STATE OF	FICE USE		
Approved by	esto.	Title		r	Pate Vision Visi
Conditions of approval, if any, are attached. Approval certify that the applicant holds legal or equitable title twhich would entitle the applicant to conduct operations thereon	o those rights in the subjon.	ect lease			
Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Secti States any false, fictitious or fraudulent statements or represe	ion 1212, makes it a crime ntations as to any matter wit	e for any person knowingly hin its jurisdiction.	and willfully to	make to any depa	rtment or agency of the United

District I 171 Hag 1980, Habba, NM 88241-1986 District II #11 South First, Actoria, NM ##210 District III 1000 Rie Brazes Rd., Astec, NM 87410

# State of New Mexico

## OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fc. NM 87505

Form ( Revised October 18, Instructions on Submit to Appropriate District ( State Lease - 4 C

Fee Lease - 3 C

District IV AMENDED REP 2040 South Pacheco, Santa Fe, NM 87505 WELL LOCATION AND ACREAGE DEDICATION PLAT' 1 Pool Code Pool Name 1 All Number 30-045-30408 Basin Dakota 71599 1 Property Name \* Well Number 1 Property Code 15M 009261 SAN JUAN 32-8 UNIT \* Elevation OGRID No. Operator Name 65381 017654 PHILLIPS PETROLEUM COMPANY 10 Surface Location North/South line Feet from the East/West line County Feet from the Ul. or lot no. Section Township Runge Lot Ida 195 SAN JUAN NORTH WEST 1450 E 24 31N 8W 11 Bottom Hole Location If Different From Surface lot Ida UL or lot ao. Feet from the North/South line Feet from the East/West line County Section Township " Order No. " Dedicated Acres "Joint or Infill 14 Consolidation Code 320 W/2 NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED O NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION 17 OPERATOR CERTIFICATIO 16 N89°22'W 5241.06' I hereby certify that the information contained herein i SF-079351 true and complete to the best of my knowledge and bel. 2562. 1450 Signature Patsy Clugston 195 Printed Name Sr. Regulatory/Proration March 13, 2001 Date Section 24 18SURVEYOR CERTIFICATION SF-080854 I hereby certify that the well location shown on this plc960 acres was plotted from field notes of actual surveys made by or under my supervision, and that the same is true and correct to the best of my belief. 2570. 07/13/00 001 Date of Survey Signature and Scal of Professional Surveyor: 5232.48

#### San Juan 32-8 #15M (MV/DK)

#### **SURFACE CASING:**

Drill Bit Diameter
Casing Outside Diameter
Casing Weight
Casing Grade
Shoe Depth
Cement Yield
Excess Cement

" 8.989 ppf , , t cuft/sk

Hole / Casing Annulus Capacity

0.0558 bbl/f 0.3132 cuft/ft

**Cement Required** 

158.6 sx

SHOE

320 '. 9.625 ".

32.3 ppf,

H-40

#### **INTERMEDIATE CASING:**

Drill Bit Diameter
Casing Outside Diameter
Casing Weight
Casing Grade
Shoe Depth
Lead Cement Yield
Lead Cement Excess
Tail Cement Length
Tail Cement Yield
Tail Cement Excess

8.75 "
77 " 6.455
20 ppf
3.5
48 9 '
20 cuft/sk
10 %
cuft/sk
10 %

Casing / Casing Annulus Capacity Hole / Casing Annulus Capacity Casing Capacity 0.0309 bbl/f 0.0268 bbl/f 0.0405 bbl/f 0

0.1734 cuft/ft 0.1503 cuft/ft 0.2272 cuft/ft

Lead Cement Required Tail Cement Required 459.9 sx 50.0 sx

SHOE

3819 ',

7 ".

20 ppf,

J-55

#### **PRODUCTION CASING:**

Drill Bit Diameter
Casing Outside Diameter
Casing Weight
Casing Grade
Top of Cement
Shoe Depth
Cement Yield

6.25 4.5 " 11.6 pp

4.000

3719

100' within intermediate shoe

Casing / Casing Annulus Capacity
Hole / Casing Annulus Capacity

00.70

cuft/sk

0.0208 bbl/f 0.0183 bbl/f 0.0155 bbl/f 0.1168 cuft/ft 0.1026 cuft/ft 0.0872 cuft/ft

Casing Capacity

Cement Required

Cement Excess

338.4 sx

SHOE 8128', 4.5", 11.6 ppf, 1-80 or N-80

# PHILLIPS PETROLEUM COMPANY

WELL	NAME: <u>San Juan 32-8 Unit #15M</u>	1 MV/DK
ndii i	LING PROGNOSIS	
		450' FNL & 195' FWL
1.		24, T31N, R8W
	<u>Beetion 2</u>	
2.	Unprepared Ground Elevation:	@ 6538' (unprepared)
3.	The geological name of the surface for	mation is <u>San Jose</u> .
4.	Type of drilling tools will be <u>rotary</u> .	
5.	Proposed drilling depth is <u>8128</u> .	
6.	The estimated tops of important geological	gic markers are as follows:
	Naciamento - 949'	Menefee Fm 5419'
		Pt. Lookout - 5724'
		Mancos Sh - 5999'
		Gallup Ss 7192'
		Greenhorn Ls 7782'
		Graneros Sh 7842'
		Dakota Ss - 7978'
	Cliff House 3s - 3307	Dukotu 55 - 7770
7.	The estimated depths at which anti- formations are expected to be encount	cipated water, oil, gas or other mineral bearing ered are as follows:
	Water: Ojo Alamo - 2	2319'- 2439'
		3094' - 3434'
		5369' – 5999'
	<u>Dakota -</u>	7978' - 8128'
8.	The proposed casing program is as fol	llows:
	Surface String: 9-5/8", 32.3#, H-40	@ 320'
	Intermediate String: 7", 20#, J/K-55 @	<del></del>
	Production String: <u>4-1/2", 11.6#, I or</u>	
	1 roduction builds 1 1/2 ; 11.0//, 10/	
9.	Cement Program:	
7.	Surface String: 158.5 sx Type	e III cement with 2% bwoc CaCl2 + 1/4#/sx Cello-
	flake mived at	14.5 ppg with a 1.41 ft3/sx yield w/46.5% H2O or
		reulate to surface – 223 cf.
	sufficient to cit	Curate to Surface – 223 cr.

Note: Cement slurry calculations based on cement to surface with 140% excess hole volume.

Intermediate String: Lead Cement: 459.9 sx Type III cement (35:65) POZ with 5#/sx

Gilsonite, ¼#/sx Cello-flake, 6% bwoc gel (bentonite), 10#/sx CSE, 3% bwow KCL, 0.4% bwoc FL-25 mixed and 0.02#/sx Static Free mixed at 12.0 ppg with a yield of 2.37 ft3/sx – 1090 cf.

Tail Cement: 50 sx – Type III cement with ½#/sx Cello-flake and 1% CaCl2 mixed at 14.5 ppg with a 1.40 ft3/sx yield (70 cf).

In the event we encounter fluid loss during drilling operations, a contingency plan for cementing the intermediate casing may require a stage collar. Phillips cannot predict exact volumes. However the 1<sup>st</sup> stage will be Cl H cement w/5#/sx Gilsonite, 0.25#/sx Cello-flake, 0.3% FL-25 & 2% CaCl2 mixed at 15.2 ppg 1.28 yield. Stage 2 - lead slurry: 65 % Class H & 35% POZ w/6% Bentonite mixed at 12.6 ppg 1.79 cf/sx Tail Slurry - Class H w/2% CaCl2 mixed at 15.6 ppg 1.20 yield. All attempt to be circulated to surface.

#### **Production String**

Lead: 338.4 sx Type III (35/65 POZ (Fly Ash) with 6% bwoc Bentonite, 10#/sx CSE, 0.2#/sx Static Free, 1% bwoc FL-52, 0.3% bwoc CD-32, 0.3% bwoc R-3 & 0.25#/sx Cello-Flake mixed at 12.3 ppg with a yield of 2.13 ft3/sx -721cf.

Note: The Production String casing cement is designed to cover openhole section (with 40% excess) and 100' inside the 7" shoe.

Note: Phillips Petroleum continually works to improve the cement slurries on our wells. BJ Services is currently trying to improve what we are using now and before we would use a new cement program it would have to have stronger properties than we are currently using.

Centralizer Program:

Surface: Total four (4) 1 @ 10' above shoe & top of 2<sup>nd</sup>, 4<sup>th</sup> & 6<sup>th</sup> joint

Intermediate: Total seven (7) – 10' above shoe, top of 1st, 2nd, 4th, 6th, & 8th jts &

1 jt. Above surface casing.

Production: None planned.

Turbulators: Total Three (3) – on intermediate casing at 1<sup>st</sup> jt. Below the Ojo

Alamo and next 2 its up.

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. Drilling Mud Prognosis:

Surface - spud mud with water with native clays &

bentonite as needed on surface casing.

Intermediate - water with native clays and bentonite as

need/Polymer sweeps.

Below Intermediate – natural gas drilled.

12. The testing, logging, and coring programs are as follows:

D.S.T.s or cores: \_

Logs: DIL from surface casing to TD, CNL - FDC over zones of interest

13. Anticipated no abnormal pressures or temperatures to be encountered or any other potential hazards such as Hydrogen Sulfide Gas. Low risk H<sub>2</sub>S equipment will be used.

Estimated Bottomhole pressures:

Mesaverde - 600 psig

Dakota – 2400 psig

14. The anticipated starting date is approximately 2nd Qtr 2001 with duration of drilling / completion operations for approximately 20 days thereafter.

328#15Mmvdk.prog

# Casing Design Worksheet - DK wells

			S	urface Casin	g			
Size	Grade	#/foot	Collapse	<u>Yield</u>	Tensile	Coupling	Length	Weight
9-5/8"	H-40	32.3	1400	2270	254	ST&C	320	10,336
			Inte	rmediate Ca	sing			
Size	Grade	#/foot	Collapse	Yield	Tensile	Coupling	Length	Weight
7"	J-55	20	2270	3740	254	ST&C	3,819	76,380
							Total Weight	76,380
			Pro	duction Cas	ing			
Size	Grade	#/foot	Collapse	Yield	Tensile	Coupling	Length	Weight
4-1/2"	<u> I-80</u>	11.6	6360	7780	212	LT&C	8,128	94,285
								-
							Total Weight	94,285

#### **Casing Parameters**

Tensile

SF , = Tensile /; Must Exceed 1.8 for Dry or 1.6 for Bouyant

9-5/8"	Surf.	254000 /	10,336	=	24.6
7"	Int.	254000 /	76,380	=	3.3
4-1/2"	Prod.	212000 /	94,285	=	2.2

Collapse

#### SF c = Collapse / (Maximum Formation Pressure) or (Mud Gradient X T. V. D.); Must Exceed 1.125

9-5/8"	Surf.	1400	/	160	=	8.8
7"	Int.	2270	/	1300	=	1.7
4-1/2"	Prod.	6360	1	2400	=	2.7

Burst

#### SF <sub>b</sub> = Burst / (Maximum Formation Pressure) or (Mud Gradient X T. V.D.); Must Exceed 1.0

9-5/8"	Surf.	2270 /	160	=	14.2
7"	Int.	3740 /	1300	=	2.9
4-1/2"	Prod.	7780 /	3300	=	2.4

B.O.P. Requirement - (Maximum Formation Pore Pressure) or (Mud Weight X 0.05195 x T. V. D.) - 0.22 X T.V.D. 2,400

#### **Excess Cement Volumes**

#### 110% Surface

Intermediate 110% Production

Note: Cement volume calculations are stored in the computer log.

# **Blowout Preventer Equipment (BOPE)**

ABHP=	2400	PSI; TVD =	8,128	Feet;	Mud Weight =	= NA*
*Air drilled h	ole for pro	duction casing.			_	
Operator's Gr	adient (AB	HP / TVD) =	0.295	_PSI/Ft (is	<u>:// <i>is not</i></u> appropri	ate and
(does)/ does i	<u>10t</u> coinci	de with the Antic	cipated M	ud Weight	for each drilled inte	rval.
The most cred	ible ABHP	is 0.295 PS	I/Ft.			
			Mud W	eight x 0.05	195 = Gradient	
				_		
		NA* X	0.05195	= #VAL	UE!	
				•		
			ABH	P - (0.22 x ′	TVD) = ASP	
		2400	0.22	V 013	.0 ) (12	
		(	0.22	<u>X</u> 812	8 ) 612	psi
Operator's pr	onosed BO	PF of 3	M (excee	ds)/does no	ot exceed the	
-	_	equate not adea				
			<del></del> ·			

Note ASP - Anticipated Surface Pressure ABHP - Anticipated Bottom Hole Pressure