Form 3160-5 UNITED STATES June 1990) DEPARTMENT OF THE INTERIOR				FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993			
,	BUREAU OF I	AND MANAGE	MENT		5. Lease Designation and Serial No.		
	SUNDRY NOTICES AN	IN DEDODTS ON	WELLS		SF-0	78459	
Do not use this f	form for proposals to drill	or to deepen or re	eentry to a differer	nt reservoir.	6. If	Indian, Allottee or	Ггіbe Name
	Use "APPLICATION FOR SUBMIT	IN TRIPLICATI		www.	7. If	Unit or CA, Agreen	nent Designation
1. Type of Well					San	Juan 32-7 Ur	nit
Oil X Ga	S Other				8. W	ell Name and No.	
2. Name of Operator	77110				C 1 2	2-7 Unit #44	I
Phillips Petr	oleum Company					<u>Z-7 UIII L #44</u> Pl Well No.	č
3. Address and Telephor	ne No.					45-21329	
5525 Highway	64, NBU 3004, Farmingt	on, NM 87401	505-599-3	454		Field and Pool, or ex	cploratory Area
4. Location of Well (Foo	otage, Sec., T., R., M., or Survey De	scription)					
1150' FSL & 1					<u>Basi</u>	n Dakota	
Section 22, T	32N, R7W				11. County or Parish, State		
					San	Juan,	NM
12. CHECK	APPROPRIATE BOX(s	) TO INDICATE	NATURE OF NOT	TICE, REPORT, (	OR O	THER DATA	
TYPE OF	SUBMISSION		7	TYPE OF ACTION			
X Noti	ce of Intent DEGE	MEV	Abandonment			Change of Plans	
	回回回	M	Recompletion		П	New Construction	
Subs	sequent Report	<sub>0 1998</sub> ピロ	Plugging Back		$\sqcap$	Non-Routine Frac	
	MAY 2	0 1998	Casing Repair		同	Water Shut-Off	
Fina	l Abandonment Notice	יי נייטנע ד	Altering Casing		一	Conversion to Inje	action
	(M) 71(0)	אייסאוה פאן		( & Compl PC	一	Dispose Water	CHOI
	DIS	N. DIV. X 1. 3	Other 1709 Dr	C G COMP 1 C		e: Report results of nul	ltiple completion on Well in Report and Log form.)
	ompleted Operations (Clearly state all						
are to MIRU. retainer & ser continue by F PC interval .3 3429', 3525' 3384', 3374'	plug back the Dakota z ND WH & NU BOP. Kill t @ 7950'. PT casing. RIH w/3 CIBP, set @ 61 32" holes on 4-1/2" ca , 3515', 3505', 349 , 3370', 3362', 334	well. COOH w/COOH. Run GR/C 50', 5250' and sing and .20" h 6', 3478', 34 6', 3342', 33	1-1/2" tbg. Clea BL-CCl from 7950 3650 respective oles on 7" as fo 67', '3464', 34 39', 3335', T	nout to PBTD. D-surf. Record N. ND BOP & Dllows:	RIH I TOC. NU fr 3404	w/4-1/2" ce If OK'd b rac head. P  //cc/c	ment y BLM erforate 3391
sand. Flow ba	ack till cleaned out. BOP. NU WH. Pump of	RIH w/1-1/2" P	roduction tubing				

See attached Pictured Cliffs plat as well as our procedure and wellbore schematic.

14. I horeby certify that the foregoing is true and correct Signed Signed Sugar Suga	Title	Regulatory Assistant	Date	5-13-98
(This space for Eederal of State office use) Approved by S/Duane W. Spencer Conditions of approval, if any:	Title		Date	MAY   8   1998

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

District I PO Box 1980, Hobbs, NM 88241-1980 District II 811 South First, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV

2040 South Pacheco, Santa Fe, NM 87505

160 acres

N

# State of New Mexico Energy, Minerals & Natural Resources Department

Santa Fe, NM 87505

Form C-102

Revised October 18, 1994 Instructions on back

OIL CONSERVATION DIVISION
Submit to Appropriate District Office 2040 South Pacheco

Solidit 14 Mills: 53 State Lease - 4 Copies Fee Lease - 3 Copies

Fee Lease - 3 Copies

AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		<sup>2</sup> Pool Code		<sup>3</sup> Pool Name				
30-045-21329	45-21329 80690 South Los Pinos Fruitland			Sands PC				
<sup>4</sup> Property Code		5 Property Name						
009260	San Ju	San Juan 32-7 Unit						
¹OGRID No.		Operator Name			¹ Elevation			
017654	Philli	ps Petroleum	Company		6547			

## <sup>10</sup> Surface Location

UL or lot no. N	Section 22	Township 32N	Range 7W	Lot Idn	Feet from the 1150	North/South line South	Feet from the 1800	East/West line West	County San Juan
			11 Bot	tom Hol	e Location I	f Different Fre	om Surface		······································
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
	T						<u> </u>		
<sup>12</sup> Dedicated Acre	es 13 Joint	or Infill   14 (	Consolidatio	a Code   "O	rder No.				

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				<sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief
		DEGE	IVED	Patsu Cluston
	•	UU MAY 2	0 1998	Signature Patsy Clugston
		<b>011</b> (0)	11. DIV. 13. 3	Printed Name Regulatory Assistant Title
				May 13, 1998  Date
SF-078459		,		<sup>18</sup> SURVEYOR CERTIFICATION  I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by
4	1		e e	me or under my supervision, and that the same is true and correct to the best of my belief.
	- 7			Date of Survey Signature and Seal of Professional Surveyer:
1800'	1150'			Original notary dated 8/4/73
				Certificate Number

San Juan 32-7 # 44 (SW/4 Sec 22-T32N-R07W)

Procedure: Abandon Dakota. Recomplete to Pictured Cliffs.

4-1/2" 11.6# & 10.5# K-55 Casing @ 8211'

1-1/2" 2.9# J-55 10rd EUE tubing (248 jts, EOT @ **8026'**)

1.43" ID F-nipple @ 7994' (one jt up)

Dakota Perforations 8042'-8047', 8079'-8084', 8088'-8093', 8100', 8138', 8156' (37 holes)

PBTD: 8203'

### Ensure Well has been Locked and Tagged Out per PPCo. Safety Manual.

- 1. Notify BLM and NMOCD of plugging operation. Record Tubing, Casing, Intermediate, and bradenhead pressures. RU wireline. Set 1-1/2" blanking plug in F-nipple @ 7994'. RD wireline.
- 2. MIRU Big A workover rig. Hold Safety Meeting. (Note upper tree section will not allow BPV to be installed). Record Tubing, Casing, Intermediate, and bradenhead pressures. Spot all auxiliary equipment and floats to handle tubulars. Blow down tubing, production casing, and intermediate casing. ND WH. NU 3000 psi BOP w/ divertor spool, single pipe ram, single blind ram, 4-1/2" single ram BOP, and stripping head. (4-1/2" rams necessary due to possibility of pulling 4-1/2" casing). Kill Well as necessary.
- 3. Unseat 1-1/2" Tubing. COOH with 248 joints of 1-1/2" 2.9# 10rd EUE tubing. Lay down tubing on Float. Standback 3600' of tubing in derrick for production string.
- 4. PU 3-7/8" bit and scraper on 2-3/8" Workstring. GIH on 2-3/8". Tag Fill or PBTD @ 8203'. COOH w/ bit and scraper.
- 5. PU 4-1/2" cement retainer on 2-3/8". GIH w/ retainer. Set retainer at 7950'. Load tubing and 4-1/2" casing w/KCl water. Pressure test Tubing to 3500 psi, pressure test casing to 500 psi. Hold Casing PT for 30 min. Monitor intermediate casing for flow or pressure build-up. Load intermediate casing with KCl Water. PT Intermediate casing to 500 psi. Notify Office with results of Pressure Test.
- 6. Sting out of retainer. COOH with setting tool. NOTE: No cement to be placed in Dakota Interval.
- 7. RU Blue Jet. RIH w/ GR-CBL-CCL. Log well from 7950' to Surface with 250 psi on casing. Verify cement integrity behind 4-1/2" casing. Record TOC cement overlap into 7" intermediate casing. Temperature Survey indicates TOC @ 2910'. **Notify Office with results of Cement Bond Log.**
- 8. After Office and BLM approval, GIH w/ 2-3/8", COOH laying down 2-3/8" work tubing string.

- 9. Based upon good cement integrity, RU wireline. R<del>IH w/ wireline set 4-1/2" CIBP. Set</del> CIBP above Niobrara formation @ 6150'. POOH. RIH w/ wireline set 4-1/2" CIBP. Set CIBP above Cliffhouse @ 5250'. POOH. RIH w/ wireline set 4-1/2" CIBP.—Set CIBP @ 3650' above Lewis. NOTE: No cement to be placed inside casing as permanent isolation, only CIBPs. Place 500 psi on intermediate Casing.
- 10. ND BOP. NU 7-1/16" 5000 psi frac valve on top of Tubing head. NU Frac Immediate Flow Back Assembly. Test secondary seals. Pressure Test 4-1/2" Casing String, WH, & Frac Equip to 3000 psi.
- 11. Place 500 psi on intermediate casing. Hold and monitor during perforating operations. Correlate with Open Hole Schlumberger GR-DENS log run 9-10-73. Perforate Pictured Cliffs formation bottom-up under a packoff as follows with select fire 3-1/8" HSC gun, Owen 302 charges 0.32" dia hole in 4-1/2" and 0.20" dia hole in 7". Note Perforating through both the 4-1/2" and 7" casing strings with associated cement:

3529'	35251	3515'	3505'	3496'	3478'
3467'	3464'	3457'	3452'	3404'	3400'
3391'	3384'	3374'	3370'	3362'	3346'
3342'	3339'	33351	Total: 21	holes	

- 12. **Hold Safety Meeting.** RU BJ Services to pump Acid Ball-Off down 4-1/2" casing. Monitor pressure on 7" annulus throughout all future operations. Establish rate and BD formation with 2% KCl water. Pump 21 bbls (882 gal 15% HCl w/ additives). Formation Temperature 130 deg Fahrenheit. During acid, drop 21 -7/8" dia 1.3 SG ball sealers evenly spaced, during displacement drop 15 additional ball sealers in the first 5 bbls of displacement (Total 36 Balls). Increase rate to 15 BPM+/- and ball off perforations to 3000 psi. Surge balls off perforations, displace acid with 2% KCl water, Total minimum displacement of 60 bbls. **MAXIMUM PRESSURE IS 3000-PSI.**
- 13. RU Blue Jet. RIH w/ Junk Basket. Recover Ball sealers. Report number recovered and hits. RD release Blue Jet.
- 14. RU BJ Services. Hold Safety Meeting. Pump Pictured Cliffs 60 Quality Nitrogen X-linked Foam with 100,000 lbs 20/40 brady sand at 40 BPM. Stimulate per BJ Services Schedule and Reservoir Engineering modifications. Gel 1 and 1/2 tanks 600 bbls useable gel to 30 lb. Equalize both gel tanks 3/4" full prior to starting job. MAXIMUM PRESSURE IS 3000 PSI. Liquid Flush.
- 15. Record ISIP. Begin Immediate flowback on 1/4" Choke. Prior to flowback ensure that two separate lines are prepared with 1/4" chokes. Monitor Flowback for 15 minutes, prior to RD BJ Services. Continue to monitor flowback for 12 hours on 1/4" choke, Recording sand production and flowing pressures. At 12 hours change choke size to 1/2" choke and continue flowback: 4 hours prior to shut-in change choke size to 3/4". Flow and record pressures.

- 16. Continue Flowback until ready to run production tubing. SI well. ND immediate flowback equipment and lines. NU BOP on top of full opening valve. Pressure Test and function test BOP and equipment to 2000 psi per Phillips Well Control Manual.
- 17. Flow well out both lines on drilling spool to pit for 2 hours to reduce well pressure. Kill well with 2% KCl water. If potential to snub exists, tubing hanger may be landed without running tubing.
- 18. PU 1-1/2" production tubing assembly, and GIH as follows: Expendable Check, one joint 1-1/2", (1.43" ID) F-nipple, and remaining joints 1-1/2". **Rabbit tubing in the hole.** Tag fill. RU air package to clean out fill. Clean out fill to PBTD of 3650'. Pull above perforations and flow well. Clean out as necessary.
- 19. Prepare to land 1-1/2" tubing at 3450'+/-. Install BPV. Land tubing hanger through full opening valve. ND BOP & valve. NU WH. Ensure upper portion of the tree is 2", and capable of running BPV. Pull BPV. Initial well production will occur up casing. Pump 2 bbls water. drop ball. Pump off expendable check. Flow both tubing and casing to pit to ensure check has been pumped off, and air is removed from the flow stream. Record final 1-hour flow test pressure and rate on 1/2" choke to complete production estimate report. RD and release Big A workover rig.
- 20. Notify Production Supervisor (Jerry Loudermilk) that well work is complete, so that Phillips personnel can schedule Pictured Cliffs Sales production. Note: Well should initially be produced up 4-1/2" casing string due to erosion velocities.
- 21. Notify Phillips regulatory to complete new C-104 for production sales.

TEM 04/06/98

Modified 04/16/98

San Juan 32-7 Unit # 44 Unit N, Section 22, T32N-R07W San Juan County, New Mexico 1150' FSL 1800' FWL 6547' GL, 13' KB

Spud: 09/04/73 Completed: 10/04/73 API # 030-045-2132900

Casinghead: 10" 3000 wkm, spool 10" 3000 x 10" 3000 wkm

4-1/2" 11.6# & 10.5# K-55 Production Casing @ 8211' w/363 sxs

Tubinghead: 10" 3000 x 6" 3000 wkm

9-5/8" 32.3 H-40 Casing @ 226' w/190 sxs to surface

(248 its)

TOC @ 2910' TS

1-1/2" 2.9# J-55 10rd EUE tubing @ 8026' F-nipple 1.43" ID @ 7994'

7" 20# K-55 Casing @ 3799' w/160 sxs TOC @ 2500' TS

(54 jts 11.6# on btm, 201 jts 10.5# above)

Formation Name: Dakota

Spot 250 gal 7-1/2% HCl acid, Perforate 1 SPF @ 8038', 8076', 8080', 8084', 8100', 8138', 8156'. (Total Holes 7). Pump 1000 gallons 15% HCl Formation broke at 2700 psi. Establish rate before acid of 21 BPM @ 4000 psi, ISIP 2050 psi. Drop 1 ball per 100 gal acid, total 10 balls. Ball off to 4000 Ran JB. Recover 2 balls. Rate after acid 22 bpm @ 4000 psi. Frac with slickwater in 3% CaCl. Total 63,195 gal liq. 50,000 lbs 40/60 sand Frac at 22 bpm, 4000 ATP. Well sanded off with 60 bbls of flush to go. ISIP 2300 psi.

PBTD: 8203' TD:8211'

ISICP = 2564 psi ISITP = 2483 psi

New Formation Tops Tops from Elec Log

Formation Tops: Oio Alamo 2310 Kirtland 2502 Fruitland 2953 Pict Cliffs 3318 3650 Lewis Cliffbouse 5376 Meneffee 5510 Pt. Lookout 5763 Mancos 6292 7843 Greenhorn Graneros 7898 8024 Dakota

Open Hole Logs GR, INO, DEN,

Cased Hole Logs GR-CCL July 23, 1987 Pump 90 bbls 15% KCl, 500 gal 15% HCl, & flush w/ 20 bbls 1% KCl down the 1-1/2" tubing. Swab well. Casing Press 20 psi. Fluid Level @ 4000'. Swab well back over 4 days. April 17, 1991 Bradenhead test. Casing Press 1450, Tubing 250 psi, Bradenhead open Casing Press 1660 psi, Tubing zero. Well swab dry, Fl. @ 4000', Final Csg 1670 psi Sept 1, 1994 Nov 16, 1994 MIRU Drake # 28. Csg = 1600, Tbg= 0. Kill well. Work Stuck Tubing. Chemical Cut Tubing @ 8058'. COOH w/ 1-1/2" Tubing. PU Fishing Tools on 2-3/8". POOH w/ remaining 1-1/2" Tubing Run GR-CCL, Perforate Dakota 8042'-8047' (5'-10 holes), 8079'-8084' (5'-10 holes), 8088'-8093' (5'-10 holes) PU PKR & RBP combination. Set RBP @ 8171', Set PKR @ 8056'. BD perfs 8079'-8156' w/ KCl @ 2 bpm 2900 ATP. Pump 1500 gal 15% HCl w/ 20 ball sealers, 1500 gal KCl, & 1500 gal HCl w/ 20 ball sealers @ 2 to 3.2 BPM 2800 ATP. Release PKR, Move RBP to 8056'. Set PKR @ 7890', BD perfs 8038'-8076' w/ 1500 gal 15% HCl & 25 ball sealers @ 3.2 bpm 3200 ATP. COOH leaving RBP behind. GIH wash balls off RBP, recover RBP (@ ????), COOH w/ RBP. Run 249 jts 1-1/2" tubing to 8046'. RD release. Tubing zero, Casing zero.

Nov 28, 1994 RU to Swab. Tubing zero, Casing 120 psi. FL @ 3400'. Swabbing all liquid, note H2S gas
 Fluid level Fluid level staying at 4000', swabbing 4 days, Total 123 bbls recovered. Final Csg 180 psi.
 Dec 20, 1994 RU to Swab. Tbg 375, Csg 395. FL @ 4600'. Swab 20 bbls. Install compressor to inject
 down annulus. Flow to tank.

Dec 20, 1994 to Jul 1, 1995 Run compressor. Csg 1300 psi, Tbg 225 suction. 1/2" gas source line open to dehydrator. All production was circulation through the meter, not from wellbore.

Jul 1, 1995 try to produce with compressor and plunger, limited success.

Jun 7, 1995 RU to swab. Tbg 0, Csg 590. Swab 51 bbls in 10 runs to tank. FL @ 4300'

Jul 7, 1995 RU to swab. Tbg 100, Csg 1050. FL @ 5000'. Swab 3 days. FL @ 5300', Ran compress on casing. Casing to 1480 psi. No flow.

Jul 21, 1995 RU to swab. Tbg 5, Csg 1360 psi. FL @ 4950', Run compressor, flowed 42 bbls to tank.

RU to swab. Tbg 760, Csg 1360 psi. Flow well to tank, 16 bbls. Install plunger lift.

Sept 18, 1995 H2S monitoring performed. Levels between 150 and 400 ppm H2S

Feb 27, 1996 RU stickline. Tag @ 8114', recovered piston stop. Flow casing to tank, 1050 psi Csg. Fluid level at 2800'. Equalize Tbg & Csg. Tag FL @ 4200'. Could not get sample of scale.

April 20, 1996 MIRU Big A # 18. Tbg 980 psi, Csg 1340 psi. COOH w/ 249 jts tubing, 26 jts bad with scale and corrosion/erosion. Some jts bent above collars? Run bit & scraper, tag fill @ 8139' Cleaned out fill to 8203', heavy scale. COOH. GIH w/ PKR set at 7990', load backside, test to 500 (indicated okay). Replace Casing valves. RU BJ to acidize. Pump 1000 gal 15% HCl acid & 50 ball sealers for 37 holes, at 3.3 bpm 3200 ATP. Surge off balls. Knock off. COOH laying down 2-3/8". No csg press. Tally & rabbit 1-1/2" pipe in hole. Had to discard 67 jts

of tubing. Land 1-1/2" tubing @ 8027', 249 jts. Note BPV can not be installed due to Tree ID.

May 1, 1996 RU to swab. Tbg 30 psi, Csg 230 psi. FL @ 4300'. Swab 2 days, Swab 47 bbls

May 30, 1996 RU to swab. FL @ 4000'. Csg 840 psi. Swab 48 bbls over 2 days.

May 30, 1996 RU to swab. FL @ 4000', Csg 840 psi. Swab 48 bbls over 2 days.

June 5, 1996 RU to swab. Tbg 0, Csg 850. FL @ 1200', then pull from 4000'. Tight spot @ 4200'

Recover 85 bbls in 3 days swabbing. FL @ 4600'.

June 26, 1996 RU to swab. Tbg 50, Csg 1240 psi. Flow to tank 12 bbls. Begin Swabbing. Recover 35 bbls to tank, flowing and swabbing.

4-6-98

Form 3160-5 (June 1990) Do not use this	DEPARTMEN BUREAU OF I SUNDRY NOTICES AN form for proposals to drill	or to deepen or re	MENT WELLS eentry to a different rese		FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993  5. Lease Designation and Serial No. 5F-078459 6. If Indian, Allottee or Tribe Name
	LISE "APPLICATION FOR SUBMIT	IN TRIPLICATI			7. If Unit or CA, Agreement Designation
3. Address and Telepho 5525 Highway	roleum Company	3	5an Juan 32-7 Unit  8. Well Namu and No.  5J 32-7 Unit #44  9. API Well No.  30-045-21329  10. Field and Pool, or exploratory Area		
1150' FSL & 3 Section 22, 3	T32N, R7W				Basin Dakota 11. County or Parish, State Ban Juan NM
12. CHECK	APPROPRIATE BOX(s	) TO INDICATE	NATURE OF NOTICE, F	REPORT, O	R OTHER DATA
TYPE O	FSUBMISSION		TYPE OF	ACTION	
Sub	ice of Intent sequent Report il Abandonment Notice		Abandonment Recompletion Plugging Back Casing Repair Altering Casing Other Plug DK & comp	olete PC	Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection Dispose Water (Note: Report small place encyletion or, Well
The NOI dated Set retainer 10 sx (11.8 f	5/13/98 is ammended to at 7950'. Load tubing t3) of Cl H cement below	o include the fo & casing. Testow retainer. St	and zones pertinent to this work.)*  ollowing: GIH w/4-1.  t tubing to 2000 psi { ing out of retainer, {	/2" cement & casing to & place 10	o 500 psi. Mix & pump
RU wireline. formations. GIH w/tbg ope Gallup format	retainr. COOH w/tbg & Run GR-CCL-CBL from Place a balancion. Pull up & place mation. Pull up to 369 mation. WOC. Sec	BTD to surface were seed 10 sx (11.8 a balanced 10 sx	vith 250 psi. Record  ft3) Cl H neat coment (11.8 ft3) Cl G ceme balanced IO sx (11.8	TOC, noting at a plug at a	7072' 150 to cover the
N2 Linear foat Land tubing a		. Acidize perfs ady sand. Flow	s w/882 gal 15% HCl & back. RIH w/1-1/2" p	ballsealer prod. tubir prig.	rs. Frac w/60 Quality
Title 18 U.S.C. Section		knowingly and willfully to	make to any department or agency	of the United Sta	tes any false, fictitious or fraudulent statements



# United States Department of the Interior

#### **BUREAU OF LAND MANAGEMENT**

Farmington District Office 1235 La Plata Highway Farmington, New Mexico 87401

IN REPLY REFER TO:

Attachment to Notice of

Intention to Workover

Re: Plug Back and Recomplete

Well: 44 San Juan 32-7 Unit

#### **CONDITIONS OF APPROVAL**

In addition to the Dakota cement plug, at a minimum place the following cement plugs.

- 1. Place a cement plug from 7072' to 6972' inside the 4 1/2" casing. (12 sks.) (top of Gallup at 7022')
- 2. Place a cement plug from 5280' to 5180' inside the  $4\ 1/2$ " casing. (12 sks.) (top of Mesaverde at 5230')
- 3. Place a cement plug from 3849' to 3749' inside the 4 1/2" casing. (12 sks.) (bottom of 7.0" csg. at 3799')
- 4. **Mike Flaniken** with the Farmington District Office is to be notified at least 24 hours before the workover operations commence (505) 599-8907.