Submit in duplicate to appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Dept

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-122
Revised 4-1-91

COPY

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MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: Penwell					Lease or Unit Name: Southern Cross 16 St			
Type Test: ☐ Initial ☐ Annual ☐ Special					Test Date: 6-16-98		Well No.: 1	
Completion Date: 2-5-98	Total Depth: 8580		Plug Back TD: 8580		Elevation:		Unit Ltr. - Sec. - TWP. - Rge.: 16 - 18 - 24	
Csg. Size: 4 1/2	Wt.: 11.6	d:	Set At: 8532	Perforations: From: 7721	To: 7728		County: Eddy	
Tbg. Size: 2 3/8	Wt.: 4.7	d: 1.995	Set At: 6094	Perforations: From:	To:		Pool:	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single			Packer Set At: 6095				Formation: ~~Strawn~~ Atoka	
Producing Thru: tbg	Reservoir Temp. °F	Mean Annual Temp. °F: 60°	Baro. Press - P_a: 13.2				Connection: Sales Line	
L: 7721	H: 7721	Gg: .627	% CO_2: .112	% N_2: .749	% H_2S:	Prover:	Meter Run: 3.068	Taps: flg

JUN 1998
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OCD - ARTESIA

NO.	FLOW DATA: Prover Line Size	X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI						1752		pkr		48 hrs
1.	3	x .500	180	20.00	90°	180		pkr		24 hrs
2.										
3.										
4.										
5.										

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1.	1.183	62.161	193.2	.9723	1.263	1.015	78
2.							
3.							
4.							
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.28	550	1.51	.971
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio 19.5 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 61.8 @ 60° Deg.
Specific Gravity Separator Gas .627 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX GMLX=.767
Critical Pressure 671 P.S.I.A. 667 P.S.I.A.
Critical Temperature 362 R 411 R

P_c 1765.2 P_c^2 3115.9

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		193.7	37.5	3078.4
2.				
3.				
4.				
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.012$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.012$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 79$

Absolute Open Flow 79 Mcfd @ 15.025 Angle of Slope θ 45 Slope, n 1.000

Remarks: well produced 4.00 bbls of 61.8 api gr. condensate

Approved By Division	Conducted By:	Calculated By:	Checked By:
	Prowell testing and WL	BM	BM