

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPHASE AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

Form O.C.C. 1
Revised 1-6-79

RECEIVED

MAY 16 1979

19
file
C-133 file

Company CITIES SERVICE COMPANY		Operator E P N G Co.		Date 5-4-79		O.C.C. ARTERIAL OFFICE	
Field BURTON FLATS		Location WOLFCAMP		Elevation 3241 GR.		Part of Lease GOVERNMENT "AC" Com.	
Completion Date 3-9-79		Test Depth 11,520'		Test Interval 10,480'		Well No.	
Test Size 5 1/2"	Wt. 11,519'	Set At 11,519'	Perforations From 9,113' To 9,194'	Well No.			
Test Size 2 7/8"	Wt. 8,989'	Set At 8,989'	Perforations From OPEN ENDED	Well No.			
Type of Well - Sample - Perforation - C.S. or G.O. Multiple SINGLE				Packer Set At 8,989'		County ELDO	
Producing Interval TUBING		Reservoir Temp. °F 152 @ 9,153'		Mean Annual Temp. °F 60		State NEW MEXICO	
L 9153	H 9153	G 0.670	% CO ₂ .144	% N ₂ 1.301	% H ₂ S 13.2	Prover 4"	Turn FLANGE

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							2597			CHOKE	72 HRS.
1.	4"	X	1.250"	519	57.76	47	1360	50		24/66	1 HR.
2.	4"	X	1.250"	519	34.81	49	1410	52		21/66	30 MIN.
3.	4"	X	1.250"	519	19.36	52	1487	54		17/66	30 MIN.
4.	4"	X	1.250"	519	11.56	54	1567	54		15/66	30 MIN.
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, F _{sc}	Rate of Flow Q, Mscf/d
1	7.469	175.33	532.2	1.013	1.222	1.067	1720
2	7.469	136.11	532.2	1.011	1.222	1.067	1340
3	7.469	101.51	532.2	1.008	1.222	1.066	996
4	7.469	78.44	532.2	1.006	1.222	1.066	766
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	.80	507	1.33	.878	6.214	49.9 @ 60	.570	X X X X X	669	382
2	.80	509	1.33	.878				X X X X X		
3	.80	512	1.34	.880						
4	.80	514	1.35	.883						
5										

NO.	P _r	P _w	P _w ²	P _r ² - P _w ²
1	3131.7	1899.7	3608.9	6198.6
2		1960.2	3842.4	5965.1
3		2026.1	4105.1	5702.4
4		2108.0	4443.7	5363.8
5				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.582$ (2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.582$

(3) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.737$

Absolute Open Flow **2,737** Mscf @ 15.025 Angle of Slope θ **45** Slope, n **1.000**

Remarks: **22 BBL CONDENSATE MADE DURING THE TEST. BOTTOM HOLE PRESSURES MEASURED WITH AMERADA GAUGE.**

Approved By Commission	Conducted By: M.C.T.	Calculated By: R.R.	Checked By: J.W.W.
------------------------	--------------------------------	-------------------------------	------------------------------