

MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122  
Revised 9-1-65

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special					Test Date 2-28-84						
Company ARCO Oil and Gas Company				Connection Phillips							
Foot Eumont				Formation Eumont Queen Gas				Unit			
Completion Date 6-8-83		Total Depth 6127		Plug Back TD 3650		Elevation KB 3531		Farm or Lease Name State L Btty. 5			
Csg. Size 5.5	Wt. 15.5	d 4.950	Set At 6127	Perforations: From 3413 To 3557		Well No. 7					
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 3203	Perforations: From Open To Ended		Unit C		Sec. 3	Twp. 21S	Rge. 36E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 3203		County Lea				
Producing Thru Tbg.		Reservoir Temp. °F 60		Mean Annual Temp. °F 60		Baro. Press. - P <sub>a</sub> 13.2		State New Mexico			
L 3203	H 3203	G <sub>g</sub> .6785	% CO <sub>2</sub> 2.85	% N <sub>2</sub> .543	% H <sub>2</sub> S -	Prover	Meter Run 4"	Taps Flg.			
FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h <sub>w</sub>	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
5:							178		Pkr.		48
1.	4 x 1.750			14.18	1.805	39	166	39	Pkr.		24
2.	4 x 1.750			14.55	3.92	42	153	42	Pkr.		24
3.	4 x 1.750			15.075	8.00	46	141	46	Pkr.		24
4.	4 x 1.750			16.445	18.0	53	114	53	Pkr.		24
5.											
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor Ft.	Gravity Factor F <sub>g</sub>	Super Compress. Factor, F <sub>pv</sub>	Rate of Flow Q, Mcfd				
1	14.93	7.03	27.38	1.021	1.214	Nil	130				
2	14.93	10.43	27.75	1.018	1.214	Nil	192				
3	14.93	15.04	28.275	1.014	1.214	Nil	276				
4	14.93	23.1	29.645	1.007	1.214	Nil	422				
5											
NO.	P <sub>f</sub>	Temp. °R	T <sub>r</sub>	Z	Gas Liquid Hydrocarbon Ratio <u>Dry Gas</u> Mcf/bbl.						
1	.04	499	1.33	Nil	A.P.I. Gravity of Liquid Hydrocarbons <u>Dry</u> Deg.						
2	.04	502	1.34	Nil	Specific Gravity Separator Gas <u>.6785</u> XXXXXX						
3	.04	506	1.35	Nil	Specific Gravity Flowing Fluid <u>XXXXX</u> Dry Gas						
4	.04	513	1.37	Nil	Critical Pressure <u>680</u> P.S.I.A. P.S.I.A.						
5					Critical Temperature <u>374</u> R R						
*P <sub>c</sub> <u>220.2</u> P <sub>c</sub> <sup>2</sup> <u>48.5</u>					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.288$ (2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.845$						
NO.	P <sub>i</sub> <sup>2</sup>	P <sub>w</sub>	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	AOF = Q $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 779$						
1	*	210.2	44.2	4.3							
2	*	203.2	41.3	7.2							
3	*	189.2	35.8	12.7							
4	*	165.2	27.3	21.2							
5											
Absolute Open Flow <u>779</u> Mcfd @ 15.025					Angle of Slope @ <u>53° 29'</u>			Slope, n <u>.740</u>			
Remarks: *BHP measured at mid-perfs 3485 Well did not produce any liquids (dry gas)											
Approved By Commission:			Conducted By: J. Cogburn			Calculated By: J. Cogburn			Checked By: L. Henson		