

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

Form C-122
 Revised 9-1-65

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 10-9-79	
Company ARCO Oil & Gas Company			Connection El Paso Natural Gas Company		
Pool Undesignated			Formation Devonian Gas		
Completion Date 8-9-79		Total Depth 15550		Plug Back TD 15455	
		Elevation 3547 G.L.		Form. or Lease Name Langley Boren Com	
Csg. Size 7	Wt. 26	d 6.276	Set At 15548	Perforations: From 12553 To 12633	
Tub. Size 2.375	Wt. 4.7	d 1.995	Set At 12464	Perforations: From Open To Ended	
Type Well - Single - Provenhead - G.G. or G.O. Multiple Dual G-G				Packer Set At 12452	
Producing Thru Tubing		Reservoir Temp. °F 175 @ 12593		Mean Annual Temp. °F 60°	
		Baro. Press. - P _a 13.2		State New Mexico	
L 12464	H 12464	G _g 0.750	% CO ₂ 2.23	% N ₂ 1.45	% H ₂ S 0.80
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 _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
5!							2681		Pkr.		139 Hrs.
1.	4 x 2.250			529	1.21	84	2459	68			2 Hrs.
2.	4 x 2.250			539	5.76	78	2332	72			2 Hrs.
3.	4 x 2.250			540	15.60	78	2162	74			2 Hrs.
4.	4 x 2.250			532	28.62	74	1943	75			2 Hrs.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super. Compress. Factor, F _{pv}	Rate of Flow Q, Mhd
1	25.64	25.61	542.2	0.9777	1.155	1.061	787
2	25.64	56.40	552.2	0.9831	1.155	1.065	1749
3	25.64	92.90	553.2	0.9831	1.155	1.065	2880
4	25.64	124.91	545.2	0.9868	1.155	1.065	3888
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.	0.80	544	1.37	0.889	6.340 Mcf/bbl.	55.6 Deg.	0.750	X X X X X X X X	676 P.S.I.A.	397 R
2.	0.82	538	1.36	0.882				X X X X X	649 P.S.I.A.	543 R
3.	0.82	538	1.36	0.882						
4.	0.81	534	1.35	0.882						
5.										

NO.	P _r ²	P _w ²	P _w ²	P _r ² - P _w ²
1		4670.2	21810.8	1096.9
2		4519.2	20423.2	2484.5
3		4321.2	18672.8	4234.9
4		4117.2	16951.3	5956.4
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.8459$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 13462$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.4623$

Absolute Open Flow	13462	Mhd @ 15.025	Angle of Slope @	47.3	Slope, n	0.922
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Remarks: B.H.P. at mid point of perforations at 12593. Packers at 12452 and 15048.
 Produced 122.3 Bbls. of distillate and 2 Bbls. water.

Approved By Commission:	Conducted By: EPNG - Dailey	Calculated By: J. Cogburn	Checked By: L.C. Hudry
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