

ID BY

MULTIPLE

NEW MEXICO OIL CONSERVATION COMMISSION
AND ONE POINT BACK PRESSURE TEST FOR GAS WELLForm C-122
Revised 9-1-65

NOV 19 1985

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 11/04/85	
Company ARCO Oil and Gas Company Atlantic Richfield Company		Connection None	
Pool Undesignated Morrow		Formation Morrow	
Completion Date 10/25/85		Total Depth 10,380'	Plug Back TD 10,287'
		Elevation 3596.9	Farm or Lease Name State CG
Csg. Size 5-1/2"	Wt. 17	d 4.892	Set At 10,380'
		Perforations: From 10,212' To 10,226'	
Tbg. Size 2.875	Wt. 6.5	d 2.441	Set At 10,134
		Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple		Packer Set At 10,134'	County Eddy
Producing Thru Tbg		Reservoir Temp. °F 155° @ 10,380'	Mean Annual Temp. °F 60°
		Baro. Press. - P _a 13.2	State New Mexico
L 10,219	H 10,219	G _g 0.656	% CO ₂ 0.498
		% N ₂ 0.506	% H ₂ S
		Prover	Meter Run 4.026
			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
SI							2965		pk		139 hrs
1.	4 x 2.250			610	8	89	2780	67	pk		1 hr
2.	4 x 2.250			610	15	85	2720	70	pk		1 hr
3.	4 x 2.250			625	47	71	2362	72	pk		1 hr
4.	4 x 2.250			620	67	72	2195	73	pk		1 hr
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour) F _b	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	25.64	70.61	623.2	.9732	1.235	1.054	2293
2	25.64	96.69	623.2	.9768	1.235	1.055	3155
3	25.64	173.19	638.2	.9896	1.235	1.062	5764
4	25.64	205.97	633.2	.9887	1.235	1.060	6835
5.							

NO.	P _t	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.	0.93	549	1.47	0.901	49.44	55.2	0.656	XXXXXX	672	373
2.	0.93	545	1.46	0.899				XXXXXX		
3.	0.95	531	1.42	0.887						
4	0.94	532	1.43	0.890						
5.										

NO.	P _t ²	* P _w	R _w ²	P _c ² - R _w ²
1	4044.2	3827.2	14647.5	1708.1
2	16355.6	3746.2	14034.0	2321.6
3		3355.2	11257.4	5098.2
4		3191.2	10183.8	6171.8
5				

$$(1) \frac{P_c^2}{P_c^2 - R_w^2} = 2.650$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 15,898$$

$$(2) \left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 2.326$$

Absolute Open Flow 15,898	Mcf/d @ 15.025	Angle of Slope @ 49° 7'	Slope, n 0.866
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Remarks: *BHP recorded at 10,217 (Mid point of perforations)
Produced 15.21 bbls condensate, 0.88 bbls H₂O during test.

Approved By Commission:	Conducted By: E. S. Bush	Calculated By: E. S. Bush	Checked By: L. Briley
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