

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4-23 to 5-1-71					
Company Continental Oil Company						Connection Continental Oil Company					
Pool Anderson Ranch Morrow						Formation Morrow					
Completion Date 4-8-71						Total Depth 13,568'		Plug Back TD 12,300'		Elevation 4306' DF	
Csg. Size 5 1/2"		Wt. 23#		Set At 13,567'		Perforations: From 12,104 To 12,138					
Thg. Size 2 7/8" X 40 6.5#		Wt. 2.441		Set At 11,013'		Perforations: From Open To ended					
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single						Packer Set At 11,013'		County Lea			
Producing Thru tubing		Reservoir Temp. °F 172		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico			
L 12,150		H 12,150		G _g 0.7091		% CO ₂ 0.13		% N ₂ 0.85		% H ₂ S 0	
								Prover 4"		Meter Run 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							2867				92.5
1.	4"	x	1.75	69.0	4.8	98	2274	80	620	60	23.5
2.	4"	x	1.75	82.0	34.8	98	1764	65	620	60	29.5
3.	4"	x	1.75	88.0	60.84	102	1472	79	620	60	24
4.	4"	x	2.50	28.0	53.29	98	1125	78	620	60	24
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, Mcfd
1	14.93	20.25	82.2	0.9653	1.188	1.006	360
2	14.93	57.82	95.2	0.9653	1.188	1.009	999
3	14.93	78.92	101.2	0.9619	1.188	1.010	1360
4	32.64	47.30	41.2	0.9653	1.188	1.003	1776
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 8.42 Mcf/bbl.
1	0.120	558	1.42	0.988	A.P.I. Gravity of Liquid Hydrocarbons 46.5 API at 60°F. Deg.
2	0.143	558	1.42	0.982	Specific Gravity Separator Gas 0.7091 X X X X X X X X
3	0.153	562	1.43	0.980	Specific Gravity Flowing Fluid X X X X X 0.8702
4	0.063	558	1.42	0.995	Critical Pressure 668 P.S.I.A. 663 P.S.I.A.
5					Critical Temperature 392 R 445 R

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.1948$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4075$ $AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{2122}{2500} \quad n = 1.000$ $n = 1.9212$
1			5198	3022	
2			3166	5054	
3			2223	5997	
4			1340	6880	

Absolute Open Flow 2122 Mcfd @ 15.025		Angle of Slope 45°	Slope, n 1.000
Remarks: L-10 Chart was used to obtain P_m & H_w			

Approved By Commission: 	Conducted By: W. D. Howard	Calculated By: D. B. Bullard	Checked By:
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NR000(3) File

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OIL CONSERVATION COMM.
HOBBES, N. H.