

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

Form O-122
Revised 9-1-65

RECEIVED

Type Test ☐ Initial ☐ Annual ☐ Special		Test Date 2-12-74		FEB 22 1974	
Company Horizon Oil & Gas Co.		Connection Natural Gas Pipeline Co. of America			
Pool Grayburg Atoka <i>Grayburg atoka lvs</i>		Permanence Atoka		Unit C. B. B.	
Completion Date 3-16-73		Total Depth 10,890'		Plug Back TD 10,870	
		Elevation 3571 Gr.		Farm or Lease Name State 28	
Csg. Size 5 1/2"		Set At 10,870'		Perforations: From 10,327' To 10,341'	
Tub. Size 2 3/8"		Set At 10,238'		Perforations: From To	
Type Well - Single - Bradenhead - G.O. or G.O. Multiple Gas-Gas Multiple		Packer Set At 10,238'		County Bddy	
Producing Thru Tubing		Reservoir Temp. °F 157 @ 10,251'		Mean Annual Temp. °F 60	
		Baro. Press. - P _a 13.2		State New Mexico	
L 10,238		H 10,238		Gg 0.6392	
		% CO ₂ 0.35		% N ₂ 0.42	
		% H ₂ S -0-		Prover 3"	
				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
L-10-Chart Readings						3261.0			Packer	Choke	
1.	3"	X	1.750"	8.29	2.00	6.40	2984.0	70		11/34	1 hr
2.	3"	X	1.750"	8.30	3.10	6.15	2895.0	72		15/34	1 hr
3.	3"	X	1.750"	8.30	4.50	5.70	2572.0	72		18/34	1 hr
4.	3"	X	1.750"	8.35	6.70	5.60	2030.0	75		22/34	1 hr
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$ Meter COeff.	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super. Compress. Factor, F _{pv}	Rate of Flow Q, Mscf
1.	15.61	2.449	824.7	0.9990	1.251	1.081	038
2.	15.61	2.449	826.7	1.0030	1.251	1.087	1342
3.	15.61	2.449	826.7	1.0110	1.251	1.092	1972
4.	15.61	2.449	836.7	1.0130	1.251	1.094	2965
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.	1.23	521	1.42	0.355	49.0	56.5	0.6392	XXXXXX	670	363
2.	1.23	517	1.40	0.347				XXXXX		
3.	1.23	509	1.38	0.338						
4.	1.25	507	1.38	0.336						
5.										

NO.	P _r	P _w	R _w	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - R_w^2}$	(2) $\left[\frac{P_r^2}{P_r^2 - R_w^2} \right]^n$
1.	3274.2	2999.5	8997.0	1723.4	1.7297	1.5459
2.	3457.6	2915.8	8501.9	2218.5		
3.	3683.3	2604.8	6785.0	3935.4		
4.	4298.2	2126.6	4522.4	6193.0		
5.						

Absolute Open Flow		4584	Mscf @ 15.025	Angle of Slope °	51.5°	Slope, n	0.795
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Remarks: L-10 Chart readings on 50", 1200", 1500" Meters			
Approved By Commission:	Conducted By: D. Tyson	Calculated By: R. West	Checked By: J. West