

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 7-25-73		AUG 3 1973	
Company Texas International				Connection None		O. C. C.	
Pool Dos Hermanos (Morrow)				Formation Morrow Gas		Unit ARTESIA, OFFICE	
Completion Date 7-19-73		Total Depth 12625'		Plug Back TD 12034'		Elevation 3410' KB	
Farm or Lease Name Hudson Fed. Comm							
Csg. Size 5 1/2	Wt. 17.0	d 4.892	Set At 12625'	Perforations: From 11777' To 11804'		Well No. 1	
Thq. Size 2 3/8	Wt. 4.7	d 1.995	Set At 11523'	Perforations: From Open To Ended		Unit Sec. Twp. Rge. J 29 20s 30e	
Type Well - Single - Broadhead - G.G. or G.O. Multiple Single				Packer Set At 11523'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 186⁰		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State New Mexico							
L 11777'	H -	G _g 0.606	% CO ₂ 0.27	% N ₂ 0.48	% H ₂ S 0.00	Prover X	Meter Run Taps F

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. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							4941		PACKER		69.5
1.	4 12/64	2.250	600	43	72	3080	79				1.0
2.	4 10/64	2.250	400	41	72	3510	81				1.0
3.	4 8/64	2.250	400	20	72	4050	83				1.0
4.	4 6/64	2.250	300	9	92	4495	82				2.0
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	25.64	162.37	613.2	0.9887	1.285	1.048	5543.2
2	25.64	130.15	413.2	0.9887	1.285	1.033	4375.3
3	25.64	90.90	413.2	0.9887	1.285	1.033	3058.9
4	25.64	53.09	313.2	0.9706	1.285	1.021	1733.4
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	0.91	532	1.50	0.910	478.867	51.8	0.606	XXXXXXX	674	354
2	0.61	532	1.50	0.938						
3	0.61	532	1.50	0.938						
4	0.46	552	1.56	0.959						
5										

NO.	P _r ²	P _w *	P _w ²	P _c ² - P _w ²
1	-	4349.2	18915.5	20399.9
2	-	4883.2	23845.6	15469.8
3	-	5403.2	29194.6	10120.8
4	-	5785.2	33468.5	5846.9
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.927$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 10144$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.830$

Absolute Open Flow 10144	Mcfd @ 15.025	Angle of Slope ϕ 47° 15'	Slope, n 0.924
---------------------------------	---------------	--------------------------------------	-----------------------

Remarks: * BHP @ (-8367') 11777' Used for pressure calculations

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	COLEMAN PET.ENG.CO.	JOE A. COLEMAN	JOE A. COLEMAN