

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

Form O-122
Revised 6-1-65

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Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 10-16-70	
Company L. BROWN, JR.		Connection NONE	
Well No. 11860-11-14 Morrow Gas		Formation MORROW GAS	
Completion Date 10-10-70	Total Depth 12115'	Plug Back TD 12050'	Elevation 3321'
Perforations: From 11850' To 11890'		Perforations: From OPEN To ENDED	
Well No. 1		Unit Sec. Twp. Rge. J 30 19 30	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE		County TODD	
Producing Thru TUBING	Reservoir Temp. *F 190 @ 11670'	Mean Annual Temp. *F 60	Baro. Press. - P _a 13.2
State NEW MEXICO		Prover -	
L 11870'	H -	G _g 0.617	% CO ₂ 0.79
%		% N ₂ 0.24	% H ₂ S 0.00
Meter Run X		Prover -	

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. @ 11870'	Temp. *F	Press. p.s.i.g.	Temp. *F	Duration of Flow
1	1 1/2"	11.6	1.5	630	62	89	2297	55	PACKED	-	4.5
2	1 1/2"	11.6	1.5	630	42	83	2558	53	-	-	1.0
3	1 1/2"	11.6	1.5	630	25	98	3000	63	-	-	1.0
4	1 1/2"	11.6	1.5	630	15	102	3175	60	-	-	1.0
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 _{sp}	Rate of Flow Q, Mscf
1	10.84	199.69	643.2	0.9732	1.273	1.047	2807
2	10.84	164.36	643.2	0.9786	1.273	1.043	2326
3	10.84	126.81	643.2	0.9653	1.273	1.043	1761
4	10.84	98.22	643.2	0.9619	1.273	1.042	1358
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	0.95	549	1.53	0.912	65.651	55.3	0.617	XXXXXX	674	358
2	0.95	543	1.52	0.910				XXXXXX		
3	0.95	558	1.56	0.919						
4	0.95	562	1.57	0.921						
5										

NO.	P _r	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2}$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n$
1	-	361.2	11297.7	13504.4	1.537	4607
2	-	2717.2	11297.7	7760.9		
3	-	128.2	11297.7	7760.9		
4	-	4387.2	11297.7	5554.9		
5						

Approximate Open Flow: 4600 Mscf @ 15.025 Angle of Slope: 50°

Remarks: * (CHP @ 11870' (-8549) USED FOR PRESSURE CALCULATIONS)

Approved by Commission: 11-12-70 1525 Conducted By: COLEMAN, R.T., ENG. CO. Calculated By: J.D. A. COLEMAN Checked By: J.D. A. COLEMAN

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O.C.C.

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