

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

Form C-122
Revised 9-1-65

RECEIVED

DEC 19 1973

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 11-27-73		DEC 19 1973			
Company Western Oil Producers, Inc.						Connection None				O. C. C. ARTESIA, OFFICE	
Pool Undesignated						Formation Morrow				Unit	
Completion Date 11-24-73			Total Depth 8860			Plug Back TD 8833		Elevation 3327 Gr.		Farm or Lease Name Kennedy Farms Comm.	
Csg. Size 5 1/2	Wt. 17	d 1.315	Set At 8833	Perforations: From 8629 To 8647				Well No. 1			
Thq. Size 2 7/8	Wt. 6.50	d 2.441	Set At 8528	Perforations: From To				Unit F	Sec. 34	Twp. 17S	R1/4 26E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 8526		County Eddy			
Producing Thru Tubing		Reservoir Temp. *F 144 @ 8475		Mean Annual Temp. *F 60		Baro. Press. - P _a 13.2		State New Mexico			
L 8638	H 8638	Gg 0.600	% CO ₂	% N ₂	% H ₂ S	Prover Pos. ck.		Meter Run	Taps		

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	Positive choke						2311		Pkr.		
1.	8/64"			2144		66	2144	66			60 min.
2.	10/64"			2020		69	2020	69			60 min.
3.	13/64"			1775		70	1775	70			60 min.
4.	16/64"			1518		71	1518	71			60 min.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	0.2618		2157.2	0.9943	1.291	1.146	830.8
2	0.4173		2033.2	0.9915	1.291	1.143	1241.3
3	0.7208		1788.2	0.9905	1.291	1.131	1864.1
4	1.1120		1531.2	0.9896	1.291	1.117	2429.8
5							

NO.	P _r	Temp. *R	T _r	Z	Gas Liquid Hydrocarbon Ratio Dry Mcf/bbl.
1	Used simplified				A.P.I. Gravity of Liquid Hydrocarbons
2	supercompressibility tables				Specific Gravity Separator Gas 0.600 X X X X X X X X
3					Specific Gravity Flowing Fluid X X X X X
4					Critical Pressure 671 P.S.I.A. P.S.I.A.
5					Critical Temperature 358 R R

P _f 3540.2 P _f ² 12533				
NO.	P _r ²	P _s	P _s ²	P _f ² - P _s ²
1		2750.2	7564	4969
2		2600.2	6761	5772
3		2306.2	5319	7214
4		1974.2	3897	8636
5				

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

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

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = \text{_____}$$

Absolute Oper. Flow 3600 Mcfd @ 15.025	Angle of Slope θ 45°	Slope, n 1.000
---	------------------------------------	-----------------------

Remarks: **BHP measured with amerada RPG-3 gauge**
P_f from BHP Build up extrapolation

Approved By Commission:	Conducted By: Tefteller, Inc.	Calculated By: F. Tefteller	Checked By:
-------------------------	---	---------------------------------------	-------------