SF
File, 122 file

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

Form C-122
Revised 9-1-65

DEC 28 1977

O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 12-23-77	
Company: Petroleum Development Corp.			Connection: None		
Pool: Undesignated			Formation: Morrow		Unit: --
Completion Date: 12-23-77	Total Depth: 12052		Plug Back TD: 12002	Elevation: 3521 KB	Farm or Lease Name: Manzano Grande - ed.
Csg. Size: 4½" / Wt.: 11.6# / d: 4.000" / Set At: 12052			Perforations: From 11282 To 11296; From 11350 To 11360		Well No.: 1
Tbg. Size: 2 3/8" / Wt.: 4.7# / d: 1.995" / Set At: 11360			Perforations: From None To		Unit: 0 / Sec.: 5 / Twp.: 24S / Rge.: 26E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 11234		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 191 @ 11282	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2		State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11282	11282	0.581	0.96	1.09	0	--	4"	Flange

	FLOW DATA					TUBING DATA		CASING DATA		
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	Duration of Flow
SI						3120.0				
1.	4"	2"				1160.0	58	packer		1 hr.
2.	4"	2"				1020.0	58	--		1 hr.
3.	4"	2"				930.0	60	--		1 hr.
4.	4"	2"	255	5.0	80	895.0	60	--		1 hr.
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							
2.							
3.							
4.	19.81	36.62	268.2	0.9813	1.3120	1.019	952
5.							

NO.	P_t	Temp. °R	T_r	Z
1.				
2.				
3.				
4.	0.40	540	1.56	0.964
5.				

Gas Liquid Hydrocarbon Ratio --- Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons --- Deg.
Specific Gravity Separator Gas 0.581 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 675 P.S.I.A. ____ P.S.I.A.
Critical Temperature 346 R ____ R

P_c 4042.2 P_c^2 16339

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1				
2				
3				
4				
5				

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

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

Absolute Open Flow ____ Mcfd @ 15.025 Angle of Slope θ ____ Slope, n ____

Remarks: Produced 11.25 BW on 4 hr. test, required 4 hrs. for rate & pressure to stabilize. Will attempt to run regular 4-point test at a later time after well has had time to clean up by production. BHP by Amerada gauge @ 11200'.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	J. C. Johnson	J. C. Johnson	C. W. Sanders