NEW MEXICO OIL CONSERVATION OMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1

RECEIVED
1980 FN
JUL 27 1981
1980 FE
O. C. D.
ARTESIA, OFFICE

Type Test: ☒ Initial ☐ Annual ☐ Special — Test Date: 6-24-81

Company: The Superior Oil Company	Connection: El Paso Natural Gas Company		
Pool: ~~Undesig.~~ Wildcat Morrow	Formation: Morrow	Unit:	
Completion Date: 4-1-81	Total Depth: 14,395	Plug Back TD: 13,685	Elevation: 3101.6 / 21.4 KB
Farm or Lease Name: Oscar State			
Csg. Size: 7 5/8 / 5" Lin.	Wt.: 26.4 / 18#	d: 6.969" / 4.276	Set At: 11,140 / 10,823-14,395
Perforations: 13594 / 13,671 To 13,680			
Well No.: 1			
Tbg. Size: 2 7/8 / 2 3/8	Wt.: 6.50# / 4.70#	d: 2.441" / 1.995"	Set At: 10,700 / 13,471
Perforations: From To			
Unit: G	Sec.: 36	Twp.: 24 S	Rge: 29
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 13,460	County: Eddy	
Producing Thru: Tubing	Reservoir Temp. °F: 210 @ 13,460	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2
State: N. Mex.			

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
13,460	13,460	.5678	.638	.699	-0-		4"	Flg.

	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						1659		PKR		64 Hrs.
1.	4	x 1½"	670	15"	80	720	87°			45 Min.
2.	4	x 1½"	665	9"	80	810	87°			45 Min.
3.										
4.										
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	10.84	101	638.2	.9813	1.327	1.045	1490
2.	10.84	78	678.2	.9813	1.327	1.045	1151
3.							
4.							
5.							

NO.	P_t	Temp. °R	T_r	Z
1	1.01	540	1.57	.915
2.	1.01	540	1.57	.915
3.				
4.				
5				

Gas Liquid Hydrocarbon Ratio: water Mcf/bbl
A.P.I. Gravity of Liquid Hydrocarbons: water Deg
Specific Gravity Separator Gas: XXXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 674 P.S.I.A. P.S.I.A
Critical Temperature: 343 R R

P_c* 1492.3 P_c^2 2226.96

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		733.2	537.6	1689.4
2		823.2	677.7	1549.3
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.3181$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.3181$

$\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1,964$

Absolute Open Flow: 1,964 Mcfd @ 15.025 — Angle of Slope θ: 45° — Slope, n: 1.000

Remarks: * Calculated from known Bottom Hole Pressures.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	M.B.	M.K.	