File
Form C-122 File
Revised 9-1-65

MEXICO OIL CONSERVATION COMM ON

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
JAN 10 1979
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 11-14-78
Company: Yates Petroleum Corp. ✓		Connection: Transwestern Pipeline Co.		Unit: ~~NM-2346~~
Pool: W. Cottonwood Creek (Wolfcamp)		Formation: Wolfcamp		
Completion Date: 7-10-77	Total Depth: 7116' KB	Plug Back TD: 6080' KB	Elevation: 3651' KB	Farm or Lease Name: Robinson "HW" Fed
Csg. Size: 4-1/2" / Wt.: 10.5# / d: 4.052 / Set At: 6478' KB		Perforations: From 4763 To 4855		Well No.: 1
Tbg. Size: 2-3/8" / Wt.: 4.7# / d: 1.995 / Set At: 4502' KB		Perforations: From To		Unit: K / Sec.: 25 / Twp.: 16S / Rge.: 24E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 4502' KB		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 106 @ 4800	Mean Annual Temp. °F: 62	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
4802	4802	0.640	0.26	0.72	Nil		2"	Flange

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					1725	45			months
1.	2.067 x 0.500	200	10	50	1627	58			1 hour
2.		200	21	50	1553	62			1 hour
3.		200	40	50	1434	66			1 hour
4.		200	69	50	1264	69			1 hour
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	1.189	46.17	213.2	1.010	1.250	1.0217	71
2.	1.189	66.91	213.2	1.010	1.250	1.0217	103
3.	1.189	92.35	213.2	1.010	1.250	1.0217	142
4.	1.189	121.29	213.2	1.010	1.250	1.0217	186
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	0.315	510	1.380	.958
2.	0.315	510	1.380	.958
3.	0.315	510	1.380	.958
4.	0.315	510	1.380	.958
5.				

Gas Liquid Hydrocarbon Ratio ---- Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons ---- Deg.
Specific Gravity Separator Gas 0.640 xxxxxxxxx
Specific Gravity Flowing Fluid xxxxx -----
Critical Pressure 670.5 P.S.I.A. --- P.S.I.A.
Critical Temperature 369.5 R ----- R

P_c 2006 P_c^2 4024

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1			3549	476
2			3222	802
3			2737	1287
4			2116	1908
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.1090$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.674$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 311$

Absolute Open Flow 311 Mcfd @ 15.025 Angle of Slope θ 55.4 deg Slope, n .6905

Remarks: All pressures by deadweight testers. Calculations worksheet C-122D attached.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Hal Elless	Eddie M. Mahfood	