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Form C-122
Revised 9-1-65

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
DEC 31 1975
O. C. C.
ARTESIA, OFFICE

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 12-19-75	
Company: MOBIL OIL CORP.		Connection: EL PASO NATURAL GAS CO.			
Pool: BURTON FLATS		Formation: MORROW		Unit: 320	
Completion Date: 8-31-74	Total Depth: 11,400'	Plug Back TD: -		Elevation: 3187 GL	Farm or Lease Name: FEDERAL "12" COM
Csg. Size: 5 1/2"	Wt.: 15.5 & 17.0	d: 4.892	Set At: 11,400	Perforations: From 10952 To 11264	Well No.: 1
Tbg. Size: 2 3/8"	Wt.: 4.7	d: 1.995	Set At: 10,941	Perforations: From 10941 (OE) To	Unit: A, Sec.: 12, Twp.: 21-S, Rge.: 26-E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE				Packer Set At: 10,910	County: EDDY
Producing Thru: TUBING	Reservoir Temp. °F: 188° @ 10,900	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
10,941	11,108	0.586	0.90	0.30	—	—	4" x 1.500"	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						3349	60	—	—	50
1.	4	x 1.500	518	5.3	70	2481	60	—	—	24
2.	4	x 1.500	533	22.1	70	1618	60	—	—	24
3.	4	x 1.500	518	37.2	69	1056	60	—	—	24
4.	4	x 1.500	518	41.0	70	707	60	—	—	24
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	53.05	531.2	.9905	1.3063	1.041	774.5
2.	10.84	109.86	546.2	.9905	1.3063	1.042	1065.7
3.	10.84	140.57	531.2	.9914	1.3063	1.041	2054.5
4.	10.84	147.57	531.2	.9905	1.3063	1.041	2154.3
5.							

NO.	P_t	Temp. °R	T_t	Z
1.	.786	530	1.510	.923
2.	.808	530	1.510	.921
3.	.786	529	1.507	.922
4.	.786	530	1.510	.923
5.				

Gas Liquid Hydrocarbon Ratio: 506.8 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: - Deg.
Specific Gravity Separator Gas: .586 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX .595
Critical Pressure: 676 P.S.I.A. 675 P.S.I.A.
Critical Temperature: 351 R 357 R

P_c 3362.2 P_c^2 11304.3

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	6221.0	2497.6	6238.3	5066.0
2	36608	1653.7	2734.8	8569.5
3	1143.1	1127.2	1270.6	10033.7
4	518.6	815.9	665.7	10638.6
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.231$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.073$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2380$

Absolute Open Flow: 2380 Mcfd @ 15.025 Angle of Slope θ: 35.545 Slope, n: 1.399

Remarks: WITH SLOPE OF n = 1.000 PLOTTED THROUGH FLOW #4, CALCULATED AOF IS 2288 Mcfd @ 15.025.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	MW BRINKMEYER	STEVE BOSCH	MW BRINKMEYER