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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

ILLEGIBLE

APR 10 1974

O. C. C.
ARTESIA, OFFICE

[X] Initial [ ] Annual [ ] Special — Test Date: 4-3-74

Field	Value
Company	MOBIL OIL CORP
Connection	—
Pool	SOUTH CARLSBAD Morrow
Formation	MORROW
Unit	320
Completion Date	2-24-74
Total Depth	12,075'
Plug Back TD	11,941
Elevation	3234 GL
Farm or Lease Name	FEDERAL RR COMM
Csg. Size	7"
Wt.	26 #/ft
d	6.276
Set At	11,997'
Perforations: From	11,512' To 11,275
Well No.	1
Tbg. Size	2 3/8"
Wt.	4.7 #/ft
d	1.995"
Set At	11,472'
Perforations: From	— To —
Unit / Sec. / Twp. / Rge.	N / 24, 23S, 26E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple	SINGLE
Packer Set At	11,460
County	EDDY
Producing Thru	TUBING
Reservoir Temp. °F	172° @ 12005'
Mean Annual Temp. °F	60°F
Baro. Press. – P_a	13.2 #
State	NEW MEXICO
L	11,472'
H	11,512'
Gg	0.5942
% CO_2	1.653
% N_2	0.222
% H_2S	
Prover	
Meter Run	4"
Taps	FLANGE

NO.	Prover Line Size	X	Orifice Size	Flow Data Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Data Press. p.s.i.g.	Tubing Data Temp. °F	Casing Data Press. p.s.i.g.	Casing Data Temp. °F	Duration of Flow
SI							2180		0		72 HR
1.	4	x	1.5	505	4	52	2000	65	0		1
2.	4	x	1.5	510	12	70	1745	65	0	—	1
3.	4	x	1.5	590	12	62	1330	65	0	—	1
4.	4	x	1.5	600	22	60	973	65	0		1
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	45.52	518.2	1.0019	1.2974	1.0416	662
2.	10.84	77.23	523.2	0.9905	1.2974	1.0387	1147
3.	10.84	85.07	603.2	0.9980	1.2974	1.0474	1251
4.	10.84	116.14	613.2	1.0000	1.2974	1.0437	1713
5							

NO.	P_r	Temp. °R	T_r	Z
1.	0.76	512	1.42	0.921
2.	0.77	530	1.52	0.926
3.	0.88	522	1.50	0.911
4	0.90	520	1.49	0.908
5.				

Gas Liquid Hydrocarbon Ratio ________ Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons ________ Deg.

Specific Gravity Separator Gas 0.5942 XXXXXXXXX

Specific Gravity Flowing Fluid XXXXX

Critical Pressure 679 P.S.I.A. 679 P.S.I.A.

Critical Temperature 342 R 342 R

P_c 2193.2 P_c^2 4810

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	4053	2016	4066	743
2	3071	1787	3131	1677
3	1826	1311	1734	2276
4	972	1033	1067	3743
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 2.864

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1.814

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1952

Absolute Open Flow 1958 Mcfd @ 15.025

Angle of Slope θ 60.583°

Slope, n .563

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	A R Alhamedrin	K L Lewis	A R Alhamedrin