NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Copy to J. RECEIVED

JUL 5 1966

O. C. C.
ARTESIA, OFFICE

Type Test: ☐ Initial ☐ Annual ☒ Special				Test Date: 6-14-66	
Company: Standard Oil Company of Texas		Connection: Marathon Oil Company			
Pool: Indian Basin (Upper Penn)		Formation: Cisco Canyon		Unit: Bogle Flats	
Completion Date: 10-22-65	Total Depth: 7550	Plug Back TD: 7350	Elevation: 4214 Gr	Farm or Lease Name: Gas Com. Bogle Flats Unit	
Csg. Size: 7 / Wt.: 26 / d: 6.276 / Set At: 7550		Perforations: From 7064 To 7225		Well No.: 6	
Tbg. Size: 2 / Wt.: 4.7 / d: 1.995 / Set At: 7037		Perforations: From None To		Unit: G / Sec.: 8 / Twp.: 22S / Rge.: 23E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 7025		County: Eddy	
Producing Thru: Tubing	Reservoir Temp. °F: 132@ 7037	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
7037	7037	.625	.56	.96	.37		3.068	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
S.					2318	60			24.5 Hrs
1.	3.068 x 1.625	7.3	3.6	78	2288	78			90 Min
2.	3.068 x 1.625	7.35	5.2	77	2264	77			90 Min
3.	3.068x 1.625	7.4	7.4	66	2207	66			90 Min
4.	3.068 x 1.625	7.3	9.3	70	2156	70			90 Min
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	59.21	26.28	1065.8	.9831	1.265	1.106	2,140
2	59.21	38.22	1080.5	.9840	1.265	1.107	3,118
3	59.21	54.76	1095.2	.9943	1.265	1.120	4,568
4.	59.21	67.16	1065.8	.9905	1.265	1.113	5,546
5							

NO.	P_t	Temp. °R	T_r	Z
1	1.53	539	1.42	.818
2.	1.53	537	1.42	.816
3.	1.52	526	1.39	.797
4.	1.51	530	1.40	.807
5				

Gas Liquid Hydrocarbon Ratio 91.50 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 58 Deg.
Specific Gravity Separator Gas .625 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .657
Critical Pressure From Analysis 675.0 P.S.I.A. 673 P.S.I.A.
Critical Temperature From Analysis 378.0 R 371 R

P_c^2 2[illegible] P_c^2 5,434.5

NO	P_w	P_w^2	$P_c^2 - P_w^2$
1	2320.9	5,386.6	47.9
2	2320.9	5,386.6	47.9
3	2313.4	5,351.8	82.7
4.	2309.1	5,331.9	102.6
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 52.97$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 23.57$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 130,700$

Absolute Open Flow 130,700 Mcfd @ 15.025 Angle of Slope θ Slope, n .796

Remarks: *Contains a Meter Factor of 4,472 for a 100" x 2000 psi L-10 Chart.
Calculated with a Continuous Operation Electronic Calculator, using 7 decimal places.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	D. F. Jones	R. W. Harrington	