NE MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

Form C-122
Revised 12-1-65

RECEIVED
JUL 1 1966
O. C. C.

Type Test			Test Date	
☐ Initial	☐ Annual	☒ Special	6-13-66	
Company: Standard Oil Company of Texas	Connection: Marathon Oil Company			
Pool: Indian Basin (Upper Penn)	Formation: Cisco Canyon		Unit: Bogle Flats	
Completion Date: 10-2-65	Total Depth: 7480	Plug Back TD: 7408	Elevation: 4159 Gr	Farm or Lease Name: Bogle Flats Unit
Csg. Size: 7 / Wt.: 26 / d: 6.276 / Set At: 7480	Perforations: From 7225 To 7292			Well No.: 5
Tbg. Size: 2 / Wt.: 4.7 / d: 1.995 / Set At: 7068	Perforations: From None To			Unit: F / Sec.: 16 / Twp.: 22S / Rge.: 23E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 7055			County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 132@ 7225	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
7225	7225	.627	.52	.89	.33		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
SI					2326	60	Packer		22 Hrs
1.	3.068 x 1.625	7.4	3.6	78	2292	72			80 Min
2.	3.068 x 1.625	7.4	5.5	68	2258	74			100 Min
3.	3.068 x 1.625	7.4	7.5	67	2201	77			85 Min
4.	3.068 x 1.625	7.4	8.9	65	2128	79			160 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	26.64	1095.2	.9831	1.263	1.093	2,141
2	59.21	40.70	1095.2	.9924	1.263	1.102	3,329
3	59.21	55.50	1095.2	.9933	1.263	1.102	4,543
4	59.21	65.86	1095.2	.9952	1.263	1.106	5,421
5							

NO.	P_r	Temp. °R	T_r	Z
1	1.64	533	1.47	.837
2	1.64	528	1.44	.823
3	1.64	527	1.44	.823
4	1.64	525	1.43	.818
5				

Gas Liquid Hydrocarbon Ratio 174.4 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 60.1 Deg.
Specific Gravity Separator Gas 627 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .644
Critical Pressure From Analysis 666.9 P.S.I.A. 673 P.S.I.A.
Critical Temperature From Analysis 366.5 R 368 R

P_c^2 5,471.9

NO	P_w	P_w^2	$P_c^2 - P_w^2$
1	2328.3	5,421.0	50.9
2	2320.0	5,382.4	89.5
3	2309.9	5,335.6	136.3
4	2279.4	5,195.7	276.2
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 40.15 (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 17.69

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 80,370

Absolute Open Flow 80,370 Mcfd @ 15.025 | Angle of Slope θ | Slope, n .778

Remarks: *Contains a Factor of 4.472 for a 100" x 2000 psi L-10 Chart
Pressures calculated with a continuous operation electronic calculator set on 7 decimals.

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