N. .EXICO OIL CONSERVATION COMM. Form C-122
Revised 9-1-65

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WEL

RECEIVED
JUN 30 1966
O. C. C.
ARTESIA, OFFICE

Type Test: ☐ Initial ☐ Annual ☒ Special				Test Date: 6-7-66	
Company: Standard Oil Company of Texas		Connection: Marathon Oil Company			
Pool: Indian Basin (Upper Penn)		Formation: Cisco Canyon		Unit: Bogle Flats	
Completion Date: 7-9-65	Total Depth: 7510	Plug Back TD: 7466	Elevation: 4147 Gr	Farm or Lease Name: Bogle Flats Unit XXX	
Csg. Size: 5 1/2 / Wt.: 15.5 / d: 4.950 / Set At: 7510		Perforations: From 6991 To 7133		Well No.: 3	
Tbg. Size: 2 / Wt.: 4.7 / d: 1.995 / Set At: 6924		Perforations: From None To		Unit: K / Sec.: 9 / Twp.: 22S / Rge.: 23E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 6910		County: Eddy	
Producing Thru: Tubing	Reservoir Temp. °F: 132 @ 6924	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico	
L: 6924 / H: 6924	Gg: .624	% CO_2: .54	% N_2: .92	% H_2S: .37	Prover: / Meter Run: 3.068 / Taps: Flange

FLOW DATA NO.	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					2326	60			23.5 Hrs
1.	3.068 x 1.625	7.5	3.8	80	2281	70			95 Min
2.	3.068 x 1.625	7.5	5.7	76	2235	72			100 Min
3.	3.068 x 1.625	7.6	7.4	69	2182	74			95 Min
4.	3.068 x 1.625	7.6	9.0	68	2115	76			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	28.50	1125.0	.9813	1.266	1.086	2,277
2.	59.21	42.75	1125.0	.9850	1.266	1.086	3,434
3.	59.21	56.24	1155.2	.9915	1.266	1.095	4,577
4.	59.21	68.40	1155.2	.9924	1.266	1.095	5,572
5.							

NO.	P_t	Temp. °R	T_t	Z
1.	1.67	540	1.51	.848
2.	1.67	536	1.50	.845
3.	1.71	529	1.48	.834
4.	1.71	528	1.48	.834
5				

Gas Liquid Hydrocarbon Ratio 109.4 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 64.7 Deg.
Specific Gravity Separator Gas .624 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .649
Critical Pressure From Analysis 674.8 P.S.I.A. 673 P.S.I.A.
Critical Temperature From Analysis 357.5 R 368 R

P_c 2389.2 P_c^2 5711.9

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_t^2$
1		2316.8	5,368.0	103.9
2		2301.0	5,294.6	177.3
3		2289.9	5,243.6	228.3
4		2271.7	5,160.6	311.3

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 17.58 (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 10.17

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 56,670

Absolute Open Flow 56,670 Mcfd @ 15.025 Angle of Slope θ Slope, n .809

Remarks: Contains a Meter Factor of 4.472 for a 100" x 2000 psi R-10 Chart

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