NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
JUN 13 1966
O. C. C.
ARTESIA, OFFICE

Type Test: ☐ Initial ☐ Annual ☒ Special			Test Date: 5-30-66	
Company: Standard Oil Co. of Texas	Connection: Marathon Oil Company			
Pool: Indian Basin (Upper Penn)	Formation: Cisco Canyon		Unit: Bogle Flats	
Completion Date: 3-1-65	Total Depth: 7880	Plug Back TD: 7825	Elevation: 4039 KB	Farm or Lease Name: Bogle Flats Unit Gas Com
Csg. Size: 5 1/2 / Wt.: 17 / d: 4.892 / Set At: 7880	Perforations: From 7269 To 7381			Well No.: 1
Tbg. Size: 2 / Wt.: 4.7 / d: 1.995 / Set At: 7206	Perforations: From To			Unit: G / Sec.: 3 / Twp.: 22S / Rge.: 23E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 7200		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 132@ 7206	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico
L: 7206 / H: 7206	Gg: .625	% CO_2: .59	% N_2: .85	% H_2S: .07 / Prover: / Meter Run: X / Taps: 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					2348	60	Packer		
1.	3.068 x 1.625	7.4	4.0	74	2293	75	Packer		1.5 Hr.
2.	3.068 x 1.625	7.4	5.4	69	2265	78	Packer		1.5
3.	3.068 x 1.625	7.4	7.7	74	2200	78	Packer		1.5
4.	3.068 x 1.625	7.4	8.9	76	2156	84	Packer		1.5
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	59.2093	29.6000	1,095.2	.9868	1.265	1.088	2,380
2.	59.2093	39.9600	1,095.2	.9915	1.265	1.090	3,235
3.	59.2093	56.9800	1,095.2	.9868	1.265	1.088	4,582
4.	59.2093	65.8600	1,095.2	.9850	1.265	1.085	5,272
5.							

NO.	P_r	Temp. °R	T_r	Z
1	1.62	534	1.49	.845
2.	1.62	529	1.48	.841
3.	1.62	534	1.49	.845
4.	1.62	536	1.50	.849
5.				

Gas Liquid Hydrocarbon Ratio: 87.9 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 60.3 Deg.
Specific Gravity Separator Gas: .625 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX .658
Critical Pressure: From Analysis = 675.6 P.S.I.A. 673 P.S.I.A.
Critical Temperature: From Analysis = 357.8 R 371 R

P_c 2361.2 P_c^2 5575.3

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2332.0	5,438.2	137.1
2		2326.3	5,411.7	163.6
3		2311.7	5,344.0	231.3
4		2303.1	5,304.3	271.0
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 20.573$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 17.848$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 94,095$

Absolute Open Flow: 94,095 Mcfd @ 15.025 Angle of Slope θ: Slope, n: .953

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

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	J. N. Casparis	R. W. Harrington	