MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
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O. C. D.
ARTESIA, OFFICE

Revised 10-1-65
SF
F ✓
C-122 File ✓

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 6-3-80	
Company: McCLELLAN OIL CORPORATION		Formation: TO AIR			
Field: [illegible]		Formation: ABO		Unit:	
Completion Date: 6-3-80	Total Depth: 4700	Plug Back TD: 4685	Elevation: 3772 gr.	Farm or Lease Name: P J FEDERAL	
Csg. Size: 4 1/2 / Wt.: 11.60 / d: 4.000 / Set At: 4700		Perforations: From 4334 To 4514		Well No.: 1	
Tbg. Size: 2 3/8 / Wt.: 4.60 / d: 2.375 / Set At: 4306		Perforations: From OPEN To END		Unit: J / Sec.: 6 / Twp.: 9S / Rge.: 26E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: SINGLE		Packer Set At: 4306		County: CHAVES	
Producing Thru: TUBING	Reservoir Temp. °F: 118 @ 4400	Mean Annual Temp. °F: 60	Baro. Press. - P_a: 13.2	State: NEW MEXICO	
L: 4400	H: 4400	Gg: .645	% CO_2: NIL	% N_2: 5.378	% H_2S:
Prover: 2"	Meter Run:	Taps:			

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.	TUBING DATA Temp. °F	CASING DATA Press. p.s.i.g.	CASING DATA Temp. °F	Duration of Flow
SI					986				
1.	2 X 1/4	721		78	721	84			1 HR.
2.	2 X 5/16	548		78	548				30 MIN.
3.	2 X 3/8	427		75	427				30 MIN.
4.	2 X 7/16	330		75	330				30 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	1.087		734.2	.9831	1.245	1.059	1034
2	1.672		561.2	.9831	1.245	1.045	1200
3	2.378		440.2	.9859	1.245	1.036	1331
4	3.408		343.2	.9859	1.245	1.028	1476
5.							

NO.	P_t	Temp. °R	T_r	Z
1	1.11	538	1.50	.892
2	.85	538	1.50	.916
3.	.67	535	1.49	.931
4.	.2	535	1.49	.946
5.				

P_t 999.2 P_c^2 998.4

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		866.3	750.5	247.9
2		784.1	614.8	383.6
3		675.9	456.8	541.6
4		508.4	258.5	739.9
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 661 P.S.I.A. P.S.I.A.
Critical Temperature 358 R R

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.027$ $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.007$

$AOF = Q\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.075$

Absolute Open Flow 2,075 Mcfd @ 15.025 Angle of Slope θ 63.5 Slope, n .500

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	M.B.	R.R.	J.W.W.