

MULTIPOINT AND ONE POINT PRESSURE TEST FOR GAS WELL

RECEIVED BY
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O. C. D. - Special
ARTESIA OFFICE

Type Test ☒ Initial ☐ Annual		Test Date 02/20/85	
Company McCLELLAN OIL CORP.		Connection AIR	
Pool South Pecos Slope <i>Flow</i>		Formation ABO	
Completion Date 12-18-84	Total Length 4560'	Plug Back TD 4500'	Elevation 3686'
Farm or Lease Name PJ <i>Federal</i>		Well No. Flow #4	
Csg. Size 4 1/2"	Wt. d	Set At 4500' TD	Perforations: 4060 From 4360 To 4407
Tub. Size 2-3/8"	Wt. d	Set At 4370	Perforations: From OPEN To ENDED
Type Well - Single - Broadhead - G.G. or G.O. Multiple SINGLE		Packer Set At NONE	County CHAVES
Producing Thru TUBING	Reservoir Temp. °F 98 @ 4000	Mean Annual Temp. °F 60	Baro. Press. - P _a 13.2
L	H	G _g .64	% CO ₂
		% N ₂	% H ₂ S
		Prover 2	Meter Run Taps

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
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.	
SI							762		780	
1.	2		1/16	740		68	734		750	
2.	2		3/36	696		71	686		719	1 hr.
3.	2		1/8	614		72	598		640	"
4.	2		7/32	294		71	280		410	"
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	.0641		753.2	.9924	1.2500	1.037	62
2	.1410		709.2	.9996	1.2500	1.0426	129
3	.2648		627.2	.9887	1.2500	1.0600	218
4	.8393		307.2	.9856	1.2500	1.0541	335
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2					Specific Gravity Separator Gas _____ X X X X X X X X
3					Specific Gravity Flowing Fluid _____ X X X X X
4					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5					Critical Temperature _____ R _____ R

P_c 1046.2 P_c² 1095

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		1033.2	1068	28
2		985.2	971	124
3		894.2	800	295
4		674.2	455	640
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.7109$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.3988$

AOG = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 470$

Absolute Open Flow _____ 470 _____ Mcfd @ 15.025	Angle of Slope θ _____ 58	Slope, n _____ 6249
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Remarks: BOTTOM HOLE PRESSURE RECORDED W/AMERADA TYPE GAUGE

Approved By Division	Conducted By: KELTIC SERVICES	Calculated By: KELLY	Checked By:
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LOGARITHMIC CYCLES

