

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 11-9-87		NOV 12 '87	
Company McCLELLAN OIL CORP. ✓		Connection ENRON		O. C. D. ARTESIA, OFFICE	
Pool S. Pecos Slope ABO		Formation ABO			
Completion Date 8-31-87		Total Depth 4680		Plug Back TD 4665	
Elevation 3753' GR		Farm or Lease Name PENJACK FED.		Well No. 3	
Csq. Size 4 1/2	Wt. 10.5	Set At TD	Perforations: From 4362 To 4377		Unit H
Thq. Size 2-3/8	Wt. 4.7	Set At 4305	Perforations: From OPEN To ENDED		Sec. Twp. Rye. 12 10S 25E
Type Well - Single - Bradenhead - G.C. or G.O. Multiple SINGLE			Packer Set At NONE		County CHAVES
Producing Thru TUBING		Reservoir Temp. °F 60	Baro. Press. - P _g 13.2		State NEW MEXICO
L	H	G _g .65	% CO ₂	% N ₂	% H ₂ S
Prover		Meter Run 2"		Taps PIPE	

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.	Temp. °F	
SI							880	58	874		
1.	2	X	1	211	.50	63	875	59	872		1 HR.
2.	2	X	1	220	5.0	59	855	61	854		"
3.	2	X	1	236	74.0	50	784	65	790		"
4.	2	X	1	245	100	50	730	67	740		"
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	5.724	10.5877	224.2	.9971	1.2403	1.0201	76.45
2.	5.724	34.1467	233.2	1.0010	1.2403	1.0216	247.91
3.	5.724	135.7969	249.2	1.0098	1.2403	1.0246	997.48
4.	5.724	160.686	258.2	1.0098	1.2403	1.0256	1181.46
5.							

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

P _c 1000.2 P _c ² 1000.4				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		994.2	988.4	11.96
2		975.2	951.0	49.39
3		899.2	808.6	191.84
4		846.2	716.1	284.35
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.5182$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.2318$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3818$

Absolute Open Flow <u>3818</u> Mcfd @ 15.025	Angle of Slope @ <u>47</u>	Slope, n <u>.9325</u>
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Remarks: BOTTOM HOLE PRESSURE DONE WITH AMERADA TYPE GAUGE

Approved By Division	Conducted By: KELTIC SERVICES	Calculated By: MIKE KELLY	Checked By:
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