

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 10/18/72	
Company McClellan Oil Corporation				Connection None		
Pool Haystack <i>Cisco</i>				Formation Cisco		Unit D. C. C. ARTESIA, OFFICE
Completion Date 10/14/72		Total Depth 6520		Plug Back TD 6000		Elevation 4090 GR
Csg. Size 5 1/2		Wt. 14.0#	d 5.012	Set At 6520	Perforations: From 5938 To 5948	
Tbg. Size 2 7/8		Wt. 6.5	d 2.441	Set At 5900	Perforations: From Open end To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 5796	
Producing Thru Tubing		Reservoir Temp. °F 112 @ 5900		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2
L 5900		H 5900	G _g .692	% CO ₂ -	% N ₂ -	% H ₂ S -
Prover X					Meter Run X	
Taps Flange						

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							1771				72
1.	3	x	1.250	670	14	90	728	74			1
2.	3	x	1.250	690	9.0	92	1003	74			1
3.	3	x	1.250	720	6.0	94	1174	74			1
4.	3	x	1.250	730	4.4	96	1226	74			1
5.											

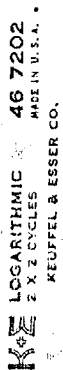
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	7.577	97.80	683.2	.9723	1.202	1.067	924
2	7.577	79.55	703.2	.9706	1.202	1.069	752
3	7.577	66.33	733.2	.9688	1.202	1.071	627
4	7.577	57.25	743.2	.9671	1.202	1.071	540
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	1.02	550	1.42	.879	A.P.I. Gravity of Liquid Hydrocarbons	692
2.	1.05	552	1.42	.875	Specific Gravity Separator Gas	xxxxx
3.	1.10	554	1.43	.872	Specific Gravity Flowing Fluid	xxxxx
4.	1.11	556	1.43	.871	Critical Pressure	669
5.					Critical Temperature	388

P _c 1784.2 P _c ² 3183					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.208$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.205$	
NO	P _t ²	P _w	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1113$			
1		741.2	549	2634				
2		1016.2	1033	2150				
3		1187.2	1409	1774				
4		1239.2	1536	1647				
5								

Absolute Open Flow 1113 Mcfd @ 15.025			Angle of Slope ϕ .985	
Remarks: Friction negligible. Produced 77 barrels water 4 hours.				
Approved By Commission:		Conducted By: <i>Ralph B. Curwin</i>		Calculated By: <i>Donna Hollop</i>
		Checked By:		

McClellan Oil Corporation
Bar 5 Federal No. 2
Unit C, Sec. 15, T6S, R27E
Chaves County, New Mexico
October 18, 1972



Q MCFPD

$$\begin{array}{r} \text{Log Q1} = 3.146128 \\ \text{Log Q2} = \underline{2.161368} \\ 0.984760 \end{array}$$