

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

Form C-122
Revised 9-1-65

RECEIVED

C/SF

C-122 4565

Type Test ☒ Initial ☐ Annual				Test Date 2-2-82		FEB 9 1982	
Company FLAG REDFERN <i>Oil Co.</i>				Connection AIR NEW WELL		O. C. D.	
Pool <i>Pecos Slope</i> UNDESIGNATED				Formation ABO		Unit ARTESIA, OFFICE	
Completion Date 1-28-82		Total Depth 4100		Plug Back TD <i>4055</i> 4043		Elevation 3865 KB	
Csg. Size 4.50		Wt. 10.5		Set At <i>2096</i> 4043		Perforations: From 3697 To 3810	
Tbg. Size 2.375		Wt. 4.7		Set At 3652		Perforations: From OPEN To ENDED	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE		Farm or Lease Name MC ELVAIN, STATE COM.	
Producing Thru TUBING		Reservoir Temp. °F 104# 3647		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2	
L 3753		H 3753		Gg 709		% CO ₂ 5.89	
						% N ₂ 8.13	
						% H ₂ S	
						Prover	
						Meter Run 2.11	
						Tups	

FLOW DATA							TUBING 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	B.H.P. PSIA	Temp. °F	of Flow
SI							927	35	1038		76 HR 20 MIN
1.	2.00	X	750	30.		27	881	38	1000		1
2.	2.00	X	750	75		20	802	38	904		1
3.	2.00	X	750	92		22	717	38	812		1
4.	2.00	X	750	112		27	630	38	713		1
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	9.6940	.00	43.2	1.0333	1.1876	1.0046	516
2	9.6940	.00	88.2	1.0408	1.1876	1.0096	1067
3	9.6940	.00	105.2	1.0387	1.1876	1.0112	1272
4	9.6940	.00	125.2	1.0333	1.1876	1.0133	1509
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	.06	487	1.36	.991	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	.13	480	1.34	.981	Specific Gravity Separator Gas <u>7090</u> XXXXXXXXXX
3	.15	482	1.34	.978	Specific Gravity Flowing Fluid XXXXXX <u>7090</u>
4	.18	487	1.36	.974	Critical Pressure <u>680</u> P.S.I.A. P.S.I.A.
5					Critical Temperature <u>359</u> R R

P _r <u>1051.2</u> P _c ² <u>1105.0</u>				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.9918$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4142$	
NO.	P _w	P _w ²	P _c ² - P _w ²				
1	1013.2	1026.6	70.0				
2	917.2	841.3	264.0				
3	825.2	681.0	424.0				
4	726.2	527.4	578.0				
5							

Absolute Open Flow <u>2,134.1</u> Mcfd @ 15.025				Angle of Slope <u>61.9</u>		Slope, n <u>.5348</u>	
Remarks: <u>BOTTOM HOLE PRESSURE RECORDED WITH AMERADA PRESSURE ELEMENTS.</u>							
Approved By Commission:		Conducted By: RICHARD TOWNLEY		Calculated By: BENNETT-CATHEY		Checked By:	