

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

Form C-122
Revised 9-1-65

458
File

Type Test 4 POINT ☒ Initial ☐ Annual ☐ Special						Test Date 5-15-84		RECEIVED JUL 01 '88	
Company FLAG REDFERN OIL COMPANY				Connection AIR NEW WELL					
Pool PECOS SLOPE (ABO)				Formation ABO				Unit	
Completion Date 4-19-84		Total Depth 4100.		Plug Back To 4057.		Elevation 3850.		Farm or Lease Name NM FEDERAL COM	
Case Size 4.500	Wt. 10.5	d 4.052	Set At 4100.	Perforations: From 3667. To 3984.		Well No. #1			
Log Size 2.375	Wt. 4.7	d 1.995	Set At 3790.	Perforations: From 0. To 0.		Unit Sec. Twp. Rge. M 5 5S 25E			
Type Well - Single - Bradenhead - G.C. or G.O. Multiple						Packer Set At None		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 109. 3824.		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2		State NEW MEXICO	
L 3790'	H 3790'	Cg 0.647	% CO ₂ 0.	% N ₂ 5.58	% H ₂ S 0.	Prover 2.0	Motor Run 0.	Taps	

FLOW DATA							TUBING DATA		B.H.P. DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	CHOKE	
51							516.		868.		116.0
1.	2.00 X 0.063			490.	0.	66.	506.	0.	854.	48/64	1.0
2.	2.00 X 0.125			575.	0.	64.	578.	0.	826.	48/64	1.0
3.	2.00 X 0.188			589.	0.	61.	589.	0.	752.	48/64	1.0
4.	2.00 X 0.250			480.	0.	60.	485.	0.	611.	48/64	1.0
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	0.06	0.	503.2	0.9943	1.2432	1.0438	41.
2	0.26	0.	588.2	0.9962	1.2432	1.0520	203.
3	0.61	0.	602.2	0.9990	1.2432	1.0544	479.
4	1.08	0.	493.2	1.0000	1.2432	1.0449	695.
5							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	0.76	526.	1.47	0.918	0.	0.	0.647	XXXXXX	660.	358.
2	0.89	524.	1.46	0.904						
3	0.91	521.	1.46	0.899						
4	0.75	520.	1.45	0.916						
5										

NO.	P _f ²	P _w ²	P _w ²	P _f ² - P _w ²	(1) $\frac{P_c^2}{P_f^2 - P_w^2} = 2.0189$	(2) $\left[\frac{P_c^2}{P_f^2 - P_w^2} \right]^n = 1.6736$
1	752.	788.	621.	20.		
2	704.	763.	582.	59.		
3	586.	696.	484.	156.		
4	390.	569.	323.	317.		
5						

$AOI = 0 \left[\frac{P_c^2}{P_f^2 - P_w^2} \right]^n = 1163.$

Absolute Open Flow 1163. Mcfd @ 15.025 Angle of Slope 53.75 Slope, n .733

Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS.

Approved By Commission	Conducted By DON BENNETT	Calculated By BENNETT & CATHEY	Checked By
------------------------	-----------------------------	-----------------------------------	------------