

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

Form O-123
Revised 9-1-55

RECEIVED BY

JAN 31 1984

O. C. D.

ARTESIA, OFFICE

Type Test 4 POINT ☒ Initial ☐ Annual ☐ Special				Test Date 7-6-83	
Company FLAG REDFERN				Connection TO AIR	
Pool ABO PECOS SLOPE <i>Plus</i>				Formation ABO	
Completion Date 7-3-83		Total Depth 4100 4102		Plug Hole 1 4070 4080	
Elevation 3846 3855.2		Farm or Lease Name US ⁶ FEDERAL 8		Well No. #1	
Well Size 4.500	Wt. 10.5	d 4.052	Set At 4100.	Perforations: From 3775 To 3807	
Fig. Size 2.375	Wt. 4.7	d 1.995	Set At 3742.	Perforations: From 0 To 0	
Type Well - Single - Freehead - O.O. or C.O. Multiple SINGLE				Packer Set At 0	
Producing thru TUBING		Reservoir Temp. °F 103 @ 3742		Moist Annual Temp. °F 60.0	
Dew. Press. - P _g 13.2		State NEW MEXICO		County CHAVES	
L 3791	H 3742	O _g 0.651	% CO ₂ 0.13	% H ₂ 7.04	% H ₂ O 0
Proved 0	Water Run 2.0	Tape 0			

FLOW DATA						TUBING DATA		B.H.P. DATA		Duration of Flow	
NO.	Proved Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. In. H ₂ O	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		CHOKE
51							993		1094		72.0
1.	2.00	X	0.125	968	0	78	968	93	1063	24/64	1.0
2.	2.00	X	0.188	916	0	79	916	91	1011	24/64	1.0
3.	2.00	X	0.250	837	0	78	837	93	931	24/64	1.0
4.	2.00	X	0.313	633	0	78	633	93	824	24/64	1.0
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{NP_R}$	Pressure P _R	Flow Temp. Factor F _t	Gravity Factor F _g	Super. Compres. Factor F _{ps}	Rate of Flow Q, MscfD
1	0.26	0	981.2	0.9831	1.2394	1.0756	340
2	0.61	0	929.2	0.9822	1.2394	1.0710	735
3	1.08	0	850.2	0.9831	1.2394	1.0654	1197
4	1.67	0	646.2	0.9831	1.2394	1.0500	1379
5							

NO.	P _R	Temp. °F	T _g	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	1.49	538	1.52	0.864	0	0	0.651	XXXXXX	658	355
2	1.41	539	1.52	0.872				XXXXXX		
3	1.29	538	1.52	0.881						
4	0.98	538	1.52	0.907						
5										

NO.	P ₁ ²	P _w ²	R ₁ ²	P ₁ ² - R ₁ ²
1	1158	976	953	55
2	1049	929	864	144
3	892	858	736	272
4	701	762	580	428
5				

(1) $\frac{P_R^2}{P_1^2 - R_1^2} = 2.3566$

AOF = 0 $\left[\frac{R_1^2}{P_1^2 - R_1^2} \right]^n = 2470$

(2) $\left[\frac{R_1^2}{P_1^2 - R_1^2} \right]^n = 1.7917$

Absolute Open Flow	2470	Mscf @ 15.025	Angle of Slope °	55.8	Slope, n	0.680
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Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS.

Approved By Commission	Conducted By	Calculated By	Checked By
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