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

Form C-122
Revised 9-1-65

C/SF C-122

RECEIVED
FEB 24 1982
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special	Test Date: 1-18-82		
Company: MESA PETROLEUM CO.	Connection: Unconnected		
Pool: ~~Undesignated~~ Pecos Slope Abo	Formation: ABO	Unit:	
Completion Date: 1-18-82	Total Depth: 4113'	Plug Back TD: 4034'	Elevation: 3869'
Farm or Lease Name: Coyote Federal			
Csg. Size: 4 1/2" / Wt.: 10.5# / d: / Set At: 4025'	Perforations: From 3633 To 3823'	Well No.: 7Y	
Tbg. Size: 2 3/8 / Wt.: 4.7# / d: / Set At: 3534'	Perforations: From open ended To	Unit: P / Sec.: 5 / Twp.: 7 / Rge.: 25	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: None	County: Chaves	
Producing Thru: tubing	Reservoir Temp. °F: 102° @ 4110	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2
State: New Mexico			
L:	H:	Gg: .65	% CO_2: 1
% N_2: 1	% H_2S:	Prover: 2" ORIFICE WELL TESTER	Meter Run:
Taps:			

	FLOW DATA				TUBING DATA		CASING DATA		
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	Duration of Flow
SI						815		790		72 hr SI
1.	2" ORIFICE	1 1/4	6		40	720	67	705		1 hr
2.	Well	1 1/4	7.5		44	630	70	620		1 hr
3.	Tester	1 1/4	10		45	525	74	520		1 hr
4.		1 1/4	11.5		49	350	74	385		1 hr
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	561	2" ORIFICE WELL		1.0198	.9608		550
2	637	TESTER		1.0157	.9608		622
3.	753			1.0147	.9608		734
4.	719			1.0107	.9608		795
5.							

NO.	P_t	Temp. °R	T_c	Z
1.				
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

P_c 803 P_c^2 645

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		718	516	129
2		633	401	244
3		533	284	361
4		398	158	487
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.3244$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.1508$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 900$

Absolute Open Flow 900 Mcfd @ 15.025 Angle of Slope θ 63.5 Slope, n .5

Remarks: Plot of $Pc^2 - Pw^2$ vs. Q yielded a straight line with a θ greater than 63.5°. Drew 63.5° line through highest point.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	James Craig	E.L. Buttross, Jr. 2-19-82	