NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AN ONE POINT BACK PRESSURE TES OR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
APR 2 C 1981
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 3-12-81	
Company: Mesa Petroleum Co.	Connection: To Be Determined			
Pool: ~~Undesignated Abo~~ Pecos Slope - Abo Gas	Formation: Abo			Unit:
Completion Date: 3-12-81	Total Depth: 4300	Plug Back TD: 4166	Elevation: 3862	Farm or Lease Name: Coyote Federal
Csg. Size: 4 1/2 / Wt.: 10.5 / d: / Set At: 4268		Perforations: From 3619 To 3804		Well No.: 3
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: / Set At: 3754		Perforations: From Open Ended To		Unit: B / Sec.: 17 / Twp.: 7S / Rge.: 25E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: None		County: Chaves
Producing Thru: Tubing	Reservoir Temp. °F: 104@ 4300	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3754	3754	.66		5		Choke		

	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						860		860		48 hr
1.	Choke	12/64	820		80	820	80	820		3/4 hr
2.	Coefficients	14/64	760		80	760	80	770		1/2 hr
3.		16/64	610		80	610	80	620		1/2 hr
4.		18/64	490		80	490	80	490		1/2 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	.5725	choke	820	.9813	1.2310		567
2.	.7924	choke	760	.9813	1.2310		727
3.	1.050	choke	610	.9813	1.2310		774
4.	1.331	choke	490	.9813	1.2310		788
5.							

NO.	P_t	Temp. °R	T_r	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 860 P_c^2 740

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		820	672	68
2		770	593	147
3		620	384	356
4		490	240	500
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.4800$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.2166$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 950$

Absolute Open Flow 950 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: E.L.B. F. L. Buttross, Jr.	Calculated By: E.L.B. F. L. Buttross, Jr.	Checked By: