NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

OCT 13 1981

O. C. D.
ARTESIA, OFFICE

C/SF C-122

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 9-23-81	
Company: Mesa Petroleum Co.	Connection: Unconnected				
Pool: UNDESIGNATED ABO	Formation: ABO			Unit:	
Completion Date: 9-23-81	Total Depth: 4250	Plug Back TD: 4170	Elevation: 3762	Farm or Lease Name: COTTONWOOD FEDERAL	
Csg. Size: 4 1/2 / Wt.: 10.5# / d: / Set At: 4210	Perforations: From 3713 To 3979			Well No.: 1	
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: / Set At: 3604	Perforations: From OPEN ENDED To			Unit: I / Sec.: 26 / Twp.: 6S / 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: 102@ 4250	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
3604	3604	.65	1	2		2" ORIFICE WELL TESTER		

	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						880		820		48 hr. SI
1.	2" Orifice	1 1/4	20	-	65	820	72	760		1 hr.
2.	Well	1 1/4	33	-	67	740	74	700		1 hr.
3.	Tester	1 1/4	42	-	68	650	75	655		1 hr.
4.		1 1/4	48	-	70	560	75	610		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	1160	2" Orifice		.9952	.9608		1109
2.	1738	Well Tester		.9933	.9608		1659
3.	2065			.9924	.9608		1967
4.	2275			.9905	.9608		2165
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 _____ XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

P_c 820 P_c^2 672

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		760	578	94
2		700	490	182
3		655	429	243
4		610	372	300
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.2400$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.5709$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3400$

Absolute Open Flow 3400 Mcfd @ 15.025 Angle of Slope θ 60.8° Slope, n .56

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Mike Lynch	F.L. Buttross, Jr.	