

MEXICO OIL CONSERVATION COM. ON
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

C/SF C-122

APR 28 1982

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4-12-82		APR 28 1982	
Company Mesa Petroleum Co. ✓				Connection Unconnected		O. C. D. ARTESIA, OFFICE	
Pool Undesignated ABO				Formation ABO		Unit	
Completion Date 4-12-82		Total Depth 4250'		Plug Back TD 3960		Elevation 3555'	
Farm or Lease Name Bitter Lake Fed Com		Well No. 1					
Csg. Size 4 1/2	Wt. 10.5#	d	Set At 3990'	Perforations: From 3661 To 3778		Well No.	
Tbg. Size 2 3/8	Wt. 4.7#	d	Set At 3551'	Perforations: From open ended To		Unit Sec. Twp. Rge. J 5 9S 25E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At None		County Chaves	
Producing Thru Tubing		Reservoir Temp. °F 101 @ 4250'		Mean Annual Temp. °F 60		Baro. Press. - P _g 13.2	
State New Mexico							
L	H	Gg .65	% CO ₂ 1	% N ₂ 1	% H ₂ S	Prover 2" orifice	Meter Run well tester

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
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
SI							835		800		72 hr. SI
1.	2" orifice	1	1 1/4	5.5		82	765	86	740		1 hr.
2.	Well	1	1 1/4	10.5		79	675	86	655		1 hr.
3.	Tester	1	1 1/4	18		83	535	89	530		1 hr.
4.		1	1 1/4	19		87	400	90	411		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	535	2" orifice	well	.9795	.9608		503
2	776	Tester		.9822	.9608		732
3	1083			.9786	.9608		1018
4	1122			.9750	.9608		1051
5							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____ X X X X X X X X
3.					Specific Gravity Flowing Fluid _____ X X X X X
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

P _c 813	P _c ² 661	
NO	P _f ²	P _w
1		753
2		668
3		543
4		424
5		

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.3742$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1723$	
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1,250$		<i>Post-Test ID-2</i> <i>6-7-82</i> <i>Comp- SF</i>	

Absolute Open Flow <u>1,250</u> Mcfd @ 15.025	Angle of Slope θ <u>63.5°</u>	Slope, n <u>.5</u>
Remarks: Plot of P _c ² - P _w 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: James Craig	Calculated By: <i>ELB 4-19-82</i> E. L. Buttross, Jr.
Checked By:		

Me Petroleum Co.
 Bitter Lake Fed Com No. 1
 Chaves Co., N. M.
 4-12-82

