

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

Form C-122
Revised 9-1-65

RECEIVED

SEP 14 1973

Type Test		☒ Initial		☐ Annual		☐ Special		Test Date		9-3-73	
Company				Connection				O. C. C. ARTESIA, OFFICE			
Mobile Oil Corp.				—							
Pool				Formation				Unit			
CARLSBAD SOUTH				MORROW				320			
Completion Date		Total Depth		Blow Count		Elevation		Farm or Lease Name			
8-11-73		12,113'		12,090'		3178' G.L.		STATE OIL COMM.			
Seq. Size	wt.	d	Set At	Perforations:		Well No.					
7"	26 #/ft	6.27%	12,113'	From 11925' To 12,056'		#1					
Trq. Size	wt.	d	Set At	Perforations:		Unit		Sec.	Twp.	Rge.	
2 3/8"	4.7 #/ft	1.99%	11,304'	From — To —		C		17-23S-21E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple						Packer Set At		County			
DUAL						11,285'		EDDY			
Producing Thru		Reservoir Temp. °F		Mean Annual Temp. °F		Dens. Press. - P ₀		State			
TUBING		184° 12,113'		60°		13.2		NEW MEXICO			
L	H	G _g	% CO ₂	% N ₂	% H ₂ S	Prover		Meter Run	Date		
11,304'	11,925'	0.587%	1.46	0.22	0			4"	FLANGE		
FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI							4230		100		4440 ST.
1.	4.0 X 1.5			700	14.5	70	3815	70	250		1440
2.	4.0 X 1.5			890	21.0	68	3689	70	280		1140
3.	4.0 X 1.5			870	38.0	74	3339	70	320		1140
4.	4.0 X 1.5			890	65.0	71	2770	70	380		1440
5.											
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{sp}	Rate of Flow Q, Mcfd				
1.	10.84	117.93	703.2	.9905	1.305	1.054	1742				
2.	10.84	137.72	903.2	.9924	1.305	1.070	2069				
3.	10.84	185.26	903.2	.9868	1.305	1.068	2762				
4.	10.84	242.30	903.2	.9905	1.305	1.070	3633				
5.											
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio ———— Mcf/bbl.						
1.	1.06	530	1.50	.900	A.P.I. Gravity of Liquid Hydrocarbons ———— Deg.						
2.	1.34	528	1.50	.873	Specific Gravity Separator Gas ———— 1.587 ———— XXXXXXXXXX						
3.	1.34	534	1.51	.876	Specific Gravity Flowing Fluid ———— XXXXX						
4.	1.34	530	1.50	.873	Critical Pressure ———— 676 ———— P.S.I.A. ———— 676 ———— P.S.I.A.						
5.					Critical Temperature ———— 353 ———— R ———— 353 ———— R						
$P_c = 4243.2$ $P_c^2 = 18004.7$											
NO.	P _t	P _w	P _w ²	P _c ² - P _w ²	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.8308$						
1.	146.54	3842	14763	3242	$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.9735$						
2.	137.65	3722	13855	4149							
3.	116.9	3380	11425	6580							
4.	77.46	2858	8168	9837							
5.											
$ACF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5354$											
Absolute Open Flow ———— 5354 ———— Mcfd @ 15.025 ———— Angle of Slope @ ———— 57° 19' ———— Slope, n ———— .6915 ————											
Remarks: ————											
Approved By Commission: ———— Conducted By: J. E. GORDON, JR. ———— Calculated By: A. R. ALAMEDDINE ———— Checked By: J. E. GORDON, JR. ————											