

0+6-EMOCD-Artesia

1-File

1-Engr BDB

1-Mr. J.A.-Midland MULTIPPOINT AND ONE POINT BACK PRESSURE TEST FOR

NEW MEXICO OIL CONSERVATION COM. MON

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GAS MAR 07 1984

Form C-12
Revised 9-1-65

O. C. D.

ARTESIA, OFFICE

Type Test		☒ Initial ☐ Annual ☐ Special		Test Date		2/29/84	
Company				Connection			
Getty Oil Company				El Paso Natural Gas			
Pool				Formation			
Undesignated <i>Malaga Atoka</i>				Atoka			
Completion Date		Total Depth		Plug Back TD		Elevation	
March, 1982		13,300'		12,195'		2954' GR	
Farm or Lease Name				Well No.			
Malaga Harroun 6" <i>Conn.</i>				1			
Csq. Size	Wt.	d	Set At	Perforations:		Unit	
7"	26#	6.276"	12,571'	From 12,144' To 12,150'		F	
Tbg. Size	Wt.	d	Set At	Perforations:		Sec. Twp. Rge.	
2 3/8"	4.7#	1.995"	11,836'	From -- To --		6 24-S 29-E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple				Packer Set At		County	
Single				11,836'		Eddy	
Producing Thru		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _a	
Tubing		165@ 12,150'		60		13.2	
L	H	G _g	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run
11,836'	11,836'	0.5806	0.434	0.569	--	--	4"
Taps				Flange			
FLOW DATA				TUBING DATA			
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.
SI	4"	X	2"	-	-	64	6612
1.	4"	X	2"	259	13.0	62	6480
2.	4"	X	2"	259	24.0	64	6385
3.	4"	X	2"	267	41.0	56	6250
4.	4"	X	2"	274	77.4	30	5972
5.							
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.
SI	4"	X	2"	-	-	64	6612
1.	4"	X	2"	259	13.0	62	6480
2.	4"	X	2"	259	24.0	64	6385
3.	4"	X	2"	267	41.0	56	6250
4.	4"	X	2"	274	77.4	30	5972
5.							
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	19.81	59.486	272.2	0.9981	1.312	1.022	1,577.1
2	19.81	80.826	272.2	0.9960	1.312	1.022	2,138.4
3	19.81	107.183	280.2	1.0040	1.312	1.024	2,864.0
4	19.81	149.095	287.2	1.0300	1.312	1.028	4,103.1
5							
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.		
1	0.404	522	1.500	0.959	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.		
2	0.404	524	1.506	0.959	Specific Gravity Separator Gas 0.5806 X X X X X X X X		
3	0.416	516	1.483	0.954	Specific Gravity Flowing Fluid X X X X X		
4	0.427	490	1.408	0.946	Critical Pressure 673.0 P.S.I.A. _____ P.S.I.A.		
5					Critical Temperature 348.0 R _____ R		
$P_c = 8011$ $P_c^2 = 64,176.1$ *							
NO	P _t	P _w	P _w ² *	P _c ² - P _w ² *	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 6.669$		
1	-	7879	62,078.6	2,097.5	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.565$		
2	-	7785	60,606.2	3,569.9			
3	-	7653	58,568.4	5,607.7			
4	-	7386	54,553.0	9,623.1			
5							
$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 14,630$							
Absolute Open Flow				14,630 Mcfd @ 15.025		Angle of Slope θ _____	
						Slope, n 0.670	
Remarks: All pressures are extrapolated bottomhole *(x1000)							
Approved By Commission:		Conducted By:		Calculated By:		Checked By:	
		Bill Krafft		Brad D. Bush		D. J. Steiner	