

1 - NMCD - Artesia
1 - File
1 - Dennis Kuhfal - Midland

WIO's
PS-ENGR
1-HS-DF

1-BB

RECEIVED
c/sf
File

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

Form C-122
Revised 9-1-65

O. C. D.
ARTESIA, OFFICE

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4/27/82					
Company Getty Oil Company /				Connection None							
Pool Undesignated				Formation Morrow							
Completion Date 4/24/82		Total Depth 13,300		Plug Back TD 13,276		Elevation 2953.7 GL					
Farm or Lease Name Malaga Harroun 6 Com		Well No. 1									
Csg. Size 5"	Wt. 18	d 4.151	Set At 13,300	Perforations: From 12,557 To 13,007		Unit F					
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 12,347	Perforations: From To		Sec. 6	Twp. 24				
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 12,322		County Eddy					
Producing Thru 2 3/8 tbg.		Reservoir Temp. °F 171 @ 13,300		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2					
State New Mexico											
L 12,457	H 12,457	G _g 0.6354	% CO ₂ 6.975	% N ₂ 0.540	% H ₂ S	Prover	Meter Run 4"				
						Taps Flange					
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	Duration of Flow
SI							4225	72	Packer		
1.	4"	1.25"	150	10.0	70	3775	72				1 hr.
2.	4"	1.25"	150	16.0	68	3500	69				1 hr.
3.	4"	1.25"	160	26.0	71	3040	69				1 hr.
4.	4"	1.25"	165	54.0	70	2520	67				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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd				
1	7.469	40.398	163.2	0.9905	1.255	1.013	380				
2	7.469	51.100	163.2	0.9924	1.255	1.013	482				
3	7.469	67.106	173.2	0.9896	1.255	1.013	631				
4	7.469	98.096	178.2	0.9905	1.255	1.014	924				
5.											
NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.						
					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.						
1.	0.23	530	1.48	0.975	Specific Gravity Separator Gas _____ 0.635						
2.	0.23	528	1.48	0.975	Specific Gravity Flowing Fluid _____ 0.635						
3.	0.25	531	1.49	0.974	Critical Pressure _____ 699 P.S.I.A.						
4.	0.26	530	1.48	0.972	Critical Temperature _____ 357 R						
5.											
P _c 5695.2 P _c ² 32,435.3											
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.054$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.060$						
1		5179.2	26,824.1	5611.2							
2		4895.2	23,963.0	8472.3							
3		4508.2	20,323.9	12,111.4							
4		3885.2	15,094.8	17,340.5							
5											
Absolute Open Flow 1,470 Mcfd @ 15.025					Angle of Slope θ _____					Slope, n 0.799	
Remarks: Bottom hole pressure measured @ mid point of perfs											
Approved By Commission:			Conducted By: Bill Krafft			Calculated By: Philip W. Smith			Checked By: Dale R. Crockett		