

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

MAY 25 1979

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 5-15-79	
Company MESA PETROLEUM COMPANY		Connection AIR	
Well 10000-1 ABO		Formation ABO	
Completion Date 4-12-79		Total Length 7675	Flow Back TD 4952
Casing Size 5		Well 18/15	Elevation 3889 GL
Perforations From 4800 To 4890		Form or Lease Name CATCLAW STATE	
Well No. # 1		Unit G 31 17 21	
County EDDY		State NEW MEXICO	
Producing thru TBG.		Reservoir Temp. °F 122 @ 4822	Mean Annual Temp. °F 60°
L 4822		R 4822	Gg .632
% CO ₂ .05		% N ₂ 1.07	% H ₂ S 2"
Prover 2"		Meter Run	Feet
FLOW DATA			
NO.	Prover Line Size	X	Orifice Size
1.	2 X	3/8	15
2.	2 X	1/8	1200
3.	2 X	1/4	940
4.	2 X	5/16	510
5.			
TUBING DATA			
NO.	Prover Line Size	X	Orifice Size
1.	2 X	3/8	15
2.	2 X	1/8	1200
3.	2 X	1/4	940
4.	2 X	5/16	510
5.			
Casing Data			
NO.	Prover Line Size	X	Orifice Size
1.	2 X	3/8	15
2.	2 X	1/8	1200
3.	2 X	1/4	940
4.	2 X	5/16	510
5.			
RATE OF FLOW CALCULATIONS			
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m
1.	4.279		28.2
2.	.2648		1213.2
3.	1.087		953.2
4.	1.672		523.2
5.			
NO.	P _r	Temp. °R	T _r
1.	.08	536	1.46
2.	1.81	536	1.46
3.	1.42	537	1.46
4.	.78	536	1.46
5.			
Gas Liquid Hydrocarbon Ratio DRY			
A.P.L. Gravity of Liquid Hydrocarbons			
Specific Gravity Separator Gas .632			
Specific Gravity Flowing Fluid X X X X X			
Critical Pressure 670 P.S.I.A.			
Critical Temperature 368 R			
P _r 1288.2 P _w 1659.5			
NO.	P _r	P _w	P _r ² - P _w ²
1.		1278.2	1633.8
2.		1223.2	1496.2
3.		963.2	927.8
4.		568.2	322.9
5.			
(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 10.162$			
(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 3.855$			
AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.696$			
Absolute Open Flow 1,696			
Mold 15.025			
Angle of Slope 59.75°			
Slope, n .582			
Remarks:			
Approved By: J. DAVIS		Conducted By: LARRY DAVIS	
Checked By:		Checked By:	