

MULTIPOINT A.

ONE POINT BACK PRESSURE TEST.

OR GAS RECEIVED

SEP 19 1975

Type Test		☒ Initial ☐ Annual ☐ Special		Test Date 7-21-75		Federal No. LC 072 015-C	
Company Maralo, Inc.		Connection None		ARTESIA, OFFICE			
Pool North Avalon		Formation Wolfcamp		Unit 0			
Completion Date		Total Depth 11,040		Plug Back TD 10,550		Elevation 3205 Gr	
Farm or Lease Name Hanson Federal							
Csg. Size 5 1/2	Wt. 17.5#	d 4.892	Set At 11,024	Perforations: From 8332 To 8493		Well No. 2	
Teg. Size 2 3/8 EUE	Wt. 4.70	d 1.995	Set At 8481	Perforations: From To		Unit 0 Soc. 28 Twp. 20S Rye. 27-E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 151° @ 8763		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State New Mexico							
L 8763	H 8763	G _g .725	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run X Taps

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
5.							1580	74			
1.	4.0		1.0	450	10"	95	1557	75			1 Hr
2.	4.0		1.0	455	11"	92	1476	77			1 Hr
3.	4.0		1.0	460	15	91	1410	78			1 Hr
4.	4.0		1.0	460	23	89	1298	81			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, Mgd
1.	4.753	68.058	463.2	.9680	1.1744	1.049	386
2.	4.753	71.764	468.2	.9706	1.1744	1.049	408
3.	4.753	84.249	473.2	.9715	1.1744	1.059	484
4.	4.753	104.324	473.2	.9732	1.1744	1.059	600
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.69	555	1.39	.909	1.484	49.8 @ 60°F	.725	XXXXXX	668	398
2.	.70	552	1.39	.908				XXXXXX		
3.	.71	551	1.38	.891						
4.	.71	549	1.38	.891						
5.										

NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²
1.	1593.2	1570.2	2466	72
2.		1489.2	2218	320
3.		1423.2	2025	513
4.		1311.2	1719	819
5.				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.9473$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.3702$	
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1147$			

Absolute Open Flow 1147 Mgd @ 15.025		Angle of Slope 61° 38.5' Slope, n .539	
Remarks: Due to the very low gas-oil ratio and the gravity of the produced fluid, the Step-wise procedure in calculating Surface pressures from observed sub-surface pressure will not work. Observed Surface pressures have been plotted.			
Approved By Commission:	Conducted By: RGR & JPS	Calculated By: H L Hagler	Checked By:
WEST TEXAS CONSULTING SERVICE, INC.			