

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

File
Form C-1e
Revised 9-1-65

RECEIVED BY

MAY 01 1984

O. C. D.

ARTESIA, OFFICE

Type Test 4 POINT ☒ Initial ☐ Annual ☐ Special		Test Date 4-4-84	
Company MARALO INC. ✓		Connection TO AIR NEW WELL	
Pool PECOS SLOPE <i>ABO</i>		Formation ABO	
Completion Date 4-1-84	Total Depth 4200.	Plug Back To 4157.	Elevation 3619.7 3620.
Furn or Lease Name PECOS STATE "16"		Well No.	
Well Size 4.500	wt. 11.6	d 4.052	Set At 4200.
Perforations: From 3898.	To 4006.		
Perf. Size 2.375	wt. 4.7	d 1.995	Set At 3700.
Perforations: From 0.	To 0.		
Type Well - Single - Braidedhead - G.G. or G.O. Multiple SINGLE		Packer Set At 0	
Producing Thru TUBING	Reservoir Temp. °F 104 @ 3952	Mean Annual Temp. °F 60.0	Enro. Press. - P _a 13.2
County CHAVES		State NEW MEXICO	
L 3952.	H 3952.	G _g 0.678	% CO ₂ 2.96
% N ₂ 6.10	% H ₂ S 0	Provoz 0	Motor Run 3.1
Taps FLANGE			

FLOW DATA						TUBING DATA		B.H.P. DATA		Duration of Flow
NO.	Provoz 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.	
51							975.	60.	1090.	
1.	3.07 X 2.250			105.	2.5	100.	947.	64.	1073.	10/64
2.	3.07 X 2.250			105.	6.5	62.	925.	65.	1053.	12/64
3.	3.07 X 2.250			110.	14.0	42.	891.	65.	1024.	16/64
4.	3.07 X 2.250			120.	34.0	66.	815.	67.	970.	20/64
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, Mscf/d
1	28.78	17.19	118.2	0.9636	1.2145	1.0081	584.
2	28.78	27.72	118.2	0.9981	1.2145	1.0106	977.
3	28.78	41.53	123.2	1.0178	1.2145	1.0124	1496.
4	28.78	67.30	133.2	0.9943	1.2145	1.0117	2366.
5							

NO.	P ₁	Temp. °R	T ₁	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbon	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	0.18	560.	1.55	0.984	0.	0.	0.678	X X X X X X X X	671.	361.
2	0.18	522.	1.44	0.979				X X X X X		
3	0.18	502.	1.39	0.976						
4	0.20	526.	1.46	0.977						
5										

NO.	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1	1180.	975.	950.	916.	868.	815.	781.	747.	713.	679.
2	1137.	957.	916.	868.	815.	781.	747.	713.	679.	645.
3	1076.	931.	868.	815.	781.	747.	713.	679.	645.	611.
4	957.	884.	781.	713.	645.	577.	511.	445.	379.	313.
5										

NO.	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1	1180.	975.	950.	916.	868.	815.	781.	747.	713.	679.
2	1137.	957.	916.	868.	815.	781.	747.	713.	679.	645.
3	1076.	931.	868.	815.	781.	747.	713.	679.	645.	611.
4	957.	884.	781.	713.	645.	577.	511.	445.	379.	313.
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2	1137.	957.	916.	868.	815.	781.	747.	713.	679.	645.
3	1076.	931.	868.	815.	781.	747.	713.	679.	645.	611.
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MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

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Revised 9-1-65

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MAY 01 1984
O.C.D.
ARTESIA, OFFICE

Type Test 4 POINT ☒ Initial ☐ Annual ☐ Special		Test Date 4-4-84	
Company MARALO INC. ✓		Connection TO AIR NEW WELL	
Pool PECOS SLOPE <i>abo</i>		Formation ABO	
Completion Date 4-1-84	Total Depth 4200.	Plug Lines 4157.	Elevation 3619.7 3620.
Well No. #2			Farm or Lease Name PECOS STATE "16"
Case Size 4.500	Wt. 11.6	d 4.052	Set At 4200.
Perforations From 3898. To 4006.	Well No. #2		
Trg. Size 2.375	Wt. 4.7	d 1.995	Set At 3700.
Perforations From 0. To 0.	Unit K		
Type Well - Single - Broadhead - G.C. or G.O. Multiple SINGLE			Factor Set At 0
Producing Thru TUBING			County CHAVES
Reservoir Temp. °F 104 3952			State NEW MEXICO
Mean Annual Temp. °F 60.0			Grade NEW MEXICO
L 3952.	H 3952.	Cg 0.678	% CO ₂ 2.96
		% N ₂ 6.10	% H ₂ S 0
		Provd Ø	Meter Run 3.1
		Type FLANGE	

FLOW DATA						TUBING DATA		B.H.P. DATA		Duration of Flow
NO.	Provd 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.	
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NO.	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
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3	0.18	502.	1.39	0.976						
4	0.20	526.	1.46	0.977						
5										

NO.	P ₁ ²	P _w ²	P ₂ ²	P ₁ ² - P _w ²
1	1180.	975.	950.	30.
2	1137.	957.	916.	64.
3	1076.	931.	868.	112.
4	967.	884.	781.	199.
5				

(1) $\frac{P_c^2}{P_1^2 - P_w^2} = 4.9257$ (2) $\left[\frac{P_c^2}{P_1^2 - P_w^2} \right]^n = 3.2297$

AOR = Q $\left[\frac{P_c^2}{P_1^2 - P_w^2} \right]^n = 7642.$

Post ID-2
5-4-84
Comp & BK

Absolute Open Flow	7642.	Mcf @ 15.025	Angle of Slope	53.7	Slope, n	0.735
Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS.						
Approved by Commission	Conducted By:	Calculated by:	Checked By:			
	RICHARD TOWNLEY	BEJNETT & CATHEY INC.	he			