

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

457
 Form C-12
 Revised 9-1-65

O. C. D.
ARTESIA, OFFICE

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 6-24-85	
Company READ & STEVENS		Connection TO AIR NEW WELL	
Pool SOUTH CARLSBAD		Formation ATOKA	
Completion Date 6-19-85	Total Depth 12620 / 12,700	Plug Hole 11830	Elevation 3120
Farm or Lease Name KIMBERLY		Well No. 1	
Well Size 5.000	Wt. 23.2	Set At 4.044	12180
Perforations: From 11157 To 11801		Well No. 1	
Fig. Size 2.375	Wt. 4.7	Set At 1.995	11090
Perforations: From 0 To 0		Unit Sec. Typ. Rye. 19 23S 28E	
Type Well - Single - (Wardenhead - G.O. or G.O. Multiple) SINGLE		Packer Set At 11090	
Producing Thru TUBING		County EDDY	
Reservoir Temp. °F 207 @ 11479		Mean Annual Temp. °F 60.0	
Baro. Press. - P _g		State NEW MEXICO	
L 11479	H 11479	Q _g 0.641	% CO ₂ 1.25
		% N ₂ 0.67	% H ₂ S 0
		Prover 0	Meter Run 2.0
			Type FLANGE

FLOW DATA						TUBING DATA		B.H.P. 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.	
51							5370	207	6904	
1.	2.00 X 1.500			600	2.0	80	4035	207	5389	5/64
2.	2.00 X 1.500			390	4.0	80	3420	207	4659	6/64
3.	2.00 X 1.500			380	5.0	80	2780	207	4033	6.5/64
4.	2.00 X 1.500			380	6.0	80	2085	207	3401	7/64
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_{p,m}}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, McM
1	13.20	35.02	613.2	0.9813	1.2490	1.0522	596
2	13.20	40.16	403.2	0.9813	1.2490	1.0345	672
3	13.20	44.34	393.2	0.9813	1.2490	1.0337	742
4	13.20	48.57	393.2	0.9813	1.2490	1.0337	812
5							

NO.	P _g	Temp. °R	Q	Z	Gas Liquid Hydrocarbon Ratio _____ Mol/bbl.
1	0.91	540	1.47	0.903	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	0.60	540	1.47	0.934	Specific Gravity Separator Gas _____ 0.641
3	0.58	540	1.47	0.936	Specific Gravity Flowing Fluid _____ 0.641
4	0.58	540	1.47	0.936	Critical Pressure _____ 675 P.S.I.A.
5					Critical Temperature _____ 367 °R

P ₁ 5571.9 P ₂ 31046			
NO.	P ₁ ²	P _w ²	P _w ² - P ₁ ²
1		4224	17839
2		3598	12943
3		3078	9472
4		2572	6613
5			

$$(1) \frac{P_g^2}{P_g^2 - P_w^2} = 1.2707$$

$$AOF = Q \left[\frac{P_g^2}{P_g^2 - P_w^2} \right]^n = 917$$

$$(2) \left[\frac{P_g^2}{P_g^2 - P_w^2} \right]^n = 1.1286$$

Absolute Open Flow _____ 917 _____ McM @ 15.025	Angle of Slope _____ 63.2	Slope, n _____ 0.505
Remarks: B.H.P. MEASURED WITH AMERADA HESS PRESSURE ELEMENT		

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	BENNETT & CATHEY	RICHARD TOWNLEY	