

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

Form C-122
Revised 9-1-65

JUL 17 1974

O. C. C.
ARTESIA, OFFICE

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 7-1-74	
Company Atlantic Richfield Co.		Connection NONE	
Pool <i>Artesia Morrow Gas</i> Undesignated Morrow		Formation MORROW GAS	
Completion Date 6-23-74		Total Depth 11130'	Plug Back TD 11075'
Csg. Size 5.5		Wt. 17.0	Set At 4.892
Tng. Size 2.375		Wt. 4.70	Set At 1.995
Perforations: From 10775 To 10830'		Elevation 3239' DF	
Farm or Lease Name State BQ Com		Well No. 1	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single		Packer Set At 10666'	
Producing Thru Tubing		Reservoir Temp. °F 182.9	Mean Annual Temp. °F 60
Baro. Press. - P _a 13.2		State New Mexico	
L 10802	H -	G _g 0.584	% CO ₂ 1.290
% N ₂ 0.242		% H ₂ S 0.00	Prover X
Meter Run F		Taps F	

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. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	
1.	4" 16/64"	2	600	29	62	2677	90	PACKER			1.0
2.	4" 14/64"	2	600	19	74	2900	93				1.0
3.	4" 12/64"	2	600	16	64	3090	93				1.0
4.	4" 9/64"	2	510	7	84	3325	87				1.0
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 _{pv}	Rate of Flow Q, Mc/d
1.	19.81	133.35	613.2	0.9981	1.309	1.045	3606.7
2.	19.81	107.94	613.2	0.9868	1.309	1.042	2878.1
3.	19.81	99.05	613.2	0.9962	1.309	1.045	2673.8
4.	19.81	60.57	523.2	0.9777	1.309	1.033	1586.3
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1.	0.90	522	1.52	0.915	A.P.I. Gravity of Liquid Hydrocarbons	-	Deg.
2.	0.90	534	1.55	0.921	Specific Gravity Separator Gas	0.584	XXXXXXXXXX
3.	0.90	524	1.52	0.915	Specific Gravity Flowing Fluid	XXXXXX	
4.	0.77	544	1.58	0.937	Critical Pressure	679	P.S.I.A.
5.					Critical Temperature	344	R

NO.	P _c	P _w	P _c ²	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.859$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.294$
1.	4709.2	22176.6	3797.2	14418.7	7775.9		
2.	-	-	4041.2	16331.3	5845.3		
3.	-	-	4091.2	16737.9	5438.7		
4.	-	-	4406.2	19414.6	2762.0		
5.							

Absolute Open Flow 8274		Mcf/d @ 15.025	Angle of Slope @ 51° 40'	Slope, n 0.791
Remarks: * BHP @ (-7563') 10802' used for pressure calculations				
Approved By Commission:	Conducted By: Coleman Pet. Eng. Co.	Calculated By: Joe A. Coleman	Checked By: Joe A. Coleman	