

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 10-18-74		OCT 30 1974	
Company Atlantic Richfield Co.		Connection None		D.C.C.	
Pool Undesignated		Formation Atoka		Unit ARTESIA	
Completion Date 10-18-74		Total Depth 11140		Plug Back TD 10936	
Elevation 3298KB		Farm or Lease Name State BR		Well No. #1	
Csg. Size 5 1/2	Wt. 15.50	d 4.950	Set At 11134	Perforations: From 10104 To 10108	Unit K 16
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 10735	Perforations: From 10021 to crossover	Sec. 21S
Type Well - Single - Bradenhead - G.G. or G.O. Multiple GG				Packer Set At 10020	Twp. 26E
Producing Thru Tubing		Reservoir Temp. °F 226 @ 10000		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State New Mexico		County Eddy	
L 1.0106	H -	G _g 0.652	% CO ₂ 0.325	% N ₂ 0.847	% H ₂ S 0.00
Prover		Meter Run X		Taps F	

FLOW DATA							TUBING DATA		CASING DATA		Duration of 16800
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	
SI	4 11/64	1.500	630	16	82	2550	70				
1.	4 7/64	1.500	690	8	84	2962	74				
2.	4 6/64	1.500	570	5	76	3365	75				
3.	4 5/64	1.500	270	4	62	3840	76				
4.											
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, Mcfd
1	10.84	101.44	643.2	0.9795	1.238	1.056	1408.1
2	10.84	74.89	703.2	0.9777	1.238	1.059	1040.6
3	10.84	54.00	583.2	0.9850	1.238	1.054	752.3
4	10.84	33.66	283.2	0.9981	1.238	1.027	463.1
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1.	0.96	542	1.46	0.896	A.P.I. Gravity of Liquid Hydrocarbons	-	Dug.
2.	1.04	544	1.47	0.892	Specific Gravity Separator Gas	0.652	XXXXXXX
3.	0.87	536	1.44	0.901	Specific Gravity Flowing Fluid	XXXXXX	
4.	0.42	522	1.41	0.948	Critical Pressure	673	P.S.I.A.
5.					Critical Temperature	371	P.S.I.A.

NO.	P _t ²	*P _w ²	P _w ²	P _t ² - P _w ²	(1) $\frac{P_c^2}{P_t^2 - P_w^2} = 1.673$	(2) $\left[\frac{P_c^2}{P_t^2 - P_w^2} \right]^n = 1.606$
1	-	3364.2	11317.8	16806.1		
2	-	4002.2	16017.6	12052.3		
3	-	4407.2	19423.4	8700.5		
4	-	4808.2	23118.8	5005.1		
5						

AOF = Q $\left[\frac{P_c^2}{P_t^2 - P_w^2} \right]^n = 2261$

11-1-74

Absolute Open Flow 2261		Mcf @ 15.025		Angle of Slope @ 47°22'		Slope, n 0.921	
Remarks: *BHP @ (-6808) 10106' Used for pressure calculations							
Approved By Commission:		Conducted By: Coleman Petr. Eng.		Calculated By: Joe A. Coleman		Checked By: Joe Coleman	