

NEW MEXICO OIL CONSERVATION COM. SION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

c/sf
 Form C-2
 Revised 5-1-65

RECEIVED BY
FEB 19 1987
O. C. D.
ARTESIA, OFFICE

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 2-11-87	
Company ARCO Oil and Gas			Connection El Paso #58-805-01		
Pool Undesignated S. Empire Morrow			Formation Morrow		
Completion Date 1-16-85		Total Depth 10,950		Plug Back 1... 10,866	
Elevation 3636.8 GL		Farm or Lease Name Federal 11			
Casing Size 5 1/2	Wt. 17	d 4.892	Set At 10,950	Perforations: From 10,721 To 10,728	
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 10,648	Perforations: From 10,763 To 10,765	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single				Packer Set At 10,648	
Producing Thru Tbg		Reservoir Temp. °F 49 @ 10,900		Moan Annual Temp. °F 60	
				Baro. Press. - P _a 13.2	
L 10,648		H 10,648	G _g .654	% CO ₂ .543	% N ₂ .545
				% H ₂ S -0-	Provor
				Meter Run 4.026	Taps Flg

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							1455				24 Hrs
1.	4 X 1.750			544	1	80	1412	65	Pkr		1 Hr
2.	4 X 1.750			546	2.3	80	1355	67	Pkr		1 Hr
3.	4 X 1.750			549	5.76	72	1264	69	Pkr		1 Hr
4.	4 X 1.750			546	11.7	74	1090	71	Pkr		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, Mcfd
1	14.92	23.61	557.2	.9813	1.2365	1.051	449
2	14.92	35.86	559.2	.9813	1.2365	1.051	682
3	14.92	56.91	562.2	.9887	1.2365	1.055	1095
4	14.92	80.89	559.2	.9868	1.2365	1.054	1552
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
					A.P.I. Gravity of Liquid Hydrocarbons 60 @ 62 ° Dec.
1	.83	540	1.44	.905	Specific Gravity Separator Gas .654 XXXXXXXXX
2	.83	540	1.44	.905	Specific Gravity Flowing Fluid XXXXX
3	.84	532	1.42	.899	Critical Pressure 670 P.S.I.A. _____ P.S.I.A.
4	.83	534	1.42	.900	Critical Temperature 375 °R _____ °R
5					

P _r 2043.2 P _c 24174.7				(1) $\frac{P_c^2}{P_r^2 - P_w^2} = 2.4$		(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.97$	
NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 3057.4$		
1		1956.2	3826.7	348			
2		1890.2	3572.8	601.9			
3		1786.2	3190.5	984.2			
4		1561.2	2437.3	1737.4			
5							

Absolute Open Flow 3057.4 Mcfd @ 15.025		Angle of Slope @ 52 ° 15 '		Slope, n .774	
Remarks: Well produced 0 bbls cond. and 0 bbls water during test					
Approved By Commissioner		Conducted By Lon Briley		Checked By Doug Conklin	