

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3/3/86	
Company ARCO Oil & Gas Co., Div. of Atlantic Richfield				Connection None	
Pool Basin Dakota				Formation Dakota	
Completion Date 2/21/86		Total Depth 6726		Plug Back TD 6639	
				Elevation 5750 GL	
Farm or Lease Name Maddox WN Fed. C					
Coq. Size 4-1/2"	Wt. 11.6#	d 4.052	Set At 6726	Perforations: From 6370 To 6517	
Well No. #1E					
Thq. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 6351	Perforations: From To	
Unit P		Sec. 14		Twp. 30N	
Rge. 13W					
Type Well - Single - Ardenhead - G.G. or G.O. Multiple Single				Packer Set At None	
County San Juan					
Producing Thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F	
				Bare. Press. - P _b 12.0	
State New Mexico					
L 6351	H 6351	G _g .696	% CO ₂	% N ₂	% H ₂ S
Prover 2"		Meter Run		Taps	

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.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI	2"		0.750				1540		1540		10 days
1.				140		80	228		515		3 hrs.
2.											
3.											
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	9.453		142	.9813	1.199	1.014	1601
2.							
3.							
4.							
5.							

NO.	P ₁	Temp. °R	T ₁	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature	Mcf/bbl.	Deg.
1.	.21	540	1.39	0.972			.696		669	388		
2.												
3.												
4.												
5.												

P _c 1552 P _c ² 2408704					APR 07 1986 OIL CON. DIV. DIST. 3	
NO.	P ₁ ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0524$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0390$
1	57600	346	119832	2288872		
2						
3						
4						
5						

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1663$			
Absolute Open Flow 1663		Mcf @ 15.025	
Angle of Slope @		Slope, n .75	
Remarks:			
Approved By Division Conducted By: Calculated By: Checked By:			