

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 2-1-82			
Company Arco Oil & Gas Co., Div. of Atlantic Richfield Co.					Connection None			
Pool Basin Dakota					Formation Dakota		Unit	
Completion Date 1-23-82			Total Depth 6791		Plug Back TD 6742		Elevation 5748	
Firm or Lease Name State "B" Com					Well No. 1E			
Coq. Size 4.500	Wt. 10.5	d 4.052	Set At 6786	Perforations: From 6548 To 6630				
Trq. Size 2.375	Wt. 4.7	d 1.995	Set At 6488	Perforations: From To		Unit E	Sec. 16	Twp. 29N
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single Gas					Packer Set At None		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _a 12.0		State New Mexico
L 6488	H 6488	Gg .680(EST)	% 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							1168		1169		SI 9 Days
1.	2"		.750	16		65	39		265		Flow 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		28	.9952	1.213	1.000	320
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	.04	525	1.36	1.000	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas .680 (EST) XXXXXXXXXX
3.					Specific Gravity Flowing Field XXXXX
4.					Critical Pressure 669 P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature 385 R _____ R

NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²
1	2601	71	5081	1389680	
2.					
3.					
4.					
5.					

(1) $\frac{P_r^2}{P_w^2 - P_r^2} = 1.0037$

(2) $\left[\frac{P_r^2}{P_w^2 - P_r^2} \right]^n = 1.0027$

AOG = Q $\left[\frac{P_r^2}{P_w^2 - P_r^2} \right]^n = 321$

Absolute Open Flow 321 Mcfd @ 15.025

Angle of Slope 0

Slope, n .75

Remarks: Well Tested Thru 48/64" Choke

Approved By Division	Conducted By: Rex Hitchcock, Jr.	Calculated By: Rex Hitchcock, Jr.	Checked By:
----------------------	-------------------------------------	--------------------------------------	-------------