

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 2/14/85	
Company Union Texas Petroleum Corp.				Connection El Paso Natural Gas Company	
Pool Basin				Formation Dakota	
Completion Date 1/29/85		Total Depth 6230		Plug Back TD 6172	
Elevation 5921		RECEIVED FEB 19 1985 OIL CON. DIST. Richardson			
Csg. Size 4.500					
Set At 6220		Perforations: From 5931 To 6051		Well No. 2-E	
Thg. Size 2.375		WI. 4.70		d 1.995	
Set At 6029		Perforations: Open Ended		Unit Sec. Twp. Rge. K 11 27N 13W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At NA	
Producing Thru Tubing		Reservoir Temp. °F #		Baro. Press. - P _a 12	
County San Juan		State New Mexico			
L 6019		H		G _g 0.650	
% CO ₂		% N ₂		% H ₂ S	
Prover		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"		3/4"				1530		1565		7 days
1.							216	80°	577		3 hours
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	12.3650		228	0.9813	0.9608	1.020	2711
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2					Specific Gravity Separator Gas _____ X X X X X X X X
3					Specific Gravity Flowing Fluid _____ X X X X X
4					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5					Critical Temperature _____ R _____ R

$P_c = 1577$ $P_c^2 = 2,486,929$					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.1621$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1192$	
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²				
1		589	346,921	2,140,008				
2								
3								
4								
5								

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3034$

Absolute Open Flow 3034 Mcfd @ 15.025 Angle of Slope @ _____ Slope, n 0.75

Remarks: Estimated fluid production: 3 bbl. condensate and 2 bbl. of water per day.

Approved By Division	Conducted By: Floyd Woodward	Calculated By: Ken Roddy	Checked By:
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EXHIBIT A

LEASE: SF-077972

RICHARDSON # 2E

1520' FSL & 1520' FWL
SEC. 11, T27N, R13W
SAN JUAN COUNTY, N.M.

50' OF NEW ROAD AND THE
IMPROVEMENT OF 300' OF THE
EXISTING ROAD IS NEEDED.

