

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 11-13-78		SPUD DATE: 6-23-78	
Company Newbourne Oil Company			Connection El Paso Natural Gas Company		
Pool Querecho Plains			Unit K		
Completion Date 10-15-78		Total Depth 13200		Plug Back TD 13140	
				Elevation 3727.7 GL	
Casing Size 5 1/2		Set At 13200		Perforations From 12710 To 12814	
Tub. Size 2 3/8		Set At 12560		Perforations From To	
Type Well - Single - Prodenhead - G.G. or G.O. Multiple Single				Packer Set At 12560	
Producing Thru Tbg.		Reservoir Temp. °F 183 @ 13024		Mean Annual Temp. °F 60	
				Baro. Press. - P _g 13.2	
L 13024		H 13024		G _g .697	
				% CO ₂	
				% N ₂	
				% H ₂ S	
				Prover	
				Meter Run 4	
				Taps Flg.	

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							3190				72 hrs.
1.	1/2 x	1.000	611	4.41	70	2720					1 hr.
2.	1/2 x	1.000	611	10.89	81	2230					1 hr.
3.	1/2 x	1.000	611	23.04	86	1815					1 hr.
4.	1/2 x	1.000	611	30.25	91	1355					1 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{P_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor Fpv	Rate of Flow Q, Mcfd
1	4.753	52.47	624.2	.9905	1.198	1.075	318
2	4.753	82.45	624.2	.9804	1.198	1.068	492
3	4.753	119.92	624.2	.9759	1.198	1.066	710
4	4.753	137.41	624.2	.9715	1.198	1.062	807
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcft/bbl.
1	.93	530	1.35	.866	58.814	58.814
2	.93	541	1.38	.876	57 @ 60	57 @ 60
3	.93	546	1.39	.880	Specific Gravity Separator Gas	.697
4	.93	551	1.41	.886	Specific Gravity Flowing Fluid	X X X X X
5.					Critical Pressure	668
					Critical Temperature	392

NO.	P _r	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.386$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.281$
1	4686.2	3355.6	11260.1	2064.2		
2	4124.2	2904.6	8436.7	5787.5		
3	3690.2	2569.4	6601.8	7622.4		
4	2896.2	1990.3	3961.3	10262.9		
5	5186.2	3771.5	S.I.P.			

Absolute Open Flow		1.034	Mcft/d @ 15.025	Angle of Slope	52.75°	Slope, n	.759
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Remarks: B.H.P. taken from a bomb set at 13024.
11 bbls. of distillate were produced during the test.

Approved by Commission:	Conducted By:	Calculated By:	Checked By:
	Rick Pagan	Rick Pagan	