

EIGHTH POINT AND NINTH POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

☒ Initial ☐ Annual ☐ Special		6-23-82		AUG 4 1982	
Company THE PETROLEUM CORP. OF DELAWARE			Connection EL PASO NATURAL GAS COMPANY		
Pool East Burton Flat			Formation Morrow		Unit O. C. D. ARTESIA, OFFICE
Completion Date 4-1-82		Total Length 11,600		Plug Back TD 11,559	
Casing Size 4 1/2		ID 12.70		Perforations: From 11,177 To 11,314	
Tubing Size 2 3/8		ID 4.70		Perforations: From To	
Type of Well - Single - Broadhead - G.C. or G.O. Multiple Dual			Packer Set At 10,710		Form or Lease Name Superior
Producing Interval Tbg.		Nearest Temp. °F 186 @ 11,246		Baro. Press. - P ₀	
Mean Annual Temp. °F		Baro. Press. - P ₀		State New Mexico	
L 11,246	H 11,246	Gr .626	% CO ₂ .8	% N ₂ .38	% H ₂ S .08
Prover		Meter Run 4"		Taps Flg.	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Flow Rate 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.	
51							2180			
1.	4 X 1.250			371	2.89	90	2032			
2.	4 X 1.250			378	6.25	97	1978			
3.	4 X 1.250			383	12.25	87	1875			
4.	4 X 1.250			393	20.25	83	1763			
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h P_{01}}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super. Compress. Factor, Zpv	Rate of Flow O. Moid
1	7.469	33.32	384.2	.9723	1.264	1.030	315
2	7.469	49.45	391.2	.9662	1.264	1.029	464
3	7.469	69.67	396.2	.9750	1.264	1.031	661
4	7.469	90.69	406.2	.9786	1.264	1.035	867
5							

NO.	$\bar{P}_r$	Temp. °R	T_r	Z	Gas Liquid Hydrocarbon Ratio _____ Dry _____ Mcl/bbl.	A.P.L. Gravity of Liquid Hydrocarbons _____ Deg.
1	.57	550	1.51	.943	Specific Gravity Separator Gas .626	XXXXXX
2	.58	557	1.53	.945	Specific Gravity Flowing Fluid _____	XXXXXX
3	.59	547	1.50	.940	Critical Pressure 671 P.S.I.A.	P.S.I.A.
4	.61	543	1.49	.933	Critical Temperature 365 R	R
5						

NO.	P_r	P_w	P_r^2	P_w^2	$P_r^2 - P_w^2$
1	4182.8	2045.9	4185.9	624.2	
2	3964.9	1992.9	3971.5	838.6	
3	3565.3	1891.8	3578.8	1231.3	
4	3154.9	1782.8	3178.2	1631.9	
5					

$$(1) \frac{P_r^2}{P_r^2 - P_w^2} = 2.948$$

$$AOF = 0 \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.334$$

$$(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.692$$

Absolute Open Flow	2,334	Moid @ 15.025	Angle of Slope @	47.5°	Slope, n	.916
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Remarks: Made no fluid during test.

Approved by Division	EL PASO EXPLORATION CO. Reston & McGowen	EL PASO EXPLORATION CO. Roy McGowen	Checked by:
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