NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

SF File 127

Form C-122
Revised 9-1-65

Type Test: ☒ Initial ☐ Annual ☐ Special			Test Date: 4/14/80	RECEIVED SPUD DATE: N/A
Company: The Petroleum Corporation ~~of Del.~~		Connection: El Paso Natural Gas Company		MAY - 5 1980
Pool: West Parkway Morrow		Formation: Morrow		Unit: B — O. C. D. ARTESIA, OFFICE
Completion Date: 12-11-79	Total Depth: 11,600	Plug Back TD: 11,377	Elevation: 3325.6 GL	Farm or Lease Name: Parkway West Unit
Csg. Size: 4½ / Wt.: 13.5-11.6 / d: 3.958 / Set At: 11,524		Perforations: From 11,280 To 11,466		Well No.: 7
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: 1.995 / Set At: 11,000		Perforations: From open To end		Unit: B / Sec.: C / Twp.: 22 / Rge.: 19 / 29
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 11,000		County: Eddy
Producing Thru: Tbg.	Reservoir Temp. °F: 187 @	Mean Annual Temp. °F	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
*11,292	*11,292	.636	.71	.70			4	Flg.

FLOW DATA / TUBING DATA / CASING DATA

NO.	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	Duration of Flow
SI							3028				72 hrs.
1.	4	x	1.250	478	3.6	74	2695				1 hr.
2.	4	x	1.250	480	13.0	76	2297				1 hr.
3.	4	x	1.250	482	24.0	74	1885				1 hr.
4.	4	x	1.250	488	33.6	76	1497				1 hr.
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	7.469	42.05	491.2	.9868	1.254	1.044	406
2	7.469	80.07	493.2	.9850	1.254	1.043	770
3	7.469	109.02	495.2	.9868	1.254	1.044	1052
4	7.469	129.77	501.2	.9850	1.254	1.044	1250
5							

NO.	P_t	Temp. °R	T_r	Z
1.	.73	534	1.45	.918
2.	.74	536	1.46	.919
3.	.74	534	1.45	.917
4.	.75	536	1.46	.918
5.				

Gas Liquid Hydrocarbon Ratio 43,388 Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons 55.5 @ 60 Deg.

Specific Gravity Separator Gas .636 — XXXXXXXXX

Specific Gravity Flowing Fluid XXXXX — G Mix - .704

Critical Pressure 670 P.S.I.A. — 668 P.S.I.A.

Critical Temperature 368 R — 392 R

P_c 3041.2 P_c^2 9248.9

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2713.4	7362.5	1886.4
2		2315.8	5362.9	3886.0
3		1908.5	3642.4	5606.5
4		1663.9	2768.6	6480.3
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.427$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.381$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.727$

Absolute Open Flow 1,727 Mcfd @ 15.025 — Angle of Slope θ 47.75 — Slope, n .908

Remarks: * Equivalent length (11,292) 3.39 Bbls. of condensate during test.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Reston, Kiker	R. E. Reston	