

NEW 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 8/11/78		SPUDED: 1/18/78	
Company The Petroleum Corporation				Connection El Paso Natural Gas Company					
Pool E. Burton Flat				Formation Morrow				Unit I	
Completion Date 7/22/78		Total Depth 11,675		Plug Back TD		Elevation		Farm or Lease Name SUPERIOR-FEDERAL	
Csg. Size 5-1/2	Wt. 17, 20	d	Set At 11,675	Perforations: From 11,340 To 11,417		Well No. 4			
Tbg. Size 2-3/8	Wt. 4.7	d	Set At 11,300	Perforations: From To		Unit Sec. Twp. Rge. I 5 20S 29E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 11,300		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 187 @ 11,300		Mean Annual Temp. °F (Assumed)		Baro. Press. - P _a 13.2		State New Mexico	
L 11,300	H 11,300	Gg .640	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run 4"	Taps Flowing	

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							3,100				72 hrs
1.	4 x .750			643	5.29	87	2,930				1 hr
2.	4 x .750			643	14.44	84	2,764				1 hr
3.	4 x .750			643	31.36	78	2,585				1 hr
4.	4 x .750			645	57.76	71	2,350				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	2.661	58.92	656.2	.9750	1.250	1.059	202
2	2.661	97.34	656.2	.9770	1.250	1.059	335
3	2.661	143.45	656.2	.9831	1.250	1.059	497
4	2.661	194.98	658.2	.9896	1.250	1.068	685
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.98	547	1.47	.891			.640		670	372
2.	.98	544	1.46	.891						
3.	.98	538	1.45	.891						
4.	.98	531	1.43	.876						
5.										

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1			8,663.9	1,028.1
2			7,716.6	1,975.4
3			6,759.0	2,933.0
4			5,600.4	4,091.6
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.369$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.623$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.369$

Absolute Open Flow	1,623	Mcfd @ 15.025	Angle of Slope	45	Slope, n	1.000
--------------------	-------	---------------	----------------	----	----------	-------

Remarks: No fluid produced during test.

Approved By Commission:	Conducted By: Rick Pagan	Calculated By: J. B. Murray	Checked By:
-------------------------	-----------------------------	--------------------------------	-------------