

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

Form C-122
Revised 1-5-66

File

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date Nov. 6, 1967	
Company El Paso Natural Gas Company			Connection None		
Pool Eumont			Formation Yates - Seven Rivers - Queens		Unit
Completion Date Oct. 31, 1967		Total Depth 3880	Plug Back TD 3526	Elevation	Form or Lease Name Shell State "E"
Csg. Size 7"	Wt. 24.0	a 6.336	Set At 3526	Perforations: From To	Well No. 1
Tub. Size 2 1/2"	Wt. 6.4	a 2.441	Set At 3314	Perforations: From 2718 To 3490	Unit Sec. Twp. Rge. J 6 21 30 31
Type Well - Single - Dranehead - G.G. or G.O. Multiple Single				Packer Set At	County Lea
Producing Thru Tubing		Reservoir Temp. °F a	Mean Annual Temp. °F	Baro. Press. - P _a 13.2	State New Mexico
L 3314	H	G _g .669	% CO ₂ 1.75	% N ₂ 2.1	% H ₂ S .46
			Prover X	Meter Run	Type

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Time- 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.	
SI							642		642	
1.	2 x 7/32			611		65	611		612	
2.	2 x 5/16			527		68	527		590	1 Hour
3.	2 x 1/2			386		68	386		550	1 Hour
4.	2 x 5/8			307		66	307		520	1 Hour
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mscf/d
1	.8393		624.2	.9952	1.223	1.066	670
2	1.572		540.2	.9924	1.223	1.055	1,156
3	4.279		399.2	.9924	1.223	1.041	2,158
4	6.473		320.2	.9943	1.223	1.033	2,604
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Trace	Mcf/bbl.
1	.93	525	1.39	.880	A.P.I. Gravity of Liquid Hydrocarbons		Deq.
2	.81	523	1.40	.803	Specific Gravity Separator Gas		X X X X X X X X
3	.60	523	1.40	.923	Specific Gravity Flowing Fluid	X X X X X	
4	.48	526	1.39	.937	Critical Pressure	670	P.S.I.A.
5					Critical Temperature	378	P.S.I.A.

P _r 655.2	P _w 429.3		
NO.	P _r ²	P _w ²	P _r ² - P _w ²
1	625.2	390.8	33.5
2	603.2	353.9	65.4
3	563.2	317.2	112.1
4	533.2	284.3	145.0
5			

$$(1) \frac{P_r^2}{P_r^2 - P_w^2} = 2.961$$

$$(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.961$$

$$AOF = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 7,710$$

Absolute Open Flow	7,710	Mcf/d @ 15.025	Angle of Slope @	45.0	Slope, n	1.000
Remarks:						

Approved by Commission:	Conducted By: Whitling & Read	Calculated By: Whitling & Read	Checked By:
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