

C/SF
C-122
4565

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 2-9-82		FEB 19 1982	
Company MEADCO, LTD. ✓		Connection El Paso Natural Gas Company		O. C. D.	
Pool Golden Lane <i>Tronco</i>		Formation Morrow		Unit N ARTESIA, OFFICE	
Completion Date 9-8-81		Total Depth 12,796 12,800		Plug Back TD 12,776	
Casing Size 5 1/2"		Well ID 17		Perforations: From 12,310 To 12,775	
Thb. Size 2 3/8"		Well ID 4.7		Perforations: From Open To end	
Type of Well - Single - Bradenhead - G.C. or C.O. Multiple Single		Packer Set At 10,370		County Eddy	
Producing Thru Thb.		Reservoir Temp. °F 199 @ 12,542.5		Mean Annual Temp. °F 60	
		Baro. Press. - P _a 13.2		State New Mexico	
* L 12,542.5		H* 12,542.5		G _g .605	
		% CO ₂ .90		% H ₂ .68	
		% H ₂ S .12 Gr.		Prover 4"	
				Meter Run Flg.	

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Flow 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							3568				24 hr.
1.	4	x	1.00	149	5.06	52	3357				1 hr.
2.	4	x	1.00	192	9.0	60	3253				1 hr.
3.	4	x	1.00	223	23.04	66	3029				1 hr.
4.	4	x	1.00	234	57.76	64	2660				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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	4.753	28.65	162.2	1.008	1.286	1.015	179
2	4.753	42.97	205.2	1.000	1.286	1.019	268
3	4.753	73.77	236.2	.9943	1.286	1.020	457
4	4.753	119.49	247.2	.9962	1.286	1.022	744
5							

NO.	$\bar{r}$	Temp. °R	T_g	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	.24	512	1.43	.971	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	.31	520	1.45	.964	Specific Gravity Separator Gas .605
3	.35	526	1.47	.961	Specific Gravity Flowing Fluid _____
4	.37	524	1.46	.958	Critical Pressure 671 P.S.I.A.
5					Critical Temperature 358 °R

NO.	P_c	P_w	P_w^2	$P_c^2 - P_w^2$
1	3581.2	3370.4	11359.3	1465.7
2	12825.0	3266.5	10670.3	2154.7
3		3043.2	9261.3	3563.7
4		2676.2	7162.3	5662.7
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.265$

AOR = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.685$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.265$

Absolute Open Flow	1,685	Mcfd @ 15.025	Angle of Slope θ	45	Slope, n	1.000
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Remarks: No fluid made during test.

* Effective diameter is 2.066 calculated to mid-perfs. Friction factor is .016234.

Approved by Division	Conducted by: Bill Rea and Roy McGowen--EP Explor	Calculated by: Roy McGowen	Checked by:
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