

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 11-17-81											
Company BELCO PETROLEUM CO.				Field Name EL PASO NATURAL GAS											
Pool CINTA ROJA				Unit MORROW											
Completion Date 10-24-81		Total Depth 14,552		Casing Head Elevation 14,509											
Casing Size 5" Liner		Casing Weight 18#		Perforations: From 14,003 To 14,012											
Tubing Size 2 3/8"		Tubing Weight 4.7#		Perforations: From OPENENDED											
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 13,945											
Producing Thru TUBING		Reservoir Temp. °F 205 @ 13,745		Mean Annual Temp. °F 60°											
Baro. Press. - P _a 13.2		State New Mexico													
L 13,745		H 13,745		Gg .5825											
% CO ₂ .531		% N ₂ .387		% H ₂ S											
Prover 4"		Meter Run 4"		Flange											
FLOW DATA															
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	Duration of Flow				
SI							4830		PKR	CHOKE	24 Hrs.				
1.	4"	x	1 3/4	400	2.25"	86°	3636	76°		5/64	1 Hr.				
2.	4"	x	1 3/4	410	5.80"	77°	3277	77°		7.5/64	45 Min.				
3.	4"	x	1 3/4	422	14.5"	75°	2897	77°		10/64	1 Hr.				
4.	4"	x	1 3/4	422	25"	73°	2522	77°		11.5/64	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	14.93	30.49	413.2	.9759	1.310	1.028	598								
2	14.93	49.54	423.2	.9840	1.310	1.030	982								
3	14.93	79.44	435.2	.9859	1.310	1.031	1579								
4	14.93	104.31	435.2	.9877	1.310	1.032	2080								
5															
NO.	P _r	Temp. °R	T _r	Z	Gas-Liquid Hydrocarbon Ratio TSTM Mcf/bbl.										
1	.616	546	1.57	.947	A.P.L. Gravity of Liquid Hydrocarbons _____ Deg.										
2	.632	537	1.54	.942	Specific Gravity Separator Gas .5825 XXXXXXXXX										
3	.650	535	1.54	.941	Specific Gravity Flowing Fluid XXXXX										
4	.650	535	1.53	.939	Critical Pressure 670 P.S.I.A. _____ P.S.I.A.										
5					Critical Temperature 348 _____ R _____ R										
P _c 4864.6 P _c ² 23,664															
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.45198$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.45198$										
1		3777.9	14272.5	9391.5											
2		3403	11580.4	12083.6											
3		3073	9443.31	14210.7											
4		2714.1	7366.3	16297.7											
5															
Absolute Oper. Flow 3,020 Mcfd @ 15,025					Angle of Slope θ 45°			Slope, n 1.000							
Remarks Use 45° Thru High Rate.															
Approved By Commission Jerry Sexton Dist. 1, Supr.				Conducted By M.R.				Calculated By M.K.				Checked By M.K.			