

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

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8/23/82			
Company Getty Oil Company				Connection Llano, Inc.					
Pool East Grama Ridge - Morrow				Formation Morrow				Unit	
Completion Date 5/7/82		Total Depth 13,360		Plug Back TD 13,316		Elevation 3630.2 GL		Form. or Lease Time Getty 1 State <i>Cam</i>	
Csg. Size 4 1/2	Wt. 13.50	d 3.795	Set At 13,360	Perforations: From 12,790 To 13,054				Well No. 2	
Tub. Size 2 3/8	Wt. 4.7	d 1.995	Set At 12,688	Perforations: From - To -				Unit Sec. Twp. Rge. H 1 22S 34E	
Type Well - Single - Bradenhead - G.O. or G.O. Multiple Morrow Gas/Single						Packer Set At 12,688		County Lea	
Producing Thru Tubing		Reservoir Temp. °F 184 @ 12,922		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 12,688	H 12,688	G _g .6472	% CO ₂ .551	% N ₂ .642	% H ₂ S -	Prover -	Meter Run 3"	Taps Flange	

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							3835	95	Packer		SI 45 1/2
1.	3" x .75	4/64		500	4	85	3625	94			1 hr.
2.	3" x .75	6.5/64		500	13.69	85	3475	93			1 1/4 hr.
3.	3" x .75	7.75/64		550	30.25	85	3300	92			1 1/4 hr.
4.	3" x .75	9/64		550	56.25	77	2815	91			3/4 hr.
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, Mcf/d
1	2.672	44.72	500	.9768	1.243	1.045	151.62
2	2.672	82.73	500	.9768	1.243	1.045	280.49
3	2.672	128.98	550	.9768	1.243	1.049	438.97
4	2.672	175.89	550	.9840	1.243	1.052	604.73
5							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	.746	545	1.453	.916	A.P.L. Gravity of Liquid Hydrocarbons _____ Deg.
2	.746	545	1.453	.916	Specific Gravity Separator Gas _____ X X X X X X X X X
3	.820	545	1.453	.908	Specific Gravity Flowing Fluid _____ X X X X X
4	.820	537	1.432	.904	Critical Pressure _____ 670 P.S.I.A. _____ P.S.I.A.
5					Critical Temperature _____ 375 _____ R _____ R

NO.	P _t	P _w	P _w ²	P _c ² - P _w ²
1		5226.2	27,313	2610
2		5080.2	25,808	4115
3		4861.2	23,631	6292
4		4269.2	18,226	11967
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.75$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.39$	
Absolute Open Flow = 1928.82 Mcf/d @ 15.025		Angle of Slope = -	
		Slope, n = .95	

Remarks: Bottom hole pressures measured at mid-point of perms

Approved by Commission:	Conducted By: Tippy & Martinez	Calculated By: Peter Botes	Checked By: D.J. Steinnerd
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