

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 1-23-79			
Company Getty Oil Company				Connection Llano, Inc.					
Pool Grama Ridge Morrow				Formation Morrow				Unit -	
Completion Date 1-3-79		Total Depth 13,355'		Plug Back TL 13,265'		Elevation 3675.8 GL		Farm or Lease Name Getty "35" State	
Csg. Size 5"	Wt. 18.0	d 4.276	Set At 13,355	Perforations: From 12,907 To 13,102			Well No. 1		
Tbg. Size 2 3/8"	Wt. 4.7	d 1.995	Set At 12,200	Perforations: From - To -			Unit Sec. Twp. Rge. K 35 21-S 34-E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Morrow Gas/Wolfcamp Oil - Dual				Packer Set At 10,187'/12,200'		County Lea			
Producing Thru Tubing		Reservoir Temp. °F 175°@ 13,352		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2 psia		State New Mexico	
L 12,200	H 12,200	Gg 0.599	% CO ₂ 0.592	% N ₂ 0.511	% 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							5970	57	Packer	-	ST 92 hrs & 15 min.
1.	3" x 1.75"	4/64"		490	10	85	5500	64	-	-	30 min.
2.	3" x 1.75"	6/64"		500	21	84	5200	64	-	-	45 min.
3.	3" x 1.75"	8/64"		505	34	83	4775	63	-	-	45 min.
4.	3" x 1.75"	12/64"		530	62	83	4400	64	-	-	30 min.
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	20.15	70.94	503.2	.9768	1.292	1.040	1876
2	20.15	103.81	513.2	0.9777	1.292	1.040	2748
3	20.15	132.74	518.2	0.9786	1.292	1.049	3547
4	20.15	183.52	543.2	0.9786	1.292	1.045	4886
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2					Specific Gravity Separator Gas _____ X X X X X X X X
3					Specific Gravity Flowing Fluid _____ X X X X X
4					Critical Pressure 671 _____ P.S.I.A. _____ P.S.I.A.
5					Critical Temperature 362 _____ R _____ R

*P _c 7468.2 P _w 55,774				
NO.	P _c ²	P _w *	P _w ²	P _c ² - P _w ²
1		6969.2	48,570	7,204
2		6538.2	42,748	13,026
3		6405.2	41,027	14,747
4		5829.2	33,980	21,794
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.559 \quad \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.273$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 11,107$$

Absolute Open Flow	11,107	Mcfd @ 15.025	Angle of Slope θ	Slope, n .874
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Remarks: _____

*P_c & P_w from bottom hole pressure recorder @ (-9329) 13005'

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	M.Y. Merchant	M.Y. Merchant	D. R. Crockett