

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			
Company Getty Oil Company				Connection Tuco, Inc.					
Pool East Grama Ridge-Morrow				Formation Morrow				Unit	
Completion Date 3-16-80		Total Depth 13,360		Plug Back TD 13,028		Elevation 3668.5 GL		Farm or Lease Name Getty 36 State	
Csg. Size 5	Wt. 18	d 4.151	Set At 13,360	Perforations: From 12,946 To 12,954			Well No. 2		
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 12,500	Perforations: From - To -			Unit Sec. Twp. Rje. J 36 21-S 34-E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Morrow Gas/Single						Packer Set At 12,500		County Lea	
Producing Thru Tubing		Reservoir Temp. °F 175 ^o 13,360		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 12,500	H 12,500	Gg .6398	% CO ₂ .482	% N ₂ 1.021	% 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.	
SI							5150	88	Packer	
1.	3" x 1.00	1/64	465	5.75	78	4720	86			1 1/4 hr.
2.	3" x 1.00	2/64	470	10	83	4555	85			1 1/4 hr.
3.	3" x 1.00	3/64	470	20.5	89	4265	84			1 hr.
4.	3" x 1.00	8/64	480	34	87	3750	82			1 3/4 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	4.789	51.71	465	.9831	1.251	1.041	317.04
2	4.789	68.56	470	.9786	1.251	1.041	418.44
3	4.789	98.15	470	.9732	1.251	1.037	593.43
4	4.789	127.75	480	.9750	1.251	1.043	778.31
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	.69	538	1.45	.922	A.P.I. Gravity of Liquid Hydrocarbons	Deg.
2	.69	543	1.46	.922	Specific Gravity Separator Gas	X X X X X X X X
3	.70	549	1.48	.930	Specific Gravity Flowing Fluid	X X X X X
4	.72	547	1.47	.919	Critical Pressure 670	P.S.I.A.
5					Critical Temperature 372	R

P _c 6932.2 P _c ² 48,053		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.72$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.16$	
NO.	P _w	P _w ²	P _c ² - P _w ²		
1	6484.2	42,045	6,008		
2	6278.2	39,416	8,637		
3	5927.2	35,132	12,921		
4	5364.2	28,775	19,278		
5					

ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1875$			
Absolute Open Flow 1875		Mcf/d @ 15.025	
Angle of Slope 0		Slope, n .875	

Remarks: *P_c & P_w from bottom hole pressure recorder at (-9281) 12,950'

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
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CORE

The Wolfcamp was cored from 11,300-13,360'. Cut 60'. Recovered 59.5' with the following description:

- 31' Shale, black, limey, occ. limestone clastics, occ. laminated wavy to planar
- 26' Limestone, tan-buff bimicrite wackstone, submature to mature, occ. fractures, vuggy porosity, occ. moldic porosity, fusulinids and crinoid frags., much detrital with black micritic matrix
- 2.5' Limestone, wackstone, biomicrotic black micritic matrix, submature to mature, crinoids - fusulinids

RECEIVED
GEOLOGICAL
MAY 1964