

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 8-13-77																																																																																																
Company Getty Oil Company				Connection Not Connected																																																																																																	
Pool Aztec				Formation Pictured Cliffs		Unit																																																																																															
Completion Date 8-8-77		Total Depth 1966		Plug Back TD 1926		Elevation 5693																																																																																															
Csg. Size 5.500		Wt. 14.0		Set At 1961		Perforations: From 1861 To 1897																																																																																															
Tbg. Size 2.375		Wt. 4.7		Set At 1837		Perforations: From Open To Ended																																																																																															
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Gas ; Gas Multiple				Packer Set At 1837		Well No. 1 A																																																																																															
Producing Thru Tubing		Reservoir Temp. °F @		Mean Annual Temp. °F		Baro. Press. - P _a																																																																																															
L 1825		H 1825		Gg .645		% CO ₂																																																																																															
				% N ₂		% H ₂ S																																																																																															
				Prover 2.000		Meter Run																																																																																															
						Taps																																																																																															
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="7">FLOW DATA</th> <th colspan="2">TUBING DATA</th> <th colspan="2">CASING DATA</th> <th rowspan="2">Duration of Flow</th> </tr> <tr> <th>NO.</th> <th>Prover Line Size</th> <th>X</th> <th>Orifice Size</th> <th>Press. p.s.i.g.</th> <th>Diff. h_w</th> <th>Temp. °F</th> <th>Press. p.s.i.g.</th> <th>Temp. °F</th> <th>Press. p.s.i.g.</th> <th>Temp. °F</th> </tr> <tr> <td>SI</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>258</td> <td></td> <td></td> <td></td> <td>168 Hr.</td> </tr> <tr> <td>1.</td> <td>2.000</td> <td>x</td> <td>.750</td> <td></td> <td></td> <td></td> <td>27</td> <td>60</td> <td></td> <td></td> <td>1 Hr.</td> </tr> <tr> <td>2.</td> <td>2.000</td> <td>x</td> <td>.750</td> <td></td> <td></td> <td></td> <td>25</td> <td>60</td> <td></td> <td></td> <td>1 Hr.</td> </tr> <tr> <td>3.</td> <td>2.000</td> <td>x</td> <td>.750</td> <td></td> <td></td> <td></td> <td>25</td> <td>60</td> <td></td> <td></td> <td>1 Hr.</td> </tr> <tr> <td>4.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>							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							258				168 Hr.	1.	2.000	x	.750				27	60			1 Hr.	2.	2.000	x	.750				25	60			1 Hr.	3.	2.000	x	.750				25	60			1 Hr.	4.												5.											
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							258				168 Hr.																																																																																										
1.	2.000	x	.750				27	60			1 Hr.																																																																																										
2.	2.000	x	.750				25	60			1 Hr.																																																																																										
3.	2.000	x	.750				25	60			1 Hr.																																																																																										
4.																																																																																																					
5.																																																																																																					
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="8">RATE OF FLOW CALCULATIONS</th> </tr> <tr> <th>NO.</th> <th>Coefficient (24 Hour)</th> <th>$\sqrt{h_w P_m}$</th> <th>Pressure P_m</th> <th>Flow Temp. Factor Ft.</th> <th>Gravity Factor Fg</th> <th>Super Compress. Factor Fpv</th> <th>Rate of Flow Q, Mcfd</th> </tr> <tr> <td>1</td> <td>11.00</td> <td></td> <td>39</td> <td>1.000</td> <td>1.241</td> <td>1.007</td> <td>536</td> </tr> <tr> <td>2</td> <td>11.00</td> <td></td> <td>37</td> <td>1.000</td> <td>1.241</td> <td>1.007</td> <td>508</td> </tr> <tr> <td>3</td> <td>11.00</td> <td></td> <td>37</td> <td>1.000</td> <td>1.241</td> <td>1.007</td> <td>508</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>												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	11.00		39	1.000	1.241	1.007	536	2	11.00		37	1.000	1.241	1.007	508	3	11.00		37	1.000	1.241	1.007	508	4								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	11.00		39	1.000	1.241	1.007	536																																																																																														
2	11.00		37	1.000	1.241	1.007	508																																																																																														
3	11.00		37	1.000	1.241	1.007	508																																																																																														
4																																																																																																					
5																																																																																																					
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>P_f</th> <th>Temp. °R</th> <th>T_f</th> <th>Z</th> <th colspan="2">Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.</th> </tr> <tr> <td colspan="5"></td> <th colspan="2">A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.</th> </tr> <tr> <td>1.</td> <td></td> <td></td> <td></td> <td></td> <td colspan="2">Specific Gravity Separator Gas _____ X X X X X X X X</td> </tr> <tr> <td>2.</td> <td></td> <td></td> <td></td> <td></td> <td colspan="2">Specific Gravity Flowing Fluid _____ X X X X X</td> </tr> <tr> <td>3.</td> <td></td> <td></td> <td></td> <td></td> <td colspan="2">Critical Pressure _____ P.S.I.A. _____ P.S.I.A.</td> </tr> <tr> <td>4.</td> <td></td> <td></td> <td></td> <td></td> <td colspan="2">Critical Temperature _____ R _____ R</td> </tr> <tr> <td>5.</td> <td></td> <td></td> <td></td> <td></td> <td colspan="2"></td> </tr> </table>												NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.							A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.		1.					Specific Gravity Separator Gas _____ X X X X X X X X		2.					Specific Gravity Flowing Fluid _____ X X X X X		3.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.		4.					Critical Temperature _____ R _____ R		5.																																															
NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.																																																																																																
					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.																																																																																																
1.					Specific Gravity Separator Gas _____ X X X X X X X X																																																																																																
2.					Specific Gravity Flowing Fluid _____ X X X X X																																																																																																
3.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.																																																																																																
4.					Critical Temperature _____ R _____ R																																																																																																
5.																																																																																																					
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2">P_c 270</td> <td colspan="2">P_c² 72900</td> <td colspan="2">(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0466$</td> <td colspan="2">(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0394$</td> </tr> <tr> <th>NO.</th> <th>P_f²</th> <th>P_w</th> <th>P_w²</th> <th>P_c² - P_w²</th> <th colspan="3"></th> </tr> <tr> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td colspan="3"></td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td colspan="3"></td> </tr> <tr> <td>3</td> <td>1369</td> <td>57</td> <td>3249</td> <td>69651</td> <td colspan="3">AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 528$</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td colspan="3"></td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td colspan="3"></td> </tr> </table>												P _c 270		P _c ² 72900		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0466$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0394$		NO.	P _f ²	P _w	P _w ²	P _c ² - P _w ²				1								2								3	1369	57	3249	69651	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 528$			4								5																																									
P _c 270		P _c ² 72900		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0466$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0394$																																																																																															
NO.	P _f ²	P _w	P _w ²	P _c ² - P _w ²																																																																																																	
1																																																																																																					
2																																																																																																					
3	1369	57	3249	69651	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 528$																																																																																																
4																																																																																																					
5																																																																																																					
Absolute Open Flow <u>528</u> Mcfd @ 15.025 Angle of Slope @ <u>85</u>																																																																																																					
Remarks:																																																																																																					
Approved By Commission: _____ Conducted By: <u>Paul D. Berhart</u> Calculated By: <u>Paul D. Berhart</u> Checked By: _____																																																																																																					