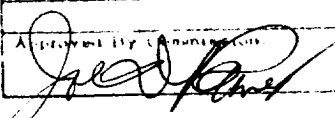


NE MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

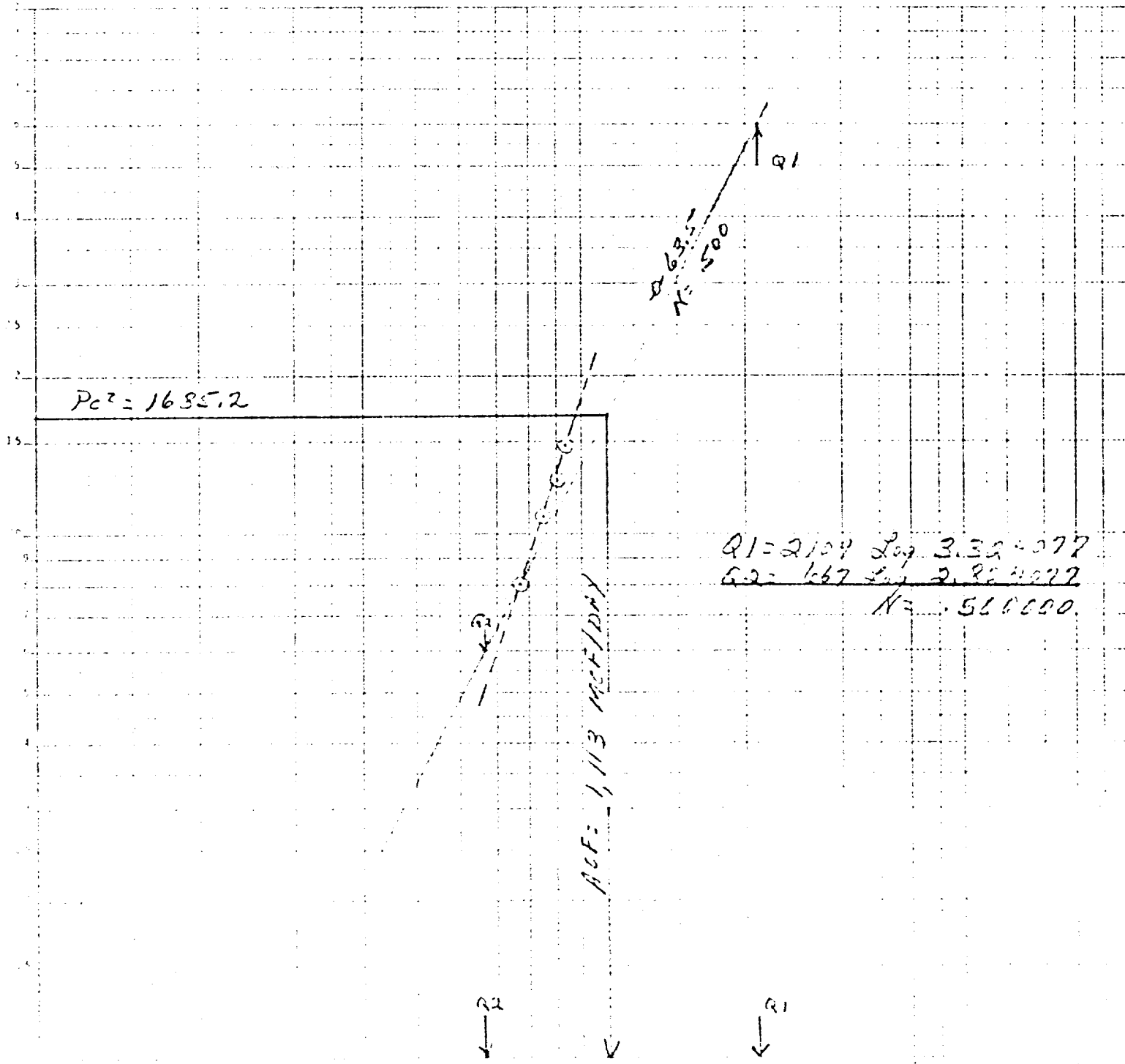
Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 9/23/74																																																																																									
Company Burlison & Huff		None																																																																																									
Owner Langlie Mattix		Queens																																																																																									
Completion Date 9/23/74		Test Depth 3498	Perforations 3362																																																																																								
Well No. 51		Stuart																																																																																									
Well Size 5 1/2"	WT. 4.7	d 1.095	Set At 3172																																																																																								
Perforations From 3243 To 3336	Well No. 2																																																																																										
Perforations From open To end	Unit C	Sec. 22	Twp. 25																																																																																								
Type Well - Single - Brodenhead - G.G. or G.O. Multiple Single		Packer Set At 3172	County Lea																																																																																								
Producing Thru Tbg.	Reservoir Temp. °F a	Mean Annual Temp. °F 13.2	State New Mexico																																																																																								
L	H	Gg .670 Assumed	% CO ₂ % N ₂ % H ₂ S Prover Meter Run Days																																																																																								
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="6">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>1285</td> <td></td> <td></td> <td></td> </tr> <tr> <td>1.</td> <td>2</td> <td>x</td> <td>3/16</td> <td>923</td> <td></td> <td></td> <td>923</td> <td>64</td> <td></td> <td></td> </tr> <tr> <td>2.</td> <td>2</td> <td>x</td> <td>7/32</td> <td>755</td> <td></td> <td></td> <td>755</td> <td>65</td> <td></td> <td></td> </tr> <tr> <td>3.</td> <td>2</td> <td>x</td> <td>1/4</td> <td>622</td> <td></td> <td></td> <td>622</td> <td>65</td> <td></td> <td></td> </tr> <tr> <td>4.</td> <td>2</td> <td>x</td> <td>5/16</td> <td>426</td> <td></td> <td></td> <td>426</td> <td>65</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> </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							1285				1.	2	x	3/16	923			923	64			2.	2	x	7/32	755			755	65			3.	2	x	1/4	622			622	65			4.	2	x	5/16	426			426	65			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																																																																																
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1.	2	x	3/16	923			923	64																																																																																			
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4.	2	x	5/16	426			426	65																																																																																			
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, F _{pv}	Rate of Flow Q, Mcfd																																																																																				
1	.6082		936.2	.9962	1.222	1.109	768																																																																																				
2	.8393		768.2	.9952	1.222	1.089	854																																																																																				
3	1.087		635.2	.9952	1.222	1.072	900																																																																																				
4	1.672		439.2	.9952	1.222	1.049	937																																																																																				
5																																																																																											
NO.	P ₁	Temp. °R	T ₁	Z	Gas Liquid Hydrocarbon Ratio _____ Mol. Lbl. A.P.G. Gravity of Liquid Hydrocarbons _____ Deg.																																																																																						
1	1.40	524	1.37	.813	Specific Gravity Separator Gas .670 Assumed XXXXXXXXXX																																																																																						
2	1.15	525	1.37	.844	Specific Gravity Flowing Fluid XXXXX																																																																																						
3	.95	525	1.37	.870	Critical Pressure 669 P.S.I.A. P.S.I.A.																																																																																						
4	.66	525	1.37	.909	Critical Temperature 382 °R °R																																																																																						
5																																																																																											
$P_1 = 1293.2$ $P_2 = 1685.3$ $\frac{P_2^2}{P_2^2 - P_1^2} = 2.101$ $\left[\frac{P_2^2}{P_2^2 - P_1^2} \right]^n = 1.149$																																																																																											
NO.	P ₁	P ₂	T ₁	T ₂	$\left[\frac{P_2^2}{P_2^2 - P_1^2} \right]^n = 1.113$																																																																																						
1	936.2	883.1	807.2																																																																																								
2	768.2	636.6	1086.7																																																																																								
3	635.2	413.2	1292.1																																																																																								
4	439.2	203.8	1481.5																																																																																								
5																																																																																											
Corrected Flow = 1.113 Actual Flow = 63.5 Error = 4.02																																																																																											
Remarks: No fluid made during test. Point alignment was too steep. A 63.50 angle was drawn through low rate of flow.																																																																																											
Approved By: 		Conducted By: Reggie Reston		Calculated By: Reggie Reston		Checked By:																																																																																					

BURLESON & HUFF
 Stuart No. 2
 C-22-25-37 Lea County, New Mexico
 September 23, 1974

PC = TWO IN (0005)

Q = 1,113



Q = Mcf/Day

AOF = 1,113 Mcf/Day