

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

Form C-122
Revised 9-1-65

RECEIVED
DEC 14 1971
O. C. C.
ARTESIA, OFFICE

Type Test ☐ Initial ☒ Annual ☐ Special				Test Date 11-18-71																																																																																															
Company Morris R. Antweil ✓				Connection Llano, Inc.																																																																																															
Pool South Carlsbad <i>Strawn</i>				Formation Strawn																																																																																															
Completion Date 2-2-71		Total Depth 10708'		Plug Back TD 10650'																																																																																															
				Elevation 3200' GL																																																																																															
Csg. Size 5.5	Wt. 17	d -	Set At 10707'	Perforations: From 10291' To 10435'																																																																																															
Thg. Size 2 3/8"	Wt. 4.70	d 1.995	Set At 10442'	Perforations: From - To -																																																																																															
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At NONE																																																																																															
Producing Thru Tubing		Reservoir Temp. °F 173 @ 10363'		Baro. Press. - P _a 13.2																																																																																															
		Mean Annual Temp. °F 60		State New Mexico																																																																																															
L 10363'	H -	G _g 0.647	% CO ₂ 0.29	% N ₂ 0.61	% H ₂ S 0.00																																																																																														
Prover			Meter Run X																																																																																																
			Taps F																																																																																																
<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. DWT</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>3715</td> <td></td> <td></td> <td></td> <td>48.0 hrs</td> </tr> <tr> <td>1.</td> <td>4 10/64</td> <td>1.750</td> <td>560</td> <td>18</td> <td>75</td> <td>3495</td> <td>69</td> <td>-</td> <td>-</td> <td>-</td> <td>1.0</td> </tr> <tr> <td>2.</td> <td>4 12/64</td> <td>1.750</td> <td>570</td> <td>32</td> <td>72</td> <td>3405</td> <td>70</td> <td>-</td> <td>-</td> <td>-</td> <td>1.0</td> </tr> <tr> <td>3.</td> <td>4 14/64</td> <td>1.750</td> <td>560</td> <td>54</td> <td>60</td> <td>3230</td> <td>68</td> <td>-</td> <td>-</td> <td>-</td> <td>1.0</td> </tr> <tr> <td>4.</td> <td>4 16/64</td> <td>1.750</td> <td>570</td> <td>82</td> <td>54</td> <td>3000</td> <td>67</td> <td>-</td> <td>-</td> <td>-</td> <td>1.0</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. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	SI							3715				48.0 hrs	1.	4 10/64	1.750	560	18	75	3495	69	-	-	-	1.0	2.	4 12/64	1.750	570	32	72	3405	70	-	-	-	1.0	3.	4 14/64	1.750	560	54	60	3230	68	-	-	-	1.0	4.	4 16/64	1.750	570	82	54	3000	67	-	-	-	1.0	5.											
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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, Mcfd																																																																																												
1	14.93	101.53	573.2	0.9859	1.243	1.051	1953.5																																																																																												
2	14.93	136.62	583.2	0.9887	1.243	1.052	2637.2																																																																																												
3	14.93	175.93	573.2	1.0000	1.243	1.050	3428.1																																																																																												
4	14.93	218.68	583.2	1.0060	1.243	1.059	4323.5																																																																																												
5																																																																																																			
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 32.966 Mcf/bbl.																																																																																														
1	0.85	535	1.45	0.905	A.P.I. Gravity of Liquid Hydrocarbons 91.6 Deg.																																																																																														
2	0.87	532	1.45	0.903	Specific Gravity Separator Gas 0.647 XXXXXXXXXX																																																																																														
3	0.85	520	1.41	0.907	Specific Gravity Flowing Fluid XXXXXX																																																																																														
4	0.87	514	1.40	0.891	Critical Pressure 673 P.S.I.A. - P.S.I.A.																																																																																														
5					Critical Temperature 368 °R - °R																																																																																														
P _c 4921.2 P _w 224218.2																																																																																																			
NO.	P _c ²	P _w ²	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 7.391$																																																																																														
1	-	4712.2	22204.8	2013.4	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.21$																																																																																														
2	-	4576.2	20341.6	3276.6																																																																																															
3	-	4445.2	19759.8	4458.4																																																																																															
4	-	4205.2	17683.7	6534.5																																																																																															
5					ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 11103$																																																																																														
Absolute Open Flow 11100 Mcfd @ 15.025 Angle of Slope 54° 24' Slope, n 0.716																																																																																																			
Remarks: * BHP @ (-7163') 10363' used for pressure calculations																																																																																																			
Approved By Commission:		Conducted By:		Calculated By:		Checked By:																																																																																													
		COLEMAN PET.ENG.		JOE A. COLEMAN		JOE A. COLEMAN																																																																																													