

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

Form C-122
Revised 3-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 5-30-73		JUL 26 1973																																																																																															
Company Coguina Oil Corporation			Connection Wolfcamp																																																																																																
Field Washington Ranch			Unit Monsanto Fed.																																																																																																
Completion Date 5-30-73		Total Depth 8200		Plug Back TD 6810																																																																																															
Casing Size 1 1/2		Set At 6810		Perforations From 6585 To 6506																																																																																															
Tubing Size 2 3/8		Set At 6407		Perforations From open To end																																																																																															
Type Well - Single - Riddenhead - G.G. or G.O. Multiple Single			Packer Set At 6407		County Brewer																																																																																														
Producing Into EDG		Reservoir Temp. °F 140		Mean Annual Temp. °F 65.47																																																																																															
L 65.47		H 65.47		Gg 690 (Assumed)																																																																																															
CO ₂		N ₂		H ₂ S																																																																																															
Positive CHS.		Positive CHS.		Positive CHS.																																																																																															
<table border="1"> <thead> <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> </thead> <tbody> <tr> <td>SI</td> <td colspan="10">Positive CHS.</td> <td>100 hr.</td> </tr> <tr> <td>1.</td> <td>3/16</td> <td></td> <td></td> <td>1442</td> <td></td> <td></td> <td>2537</td> <td>74</td> <td></td> <td></td> <td>1 hr.</td> </tr> <tr> <td>2.</td> <td>7/32</td> <td></td> <td></td> <td>1223</td> <td></td> <td></td> <td>1223</td> <td>73</td> <td></td> <td></td> <td>1 hr.</td> </tr> <tr> <td>3.</td> <td>1/4</td> <td></td> <td></td> <td>1117</td> <td></td> <td></td> <td>1117</td> <td>72</td> <td></td> <td></td> <td>1 hr.</td> </tr> <tr> <td>4.</td> <td>5/16</td> <td></td> <td></td> <td>1105</td> <td></td> <td></td> <td>1105</td> <td>69</td> <td></td> <td></td> <td>1 hr.</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> </tbody> </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	Positive CHS.										100 hr.	1.	3/16			1442			2537	74			1 hr.	2.	7/32			1223			1223	73			1 hr.	3.	1/4			1117			1117	72			1 hr.	4.	5/16			1105			1105	69			1 hr.	5.											
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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, Mscf																																																																																												
1	.6101		1455.2	.9859	1.204	1.184	1,246																																																																																												
2	.6419		1236.2	.9877	1.204	1.175	1,428																																																																																												
3	1.112		1130.2	.9857	1.204	1.171	1,907																																																																																												
4	1.771		1118.2	.9975	1.204	1.169	2,583																																																																																												
5																																																																																																			
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 14.0 Mol. Shl.																																																																																														
1	2.10	535	1.38	.713	A.P.L. Gravity of Liquid Hydrocarbons 58.0 @ 60°																																																																																														
2	1.95	533	1.37	.750	Specific Gravity Separator Gas .690 Assumed																																																																																														
3	1.69	532	1.37	.763	Specific Gravity Flowing Fluid																																																																																														
4	1.57	529	1.36	.771	Critical Pressure 662 P.S.I.A.																																																																																														
5					Critical Temperature 303 R																																																																																														
P ₀ 2550.2 P ₀ ² 6503.5					$(1) \frac{P_0^4}{P^4 - P_0^4} = 1.340$ $(2) \left[\frac{P^2}{P^2 - P_0^2} \right]^n = 3.533$																																																																																														
NO.	P _w	P _w ²	P _w ⁴	P _w ² - P ₀ ²																																																																																															
1	2552.1	2554.2	3468.7																																																																																																
2	2499.5	2472.4	1183.1																																																																																																
3	2336.4	1822.0	1424.5																																																																																																
4	2407.2	1682.7	1420.8																																																																																																
5																																																																																																			
Absolute Open Flow 3.633 Mcf @ 14.025					Angle of Slope 45		Slope, n 1.000																																																																																												
Remarks: Made 21.66 BSLS condensate and 3.51 BBL of F60 through out test. MIP's run by Bennett Wire Line Service. * Calculated from known L&P's.																																																																																																			
Approved By Commission		Conducted By: J. C. Roberts		Calculated By: J. B. Murray		Checked By:																																																																																													

5-50-73

