

NEW MEXICO OIL CONSERVATION CO. DIVISION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Copy to SF
C-122
Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 9-24-73		SEP 28 1973																																																																																															
Company Belco Petroleum Corporation			Connection Natural Gas Pipeline of America																																																																																																
Pool James Ranch			Formation Morrow																																																																																																
Completion Date Sept. 9, 1973		Total Depth 14380		Plug Back TD 14273																																																																																															
		Elevation 3296 GL		Unit James Ranch																																																																																															
Csg. Size 5 1/2		Wt. 20#		Set At 14379																																																																																															
Perforations: From 13865 To 14114		Well No. 4		Unit Sec. Twp. Rge. L 6 23S 31E																																																																																															
Thg. Size 2 7/8		Wt. 6.50		Set At 13700																																																																																															
Perforations: From To		State New Mexico		County Eddy																																																																																															
Type Well - Single - Bradenhead - G.G. or G.O. Multiple			Packer Set At 13700																																																																																																
Producing Thru Tubing		Reservoir Temp. °F 194 @ 13000		Mean Annual Temp. °F 70																																																																																															
Baro. Press. - P _a 13.2		Prover 13990		Meter Run X																																																																																															
L 13990		H 13990		Gg 0.600																																																																																															
% CO ₂		% N ₂		% H ₂ S																																																																																															
<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>4757</td> <td></td> <td>Pkr.</td> <td></td> <td></td> </tr> <tr> <td>1.</td> <td>4"</td> <td>X</td> <td>2.250</td> <td>832.5</td> <td>6.25</td> <td>69</td> <td>4221</td> <td>70</td> <td>"</td> <td></td> <td>30 min.</td> </tr> <tr> <td>2.</td> <td>4"</td> <td>X</td> <td>2.250</td> <td>832.5</td> <td>7.56</td> <td>69</td> <td>4167</td> <td>70</td> <td>"</td> <td></td> <td>30 min.</td> </tr> <tr> <td>3.</td> <td>4"</td> <td>X</td> <td>2.250</td> <td>832.5</td> <td>10.89</td> <td>67</td> <td>3938</td> <td>70</td> <td>"</td> <td></td> <td>45 min.</td> </tr> <tr> <td>4.</td> <td>4"</td> <td>X</td> <td>2.250</td> <td>832.5</td> <td>17.64</td> <td>65</td> <td>3530</td> <td>70</td> <td>"</td> <td></td> <td>60 min.</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							4757		Pkr.			1.	4"	X	2.250	832.5	6.25	69	4221	70	"		30 min.	2.	4"	X	2.250	832.5	7.56	69	4167	70	"		30 min.	3.	4"	X	2.250	832.5	10.89	67	3938	70	"		45 min.	4.	4"	X	2.250	832.5	17.64	65	3530	70	"		60 min.	5.											
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5.																																																																																																			
RATE OF FLOW CALCULATIONS																																																																																																			
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$ L-10	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd																																																																																												
1	25.64	7.45 x 2.50	832.5	0.9915	1.291	1.071	2535.5																																																																																												
2	25.64	7.45 x 2.75	832.5	0.9915	1.291	1.071	2789.1																																																																																												
3	25.64	7.45 x 3.30	832.5	0.9933	1.291	1.071	3353.0																																																																																												
4	25.64	7.45 x 4.20	832.5	0.9952	1.291	1.071	4275.6																																																																																												
5																																																																																																			
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.																																																																																														
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.																																																																																														
2.	Used Simplified				Specific Gravity Separator Gas 0.600 XXXXXXXXXX																																																																																														
3.	Supercompressibility				Specific Gravity Flowing Fluid XXXXXX																																																																																														
4.	Tables				Critical Pressure 671 P.S.I.A. _____ P.S.I.A.																																																																																														
5.					Critical Temperature 358 R _____ R																																																																																														
$P_f = 6142.2$ $P_{f2} = 37727$																																																																																																			
NO.	P _t ²	P _s ²	P _s ²	P _{f2} ² - P _s ²	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \text{_____}$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \text{_____}$																																																																																														
1	5580.2	31139	6588		$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \text{_____}$																																																																																														
2	5484.2	30076	7651																																																																																																
3	5226.2	27313	10414																																																																																																
4	4754.2	22602	15125																																																																																																
5																																																																																																			
Absolute Open Flow 7800 Mcfd @ 15,025					Angle of Slope 57° 13'		Slope 0.64412																																																																																												
Remarks: BHP measured with Amerada RPG-3 gauge.																																																																																																			
Approved By Commission:		Conducted By: Tefteller, Inc.		Calculated By: F. Tefteller		Checked By:																																																																																													