

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

Copy to S.E.
Form C-122
Revised 9-1-65

RECEIVED

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 8-10-76		AUG 30 1976	
Company Belco Petroleum Corporation				Connection Llano, Inc.		D. S. C. ARTESIA, OFFICE	
Pool So. Carlsbad - Morrow (Gas)				Formation Morrow		Unit	
Completion Date 3-22-73		Total Depth 11650'		Plug Back TD 11622'		Elevation 3151' GL	
Farm or Lease Name Union Mead Com				Well No. 3			
Csg. Size 4 1/2"	Wt. 13.5	d 3.920	Set At 11642'	Perforations: From 11420' To 11608'		Unit Sec. Twp. Rge. J 5 22S 27E	
Tbg. Size 2 7/8"	Wt. 6.50	d 2.441	Set At 8580'	Perforations: From Open To Ended			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 8590'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F @		Mean Annual Temp. °F		Baro. Press. - P _a 13.2	
L 11514'		H		G _g .592		% CO ₂ % N ₂ % H ₂ S Prover	
						Meter Run 3"	
						Taps Flange	

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
1.	3"	x	1.750	840	63	65	1800	65	Packer		24 hr.
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	15.61	231.8	853.2	.9952	1.300	1.071	5014
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	1000	Mcf/bbl.
1	1.27	525	1.48	.872	A.P.I. Gravity of Liquid Hydrocarbons	55	Deg.
2.					Specific Gravity Separator Gas	.592	X X X X X X X X
3.					Specific Gravity Flowing Fluid	X X X X X	
4.					Critical Pressure	672	P.S.I.A.
5.					Critical Temperature	354	R

P _c	2063.2	P _c ²	4256.8
NO.	P _t ²	P _w	P _w ²
1		1813.2	3287.7
2.			
3.			
4.			
5.			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.393$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 22027$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.393$

Absolute Open Flow	22027	Mcf/d @ 15.025	Angle of Slope °	45°	Slope, n	1.000
Remarks:						
Approved By Commission:		Conducted By:		Calculated By:		Checked By:
				C. W. Byrd		<i>C. W. Byrd</i>