

NE MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR CASEVILLE 1 VED

Form C-122
Revised 9-1-65

DEC 21 1973

Type Test ☐ Initial ☒ Annual ☐ Special					Test Date 12-5-73			
Company Belco Petroleum Corp.				Connection El Paso Natural Gas			O.E.C. ARTESIA, OFFICE	
Pool Undesignated				Formation Morrow Gas			Unit	
Completion Date 3-22-73		Total Depth 11650'		Plug Back TD 11622'		Elevation 3151' GL		Farm or Lease Name Union Mead
Csg. Size 4 1/2	Wt. 13.5	d 3.920	Set At 11642	Perforations: From 11420' To 11608'			Well No. 3	
Tbg. Size 2 7/8	Wt. 6.50	d 2.441	Set At 8580'	Perforations: From Open To Ended			Unit Sec. Twp. Rge. J 5 22s 27e	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 8590'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 189° 11514'		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico
L 11514'	H -	Gg 0.5731	% CO ₂ 0.88	% N ₂ 0.09	% 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. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							2905.0	57	Packer	Choke	40.0 Hrs
1.	3" X	2.00"		680.0	52.0	68	2148.0	65		20/64"	75 min
2.	3" X	2.00"		685.0	33.0	70	2348.0	67		17/64"	75 Min
3.	3" X	2.00"		680.0	19.0	70	2540.0	69		14/64"	45 min
4.	3" X	2.00"		675.0	8.0	73	2712.0	70		11/64"	60 min
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, Fpv	Rate of Flow Q, Mcfd
1	21.32	189.86	693.2	0.9924	1.321	1.051	5577
2	21.32	151.79	698.2	0.9905	1.321	1.051	4450
3	21.32	114.77	693.2	0.9905	1.321	1.051	3365
4	21.32	74.20	688.2	0.9877	1.321	1.051	2169
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	1.03	528	1.53	0.906	Dry Gas	-	0.5731	XXXXXXX	672	346
2.	1.04	530	1.53	0.905						
3.	1.03	530	1.53	0.906						
4.	1.02	533	1.54	0.905						
5.										

NO.	P _t ²	P _w *	P _w ²	P _c ² - P _w ²
1	2851.2	8129.3	5800.0	
2	3096.2	9586.5	4342.8	
3	3305.2	10924.3	3005.0	
4	3482.2	12125.7	1803.6	
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.4016$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 10,930$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.9599$

Absolute Open Flow	10,930	Mcfd @ 15.025	Angle of Slope @	52.5°	Slope, n	0.768
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Remarks: * BHP (-8363') 11514' used for pressure calculations

Approved By Commission:	Conducted By: COLEMAN PET.ENG.CO.	Calculated By: R. West	Checked By: Joe A. Coleman
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