

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 10-21-72		JUL 12 1973	
Company Belco Petroleum Corporation			Connection NONE		O. C. C. ARTESIA, OFFICE
Pool <i>Carlisle manou</i> Undesignated			Formation Morrow Gas		
Completion Date 10-20-72		Total Depth 11650'	Plug Back TD 11648'	Elevation 3112' KB	Farm or Lease Name Union Mead Com.
Csg. Size 5 1/2"	Wt. 20.0	d 4.778	Set At 11648'	Perforations: From 11167' To 11184'	Well No. 1
Tbg. Size 2 7/8"	Wt. 7.9	d 2.323	Set At 11088'	Perforations: From Open Ended	Unit Sec. Twp. Rye H 8 22s 27e
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 11050'	County EDDY
Producing Thru Tubing		Reservoir Temp. °F 191° @ 11000'	Mean Annual Temp. °F 60	Baro. Press. - P _a 13.2	State NEW MEXICO
L 11176'	H -	G _g 0.584	% CO ₂ 0.82	% N ₂ 0.29	% H ₂ S 0.00
Prover		Meter Run	Taps		
X		X	F		

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							3784		PACKER		7.0 Hrs
1.	6	14/64	2	750	73	80	1949	83			3.0
2.	6	11/64	2	660	63	76	2420	78			1.0
3.	6	9/64	2	460	44	97	2960	67			1.0
4.	6	7/64	2	420	38	98	3039	63			1.0
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.	19.16	236.04	763.2	0.9813	1.309	1.051	6105.5
2.	19.16	205.93	673.2	0.9850	1.309	1.047	5326.4
3.	19.16	144.29	473.2	0.9662	1.309	1.028	3594.5
4.	19.16	128.30	433.2	0.9653	1.309	1.025	3183.8
5.							

NO.	P _r	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.	1.13	540	1.56	0.905	Dry Gas	-	0.584	XXXXXXX	675	346
2.	1.00	536	1.55	0.912						
3.	0.70	557	1.61	0.946						
4.	0.64	558	1.61	0.951						
5.										

$P_c = 4792.2$ $P_c^2 = 22965.2$					$(1) \frac{P_c^2}{P_r^2 - P_w^2} = 5.394$	$(2) \left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 2.510$
NO.	P _r ²	P _w *	P _w ²	P _c ² - P _w ²		
1	-	3314.2	10983.9	11981.3		
2	-	3735.2	13951.7	9013.5		
3	-	4325.2	18707.4	4257.8		
4	-	4404.2	19397.0	3568.2		
5						

$AOF = Q \left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 9022$		
Absolute Open Flow 9022	Mcfd @ 15.025	Angle of Slope @ 61° 14'
Slope, n 0.549		

Remarks: * BHP @ (-8064') 11176' used for pressure calculations

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	COLEMAN PET.ENG.CO.	JOE A. COLEMAN	JOE A. COLEMAN