

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 1-21-82		RECEIVED	
Company Belco Petroleum Corp. /				Connection E.P.N.G. CO.		FEB 1 1982	
Pool Loving North				Formation Morrow		Unit O.C.D.	
Completion Date 11-11-81		Total Depth 12,950		Plug Back TD 12,438		Elevation 3086 K.B.	
Casing Size 7 5/8"		Wt. 33.7#		Set At 12,945		Perforations: From 12,387 To 12,397	
Tubing Size 2 7/8"		Wt. 6.5#		Set At 12,248		Perforations: From OPENENDED To	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple				Packer Set At		Well No. 1	
Single						County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 191@ 12,000		Mean Annual Temp. °F		Baro. Press. - P _a 13.2	
L 12,000		H 12,000		G _g .5841		% CO ₂ 1.41	
				% N ₂ 2.31		% H ₂ S -0-	
				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
SI			S.I.				1842		PKR.	CHOKE	24 HRS.
1.	3"	x	.625	320	5"	64°	1717	59°		5/64	1 HR.
2.	3"	x	.625	320	11"	67	1572	59°		5.5/64	1 HR.
3.	3"	x	.625	320	20"	67	1367	59°		6.5/64	1 HR.
4.	3"	x	.625	320	35"	68	1072	60°		7.5/64	1 HR.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	1.850	40.82	333.2	1.001	1.309	1.025	101.4
2.	1.850	60.54	333.2	1.001	1.309	1.025	150.4
3.	1.850	81.63	333.2	1.001	1.309	1.025	203
4.	1.850	107.99	333.2	1.000	1.309	1.025	268
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ T.S.T.M. _____ Mcf/bbl.
1.	.494	519	1.52	.952	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	.494	519	1.52	.952	Specific Gravity Separator Gas .5841 X X X X X X X X
3.	.494	519	1.52	.952	Specific Gravity Flowing Fluid X X X X X
4.	.494	520	1.52	.952	Critical Pressure 674 P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature 341 R _____ R

* $P_c = 2312.6$ $P_w = 5348.1$

NO.	P_c^2	P_w^2	$P_w^2 - P_c^2$	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.9937$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.5023$
1		2203.9	4857.2	490.9	
2		2070.2	4285.7	1062.4	
3		1887.6	3563.0	1785.1	
4		1632.7	2665.7	2682.4	
5					

AOFP = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 403$

Absolute Open Flow 403 Mcfd @ 15.025		Angle of Slope @ 59° 28'		Slope, n 58983	
Remarks: calculated from known Bottom Hole Pressures.					
Approved By Commission:		Conducted By: W.S.		Calculated By: M.K.	
				Checked By: M.K.	