

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

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 9-15-77		SEP 26 1977	
Company Depco, Inc. ✓				Connection None		O.C.C.	
Pool Und. Buffalo Valley Penn				Formation Morrow		Unit ARTESIA, OFFICE	
Completion Date 8-15-77		Total Depth 9137		Plug Back TD 9080		Elevation 3538.2 Gr	
Csg. Size 4 1/2		Wt. 11.6		Set At 9136		Perforations: From 8874 To 8880	
Thg. Size 2 3/8		Wt. 4.7		Set At 8769		Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 8769		County Chaves	
Producing Thru Tubing		Reservoir Temp. °F 156 @ 8872		Mean Annual Temp. °F		Baro. Press. - P _a 13.2	
L 8874		H		G _g 0.660		% CO ₂ 0.32	
				% N ₂ 0.84		% H ₂ S	
				Prover		Meter Run	
						Taps	

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							2240	80			
1.	2"		1.250	406	2.25	86	2060	83			1 hour
2.	2"		1.250	406	10.24	84	1740	83			1 hour
3.	2"		1.250	406	27.04	87	1225	87			1 hour
4.	2"		1.250	406	40.96	90	755	90			1 hour
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	8.120	30.71	419.2	0.9759	1.231	1.037	311
2	8.120	65.52	419.2	0.9777	1.231	1.038	665
3	8.120	106.47	419.2	0.9750	1.231	1.037	1076
4	8.120	131.04	419.2	0.9723	1.231	1.036	1319
5.							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio 28776 Mcf/bbl.
1.	0.63	546	1.46	0.930	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	0.63	544	1.45	0.928	Specific Gravity Separator Gas .660 XXXXXXXXXX
3.	0.63	547	1.46	0.930	Specific Gravity Flowing Fluid XXXXX
4.	0.63	550	1.47	0.932	Critical Pressure 669 P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature 375 R _____ R

P _f 3165.2 P _s 10018			
NO.	P _f ²	P _s ²	P _f ² - P _s ²
1	5076.9	3012.2	9073
2	4298.2	2531.2	6407
3	3073.7	1824.2	3328
4	1533.1	1187.2	1409
5	590.1		

(1) $\frac{P_f^2}{P_f^2 - P_s^2} = 1.1636$

AOF = Q $\left[\frac{P_f^2}{P_f^2 - P_s^2} \right]^n = 1,485$

(2) $\left[\frac{P_f^2}{P_f^2 - P_s^2} \right]^n = 1.1256$

Absolute Open Flow 1,485 Mcfd @ 15.025	Angle of Slope 52	Slope, n 0.781
Remarks:		
Approved By Commission:	Conducted By: Martin	Calculated By: McPherson
Checked By:		