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NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

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O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: Nov. 27, 1976	
Company: Depco, Inc.	Connection: None			
Pool: ~~Undesignated~~ Buffalo Valley Penn	Formation: Morrow Gas		Unit	
Completion Date: Nov. 27, 1976	Total Depth: 9147'	Plug Back TD: 9117'	Elevation: 3535'GL	Farm or Lease Name: Bogle State
Csg. Size: 4½" / Wt.: 11.6 / d: 4.000 / Set At: 9147'		Perforations: From 8834' To 8842'		Well No.: 1
Tbg. Size: 2 3/8" / Wt.: 4.7 / d: 1.995 / Set At: 8777'		Perforations: From Open Ended To		Unit: J / Sec.: 8 / Twp.: 15 / Rge.: 28
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 8777'		County: Chaves
Producing Thru: Tubing	Reservoir Temp. °F: 132 @ 8738'	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
8838'	--	0.6996	0.254	1.243	0.000		X	F

	FLOW DATA					TUBING DATA		CASING DATA		
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	Duration of Flow
SI	2	1.250				2180	-	PACKER		63.0
1.	2 6/64	1.250	600	3	70	1620	-			1.0
2.	2 8/64	1.250	600	6	70	1345	-			1.0
3.	2 10/64	1.250	600	9	70	1115	-			1.0
4.	2 12/64	1.250	600	12	70	890	-			3.0
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	42.89	613.2	0.9905	1.195	1.067	439.8
2.	8.120	60.64	613.2	0.9905	1.195	1.067	621.9
3.	8.120	74.29	613.2	0.9905	1.195	1.067	761.2
4.	8.120	85.78	613.2	0.9905	1.195	1.067	879.7
5.							

NO.	P_t	Temp. °R	T_f	Z
1.	0.92	530	1.38	0.878
2.	0.92	530	1.38	0.878
3.	0.92	530	1.38	0.878
4.	0.92	530	1.38	0.878
5.				

Gas Liquid Hydrocarbon Ratio: Dry Gas Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: -- Deg.
Specific Gravity Separator Gas: 0.6996 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 669 P.S.I.A. -- P.S.I.A.
Critical Temperature: 385 R -- R

P_c 3194.2 P_c^2 10202.9

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2471.2	6106.8	4096.1
2		2103.2	4423.5	5779.4
3		1777.2	3158.4	7044.5
4		1347.2	1814.9	8388.0
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.491$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.424$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1066$

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Absolute Open Flow: 1066 Mcfd @ 15.025 | Angle of Slope θ: 45° 55' | Slope, n: 0.969

Remarks: * BHP @ (-5303) 8838' Used for Pressure Calculation

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Jarrel Services, Inc.	Joe A. Coleman	Joe A. Coleman