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State of New Mexico
Energy, Minerals and Natural Resources Department

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Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MAR 03 1993

O. C. D.
APTEC

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Conoco Inc.				Lease or Unit Name Preston Federal			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 2-9-93		Well No. 6	
Completion Date 2-3-93		Total Depth 9650'		Plug Back TD 9430'		Elevation 3645'	
Csg. Size 7"		Wt. 26		d 6.151		Set At 9650	
Perforations: From: 9302' To: 9326'				County Eddy			
Tbg. Size 2 7/8		Wt. 6.5		d 2.441		Set At 9222	
Perforations: From: To:				Pool Somatory Morrow			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single				Packer Set At 9222		Formation morrow	
Producing Thru TBG		Reservoir Temp. °F 166 F		Mean Annual Temp. °F 60 F		Baro. Press. - P 13.2 psi	
Connection vented		L 9222		H 9222		Gg .678	
% CO ₂ .78		% N ₂ .17		% H ₂ S		Prover	
Meter Run 4.026		Taps flg					

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							2842		pk		72 hr.
1.	4	X	3.000	120	25.00	58	2750		pk		1 hr.
2.	4	X	3.000	120	32.00	58	2725		pk		30 min.
3.	4	X	3.000	145	36.00	56	2700		pk		45 min.
4.	4	X	3.000	170	40.00	50	2675		pk		30 min.
5.											

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$h_w P_m$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	51.64	57.71	133.2	1.002	1.214	1.015	3695
2.	51.64	65.29	133.2	1.002	1.214	1.015	4130
3.	51.64	75.47	158.2	1.004	1.214	1.017	4832
4.	51.64	85.60	183.2	1.010	1.214	1.023	5481
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	253.2	Mcf/bbl.
1.	.20	518	1.35	.971	A.P. I. Gravity of Liquid Hydrocarbons	52.0 @ 60	Deg.
2.	.20	518	1.35	.971	Specific Gravity Separator Gas	.678	XXXXXXXXXX
3.	.23	516	1.35	.967	Specific Gravity Flowing Fluid	XXXXXX	SG mix = .690
4.	.27	510	1.33	.956	Critical Pressure	669	P.S.I.A.
5.					Critical Temperature	382	R

P_c 2850		P_c^2 8122.5	
NO.	P_t^2	P_w	P_w^2
1.		2750	7562.5
2.		2725	7425.6
3.		2700	7290.0
4.		2675	7155.6
5.			

$$1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{8.401}{(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{5.668}{AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{31.3}$$

Absolute Open Flow **31,300** Mcfd @ 15.025 Angle of Slope Θ Slope, n **0.8152**

Remarks: **Well made 2.00 bbl of 52.0 API Gr. Condensate**

Approved By Division Conducted By: **Prowell Testors** Calculated By: **BM** Checked By: