Submit in duplicate to appropriate district office
See Rule 401 & Rule 1122

Energy, Minerals and Natural Resources Department

Revised 4-1-1991

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator					Lease or Unit Name	
ARCO Permian					B&C Federal	
Test Type: ☒ Initial ☐ Annual ☐ Special					Test Date: 1-19-2000	Well No.: 25-1
Completion Date	Total Depth: 8323		Plug Back TD: 8258		Elevation	Unit Ltr - Sec - TWP - Rge.: M 25-20-21
Csg. Size: 5.500	Wt.: 17.000	d: 4.900	Set At: 8323	Perforation: From To		County: Eddy
Tbg. Size: 2.375	Wt.: 4.700	d: 1.995	Set At: 8040	Perforation: From 8128 To 8134		Pool: Little Box Canyon Morrow
Type Well-Single-Bradenhead-G.G. or G.O. Multiple: Single					Packer Set At: 8040	Formation: Morrow
Producing Thru: Tubing	Reservoir Temp.F: 140		Mean Annual Temp.F: 65		Baro. Pressure: 15.02	Connection
L: 8131	H: 8131	Gg: .626	% CO_2: .49	% N_2: .28	% H_2S	Prover: Positive C
Meter Run: 3"	Taps: Flange					

Flow Data					Tubing Data		Casing Data		SIP/Flow Duration (HRS.)
No.	(Prover) Line Size x Orifice Size	Press. PSIG	Diff. h_w	Temp. F	Press. PSIG	Temp. F	Press. PSIG	Temp. F	
Shut-in Pressure					1600	60			24
1.	3.07 x .11	240.00	6.00	72	1450	72			1
2.	3.07 x .16	250.00	16.00	70	1225	70			1
3.	3.07 x .19	360.00	28.00	70	740	70			1
4.	3.07 x .25	360.00	32.00	70	500	70			1

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.	6.340	39.117	255.0	.9887	1.2639	1.0208	316.3
2.	6.340	65.118	265.0	.9905	1.2639	1.0219	528.2
3.	6.340	102.473	375.0	.9905	1.2639	1.0314	838.9
4.	6.340	109.548	375.0	.9905	1.2639	1.0314	896.8

No.	P_r	TEMP.	T_r	Z
1.	.379	532	1.465	.9597
2.	.394	530	1.460	.9575
3.	.558	530	1.460	.9400
4.	.558	530	1.460	.9400

Gas-Liquid Hydrocarbon Ratio			Mcf/bbl
API Gravity of Liquid Hydrocarbons			Deg.
Specific Gravity Separator Gas	.626		
Specific Gravity Flowing Fluid		.626	
Critical Pressure	672 PSIA	672	PSIA
Critical Temperature	363 R	363	R

P_C = 1615.0 P_C^2 = 2608.3

No.	Pw	Pw^2	$Pc^2 - Pw^2$
1.	1486.2	2149	458.479
2.	1243.8	1547	1061.275
3.	770.7	593	2014.385
4.	541.5	293	2315.079

(1) $\frac{P_C^2}{P_C^2 - P_W^2} = 1.127$ (2) $\left[\frac{P_C^2}{P_C^2 - P_W^2}\right]^n = 1.081$

$AOF = Q\left[\frac{P_C^2}{P_C^2 - P_W^2}\right]^n = 969$

Absolute Open Flow	969 Mcfd @ 15.025	Angle of Slope -	56.8	Slope, n	.654
Remarks					
Approved By Division:	Conducted By:	Calculated By: BPT System/Myco		Checked By:	