OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: ☐ Initial ☐ Annual ☐ Special			Test Date: 10-5-82	
Company: Arco Oil & Gas Co., Div of Atlantic Richfield Co.	Connection: None			
Pool: Basin Dakota	Formation: Dakota			Unit
Completion Date: 9-19-82	Total Depth: 6790	Plug Back TD: 6755	Elevation: 5931	Farm or Lease Name: Maddox WN Federal
Csg. Size: 4.500 / Wt.: 11.6 / d: 4.000	Set At: 6789	Perforations: From 6522 To 6738		Well No.: 1
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995	Set At: 6645	Perforations: From To		Unit: H / Sec.: 13 / Twp.: 30N / Rge.: 13W
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single - Gas		Packer Set At: 6397		County: San Juan
Producing Thru: Tubing	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. – P_a: 12.0	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
6645	6645	.700(EST)				2"		

	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.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI						1186		PKR		SI 16 DAYS
1.	2"	x .750	32		70	56		PKR		3-HOURS
2.										
3.										
4.										
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	9.453		44	.9905	1.195	1.000	492
2.							
3.							
4.							
5.							

NO.	P_t	Temp. °R	T_t	Z
1	.07	530	1.35	1.000
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas .700 (EST) XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 668 P.S.I.A. _____ P.S.I.A.
Critical Temperature 392 R _____ R

P_c 1198 P_c^2 1435204

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	4624	104	10765	1424439
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0076$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.0057$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 495$

Absolute Open Flow 495 Mcfd @ 15.025 Angle of Slope θ _____ Slope, n .75

Remarks: This well has been SI since Feb., 1969 due to Casing Leak. Workover to repair leak completed 9-19-82.

Approved By Division	Conducted By:	Calculated By:	Checked By:
	Rex Hitchcock, Jr.	Rex Hitchcock, Jr.	