SF/file

N MEXICO OIL CONSERVATION CO SSION

Form C-122
Revised 9-1-65

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 6-16-82	
Company: ARCO Oil and Gas Company ✓			Connection: None		
Pool: ~~Undesignated~~ South Empire Morrow			Formation: Morrow Gas		Unit
Completion Date: 6-12-82	Total Depth: 10861		Plug Back TD: 10769	Elevation: 3657.8 GR	Farm or Lease Name: State BX
Csg. Size: 5.5 / Wt.: 17 / d: 4.892 / Set At: 10861			Perforations: From 10590 To 10722		Well No.: 1
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 10530			Perforations: From Open To Ended		Unit: O / Sec.: 35 / Twp.: 17S / Rge.: 28E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 10530		County: Eddy
Producing Thru: Tbg.	Reservoir Temp. °F: 161 @ 10656	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
10530	10530	.643	2.161	.402	-0-		4"	Flg.

	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 Hrs.
SI					2625		Pkr.		49
1.	4 x 1	482	13	94	2260	74	Pkr.		1
2.	4 x 1	488	16.5	90	2090	74	Pkr.		1
3.	4 x 1	498	43	89	1840	74	Pkr.		1
4.	4 x 1	505	67	89	1538	76	Pkr.		1
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	4.753	80.235	495.2	.9688	1.247	1.040	479
2	4.753	90.938	501.2	.9723	1.247	1.041	546
3	4.753	148.262	511.2	.9732	1.247	1.043	892
4	4.753	186.331	518.2	.9732	1.247	1.043	1121
5							

NO.	P_t	Temp. °R	T_t	Z
1	.731	554	1.489	.924
2.	.740	550	1.478	.922
3.	.755	549	1.476	.920
4.	.765	549	1.476	.919
5				

Gas Liquid Hydrocarbon Ratio – Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons – Deg.
Specific Gravity Separator Gas .643 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 677 P.S.I.A. P.S.I.A.
Critical Temperature 372 R R

$*P_c$ 3616.2 P_c^2 13076.9

NO	P_t^2	* P_w	P_w^2	$P_c^2 - P_w^2$
1		3154.2	9949.0	3127.9
2		2944.2	8668.3	4408.6
3		2415.2	5833.2	7243.7
4		2165.2	4688.1	8388.8
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.805$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.641$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1463$

Absolute Open Flow 1463 Mcfd @ 15.025 Angle of Slope θ – Slope, n .838

Remarks: *BHP at mid point of perforations 10656
Via bottom hole pressure bomb
Produced 5 bbl. water. No distillate

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	C. Johnson	J. Cogburn	S.D. Smith