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

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Revised 4-1-91

c/SF

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: MURCHISON OIL & GAS						Lease or Unit Name: OGDEN ST.			
Type Test: [X] Initial [ ] Annual [ ] Special						Test Date: 4-7-97		Well No.: 3	
Completion Date: 4-1-97		Total Depth: 11479		Plug Back TD: 11479		Elevation: 3379 GL		Unit Ltr. - Sec. - TWP - Rge.: K 2-25S-26E	
Csg. Size: 5½	Wt.: 20#	d: 4.778	Set At: 11479	Perforations: From: 11008	To: 11394			County: EDDY	
Tbg. Size: 2-7/8	Wt.: 6.5	d: 2.441	Set At: 10879	Perforations: From:	To:			Pool: White City Penn	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: single				Packer Set At: 10879				Formation: MORROW	
Producing Thru: TBG	Reservoir Temp. °F	Mean Annual Temp. °F: 60°		Baro. Press - P_a: 13.2				Connection: AIR	
L: 10877	H: 10877	Gg: .695	% CO_2: 1.47	% N_2: .60	% H_2S: -0-	Prover: -0-		Meter Run: 3.068	Taps: 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
SI					1540		PKR		
1.	3.068 X 1.125	100	6"	90°	1465		"		60 min
2.	3.068 X 1.250	100	20"	84°	1330		"		60 min
3.	3.068 X 1.250	100	52"	80°	1300		"		60 min
4.	3.068 X 1.250	100	85"	82°	1200		"		60 min
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, F pv.	Rate of Flow Q, Mcfd
1.	6.095	26.06	113.2	.9723	1.200	1.050	194
2.	6.095	47.58	113.2	.9777	1.200	1.054	358
3.	6.095	76.72	113.2	.9813	1.200	1.055	580
4.	6.095	98.09	113.2	.9795	1.200	1.055	741
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.81	550	1.43	.907
2.	.80	544	1.41	.901
3.	.80	540	1.40	.899
4.	.80	542	1.40	.899
5.				

Gas Liquid Hydrocarbon Ratio: N/A Mcf/bbl.
A.P. I. Gravity of Liquid Hydrocarbons: N/A Deg.
Specific Gravity Separator Gas: .695 XXXXXXXXX
Specific Gravity Flowing Fluid: N/A XXXXX
Critical Pressure: 672 P.S.I.A. ____ P.S.I.A.
Critical Temperature: 384 R ____ R

P_c 1817.6 P_c^2 3303.6

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		1766.6	3120.8	182.8
2.		1682.4	2830.4	473.4
3.		1622.8	2633.4	670.2
4.		1521.1	2313.7	989.9
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.33$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.70$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2000.7$

Absolute Open Flow: 2000.7 Mcfd @ 15.025 | Angle of Slope θ: 50.4 | Slope, n: .8258

Remarks: *CALCULATED FROM KNOWN BOTTOM HOLE PRESSURES

Approved By Division	Conducted By:	Calculated By:	Checked By:
	PRO WELL TESTER	MB	BM