

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

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-122
Revised October, 1999

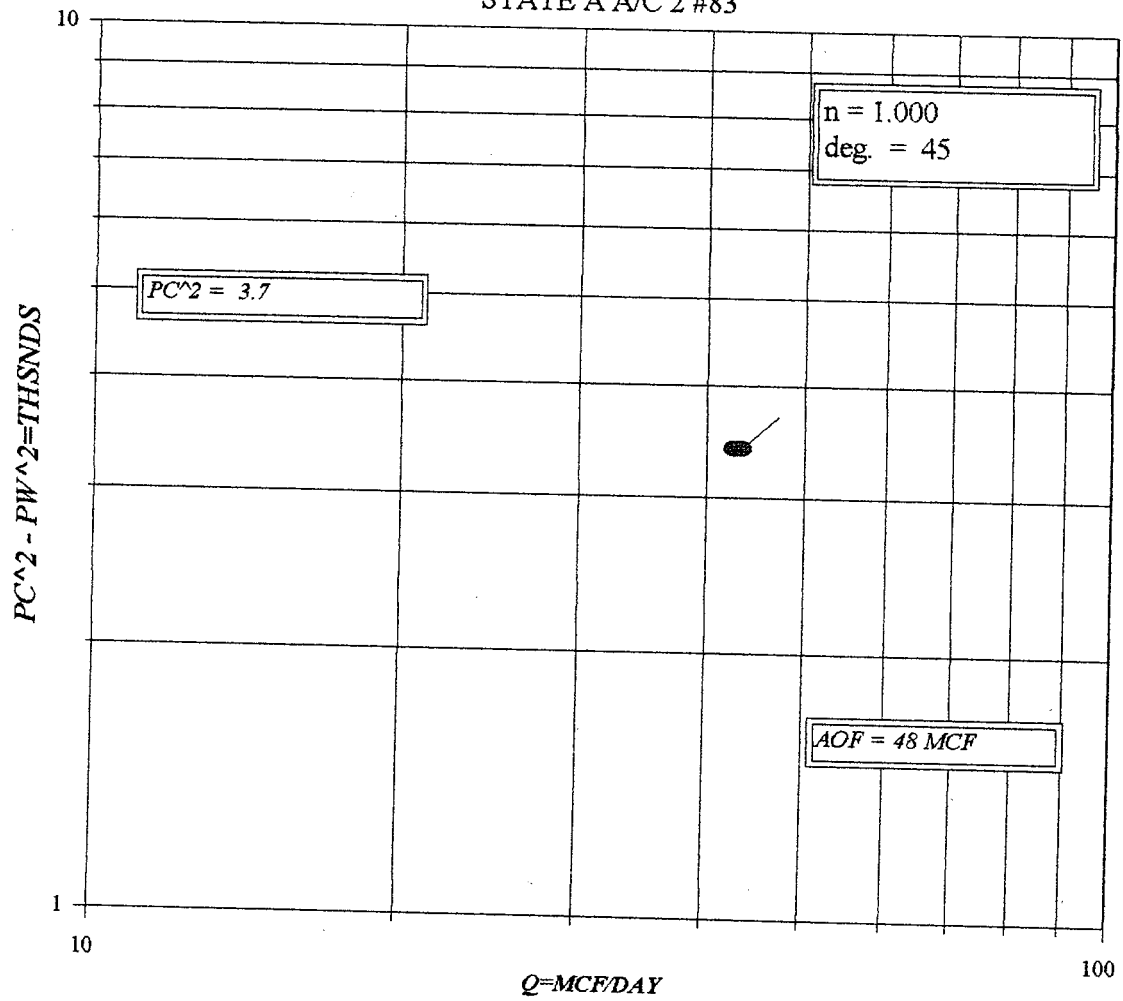
30-025-36910

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator MISSION RES.				Lease or Unit Name STATE A A/C2			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 6/28/05		Well No. 83	
Completion Date 4/29/05		Total Depth 3725		Plug Back TD 3678		Elevation 3539	
Csg. Size 4 1/2		Wt. d 11.6 3.723		Set At 3723		Perforations: From: 3678 To: 3640	
Tbg. Size 2 3/8		Wt. d 4.7 1.995		Set At 3318		Perforations: From: To:	
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At N/A		Formation	
Producing Thru Csg. Size		Reservoir Temp. 104		Mean Annual Temp. 60		Baro. Press.-P _a 13.2	
Connection SALES							
L 2976		H 2976		Gg 0.7244		%CO ₂ 16	
				%N ₂ 3.994		%H ₂ S 0	
				Prover N/A		Meter Run 3.068	
						Taps FLG	
FLOW DATA				TUBING DATA			
CASING DATA				Duration of Flow			
No.	Prover Line Size	Orifice x Size	Press p.s.i.g.	Diff. h _w	Temp.	Press p.s.i.g.	Temp.
SI							
1	3.0 X .875		3.7	6	72		48
2							25
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 F _g	Super Compress Factor F _{pv}	Rate of Flow Q, Mcfd
1	3.65	10.07	16.9	1	1.175	1.004	43.4
2							
3							
4							
5							
No.	P _r	Temp. R	T _r	Z	Gas Liquid Hydrocarbon Ratio N/A Mcf bbl.		
1	0.02	520	1.44	0.992	A.P. I. Gravity of Liquid Hydrocarbons Deg.		
2					Specific Gravity Separator Gas 0.7244 XXXXXXXX		
3					Specific Gravity Flowing Fluid XXXXX		
4					Critical Pressure 731 P.S.I.A. N/A P.S.I.A.		
5					Critical Temperature 360 R. N/A R		
P _c 61.2 P ₂ 3.7							
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.097$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.097$		
1		18.2	0.3	3.4			
2							
3							
4							
5							
Absolute Open Flow [0.048] Mcfd @ 15.025					Angle of Slope (°) 45 Slope, n: 1		
Remarks: * NO LIQUID MOQE DURING TEST.							
Approved By Division:		Conducted By:		Calculated By:		Checked By:	
		MISSION RES.		MERV BUECKER		MB	

MISSION RESOURCES

STATE A A/C 2 #83



COMPANY : MISSION RESOURCES LEASE : ST. A A/C 2 WELL NO. : 83
 UNIT : N SECTION : 11 TOWNSHIP : 22
 L : 2976 H : 2976 L/H : 1 G/GMIX : 0.724
 %CO2 : 16 %N2 : 3.994 H2S : DATE : 6-28-05
 d : 3.434 Fr : 0.004413 GH : 2155.8 RANGE : 36

Pc = 61.2 Pc2 = 3.7 *
 Pt2 = 0.3 Pw = 18.2 *
 0.0 ERR *
 0.0 ERR *
 0.0 ERR *

VOL 1 : 43.4 PSIA 1 : 18.2 RESV.TEMP 104.0
 VOL 2 : PSIA 2 :
 VOL 3 : PSIA 3 : SHUT-IN PR= 61.2
 VOL 4 : PSIA 4 :

Pc2-Pw2= 3.4 Pw2 = 0.3 *
 ERR ERR *
 ERR ERR *
 ERR ERR *

PCR : 731
 TCR : 360

n = 1.000 *

Pc2/(Pc2-Pw2) = 1.097 *
 ERR *
 ERR *
 ERR *

LINE		RATE 1		RATE 2		RATE 3		RATE 4	
		1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND
1	QM	0.043	0.043	0.000	0.000	0.000	0.000	0.000	0.000
2	TW	534	534	534	534	534	534	534	534
3	Ts	564.0	564.0	564.0	564.0	564.0	564.0	564.0	564.0
4	T	549.0	549.0	549.0	549.0	549.0	549.0	549.0	549.0
	PR (est)	0.02		0.00		0.00		0.00	
5	Z(est)	0.973	0.973	ERR	ERR	ERR	ERR	ERR	ERR
6	TZ	534.3	534.2	ERR	ERR	ERR	ERR	ERR	ERR
7	GH/TZ	4.035	4.035	ERR	ERR	ERR	ERR	ERR	ERR
8	eS	1.163	1.163	ERR	ERR	ERR	ERR	ERR	ERR
9	l-e-S	0.140	0.140	ERR	ERR	ERR	ERR	ERR	ERR
10	Pt	18.2	18.2	0.0	0.0	0.0	0.0	0.0	0.0
11	Pt2 /1000	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
12	Fr	0.004413	0.004413	0.004413	0.004413	0.004413	0.004413	0.004413	0.0044132
13	Fc=FrTZ	2.358	2.358	ERR	ERR	ERR	ERR	ERR	ERR
14	FcQm	0.10	0.10	ERR	ERR	ERR	ERR	ERR	ERR
15	L/H(FcQm)	0.0	0.0	ERR	ERR	ERR	ERR	ERR	ERR
16	Fw	0.001470	0.001470	ERR	ERR	ERR	ERR	ERR	ERR
17	Pw2	0.3	0.3	ERR	ERR	ERR	ERR	ERR	ERR
18	Ps2	0.4	0.4	ERR	ERR	ERR	ERR	ERR	ERR
19	Ps	19.7	19.7	ERR	ERR	ERR	ERR	ERR	ERR
20	P	18.9	18.9	ERR	ERR	ERR	ERR	ERR	ERR
21	Pr	0.03	0.03	ERR	ERR	ERR	ERR	ERR	ERR
22	Tr	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53
23	Z	0.973	0.973	ERR	ERR	ERR	ERR	ERR	ERR

[Pc2/Pc2-Pw2]n = 1.097 *
 ERR *
 ERR *
 ERR *

AOF= Q 0.048 *
 ERR *
 ERR *
 ERR *