NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: ■Initial ☐ Annual ☐ Special							Test Date: 09/28/96	
Company: Amoco Prod			Connection				30-039-25577	
Pool: BLANCO			Formation: MESAVERDE				Unit: ROSA UNIT	
Completion Date: 08/31/96	Total Depth: 7992'		Plug Back TD: 7969'		Elevation: 6231'		Farm or Lease Name: #19M	
Casing Size	Weight	d	Set At	Perforations: From To			Well No.	
Tubing Size: 1-1/4"	Weight: 2.33#	d	Set at	Perforations: From 5269' To 5872			Unit: F Sec: 24 Twp: 31N Rng: 6W	
Type Well - Single - Bradenhead - GG or GO Multiple			Packer Set At: 6050'				County: RIO ARRIBA	
Producing Thru: TUBING	Reservoir Temp. °F		Mean Annual Temp. °F		Barometer Pressure - P_a		State: NEW MEXICO	
L	H	Gq: .6	$\%CO_2$	$\%N_2$	$\%H_2S$	Prover: 3/4"	Meter Run: 2"	Taps

	FLOW DATA			TUBING DATA		CASING DATA		
NO.	Prover Line / Orifice Size	Pressure p.s.i.g.	Temperature °F	Pressure p.s.i.g.	Temperature °F	Pressure p.s.i.g.	Temperature °F	Duration of
SI	2" X 3/4"			815		816		0
1				107	*52°	791		0.5 HR
2				108	57°	784		1.0 HR
3				107	59°	778		1.5 HR
4				108	59°	776		2.0 HR
5				102	59°	761		3.0 HR

RATE OF FLOW CALCUATIONS

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	9.604		114	1.0010	1.29	1.010	1428
2							
3							
4							

NO.	P_r	Temp. °R	T_r	Z
1.				
2.				
3.				
4.				
5.				

P_c 828 P_c^2 685584

Gas Liquid Hydrocarbon Ration _____ Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.

Specific Gravity Separator _____ XXXXXXX

Specific Gravity Flowing Fluid xxxxx _____

Critical Pressure _____ p.s.i.a. _____ p.s.i.a.

Critical Temperature _____ R _____ R

NO.	P_t^1	P_w	P_w^2	$P_c^2 - P_w^2$
1.		773	597529	88055
2.				
3.				
4.				

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 7.8759 (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 4.6610

AOF = Q $\frac{P_c^2}{[P_c^2 - P_w^2]}^n$ = 6656

Absolute Open Flow 6656 Mcfd @ 15.025 Angle of Slope θ _____ Slope, n .75

Remarks: *UNLOAD WATER IN 45 MIN.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	CHIK CHARLEY	SUSAN BRIGUHN	

WELLBORE DIAGRAM

ROSA UNIT #19M
MV/DK

Location: 1620' FNL,1665' FWL
SE/4 NW/4 Section 24, T31N, R6W
Rio Arriba Co., NM

Elevation = 6231' GR
KB = 14'

TOPS	DEPTH
OJO ALAMO	2300'
KIRTLAND	2438'
FRUITLAND	2878'
PICTURED CLIFFS	3084'
LEWIS	3373'
CLIFF HOUSE	5282'
MENEFEE	5326'
POINT LOOKOUT	5555'
MANCOS	5862'
GALLUP	6322'
GREENHORN	7595'
GRANEROS	7652'
DAKOTA	7775'

STIMULATION

Cliff House/Menefee: 5269' - 5541'

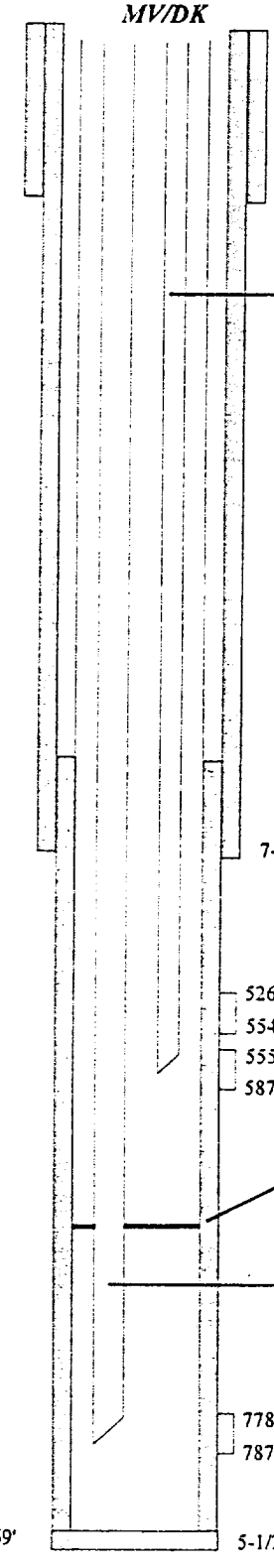
80,000# of 20/40 sand in 1771 Bbls of slick water

Point Lookout: 5556' - 5872'

80,000# of 20/40 sand in 1968 Bbls of slick water

Dakota: 7788' - 7875'

95,000# of 20/40 Ottawa in 1392 Bbls of 60 qual N2 foam w/ 30# CMHPG gel X-linked w/ Zirconium.



10-3/4" 40.5# J-55 @ 307'

180 jts of 1-1/4", 2.33#, IJ Lonestar as follows: orange peeled perforated jt on bottom, SN (1.062" ID @ 5804') on top of perf jt and 1179 jts of tubing. Landed @ 5833' KB.

7-5/8" 26.4# K-55 @ 3509'

5269'
5541' Mesaverde Perforations
5556'
5872'

Model "D" packer @ 6050'

239 jts of 1-1/2", 2.9#, EUE Lonestar as follows: 1/2 mule show on bottom, SN (1.375" ID @ 7827') on top of bottom jt. 54 jts of tail pipe, 5 seal units, 183 jts of tubing, 1 4' pup, 1 8' pup and 1 jt of 1-1/2" tbg on top. Landed @ 7862' KB.

7788'
7875' Dakota Perforations

PBTD @ 7969'

5-1/2" 17# N-80 @7992'

HOLE SIZE	CASING	CEMENT	VOLUME	TOP OF CMT
14-3/4"	10-3/4" 40.5#	285 sx	336 cu.ft.	SURFACE
9-7/8"	7-5/8" 26.4#	780 sx	1420 cu.ft.	SURFACE
6-3/4"	5-1/2" 17#	440 sx	611 cu.ft.	3010' (CBL)