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

Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: H.L. Brown, Jr.					Lease or Unit Name: Feather, North State Unit		
Type Test: [X] Initial [ ] Annual [ ] Special					Test Date: 8-27-97	Well No.: 2	
Completion Date: 5-23-97	Total Depth: 12506		Plug Back TD: 12477		Elevation:	Unit Ltr. - Sec. - TWP - Rge.: I - 9-15S-32E	
Csg. Size: 5½	Wt.: 17/20	d: 4.892 / 4.778	Set At: 12506	Perforations: From: 12312	To: 12392	County: Lea	
Tbg. Size: 2 7/8	Wt.: 2.441	d: 2.441	Set At: 12298	Perforations: From:	To:	Pool: N Feather	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single			Packer Set At: 12298			Formation: Morrow	
Producing Thru: Tbg	Reservoir Temp. °F	Mean Annual Temp. °F: 60°	Baro. Press - P_a: 13.2			Connection: Sale	
L: 12298	H: 12298	Gg: .738	% CO_2: .85	% N_2: 1.35	% H_2S: 0	Prover: 0	Meter Run: 4.026	Taps: F/G

NO.	FLOW DATA: Prover Line X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					840		PKR		72 hrs
1.	4.026 X 2.250	38.1	3.1	95°	780	90°			
2.	4.026 X 2.250	45.8	11.1	92°	725	92°			
3.	4.026 X 2.250	53.3	30.3	81°	560	92°			
4.	4.026 X 2.250	75.6	68.7	72°	490	95°			
5.									

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR)	$h_w P_m$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, F pv.	Rate of Flow Q, Mcfd
1.							
2.		Readings	Take	From Total	Flow Meter		320
3.							657
4.							1173
5.							2155

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

Gas Liquid Hydrocarbon Ratio 32.614 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 58.6 Deg.
Specific Gravity Separator Gas .738 XXXXXXXXX
Specific Gravity Flowing Fluid N/A XXXXX
Critical Pressure 664 P.S.I.A. P.S.I.A.
Critical Temperature 401 R R

P_c 853.2 P_c^2 728.0

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.	629.2	794.1	630.6	97.3
2.	544.9	742.4	551.2	176.8
3.	328.6	591.0	349.2	378.7
4.	253.2	569.0	323.8	404.2
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.801$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.801$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.881$

Absolute Open Flow 3.881 Mcfd @ 15.025 | Angle of Slope θ 45.0 | Slope, n 1.000

Remarks: *Well made 5.5 BBLS of 58.6 API Gravity Condensate

Approved By Division	Conducted By:	Calculated By:	Checked By:
	Pro Well Testing	M.B.	B.M.