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

C15F

Form C-122
Revised October, 1999

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: BELLWETHER EXPL CO.					Lease or Unit Name: Wishbone Federal Com			
Type Test: ☑ Initial ☐ Annual ☐ Special					Test Date: 1/21/01		Well No.: 1	
Completion Date: 9/28/00	Total Depth: 11750			Plug Back TD: 11452		Elevation: 3414	Unit Ltr - Sec - TWP - Rge: 6 19S 30E	
Csg. Size: 5 1/2	Wt.: 17	d: 4.892	Set At: 11750	Perforations: From: 11399	To: 11432		County: EDDY	
Tbg. Size: 2 7/8	Wt.: 605	d: 2.441	Set At: 11254	Perforations: From:	To:		Pool: Turkey Track; Morrow	
Type Well-Single-Bradenhead-G.G. or G.O. Multiple: SINGLE				Packer Set At: 11254			Formation: MORROW	
Producing Thru: TUBING	Reservoir Temp. °F: 186.5	Mean Annual Temp. °F: 60		Baro. Press.-P_a: 13.2			Connection: SALES	

L	H	Gg	%CO_2	%N_2	%H_2S	Prover	Meter Run	Taps
11254	11254	0.6794	2.446	0.497	N/A	N/A	3.068	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					800	N/A	PKR	N/A	
1	3.068 X 1.250	294	20	60	400				24 HRS.
2									
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							582
2	GAS	VOLUMES	FROM	TOTAL	FLOW	METER	
3							
4							
5							

No.	P_r	Temp. °R	T_r	Z
1				
2	TOTAL	FLOW	METER	
3				
4				
5				

Gas Liquid Hydrocarbon Ratio	N/A	Mcf/bbl.	
A.P.I. Gravity of Liquid Hydrocarbons	N/A	Deg.	
Specific Gravity Separator Gas	0.6794	XXXXXXX	
Specific Gravity Flowing Fluid	N/A	XXXXX	
Critical Pressure	660 P.S.I.A.		P.S.I.A.
Critical Temperature	376 R.		R

P_c 813.2 P_c^2 661.3

No.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	170.7	418.9	175.5	485.8
2				
3				
4				
5				

(1) $\dfrac{P_c^2}{P_c^2 - P_w^2} =$ 1.361 (2) $\left[\dfrac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ 1.361

AOF = Q $\left[\dfrac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ 792

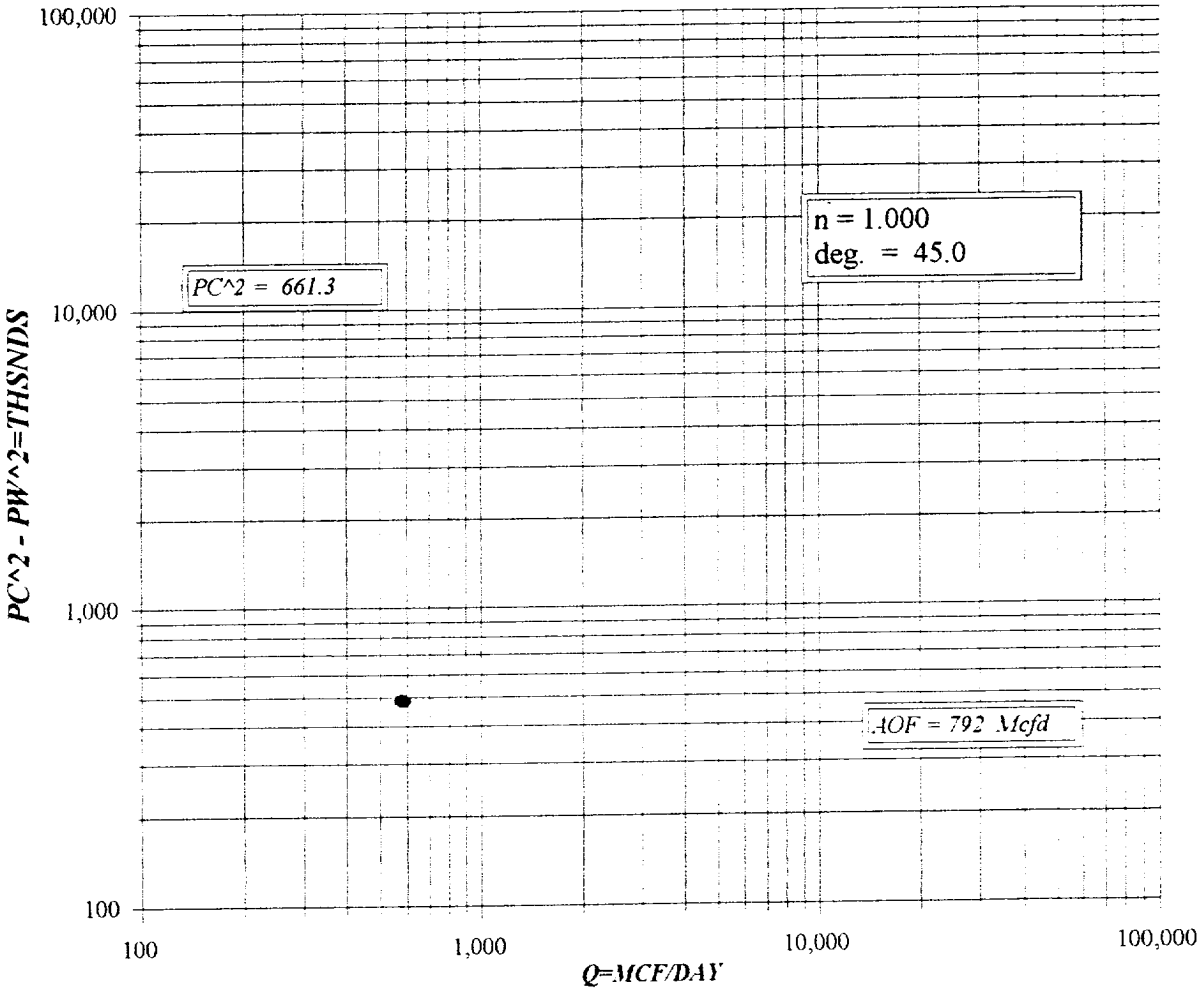
Absolute Open Flow	792	Mcfd @ 15.025	Angle of Slope ():	45	Slope n: 1

Remarks: * NO LIQUID MADE DURING TEST.

Approved By Division:	Conducted By:	Calculated By:	Checked By:
	PRO WELL TESTING	MERV BUECKER	BM

BELLWETHER EXP. CO.

WISHBONE "6" FED COM # 1



UNIT : SECTION : TOWNSHIP :

L : 11254 H : 11254 L 1 G/GMIX : 0.679

%CO2 : 2.466 %N2 : 0.497 H2S : DATE :1/21/01

d : 2.441 Fr :0.010763 GH : 7646.0 RANGE :

VOL 1 : 582 PSIA 1 : 413.2 RESV.TEMP 186.5

VOL 2 : PSIA 2 :

VOL 3 : PSIA 3 : SHUT-IN PR= 813.2

VOL 4 : PSIA 4 :

PCR : 660

TCR : 376

	LINE	RATE 1		RATE 2		RATE 3		RATE 4	
		`1ST	`2ND	`1ST	``2ND	`1ST	`2ND	`1ST	`2ND
1	QM	0.582	0.582	0.000	0.000	0.000	0.000	0.000	0.000
2	TW	534	534	534	534	534	534	534	534
3	Ts	646.5	646.5	646.5	646.5	646.5	646.5	646.5	646.5
4	T	590.3	590.3	590.3	590.3	590.3	590.3	590.3	590.3
	PR (est)	0.63		0.00		0.00		0.00	
5	Z(est)	0.924	0.916	ERR	ERR	ERR	ERR	ERR	ERR
6	TZ	545.4	540.7	ERR	ERR	ERR	ERR	ERR	ERR
7	GH/TZ	14.019	14.140	ERR	ERR	ERR	ERR	ERR	ERR
8	eS	1.692	1.699	ERR	ERR	ERR	ERR	ERR	ERR
9	1-e-S	0.409	0.412	ERR	ERR	ERR	ERR	ERR	ERR
10	Pt	413.2	413.2	0.0	0.0	0.0	0.0	0.0	0.0
11	Pt2 /1000	170.7	170.7	0.0	0.0	0.0	0.0	0.0	0.0
12	Fr	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.0107631
13	Fc=FrTZ	5.870	5.820	ERR	ERR	ERR	ERR	ERR	ERR
14	FcQm	3.42	3.39	ERR	ERR	ERR	ERR	ERR	ERR
15	L/H(FcQm)	11.7	11.5	ERR	ERR	ERR	ERR	ERR	ERR
16	Fw	4.772315	4.721584	ERR	ERR	ERR	ERR	ERR	ERR
17	Pw2	175.5	175.5	ERR	ERR	ERR	ERR	ERR	ERR
18	Ps2	296.9	298.2	ERR	ERR	ERR	ERR	ERR	ERR
19	Ps	544.9	546.0	ERR	ERR	ERR	ERR	ERR	ERR
20	P	479.0	479.6	ERR	ERR	ERR	ERR	ERR	ERR
21	Pr	0.73	0.73	ERR	ERR	ERR	ERR	ERR	ERR
22	Tr	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57
23	Z	0.916	0.916	ERR	ERR	ERR	ERR	ERR	ERR

Pt2 = / Pw = 418.9

u.0 ERR

0.0 ERR

0.0 ERR

Pc2-Pw2= 485.8 Pw2 = 175.5

ERR ERR

ERR ERR

ERR ERR

n = 1.000

Pc2/(Pc2-Pw2) = 1.361

ERR

ERR

ERR

[Pc2/Pc2-Pw2]n = 1.361

ERR

ERR

ERR

AOF= Q 0.792

ERR

ERR

ERR

FORM C122-D

Wildcat Measurement Service
P.O. Box 1836
Artesia, New Mexico 88211-1836
TollFree #888-421-9453
Office #505-746-1481
"Quality and Service is our First Concern"

PDS 06/25/80

Run No. 210123-09
Date Ran 01/23/2001
Date Sampled 01/23/2001

GPARGL.160

Analysis for: TORCH OPERATING COMPANY
Well Name: WISHBONE FEDERAL COM #1
Field: TURKEY TRACK
Sta. Number:
Purpose: SPOT
Sampling Temp: 66 DEG F
Volume/day:
Pressure on Cylinder: 256 PSIG

Producer: BELLWETHER EXPLORATION CO.
County: EDDY State: NM
Sampled By: MONTE AKIN
Atmos Temp: 53 DEG F
Formation:
Line Pressure: 269.2 PSIA

Pressure Base: 14.7300

Real BTU Dry: 1135.04
Real BTU Wet: 1115.29
Real Calc. Specific Gravity: 0.6754
Field Specific Gravity: 0.0000

Standard Pressure: 14.6950
BTU Dry: 1112.42
BTU Wet: 1112.71

GAS COMPONENT ANALYSIS

		Mol %	GPM
Carbon Dioxide	CO2	2.4669	
Nitrogen	N2	0.4974	
Methane	C1	85.9016	
Ethane	C2	6.0759	1.6240
Propane	C3	2.7617	0.7604
Iso-Butane	IC4	0.5079	0.1658
Nor-Butane	NC4	0.8214	0.2589
Iso-Pentane	IC5	0.2560	0.0937
Nor-Pentane	NC5	0.2014	0.0729
Hexanes Plus	C6+	0.5107	0.2228
TOTAL		100.0000	3.1386

Z Factor: 0.9972
N Value: 1.2811
Avg Mol Weight: 19.6291
Avg Cuft/Gal: 55.5244
26 Lb Product: 3.6033
Methane+ GPM: 17.1586
Ethane+ GPM: 3.1986
Propane+ GPM: 1.5746
Butane+ GPM: 0.8142
Pentane+ GPM: 0.3994

REMARKS:

Approved by: DON NORMAN

Wed Jan 24 11:46:56 2001