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

State of New Mexico
Energy Minerals and Natural Resources

Form C-122
Revised October, 1999

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87504

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: Fasken Oil and Ranch, Ltd.						Lease or Unit Name: Kirby "26" State					
Type Test: [X] Initial [ ] Annual [ ] Special						Test Date: 3-12-03			Well No.: 1		
Completion Date: 3-7-03		Total Depth: 11,950'		Plug Back TD: 11,915'		Elevation: 4032' GR			Unit Ltr. – Sec. - TWP – Rge.: E 26 17S 31E		
Csg. Size: 5-1/2"	Wt.: 20	d: 4.778	Set At: 11,950'	Perforations: From: 11819' To: 11835'					County: Lea		
Tbg. Size: 2-3/8"	Wt.: 4.7	d: 1.995	Set At: 11,736'	Perforations: From: To:					Pool: North Vacuum		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single				Packer Set At: 11,736'					Formation: Morrow		
Producing Thru: Tubing	Reservoir Temp. °F: 173		Mean Annual Temp. °F: 60	Baro. Press - P_a: 13.2					Connection: WOPL		
L: 11736'	H: 11736'	Gg: 0.683	%CO_2: 0.346	%N_2: 1.066	%H_2S: 0.00	Prover: Orifice		Meter Run: 4"		Taps: Flange	

	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					4269	60	0	60	–
1.	4.026" x 1.75"	510	9.4	56	3705	70	50	70	1 hr
2.	4.026" x 1.75"	510	23.4	69	3258	75	90	75	1 hr
3.	4.026" x 1.75"	510	45	60	2797	80	154	80	1 hr
4.	4.026" x 1.75"	525	72	55	2301	85	170	85	1 hr
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.	14.93	70.19	523.2	1.0040	1.210	1.062	1352
2.	14.93	114.31	523.2	0.9915	1.210	1.054	2089
3.	14.93	153.44	523.2	1.0000	1.210	1.062	2944
4.	14.93	196.85	538.2	1.0050	1.210	1.063	3796
5.							

No.	P_r	Temp. °R	T_r	Z
1.	0.78	516	1.347	0.886
2.	0.78	529	1.381	0.901
3.	0.78	520	1.358	0.887
4.	0.80	515	1.345	0.885
5.				

Gas Liquid Hydrocarbon Ratio 6276 Mcf/bbl.
A. P. I. Gravity of Liquid Hydrocarbons 48.5 Deg.
Specific Gravity Separator Gas 0.683 XXXXXXXXX
Specific Gravity Flowing Fluid 0.786 XXXXX 1.13
Critical Pressure 669 P.S.I.A. P.S.I.A.
Critical Temperature 383 R. R

P_f 6506.2 P_f^2 42330.6

No.	P_t^2	P_s	P_s^2	$P_f^2 - P_s^2$
1.		5867.2	34420.4	7910.2
2.		5361.2	28742.5	13588.1
3.		4810.3	23139.0	19191.6
4.		4235.1	17936.1	24394.5
5.				

(1) $\frac{P_f^2}{P_f^2 - P_s^2} = \frac{42330.6}{24394.5}$ (2) $\left[\frac{P_f^2}{P_f^2 - P_s^2}\right]^n = 1.7353$

AOF = Q (3796) $\left[\frac{P_f^2}{P_f^2 - P_s^2}\right]^n =$ 6587 MCFD

RECEIVED
Hobbs OCD

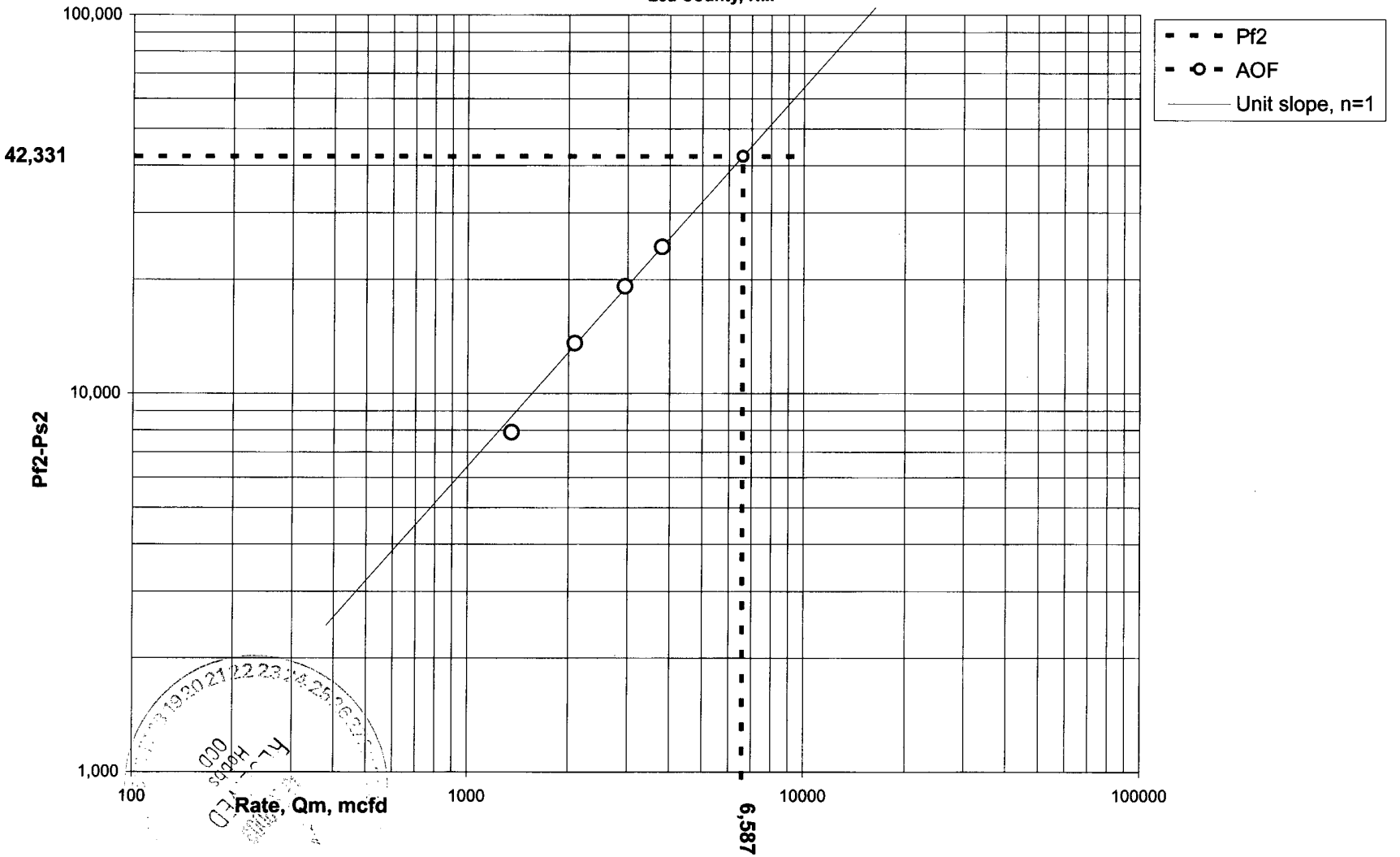
Absolute Open Flow 6587 Mcfd@ 15.025 Angle of Slope θ: 45 Slope, n: 1.00

Remarks:
Bottom hole pressure measured with electronic 0-10,000 psi gauges at 11,736'.

Approved By Division	Conducted By:	Calculated By:	Checked By:
	Fasken Oil and Ranch, Ltd.	Carl Brown	

PETROLEUM ENGINEER APR 23 2003

Fasken Oil and Ranch, Ltd.
Kirby "26" Statel No. 1
Unit E, Sec 26, T17S, R34E
North Vacuum (Atoka-Morrow) Pool
Lea County, NM



3-17-03
CWB