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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
2040 South Pacheco
Santa Fe, NM 87505

30-025-36437

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Fasken Oil and Ranch, Ltd.						Lease or Unit Name Laguna "16" State					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4-6-2004		Well No. 1			
Completion Date 2-28-2004		Total Depth 13,372'		Plug Back TD 13,155'		Elevation 3512'		Unit Ltr. - Sec. - TWP - Rge. P 16 20S 32E			
Csg. Size 5-1/2"	Wt. 17&20	d 4.778	Set At 13,372'	Perforations: From: 12,971' To: 12,985'				County Lea			
Tbg. Size 2-3/8"	Wt. 4.7	d 1.995	Set At 12,901'	Perforations: From: To:				Pool Wildcat (Morrow)			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 12,870'		Formation Morrow			
Producing Thru Tubing		Reservoir Temp. °F 186		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection Duke Energy Field Serv.			
L 12901	H 12901	Gg 0.60	%CO ₂ 0.8	%N ₂ 0.20	%H ₂ S 0.00	Prover Orifice		Meter Run 3"	Taps Flange		

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. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
SI						4561	75	0	
1.	3.068" x 1.25"		195	3.73	90	195	90	0	
2.									
3.									
4.									
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.	7.577	27.87	208.2	0.9723	1.291	1.0148	269
2.							
3.							
4.							
5.							

No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	0.309	550	1.545	0.971	A. P. I. Gravity of Liquid Hydrocarbons	Deg.
2.					Specific Gravity Separator Gas 0.6	XXXXXXXXXX
3.					Specific Gravity Flowing Fluid 0.6	XXXXXX
4.					Critical Pressure 673	P.S.I.A. P.S.I.A.
5.					Critical Temperature 356	R. R

No.	P _c	P _w	P _c ²	P _w ²	P _c ² - P _w ²
1.	4574.2	20923.3	38.0	43.3	20880.0
2.					
3.					
4.					
5.					

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{20923.3}{20880.0}$

AOF = Q (269) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 270$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.002$

Absolute Open Flow 270	Mcf/d @ 15.025	Angle of Slope θ: 45	Slope, n: 1.0
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Remarks: _____

Approved By Division 	Conducted By: Fasken Oil and Ranch, Ltd.	Calculated By: Carl Brown	Checked By:
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Fasken Oil and Ranch, Ltd.
 Laguna "16" State No. 1
 Unit P, Sec 16, T20S, R32E
 Wildcat (Morrow) Pool
 Lea County, NM

