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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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Fasken Oil and Ranch, Ltd.					Lease or Unit Name Avalon Federal				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 2-7-00				
Completion Date 1-7-00		Total Depth 10600'		Plug Back TD 10545'		Elevation 3265' GR		Unit Tr. - Sec. - TWP - Rge. 1 21S 25E	
Csg. Size 5 1/2"	Wt. 17	d 4.892"	Set At 10593'	Perforations: From: 10407' To: 10413'				County Eddy	
Tbg. Size 2-3/8"	Wt. 4.7	d 1.995"	Set At 10295'	Perforations: From: To:				Pool Catclaw Draw	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 10295'		Formation Morrow		
Producing Thru Tubing		Reservoir Temp. °F 171		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection El Paso Natural	
L 10295'	H 10295'	Gg 0.606	%CO ₂ 0.7454	%N ₂ 0.2218	%H ₂ S 0.0	Prover		Meter Run 4"	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.		Temp. °F
SI						2560	---	3039	171	52 hr.
1.	4.026 x 2.0		409	1.0	80	2150	60	2747	171	1.0 hr.
2.	4.026 x 2.0		409	3.6	80	1850	60	2371	171	1.0 hr.
3.	4.026 x 2.0		409	6.8	80	1420	60	1876	171	1.0 hr.
4.	4.026 x 2.0		397	12.3	80	950	60	1310	171	1.0 hr.
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.	19.81	20.55	422.2	.9813	1.285	1.033	530
2.	19.81	38.99	422.2	.9813	1.285	1.033	1006
3.	19.81	53.58	422.2	.9813	1.285	1.033	1383
4.	19.81	71.03	410.2	.9813	1.285	1.033	1833
5.							

No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	0.63	540	1.50	.937	A. P. I. Gravity of Liquid Hydrocarbons	Deg.
2.	0.63	540	1.50	.937	Specific Gravity Separator Gas	0.606
3.	0.63	540	1.50	.937	Specific Gravity Flowing Fluid	XXXXXX
4.	0.61	540	1.50	.938	Critical Pressure	674 P.S.I.A.
5.					Critical Temperature	361 R.

No.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1.		2760.2	7618.7	1697.2
2.		2384.2	5684.4	3631.5
3.		1889.2	3569.1	5746.8
4.		1323.2	1750.9	7565.0
5.				

(1) $P_c^2 = \frac{9315.9}{9315.9 - 1750.9}$

AOF = Q 1833 $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2177$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1876$

Absolute Open Flow	2177	Mcf/d @ 15.025	Angle of Slope θ:	50	Slope, n:	0.826
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Remarks: Bottom hole shut in and flowing pressures measured with electronic pressure gauge at 10330'

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