

151"

NE. MEXICO OIL CONSERVATION COMMISSION  
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122  
Revised 9-1-65

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special			Test Date 07/04/96		
Company FASKEN OIL AND RANCH, LTD.			Connection		
Pool INDIAN BASIN (STRAWN)			Formation Strawn		Unit
Completion Date 06/14/96		Total Depth 9470'		Plug Back TD 9408'	Elevation 4035' GL
Farm or Lease Name Mobil "10" Federal					Well No. 1
Csg. Size 4.5"	Wt. 11.60	d 4.000	Set At 9470'	Perforations: From 8744'                      To 8752'	
Tbg. Size 2.375"	Wt. 4.7	d 1.995"	Set At 8650'	Perforations: From --                      To --	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single			Packer Set At 8650'		County Eddy
Producing Thru tubing (gas)		Reservoir Temp. °F 155 @ 8948'	Mean Annual Temp. °F 60	Baro. Press. - P <sub>a</sub> 13.2	
State New Mexico		L 8748'		H 8748'	G <sub>g</sub> 0.637
% CO <sub>2</sub> 0.267		% N <sub>2</sub> 0.598		% H <sub>2</sub> S 0.00	Prover 0.00
Meter Run 2.0		Taps flowing			

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h <sub>w</sub>	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI				--	--	--	2115				17 days
1.	2" x .75"			215	13.5	85	215	85			24 hours
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor Ft.	Gravity Factor F <sub>g</sub>	Super Compress. Factor, F <sub>pv</sub>	Rate of Flow Q, Mcfd
1	2.709	55.4	228	0.9768	1.253	1.018	187
2.							
3.							
4.							
5.							

NO.	P <sub>r</sub>	Temp. °R	T <sub>r</sub>	Z	Gas Liquid Hydrocarbon Ratio _____ dry gas _____ Mcf/bbl.
1.	.332	545	1.501	.965	A.P.I. Gravity of Liquid Hydrocarbons _____ dry _____ Deg.
2.					Specific Gravity Separator Gas _____ 0.637 _____ X X X X X X X X X
3.					Specific Gravity Flowing Fluid _____ X X X X X _____
4.					Critical Pressure _____ 687 _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ 363 _____ R _____ R

P <sub>c</sub> 2128	P <sub>c</sub> <sup>2</sup> 4528.4				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.016$	(2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.016$
NO	P <sub>r</sub> <sup>2</sup>	P <sub>w</sub>	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>		
1		264	69.7	4458.7		
2						
3						
4						
5						

AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 190$

Absolute Open Flow _____ 190 _____ Mcfd @ 15.025	Angle of Slope @ _____ 45 _____	Slope, n _____ 1.0* _____
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Remarks: \* previous back pressure plot for "n" not available. Used n=1 per Artesia OCD instructions (Tim Gum) due to low rate.

Approved By Commission:	Conducted By: Fasken Oil & Ranch, Ltd.	Calculated By: Carl W. Brown	Checked By:
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