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appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

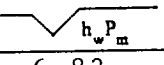
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MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator LION PRODUCTION, INC.						Lease or Unit Name N.B. BORDAGES GAS COM.					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 11-8-95		Well No. 2			
Completion Date 10-19-95		Total Depth 3788		Plug Back TD 3744		Elevation 3602 K.B.		Unit Ltr. - Sec. - TWP - Rge. 32-19-37			
Csg. Size 7"	Wt. 26#	d 	Set At 3787	Perforations: From: 3382 To: 3653				County LEA			
Tbg. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 3674	Perforations: From: To: 				Pool EUMONT			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE						Packer Set At NONE		Formation YATES, 7R, QUEENS			
Producing Thru CSG.		Reservoir Temp. °F 60°		Mean Annual Temp. °F 60°		Baro. Press - P _a 13.2		Connection WARREN PETROLEUM			
L **3382	H 3382	Gg .719	% CO ₂ 4.74	% N ₂ 2.31	% H ₂ S 	Prover 		Meter Run 3.068		Taps FLG.	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
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
SI									148		24 HRS.
1.	3	X	2.000	9.0	2.10	59			146		30 MIN.
2.	3	X	2.000	24.0	13.10	63			138		30 MIN.
3.	3	X	2.000	44.0	25.60	68			125		30 MIN.
4.	3	X	2.000	60.0	34.40	70			94		30 MIN.
5.											

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)		Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	21.32	6.83	22.2	1.001	1.179	1.004	173
2.	21.32	22.08	37.2	.9971	1.179	1.004	556
3.	21.32	38.27	57.2	.9924	1.179	1.004	959
4.	21.32	50.18	73.2	.9901	1.179	1.010	1261
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.03	519	1.35	.992	DRY GAS	
2.	.05	523	1.36	.993	A.P. L Gravity of Liquid Hydrocarbons DRY	
3.	.08	528	1.38	.993	Specific Gravity Separator Gas .719	XXXXXXXXXX
4.	.10	530	1.38	.982	Specific Gravity Flowing Fluid XXXXX	
5.					Critical Pressure *682 P.S.I.A.	P.S.I.A.
					Critical Temperature *382 R	R

NO.	P _c	P _w	P _c ²	P _w ²	P _c ² - P _w ²
1.	14/64	159.2	25.3	0.6	
2.	24/64	151.3	22.9	3.1	
3.	34/64	138.5	19.2	6.8	
4.	48/64	107.9	11.6	14.3	
5.					

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.823$

2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.581$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.475$

$P_c = 161.2$ $P_c^2 = 26.0$

Absolute Open Flow	2,475	Mcf @ 15.025	Angle of Slope Θ	54.8	Slope, n	.707
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Remarks: * = CORRECTED TO 4.74% CO₂ & 2.31% N₂

 ** = L - TOP OF PERFS.

Approved By Division	Conducted By: WEST-TEST, INC.	Calculated By: B.M.	Checked By: B.M.
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