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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 JAN 21 1994
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator BERNARD LANKFORD, JR.						Lease or Unit Name STATE 28					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 1-11-94		Well No. 1			
Completion Date 11-19-93		Total Depth 770		Plug Back TD 760		Elevation 3228 GL		Unit Ltr. - Sec. - TWP - Rge. C - 28 - 20 - 28			
Csg. Size 5 1/2	Wt. 17#	d 4.892	Set At 769	Perforations: From: 710 To: 745				County EDDY			
Tbg. Size 2-3/8	Wt. 4.7	d 1.995	Set At 640	Perforations: From: OPEN To: END				Pool S. BURTON SOUTH <i>Yates</i>			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE				Formation YATES			
Producing Thru Tbg		Reservoir Temp. °F 80		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection GRAND VALLEY GATHERING			
L 640	H 640	Gg .704	% CO ₂ .45	% N ₂ 2.60	% H ₂ S	Prover		Meter Run 2.067		Taps FLG	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	Onface 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						164		164		24 HOURS
1.	2 X 1.500		36	1.50	64	144		144		45 MIN.
2.	2 X 1.500		36	6.00	64	133		133		" "
3.	2 X 1.500		39	18.40	58	118		118		" "
4.	2 X 1.500		41	54.00	64	107		107		1 1/2 HRS
5.										

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	12.76	8.59	49.2	.9962	1.192	1.005	131
2.	12.76	17.18	49.2	.9962	1.192	1.005	262
3.	12.76	30.99	52.2	1.0020	1.192	1.005	475
4.	12.76	54.10	54.2	.9962	1.192	1.005	824
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	DRY GAS	Mcf/bbl.
1.	.04	524	1.35	.990	A.P. I. Gravity of Liquid Hydrocarbons	DRY	Deg.
2.	.04	524	1.35	.990	Specific Gravity Separator Gas	.704	XXXXXXXXXX
3.	.05	518	1.34	.990	Specific Gravity Flowing Fluid	XXXXXX	
4.	.05	524	1.35	.990	Critical Pressure	*665	P.S.I.A.
5.					Critical Temperature	*386	R

P_c 177.2 P_c 31.4

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1.		157.2	24.7	6.7
2.		146.2	21.4	10.0
3.		131.2	17.2	14.2
4.		120.2	14.4	16.9
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.858$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.531$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.858$

Absolute Open Flow	1,531	Mcf @ 15.025	Angle of Slope θ	45	Slope, n	1.000
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Remarks: * = CORRECTED TO 2.60% N₂
NO FLUID PRODUCED

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