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OIL CONSERVATION DIVISION

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator VISION ENERGY					Lease or Unit Name STATE				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 4-9-94		Well No. 2		
Completion Date 3-30-94		Total Depth 770		Plug Back TD 767		Elevation		Unit Ltr. Sec. TWP. Rge. 0 21-20S-28E	
Csg. Size 5 1/2	Wt. 15.5	d 4.950	Set At 770	Perforations: From: 701 To: 735			County EDDY		
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 660	Perforations: From: To:			Pool S. Burton Yates		
Type Well - Single - Bradenhead - G.G. or P.O. Multiple single				Packer Set At 630		Formation YATES			
Producing Thru T.B.G.		Reservoir Temp. °F 70		Mean Annual Temp. °F 60°		Baro. Press - P _a 13.2		Connection PIPELINE	
L 718	II 718	Gg .854	% CO ₂ 20.22	% N ₂ 2.20	% H ₂ S	Prover	Meter Run 2.067	Taps FLG.	

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
SI						249			
1.	2.067 X 1.500		41.2	1.5	78.2	244	68	PKR.	1 hr.
2.	2.067 X 1.500		40.9	3.4	78.5	240	74		1 hr.
3.	2.067 X 1.500		39.9	7.3	79.7	231	78		1 hr.
4.	2.067 X 1.500		41.7	18.8	77.7	202	84		1 hr.
5.									

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	12.76	9.03	54.4	.9831	1.082	1.006	123
2.	12.76	13.56	54.1	.9831	1.082	1.006	185
3.	12.76	19.69	53.1	.9822	1.082	1.006	269
4.	12.76	32.13	54.9	.9831	1.082	1.006	439
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio DRY GAS Mcf/bbl.		
1.	.07	538.2	1.34	.989	A.P. I. Gravity of Liquid Hydrocarbons DRY Deg.		
2.	.07	538.5	1.34	.989	Specific Gravity Separator Gas .854 XXXXXXXXXXXX		
3.	.07	539.7	1.35	.989	Specific Gravity Flowing Fluid DRY XXXXXX		
4.	.07	537.7	1.34	.989	Critical Pressure 748 P.S.I.A. P.S.I.A.		
5.					Critical Temperature 401 R		

P_c **262.2** P_c² **68.7**

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1.		257.3	66.2	2.5
2.		253.4	64.2	4.5
3.		244.7	59.9	8.9
4.		216.7	47.0	21.8
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.157$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.866$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 819$

Absolute Open Flow 819.0 Mcfd @ 15.025		Angle of Slope Θ 62°	Slope, n .54281
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Remarks: **NO FLUID MADE DURING TEST**

Approved By Division	Conducted By: PRO WELL TESTERS R.G.	Calculated By: KS	Checked By: BM
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