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appropriate district office
See Rule 401 & Rule 1122

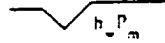
OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

CONFIDENTIAL

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator BTA OIL PRODUCERS					Lease or Unit Name VACA DRAW 9418 JV-P				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 7/15/99		Well No. 1		
Completion Date 06/29/99		Total Depth 14162		Plug Back TD 14,093		Elevation 3394' GR; 3411' KB		Unit Loc. - Sec. - TWP. - Rge. 'K' 10- 25S- 33E	
Csg. Size 5-1/2		WL 17	d 12,575	Perforations: From: To:		County LEA			
Tbg. Size 2-7/8		WL 6.5	d 2.441	Perforations: From: 13542 To: 14060		Pool Johnson Ranch			
Type Well - Single - Bradenhead - G.G. or G.C. Multiple single					Packer Set At none		Formation Wolfcamp		
Producing Thru tbg		Reservoir Temp. °F 212.0°	Mean Annual Temp. °F 60°	Baro. Press - P _a 13.2		Connection Duke Energy			
L 13801	II 13801	G _g .664	% CO ₂ .173	% N ₂ .643	% H ₂ S -0-	Prover -0-	Meter Run 4.026	Taps FLG	

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	Orifices 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
5.						4290				
1.	4.026	X 2.125	774	.43	87°	4270				
2.	4.026	X 2.125	761	1.31	54°	4020				
3.	4.026	X 2.125	765	5.13	50°	3920				
4.	4.026	X 2.125	787	22.0	70°	3700				
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 _{sp}	Rate of Flow Q, Mcfd
1.							521
2.							1129
3.	GAS VOLUMES BY TOTAL FLOW METER						2131
4.							4013
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Moist
1.					54.125	
2.					54.9	Deg
3.					.664	XXXXXXXXXX
4.					n/a	XXXXXX
5.					673	PSIA
					374	R

NO.	P _i	P _w	P _w ²	P _e ² - P _w ²
1.	4223.8	17840.1	677.5	
2.	4035.8	16288.1	2229.5	
3.	3942.7	15545.2	2972.3	
4.	3748.1	14047.9	4469.6	
5.				

1) $\frac{P_e^2}{P_e^2 - P_w^2} = 4.143$

AOF = Q $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 16.626$

(2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 4.143$

Absolute Open Flow	16,626	Mcfd @ 15.025	Angle of Slope θ	45°	Slope, n	1.000
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Remarks: * WELL MADE 6 BBLS OF 54.9 API GRAVITY CONDENSATE DURING TEST

Approved By Division	Conducted By: PRO WELL TESTING	Calculated By: MB	Checked By: BM
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