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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

SEP 29 1993

OIL CON. DIV.
DIST. 3

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Dugan Production Corp.						Lease or Unit Name South Seas					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 9-3-93		Well No. 1			
Completion Date 8-26-93		Total Depth 1840'		Plug Back TD 1784'		Elevation 6800' GL (est.)		Unit Lr. - Sec. - TWP - Rge. A-6-22N-7W			
Csg. Size 2-7/8"		Wt. 6.5#		Set At 1828'		Perforations: From: 1629 To: 1731'		Country Sandoval			
Tbg. Size 1 1/4"		Wt. 2.3#		Set At 1650'		Perforations: From: To:		Pool Undes. Chacra			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single						Packer Set At		Formation Chacra			
Producing Thru tubing		Reservoir Temp. °F 65°		Mean Annual Temp. °F		Baro. Press. P _a		Connection			
L		H		Gg. .635		% CO ₂		% N ₂		% H ₂ S	
								Prover		Meter Run Taps	

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.	Temp. °F	
1.						340		340		8 days
2.										
3.	3/4" pos. choke		21		65°	21		200		3 hrs.
4.										
5.										

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_u}$	Pressure P _u	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1.							
2.							
3.	11		33	0.9952	1.255	1.0013	454
4.							
5.							

NO.	P _i	Temp. °R	T _i	Z	Gas Liquid Hydrocarbon Ratio	Mcft/bbl
1.				.9974		
2.						
3.						
4.						
5.						

P _i 352		P _u 123,904	
NO.	P _i ²	P _u ²	P _i ² - P _u ²
1.			
2.			
3.		212	44944
4.			78960
5.			

$$1) \frac{P_i^2}{P_i^2 - P_u^2} = 1.5692$$

$$AOF = Q \left[\frac{P_i^2}{P_i^2 - P_u^2} \right]^n = 666$$

$$(2) \left[\frac{P_i^2}{P_i^2 - P_u^2} \right]^n = 1.467$$

Absolute Open Flow 666 MCF		Mcfd @ 15.025		Angle of Slope θ		Slope, n .85	
Remarks: heavy spray							

Approved By Division	Conducted By: M. Brown	Calculated By: J. Alexander	Checked By:
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