

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Oxy USA				Lease or Unit Name puma Fed.			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 9-19-99		Well No. 1	
Completion Date		Total Depth		Plug Back TD		Elevation	
Csg. Size 4 1/2		WL 11.6	d 4.0	Perforations: From: 11040' To: 11076'		County Eddy	
Tub. Size 2 3/8		WL 4.7	d 1.995	Perforations: From: 11020 To: 11020		Pool N Turkey Track	
Type Well - Single - Unconventional - G.G. or G.C. Multiple Single				Packer Set At 11000'		Fracture morrow	
Producing thru Tbg		Reservoir Temp. °F 169°	Avg Annual Temp. °F 60°	Baro. Press - P _a 13.2		Commission Sales	
L 11020	II 11020	G _g .657	% CO ₂ .588	% N ₂ .569	% H ₂ S 0	Prover 0	Moist Flow 2.067
Taps F/G							

FLOW DATA				TUBING DATA				CASING DATA				Duration of Flow
NO.	Prover Line Size	Orifice Size	Press. psig.	Diff. h _w	Temp. °F	Press. psig.	Temp. °F	Press. psig.	Temp. °F			
1.	2.067 X 1.250	336	1.5	95°	11375	N/A	PKR			60 min		
2.	2.067 X 1.250	343	5.9	103°	11299					60 min		
3.	2.067 X 1.250	348	16.4	90°	11140					60 min		
4.	2.067 X 1.250	354	38.0	72°	960					60 min		
5.												

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	h_w^2	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{sp}	Rate of Flow Q, Mcf/d
1.							226
2.	GAS MEASURED BY TOTAL FLOW METER						447
3.							775
4.							1193
5.							

NO.	P _i	Temp. °R	T _i	Z	Gas Liquid Hydrocarbon Ratio	Metric
1.					55.02	
2.					61.0	Deg.
3.					.657	XXXXXX
4.					N/A	XXXXX
5.					673	PSIA
					371	R

NO.	P _i	P _u	P _u ²	P _e ² - P _u ²
1.		1444.5	2086.6	226.8
2.		1380.3	1905.2	408.2
3.		1259.6	1586.6	726.8
4.		1068.9	1142.5	1170.9
5.				

1) $\frac{P_e^2}{P_i^2 - P_u^2} = 1.97$

2) $\left[\frac{P_e^2}{P_i^2 - P_u^2} \right] = 1.97$

AOF = Q $\left[\frac{P_i^2}{P_e^2 - P_u^2} \right] = 2350$

Absolute Open Flow **2350**

Mcf/d @ 15.025

Angle of Slope **45.0**

Slope n **1.000**

Remarks: *Calculated from known bottom hole pressure.
*well made 2 BBLS of 61.0 API Gravity condensate during test.

Approved By Division	Conducted By: Pro Well Testing	Calculated By: M.B.	Checked By: B.M.
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