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appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

45F
Form C-122
Revised 4-1-91

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 INC.					Lease or Unit Name MAKO ST. COM				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 7-MAY-97		Well No. 1		
Completion Date		Total Depth		Plug Back TD		Elevation		Unit Ltr. - Sec. - TWP - Rge. J- 5 - 19S - 29E	
Csg. Size 4.5	Wt. d	Set At	Perforations: From: 11,226 ft To: 11,236 ft			County EDDY			
Tbg. Size 2.375	Wt. 4.6	Set At 11,023	Perforations: From: To:			Pool Turkey Track Mor			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple					Packer Set At 11,023		Formation MORROW		
Producing Thru		Reservoir Temp. °F 178		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection	
L 11231	H 11,231	Gg 0.623	% CO ₂ 0.70	% N ₂ 0.27	% H ₂ S 0	Prover		Meter Run 4.0	Taps Flange

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	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
SI									3728	178	91.6
1.	4.0	X	2.0	395	20.0	65	—	—	3496	178	1
2.	4.0	X	2.0	393	50.6	61	—	—	3382	178	1
3.	4.0	X	2.0	393	86.9	61	—	—	3252	178	1
4.	4.0	X	2.0	394	132.0	56	—	—	3176	178	1
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.		90.30	407.7	0.9955	1.2669	1.0368	1295
2.		143.46	406.6	0.9987	1.2669	1.0375	1995
3.		187.86	406.1	0.9989	1.2669	1.0376	2601
4.		231.91	407.5	1.0036	1.2669	1.0390	3201
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P. I Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature	Mcf/bbl.	Deg.
1.	0.60	525	1.44	0.930	94.7	56.2	0.623	XXXXXX	674	364	673	373
2.	0.60	521	1.43	0.929				XXXXXX				
3.	0.60	521	1.43	0.929								
4.	0.60	516	1.42	0.926								
5.												

P _c	2793.5	P _c ²	7804									
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	$1) \frac{P_c^2}{P_c^2 - P_w^2} = 3.5172 \quad (2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.5172$							
1.	12312	2611	6816	988	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 11,259$							
2.	11525	2522	6359	1445								
3.	10659	2421	5863	1941								
4.	10168	2363	5585	2219								
5.												

Absolute Open Flow	11,259	Mcf/d @ 15.025	Angle of Slope θ	45.0	Slope, n	1.0
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Remarks: BASED ON BOTTOM HOLE PRESSURE DATA

Approved By Division
Conducted By: Larry Davis by MHA
Calculated By: Ronch. J. P. Beckham
Checked By: