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See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-122
Revised 4-1-91

MAR 1993
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OCD - ARTESIA

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator OXY USA, INC.				Lease or Unit Name LOGAN draw 4 FED COM			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 27-FEB-98		Well No. 1	
Completion Date 19-FEB-98		Total Depth 9247		Plug Back TD		Elevation 3418.5	
Csg. Size 4 1/2		Wt. 11.6		d 4.0		Set At 9247	
Perforations: From: 8885		To: 8918		Unit Ltr. - Sec. - TWP - Rge. 4-17-27		County EDDY	
Tbg. Size 2 3/8		Wt. 4.7		d 1.995		Set At 8792	
Perforations: From:		To:		Pool CROW Flats Morrow			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 8792		Formation MORROW	
Producing thru TUBING		Reservoir Temp. °F 157		Mean Annual Temp. °F 60		Baro. Press. - P. 13.2	
1. 8902		H 8902		Gg .638		% CO ₂ 1.05	
				% N ₂ 0.35		% H ₂ S Prover	
				Meter Run 3.068		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	Duration of Flow
1.	3.068	X	0.6247	750	15	55	2860		3655*	157	75
2.	3.068	X	0.6247	753	26	67	2840		3653	157	0.6
3.	3.068	X	0.6247	756	39	66	2815		3653	157	0.8
4.	3.068	X	0.6247	765	93	69	2780		3651	157	0.9
5.	3.068	X	0.6247	765			2750		3647	157	0.6

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.		107.0	763.2	1.0048	1.252	1.0797	1404
2.		141.14	766.2	0.9933	1.252	1.0727	1716
3.		173.20	769.2	0.9913	1.252	1.0736	2216
4.		269.02	778.2	0.9915	1.252	1.0727	3369
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	1.13	515	1.40	0.858	89.4	
2.	1.14	527	1.43	0.869		
3.	1.14	526	1.43	0.868		
4.	1.15	529	1.44	0.869		
5.						

P_c 2839.4 P_c² 8062

NO.	P _i ²	P _w	P _w ²	P _i ² - P _w ²
1.	13441	2837	8049	14
2.	13438	2837	8047	15
3.	13425	2835	8038	24
4.	13396	2832	8019	43
5.				

$$1) \frac{P_c^2}{P_c^2 - P_w^2} = 189.1858$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 44.6601$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 151200$$

Absolute Open Flow **151200** Mcfd @ 15.025 Angle of Slope θ **54.1** Slope, n **0.725**

Remarks: *** BOTTOMHOLE DATA USED IN PLOT**

Approved By Division

Conducted By:

Calculated By:

Checked By:

Larry Davis

Rich Linder