

CISF

OIL CONSERVATION DIVISION

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

30-115-22886

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator OXY USA, INC.				Lease or Unit Name VILLA COM "A"			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12-NOV-97		Well No. #1	
Completion Date		Total Depth 12,670		Plug Back TD		Elevation	
Csg. Size 5.5"		Set At		Perforations: From: 12,038' To: 12,417'		Unit Ltr. - Sec. - TWP - Rge. K 8-23-28	
Tbg. Size		Set At		Perforations:		County EDDY	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At		Formation	
Producing Thru		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press - P _a	
TUBING 202012,227		60		13.2		Connection	
L	H	Gg	% CO ₂	% N ₂	% H ₂ S	Proven	Meter Run
12,227	12,227	0.576	0.62	1.05		000 - ARTESIA	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									5722	202	138.1
1.	4.03	X	2.000	292	0.8	49			5715	202	1
2.	4.03	X	2.000	293	2.2	73			5708	202	1
3.	4.03	X	2.000	294	9.2	72			5690	202	1
4.	4.03	X	2.000	301	52.7	52			5628	202	1
5.											

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.		15.61	304.7	1.0106	1.3175	1.0256	460
2.		25.93	305.7	0.9880	1.3175	1.0217	572
3.		53.16	307.2	0.9888	1.3175	1.0219	1387
4.		128.66	314.1	1.0078	1.3175	1.0259	3391
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	0.45	509	1.47	0.951	0	
2.	0.45	533	1.53	0.958	0	
3.	0.46	532	1.53	0.958	0.575	XXXXXXXXXX
4.	0.47	512	1.48	0.950	XXXXXX	0.575
5.						

P _c 4573.3 P _c ² 20915					1) $\frac{P_c^2}{P_c^2 - P_w^2} = 28.0850$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 15.3917$	
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²				
1.	32.817	4568	20,864	51				
2.	32.728	4561	20,801	114				
3.	32.531	4546	20,664	251				
4.	31.823	4491	20,170	745				
5.								

Absolute Open Flow	52,192	Mcf @ 15.025	Angle of Slope θ	50.7	Slope, n	0.82
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Remarks: CALCULATED FROM BOTTOM HOLE PRESSURE.

Approved By Division	Conducted By: <i>C. Taylor by MSA</i>	Calculated By: <i>R. J. Redhammer</i>	Checked By:
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