

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 BULLDOG			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 19-MAY-97		Well No. 1	
Completion Date		Total Depth		Plug Back TD 11,040		Elevation	
Csg. Size 4 1/2		Wt. d		Set At		Perforations: From: 10,874 To: 11,154	
Tbg. Size NONE		Wt. d		Set At		Perforations: From: To:	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple				Packer Set At		Pool Burton Flat Mar	
Producing Thru				Reservoir Temp. °F 147		Mean Annual Temp. °F 60	
Baro. Press - P _a 13.2				Connection		Formation Morrow	
L 11,014		H 11,014		G _g 0.625		% CO ₂ 0.45	
% N ₂ 1.08		% H ₂ S 0		Prover		Meter Run 3.0	
Taps FLANGE							

FLOW DATA

TUBING DATA

CASING DATA

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
SI											
1.	3.02		1.250	337	13.3	57			3160	70	72.0
2.	3.02		1.250	341	26.4	48			3090	67	1
3.	3.02		1.250	340	50.3	37			2985	60	1
4.	3.02		1.250	353	106.3	26			2846	52	1
5.									2569	49	1

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.		68.20	349.7	1.0026	1.2649	1.0328	674
2.		96.63	353.7	1.0117	1.2649	1.0354	995
3.		133.29	353.2	1.0229	1.2649	1.0383	1371
4.		197.30	366.2	1.0344	1.2649	1.0432	2111
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	0.52	517	1.43	0.938	74.3	
2.	0.53	508	1.40	0.933	62.6	
3.	0.53	497	1.37	0.928		
4.	0.55	486	1.34	0.919		
5.						

NO.	P _c	P _w	P _c ²	P _w ²	P _c ² - P _w ²
1.	9630	3096	9583	409	
2.	8989	3001	9008	983	
3.	8176	2875	8267	1724	
4.	7193	2703	7305	2686	
5.					

$$1) \frac{P_c^2}{P_c^2 - P_w^2} = 3.7192 \quad (2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.2168$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4679$$

Absolute Open Flow **4679** Mcfd @ 15.025 Angle of Slope θ **58.8** Slope, n **0.606**

Remarks:

Approved By Division

Conducted By:

Calculated By:

Checked By:

Larry Davis by MHA

R. J. Redhammer