

MAR 10 1995

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

OIL CON. DIV.

DIST. 2

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Nearburg Producing Company				Lease or Unit Name Big Walt 2 State			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 2/28/95		Well No. 3	
Completion Date 12/30/94		Total Depth 8550		Plug Back TD 8319		Elevation 3902' GL	
Unit Ltr. - Sec. - TWP - Rge. K 2 22s 24e		County Eddy					
Csg. Size 7"	Wt. 26#	d 6.276	Set At 8550	Perforations: From: 7794 To: 7832			Pool Walt Canyon
Tbg. Size 2 3/8"	Wt. 4.7#	d 1.995	Set At 7561	Perforations: From: OPEN To: ENDED			Formation Cisco Canyon
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 7547		Connection GCNM	
Producing Thru Tbg		Reservoir Temp. °F 147 @ 7813		Mean Annual Temp. °F 60		Baro. Press - P 13.2	
L 7813	H 7813	Gg .645	% CO ₂ .56	% N ₂ .97	% H ₂ S	Prover	Meter Run 3.068
						Taps FLG	

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							1601		PKR		24 HR
1.	3	x	1.500	611	9.61	69	1589		"		1 HR
2.	3	x	1.500	659	28.10	68	1562		"		1 HR
3.	3	x	1.500	693	53.30	66	1520		"		1 HR
4.	3	x	1.500	778	90.30	65	1431		"		1 HR
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.	11.13	77.45	624.2	.9915	1.245	1.064	1,132
2.	11.13	137.44	672.2	.9924	1.245	1.069	2,020
3.	11.13	194.01	706.2	.9943	1.245	1.073	2,868
4.	11.13	267.46	792.2	.9952	1.245	1.083	3,995
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcft/bbl.
1.	.93	529	1.42	.883	A.P. I. Gravity of Liquid Hydrocarbons	Dry	Mcft/bbl.
2.	1.00	528	1.41	.875	Specific Gravity Separator Gas	.645	XXXXXXXXXX
3.	1.05	526	1.41	.869	Specific Gravity Flowing Fluid	XXXXXX	
4.	1.18	525	1.41	.852	Critical Pressure	670 P.S.I.A.	P.S.I.A.
5.					Critical Temperature	372 R	R

P_c 1614.2 P_c 2605.6

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1.	*	1578.4	2491.3	114.3
2.	*	1576.0	2483.8	121.8
3.	*	1572.7	2473.4	132.2
4.	*	1568.6	2460.5	145.2
5.				

$$1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{17.957}{17.957} \quad (2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{17.957}{17.957}$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{71.738}{71.738}$$

Absolute Open Flow 71,738 Mcfd @ 15.025 Angle of Slope 45 Slope, n 1.000

Remarks: No fluid produced

* = Calculated from known BHP's. xx = BHP set @ this depth

Approved By Division Conducted By: Jarrel Services, Inc. Calculated By: Bob Murray Checked By: Bob Murray