

OIL CONSERVATION DIVISION

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

c/s file

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator TEXACO EXPLORATION						Lease or Unit Name DOW B 33 FEDERAL					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 12-30-93		Well No. 2			
Completion Date 12-26-93		Total Depth 12100'		Plug Back TD 12075		Elevation		Unit L ₁ Sec. TWP. Rgc. 33 17S 31E			
Csg. Size	Wt.	d	Set At	Perforations:				County			
5 1/2	17#	4.892	12100'	From: 11818 To: 11832				EDDY			
Tbg. Size	Wt.	d	Set At	Perforations:				Pool			
2 7/8"	6.5#	2.441	11770'	From: To:				E Cedar Lake Morrow			
Type Well - Single - Bradenhead - G.G. or P.O. Multiple single						Packer Set At 11770'		Formation			
Producing Thru tbg.		Reservoir Temp. °F 182		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection ATMOSPHERE			
L 11825	H 11825	Gg .680	% CO ₂ .48	% N ₂ .56	% H ₂ S	Prover		Meter Run 6.065		Taps flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	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						3390		PKR.		
1.	6.065 X 2.50	600	3	66	3230	55				1 hr.
2.	6.065 X 2.50	600	9	68	2940	55				1 hr.
3.	6.065 X 2.50	600	18	70	2440	53				1 hr.
4.	6.065 X 2.50	600	32	70	2200	52				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.	30.31	42.89	613.2	.9943	1.213	1.074	1684
2.	30.31	74.29	613.2	.9924	1.213	1.074	2911
3.	30.31	105.06	613.2	.9905	1.213	1.074	4109
4.	30.31	140.08	613.2	.9905	1.213	1.074	5479
5.							

NO.	P _r	Temp. °R	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.92	526	1.365	18.467	
2.	.92	528	1.37	54.1 @ 60°	
3.	.92	530	1.375	.680	XXXXXXX
4.	.92	530	1.38	.680	G MIX .835
5.				669	665 P.S.I.A.
				385	434 R

P _c 3403.2 P _c ² 11581.8				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1.		3249.8	10561.2	1020.6
2.		2973.9	8844.3	2737.4
3.		2499.8	6248.8	5333.0
4.		2302.2	5300.2	6281.6
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.844$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 8,706$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.589$

Absolute Open Flow 8,706 Mcfd @ 15.025	Angle of Slope θ 53°	Slope .75696
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Remarks: **MADE 32 BBLs 54.1 GRAV. 260° COND. DURING TEST**

Approved By Division	Conducted By: PRO WELL TESTERS	Calculated By: KS
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