

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit in duplicate to
appropriate district office
See Rule 401 & Rule 1122

OIL CONSERVATION DIVISION

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

Form C-122
Revised 4-1-91

O. C. D.
OFFICE OF OIL CONSERVATION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator COLLINS & WARE INCORPORATED						Lease or Unit Name MULEY FEDERAL					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 11/9/92			Well No. 1		
Completion Date 9/5/92			Total Depth 11538			Plug Back TD 9890			Elevation 3519.9		
Csg. Size 7"		Wt. d		Set At		Perforations: From: 9680 To: 9690					
Tbg. Size 2 3/8"		Wt. d		Set At 1.995		Perforations: From: To:					
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE						Packer Set At 9596			Formation STRAWN		
Producing Thru TBG		Reservoir Temp. °F 189@11538'		Mean Annual Temp. °F 60°		Baro. Press - P _a 13.2			Connection TRANSWESTERN		
L 11538	H 11538	Gg .680	% CO ₂ .30	% N ₂ .81	% H ₂ S	Prover		Meter Run 3.068	Taps FLG		

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	
1.	3	X	1.250	570	26.00	56°	610			1HR
2.										
3.										
4.										
5.										

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$\frac{h_w P_m}{P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	7.577	123.13	583.2	1.004	1.213	1.070	1216
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	.87	516	1.34	.874	243.2	1.070	1216
2.							
3.							
4.							
5.							

P _c 3213.2 P _c ² 10324.7		1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.044$		2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.044$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	
1.		659.1	434.4	9890.2	
2.					
3.					
4.					
5.					

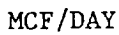
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.269$

Absolute Open Flow **1,269** Mcfd @ 15.025 Angle of Slope θ **45°** Slope, n **1.000**

Remarks: **MADE 5 BBL CONDENSATE DURING TEST.**

Approved By Division	Conducted By: JOHN WEST ENGINEERING	Calculated By: GPW	Checked By: BM
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NOVEMBER 09, 1992



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NEW MEXICO G.O.R./G. MIX

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NO. OF BBLS PRODUCED = 5.0
API GRAVITY @ 60 DEG. = 0.7

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SPECIFIC GRAVITY OF GAS = 0.6800

XXX
TOTAL GAS PRODUCED = 1216

G.O.R. = 243.200

G.MIX = 0.699

COMPANY : COLLINS & WARE LEASE : MULEY FEDERAL WELL NO. : 1 Pc = 3213.2 Pc2 = 10324.7 *
 UNIT : SECTION : 26 TOWNSHIP : 23S Pt2 = 376.0 Pw = 659.1 *
 L : 11538 H : 11538 L/H : 1 G/GMIX : 0.699 DATE : 11/09/92 0.0 ERR *
 %CO2 : 0.3 %N2 : 0.81 H2S : RANGE : 0.0 ERR *
 d : 1.995 Fr : 0.018231 GH : 8065.1 0.0 ERR *

VOL 1 : 1216 PSIA 1 : 613.2 RESV. TEMP 189.4 Pc2-Pw2= 9890.2 Pw2 = 434.4 *
 VOL 2 : PSIA 2 : ERR ERR *
 VOL 3 : PSIA 3 : SHUT-IN PR= 3213.2 ERR ERR *
 VOL 4 : PSIA 4 : ERR ERR *
 PCR : 669 n = 1.000 *
 TCR : 388 Pc2/(Pc2-Pw2) = 1.044 *

LINE		RATE 1		RATE 2		RATE 3		RATE 4		
		'1ST	'2ND	'1ST	'2ND	'1ST	'2ND	'1ST	'2ND	
1	QM	1.216	1.216	0.000	0.000	0.000	0.000	0.000	0.000	
2	TW	534	534	534	534	534	534	534	534	[Pc2/Pc2-Pw2]n = 1.044
3	Ts	649.4	649.4	649.4	649.4	649.4	649.4	649.4	649.4	ERR
4	T	591.7	591.7	591.7	591.7	591.7	591.7	591.7	591.7	ERR
	PR (est)	0.92		0.00		0.00		0.00		ERR
5	Z(est)	0.893	0.876	ERR	ERR	ERR	ERR	ERR	ERR	
6	TZ	528.4	518.5	ERR	ERR	ERR	ERR	ERR	ERR	ADF= Q 1.269
7	GH/TZ	15.262	15.555	ERR	ERR	ERR	ERR	ERR	ERR	ERR
8	eS	1.772	1.792	ERR	ERR	ERR	ERR	ERR	ERR	ERR
9	1-e-S	0.436	0.442	ERR	ERR	ERR	ERR	ERR	ERR	ERR
10	Pt	613.2	613.2	0.0	0.0	0.0	0.0	0.0	0.0	
11	Pt2 /1000	376.0	376.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	Fr	0.018231	0.018231	0.018231	0.018231	0.018231	0.018231	0.018231	0.018231	
13	Fc=FrTZ	9.634	9.453	ERR	ERR	ERR	ERR	ERR	ERR	
14	FcQm	11.71	11.49	ERR	ERR	ERR	ERR	ERR	ERR	
15	L/H(FcQm)	137.2	132.1	ERR	ERR	ERR	ERR	ERR	ERR	
16	Fw	59.80761	58.39279	ERR	ERR	ERR	ERR	ERR	ERR	
17	Pw2	435.8	434.4	ERR	ERR	ERR	ERR	ERR	ERR	
18	Ps2	772.4	778.4	ERR	ERR	ERR	ERR	ERR	ERR	
19	Ps	878.9	882.3	ERR	ERR	ERR	ERR	ERR	ERR	
20	P	746.0	747.7	ERR	ERR	ERR	ERR	ERR	ERR	
21	Pr	1.12	1.12	ERR	ERR	ERR	ERR	ERR	ERR	
22	Tr	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52	
23	Z	0.876	0.876	ERR	ERR	ERR	ERR	ERR	ERR	FORM C122-D