

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

RECEIVED

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date 4-8-82		APR 21 1982									
Company Marlo, Inc.				Connection To Air		O. C. D. ARTESIA, OFFICE									
Pool Undesignated Carson				Formation Morrow		Unit N									
Completion Date 3-25-82		Total Depth 10305		Plug Back TD 10224		Elevation 4293 GL		Form or Lease Name Carson Fed. Com.							
Coq. Size 5 1/2"	Wt. 17#	d 10268	Set At 10268	Perforations: From 9767 To 10025		Well No. #1									
Trg. Size 2 7/8"	Wt.	d 9680	Set At 9680	Perforations: From To		Unit N	Soc. 3	Twp. 9S	Rge. 31E						
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 9680		County Chaves									
Producing Thru TbG		Reservoir Temp. °F 173° 9896		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico							
L 9896	H 9896	Cq .7709	% CO ₂ 8.098	% N ₂ 1.835	% H ₂ S	Prover	Meter Run 4.0"	Caps Flg.							
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	Duration of Flow				
Si							2115				72+hr				
1.	4.0 x 1.00			540	8"	76°	1966	68°	PKR		1 hr				
2.	4.0 x 1.00			540	9"	73°	1877	68°	PKR		1 hr				
3.	4.0 x 1.00			540	16"	68°	1760	67°	PKR		1 hr				
4.	4.0 x 1.00			540	62"	83°	1597	62°	PKR		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 F _g	Super Compress. Factor, F _{sp}	Rate of Flow G, Mcd								
1	4.753	66.53	553.2	.9850	1.139	1.062	377								
2	4.753	70.56	553.2	.9877	1.139	1.064	401								
3	4.753	94.08	553.2	.9924	1.139	1.065	538								
4	4.753	185.20	553.2	.9786	1.139	1.060	1040								
5															
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio <u>NONE</u> Mcl/bbl.										
1	.79	536	1.36	.887	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.										
2	.79	533	1.35	.884	Specific Gravity Separator Gas <u>.771</u> <u>X X X X X X X X</u>										
3	.79	528	1.34	.882	Specific Gravity Flowing Fluid <u>X X X X X</u>										
4	.79	543	1.37	.890	Critical Pressure <u>697</u> P.S.I.A. _____ P.S.I.A.										
5					Critical Temperature <u>395</u> R _____ R										
P _c 2224.3 P _c ² 4947.4															
NO.	P _r	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.729$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.729$										
1		2123.8	4510.7	436.7	AOF = 0 $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.838$										
2		2053.6	4217.1	730.3											
3		1973.9	3896.6	1050.8											
4		1770.4	3134.2	1813.2											
5															
Absolute Open Flow <u>2.838</u> Mcd @ 15.025					Angle of Slope θ <u>45°</u>		Slope, n <u>1.000</u>								
Remarks: <u>Made no liquids during test.</u>															
Approved By Division				Conducted By: Baber Well Serv. Co.				Calculated By: B.M.				Checked By: Mark Rowland			