

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

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O. C. D.

Form C-122
Revised 10-1-78

45P
File

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 4/24/87	
Company Enron Oil & Gas Company		Connection -El-Pase- Enron Oil & Gas Co.	
Well Malaga		Formation Atoka	
Completion Date 12/3/86		Total Depth 12311'	
Plug Back TD 12225'		Elevation 2949'GL	
Farm or Lease Name Fort 7 Com		Well No. 1	
Csg. Size 4 1/2"	Pl. 13.5#	d 2.930	Set At 12311
Perforations: From 12125' To 12139'		Well No. 1	
Tub. Size 2 3/8"	Wt. 4.7#	d 1.995	Set At 10350
Perforations: From Open To Ended		Unit 0 7 24s 29e	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single		Packer Set At 10350	
Producing Thru Tbg		County Eddy	
Reservoir Temp. °F 110		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State New Mexico	
L 10962'	H 10962'	G _g 0.574	% CO ₂ 0.420
% N ₂ 0.515	% H ₂ S -	Prover -	Meter Run 3.068
Flags 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	
SI							3271		PACKER		125 hrs
1.	3.063	X	1.250	190	7	68	2960	63			1.0 hrs
2.	3.063	X	1.250	200	12	67	2785	61			1.0 hrs
3.	3.063	X	1.250	200	28	66	2452	61			1.0 hrs
4.	3.063	X	1.250	200	56	67	2106	61			1.0 hrs
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 _{pv}	Rate of Flow Q, Mscf/d
1	7.577	37.71	203.2	.9924	1.320	1.015	380
2	7.577	50.58	213.2	.9933	1.320	1.016	510
3	7.577	77.26	213.2	.9943	1.320	1.016	781
4	7.577	109.27	213.2	.9933	1.320	1.016	1103
5							

NO.	P	Temp. °F	T _g	Z	Gas Liquid Hydrocarbon Ratio	Dry	Mcf/cu ft.
1	.30	528	1.53	.971	A.P.I. Gravity of Liquid Hydrocarbons		Deg.
2	.30	527	1.52	.968	Specific Gravity Separator Gas	.574	XXXXXX
3	.30	526	1.52	.968	Specific Gravity Flowing Fluid	XXXXXX	
4	.30	527	1.52	.968	Critical Pressure	672	P.S.I.A.
5					Critical Temperature	346	°R

P _e 3284	P _w 10786	(1) $\frac{P_e^2}{P_e^2 - P_w^2} = 2.298$	(2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 1.928$
NO. 1	P _w 2072.0	P _e 2844	P _e 2 - P _w 1942
2	2072.0	7920	2047
3	2072.0	1131	1033
4	2072.0	1511	1065
5			

Absolute Open Flow 1,113 Mcf/d @ 15.025 Angle of Slope 51.5 Slope, n .705

Remarks: Equivalent length I.D. (Deff) Calculated.

Approved By Division _____ Conducted By: _____ Calculated By: _____ Checked By: _____