

MEXICO OIL CONSERVATION COMM. IN
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-63

W.P. 1
T: SF
to G.P.
W.P. 1

7-19-68

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 7-19-68	
Company Monsanto Co.			Connection None		
Pool Rock Tank Lower Morrow Gas Pool			Formation Morrow		Unit H
Completion Date 7-17-68		Total Depth 10552	Plug Back TD 10478	Elevation DE 4014	Form or Lease Name Rock Tank Unit
Csg. Size 4 1/2	Wt. 11.6	d 10533	Set At 10533	Perforations: From 10404 To 10433	Well No. 2
Tub. Size 2 3/8	Wt. 6.7	d 10314	Set At 10314	Perforations: From 10200 To 10210	Unit Sec. Twp. Rge. 6 - 23S - 23E
Type Well - Single - Brazenhead - G.G. or G.O. Multiple				Packer Set At 10310	County Tadous
Producing Thru Tubing		Reservoir Temp. °F 175 @ 10158	Mean Annual Temp. °F 60	Baro. Press. - P _a 14.2	State New Mexico
L 10433	H	Gg .570	% CO ₂ .62	W N ₂ .02	% H ₂ O 0
Prover		Meter Run	Taps		

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. ps.i.g.	Diff. h _w	Temp. °F	Press. ps.i.g.	Temp. °F	Press. ps.i.g.		Temp. °F
1.	2"		2.25	535	10"	100°	535	74°			60 min.
2.	4"		2.25	650	32"	80°	650	77°			50 min.
3.	4"		2.25	735	43"	75°	735	78°			60 min.
4.	4"		2.25	800	54"	70°	800	80°			60 min.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{sp}	Rate of Flow Q, Mscf
1.	35.66	103.76	535.2	0.927	1.015	1.033	6430
2.	35.66	142.34	650.2	0.915	1.015	1.042	6907
3.	35.66	165.51	735.2	0.910	1.015	1.051	6431
4.	35.66	220.13	800.2	0.905	1.015	1.050	6010
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.813	530	1.43	.937			.570	XXXXXX	675.28	675
2.	.935	540	1.57	.927				XXXXX		
3.	1.100	535	1.56	.909						
4.	1.204	530	1.54	.894						
5.										

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²
1.	660.96	5327.1	28375	3367
2.	874.09	5974	35691	1567
3.	1210.00	6067	36807	2405
4.	1449.76	6208	38540	3310
5.				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 3.565$ (2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.827$

AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 24555$

Absolute Open Flow 24555 Mscf/D 15.023 Angle of Slope ϕ 0° Slope, n 0.71

Remarks: Calculated with a standard equation. Standard calculation using 7 vertical pipes.

Approved by Commission:	Conducted By: W. H. Davis	Calculated By: W. H. Davis	Checked By:
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