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N. MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 9-1-65

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

MAR 22 1969

O. C. C.
ARTESIA, OFFICE

Type Test: ☐ Initial ☐ Annual ☒ Special				Test Date: 5-6-69	
Company: Monsanto Company		Connection: [illegible]			
Pool: Rock Tank Lower Morrow Gas Pool		Formation: Lower Morrow			Unit: D
Completion Date: 1-23-68	Total Depth: 11,026		Plug Back TD: 10,385	Elevation: 3961	Farm or Lease Name: Rock Tank Unit
Csg. Size: 5 1/2	Wt.: 17	d: 4.892	Set At: 10,472	Perforations: From 10,290 To 10,324	Well No.: 1-X
Tbg. Size: 2 7/8	Wt.: 6.5	d: 2.441	Set At: 10,204	Perforations: From Open Ended	Unit: D Sec.: 7 Twp.: 23-S Rge.: 25-E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: GG			Packer Set At: 10,200		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 172 @ 10,307		Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10,290	10,290	.583	.73	.22			X	[illegible]

FLOW DATA						TUBING DATA		CASING DATA		
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						3342				
1.	4	2.25	760	48	72	3137	78			2.00 Hrs
2.	4	2.25	770	36	68	3193	78			1.33 Hrs
3.	4	2.25	800	57	70	3113	80			2.92 Hrs
4.	4	2.25	820	73	68	3043	80			2.00 Hrs
5.	4	2.25	860	99	68	2913	82			2.25 Hrs

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, Fpv	Rate of Flow Q, Mcfd
1	25.64	190.99	760	.9887	1.310	1.057	6704
2.	25.64	166.49	770	.9924	1.310	1.059	5877
3.	25.64	213.54	800	.9905	1.310	1.061	7538
4.	25.64	244.66	820	.9924	1.310	1.063	8669
5.	25.64	291.78	860	.9924	1.310	1.066	10368

NO.	P_r	Temp. °R	T_r	Z
1.	[illegible]	[illegible]	[illegible]	[illegible]
2.	[illegible]	[illegible]	[illegible]	[illegible]
3.	[illegible]	[illegible]	[illegible]	[illegible]
4.	[illegible]	[illegible]	[illegible]	[illegible]
5.	[illegible]	[illegible]	[illegible]	[illegible]

Gas Liquid Hydrocarbon Ratio 1524 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 54° @ 62°F Deg.
Specific Gravity Separator Gas .583 XXXXXXXXX
Specific Gravity Flowing Fluid 58.5 XXXXX
Critical Pressure 676 P.S.I.A. P.S.I.A.
Critical Temperature 350 R R

P_c 3355.2 P_c^2 11,257

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3248.6	10,553	704
2		3270.7	10,697	560
3		3225.4	10,403	854
4		3193.5	10,198	1059
5		3120.5	9737	1520

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 7.4059$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.3379$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 34,607$

Absolute Open Flow 34,607 Mcfd @ 15.025 Angle of Slope θ 59° Slope, n .602

Remarks: *Meters set to read psia

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	D F Tomes		