

610726

Form G-122
Revised 9-1-65

NE MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS FIELDS

APR 20 1973

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4-16-73	
Company Monsanto Company			Connection None		
Well <u>Wilcox Strawn</u> Burton Flat Morrow			Formation Strawn		Unit Burton Flat Deep Unit
Completion Date 3-23-73		Total Depth 11,546	Plug Back TD 11,472	Elevation 3223 DF	Farm or Lease Name Burton Flat Unit
Dep. Size 7	Wt. 26#	d 6.276	Set At 11,546	Perforations: From 10,208 To 10,250	Well No. S - UT
Reg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 9960	Perforations: From 10,208 To 10,250	Unit Sec. Twp. Rge. V 3 21-S 27-E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual				Packer Set At 9950	County Eddy
Producing Thru Tubing		Reservoir Temp. °F 151° ± 10,229	Mean Annual Temp. °F 60	Baro. Press. - P _c 13.2	State New Mexico
L 10,229	H 10,229	G _g .696	% CO ₂ .38	% N ₂ .88	% H ₂ S Neg
				Prover	Meter Run X

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
5.							3645	68			
1.	2"		1.0	320	50	97	2797	64			1 Hr
2.	2"		1.0	320	56	95	2477	68			1 Hr
3.	2"		1.0	450	60	90	2077	66			1 Hr
4.	2"		1.0	475	70	80	1618	63			1 Hr
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, Mcfd
1	4.753	129.07	333.2	.9962	1.199	1.031	755
2	4.753	136.59	333.2	.9990	1.199	1.032	778
3	4.753	166.70	463.2	.9723	1.199	1.047	967
4	4.753	184.86	468.2	.9813	1.199	1.055	1091
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	.49	557	1.42	.940	12.898	63.6	.702	XXXXXXX	668	392
2	.49	555	1.41	.939				XXXXX		
3	.63	530	1.40	.912						
4	.73	540	1.37	.898						
5										

NO.	P _c ²	P _w ²	P _w ²	P _c ² - P _w ²
1	2815.2	7925	5457	
2	2494.2	6221	7161	
3	2096.6	4325	8987	
4	1641.4	2594	10688	
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{13382}{10688}$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2228$$

$$ACF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1334$$

Applied to Open Flow: 1334 Mcfd @ 15.025 Angle of Slope @ 49° 10' Slope, n .895

Approved by Commission:		Conducted By: D. Forrest Jones	Calculated By: H. L. Hagler	Checked By:
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