

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

*Copy 657
C-122*

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 10-9-73		OCT 23 1973	
Company Monsanto Company				Connection Transwestern Pipeline Company			
Pool Burton Flat (Morrow)				Formation Morrow			
Completion Date 11-3-72		Total Depth 11,700		Plug Back TD 11,641		Elevation 3196 DF	
Farm or Lease Name Burton Flat Unit				Well No. 1			
Csg. Size 5.5	Wt. 17#	d 4.892	Set At 11,700	Perforations: From 11,308 To 11,458		Unit Sec. Twp. Rje. 3 21-E 27-S	
Thg. Size 2 7/8 EUE	Wt. 6.5	d 2.441	Set At	Perforations: From To			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11,025		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 184 @ 11,383		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State New Mexico							
L 11,383	H 11,383	Gg .592	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run X
Taps							

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	4						2703	76			
1.	4		2"	778	7.5	90	2621	78			1 Hr
2.	4		2"	778	14.5	84	2582	83			1 Hr
3.	4		2"	790	28.0	81	2534	84			1 Hr
4.	4		2"	780	48.0	81	2456	87			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 Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	19.81	77.032	791.2	.9723	1.0067	1.055	1576
2	19.81	107.109	791.2	.9777	1.0067	1.056	2205
3	19.81	149.965	803.2	.9804	1.0067	1.059	3105
4	19.81	195.124	793.2	.9804	1.0067	1.058	4036
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio	542 Mcf/bbl.
1.	1.18	550	1.55	.898	A.P.I. Gravity of Liquid Hydrocarbons	53.4 Deg.
2.	1.18	544	1.54	.896	Specific Gravity Separator Gas	.592
3.	1.20	541	1.53	.891	Specific Gravity Flowing Fluid	XXXXXX
4.	1.18	541	1.53	.893	Critical Pressure	672 P.S.I.A.
5.					Critical Temperature	354 R

P _c 2716.2 P _c ² 7377						
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{7377}{1093}$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 6.74931$
1		2642.4	6982	395		
2		2615.8	6842	535		
3		2570.8	6609	768		
4		2506.8	6284	1093		
5						

Absolute Open Flow			27240 Mcfd @ 15.025	Angle of Slope °	45°	Slope, n	1.00
Remarks:							
Approved By Commission:		Conducted By: W. I. Hagler WEST TEXAS ENGINEERING SERVICE, INC.		Calculated By: H. L. Hagler		Checked By:	