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Form C-122
Revised 1-1-65
C-122

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

RECEIVED
DEC 20 1973

Type Test			Test Date	
☐ Initial	☐ Annual	☒ Special	12-4-73	

Company	Connection	
Monsanto Company	TwP + SU	O. G. C.

Pool	Formation	Unit
Burton Flat (Morrow) La	Morrow	G

Completion Date	Total Depth	Plug Back TD	Elevation	Farm or Lease Name
5-1-73	11,510	11,432	3199 DF	Miller Federal

Csg. Size	Wt.	d	Set At	Perforations:	Well No.
5 1/2	17#	4.892	11,510	From 11,304 To 11,310	1-S

Tbg. Size	Wt.	d	Set At	Perforations:	Unit	Sec.	Twp.	Rge.
2 7/8 EUE	6.5	2.441	11,137	From To	G	3	21-S	27-E

Type Well – Single – Bradenhead – G.G. or G.O. Multiple	Packer Set At	County
Dual	11,126	Eddy

Producing Thru	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. – P_a	State
Tubing	161 @ 11,307	60	13.2	New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11,307	11,307	.594					X	

	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						2988	56			
1.	4.0	1.25	760	7	63	2915	60			1 Hr
2.	4.0	1.25	760	16	68	2861	62			1 Hr
3.	4.0	1.25	760	21	69	2825	63			1 Hr
4.	4.0	1.25	760	38	69	2747	64			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.	7.469	73.57	773.2	.9971	1.2975	1.064	756
2.	7.469	111.23	773.2	.9924	1.2975	1.062	1136
3.	7.469	127.42	773.2	.9915	1.2975	1.062	1300
4.	7.469	171.41	773.2	.9915	1.2975	1.062	1749
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	1.15	523	1.48	.883
2.	1.15	528	1.49	.886
3.	1.15	529	1.49	.886
4.	1.15	529	1.49	.886
5.				

Gas Liquid Hydrocarbon Ratio 490.18 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 50.2 @ 60° Deg.
Specific Gravity Separator Gas .594 XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 672 P.S.I.A. P.S.I.A.
Critical Temperature 354 R R

P_c 3001.2 P_c^2 9007

NO	P_w	P_w^2	$P_c^2 - P_w^2$
1	2940.2	8645	362
2	2877.5	8280	727
3	2819.9	7952	1055
4	2767.0	7656	1351
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{9007}{1351}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.6607$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 6403$

Absolute Open Flow 6403 Mcfd @ 15.025 Angle of Slope θ 55.6 Slope, n .684

Remarks: Well Shut-In 24 Hours Prior to Start of This Test.

Approved by Commission:	Conducted By:	Calculated By:	Checked By:
	W T Hagler West Texas Consulting Service, Inc.	H L Hagler	