

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test: ☒ Initial ☐ Annual ☐ Special					Test Date 5-28-74		JUN 3 1974	
Company Monsanto Company				Connection None			O. C. C.	
Well Burton Flat (Morrow)				Formation Morrow			Unit/ARTESIA, OFFICE B	
Completion Date 5-22-74		Total Depth 11,500		Plug Back TD 11,385		Elevation 3243 KB		Farm or Lease Name Burton Flat Deep Unit
Csg. Size 5 1/2	Wt. 17#	d 4.892	Set At 11,500	Perforations: From 10,990 To 11,260			Well No. 11	
Tub. Size 2 7/8 EUE	Wt. 6.5	d 2.441	Set At 10,753	Perforations: From To			Unit Soc. Twp. Rge. B 27 20 S 28 E	
Type Well - Single - Bradenhead - C.G. or G.O. Multiple Single				Packer Set At 10,753			County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 162 @ 11,500		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico
L 11,125	H 11,125	G _g .604	% 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							3590	76			
1.	4.0		2.0	540	8	110	3479	83			1 Hr
2.	4.0		2.0	555	16	78	3389	83			1 Hr
3.	4.0		2.0	555	30	75	3288	84			1 Hr
4.	4.0		2.0	560	58	71	3112	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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	19.81	66.5252	553.2	.9551	1.2867	1.034	1675
2	19.81	95.3478	568.2	.9831	1.2867	1.045	2497
3	19.81	130.5603	568.2	.9859	1.2867	1.047	3435
4	19.81	182.3338	573.2	.9896	1.2867	1.048	4820
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	None Produced	Mcfd/bbl.
1	.82	570	1.59	.935	A.P.I. Gravity of Liquid Hydrocarbons		Deq.
2	.85	538	1.50	.916	Specific Gravity Separator Gas	.604	X X X X X X X X
3	.85	535	1.49	.913	Specific Gravity Flowing Fluid	X X X X X	
4	.85	531	1.48	.911	Critical Pressure	671	P.S.I.A. 671 P.S.I.A.
5					Critical Temperature	358	R 358 R

P _r 3603.2 P _c ² 12983				
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²
1		3497.2	12230	753
2		3408.2	11616	1367
3		3323.4	11045	1938
4		3168.4	10039	2944
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{12983}{2944}$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.48822$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 16813$$

Absolute Open Flow	16813	Mcfd @ 15.025	Angle of Slope @ 49° 54'	Slope, n .842
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Remarks:

Approved by Commission:	Conducted By: J N Casparis	Calculated By: H L Hagler	Checked By:
	WEST TEXAS CONSULTING SERVICE, INC.		