

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

Form C-122
REV. 1-65

RECEIVED

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JUL 12 1966

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 6-21-66		O. C. C. ARTESIA, OFFICE	
Company Monsanto Company				Connection Marathon Oil Company			
Pool Indian Basin (Upper Penn)				Formation Cisco		Unit Marathon 302 U	
Completion Date 10-4-65		Total Depth		Plug Back TD 7776		Elevation 3980 RDB	
Farm or Lease Name Conoco-State <i>Gascom</i>							
Csg. Size 4 1/2	Wt. 11.6	d 4.000	Set At 7807	Perforations: From 7413 To 7488		Well No. 1	
Tag. Size 2	Wt. 4.7	d 1.995	Set At 7276	Perforations: From Open End to		Unit Sec. Twp. Rge. F 2 22S 23E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 7276		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 132 @ 7413		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State New Mexico							
L 7413	H 7413	G _g .634	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run 3.068
						Taps Flange	

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
51							2333	60	Packer		24 Hrs
1.	3.068 x	1.625		7.40	3.50	79	2307	71			90
2.	3.068 x	1.625		7.45	5.55	71	2263	74			90
3.	3.068 x	1.625		7.45	7.65	70	2200	78			90
4.	3.068 x	1.625		7.45	9.10	70	2151	80			90
5.											

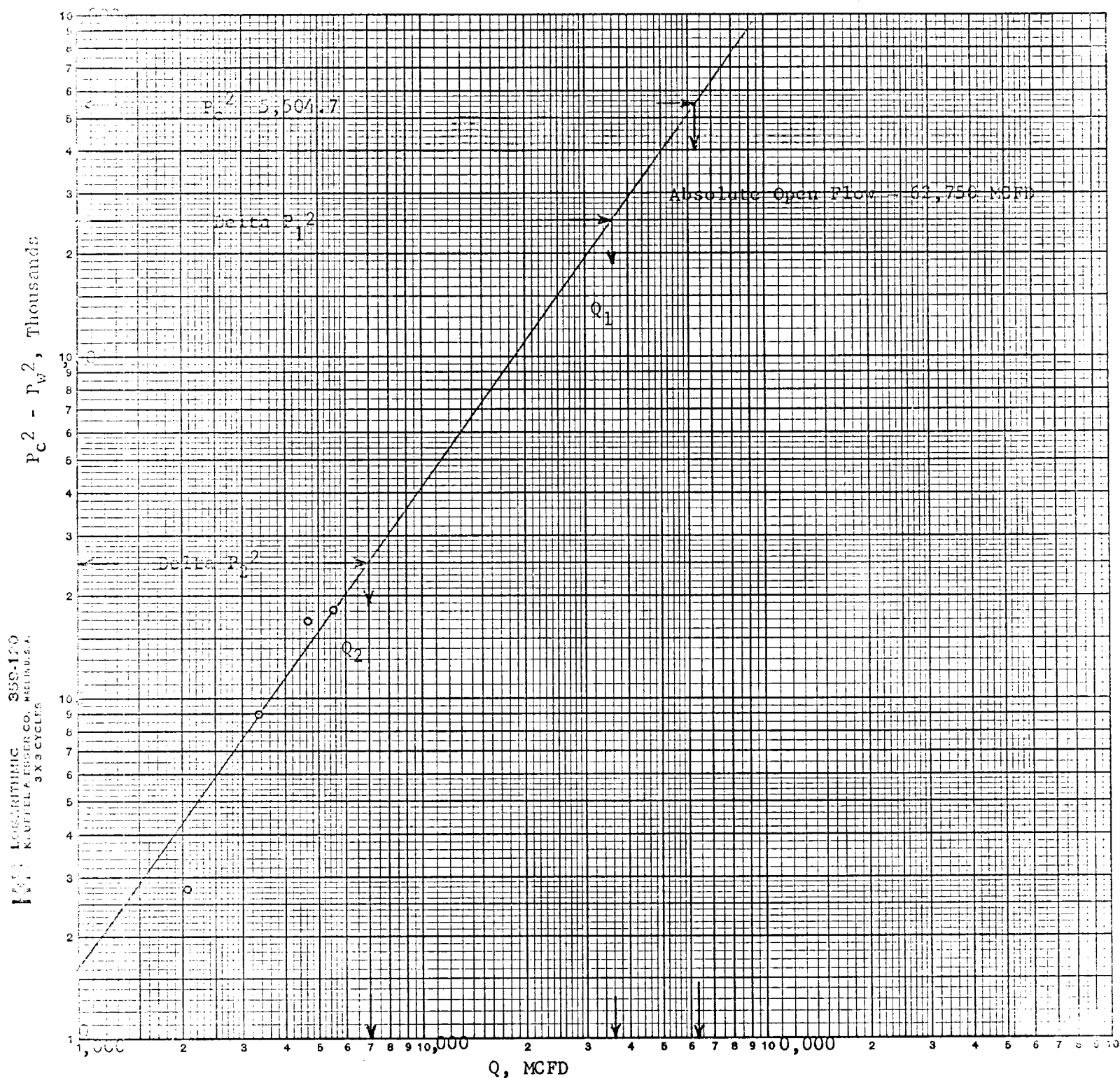
RATE OF FLOW CALCULATIONS							
NO.	Coefficient * (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	59.21	25.90	1095.2	.9822	1.256	1.093	2,068
2	59.21	41.35	1110.2	.9896	1.256	1.104	3,360
3	59.21	56.99	1110.2	.9905	1.256	1.104	4,635
4	59.21	67.80	1110.2	.9905	1.256	1.104	5,514
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	2.64	539	1.47	.837	71.36	
2.	2.66	531	1.44	.821	59.6	
3.	2.66	530	1.44	.821		
4.	2.66	530	1.44	.821		
5.						

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} =$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n =$
1	2346.2	2340.3	5,477.0	27.7	30.57	11.38
2		2327.1	5,415.4	89.3		
		2209.8	5,335.2	169.5		
		2307.5	5,324.6	180.1		

Absolute Open Flow 62,750 Mcfd @ 15.025				Angle of Slope @		Slope, n .711	
Remarks: Contains a Meter Factor of 4.472 for a 100" x 2000 psi L-10 Chart. Calculated with a Continuous Operation Electronic Calculator, using 7 decimal places.							
Approved By Commission: <i>N-1</i>		Conducted By: J. N. Casparis		Calculated By: R. W. Harrington		Checked By: <i>CHL</i>	

COMPANY	Monsanto Company
WELL	Conoco - State No. 1
LOCATION	2 - 22S - 23E
COUNTY	Eddy
DATE	6-21-66



Delta P_1^2 ; $P_c^2 - P_w^2 = 2,500$; $Q_1 = 36,000$ MCFD; $\log Q_1 = 4.55630$

Delta P_2^2 ; $P_c^2 - P_w^2 = 250$; $Q_2 = 7,000$ MCFD; $\log Q_2 = 3.84510$

$$n = .71120 = .711$$