

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPHASE AND ONE POINT BACK PRESSURE TEST FOR GAS WELL
MAY 26 1980

Form C-122
Revised 9-1-65

O. C. D.

ARTESIA, OFFICE

☒ Initial ☐ Annual ☐ Special				Test Date 5-13-80		O. C. D.	
Operator Perry R. Bass				Direction None			
Field Indian Flats <i>Atoka</i>				Formation Atoka		Unit Big Eddy Unit	
Completion Date 5-13-80		Total Length 12,580' / 12,590'		Plug Depth 12,545'		Elevation 3236' KB	
Well No. 74		Former Lease Name Big Eddy Unit					
Pipe Size 5 1/2"	Wt. 17#	d 12,590'	Set At 12,590'	Perforations: From 11,468 To 11,616		Well No. 74	
Pipe Size 2 3/8"	Wt. 4.7#	d 11,655'	Set At 11,655'	Perforations: From To		Unit Sec. Twp. R. B 25 21S 28E	
Type Well - Single - Preforehead - G.O. or G.O. Multiple Single				Packer Set At 11,395'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 198 @ 11402		Mean Annual Temp. °F 68		Baro. Press. - P _a 13.2	
State New Mexico							
L 	R 	Gg .618	% CO ₂ 0	% N ₂ 0	% H ₂ S 0	Prover 	Meter Run 4.026
						Flange	

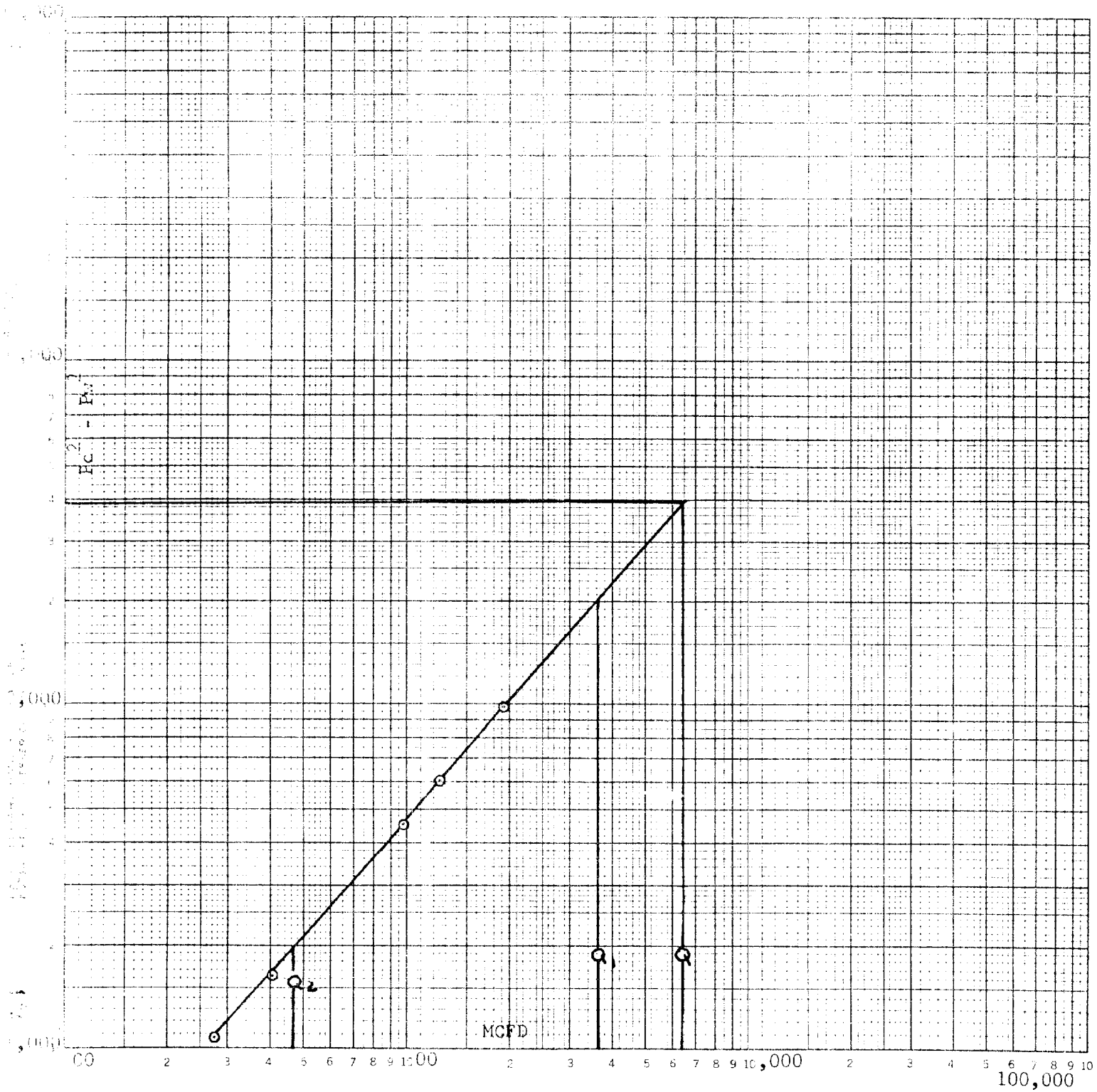
FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. in. H ₂ O	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
1	4.026	1.50	125	3.0	82	4906	68			
2	4.026	1.50	140	6.0	97	4825	74	Packer in		60
3	4.026	1.50	515	9.5	91	4802	75	Well		60
4	4.026	1.50	520	15.0	86	4588	76			60
5	4.026	1.50	529	35.0	90	4489	76			60
	4.026	1.50	529	35.0	90	4135	75			60

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, F _{spv}	Rate of Flow Q, Mhd
1	10.84	20.36	138.2	.9795	1.270	1.011	278
2	10.84	30.32	153.2	.9662	1.270	1.012	408
3	10.84	70.84	528.2	.9715	1.270	1.042	987
4	10.84	89.43	533.2	.9759	1.270	1.042	1252
5	10.84	137.76	542.2	.9723	1.270	1.043	1923

NO.	P _r	Temp. °R	T _r	Z	Gas Liquidity correction Ratio	5260' to 1	Mcf/Well
1	.21	542	1.48	.978	52.6		
2	.23	557	1.53	.976			
3	.79	551	1.51	.921			
4	.79	546	1.50	.921			
5	.81	550	1.51	.919			

NO.	P _r	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2}$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n$
1	6093.2	37127	1073		3.8838	3.371
2	6050.2	36605	1615			
3	5800.2	33642	4578			
4	5674.2	32197	6023			
5	5327.2	28379	9841			

Absolute Open Flow 6482				Mcf @ 15,025		Angle of Slope θ 48		Slope, n .8947		
Remarks: P _w Substituted for P _c - Measured with Amerada Instrument No. 34683 - 0-6300# Element										
Approved By Coramission:			Conducted By: Lambert			Calculated By: Spruell			Checked By: Pyle	



$$Q_1 = 3,625$$

$$\log Q_1 = 3.55931$$

$$Q_2 = 462$$

$$\log Q_2 = 2.66464$$

$$.8947$$

$$Q = 6482 \text{ MCFD}$$