

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

Form C-122
Revised 9-1-65

File

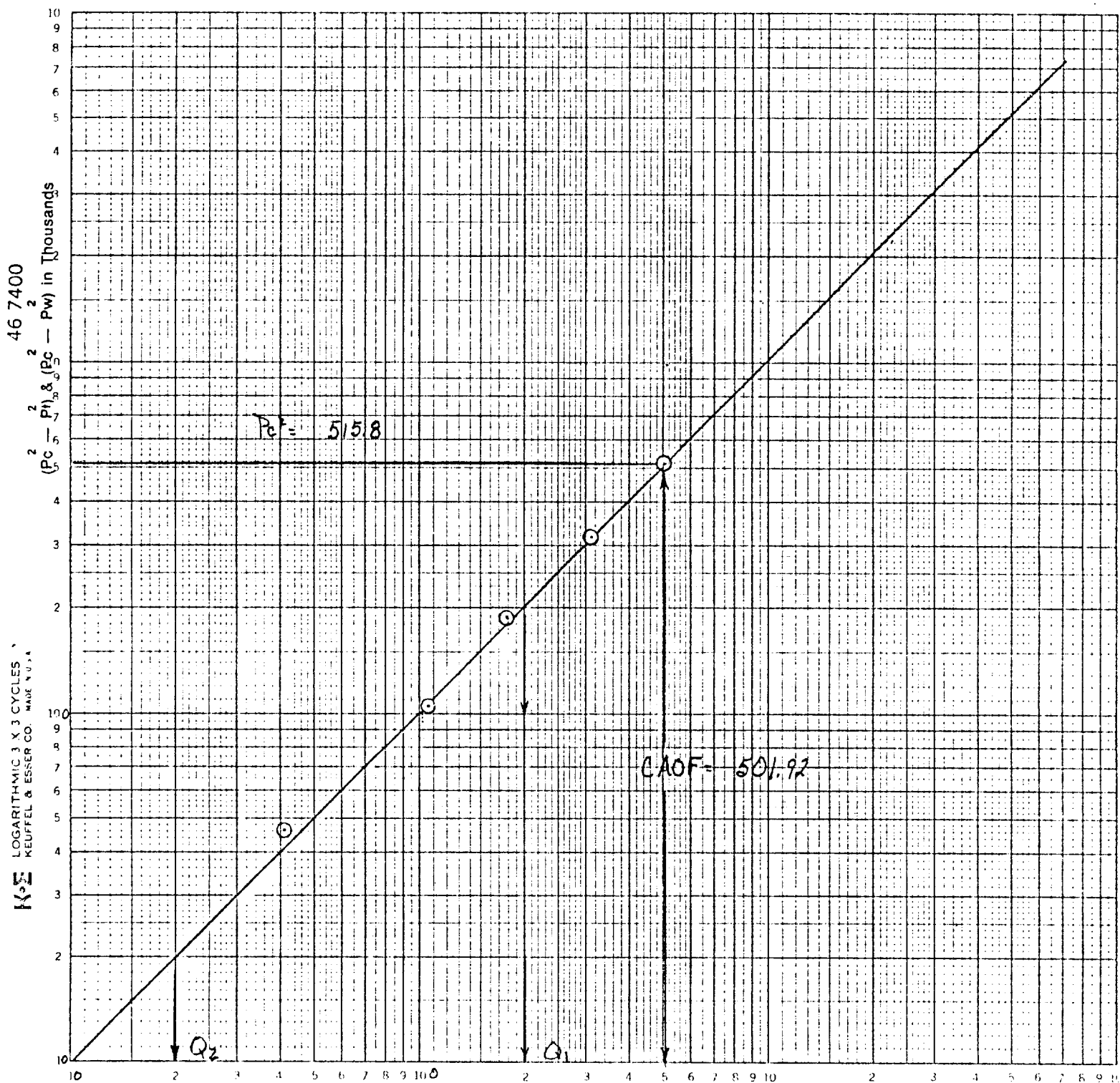
APR 22 1986

Type Test ☒ Initial ☐ Special		Test Date 4-11-86	
Company MC CLELLAN OIL		Connection TO AIR	
Pool HIGH LONESOME		Formation PEN ROSE	
Completion Date 4-6-86		Total Depth 2510	Plug Back L. 2417 2473
Elevation 3698'		Farm or Lease Name SIMMONS FEDERAL	
Casing Size 4.5	Wt. 9.5	d 4.090	Set At 2473
Perforations: From 2121 To 2161	Well No. 3		
Tub. Size 2.375	Wt. 4.7	d 1.995	Set At 2161
Perforations: From OPEN To ENDED	Unit H	Sec. 26	Twp. 16S
Type Well - Single - Blindhead - G.O. or G.O. Multiple SINGLE		Packer Set At NONE	County CHAVES
Producing Thru TUBING	Reservoir Temp. °F 60°	Mean Annual Temp. °F 60°	State NEW MEXICO
L 2141	H 2141	Cg .803	% CO ₂ .237
% N ₂ 44.410	% H ₂ O 0	Provor 2.000	Motor Run 0
Taps 0			
FLOW DATA			
NO.	Prover Line Size	X	Orifice Size
SI			
1.	2.000 X 0.0625		678
2.	2.000 X 0.09375		640
3.	2.000 X 0.125		565
4.	2.000 X 0.1875		430
5.			
RATE OF FLOW CALCULATIONS			
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m
1	0.06405	0.00	691.2
2	0.1410	0.00	653.2
3	0.2648	0.00	578.2
4	0.6082	0.00	443.2
5			
NO.	P ₁	Temp. °F	T ₁
1	1.19	512	1.70
2	1.13	511	1.69
3	1.00	511	1.69
4	.76	511	1.69
5			
Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.			
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.			
Specific Gravity Separator Gas _____			
Specific Gravity Flowing Fluid _____			
Critical Pressure _____ P.S.I.A.			
Critical Temperature _____ °F			
NO.	P ₁ ²	P _w ²	P ₁ ² - P _w ²
1	685.2	469.5	46.3
2	640.2	409.9	105.9
3	572.2	327.4	188.4
4	443.2	196.4	319.4
5			
(1) $\frac{P_c^2}{P_1^2 - P_w^2} = 1.6149$			
(2) $\left[\frac{P_c^2}{P_1^2 - P_w^2} \right]^n = 1.6149$			
AOI = Q $\left[\frac{P_c^2}{P_1^2 - P_w^2} \right]^n = 501.92$			
Post IO-2 5-2-86 comp 4 BK			
Absolute Open Flow 502		Mcf @ 15.025	Angle of Slope @ 1.000
Slope, n 45°		Remarks: CALCULATED BY CASING PRESSURE	
Approved By Commission		Conducted By BENNETT & CATHEY	Calculated By RICHARD TOWNLEY
		Checked By	

BACK PRESSURE CURVE

Operator McCollan Oil Lease Simmons Federal Well No. 3
 County Chavez Field High One some Location 26 16S 29E
 Date of Test 4-11-86 Slope "n" 1.000 Angle of Slope 45°

Calc. Abs. Potential 502 MCF/D



$$\frac{\Delta P_1^2}{\Delta P_2^2} \frac{P_c^2 - P_w^2}{P_c^2 - P_w^2} = \frac{200}{20}$$

Q in MCF/Day

$$\log Q_1 = 2.3010$$

$$\log Q_2 = 1.3010$$

$$Q_1 = 200$$

$$n = 1.000$$

$$Q_2 = 20$$