

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

Form C-122
 Revised 9-1-65

File ✓
C-122 file

RECEIVED

Type Test: ☒ Initial ☐ Annual ☐ Special			Test Date: 1/5/78		JAN 12 1978	
Company: W. L. & S. Corp.			Connection: 4 in			
Well: 71-0000W			Location: Artesia		Unit: O.C.C. ARTESIA, OFFICE	
Completion Date: 12-31-77		Total Depth: 8700		Elevation: 3643		Form or Lease Name: Eddy GK State Com.
Gas Size: 5 1/2	WC: 15.5	Set At: 8508	Perforations: From 8172 To 8498		Well No.: # 2	
Gas Size: 2 3/2	WC: 4.7	Set At: 8423	Perforations: From To		Unit: F 19 18 25	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single				Packer Set At: 8422		County: Eddy
Producing Thru Tbg.: 158 @ 8423		Reservoir Temp. °F: 158 @ 8423		Baro. Press. - P _a : New Mexico		State: New Mexico
L: 8423	H: 8423	Gg: .607	% CO ₂	% N ₂	% H ₂ S	Prover: 4"
Meter Run: 4"		Taps: Flg.				

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							2600				72 Hr.
1.	4 X 2.500			512	12.0	77	2450		70		1 Hr.
2.	4 X 2.500			517	24.0	85	2330		70		1 Hr.
3.	4 X 2.500			521	43.0	77	2095		70		1 Hr.
4.	4 X 2.500			525	82.0	77	1645		70		1 Hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{P_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super. Compress. Factor, Fov	Rate of Flow Q, Mgd
1	32.64	77.32	525.2	.9946	1.234	1.045	3441
2	32.64	112.80	530.2	.9763	1.234	1.041	4807
3	32.64	160.13	534.2	.9322	1.234	1.044	6882
4	32.64	217.63	538.2	.9310	1.234	1.045	9379
5							

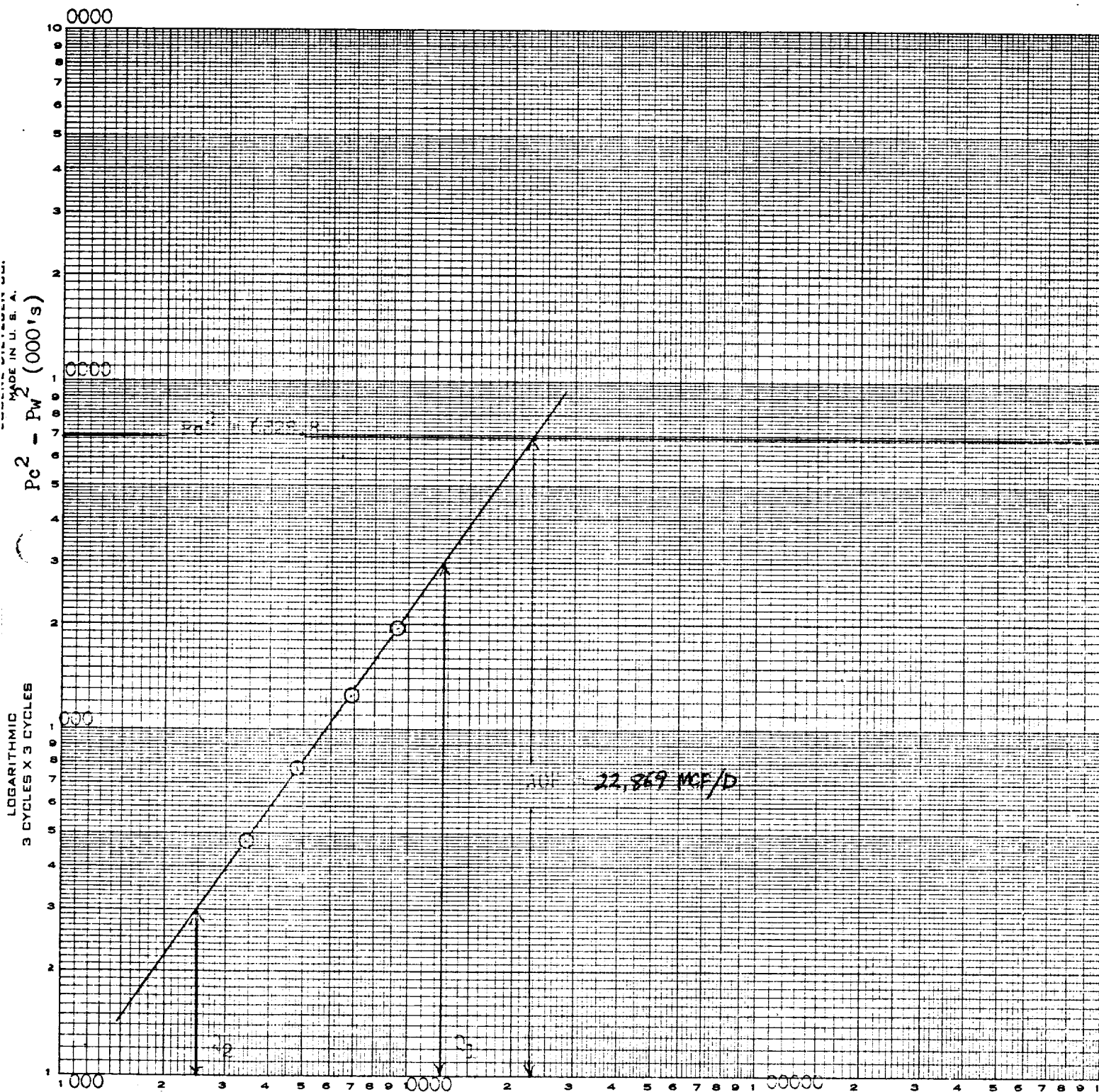
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio: DRY	Mcf/bbl.
1	78	533	1.47	.971	A.P.I. Gravity of Liquid Hydrocarbons	Deg.
2	77	515	1.51	.923	Specific Gravity Separator Gas: .607	X X X X X X X X
3	70	533	1.49	.974	Specific Gravity Flowing Fluid: X X X X X	
4	70	537	1.48	.974	Critical Pressure: 671	P.S.I.A.
5					Critical Temperature: 362	R

NO.	P _t	P _w	R ²	R ² - P _w ²	$(1) \frac{P_t^2}{R^2 - P_w^2} = 3.502$ $(2) \left[\frac{P_t^2}{R^2 - P_w^2} \right]^n = 2.438$ <i>Tested & good</i> <i>10-2</i> <i>51</i>
1		2521.6	6357.5	170.3	
2		2460.6	6054.6	274.3	
3		2364.4	5530.4	2233.4	
4		2209.7	4932.2	2946.0	

Absolute Free Flow: 22,862	Mold @ 15,000	Angle of Slope: 54.75°	Slope, n: .770
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Remarks:		Approved by Commission:	Conducted By: John Davis	Calculated By: Larry Davis	Checked By:
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Company: Gulf Oil Corp.
Lease: Eddy GK State Com.
Well No: # 2
Field: Undesignated
County: Eddy
Date: 1-5-78


$$\begin{array}{rcll} & Q \text{ MCF/D} & & \\ 12810 = Q^1: & \text{Log OF } Q^1 & = & 4.1075491 \\ 2499 = Q^2: & \text{Log Of } Q^2 & = & \underline{3.3977663} \\ & N & = & .70978283 \\ & N & = & .710 \end{array}$$