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

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 9-28-77	SPUD DATE: 8-10-77
Company: Bennett and Ryan	Connection: None	RECEIVED			
Pool: Undesignated	Formation: Morrow	OCT 11 1977			Unit: C
Completion Date: 9-28-77	Total Depth: 8915	Plug Back TD: 8843	O. C. C. ARTESIA, OFFICE		Farm or Lease Name: Lone Tree
Csg. Size: 4½ / Wt.: 11.6 / d: 4.00 / Set At: 8915		Perforations: From 8595			Well No.: 1
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: 1.995 / Set At: 8442		Perforations: From open To end			Unit: C / Sec.: 32 / Twp.: 18 / Rge.: 25
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 8442			County: Eddy
Producing Thru: Tbg.	Reservoir Temp. °F: 161 @ 8652	Mean Annual Temp. °F	Baro. Press. – P_a: 13.2		State: New Mexico
L: *8652	H: 8652	Gg: .646	% CO_2	% N_2	% H_2S / Prover / Meter Run: 6" Positive Choke / Taps

	FLOW DATA				TUBING DATA		CASING DATA		
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	Duration of Flow
SI	6" Positive Ck.				2420		shut-in		72 hrs.
1.	1/8	2347		78	2347				1 hr.
2.	3/16	1990		78	1990				1 hr.
3.	13/64	1880		78	1882				1 hr.
4.	1/4	1670		79	1670 ✓				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 Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	.2618		2360.2	.9831	1.244	1.163	879
2	.6101		2003.2	.9831	1.244	1.159	1732
3	.7208		1893.2	.9831	1.244	1.154	1926.
4	1.112		1683.2	.9822	1.244	1.143	2614 ✓
5							

NO.	P_r	Temp. °R	T_r	Z
1	3.52	538	1.45	.739
2	2.99	538	1.45	.745
3	2.83	538	1.45	.751
4	2.51	539	1.45	.765
5				

Gas Liquid Hydrocarbon Ratio: Dry Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: .646 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 670 P.S.I.A. P.S.I.A.
Critical Temperature: 372 R R

P_c 2433.2 P_c^2 5920.5

NO	P_t*	P_w	P_w^2	$P_c^2 - P_w^2$
1		2364.9	5592.8	327.7
2		2022.9	4092.1	1828.4
3		1918.4	3680.3	2240.2
4		1735.4	3011.6	2908.9
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.035$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.845$

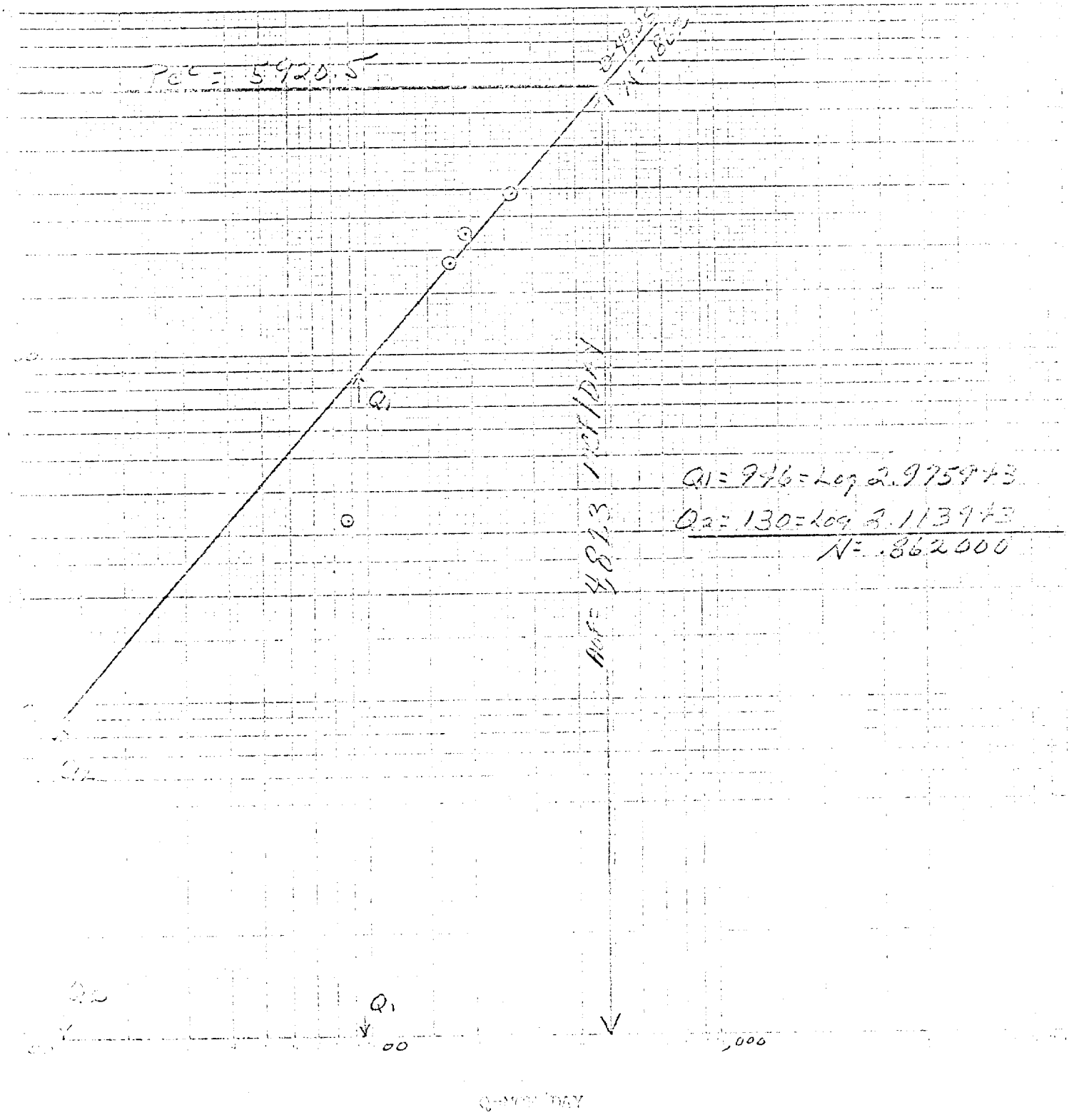
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4.823$

Absolute Open Flow: 4,823 Mcfd @ 15.025 Angle of Slope θ: 49.25 Slope, n: .862

Remarks: * Equivalent Length. No way to measure fluid.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Reggie Reston	Reggie Reston	

Lone Tree No. 1
C-32-18-25
Eddy County, New Mexico
September 28, 1977



$Q_1 = 946 = \log 2.975943$

$Q_2 = 130 = \log 2.113943$

$N = .862000$