

NE MEXICO OIL CONSERVATION COMMS
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 5-21-74		MAY 28 1974		
Company Yates Petroleum Corporation				Connection				O. C. C. ARTESIA, OFFICE	
Pool Wildcat				Formation Wolfcamp				Unit	
Completion Date 5-6-74		Total Depth 11514		Plug Back TD 11268		Elevation 3265 KB		Farm or Lease Name Stonewall "DD"	
Csg. Size 5 1/2	Wt. 17#	d 4.892	Set At 11409	Perforations: From 8917 To 8954				Well No. 1	
Tbg. Size 2 7/8"	Wt. 6.5#	d 2.441	Set At 8915	Perforations: From To				Unit Sec. Twp. Rge. N 20 20 28	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 8867		County Eddy		
Producing Thru Tubing		Reservoir Temp. *F @ 138		Mean Annual Temp. *F		Baro. Press. - P _a 13.2		State New Mexico	
L 8936	H 8936	Gg 0.680	% CO ₂ 0.15	% N ₂ 0.82	% H ₂ S 0.01	Prover Barton	Meter Run 4"	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
SI	4		1.250				1625	82			
1.	4		1.250	478	3	70	967	83			1.75 hrs.
2.	4		1.250	493	8	76	803	83			1 hr.
3.	4		1.250	493	12	71	658	83			1 hr.
4.	4		1.250	497	14.5	73	500	82			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	7.469	38.387	491.2	.9905	1.213	1.055	363
2	7.469	63.636	506.2	.9850	1.213	1.054	599
3	7.469	77.938	506.2	.9896	1.213	1.056	738
4	7.469	86.011	510.2	.9377	1.213	1.056	813
5.							

NO.	P _t	Temp. *R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	.730	530	1.370	.899	A.P.I. Gravity of Liquid Hydrocarbons 44.3 Deg.
2.	.753	536	1.385	.900	Specific Gravity Separator Gas 0.680 X X X X X X X X
3.	.753	531	1.372	.897	Specific Gravity Flowing Fluid X X X X X
4.	.759	533	1.377	.897	Critical Pressure 672 P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature 387 R _____ R

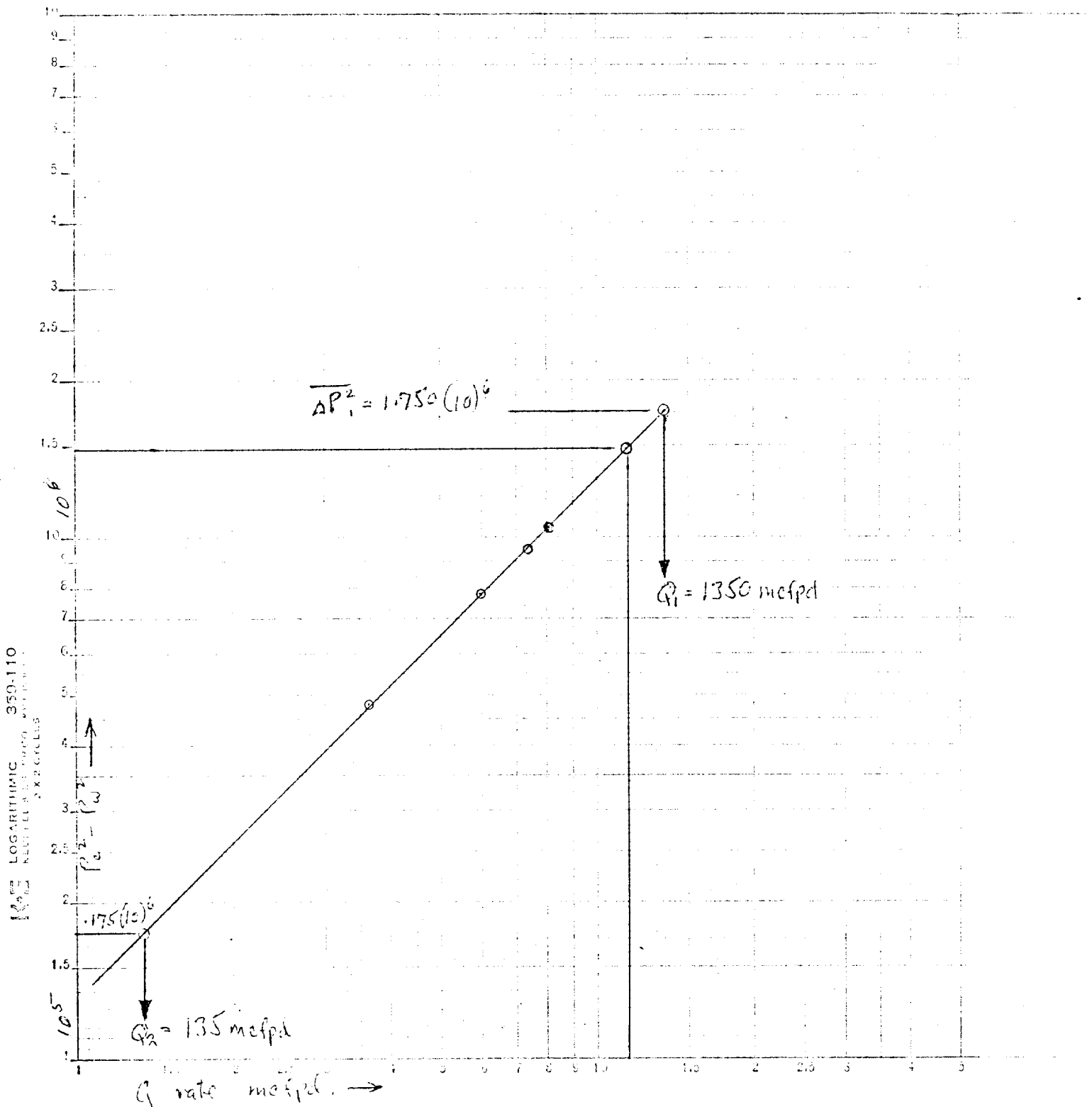
NO.	P _t	P _w	P _w ²	P _t ² - P _w ²	(1) $\frac{P_t^2}{P_t^2 - P_w^2} =$	(2) $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n =$
1		3156.2	9.962	4.801	1.410	1.410
2		2640.2	6.971	7.792		
3		2290.2	5.245	9.513		
4		2072.2	4.294	10.469		
5						

Absolute Open Flow 1,146 Mcfd @ 15.025				Angle of Slope θ _____		Slope, n 1.000	
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Remarks: Witnessed by Jack Moore, Transwestern Pipeline Company			
Bottom Hole Pressures by Bennett Wireline Service			

Approved By Commission:	Conducted By: Don Weaver	Calculated By: Eddie Mahfood	Checked By:
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Yates Petroleum Corporation = Stonewall "DD" #1 Com.
 Unit N Section 20-T20S-R28E
 Eddy County, PMNM
 May 21, 1974



$Q_1 = 1350$
 $Q_2 = 135$

$\log Q_1 = 3.13033$
 $\log Q_2 = 2.13033$
 $N = 1.00000$