

NEW MEXICO OIL CONSERVATION COMMISSION
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 10/12/82		JAN 03 1983	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline				
Well Pecos Slope - Abo Gas				Formation Abo			Unit O.C.D. ARRESIA, OFFICE	
Completion Date 6/23/82		Total Depth 4250'		Plug Back TD 4178'		Elevation 3836' GL		Form. or Lease Name Godfrey "MP" Federal
Csg. Size 4 1/2"	Wt. 9.5#	d 4.090	Set At 4250'	Perforations: From 4009 To 4022		Well No. 3		
Tub. Size 2 3/8"	Wt. 4.7#	d 1.995	Set At 3974	Perforations: From To		Unit Sec. Twp. Rge. C 15 7S 25E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 3974'		County Chaves	
Producing Thru Tubing		Reservoir Temp. *F 112# 3974'		Mean Annual Temp. *F 62		Baro. Press. - P _a 13.2 psi		State New Mexico
L 3974	H 3974	G _g .646	% CO ₂ .10	% N ₂ 4.89	% H ₂ S 0	Prover -	Meter Run 2"	Tags Flanged

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.	
5.										
1.	2.067 x 1.250			140	38.6	70	866	62		
2.	2.067 x 1.250			145	41.2	70	860	62		
3.	2.067 x 1.250			150	43.6	68	854	62		
4.	2.067 x 1.250			150	50.0	70	845	62		
5.										

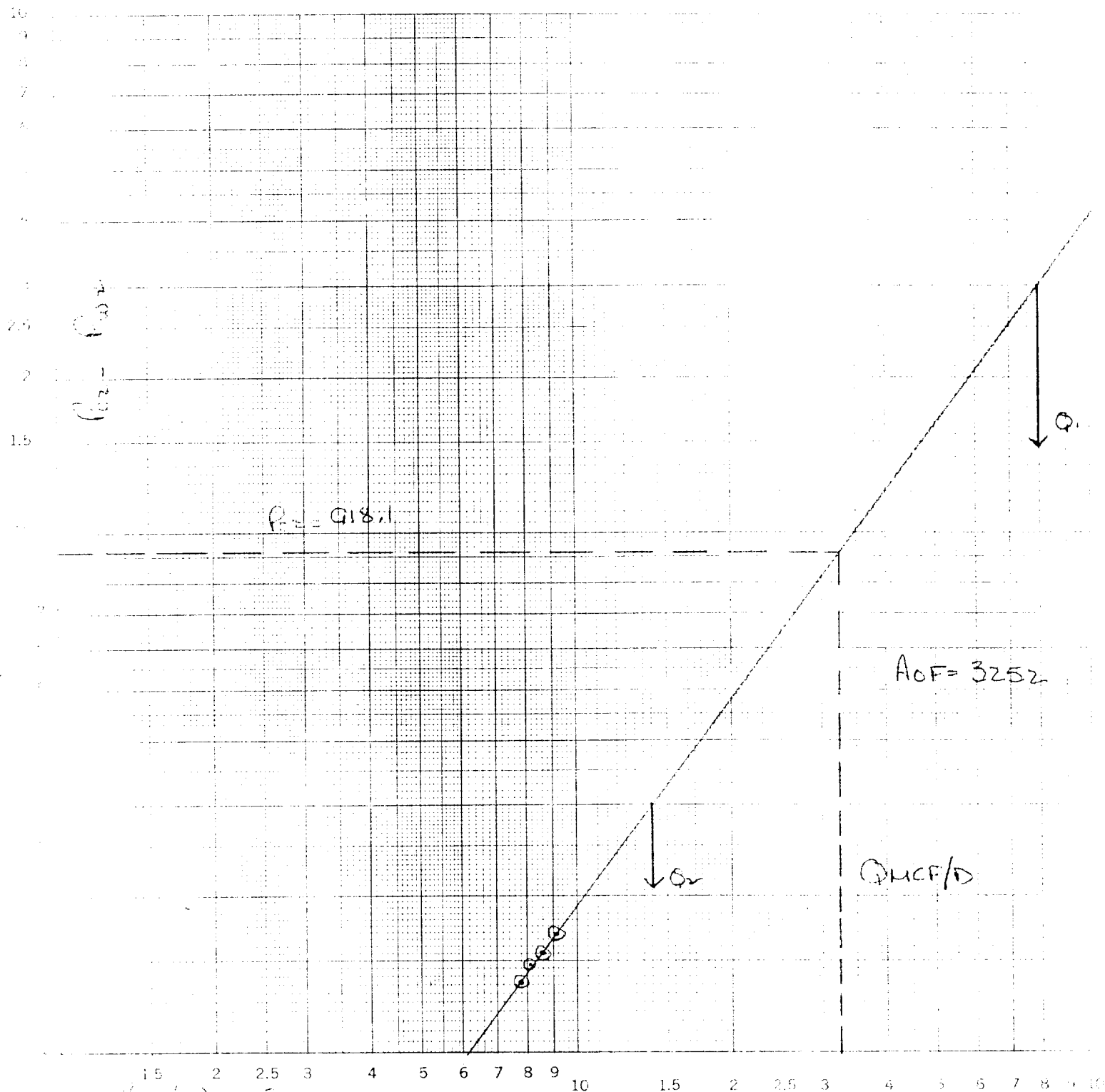
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{pv}	Rate of Flow Q, Mscf/d
1.	8.120	76.9	153.2	.9905	1.244	1.013	779
2.	8.120	80.7	158.2	.9905	1.244	1.013	818
3.	8.120	84.3	163.2	.9924	1.244	1.014	857
4.	8.120	90.3	163.2	.9905	1.244	1.014	916
5.							

NO.	P _t	Temp. *R	T _r	Z	Gas Liquid Hydrocarbon Ratio <u>Dry</u> Mscf/Dbl.		
					A.P.I. Gravity of Liquid Hydrocarbons <u>--</u> Deg.		
					Specific Gravity Separator Gas <u>.646</u>	X X X X X X X X	
					Specific Gravity Flowing Fluid <u>X X X X X</u>	<u>.646</u>	
					Critical Pressure <u>665</u> P.S.I.A.	<u>665</u> P.S.I.A.	
4.	.25	530	1.47	.973	Critical Temperature <u>361</u> R	<u>361</u> R	
5.							

P _c <u>958.2</u>	P _c ² <u>918.1</u>	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{5.404}{\quad}$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{3.550}{\quad}$ $AOR = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{3252}{\quad}$
NO.	P _w	
1	773.0	
2	762.5	
3	752.0	
4	736.5	
5.		

Absolute Open Flow <u>3252</u> Mscf @ 15.025		Angle of Slope θ <u> </u>	Slope, n <u>.751</u>
Remarks: <u> </u>			
Approved By Commission:	Conducted By: David Weaver	Calculated By: Andie Alderson	Checked By:

Yates Petroleum Co.
 Godfrey Mine Federal #2
 UAC 15-72-100
 Choke Quality



(in (in)) 3000
 (in (in)) 300
 $Q_1 = 7950$
 $Q_2 = 1410$

$\log Q_1 = 3.90037$
 $\log Q_2 = 3.14922$
 $n = .45115 = .751$

