

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

Form C-127
Revised 9-1-65

☒ Initial ☐ Annual ☐ Special				Test Date 1-25-73	
Company Western Oil Producers Inc.				Connection To Air	
Loc. Osuda				Formation Morrow	
Test Date 1-23-73		Total Length 11,467		Plug Back TD 11,467	
Elevation 3644 Gr.		Form or Lease Name St.			
Well No. 7"	WT. 29.0	d 6.184	Set At 11,467	Perforations: From 11,319 To 11,458	
Well No. 2-3/8"	WT. 4.5	d 1.995	Set At 11,285	Perforations: From Open To Ended	
Type Well - Single - Dragoonhead - G.G. or G.O. Multiple Single				Packer Set At 10,972	
Producing Intv To Top		Reservoir Temp. °F 159 @ 11,350		Mean Annual Temp. °F 60	
Baro. Press. - P_b 13.2		State New Mexico			
Well No. 11,285	WT. 11285	Gg 0.602	% CO ₂ 0.31	% N ₂ 0.44	% H ₂ S Trace
Prover 4" CNT		Meter Run --			

FLOW DATA						TUBING DATA		CASING DATA		Duration	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	IN Diff. HG XX	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
1.	4" CNT	1-1/2"			6.0	60	1128.0	60	11/64"	Choke	
2.	4" CNT	1-1/2"			15.0	60	899.0	65	13/64"	Choke	
3.	4" CNT	1-1/2"			23.0	60	802.0	65	15/64"	Choke	
4.	4" CNT	1-1/2"			38.0	60	619.0	67	18/64"	Choke	
5.	4" CNT	2.0"			22.5	60	561.0	68	22/64"	Choke	

RATE OF FLOW CALCULATIONS						
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor F_g	Super Compress. Factor F_{pv}
1.	1.000			1.000	1.0000	1.000
2.	1.000			1.000	1.0000	1.000
3.	1.000			1.000	1.0000	1.000
4.	1.000			1.000	1.0000	1.000
5.	1.000			1.000	1.0000	1.000

NO.	P_c	Temp. °R	T_c	Z	Gas Liquid Hydrocarbon Ratio $T.S.T.R.$
1.	Loss	non available tables			
2.					
3.					
4.					
5.					

A.P.I. Gravity of Liquid Hydrocarbons		Specific Gravity Separator Gas		Specific Gravity Flowing Fluid		Critical Pressure		Critical Temperature	
			0.602		XXXXX		673		360

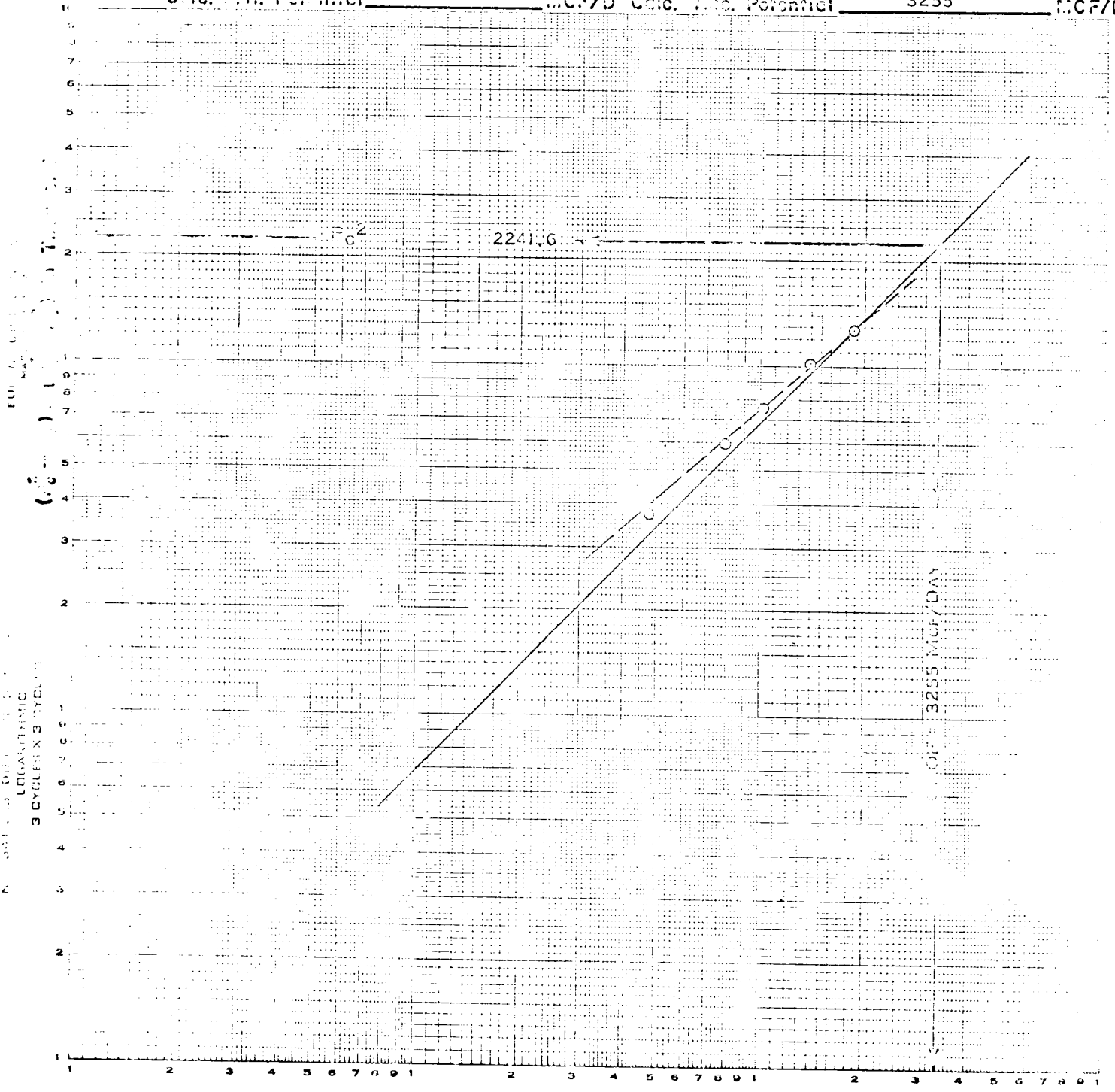
NO.	P_c^2	$P_c^2 - P_w^2$	$\frac{P_c^2}{P_c^2 - P_w^2}$	$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n$
1.	1577.0	1576.5	575.1	
2.	1213.2	1212.6	595.5	
3.	1213.2	1212.6	757.5	
4.	1106.2	1105.7	1074.8	
5.	930.2	929.6	1233.5	

Slope		Mod @ 15,000		Slope of Slope	
	3255		50		

One point air test - due in excess of 1.00 in. of air			
Approved by Commission:	Conducted by:	Calculated by:	Checked by:
<i>[Signature]</i>	M.C.T.	R.L.M.	J.M.W.

PACK PRESSURE CURVE

Operator WESTERN OIL PRODUCERS, INC. STATE OKLAHOMA Well No. 1
 County LEA Field OSUDO (MORROW) Location UNIT M, SEC. 5, T21S, R35E
 Date of Test 1-25-73 Slope "n" 1.00 LIMITED W.N. ABS.
 Calc. W.N. Potential MCF/D Calc. Abs. Potential 3255 MCF/D



Q in MCF/Day

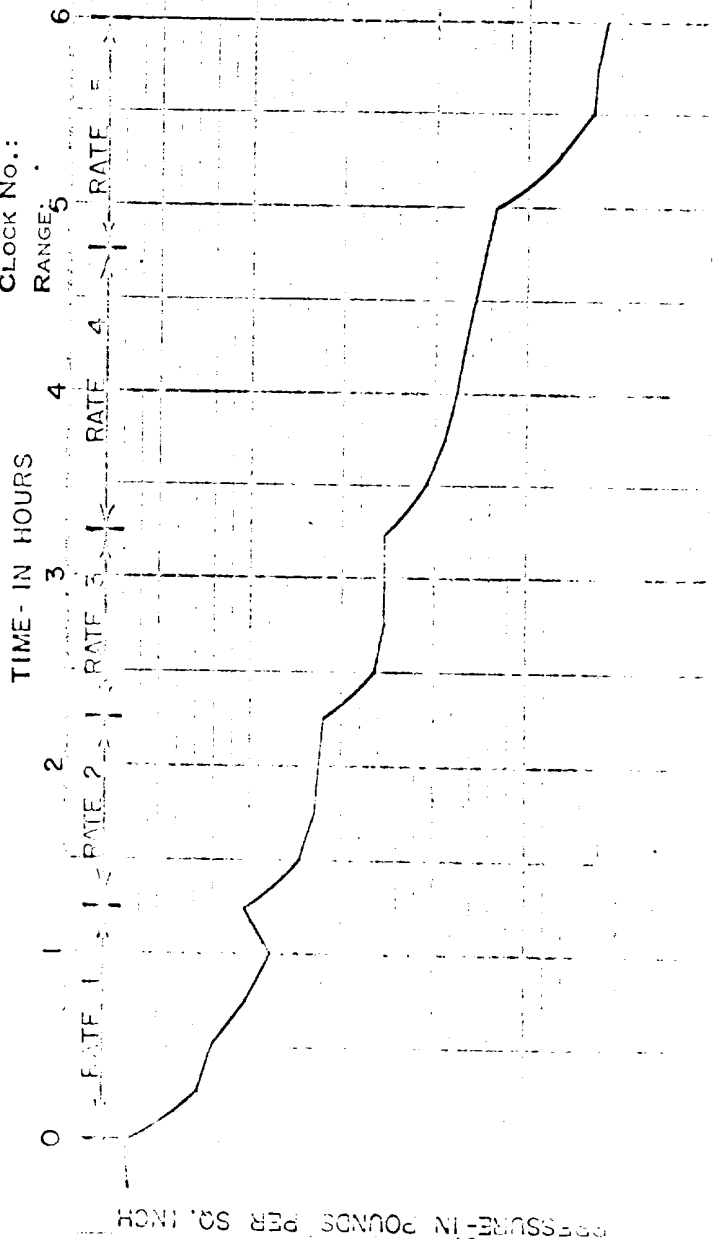
ABS. SLOPE = 1.00 LIMITED

$$CAOF = 1860 \left(\frac{2241.6}{1200.8} \right)^{1.00} = 3255 \text{ MCF/DAY}$$

	CUM./HRS	P.S.I.G. @ 11,350'	TIME	CUM./HRS	P.S.I.G. @ 11,350'
11:15 PM	00 11:15 00 MIN	1481 GAUGE RECORDED 11,350'	2:45 PM	03 HRS 30 MIN	1153
11:30 PM	01 15	1401 DEPTH 1ST RATE,		03 45	1142
12:00 PM	00 30	1405		04 00	1128
12:15 PM	00 45	1391		04 15	1119
12:30 PM	01 00	1331	4:00 PM	04 30	1107
	01 15	1326		04 45	1093 END 4TH RATE
	01 30	1353 END 1ST RATE		05 00	1084
	01 45	1295		05 15	1019
	02 00	1279		05 30	979
1:30 PM	02 15	1274	5:15 PM	05 45	977
	02 30	1270 END 2ND RATE		06 00	967 END 5TH RATE, END TEST
	02 45	1214			
	03 00	1205			
2:30 PM	03 15	1205			
		1205 END 3RD RATE			

TEST DATE: JANUARY 25, 1973
 TEST DEPTH: 11,350 FEET

ELEMENT No.: 16194-N
 RANGE: 0-4600 P S I
 CLOCK No.: 11782
 RANGE: 0-24 HOURS



WESTERN OIL PRODUCERS, INC.

STATE WELL No. 1
 BOTTOM HOLE PRESSURES TO BE USED FOR CALCULATING
 MULTI-POINT BACK PRESSURE TEST