

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

Form C-122
Revised 9-1-65

HOBBS OFFICE O.C.C.

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date FEB 21 1966		Time 11 20 AM '66	
Company Shell Oil Company				Connection El Paso Natural Gas Company			
Pool Blaineby Gas				Formation Blaineby		Unit -	
Completion Date 10-3-52		Total Depth 6633'		Plug Back TD -		Elevation 3429' DF	
Farm or Lease Name Turner							
Csg. Size 3 1/2	Wt. 15.0	d 4.976	Set At 6550'	Perforations: From 5510' To 5621'		Well No. 13	
Tbg. Size 2	Wt. 4.7	d 1.995	Set At 6624'	Perforations: From To		Unit R	Sec. 22
						Twp. 21N	Rge. 37E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G. O. Dual				Packer Set At 6400'		County Lea	
Producing Thru 6550'		Reservoir Temp. °F 115 @ 5600		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State New Mexico							
L 5566	H 5366	G _g .713	% CO ₂ 0	% N ₂ 0	% H ₂ S 0	Prover	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							Packer		1341	64	72 hrs.
1.	4	X	1.500	591		64			1056	64	24
2.	4	X	1.500	594		65			959	66	24
3.	4	X	1.500	596		64			892	64	24
4.	4	X	1.500	571		64			784	64	24
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, Mcfd
1	10.84	76.20	604.2	.9962	1.184	1.083	1,055
2	10.84	86.24	607.2	.9943	1.184	1.084	1,193
3	10.84	125.9	609.2	.9962	1.184	1.084	1,745
4	10.84	159.5	584.2	.9962	1.184	1.080	2,202
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 1,549	Mcf/bbl.
1.	.90	524	1.33	.832	52.2	
2.	.91	526	1.33	.831	.713	
3.	.91	524	1.33	.831		
4.	.87	524	1.33	.837		
5.						

NO.	P _r ²	P _w	P _r ²	P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.534$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.534$
1	1208.2		1208.8	625.7		
2	945.2		946.0	887.9		
3	819.4		821.1	1012.8		
4	635.5		638.4	1195.5		
5						

Absolute Open Flow 3,378 Mcfd @ 15.025		Angle of Slope @ 45.0		Slope, n 1.000	
Remarks: Slope greater than 1.000, a slope of 1.000 drawn through highest rate of flow.					
Approved By Commission:					
Conducted By: A. L. Ellerd		Calculated By: A. L. Ellerd		Checked By:	

**GAS WELL
BACK PRESSURE CURVE**

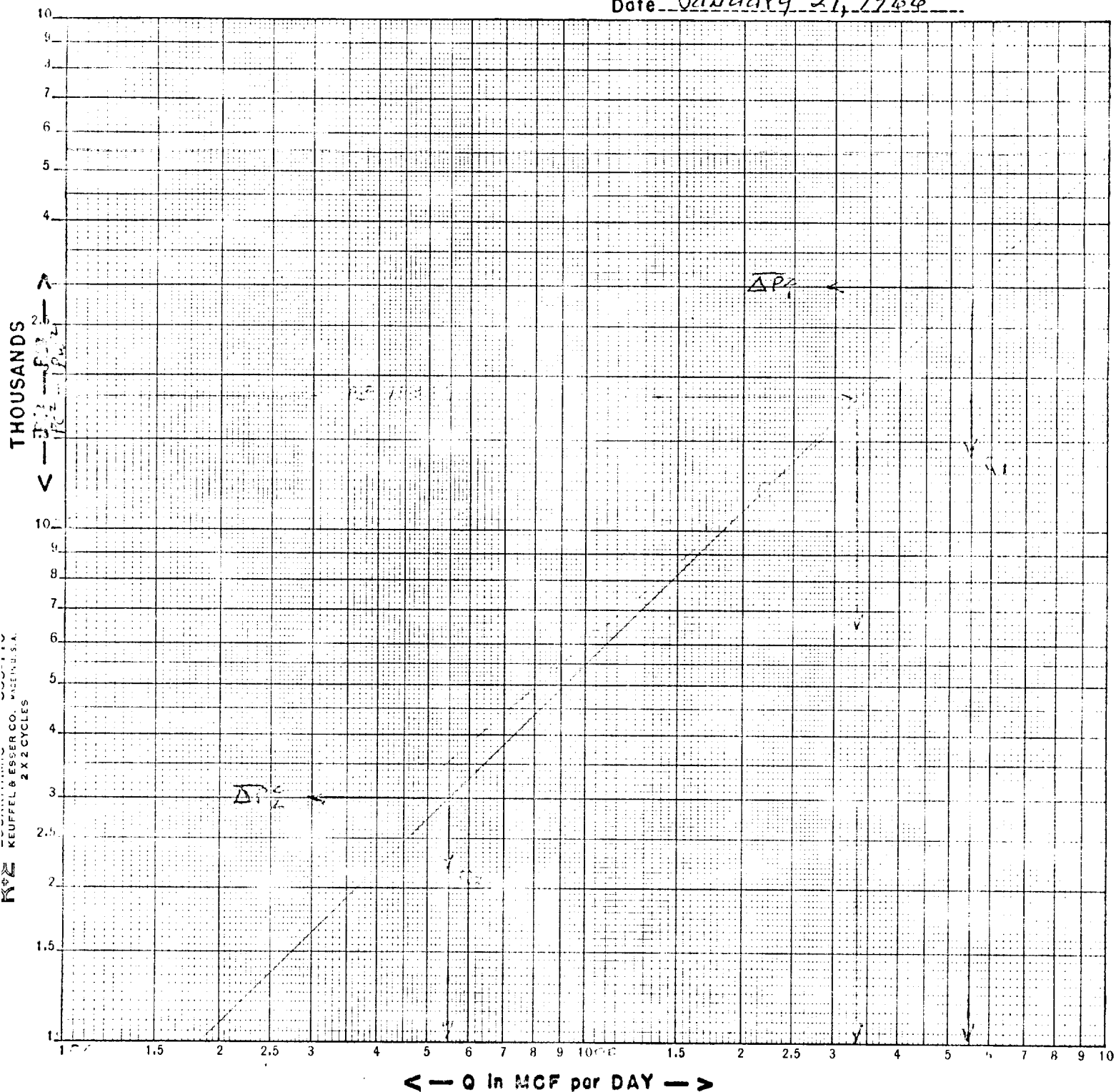
County LEA Field BLINEBERRY GAS

Operator SHELL OIL COMPANY

Lease TURNER Well No. 13

Volume 3,378 MCF/24 hr.

Date JANUARY 21, 1946



$$\Delta P_1^2 - \Delta P_2^2 = 3000$$

$$\Delta P_2^2 - \Delta P_1^2 = 300$$

$$Q_1 = 5500 \text{ MCFD}$$

$$Q_2 = 550 \text{ MCFD}$$

$$\log Q_1 = 3.740363$$

$$\log Q_2 = 2.740363$$

$$n = 1.000$$