

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

-122  
Revised 9-1-65

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date 2/28/72	
Company The Petroleum Corporation			Connection None		
Pool Wildcat			Formation Ellenburger		
Completion Date 2/24/72		Total Depth 11,854		Plug Back TD 11,849	Elevation 3021 KB
Farm or Lease Name Tenneco Federal					Well No. 1
Csg. Size 5-1/2	Wt. 17	Set At 11,853	Perforations: From 11,634 To 11,828		Unit N
Tub. Size 2-3/8	Wt. 4.7	Set At 11,307	Perforations: From - - To - -		Unit Sec. Twp. Rye. N 12 26 37
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11,110	
Producing Thru Tubing				Baro. Press. - P <sub>g</sub> 13.2	
Reservoir Temp. °F 144 @ 11,850		Mean Annual Temp. °F 60		State New Mexico	
L 11,731	H 11,731	G <sub>g</sub> 0.677	% CO <sub>2</sub> 0.36	% N <sub>2</sub> 1.57	% H <sub>2</sub> S 0.18
				Prover 4"	Meter Run Flange

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h <sub>w</sub>	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
5i				2898							
1.	4	x	2	335	6	57	2489	90	Pkr.	-	1
2.	4	x	2	350	16	56	2035	90	"	-	1
3.	4	x	2	360	27	60	1799	91	"	-	1
4.	4	x	2	365	37	60	1497	91	"	-	0.75

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor Ft.	Gravity Factor F <sub>g</sub>	Super Compress. Factor, F <sub>pv</sub>	Rate of Flow Q, Mcfd
1	19.81		45.70-348.2	1.003	1.215	1.041	1,148.5
2	19.81		76.23-363.2	1.004	1.215	1.043	1,921.3
3	19.81		100.38-373.2	1.000	1.215	1.044	2,522.4
4	19.81		118.30-378.2	1.000	1.215	1.045	2,975.5

NO.	R <sub>f</sub>	Temp. °R	T <sub>f</sub>	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	0.52	517	1.34	0.923	5.6525	60.6° API @ 60° F.	0.677	XXXXXX	669	385
2	0.54	516	1.34	0.920				XXXXX		
3	0.56	520	1.35	0.918						
4	0.57	520	1.35	0.916						

NO.	P <sub>c</sub> <sup>2</sup>	P <sub>w</sub>	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>
1	2911.2	2504.6	6273	2202
2		2075.9	4309	4166
3		1865.3	3479	4996
4		1602.5	2568	5907

(1)  $\frac{P_c^2}{P_c^2 - P_w^2} = 1.434$       (2)  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.428$   
 AOF = Q  $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4,249$

Absolute Open Flow 4249 Mcfd @ 15.025      Angle of Slope  $\theta$  46°      Slope, n .99

Remarks: \_\_\_\_\_

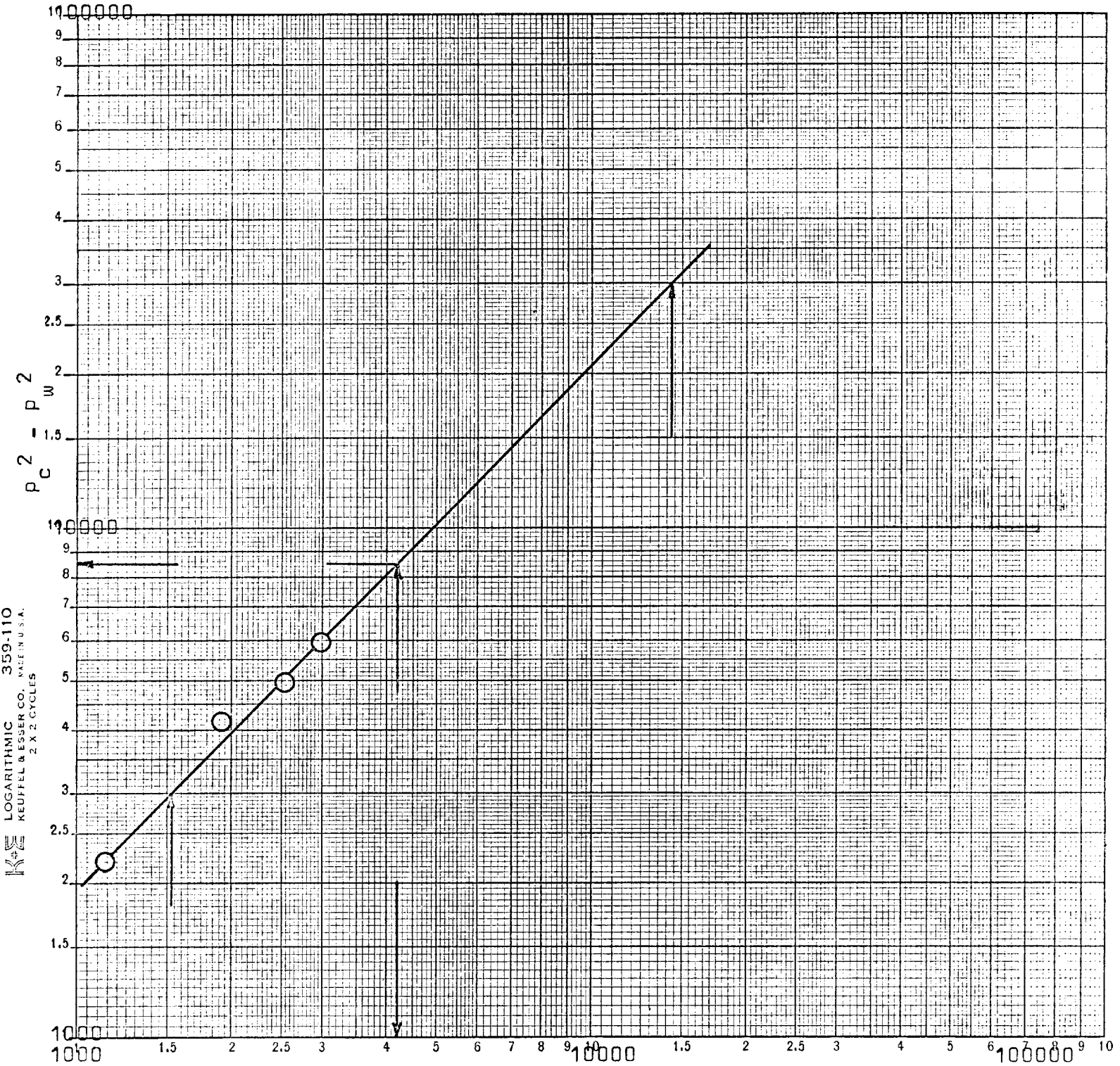
Approved By Commission: 	Conducted By: J. T. Berry	Calculated By: J. T. Berry	Checked By: J. T. Berry
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APR 11 1972

OIL CONSERVATION COMM.  
HOUSTON, N. M.

COMPANY THE PETROLEUM CORPORATION  
 WELL TENNECO-FEDERAL NO. 1  
 LOCATION N - Sec 12 - T26S-R37E  
 COUNTY Lea  
 DATE February 29, 1972



$Q_1 = 1530$   
 $Q_2 = 10430$

Q - MCFPD

Log  $Q_2 = 4.0182843$

Log  $Q_1 = 3.0224284$

N = 0.9958559

Absolute Open Flow = 4,249 MCFPD  $\theta = 46^\circ$

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OIL CONSERVATION COMM.  
HOOLA, N. M.