

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT ONE POINT BACK PRESSURE TEST - R GAS WELL

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 6/16/71	
Company Union Texas Pet. Corp.		Connection	
Pool Wildcat		Formation Devonian	
Completion Date 6/12/71		Total Depth 13,252	
Csg. Size 5 1/2		Set At 13,252	
Wt. 17.0		Perforations: From 13,156 To 13,204	
Thq. Size 2 7/8		Set At 13,061	
Wt. 6.4		Perforations: From Open Ended To	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single		Packer Set At 13,061	
Producing Thru Tubing		Baro. Press. - P _a 13.2	
Reservoir Temp. °F 212° @ 13,060		Mean Annual Temp. °F 60°	
L 13,061		H 13,061	
G _g .635		% CO ₂ 1.6	
% N ₂ 0.37		% H ₂ S 4.0	
Prover		Meter Run X	
Taps Flg.		Unit Sec. Twp. Rge. E 6 13S 35E	
County Lea		State New Mexico	

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
1.	3	X	1.25	875	6.0	50	2914	82	Choke		48 Hrs.
2.	3	X	1.25	885	23.0	44	2114	82	10/64		1 Hr.
3.	3	X	1.25	900	44.0	50	2211	84	12/64		1 Hr.
4.	3	X	1.25	920	62.0	62	1863	87	14/64		1 Hr.
5.							1420	88	16/64		1 Hr.

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 _{sp}	Rate of Flow Q, Mcfd
1.	7.703	73.00	888.2	1.010	1.255	1.092	778
2.	7.703	143.7	898.2	1.016	1.255	1.100	1553
3.	7.703	200.5	913.2	1.010	1.255	1.095	2144
4.	7.703	240.5	933.2	.9931	1.255	1.089	2527
5.							

NO.	P _i	Temp. °R	T _r	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.	1.31	510	1.40	.838		63.6	.635	X X X X X X X X	676	365
2.	1.33	504	1.38	.827				X X X X X		
3.	1.35	510	1.40	.834						
4.	1.38	522	1.43	.843						
5.										

$P_c = 1640.2$ $P_c^2 = 21531*$				
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1		3876.2	15025	6506
2		3532.2	12467	9064
3		3039.2	9237	12294
4		2537.2	6437	15094
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.126$

AO - C $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3571$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.113$

Absolute Open Flow	3571	Mcfd @ 15,025	Angle of Slope θ	Slope, n, .975
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Remarks: * From BHP gauge @ 13,060

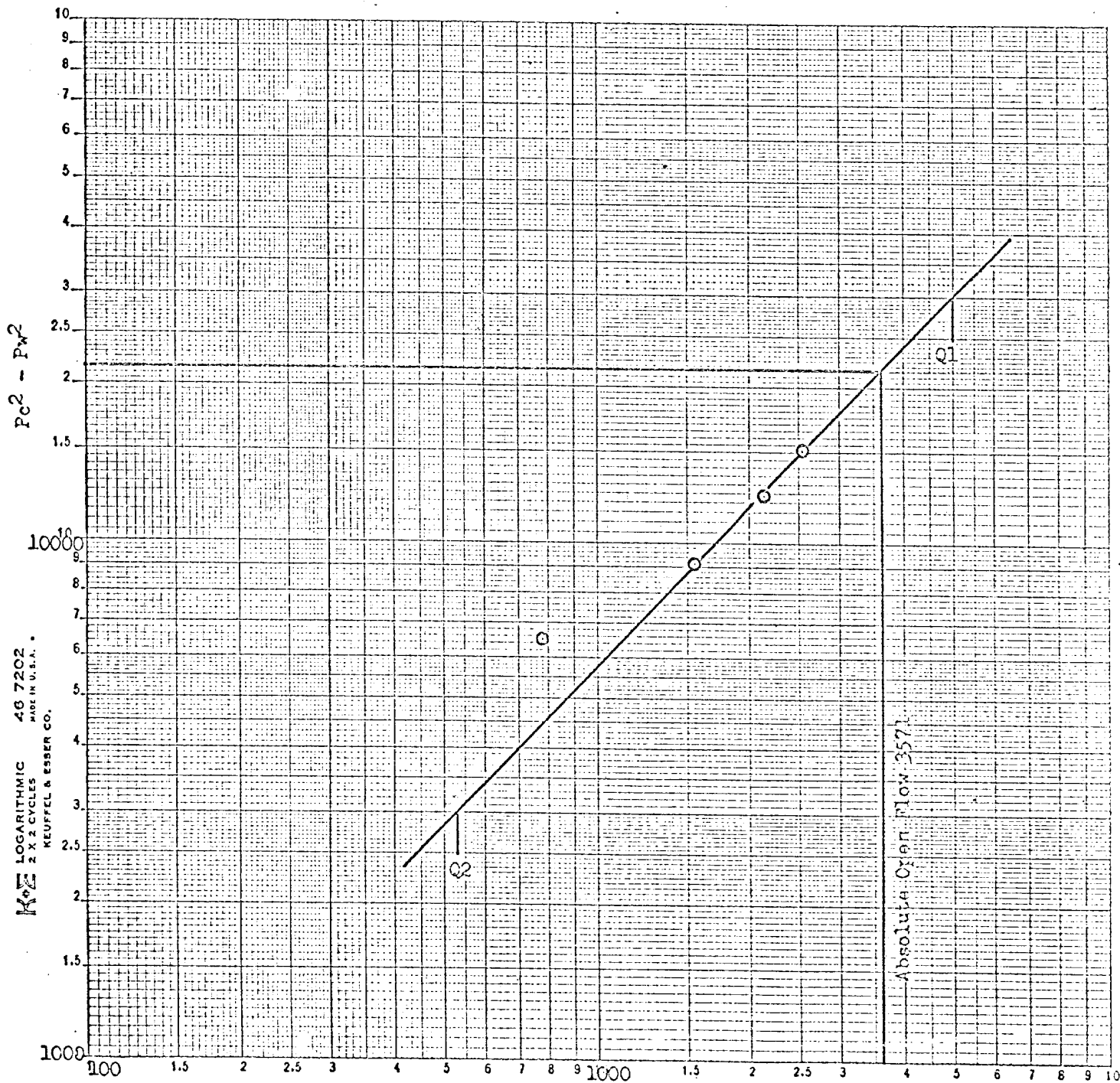
Approved By Commission	Conducted By:	Calculated By:	Checked By:
	Thomason	11/16	

RECEIVED

JUN 21 1971

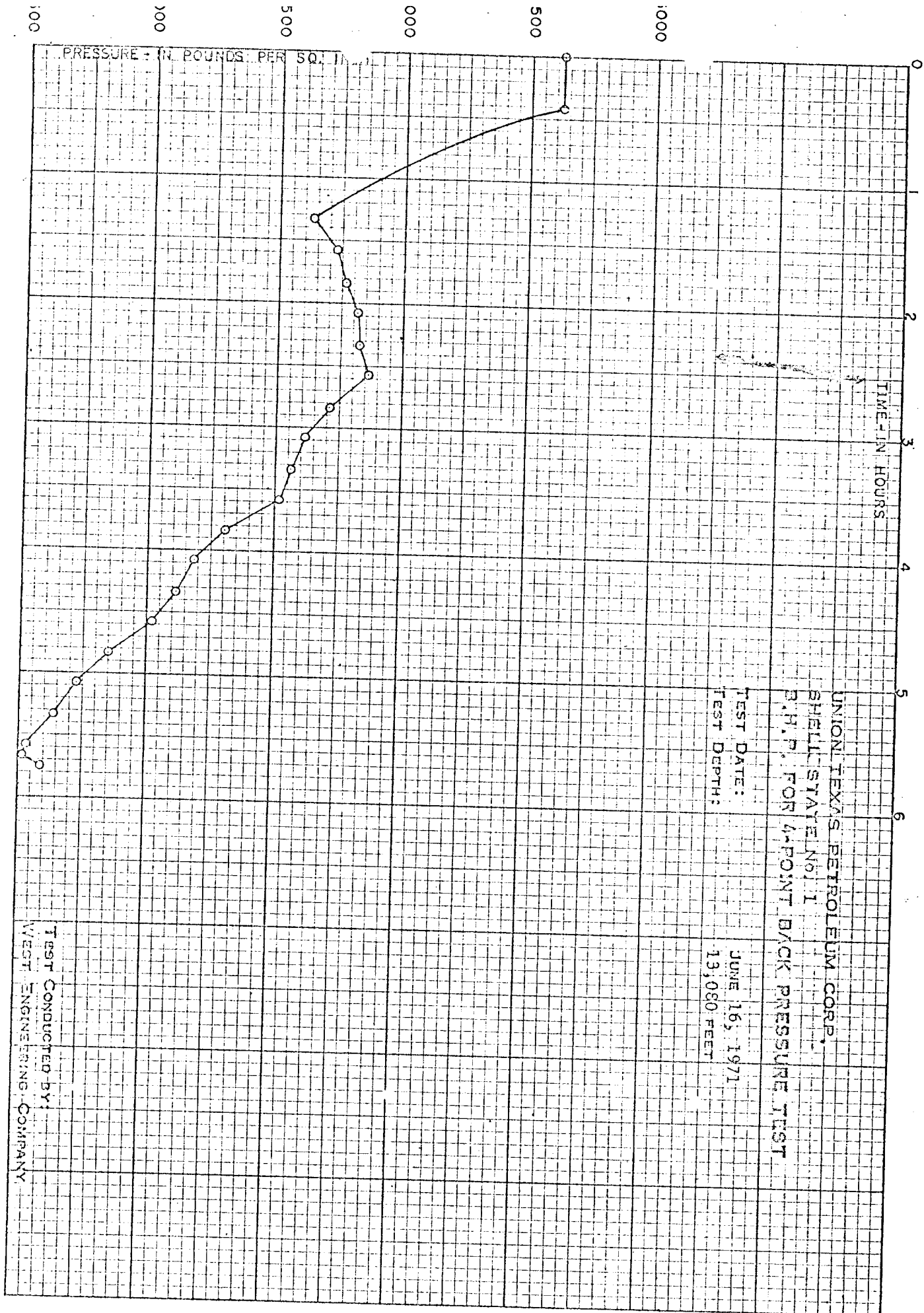
OIL CONSERVATION COMM.
HOBBS, N. M.

Union Texas Petroleum Corporation
 Shell State Com No. 1
 Unit E, Sec. 6, T13S, R35E
 Lea County, New Mexico
 June 16, 1971



Q MCFPD

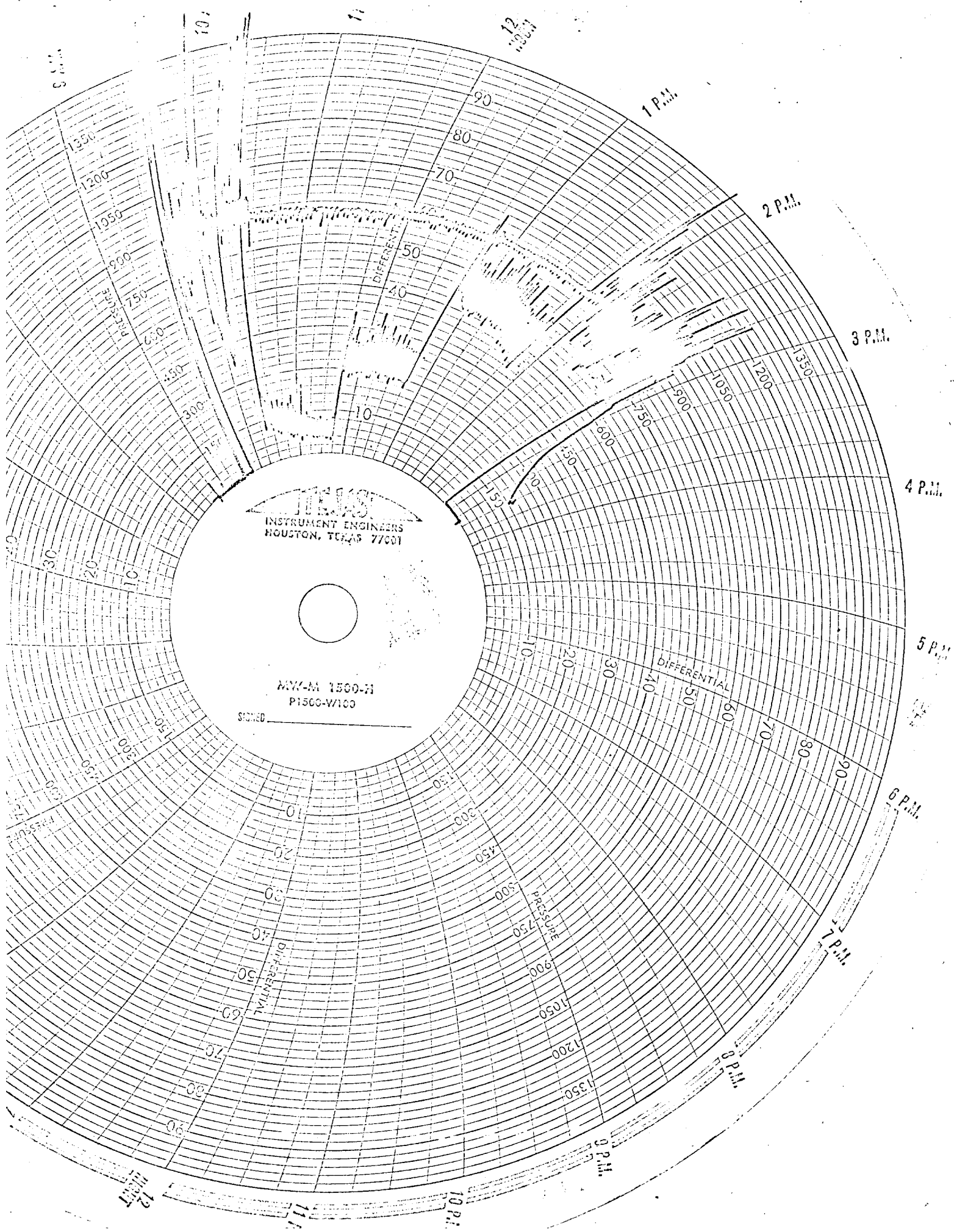
Log $Q1 = 3.698970$
 Log $Q2 = 2.721276$
 $n = 0.974694$



UNION TEXAS PETROLEUM CORP.
SHELL STATE No. 1
PRESSURES FOR 4-POINT BACK PRESSURE TEST
TABULATION OF PRESSURE AND TIME

TEST DATE: JUNE 16, 1971
TEST DEPTH: 13,080 FEET
ELEMENT NO.: 16531-N
OPER.: M.C.T.

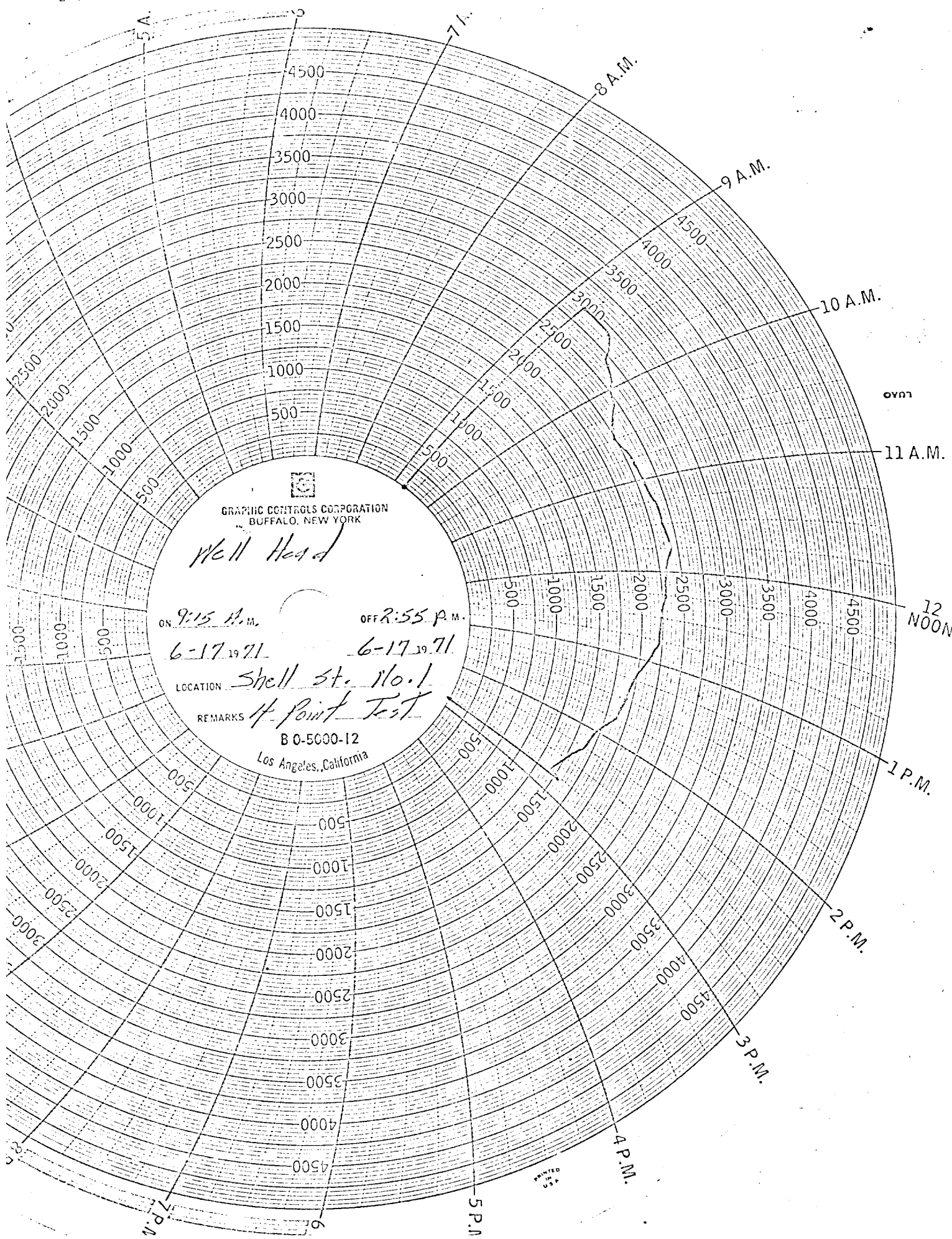
<u>TIME</u>	<u>CUM. HRS. / MIN.</u>	<u>P.S.I. @ 13,080 FEET</u>
9:10 A.M.	00 HRS. 00 MIN.	4627 GAUGE REACHED 13,080' WELL SHUT-IN 48.5 HRS.
9:35 A.M.	00 35	4627 OPEN CHOKE
10:30	01 20	3639 BEGIN 1ST RATE 10/64 CHOKE
10:45	01 35	3737
11:00	01 50	3768
11:15	02 05	3810
11:30	02 20	3832
11:45 A.M.	02 35	3863 END 1ST RATE
12:00 NOON	02 50	3702
12:15 P.M.	03 05	3611
12:30	03 20	3557
12:45	03 35	3519 END 2ND RATE
1:00	03 50	3301
1:15	04 05	3191
1:30	04 20	3115
1:45	04 35	3026 END 3RD RATE
2:00	04 50	2850
2:15	05 05	2739
2:30	05 20	2644
2:45	05 35	2524 END 4TH RATE
2:50	05 40	2515 WELL SHUT-IN
2:55 P.M.	05 HRS. 45 MIN.	2591 GAUGE OUT, END TEST



TEXAS
INSTRUMENT ENGINEERS
HOUSTON, TEXAS 77001

MVA-M 1500-M
P1500-V/100

SIGNED _____



GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK

Well Head

ON *9:15 A.M.*

OFF *2:55 P.M.*

6-17-1971

6-17-1971

LOCATION *Shell St. No. 1*

REMARKS *4 Point Test*

B 0-5000-12

Los Angeles, California

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