

BEACH EXPLORATION, INC.
INJECTION WELL STEP-RATE-TESTS
WHLU AND RLU -- QUEEN (PENROSE) WATERFLOODS

<u>Well #</u>	<u>Date</u>	Friction Adj	Bottom Hole		Fracture	Vertical Frac
		Surface	Frac Press	Mid Perf	Gradient	+200 psi
		Frac Press	Frac Press		BHFP / Mid Perf	Surf Press
		(PSI)	(PSI)	(FT)	(PSI / FT)	Limits
						(PSI)
<u>WEST HIGH LONESOME UNIT</u>						
WHL # 1 *	Jul-03	1,220	1,930	1,650	1.17	1,220
WHL # 5	Apr-03	940	1,720	1,758	0.98	940
WHL #17	Apr-03	950	1,710	1,745	0.98	950
WHL #21	Apr-03	885	1,645	1,759	0.94	1,085
WHL #25 *	Jul-03	1,045	1,820	1,772	1.03	1,045
WHL #27 *	Jul-03	<u>830</u>	1,602	1,784	<u>0.90</u>	<u>1,030</u>
AVG		<u>978</u>			<u>1.00</u>	<u>1,045</u>

<u>RED LAKE UNIT</u>						
RLU # 5	Jul-91	805	1,505	1,747	0.86	
RLU # 9	Aug-91	855	1,555	1,833	0.85	
RLU #14	Jul-91	1,150	1,820	1,587	1.15	
RLU #22	Jul-91	1,040	1,745	1,645	1.06	
RLU #25	Jul-91	<u>825</u>	1,580	1,786	<u>0.88</u>	
AVG		935			0.96	

* Current step-rate-tests witnessed by OCD

OIL CONSERVATION DIVISION

CASE NUMBER

EXHIBIT

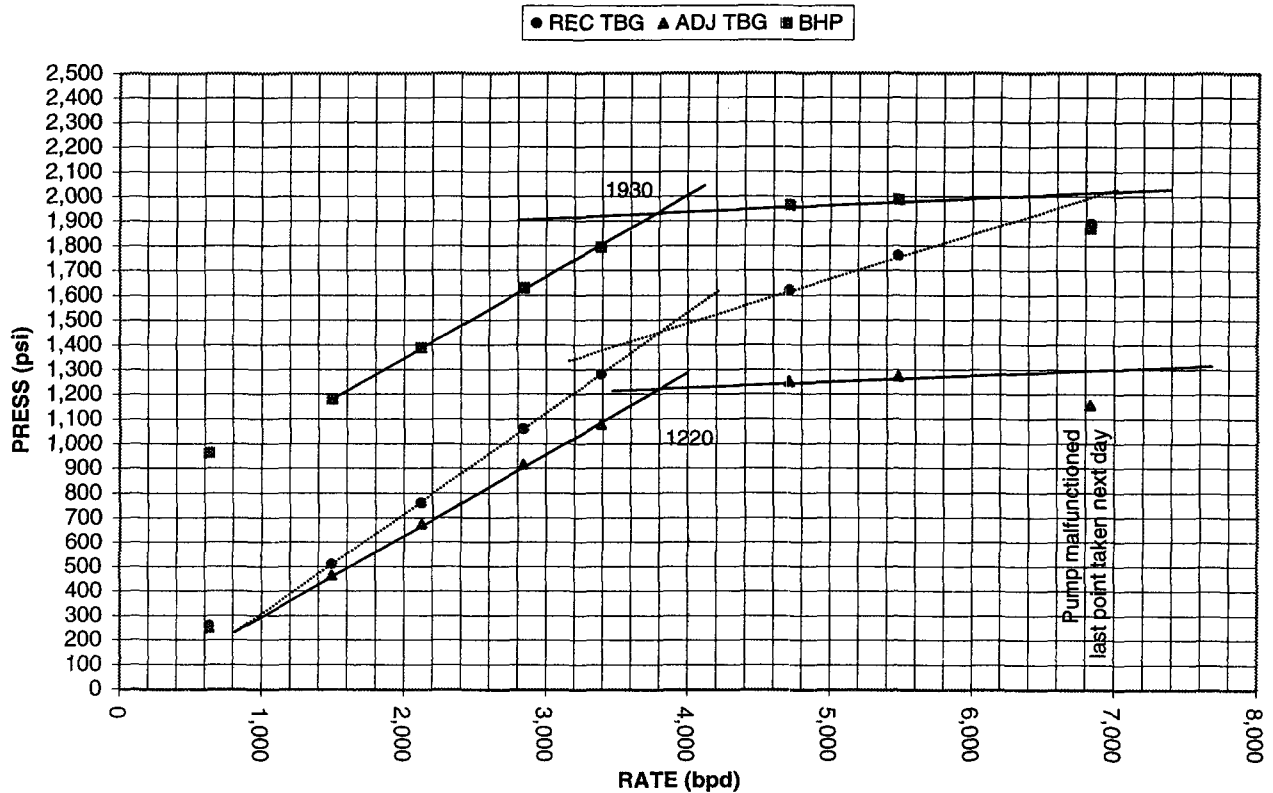
WHL #1

7/23/03

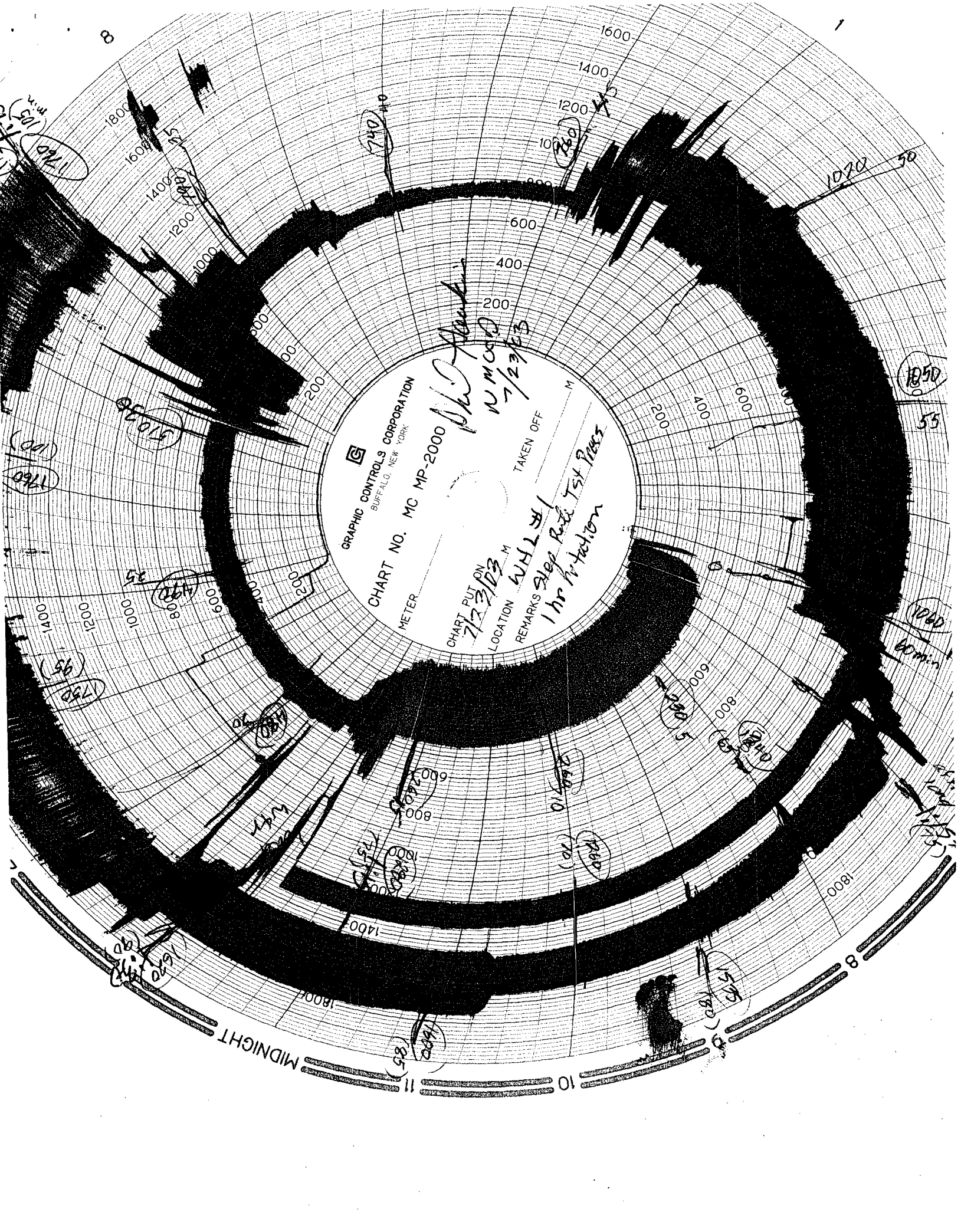
	<u>Top</u>	<u>Bot</u>
Perforations	1645	1655

1582 Packer Depth
1650 Mid Perf

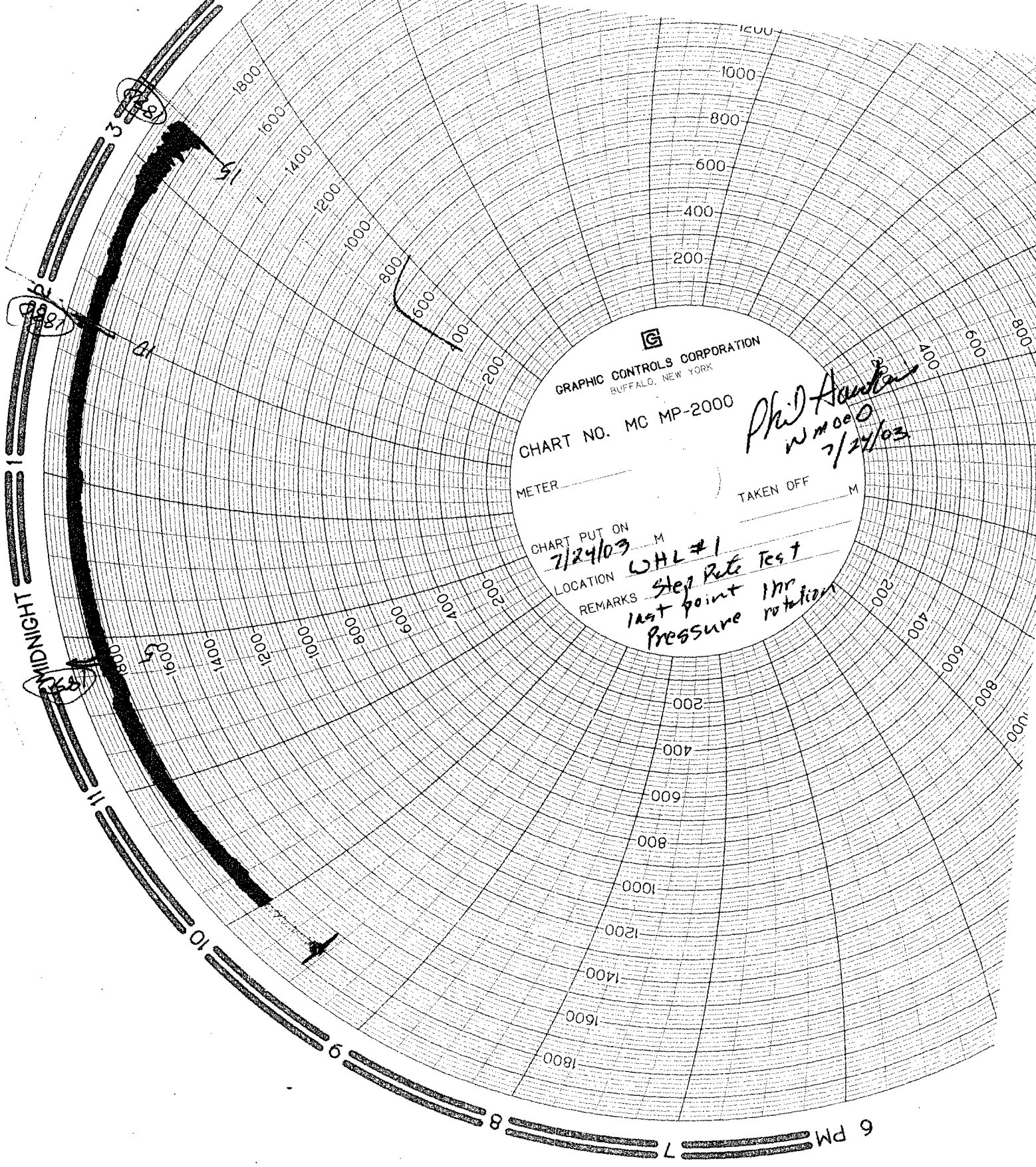
SITP 0

[illegible]

WHL #1 Step Rate Test



MIDNIGHT



STEP RATE TEST

WHL #5

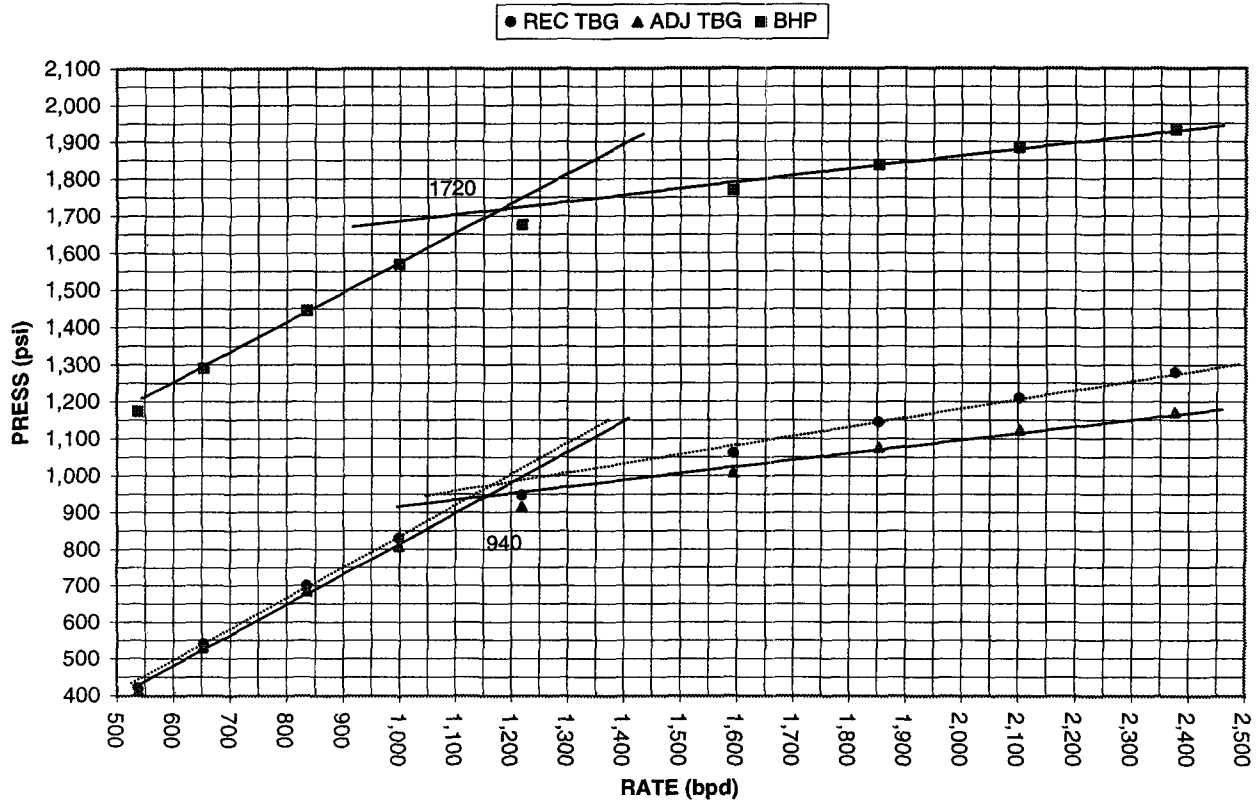
4/9/03

Top Bot
Perforations 1752 1764

1649 Packer Depth
1758 Mid Perf

SITP 120

TIME	REC TBG PRESS	REC RATE BPD	CUM BBL PUMP	15 MIN AVG BPD	REC TBG PRESS	RATE GPM	FRICT LOSS PSI	ADJ TBG PRESS	CALC BHP
3:15	240	520	0.0						
:20	345	558	1.9						
:25	385	558	3.7						
:30	420	520	5.6	538	420	15.7	6.9	413	1,174
:35	500	670	7.9						
:40	520	670	10.2						
:45	540	595	12.4	653	540	19.0	9.9	530	1,291
:50	650	818	15.2						
:55	680	825	18.2						
4:00	700	830	21.1	835	700	24.4	15.6	684	1,446
:05	775	1,004	24.6						
:10	795	1,007	28.0						
:15	830	1,004	31.5	998	830	29.1	21.7	808	1,569
:20	905	1,190	35.7						
:25	925	1,190	39.9						
:30	947	1,227	44.2	1,219	947	35.6	31.4	916	1,677
:35	1,010	1,525	51.8						
:40	1,030	1,785	55.2						
:45	1,060	1,636	60.8	1,594	1,060	46.5	51.6	1,008	1,770
:50	1,105	1,934	67.4						
:55	1,130	1,860	73.8						
5:00	1,145	1,897	80.1	1,853	1,145	54.0	68.2	1,077	1,838
:05	1,190	2,230	87.3						
:10	1,210	2,232	94.7	2,102	1,210	61.3	86.2	1,124	1,885
:15	1,265	2,380	102.9						
:20	1,280	2,380	111.2	2,376	1,280	69.3	108.0	1,172	1,933
:25	1,100	0							
:30	1,060	0							
:35	1,035	0							





GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK

CHART NO. MC MP-2000

METER

CHART PUT ON

4/9/03

TAKEN OFF

LOCATION

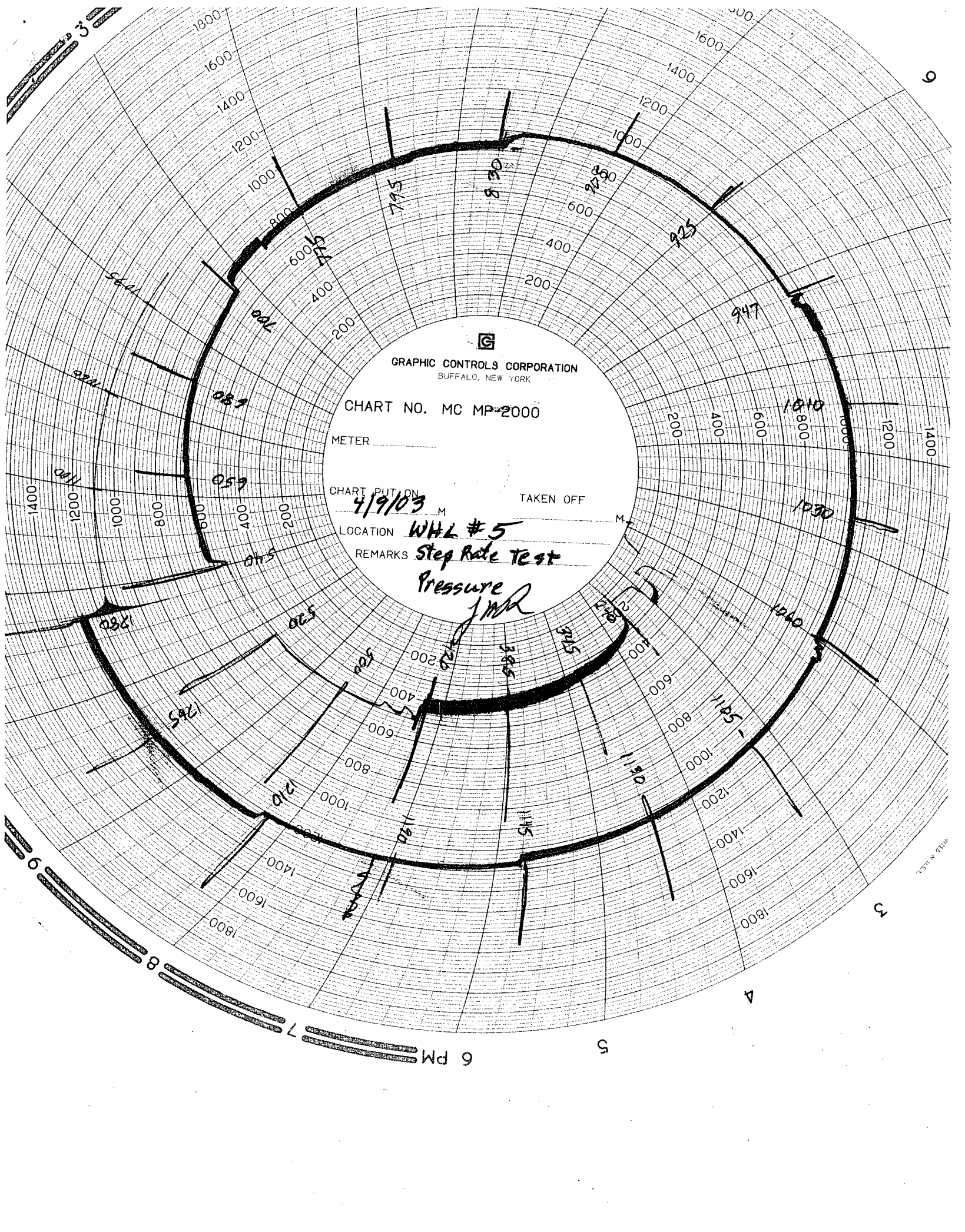
WHL #5

REMARKS

Step Rate Test

Pressure

JMR



STEP RATE TEST

WHL #17

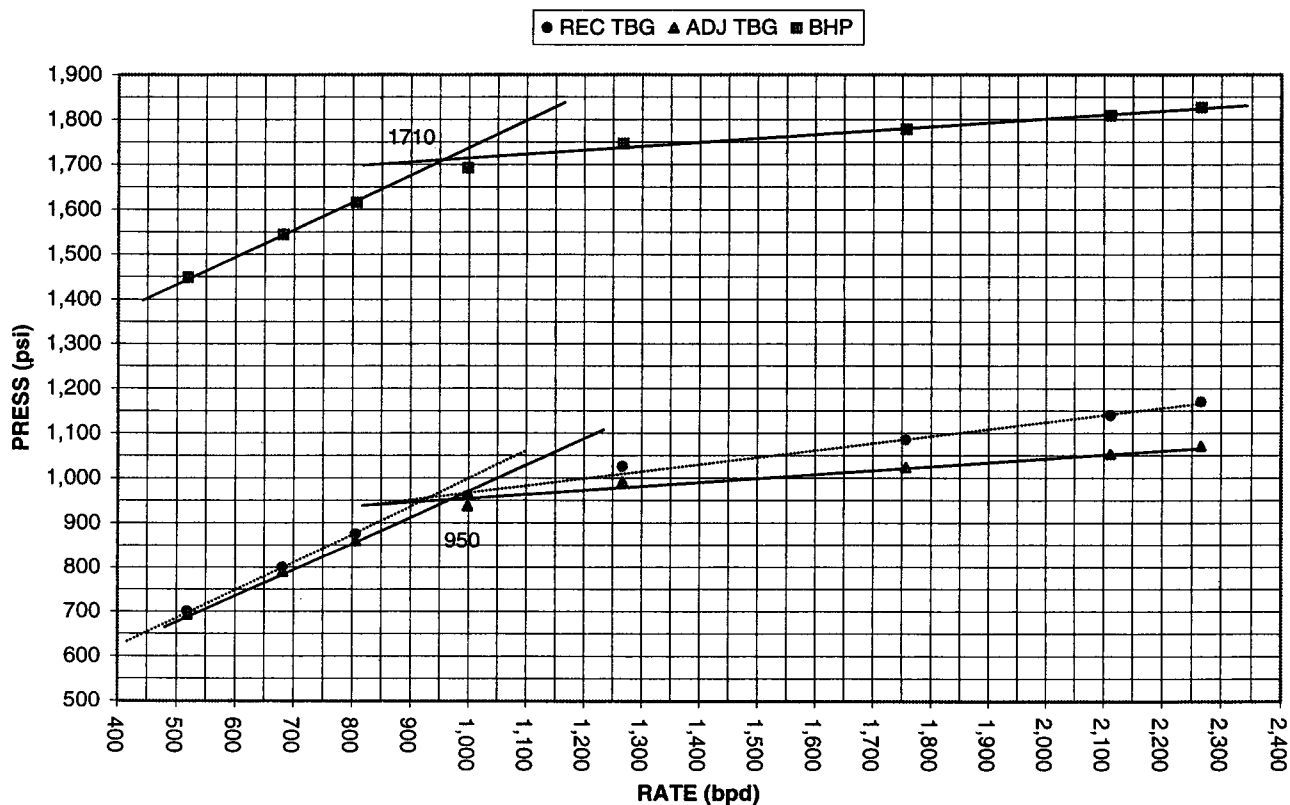
4/9/03

Perforations Top Bot
1729 1760

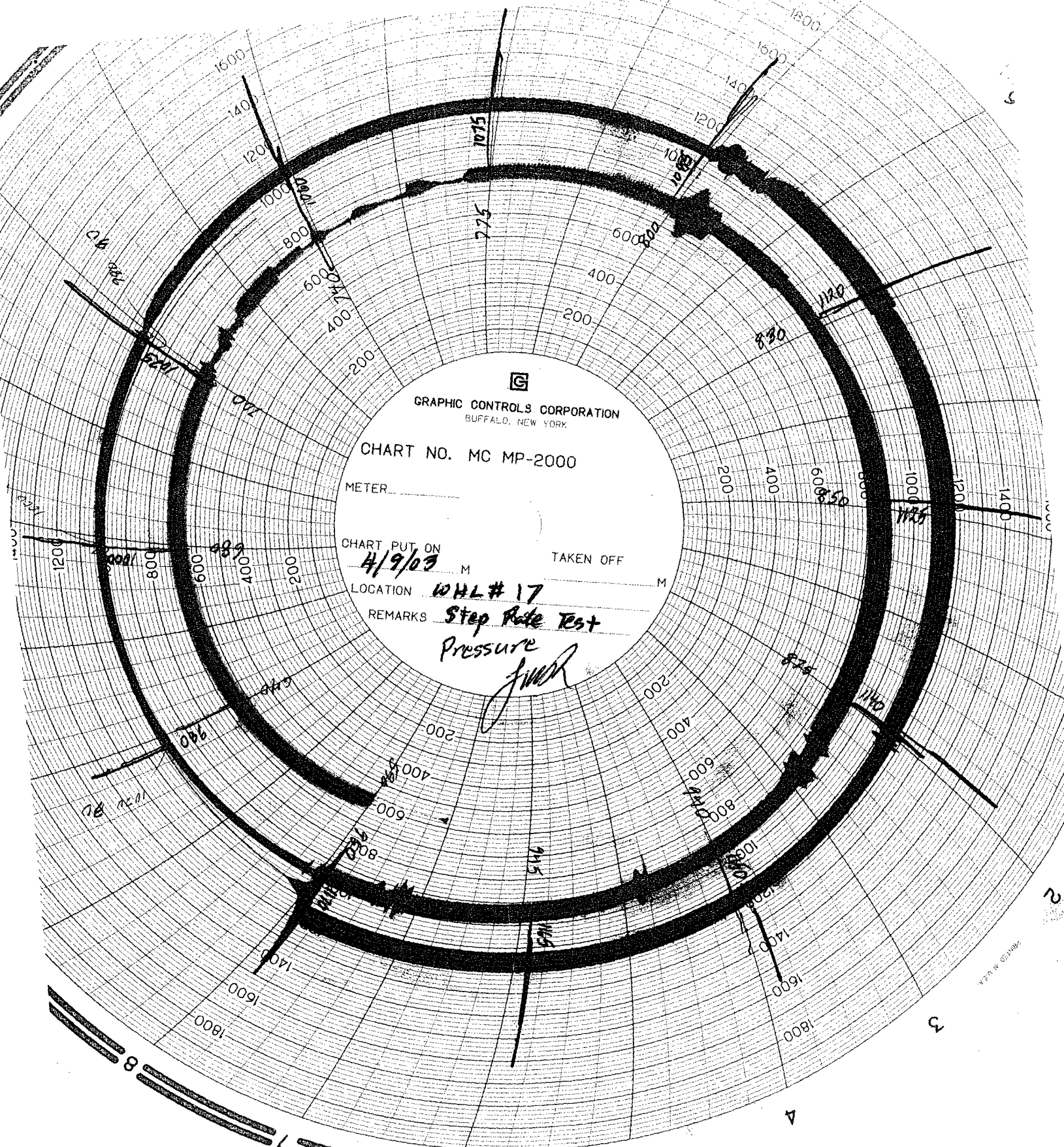
1636 Packer Depth
1745 Mid Perf

SITP 350

TIME	REC TBG PRESS	REC RATE BPD	CUM BBL PUMP	15 MIN AVG BPD	REC TBG PRESS	RATE GPM	FRICT LOSS PSI	ADJ TBG PRESS	CALC BHP
11:00	590	558	0.0						
:05	640	520	1.8						
:10	680	520	3.6						
:15	700	520	5.4	518	700	15.1	6.4	694	1,449
:20	740	670	7.8						
:25	775	670	10.1						
:30	800	670	12.5	682	800	19.9	10.6	789	1,545
:35	830	818	15.3						
:40	850	818	18.1						
:45	875	818	20.9	806	875	23.5	14.5	860	1,616
:50	940	1,004	24.2						
:55	945	1,004	27.7						
12:00	960	1,041	31.3	998	960	29.1	21.6	938	1,694
:05	980	1,265	35.9						
:10	1,000	1,227	40.3						
:15	1,025	1,227	44.5	1,267	1,025	37.0	33.5	991	1,747
:20	1,060	1,674	50.6						
:25	1,075	1,800	56.7						
:30	1,085	1,860	62.8	1,757	1,085	51.2	61.3	1,024	1,779
:35	1,120	2,120	69.9						
:40	1,125	2,150	77.4						
:45	1,140	2,046	84.8	2,112	1,140	61.6	86.2	1,054	1,809
:50	1,150	2,300	92.6						
:55	1,165	2,300	100.5						
1:00	1,170	2,300	108.4	2,266	1,170	66.1	98.2	1,072	1,827
:05	1,020	0							
:10	1,000	0							
:15	980	0							



WHL #17 Step Rate Test



GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK

CHART NO. MC MP-2000

METER

CHART PUT ON

4/9/03

M

TAKEN OFF

M

LOCATION

WHL # 17

REMARKS

Step Rate Test

Pressure

juv

6 PM

5

4

3

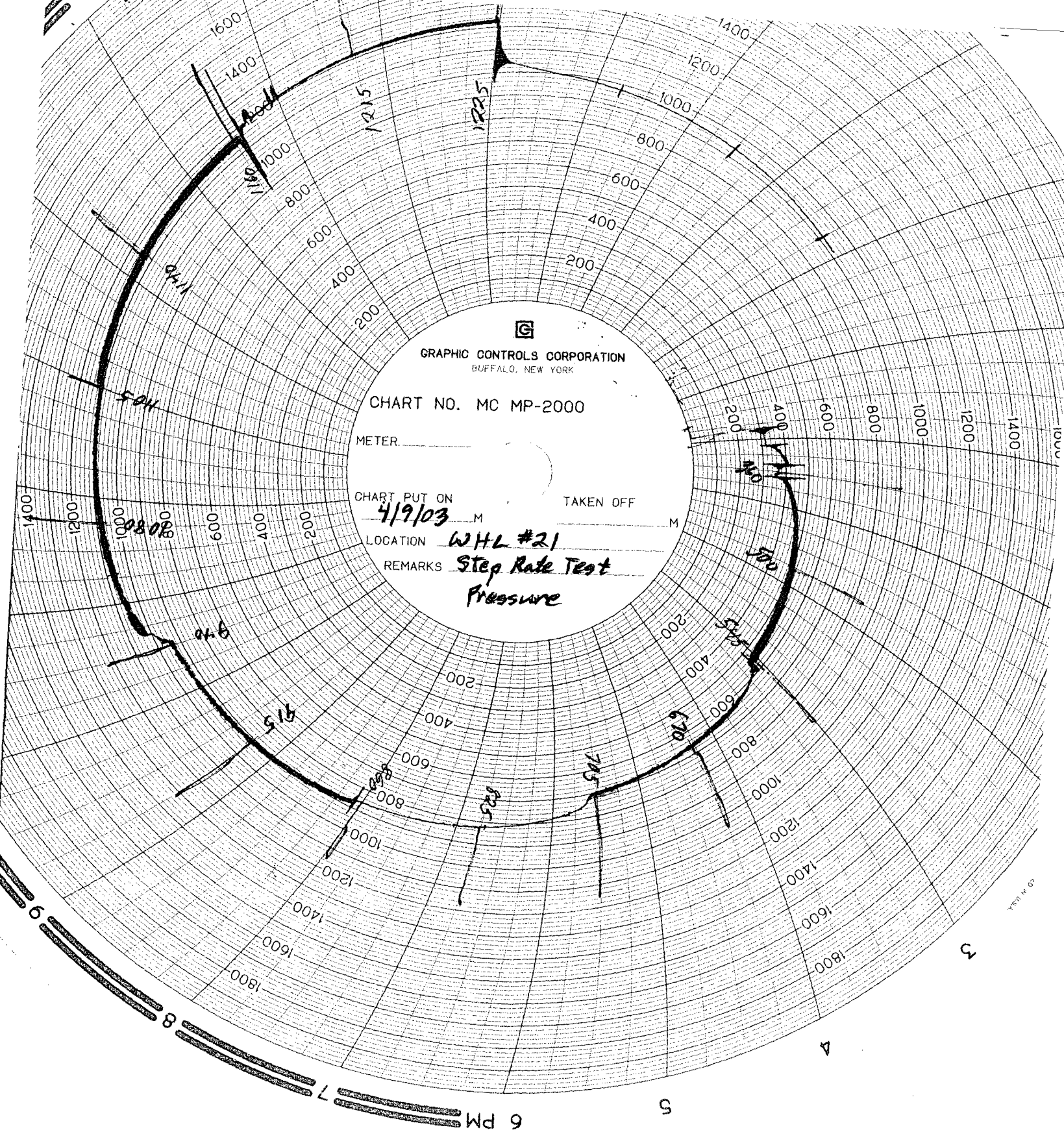
2

1200 R 621000

4/9/03

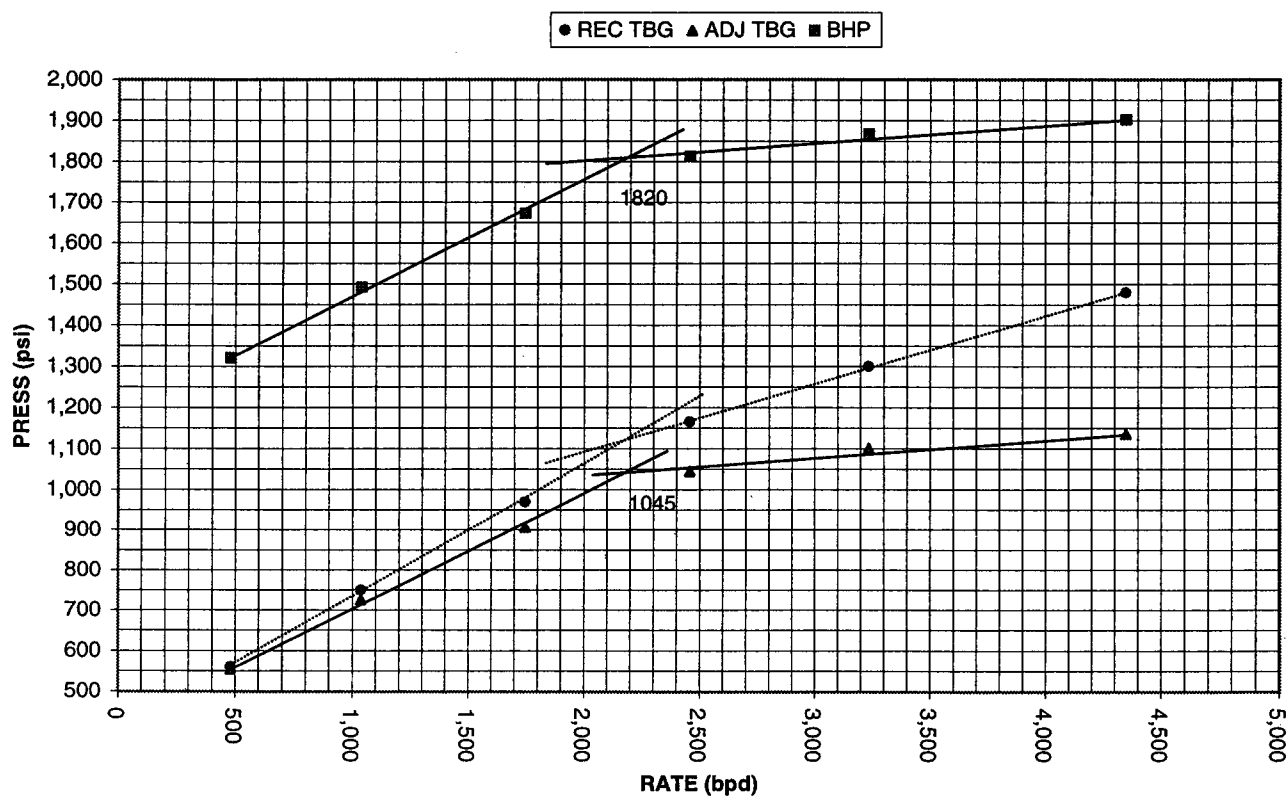
SITP 320

WHL #21 Step Rate Test

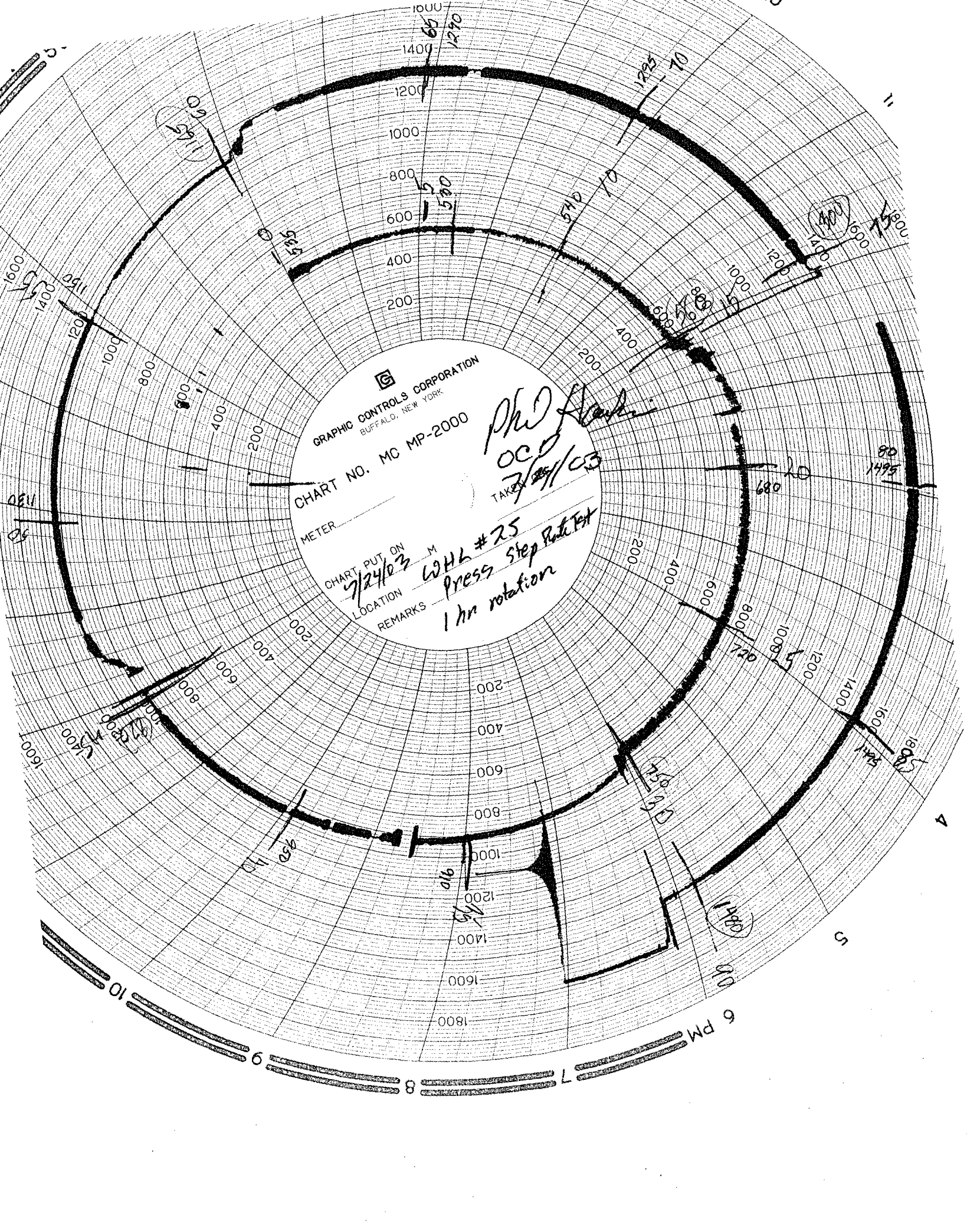


7/24/03

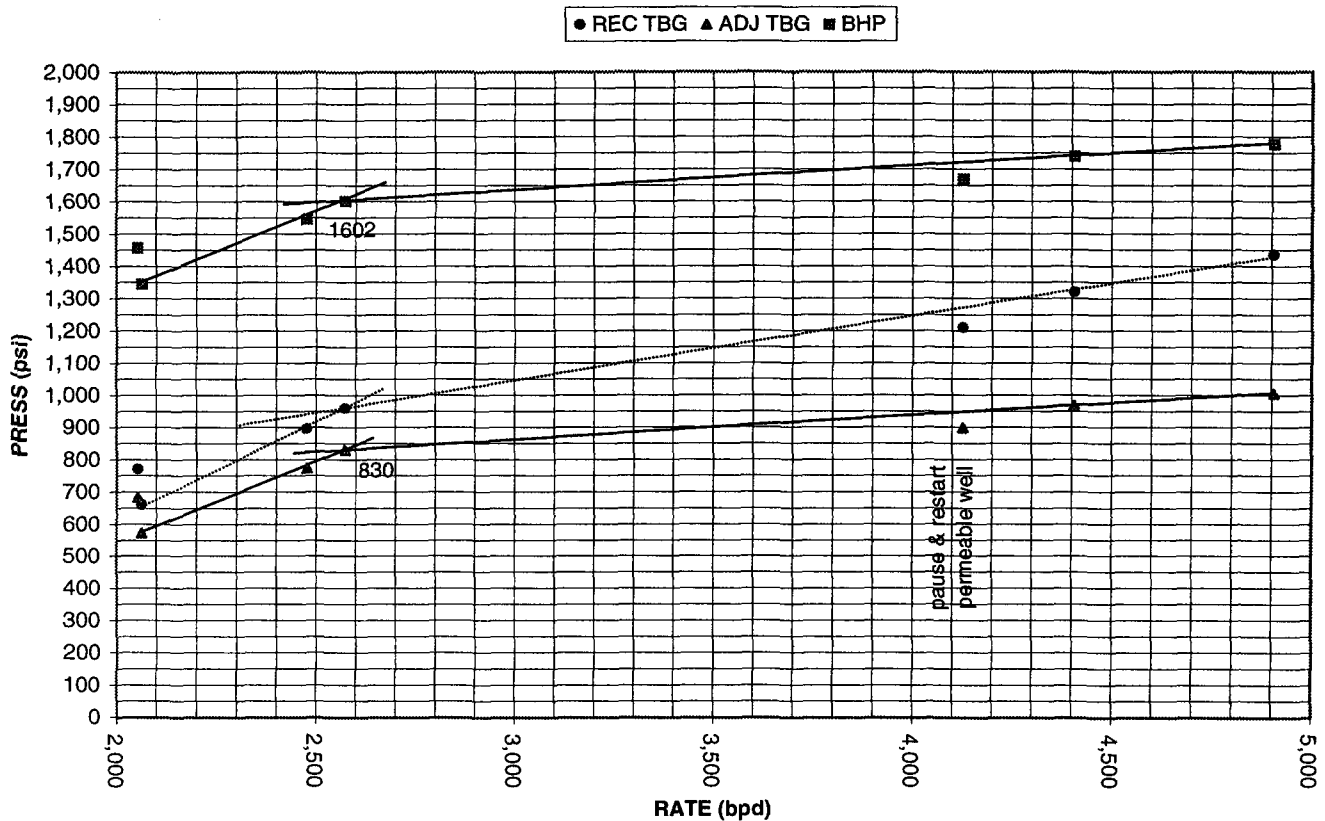
SITP 0



WHL #25 Step Rate Test

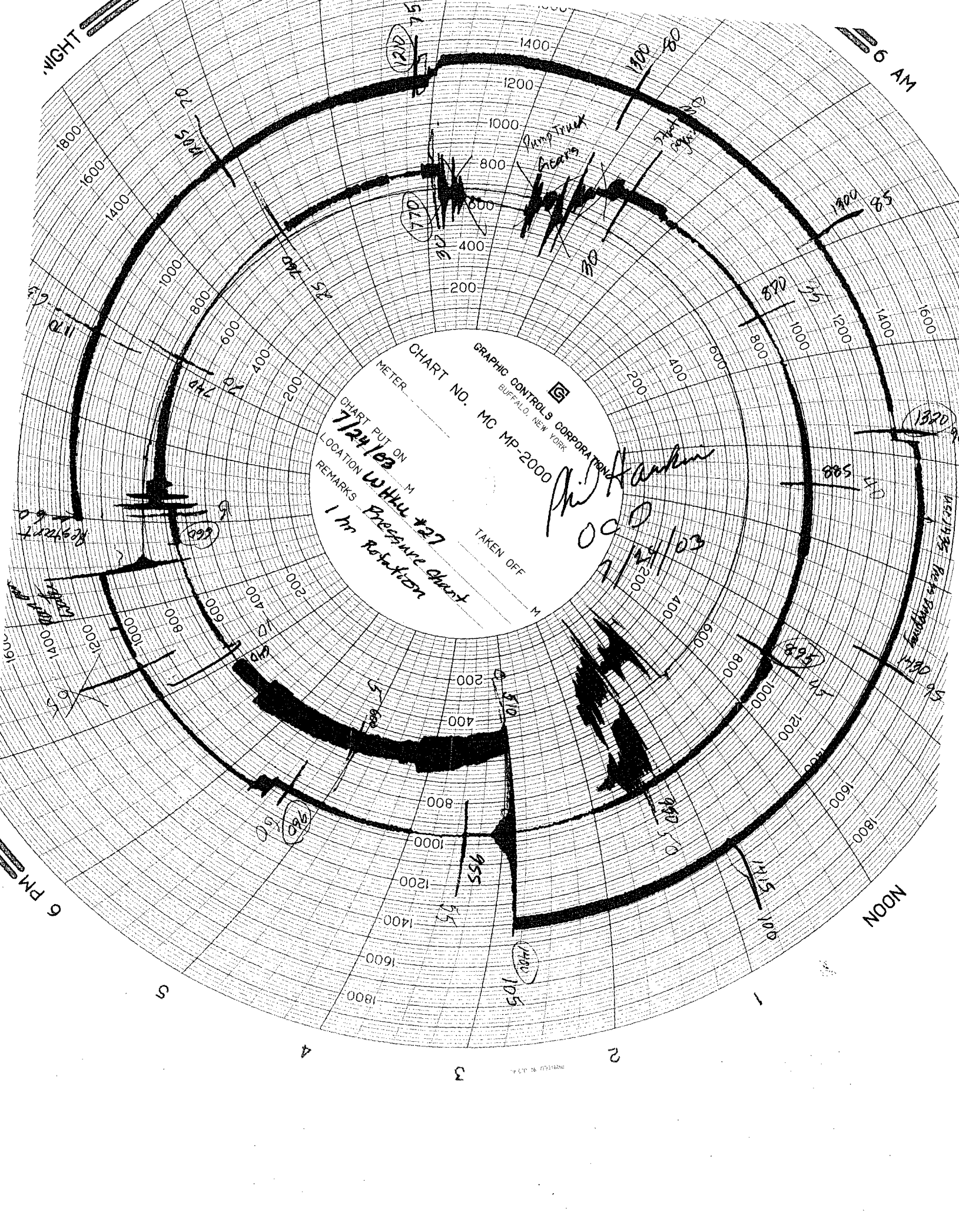


7/24/03

SITP 300[illegible]

WHL #27 Step Rate Test

WIGHT 6 AM



GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
CHART NO. MC MP-2000
CHART PUT ON 7/24/03
LOCATION W. Hill #27
REMARKS Pressure chart
1 in Rotation
TAKEN OFF

Pump Truck
Pneumatics

Phil Hankin
000
7/24/03

Register
7/24/03

1320
885
1400
1450
1500
1550
1600
1650
1700
1750
1800
1850
1900
1950
2000

6 PM

NOON

4 3 2