

Mobil Producing Texas & New Mexico Inc.

P.O. BOX 633
MIDLAND, TEXAS 79702

May 20, 1987

State of New Mexico
Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87501

Attention: W. J. LeMay

MOBIL PRODUCING TX. & N.M., INC.
NORTH VACUUM ABO UNIT
WATER INJECTION WELL NOS. 155,
204, 205 AND 211
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

Gentlemen:

Under the provisions of Order No. WFX-557 dated February 11, 1986, and PMX-138 dated November 12, 1985, Mobil Producing Texas & New Mexico, Inc. (MPTM) was granted permission to inject water into the Abo formation for the subject wells. The order limited the pressure on the injection wells to no more than 0.2 psi per foot to the uppermost injection interval. MPTM has completed step-rate tests for these wells which show that higher pressure will not result in migration of the injected fluid from the Abo formation. MPTM therefore requests an increase in the injection pressure as follows:

	<u>Injection Interval</u>	<u>Present Surface Inj. Pressure Limit</u>	<u>Requested Surface Inj. Pressure Limit</u>
Well No. 155 Unit D, Sec. 23 T-17-S, R-34-E	8593-8655'	2950 psig.	4050 psig.
Well No. 204 Unit D, Sec. 24 T-17-S, R-34-E	8487-8536'	2833 psig	3945 psig

	<u>Injection Interval</u>	<u>Present Surface Inj. Pressure Limit</u>	<u>Requested Surface Inj. Pressure Limit</u>
Well No. 205 Unit B, Sec. 26 T-17-S, R-34-S	8523-8662'	2943 psig.	3910 Psig.
Well No. 211 Unit J, Sec. 24 T-17-S, R-34-E	8475-8759'	2998 psig.	3775 psig.

Enclosed are copies of the step rate tests.

Yours very truly,

C. C. Smith

for - M. E. Sweeney
Environmental & Regulatory Mgr.

CCSmith/

Attachments

cc: District Director OCD-Hobbs

B & D WELL TESTERS

Step Rate Test

Phone (505) 397-3914

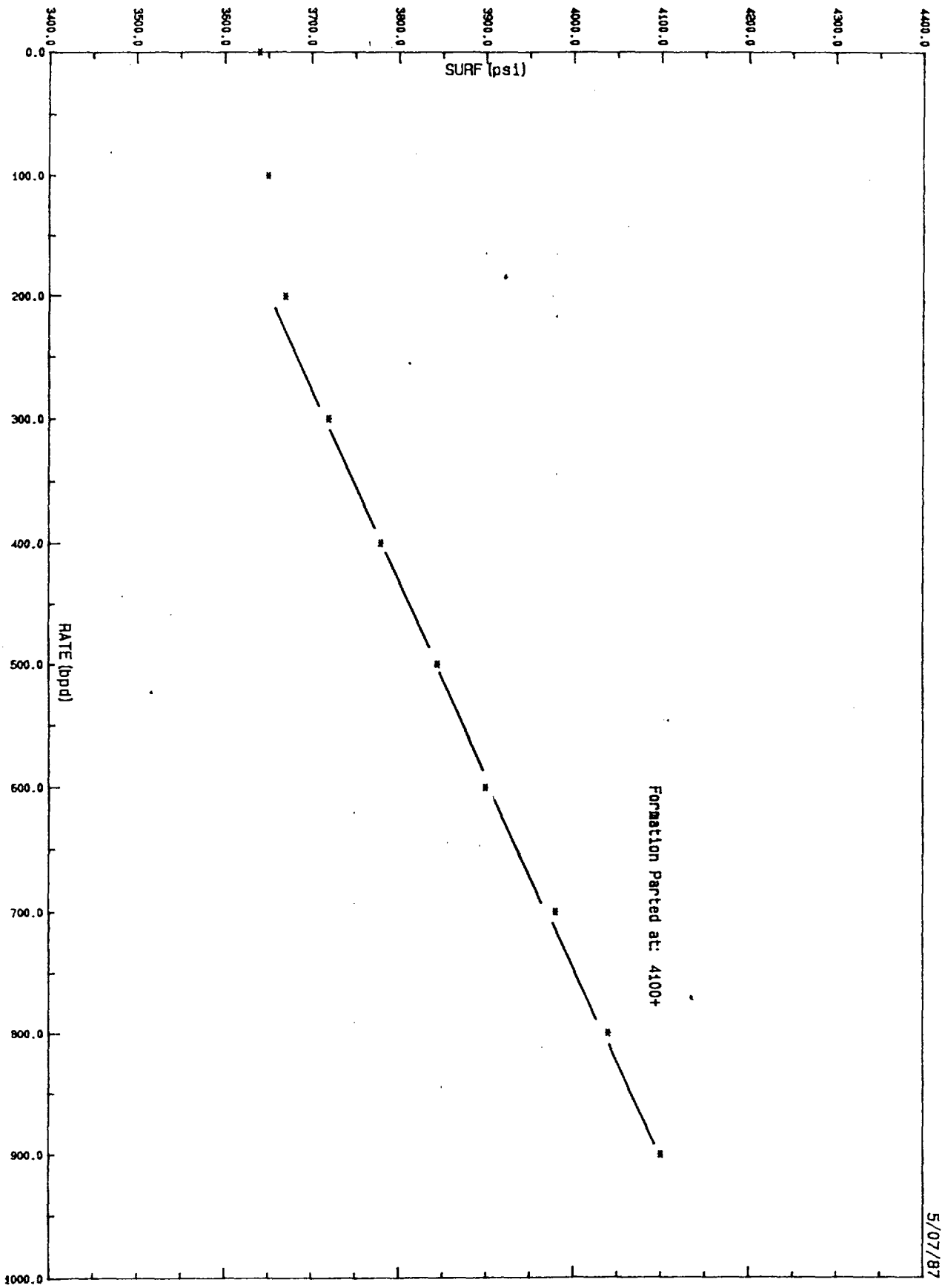
Hobbs, New Mexico 88240

Company Mobil Producing Texas & New Mexico				Test Date 5-7-87		Unit
Total Depth 8700'				Plug Back TD 8692'		Elevation 4034'
Csg size 5 1/2" Wt 17# d				Set at 8700' Perfs: From 8593' To 8655'		Lease N.V.A.U.
Tbg size 2 3/8" Wt 4.7# d				Set at 8510' Perfs: From To		Well # 155
Producing thru				Packer set at 8510'		Sec 23D Twp-Blk 17S Rge 34E
						County Lea State New Mexico
						Co. Rep D. Howell

Time of Reading	Elap Time Hrs.	Well Information					Remarks
		Rate BBLs Per Day	Total BBLs Per Rate	Surface PSIG	Surface PSI Cor for Friction	BHP	
12:20	SI			3660			
12:30	Start			3640			
12:35		100		3645			
12:40		100		3650			
12:45	:15	100		3650			
12:50		200		3650			
12:55		200		3670			
1:00	:30	200		3670			
1:05		300		3685			
1:10		300		3700			
1:15	:45	300		3720			
1:20		400		3750			
1:25		400		3770			
1:30	1:00	400		3780			
1:35		500		3810			
1:40		500		3820			
1:45	1:15	500		3845			
1:50		600		3880			
1:55		600		3890			
2:00	1:30	600		3900			
2:05		700		3940			
2:10		700		3970			
2:15	1:45	700		3980			
2:20		800		4010			
2:25		800		4020			
2:30	2:00	800		4040			
2:35		900		4070			
2:36		900		4090			
2:45	2:15	900		4100			Ran out of H2O

B & D WELL TESTERS

Customer: MOBIL PRODUCING
Well: N.V.A.U. #155



B & D WELL TESTERS, INC.

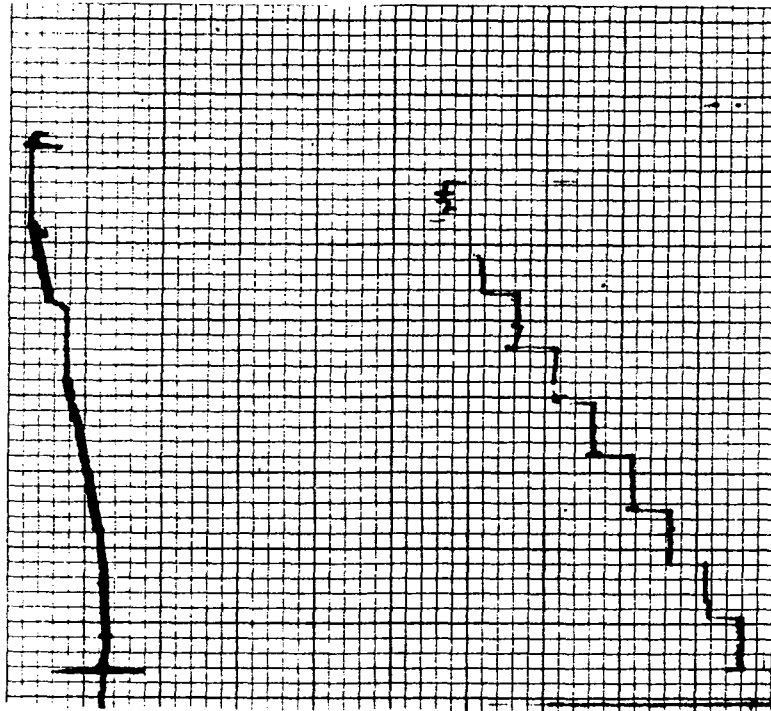
P.O. Box 5683
HOBBS, NEW MEXICO

505 397-3914

Mobil Producing Texas & New Mexico, Inc.

N.V.A.U. #155

5-7-87



NO. 59018

B & D WELL TESTERS

Step Rate Test

Phone (505) 397-3914

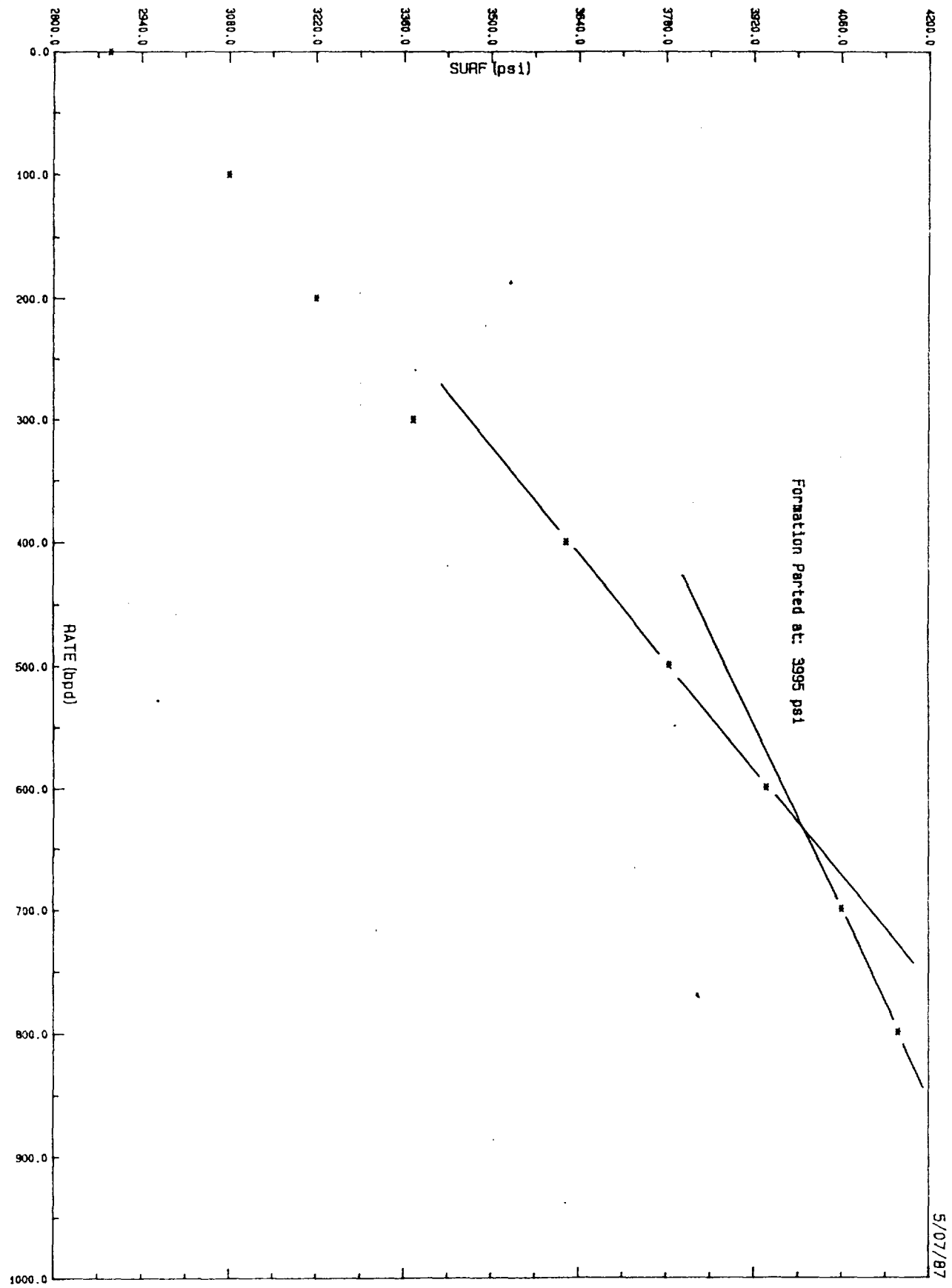
Hobbs, New Mexico 88240

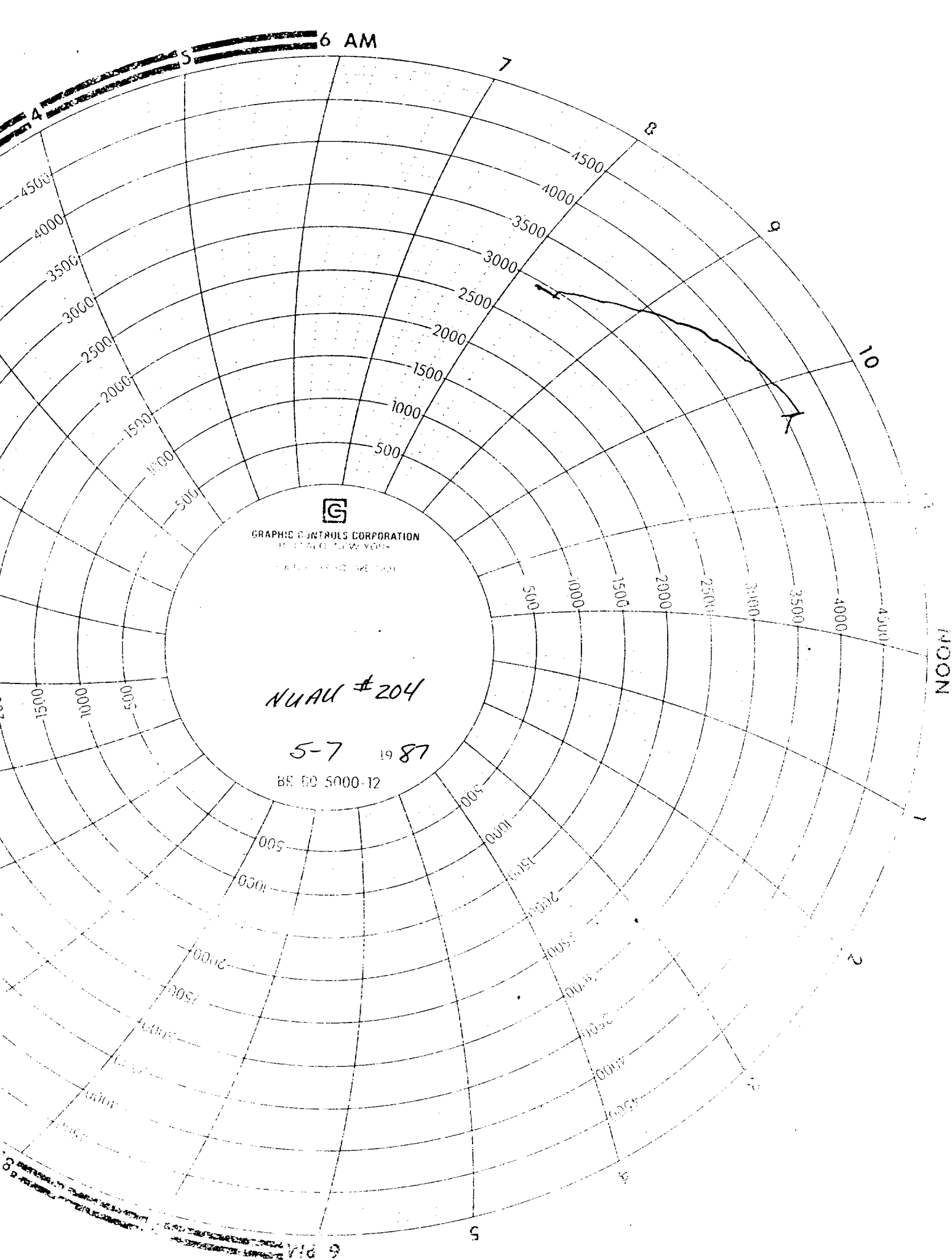
Company Mobil Producing Texas & New Mexico					Test Date 5-7-87	Unit
Total Depth 10,359'	Plug Back TD 9980'	Elevation 4049'			Lease N.V.A.U.	
Csg size 7"	Wt 23#	d	Set at 10,359'	Perfs: From 8487'	To 8536'	Well # 204
Tbg size 2 3/8	Wt 4.7#	d	Set at 8,400'	Perfs: From	To	Sec 24 Twp-Blk 17S Rge 34E
Producing thru tbg	Packer set at 8400'				County Lea	State New Mexico
					Co. Rep D. Howell	

Time of Reading	Elap Time Hrs.	Well Information					Remarks
		Rate BBLS Per Day	Total BBLS Per Rate	Surface PSIG	Surface PSI Cor for Friction	BHP	
8:24	SI	0		2890			
8:25	Start	100		3000			
8:30		100		3050			
8:35	:15	100		3080			
8:40		200		3140			
8:45		200		3185			
8:50	:30	200		3220			
8:55		300		3300			
9:00		300		3360			
9:05	:45	300		3375			
9:10		400		3500			
9:15		400		3570			
9:20	1:00	400		3620			
9:25		500		3710			
9:30		500		3765			
9:35	1:15	500		3785			
9:40		600		3860			
9:45		600		3900			
9:50	1:30	600		3940			
9:55		700		3995			
10:00		700		4035			
10:05	1:45	700		4060			
10:10		800		4120			
10:15		800		4140			
10:20	2:00	800		4150			
10:20	ISIP			4130			
10:21				4060			
10:22				4040			
10:23				4010			
10:24				3990			End Test
10:25				3980			

B S D WELL TESTERS

Customer: MOBIL PRODUCING
Well: N.V.A.U. #204





B & D WELL TESTERS

Step Rate Test

Phone (505) 397-3914

Hobbs, New Mexico 88240

Company Mobil Producing Texas & New Mexico Test Date 5-7-87						Unit
Total Depth 10,401' Plug Back TD 9492' Elevation 4017'						Lease N.V.A.U.
Csg size 7" Wt 23# d Set at Perfs: From 8523 To 8662						Well # 205
Tbg size 2 3/8 Wt 4.7# d Set at 8410 Perfs: From To						Sec B24 Twp-Blk 17S Rge 34E
Producing thru Tbg Packer set at 8410						County Lea State New Mexico
						Co. Rep D. Howell

Time of Reading	Elap Time Hrs.	Well Information					Remarks
		Rate BBLS Per Day	Total BBLS Per Rate	Surface PSIG	Surface PSI Cor for Friction	BHP	
11:34	SI	0		3260			
11:35	Start	100		3270			
11:40		100		3290			
11:45	:15	100		3300			
11:50		200		3330			
11:55		200		3350			
12:00	:30	200		3370			
12:05		300		3410			
12:10		300		3430			
12:15	:45	300		3450			
12:20		400		3500			
12:25		400		3530			
12:30	1:00	400		3555			
12:35		500		3610			
12:40		500		3640			
12:45	1:15	500		3660			
12:50		600		3700			
12:55		600		3735			
1:00	1:30	600		3760			
1:05		700		3810			
1:10		700		3840			
1:15	1:45	700		3860			
1:20		800		3910			
1:25		800		3935			
1:30	2:00	800		3960			
1:35		900		3995			
1:40		900		4000			
1:45	2:15	900		4010			
See page #2							

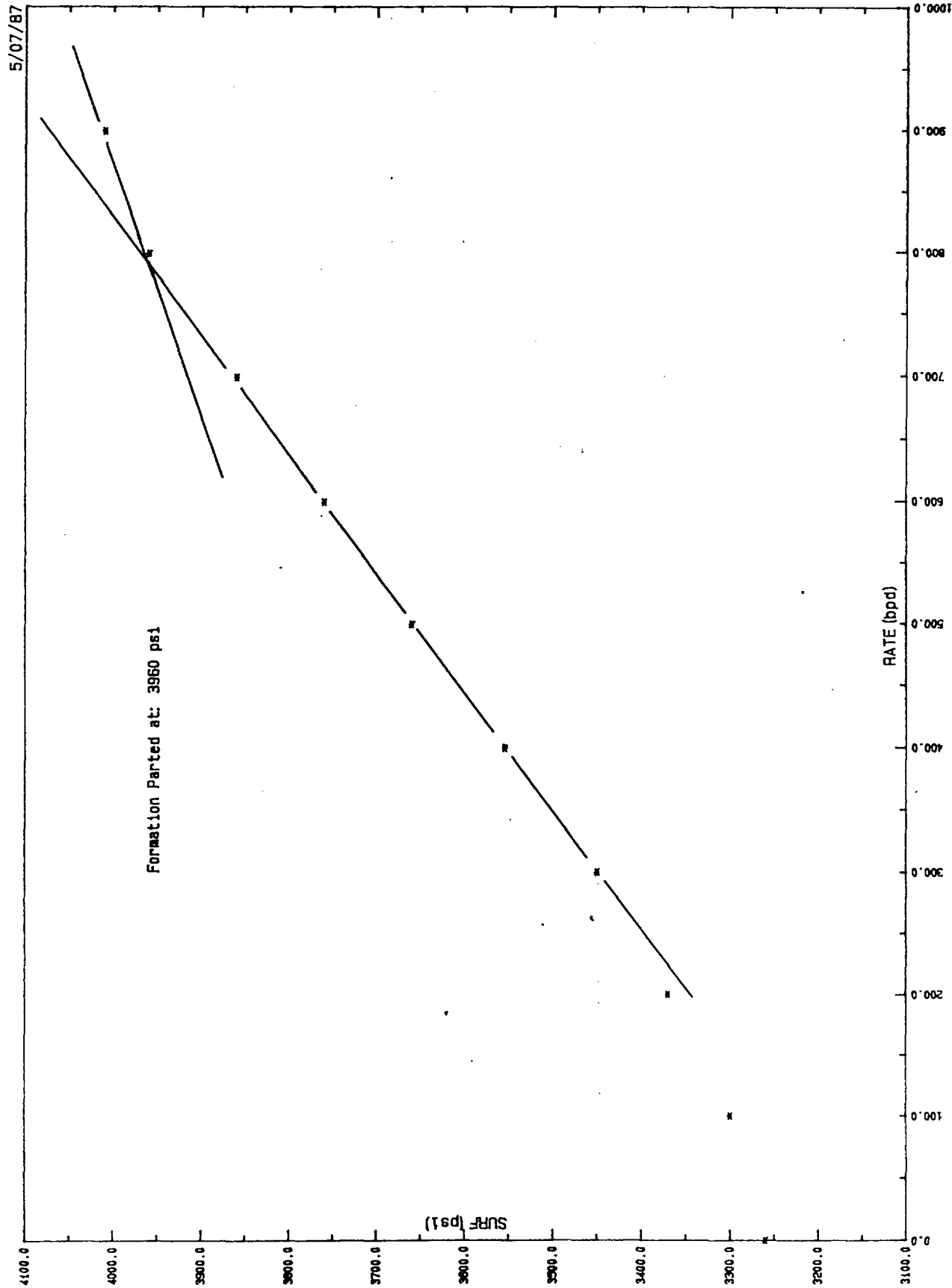
Step Rate Test

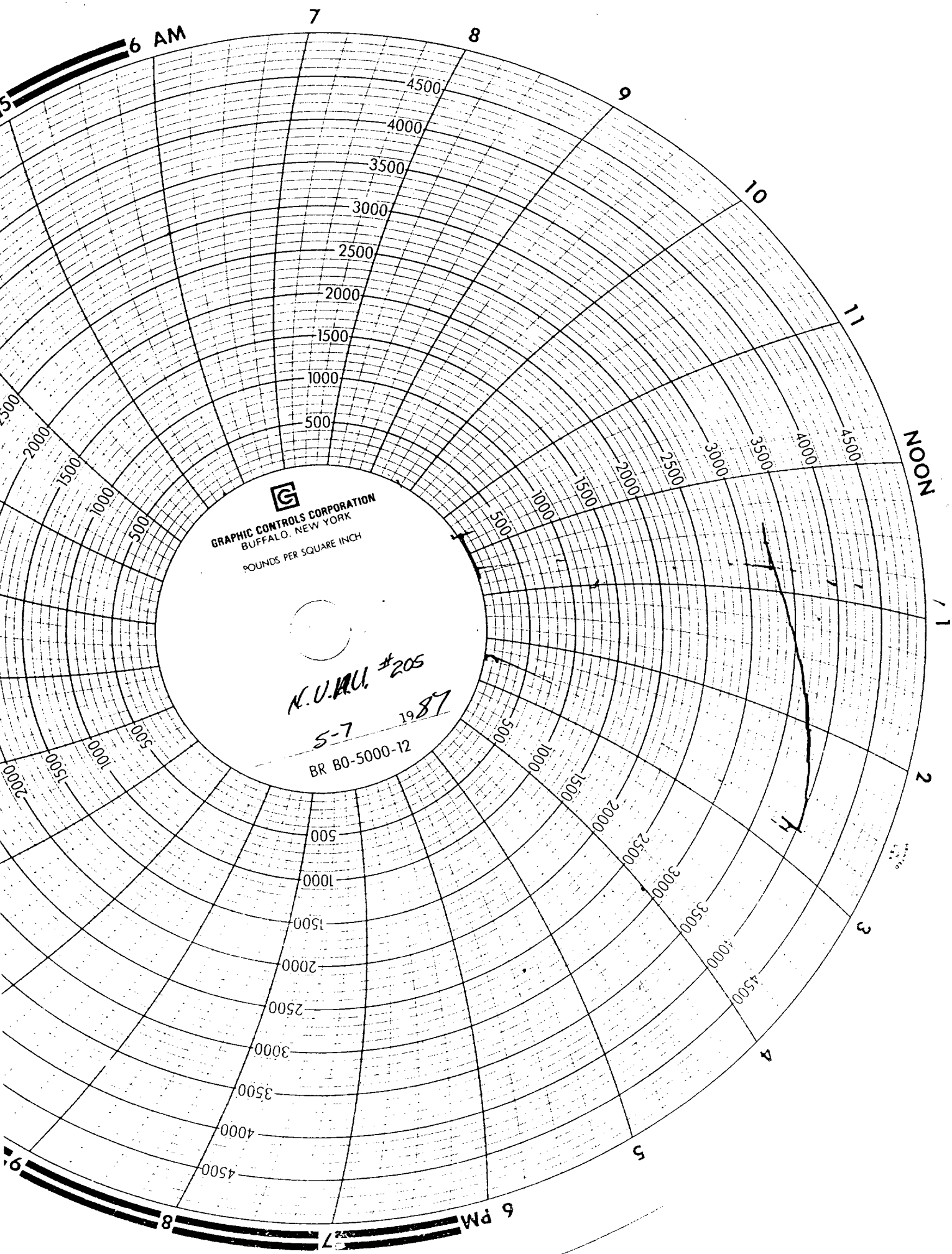
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Hobbs, New Mexico 88240

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B & D WELL TESTERS

Customer: MOBIL PRODUCING
Well: N.V.A.U. #205





G
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
POUNDS PER SQUARE INCH

N. VAL. #205
5-7 1987
BR 80-5000-12

B & D WELL TESTERS

Step Rate Test

Phone (505) 397-3914

Hobbs, New Mexico 88240

Company Mobil Producing Texas & New Mexico Test Date 5-7-87						Unit
Total Depth 10,200' Plug Back TD 8700' Elevation 4006'						Lease N.V.A.U.
Csg size 5½" Wt 17# d Set at 9386 Perfs: From To						Well # 211
Tbg size 2 3/8 Wt 4.7# d Set at 8370 Perfs: From To						Sec J24 Twp-B1k17S Rge34E
Producing thru Tbg Packer set at 8370						County Lea State New Mexico
						Co. Rep D. Howell

Time of Reading	Elap Time Hrs.	Well Information					Remarks
		Rate BBLS Per Day	Total BBLS Per Rate	Surface PSIG	Surface PSI Cor for Friction	BHP	
2:44	SI	0		3190			
2:45	Start	100		3200			
2:50		100		3200			
2:55	:15	100		3210			
3:00		200		3230			
3:05		200		3240			
3:10	:30	200		3240			
3:15		300		3260			
3:20		300		3280			
3:25	:45	300		3290			
3:30		400		3310			
3:35		400		3330			
3:40	1:00	400		3340			
3:45		500		3370			
3:50		500		3390			
3:55	1:15	500		3400			
4:00		600		3430			
4:05		600		3450			
4:10	1:30	600		3470			
4:15		700		3510			
4:20		700		3520			
4:25	1:45	700		3540			
4:30		800		3580			
4:35		800		3600			
4:40	2:00	800		3620			
4:45		900		3650			
4:50		900		3670			
4:55	2:15	900		3690			
5:00		1000		3720			
5:05		1000		3745			
5:10	2:30	1000		3760			

Step Rate Test

Hobbs, New Mexico 88240

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B & D WELL TESTERS

Customer: MOBIL PRODUCING
Well: N.V.A.U. #211

