



TONY ANAYA
GOVERNOR

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

May 27, 1986



1935 - 1985

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

Mobil Producing Texas &
New Mexico Inc.
P. O. Box 633
Midland, Texas 79702

Attn: G. E. Tate

Re: Injection Pressure Increase
N. Vacuum Abo East Unit
N. Vacuum Abo Field,
Lea County, New Mexico

Dear Sir:

Reference is made to your request of May 20, 1986 to increase the surface injection pressure on your N. Vacuum Abo East Unit Wells Nos. 1 & 9. This request is based on a step rate tests conducted on the wells during April, 1986. The results of the tests have been reviewed by my staff and we feel an increase in injection pressure on these wells is justified at this time.

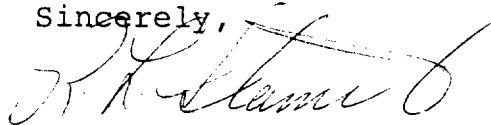
You are therefore authorized to increase your surface injection pressure on the following wells:

<u>Well & Location</u>	<u>Maximum Injection Surface Pressure</u>
N. Vacuum Abo Unit No. 1 Unit J. Section 7, T-17S, R-35E	2300 PSIG
N. Vacuum Abo Unit No. 9 Unit J, Section 18, T-17S, R-35E	2300 PSIG

Both in Lea County, New Mexico

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or it is endangering any fresh water aquifers.

Sincerely,

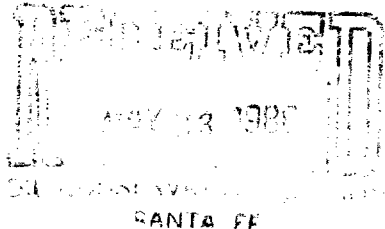
A handwritten signature in cursive script, appearing to read "R. L. Stamets", written in dark ink.

R. L. STAMETS
Director

RLS/DRC/et

cc: Oil Conservation Division - Hobbs
Case File 6248
D. McDonald
D. Catanach

Mobil Producing Texas & New Mexico Inc.



May 20, 1986

P.O. BOX 633
MIDLAND, TEXAS 79702

MIDLAND DIVISION

State of New Mexico
Energy and Minerals Department
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. Dave Catanach

Re: PRESSURE INCREASE
NORTH VACUUM ABO EAST UNIT
WELL NO. 1 (UNIT J)
SECTION 7, T-17-S, R-35-E
WELL NO. 9 (UNIT J)
SECTION 18, T-17-S, R-35-E
VACUUM ABO, NORTH FIELD
LEA COUNTY, NEW MEXICO

Gentlemen:

MPTM is requesting a maximum pressure increase of up to 2300 PSI on the subject wells. The approved pressure on Well No. 1 is 1730 PSI and on Well No. 9 is 1742 PSI. The surface pressure broke @ 3000 PSI on test.

Attached for your information are step-rate tests per our telephone conversation on 5-19-86. If additional information is needed, please call Lorraine Maroney at (915) 688-1773, collect.

Very truly yours,

G. E. Tate
G. E. Tate

Environmental & Regulatory Manager

LLMaroney/hw

Attachments

xc: NMOCC, Hobbs

A:M614069B.LLM

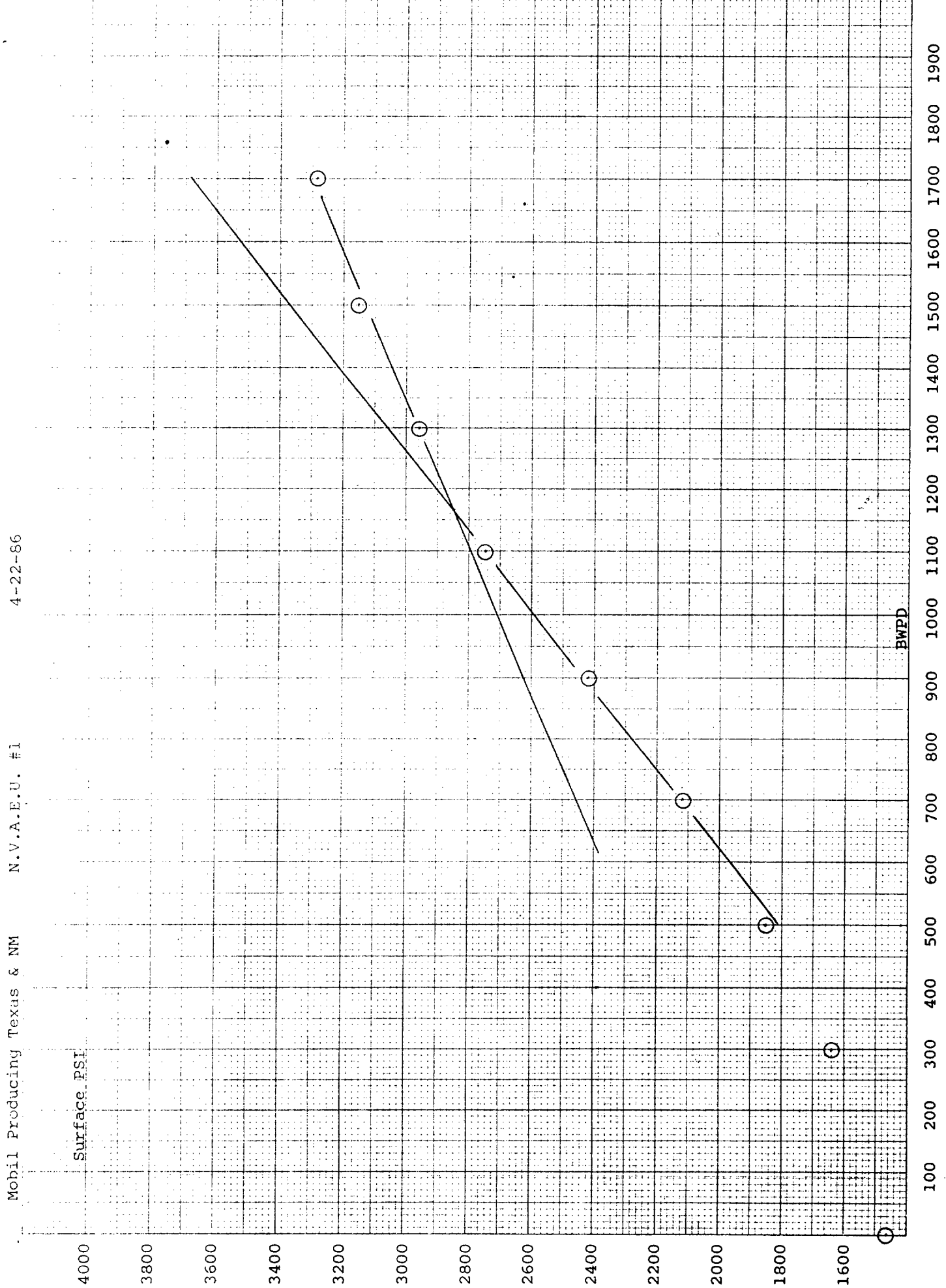
R & D WELL TESTERS

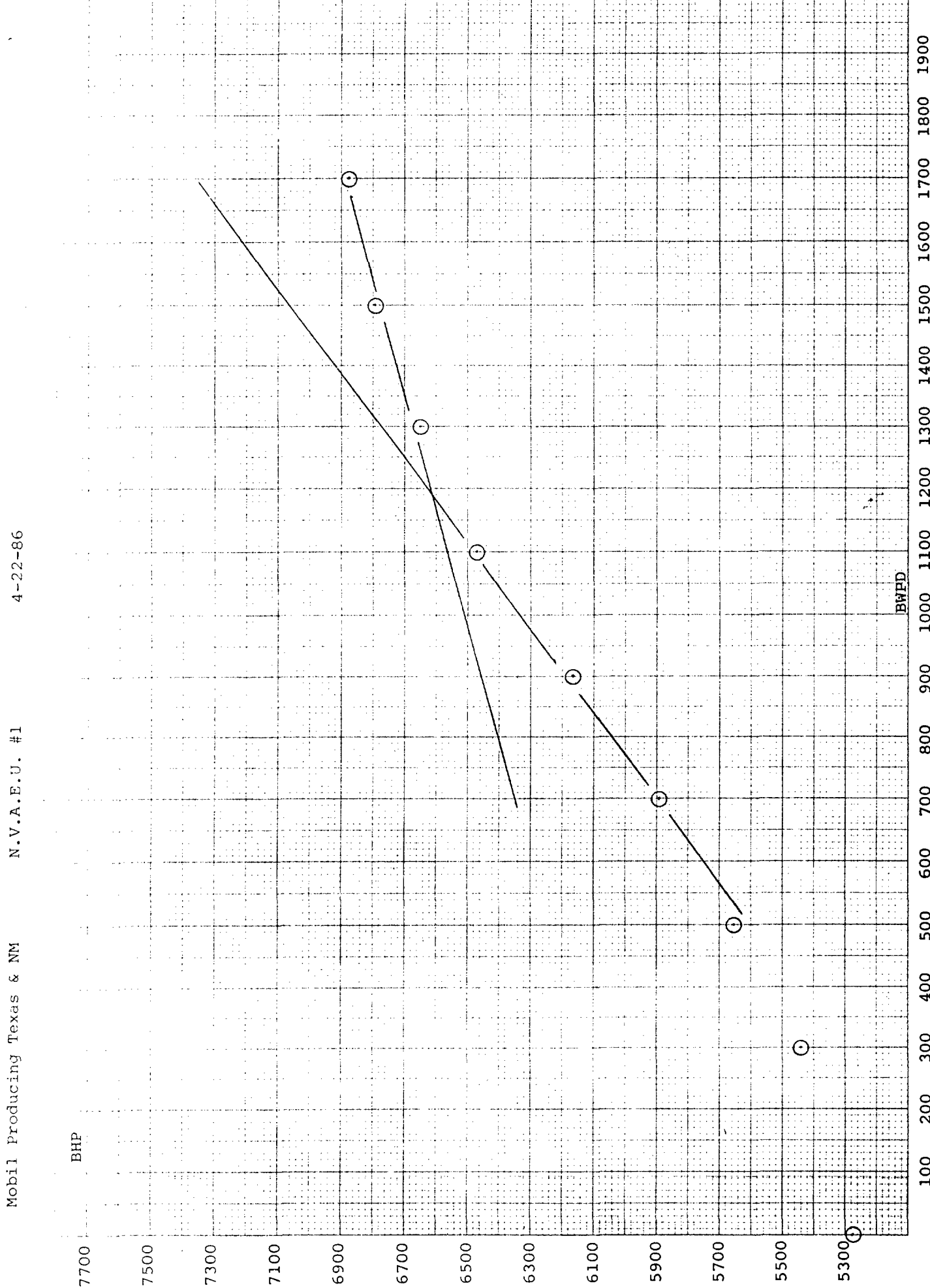
Step Rate Test

Phone (505) 397-3914

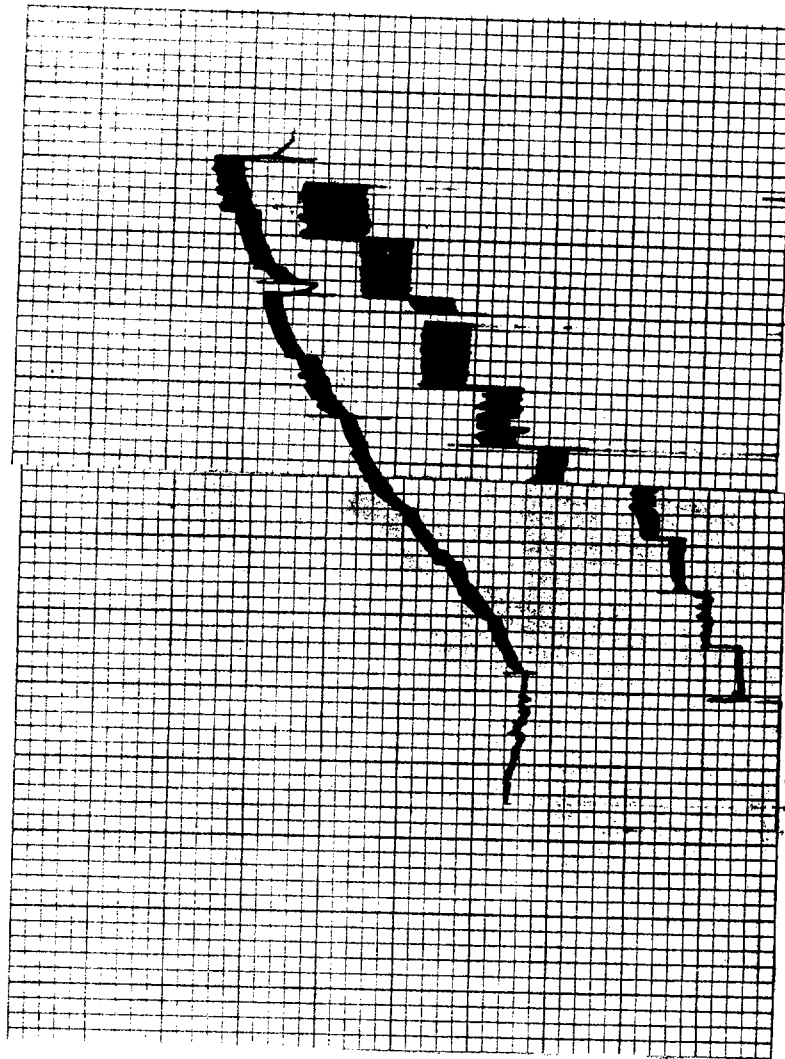
Hobbs, New Mexico 88240

Company Mobil Producing Texas & NM						Test Date 4-22-86		Unit	
Total Depth 8930'		Plug Back TD 8920'		Elevation		Lease N.V.A.E.U.			
Csg size 5 1/2" Wt		Set at		Perfs. From 8698' To 8903'		Well # 1			
Tbg size 2 3/8 Wt		Set at		Perfs. From		To		Sec Twp-Blk Rge	
Producing thru						Packer set at 8610		County Lea State New Mexico	
						Co. Rep Luke Gilpin			
Well Information									
Time of Reading	Elap Time Hrs.	Rate BBLs Per Day	Total BBLs Per Rate	Surface PSIG	Surface PSI Cor for Friction	BHP	Remarks		
9:21	Shut in			1460		5278	Bomb set @ 8800' (Midway) @		
9:25	Start	300		1460		5278	9:21		
9:30		300		1545		5349			
9:35		300		1605		5401			
9:40	:15	300		1640		5440			
9:45		500		1750		5527			
9:50		500		1795		5593			
9:55	:30	500		1850		5654			
10:00		700		1985		5739			
10:05		700		2060		5856			
10:10	:45	700		2120		5896			
10:15		900							
10:20		900							
10:25	1:00	900		2420		6165	Bottom hole tool not operating		
14:45	Restart @900 BPD			1270		5092	properly-Stop test-Pull tool		
	Pump @ 900 BPD until 2420 is obtained								
15:40	Obtained 2460 PSI - Restart @ 1100 BPD								
15:40		1100		2420		6165			
15:45		1100		2635		6347			
15:50		1100		2710		6420			
15:55	1:15	1100		2750		6476			
16:00		1300		2870		6561			
16:05		1300		2925		6615			
16:10	1:30	1300		2960		6647			
	Down for 3 minutes								
16:20		1500							
16:25		1500		3080		6745			
16:30		1500		3125		6792			
16:35	1:45	1500		3155		6797			
16:40		1700		3240		6834			
16:45		1700		3275		6861			
16:50	2:00	1700		3285		6875			
ISIP									
16:51				2950		6818			
See Page #2									





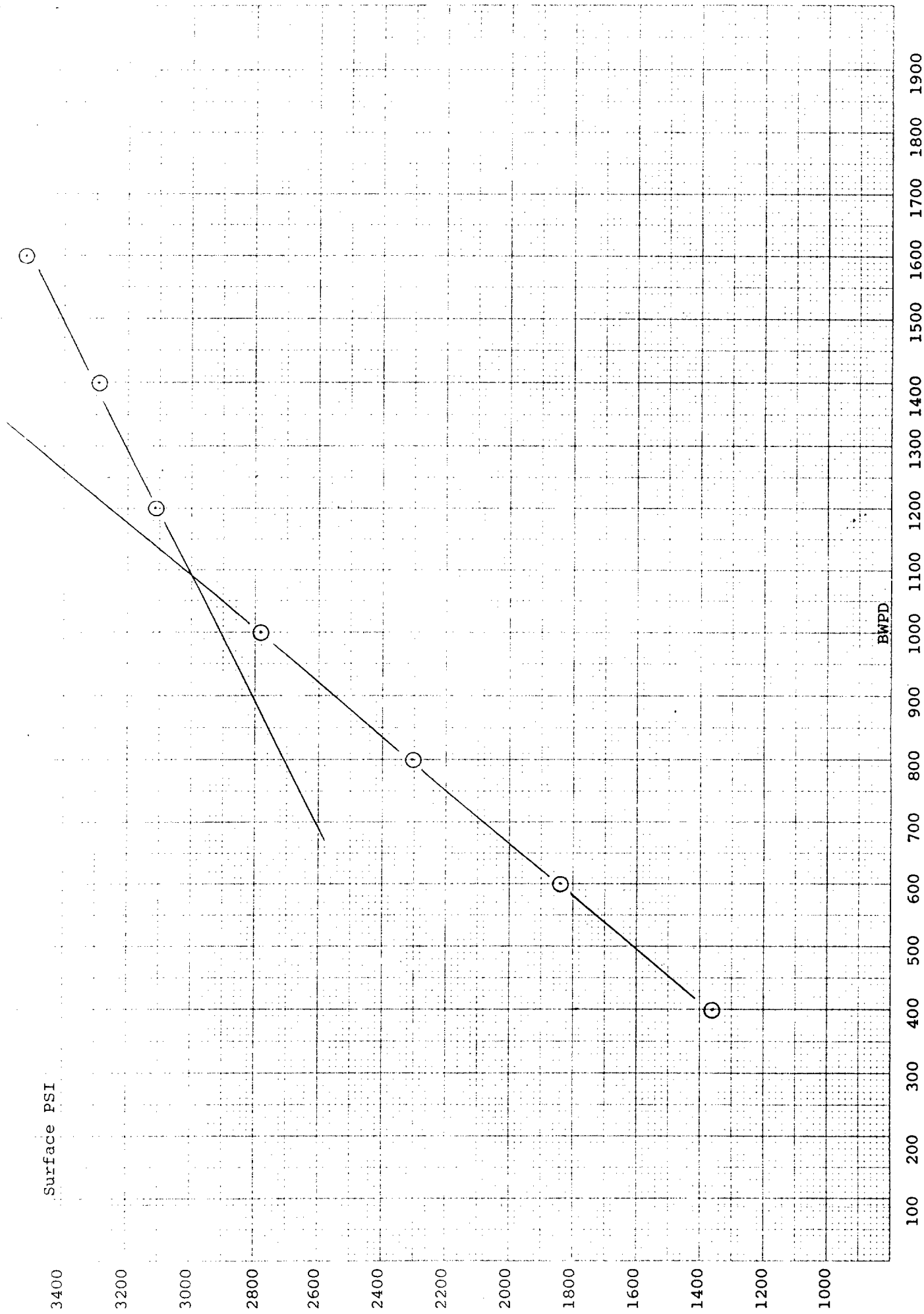
Mobil Producing Texas & NM
N.V.A.E.U. #1
4-22-86

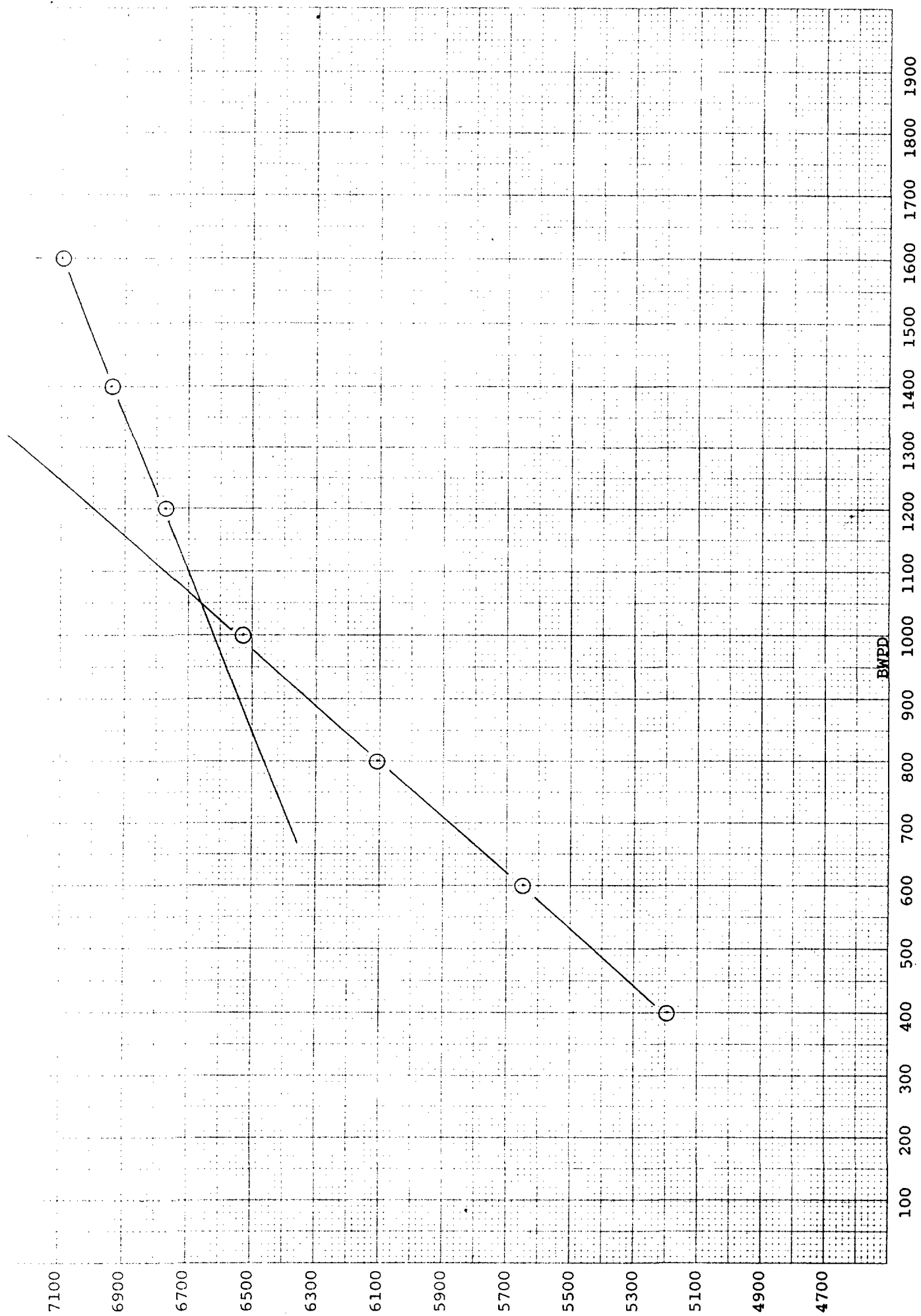


Step Rate Test

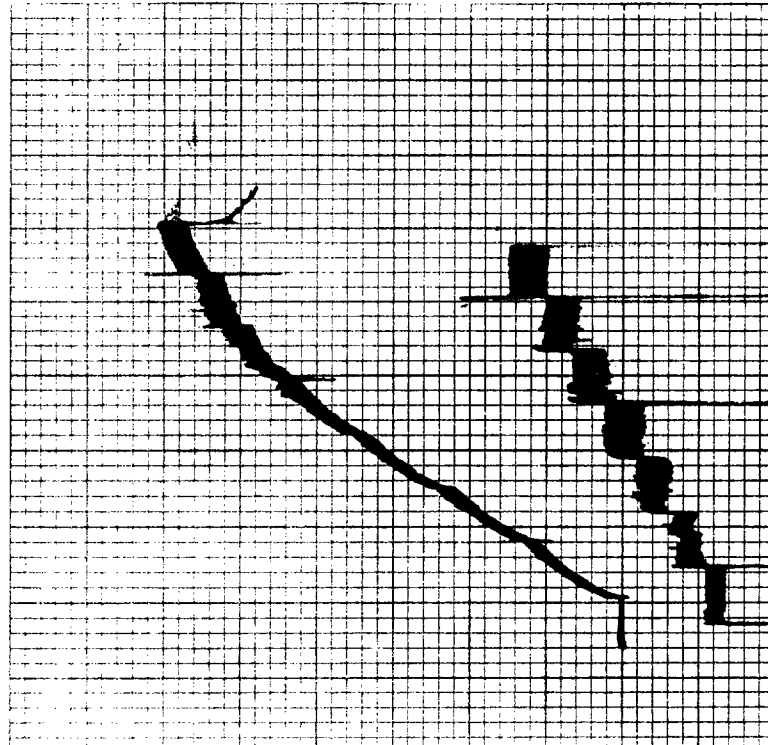
Hobbs, New Mexico 88240

Company Mobil Producing Texas & NM						Test Date 4-25-86	Unit
Total Depth						Plug-Back TD 8850	Elevation
Csg size 5 1/2 Wt d Set at						Perfs: From 8896 To 8834	Sec Twp-Blk Rge
Tbg size 2 3/8 Wt d Set at						Perfs: From To	County Lea State New Mexico
Producing thru						Packer set at 8610	Co. Rep Luke Gilpin
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	
11:24	Shut in			870		4575	Couldn't get past profile
11:30	Start	400		870		4575	nipple-set tool @ 8450'-
11:35		400		1135		4816	Exstrapulate BHP's to
11:40		400		1280		4946	8765'-Gradient = .438
11:45	:15	400		1360		5057	5195
11:50		600		1590		5240	
11:55		600		1720		5382	
12:00	:30	600		1840		5514	5652
12:05		800		2070		5704	
12:10		800		2200		5845	
12:15	:45	800		2305		5969	6107
12:20		1000		2530		6141	
12:25		1000		2670		6278	
12:30	1:00	1000		2785		6391	6529
12:35		1200		2975		6501	
12:40		1200		3070		6590	
12:45	1:15	1200		3115		6637	6775
12:50		1400		3210		6710	
12:55		1400		3250		6754	
13:00	1:30	1400		3295		6804	6942
13:05		1600		3420		6884	
13:10		1600		3470		6922	
13:15	1:45	1600		3520		6962	7100
ISIP				3165		6911	7049
13:17	5 minute fall off			3140		6873	7011
13:18				3110		6852	6990
13:19				3085		6830	6968
13:20				3060		6807	6945

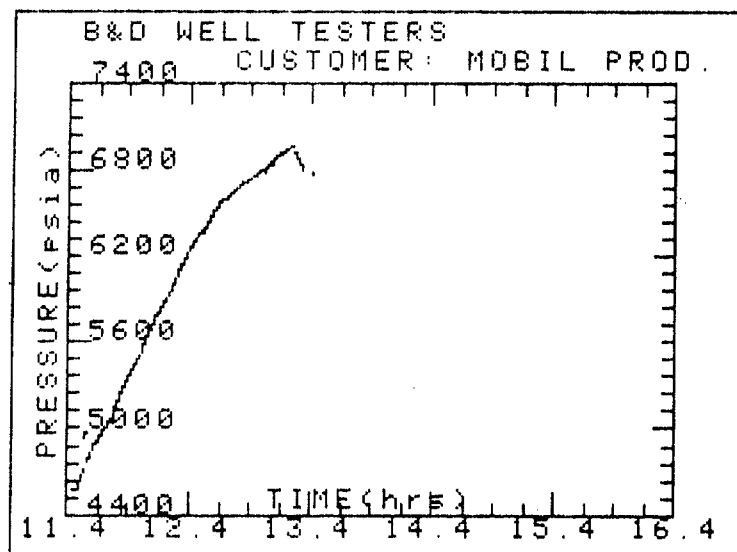




Mobil Producing Texas & NM
North Vacuum Abo East Unit #9
4-25-86



2. 59018



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE NEW MEXICO 87504
(505) 827-5800

April 26, 1990

Mobil Exploration & Producing U.S., Inc.
P.O. Box 633
Midland, TX 79702

Attention: G. N. Miller

*RE: Injection Pressure Increase
North Vacuum Abo East Unit Well Nos. 4, 8 and 11.
Lea County, New Mexico*

Dear Mr. Miller:

Reference is made to your request dated April 4, 1990, to increase the surface injection pressure on three wells within the North Vacuum Abo East Unit Pressure Maintenance Project. This request is based on step rate tests conducted on these wells during March, 1990. The results of the tests have been reviewed by my staff and we feel an increase in injection pressure on these wells is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following wells.

WELL AND LOCATION

MAXIMUM INJECTION
SURFACE PRESSURE

NVAEU Well No. 4
Unit P, Section 7, T-17 South,
R-35 East, NMPM;

NVAEU Well No. 8
Unit H, Section 18, T-17 South,
R-35 East, NMPM; and

3825 PSIG

3634 PSIG

Injection Pressure Increase
Mobil Exploration and Producing U.S., Inc.
April 26, 1990
Page 2

WELL AND LOCATION

MAXIMUM INJECTION
SURFACE PRESSURE

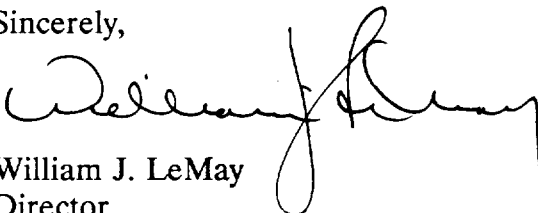
NVAEU Well No. 11
Unit N, Section 18, T-17 South,
R-35 East, NMPM,

3910 PSIG

All in Lea County, New Mexico.

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

A handwritten signature in black ink, appearing to read 'William J. LeMay', with a long horizontal stroke extending to the right.

William J. LeMay
Director

cc: Oil Conservation Division - Hobbs
File: Case 6248
T. Gallegos
D. Catanach

Mobil Exploration & Producing U.S. Inc.

P.O. BOX 633
MIDLAND, TEXAS 79702

MIDLAND DIVISION

April 4, 1990

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

Attention: Mr. W. J. LeMay

**INJECTION PRESSURE INCREASE REQUEST
NORTH VACUUM ABO EAST UNIT
WELLS NO. 4, 8, and 11
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO**

Gentlemen:

Under the provisions of Order No. R-5801 dated September 20, 1978 permission was granted 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. A step-rate test for these wells has been completed which shows that higher pressure will not result in migration of the injected fluid from the Abo formation. Permission is requested to increase the injection pressure as follows:

	<u>INJECTION INTERVALS</u>	<u>PRESENT SURFACE INJECTION PRESSURE LIMIT</u>	<u>REQUESTED SURFACE INJECTION PRESSURE LIMIT</u>
WELL NO. 4 UNIT P, SEC. 7 T-17-S, R-35-E Order No. R-5801	8776-8892'	3500 psig	3825 psig
WELL NO. 8 UNIT H, SEC. 18 T-17-S, R-35-E Order No. R-5801	8733-8873'	3500 psig	3634 psig
WELL NO. 11 UNIT N, SEC. 18 T-17-S, R-35-E Order No. R-5801	8672-8722'	3500 psig	3910 psig

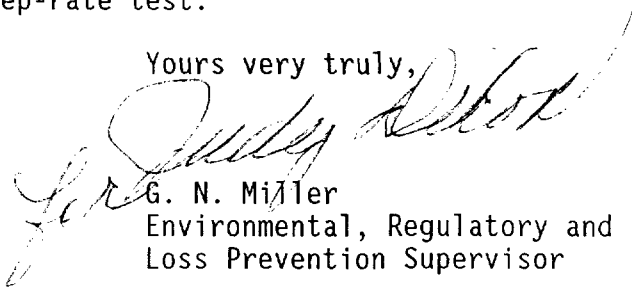
State of New Mexico
North Vacuum Abo East Unit
Wells No. 4, 8, & 11
Lea County , New Mexico

-2-

April 4, 1990

Enclosed are copies of the Step-rate test.

Yours very truly,



G. N. Miller
Environmental, Regulatory and
Loss Prevention Supervisor

Mobil Exploration & Producing U.S. Inc.
as Agent for
Mobil Producing Texas & New Mexico, Inc.

JWDixon
Attachments
cc: District Director OCD - Hobbs

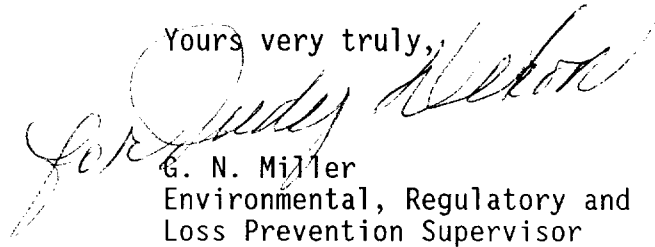
State of New Mexico
North Vacuum Abo East Unit
Wells No. 4, 8, & 11
Lea County , New Mexico

-3-

April 4, 1990

Enclosed are copies of the Step-rate test.

Yours very truly,



G. N. Miller
Environmental, Regulatory and
Loss Prevention Supervisor

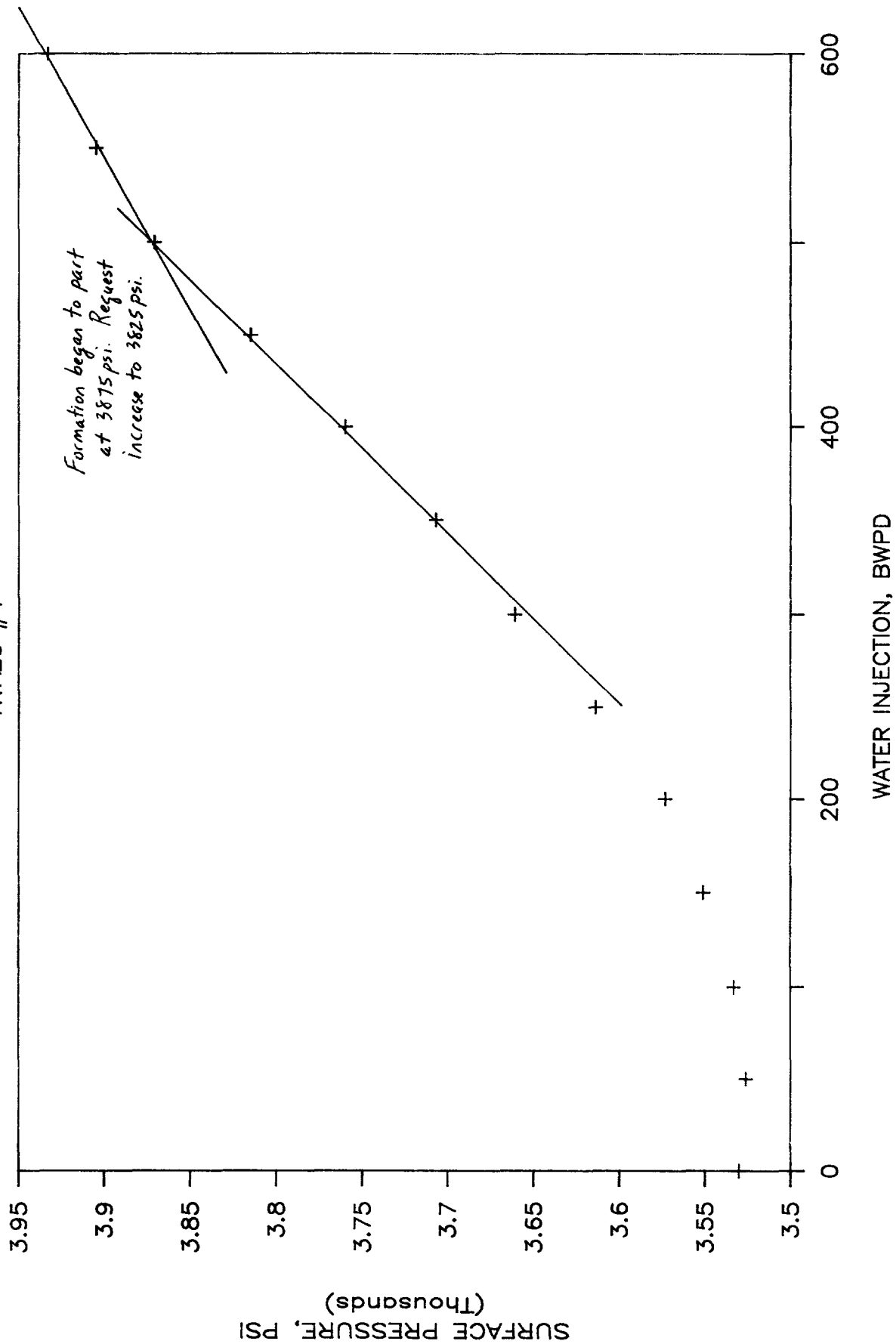
Mobil Exploration & Producing U.S. Inc.
as Agent for
Mobil Producing Texas & New Mexico, Inc.

JWDixon
Attachments
cc: District Director OCD - Hobbs

bcc: Central Files
Regulatory Files
Proration Acct.
Reservoir Engr. Mgr.
Oper. Supv. - E. R. Hanson

MOBIL STEP-RATE TEST

NVAEU #4



COMPANY: Mobil Exploration & Producing U. S.
 WELL NAME: NVAEU #4
 LEASE: North Vacuum Abo East Unit
 LOCATION: Lea County, New Mexico
 Unit P. Sec 7. T17S, R35E
 TEST DATE: March 7, 1990

STEP-RATE TEST DATA

SAMPLE POINT NUMBER	SAMPLE TIME	TUBING PRESSURE
300	11 : 44 : 22	96
301	11 : 45 : 22	97
302	11 : 46 : 22	97
303	11 : 47 : 22	97
304	11 : 48 : 22	97
305	11 : 49 : 22	98
306	11 : 50 : 22	98
307	11 : 51 : 22	98
308	11 : 52 : 22	3534
309	11 : 53 : 22	3532
310	11 : 54 : 22	3530
311	11 : 55 : 22	3529
312	11 : 56 : 22	3522
313	11 : 57 : 22	3530
314	11 : 58 : 22	3529
315	11 : 59 : 22	3529
316	12 : 0 : 22	3526
317	12 : 1 : 22	3530
318	12 : 2 : 22	3529
319	12 : 3 : 22	3528
320	12 : 4 : 22	3528
321	12 : 5 : 22	3528
322	12 : 6 : 22	3527
323	12 : 7 : 22	3527
324	12 : 8 : 22	3527
325	12 : 9 : 22	3526
326	12 : 10 : 22	3526
327	12 : 11 : 22	3528
328	12 : 12 : 22	3530
329	12 : 13 : 22	3531
330	12 : 14 : 22	3534
331	12 : 15 : 22	3532
332	12 : 16 : 22	3527
333	12 : 17 : 22	3529
334	12 : 18 : 22	3528
335	12 : 19 : 22	3531
336	12 : 20 : 22	3531
337	12 : 21 : 22	3532
338	12 : 22 : 22	3532

STEP-RATE TEST DATA

SAMPLE POINT NUMBER	SAMPLE TIME	TUBING PRESSURE
339	12 : 23 : 22	3533
340	12 : 24 : 22	3533
341	12 : 25 : 22	3534
342	12 : 26 : 22	3534
343	12 : 27 : 22	3540
344	12 : 28 : 22	3543
345	12 : 29 : 22	3543
346	12 : 30 : 22	3544
347	12 : 31 : 22	3545
348	12 : 32 : 22	3545
349	12 : 33 : 22	3546
350	12 : 34 : 22	3547
351	12 : 35 : 22	3548
352	12 : 36 : 22	3549
353	12 : 37 : 22	3549
354	12 : 38 : 22	3550
355	12 : 39 : 22	3551
356	12 : 40 : 22	3551
357	12 : 41 : 22	3553
358	12 : 42 : 22	3557
359	12 : 43 : 22	3558
360	12 : 44 : 22	3560
361	12 : 45 : 22	3561
362	12 : 46 : 22	3562
363	12 : 47 : 22	3567
364	12 : 48 : 22	3566
365	12 : 49 : 22	3567
366	12 : 50 : 22	3569
367	12 : 51 : 22	3569
368	12 : 52 : 22	3570
369	12 : 53 : 22	3572
370	12 : 54 : 22	3573
371	12 : 55 : 22	3576
372	12 : 56 : 22	3577
373	12 : 57 : 22	3585
374	12 : 58 : 22	3590
375	12 : 59 : 22	3593
376	13 : 0 : 22	3596
377	13 : 1 : 22	3599
378	13 : 2 : 22	3601
379	13 : 3 : 22	3604
380	13 : 4 : 22	3606
381	13 : 5 : 22	3607
382	13 : 6 : 22	3609
383	13 : 7 : 22	3611
384	13 : 8 : 22	3612
385	13 : 9 : 22	3614
386	13 : 10 : 22	3616
387	13 : 11 : 22	3631
388	13 : 12 : 22	3636
389	13 : 13 : 22	3639
390	13 : 14 : 22	3641

STEP-RATE TEST DATA

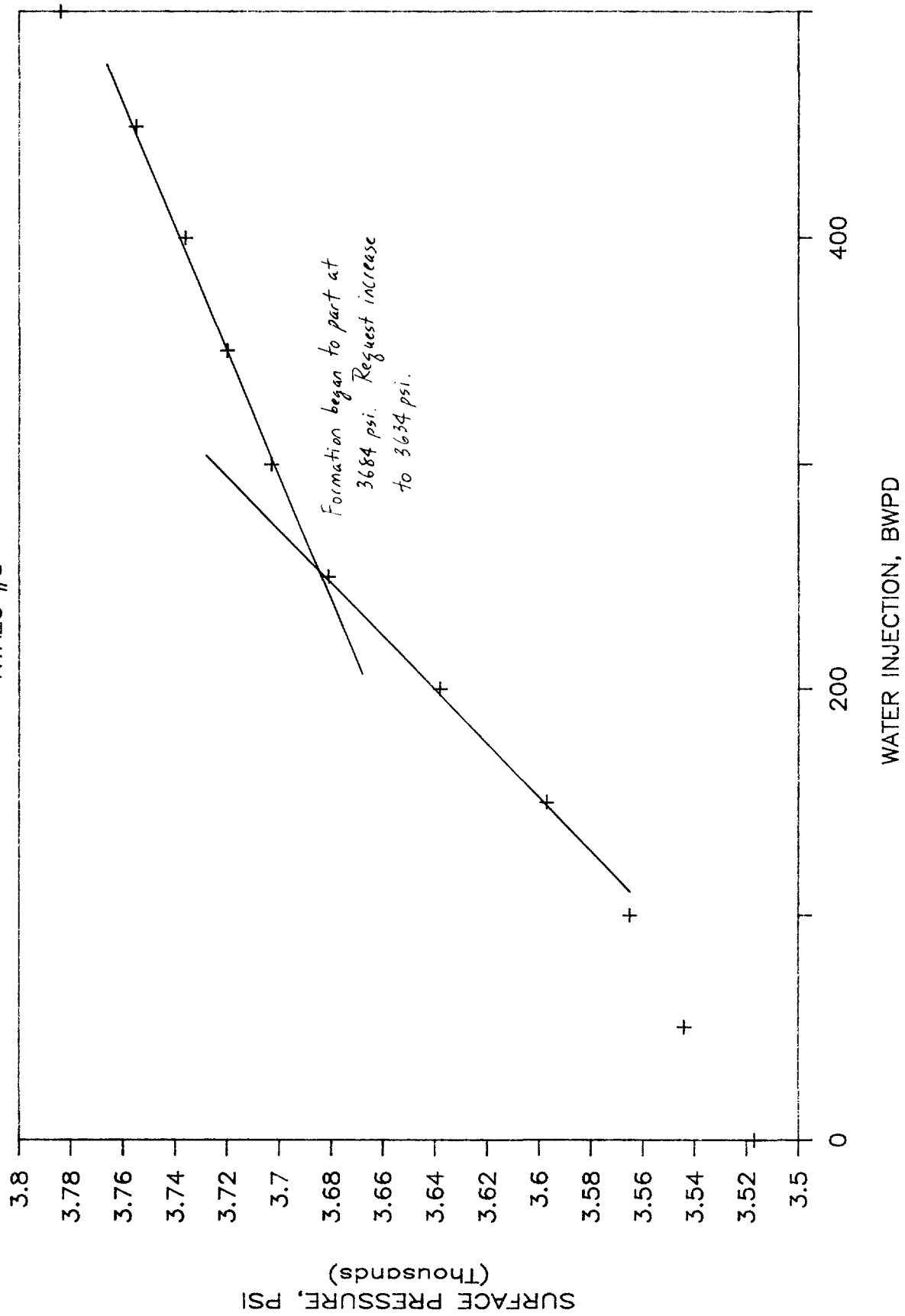
SAMPLE POINT NUMBER	SAMPLE TIME	TUBING PRESSURE
391	13 : 15 : 22	3642
392	13 : 16 : 22	3645
393	13 : 17 : 22	3648
394	13 : 18 : 22	3649
395	13 : 19 : 22	3651
396	13 : 20 : 22	3652
397	13 : 21 : 22	3655
398	13 : 22 : 22	3657
399	13 : 23 : 22	3659
400	13 : 24 : 22	3661
401	13 : 25 : 22	3682
402	13 : 26 : 22	3683
403	13 : 27 : 22	3688
404	13 : 28 : 22	3692
405	13 : 29 : 22	3707
406	13 : 30 : 22	3711
407	13 : 31 : 22	3712
408	13 : 32 : 22	3723
409	13 : 33 : 22	3722
410	13 : 34 : 22	3724
411	13 : 35 : 22	3728
412	13 : 36 : 22	3730
413	13 : 37 : 22	3732
414	13 : 38 : 22	3734
415	13 : 39 : 22	3745
416	13 : 40 : 22	3752
417	13 : 41 : 22	3756
418	13 : 42 : 22	3757
419	13 : 43 : 22	3756
420	13 : 44 : 22	3760
421	13 : 45 : 22	3764
422	13 : 46 : 22	3766
423	13 : 47 : 22	3775
424	13 : 48 : 22	3777
425	13 : 49 : 22	3780
426	13 : 50 : 22	3791
427	13 : 51 : 22	3795
428	13 : 52 : 22	3798
429	13 : 53 : 22	3800
430	13 : 54 : 22	3803
431	13 : 55 : 22	3806
432	13 : 56 : 22	3807
433	13 : 57 : 22	3810
434	13 : 58 : 22	3813
435	13 : 59 : 22	3815
436	14 : 0 : 22	3817
437	14 : 1 : 22	3833
438	14 : 2 : 22	3837
439	14 : 3 : 22	3841
440	14 : 4 : 22	3844
441	14 : 5 : 22	3847
442	14 : 6 : 22	3851

STEP-RATE TEST DATA

SAMPLE POINT NUMBER	SAMPLE TIME	TUBING PRESSURE
443	14 : 7 : 22	3853
444	14 : 8 : 22	3856
445	14 : 9 : 22	3858
446	14 : 10 : 22	3861
447	14 : 11 : 22	3863
448	14 : 12 : 22	3866
449	14 : 13 : 22	3868
450	14 : 14 : 22	3871
451	14 : 15 : 22	3873
452	14 : 16 : 22	3874
453	14 : 17 : 22	3874
454	14 : 18 : 22	3876
455	14 : 19 : 22	3879
456	14 : 20 : 22	3880
457	14 : 21 : 22	3880
458	14 : 22 : 22	3881
459	14 : 23 : 22	3880
460	14 : 24 : 22	3882
461	14 : 25 : 22	3884
462	14 : 26 : 22	3885
463	14 : 27 : 22	3888
464	14 : 28 : 22	3888
465	14 : 29 : 22	3887
466	14 : 30 : 22	3889
467	14 : 31 : 22	3892
468	14 : 32 : 22	3895
469	14 : 33 : 22	3899
470	14 : 34 : 22	3905
471	14 : 35 : 22	3905
472	14 : 36 : 22	3907
473	14 : 37 : 22	3908
474	14 : 38 : 22	3910
475	14 : 39 : 22	3911
476	14 : 40 : 22	3914
477	14 : 41 : 22	3919
478	14 : 42 : 22	3925
479	14 : 43 : 22	3929
480	14 : 44 : 22	3933
481	14 : 45 : 22	3935
482	14 : 46 : 22	3931
483	14 : 47 : 22	3921
484	14 : 48 : 22	3904
485	14 : 49 : 22	3874
486	14 : 50 : 22	3846
487	14 : 51 : 22	3829
488	14 : 52 : 22	3813
489	14 : 53 : 22	3801
490	14 : 54 : 22	106
491	14 : 55 : 22	87
492	14 : 56 : 22	86
493	14 : 57 : 22	88
494	14 : 58 : 22	87

MOBIL STEP-RATE TEST

NVAEU #8



COMPANY: Mobil Exploration & Producing U. S.
WELL NAME: NVAEU #8
LEASE: North Vacuum Abo East Unit
LOCATION: Lea County, New Mexico
Unit H, Sec 18, T17S, R35E
TEST DATE: March 2, 1990

STEP-RATE TEST DATA

SAMPLE POINT NUMBER	SAMPLE TIME	TUBING PRESSURE
0001	07:40:21	124.00
0002	07:41:21	124.00
0003	07:42:21	125.00
0004	07:43:21	125.00
0005	07:44:21	125.00
0006	07:45:21	125.00
0007	07:46:21	125.00
0008	07:47:21	125.00
0009	07:48:21	125.00
0010	07:49:21	125.00
0011	07:50:21	125.00
0012	07:51:21	125.00
0013	07:52:21	125.00
0014	07:53:21	125.00
0015	07:54:21	125.00
0016	07:55:21	124.00
0017	07:56:21	125.00
0018	07:57:21	125.00
0019	07:58:21	3477.00
0020	07:59:21	3517.00
0021	08:00:21	3523.00
0022	08:01:21	3526.00
0023	08:02:21	3528.00
0024	08:03:21	3531.00
0025	08:04:21	3533.00
0026	08:05:21	3534.00
0027	08:06:21	3535.00
0028	08:07:21	3536.00
0029	08:08:21	3537.00
0030	08:09:21	3538.00
0031	08:10:21	3540.00
0032	08:11:21	3543.00
0033	08:12:21	3545.00
0034	08:13:21	3544.00
0035	08:14:21	3544.00
0036	08:15:21	3547.00
0037	08:16:21	3548.00

STEP-RATE TEST DATA

SAMPLE POINT NUMBER	SAMPLE TIME	TUBING PRESSURE
0038	08:17:21	3547.00
0039	08:18:21	3548.00
0040	08:19:21	3551.00
0041	08:20:21	3551.00
0042	08:21:21	3555.00
0043	08:22:21	3555.00
0044	08:23:21	3557.00
0045	08:24:21	3557.00
0046	08:25:21	3558.00
0047	08:26:21	3562.00
0048	08:27:21	3562.00
0049	08:28:21	3563.00
0050	08:29:21	3565.00
0051	08:30:21	3567.00
0052	08:31:21	3571.00
0053	08:32:21	3571.00
0054	08:33:21	3572.00
0055	08:34:21	3574.00
0056	08:35:21	3577.00
0057	08:36:21	3580.00
0058	08:37:21	3582.00
0059	08:38:21	3584.00
0060	08:39:21	3587.00
0061	08:40:21	3589.00
0062	08:41:21	3592.00
0063	08:42:21	3594.00
0064	08:43:21	3594.00
0065	08:44:21	3597.00
0066	08:45:21	3597.00
0067	08:46:21	3601.00
0068	08:47:21	3605.00
0069	08:48:21	3607.00
0070	08:49:21	3607.00
0071	08:50:21	3615.00
0072	08:51:21	3619.00
0073	08:52:21	3623.00
0074	08:53:21	3626.00
0075	08:54:21	3629.00
0076	08:55:21	3634.00
0077	08:56:21	3638.00
0078	08:57:21	3638.00
0079	08:58:21	3637.00
0080	08:59:21	3638.00
0081	09:00:21	3638.00
0082	09:01:21	3643.00
0083	09:02:21	3649.00
0084	09:03:21	3656.00
0085	09:04:21	3661.00
0086	09:05:21	3666.00
0087	09:06:21	3669.00
0088	09:07:21	3673.00
0089	09:08:21	3674.00

STEP-RATE TEST DATA

SAMPLE POINT NUMBER	SAMPLE TIME	TUBING PRESSURE
0090	09:09:21	3674.00
0091	09:10:21	3676.00
0092	09:11:21	3679.00
0093	09:12:21	3679.00
0094	09:13:21	3680.00
0095	09:14:21	3681.00
0096	09:15:21	3681.00
0097	09:16:21	3681.00
0098	09:17:21	3683.00
0099	09:18:21	3685.00
0100	09:19:21	3685.00
0101	09:20:21	3689.00
0102	09:21:21	3690.00
0103	09:22:21	3691.00
0104	09:23:21	3695.00
0105	09:24:21	3696.00
0106	09:25:21	3697.00
0107	09:26:21	3699.00
0108	09:27:21	3702.00
0109	09:28:21	3709.00
0110	09:29:21	3703.00
0111	09:30:21	3693.00
0112	09:31:21	3688.00
0113	09:32:21	3692.00
0114	09:33:21	3697.00
0115	09:34:21	3698.00
0116	09:35:21	3708.00
0117	09:36:21	3706.00
0118	09:37:21	3702.00
0119	09:38:21	3698.00
0120	09:39:21	3695.00
0121	09:40:21	3696.00
0122	09:41:21	3697.00
0123	09:42:21	3713.00
0124	09:43:21	3717.00
0125	09:44:21	3720.00
0126	09:45:21	3722.00
0127	09:46:21	3724.00
0128	09:47:21	3723.00
0129	09:48:21	3722.00
0130	09:49:21	3722.00
0131	09:50:21	3723.00
0132	09:51:21	3725.00
0133	09:52:21	3728.00
0134	09:53:21	3729.00
0135	09:54:21	3729.00
0136	09:55:21	3729.00
0137	09:56:21	3732.00
0138	09:57:21	3735.00
0139	09:58:21	3735.00
0140	09:59:21	3736.00
0141	10:00:21	3736.00

STEP-RATE TEST DATA

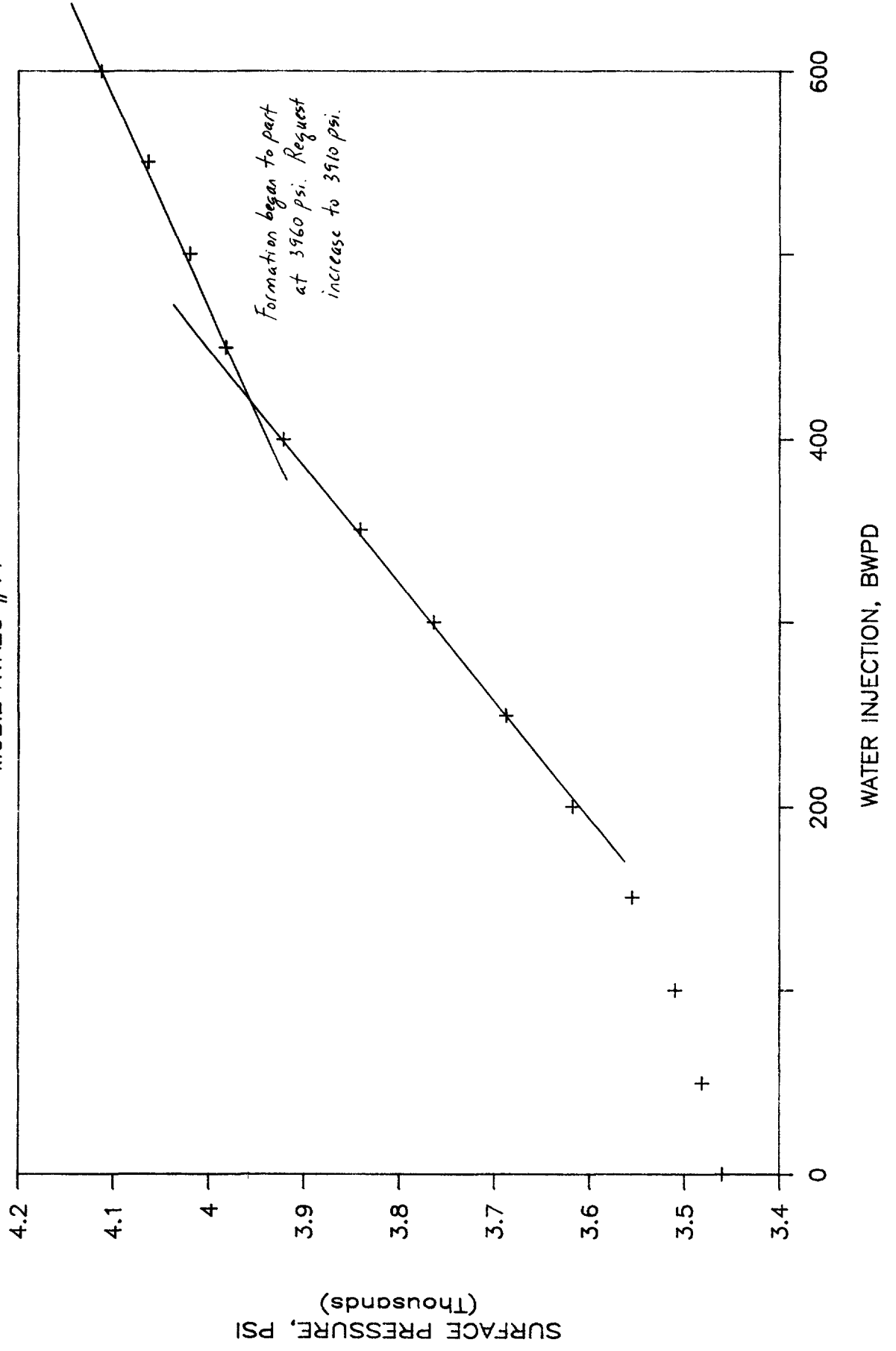
SAMPLE POINT NUMBER	SAMPLE TIME	TUBING PRESSURE
0142	10:01:21	3737.00
0143	10:02:21	3737.00
0144	10:03:21	3739.00
0145	10:04:21	3740.00
0146	10:05:21	3743.00
0147	10:06:21	3745.00
0148	10:07:21	3745.00
0149	10:08:21	3744.00
0150	10:09:21	3748.00
0151	10:10:21	3748.00
0152	10:11:21	3747.00
0153	10:12:21	3751.00
0154	10:13:21	3755.00
0155	10:14:21	3755.00
0156	10:15:21	3755.00
0157	10:16:21	3756.00
0158	10:17:21	3759.00
0159	10:18:21	3763.00
0160	10:19:21	3763.00
0161	10:20:21	3766.00
0162	10:21:21	3768.00
0163	10:22:21	3771.00
0164	10:23:21	3771.00
0165	10:24:21	3774.00
0166	10:25:21	3776.00
0167	10:26:21	3778.00
0168	10:27:21	3781.00
0169	10:28:21	3784.00
0170	10:29:21	3784.00
0171	10:30:21	3765.00
0172	10:31:21	3750.00
0173	10:32:21	3732.00
0174	10:33:21	3723.00
0175	10:34:21	3719.00
0176	10:35:21	3711.00
0177	10:36:21	3704.00
0178	10:37:21	3694.00
0179	10:38:21	3688.00
0180	10:39:21	536.00
0181	10:40:21	119.00
0182	10:41:21	113.00
0183	10:42:21	99.00
0184	10:43:21	90.00
0185	10:44:21	88.00
0186	10:45:21	86.00
0187	10:46:21	80.00
0188	10:47:21	77.00
0189	10:48:21	78.00
0190	10:49:21	79.00
0191	10:50:21	80.00
0192	10:51:21	80.00
0193	10:52:21	81.00

STEP-RATE TEST DATA

SAMPLE POINT NUMBER	SAMPLE TIME	TUBING PRESSURE
0194	10:53:21	82.00
0195	10:54:21	83.00
0196	10:55:21	82.00
0197	10:56:21	82.00
0198	10:57:21	82.00
0199	10:58:21	83.00
0200	10:59:21	83.00
0201	11:00:21	83.00
0202	11:01:21	83.00
0203	11:02:21	88.00
0204	11:03:21	93.00
0205	11:04:21	88.00
0206	11:05:21	82.00
0207	11:06:21	82.00
0208	11:07:21	83.00
0209	11:08:21	83.00
0210	11:09:21	84.00
0211	11:10:21	84.00
0212	11:11:21	84.00
0213	11:12:21	85.00
0214	11:13:21	85.00
0215	11:14:21	85.00
0216	11:15:21	86.00
0217	11:16:21	86.00
0218	11:17:21	86.00
0219	11:18:21	87.00
0220	11:19:21	87.00

STEP-RATE TEST

MOBIL NVAEU #11



COMPANY: Mobil Exploration & Producing U. S.
WELL NAME: NVAEU #11
LEASE: North Vacuum Abo East Unit
LOCATION: Lea County, New Mexico
Unit N, Sec 18, T17S, R35E
TEST DATE: March 6, 1990

STEP-RATE TEST DATA

SAMPLE POINT NUMBER	SAMPLE TIME	TUBING PRESSURE
167	9 : 16 : 17	157
168	9 : 17 : 17	157
169	9 : 18 : 17	155
170	9 : 19 : 17	134
171	9 : 20 : 17	130
172	9 : 21 : 17	125
173	9 : 22 : 17	119
174	9 : 23 : 17	120
175	9 : 24 : 17	120
176	9 : 25 : 17	115
177	9 : 26 : 17	115
178	9 : 27 : 17	116
179	9 : 28 : 17	116
180	9 : 29 : 17	117
181	9 : 30 : 17	117
182	9 : 31 : 17	117
183	9 : 32 : 17	118
184	9 : 33 : 17	118
185	9 : 34 : 17	118
186	9 : 35 : 17	119
187	9 : 36 : 17	119
188	9 : 37 : 17	119
189	9 : 38 : 17	119
190	9 : 39 : 17	120
191	9 : 40 : 17	120
192	9 : 41 : 17	3494
193	9 : 42 : 17	3491
194	9 : 43 : 17	3487
195	9 : 44 : 17	3484
196	9 : 45 : 17	3481
197	9 : 46 : 17	3478
198	9 : 47 : 17	3476
199	9 : 48 : 17	3473
200	9 : 49 : 17	3471
201	9 : 50 : 17	3467
202	9 : 51 : 17	3467
203	9 : 52 : 17	3465
204	9 : 53 : 17	3463

STEP-RATE TEST DATA

SAMPLE POINT NUMBER	SAMPLE TIME	TUBING PRESSURE
205	9 : 54 : 17	3460
206	9 : 55 : 17	3470
207	9 : 56 : 17	3471
208	9 : 57 : 17	3473
209	9 : 58 : 17	3474
210	9 : 59 : 17	3475
211	10 : 0 : 17	3476
212	10 : 1 : 17	3477
213	10 : 2 : 17	3478
214	10 : 3 : 17	3478
215	10 : 4 : 17	3479
216	10 : 5 : 17	3480
217	10 : 6 : 17	3480
218	10 : 7 : 17	3481
219	10 : 8 : 17	3481
220	10 : 9 : 17	3482
221	10 : 10 : 17	3482
222	10 : 11 : 17	3490
223	10 : 12 : 17	3489
224	10 : 13 : 17	3492
225	10 : 14 : 17	3495
226	10 : 15 : 17	3497
227	10 : 16 : 17	3499
228	10 : 17 : 17	3499
229	10 : 18 : 17	3501
230	10 : 19 : 17	3503
231	10 : 20 : 17	3504
232	10 : 21 : 17	3506
233	10 : 22 : 17	3507
234	10 : 23 : 17	3509
235	10 : 24 : 17	3510
236	10 : 25 : 17	3511
237	10 : 26 : 17	3517
238	10 : 27 : 17	3522
239	10 : 28 : 17	3527
240	10 : 29 : 17	3530
241	10 : 30 : 17	3534
242	10 : 31 : 17	3536
243	10 : 32 : 17	3539
244	10 : 33 : 17	3541
245	10 : 34 : 17	3544
246	10 : 35 : 17	3546
247	10 : 36 : 17	3549
248	10 : 37 : 17	3551
249	10 : 38 : 17	3553
250	10 : 39 : 17	3555
251	10 : 40 : 17	3557
252	10 : 41 : 17	3566
253	10 : 42 : 17	3572
254	10 : 43 : 17	3577
255	10 : 44 : 17	3581

STEP-RATE TEST DATA

SAMPLE POINT NUMBER	SAMPLE TIME	TUBING PRESSURE
256	10 : 45 : 17	3586
257	10 : 46 : 17	3591
258	10 : 47 : 17	3595
259	10 : 48 : 17	3600
260	10 : 49 : 17	3602
261	10 : 50 : 17	3602
262	10 : 51 : 17	3607
263	10 : 52 : 17	3610
264	10 : 53 : 17	3613
265	10 : 54 : 17	3618
266	10 : 55 : 17	3628
267	10 : 56 : 17	3633
268	10 : 57 : 17	3638
269	10 : 58 : 17	3645
270	10 : 59 : 17	3650
271	11 : 0 : 17	3655
272	11 : 1 : 17	3659
273	11 : 2 : 17	3663
274	11 : 3 : 17	3666
275	11 : 4 : 17	3670
276	11 : 5 : 17	3673
277	11 : 6 : 17	3678
278	11 : 7 : 17	3681
279	11 : 8 : 17	3685
280	11 : 9 : 17	3688
281	11 : 10 : 17	3697
282	11 : 11 : 17	3704
283	11 : 12 : 17	3709
284	11 : 13 : 17	3714
285	11 : 14 : 17	3722
286	11 : 15 : 17	3728
287	11 : 16 : 17	3733
288	11 : 17 : 17	3738
289	11 : 18 : 17	3742
290	11 : 19 : 17	3746
291	11 : 20 : 17	3750
292	11 : 21 : 17	3753
293	11 : 22 : 17	3757
294	11 : 23 : 17	3762
295	11 : 24 : 17	3764
296	11 : 25 : 17	3768
297	11 : 26 : 17	3779
298	11 : 27 : 17	3789
299	11 : 28 : 17	3794
300	11 : 29 : 17	3799
301	11 : 30 : 17	3805
302	11 : 31 : 17	3809
303	11 : 32 : 17	3814
304	11 : 33 : 17	3818
305	11 : 34 : 17	3821
306	11 : 35 : 17	3825

STEP-RATE TEST DATA

SAMPLE POINT NUMBER	SAMPLE TIME	TUBING PRESSURE
307	11 : 36 : 17	3829
308	11 : 37 : 17	3834
309	11 : 38 : 17	3838
310	11 : 39 : 17	3841
311	11 : 40 : 17	3850
312	11 : 41 : 17	3866
313	11 : 42 : 17	3871
314	11 : 43 : 17	3877
315	11 : 44 : 17	3882
316	11 : 45 : 17	3887
317	11 : 46 : 17	3892
318	11 : 47 : 17	3897
319	11 : 48 : 17	3902
320	11 : 49 : 17	3906
321	11 : 50 : 17	3909
322	11 : 51 : 17	3913
323	11 : 52 : 17	3917
324	11 : 53 : 17	3919
325	11 : 54 : 17	3922
326	11 : 55 : 17	3925
327	11 : 56 : 17	3935
328	11 : 57 : 17	3945
329	11 : 58 : 17	3943
330	11 : 59 : 17	3951
331	12 : 0 : 17	3954
332	12 : 1 : 17	3957
333	12 : 2 : 17	3961
334	12 : 3 : 17	3964
335	12 : 4 : 17	3968
336	12 : 5 : 17	3971
337	12 : 6 : 17	3974
338	12 : 7 : 17	3977
339	12 : 8 : 17	3980
340	12 : 9 : 17	3982
341	12 : 10 : 17	3985
342	12 : 11 : 17	3989
343	12 : 12 : 17	3992
344	12 : 13 : 17	3995
345	12 : 14 : 17	3997
346	12 : 15 : 17	3999
347	12 : 16 : 17	4002
348	12 : 17 : 17	4004
349	12 : 18 : 17	4006
350	12 : 19 : 17	4009
351	12 : 20 : 17	4011
352	12 : 21 : 17	4013
353	12 : 22 : 17	4015
354	12 : 23 : 17	4018
355	12 : 24 : 17	4020
356	12 : 25 : 17	4022
357	12 : 26 : 17	4029

STEP-RATE TEST DATA

SAMPLE POINT NUMBER	SAMPLE TIME	TUBING PRESSURE
358	12 : 27 : 17	4033
359	12 : 28 : 17	4035
360	12 : 29 : 17	4037
361	12 : 30 : 17	4039
362	12 : 31 : 17	4044
363	12 : 32 : 17	4046
364	12 : 33 : 17	4050
365	12 : 34 : 17	4052
366	12 : 35 : 17	4054
367	12 : 36 : 17	4057
368	12 : 37 : 17	4059
369	12 : 38 : 17	4062
370	12 : 39 : 17	4064
371	12 : 40 : 17	4080
372	12 : 41 : 17	4081
373	12 : 42 : 17	4084
374	12 : 43 : 17	4091
375	12 : 44 : 17	4092
376	12 : 45 : 17	4095
377	12 : 46 : 17	4098
378	12 : 47 : 17	4100
379	12 : 48 : 17	4102
380	12 : 49 : 17	4104
381	12 : 50 : 17	4106
382	12 : 51 : 17	4108
383	12 : 52 : 17	4110
384	12 : 53 : 17	4112
385	12 : 54 : 17	4113
386	12 : 55 : 17	4115
387	12 : 56 : 17	4033
388	12 : 57 : 17	4032
389	12 : 58 : 17	4019
390	12 : 59 : 17	4011
391	13 : 0 : 17	4005
392	13 : 1 : 17	3998
393	13 : 2 : 17	1167
394	13 : 3 : 17	1173
395	13 : 4 : 17	1177
396	13 : 5 : 17	114
397	13 : 6 : 17	115
398	13 : 7 : 17	99
399	13 : 8 : 17	90
400	13 : 9 : 17	85
401	13 : 10 : 17	85
402	13 : 11 : 17	86
403	13 : 12 : 17	86
404	13 : 13 : 17	86
405	13 : 14 : 17	87
406	13 : 15 : 17	87
407	13 : 16 : 17	88
408	13 : 17 : 17	88

STEP-RATE TEST DATA

SAMPLE POINT NUMBER	SAMPLE TIME	TUBING PRESSURE
409	13 : 18 : 17	88
410	13 : 19 : 17	88
411	13 : 20 : 17	89
412	13 : 21 : 17	89
413	13 : 22 : 17	89
414	13 : 23 : 17	91
415	13 : 24 : 17	91
416	13 : 25 : 17	92
417	13 : 26 : 17	92
418	13 : 27 : 17	92
419	13 : 28 : 17	92
420	13 : 29 : 17	92
421	13 : 30 : 17	93
422	13 : 31 : 17	93
423	13 : 32 : 17	93
424	13 : 33 : 17	93
425	13 : 34 : 17	93
426	13 : 35 : 17	94
427	13 : 36 : 17	94
428	13 : 37 : 17	94
429	13 : 38 : 17	94
430	13 : 39 : 17	94
431	13 : 40 : 17	95
432	13 : 41 : 17	94
433	13 : 42 : 17	95
434	13 : 43 : 17	95
435	13 : 44 : 17	95
436	13 : 45 : 17	95
437	13 : 46 : 17	95
438	13 : 47 : 17	96
439	13 : 48 : 17	96
440	13 : 49 : 17	96
441	13 : 50 : 17	96
442	13 : 51 : 17	96
443	13 : 52 : 17	96



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

April 12, 1990

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS.

Gentlemen:

I have examined the step rate test for the:

Mobil Prod. TX & NM Inc.	North Vacuum Abo East Unit	#11-N	18-17-35
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

April 12, 1990

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Prod. TX & NM Inc.	North Vacuum Abo East Unit	#8-H	18-17-35
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE
April 12, 1990

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Prod TX & NM Inc.	North Vacuum Abo East Unit	#4-P	7-17-35
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton
Supervisor, District I

/bp

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

May 24, 1991

Mobil Exploration & Producing U.S., Inc.
P.O. Box 633
Midland, TX 79702

Attention: Judy Dixon

*RE: Injection Pressure Increase
N. Vacuum Abo East Unit
Lea County, New Mexico*

Dear Ms. Dixon:

Reference is made to your request dated April 9, 1991, to increase the surface injection pressure on six wells within the North Vacuum Abo East Unit Pressure Maintenance Project. This request is based on step rate tests conducted on these wells during March, 1991. The results of the tests have been reviewed by my staff and we feel an increase in injection pressure on these wells is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following wells:

WELL AND LOCATION

MAXIMUM INJECTION
SURFACE PRESSURE

NVAEU Well No. 1
Unit J, Section 7, T-17 South,
R-35 East, NMPM;

3800 PSIG

NVAEU Well No. 2
Unit L, Section 7, T-17 South,
R-35 East, NMPM;

4250 PSIG

Injection Pressure Increase
Mobil Exploration and Producing U.S., Inc.
May 24, 1991
Page 2

WELL AND LOCATION

MAXIMUM INJECTION
SURFACE PRESSURE

NVAEU Well No. 3
Unit N, Section 7, T-17 South,
R-35 East, NMPM;

3930 PSIG

NVAEU Well No. 5
Unit B, Section 18, T-17 South,
R-35 East, NMPM;

3515 PSIG

NVAEU Well No. 8
Unit H, Section 18, T-17 South,
R-35 East, NMPM;

3870 PSIG

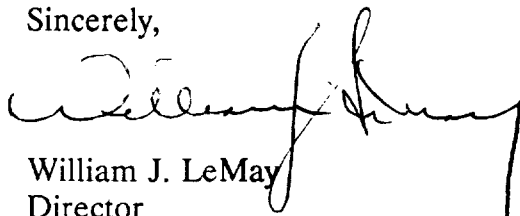
NVAEU Well No. 11
Unit N, Section 18, T-17 South,
R-35 East, NMPM.

3950 PSIG

All in Lea County, New Mexico.

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,



William J. LeMay
Director

cc: Oil Conservation Division - Hobbs
File: Case No. 6248
WFX-551
D. Catanach
R. Brown

NO WAITING PERIOD

COMPANY: Mobil Exploration & Producing U.S. Inc.
ADDRESS: P.O. Box 633
CITY, STATE, ZIP: Midland, Texas 79702-0633
ATTENTION: Judy Dixon

Re: Injection Pressure Increase
N. Vacuum Also East Unit

Lea County, New Mexico

Dear Sir:

Reference is made to your request dated April 9, 1991, to increase the surface injection pressure on 6 wells within the N. Vacuum Also East Unit Pressure Maintenance Project. This request is based on step rate tests conducted on these wells during March, 1991. The results of the tests have been reviewed by my staff and we feel an increase in injection pressure on these wells is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following wells:

<u>Well & Location</u>	<u>Maximum Injection Surface Pressure</u>
<u>NUAEU Well No. 1</u> <u>Unit J, Section 7, T-17South, R-35 East, NMPM</u>	<u>3800 PSIG</u>
<u>NUAEU Well No. 2</u> <u>Unit H, Section 7, T-17South, R-35 East, NMPM</u>	<u>4250 PSIG</u>
<u>NUAEU Well No. 3</u> <u>Unit N, Section 7, T-17South, R-35 East, NMPM</u>	<u>3930 PSIG</u>
<u>NUAEU Well No. 5</u> <u>Unit B, Section 18, T-17South, R-35 East, NMPM</u>	<u>3515 PSIG</u>
<u>NUAEU Well No. 8</u> <u>Unit A, Section 8, T-17South, R-35 East, NMPM</u>	<u>3870 PSIG</u>
<u>NUAEU Well No. 11</u> <u>Unit N, Section 18, T-17South, R-35 East, NMPM</u>	<u>3950 PSIG</u>

Act in Lea County, New Mexico.

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

xc: T. GALLEGOS

D. CATANACH

FILE-

Case No. 6248
WRK-551

OCD-

14660

R Brown

OIL CONSERVATION DIVISION

Mobil Exploration & Producing U.S. Inc.

'91 APR 12 AM 9 04

April 9, 1991

P.O. BOX 633
MIDLAND, TEXAS 79702-0633

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

SNYDER ASSET TEAM
ENVIRONMENTAL, REGULATORY &
LOSS PREVENTION

PHONE (915) 688-1753
FACSIMILE (915) 688-2050

Attention: Mr. W. J. LeMay

**INJECTION PRESSURE INCREASE REQUEST
NORTH VACUUM ABO EAST UNIT
WELLS NOS. 1, 2, 3, 5, 8, 11
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO**

Gentlemen:

Under the provisions of Order No. R-5801 dated September 20, 1978 and Order No. WFX-551 dated October 1, 1985, permission was granted 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. A step-rate test for these wells has been completed which shows that higher pressure will not result in migration of the injected fluid from the Abo formation. Permission is requested to increase the injection pressure as follows:

	<u>INJECTION INTERVALS</u>	<u>PRESENT SURFACE INJECTION PRESSURE LIMIT</u>	<u>REQUESTED SURFACE INJECTION PRESSURE LIMIT</u>
WELL NO. 1 UNIT J, SEC. 7 T-17-S, R-35-E ORDER NO. WFX-551	8657-8759'	3400 PSIG	3800 PSIG
WELL NO. 2 UNIT, J. SEC. 7 T-17-S, R-35-E ORDER NO. WFX-551	8605-8668'	3990 PSIG	4250 PSIG
WELL NO. 3 UNIT N, SEC. 7 T-17-S, R-35-E ORDER NO. WFX-551	<u>N/A</u> +8800'	3500 PSIG	3930 PSIG

State of New Mexico
North Vacuum Abo East Unit
Wells No. 1, 2,3,5,8,11
Lea County , New Mexico

-2-

April 9, 1991

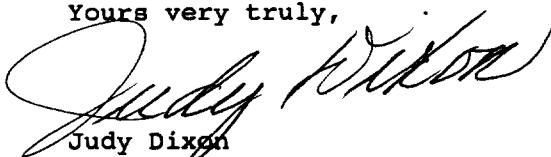
WELL NO. 5
UNIT B, SEC. 18 8792-8810' 3325 PSIG 3515 PSIG
T-17-S, R-35-E
ORDER NO. WFX-551

WELL NO. 8
UNIT H, SEC. 18 8733-8873' 3634 PSIG 3870 PSIG
T-17-S, R-35-E
Order No. R-5801

WELL NO. 11
UNIT N, SEC. 18 8672-8722' 3910 PSIG 3950 PSIG
T-17-S, R-35-E
Order No. R-5801

Enclosed are copies of the Step-rate test.

Yours very truly,



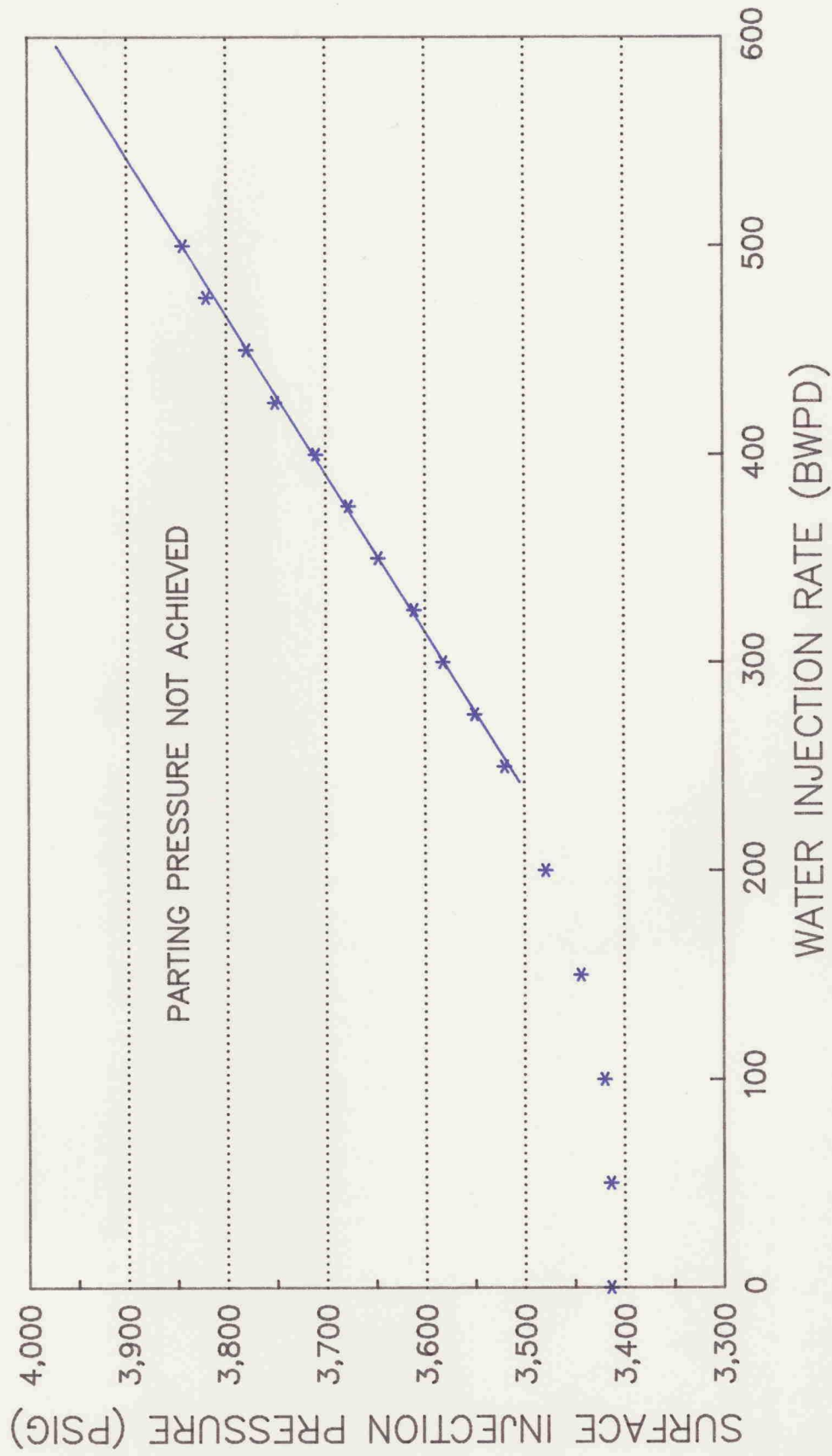
Judy Dixon
Environmental/Regulatory Technician

JWDixon

Attachments

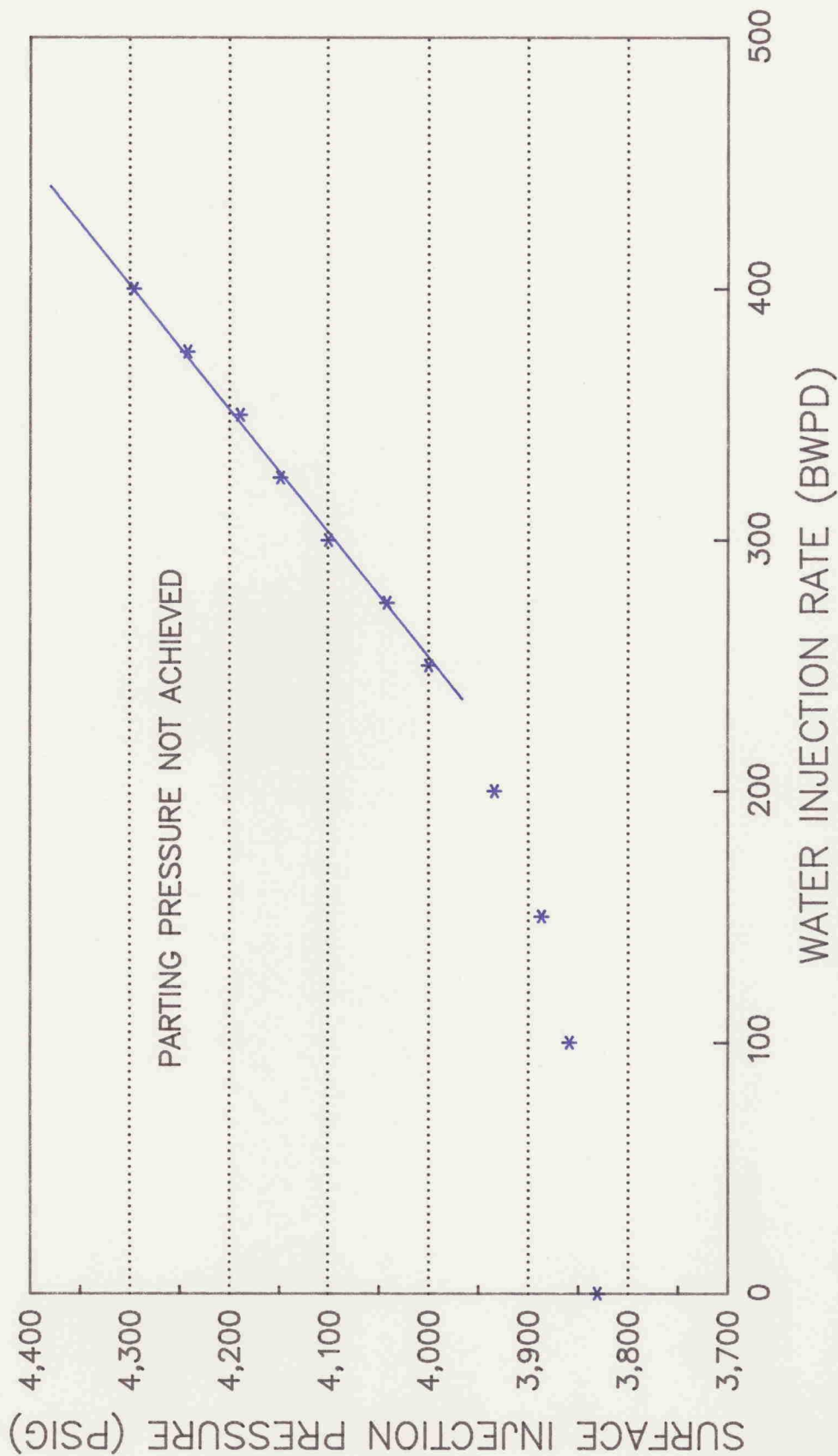
cc: District Director OCD - Hobbs
Central Files
Regulatory Files
Proration Acct.
Reservoir Engr. -M. Jimenez - 1142 TCB
Production Foremen - Buckeye

NVAE NO. 1 STEP RATE TEST
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO



DATE OF TEST: 3-12-91

NVAE NO. 2 STEP RATE TEST
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO

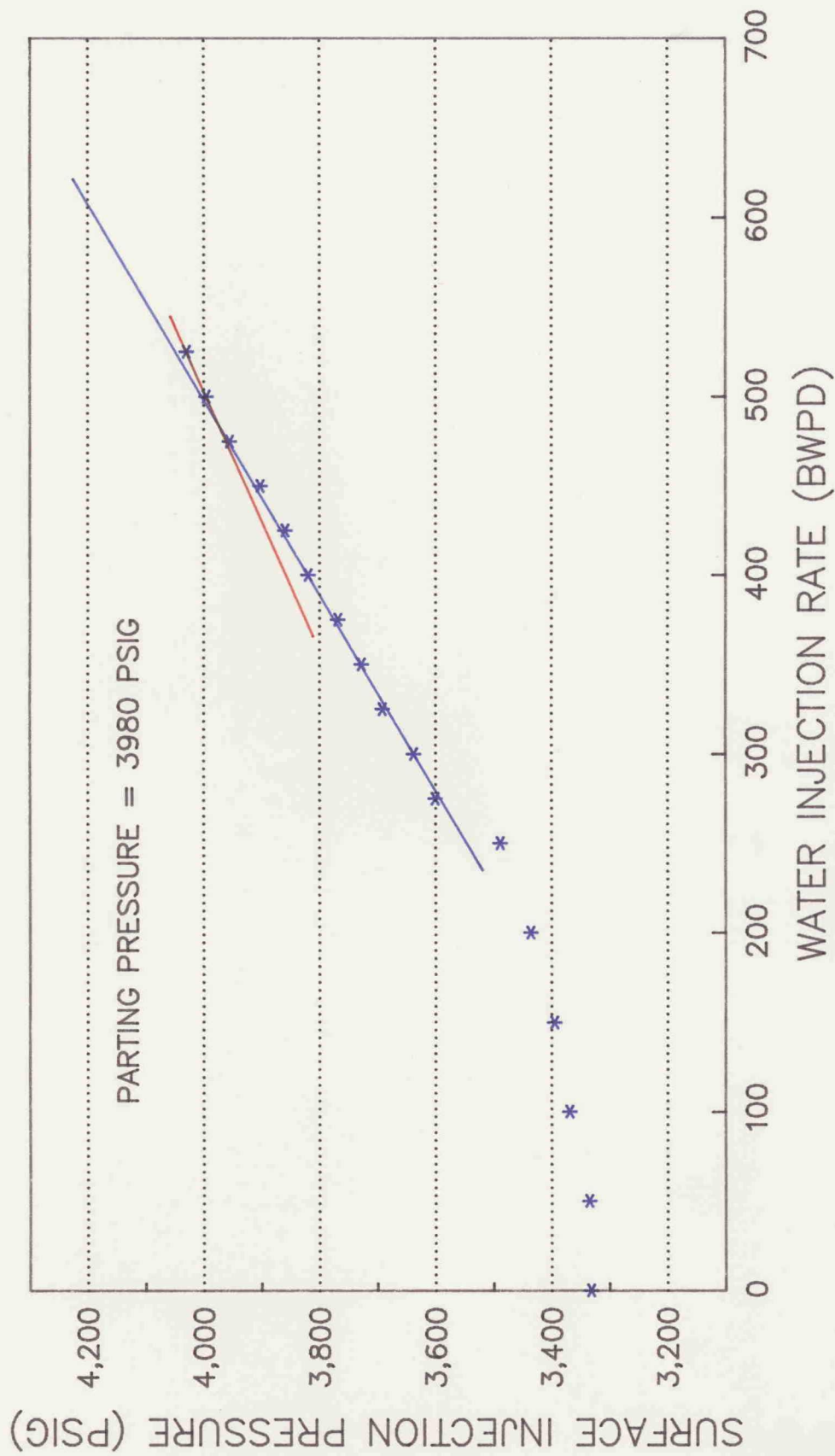


DATE OF TEST: 3-18-91

NVAE NO. 3 STEP RATE TEST

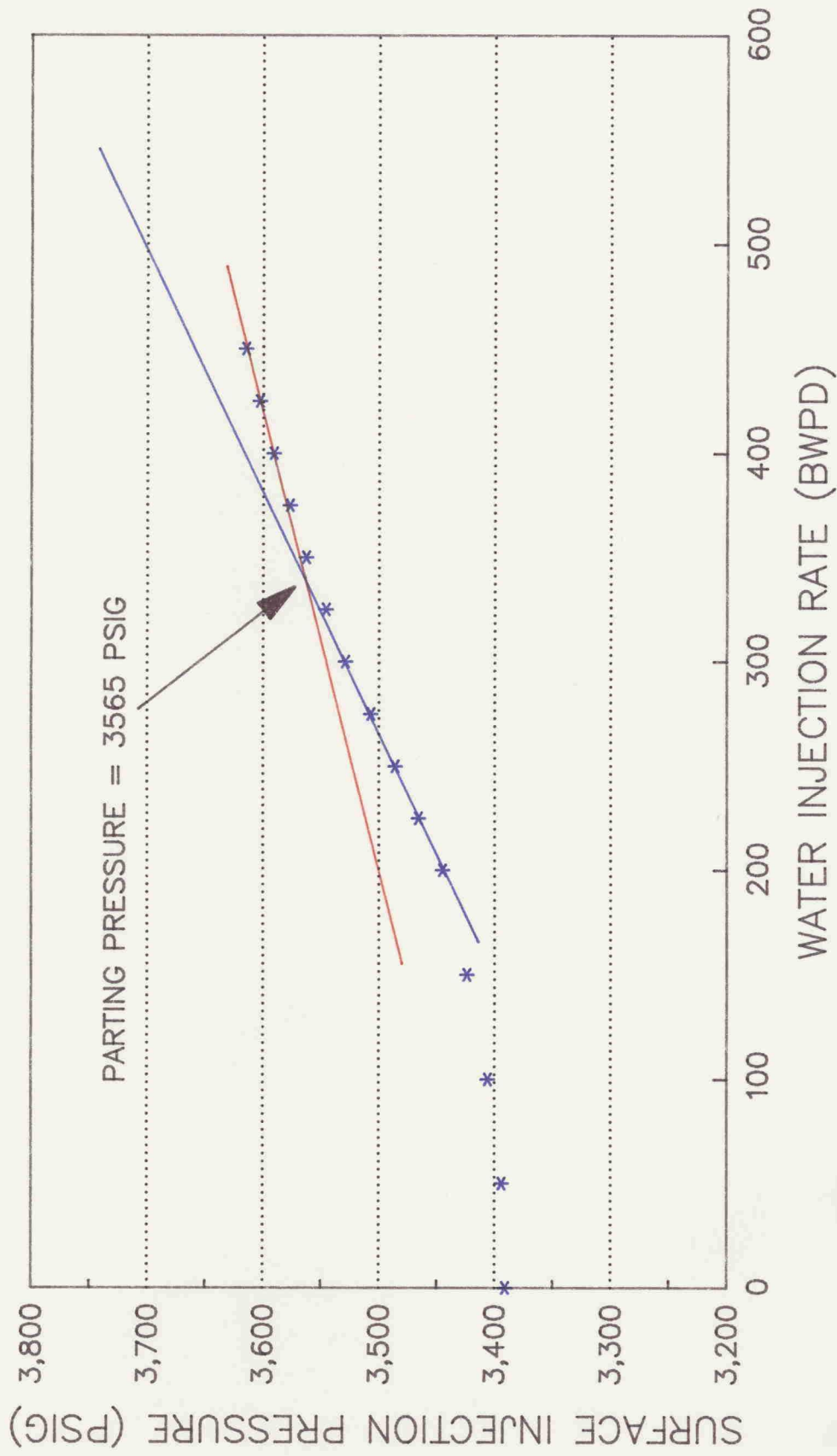
NORTH VACUUM ABO FIELD

LEA COUNTY, NEW MEXICO



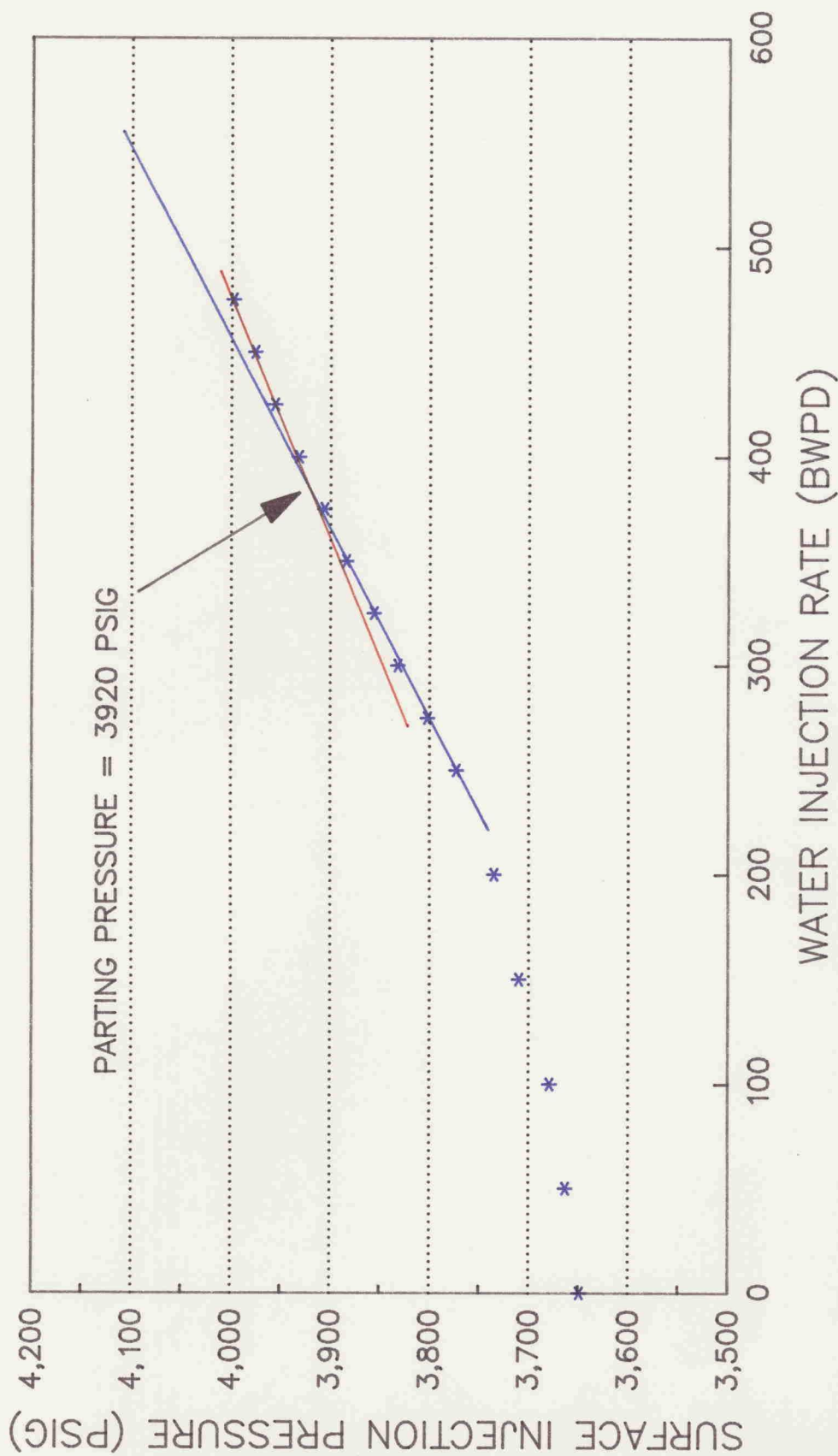
DATE OF TEST: 3-6-91

NVAE NO. 5 STEP RATE TEST
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO



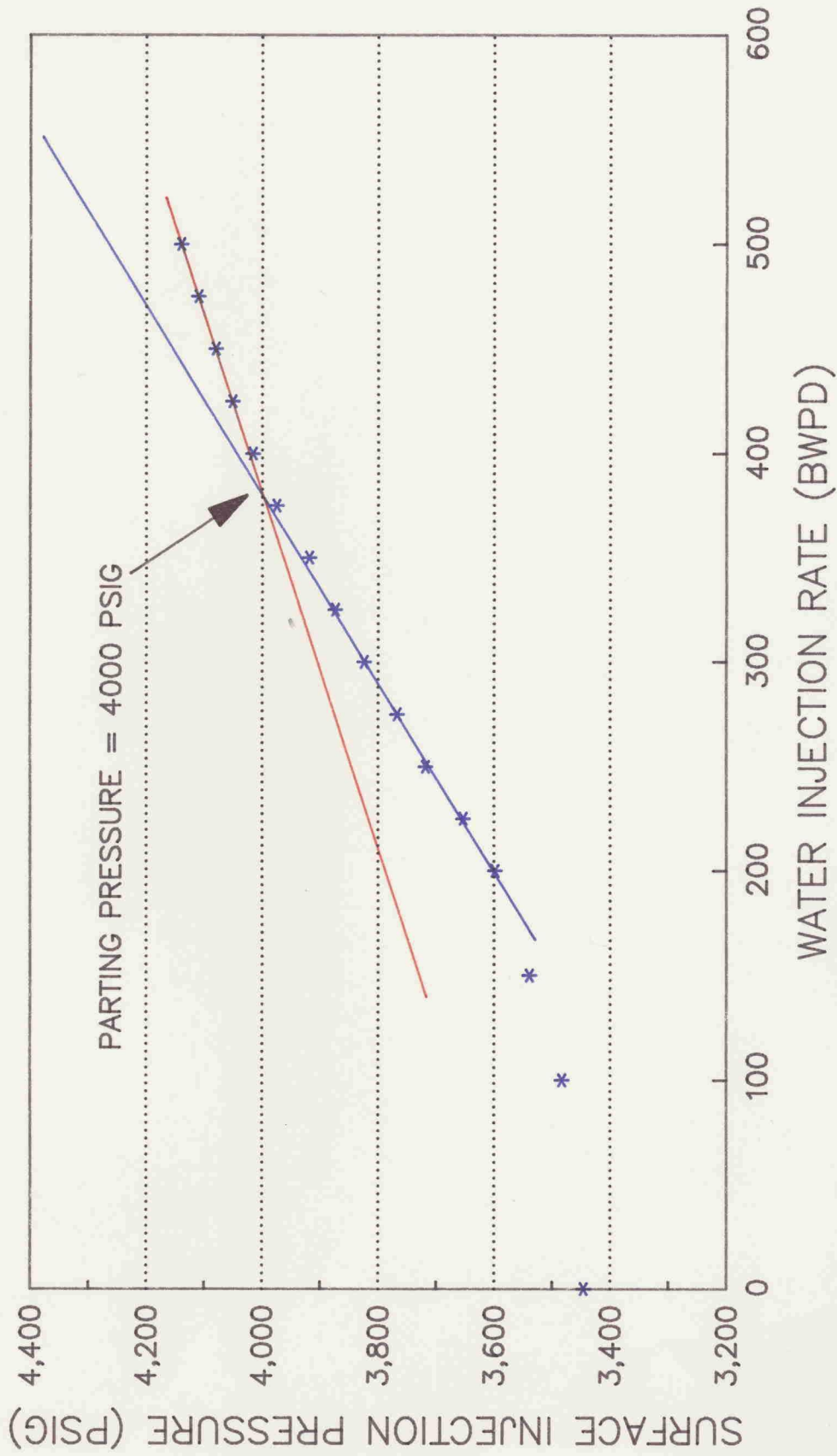
DATE OF TEST: 3-5-91

NVAE NO. 8 STEP RATE TEST NORTH VACUUM ABO FIELD LEA COUNTY, NEW MEXICO



DATE OF TEST: 3-20-91

NVAE NO. 11 STEP RATE TEST
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO



DATE OF TEST: 3-19-91



OIL CONSERVATION DIVISION
RECEIVED
STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE
APR 12 1991
AM 10 47

BRUCE KING
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc. N Vac Abo E Ut	#8-H	18-17-35
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton

Jerry Sexton
Supervisor, District I

/bp



OIL CONSERVATION DIVISION
RECEIVED

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

'91 APR 22 AM 10 47

April 12, 1991

BRUCE KING
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc. N Vac Abo E Ut	#11-N	18-17-35
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



STATE OF NEW MEXICO OIL CONSERVATION DIVISION
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

April 12, 1991

BRUCE KING
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc. N Vac Ab E Ut	#1-J	7-17-35
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

OIL CONSERVATION DIVISION
RECEIVED
91 APR 22 AM 10 46

April 12, 1991

BRUCE KING
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc. N Vac Abo E Ut #2-J	7-17-35
Operator	Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



OIL CONSERVATION DIVISION
RECEIVED

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

'91 APR 22 AM 10 46

April 12, 1991

BRUCE KING
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc. N Vac Abo E Ut	#3-N	7-17-35
Operator	Lease & Well No.	Unit
		S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

April 12, 1991

BRUCE KING
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

OIL CONSERVATION DIVISION
RECEIVED
91 APR 22 AM 10 46

OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

I have examined the step rate test for the:

Mobil Exploration & Producing U.S. Inc.	N Vac Abo E Ut	#5-B	18-17-35
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton
Supervisor, District I

/bp

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY



2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

6248

November 2, 1994

DEC 12 '94

Mobil Exploration & Producing U.S., Inc.
P.O. Box 633
Midland, Texas 79702-0633

Attn: Kay Pollock-Lyon

**RE: Injection Pressure Increase North Vacuum Abo East Pressure
Maintenance Project Lea County, New Mexico**

Dear Ms. Pollock-Lyon:

Reference is made to your request dated September 27, 1994 to increase the surface injection pressure on 10 wells. This request is based on step rate tests conducted on these wells July 21 and September 20, 1994. The results of the tests have been reviewed by my staff and we feel an increase in injection pressure on these wells is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following wells:

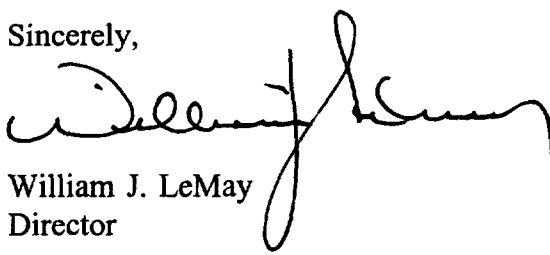
Well and Location	Maximum Injection Surface Pressure
North Vacuum Abo East Unit Well No.1 Unit J, Section 7,	4310 PSIG
North Vacuum Abo East Unit Well No.3 Unit N, Section 7,	4400 PSIG
North Vacuum Abo East Unit Well No.4 Unit P, Section 7,	4250 PSIG
North Vacuum Abo East Unit Well No.5 Unit B, Section 18,	3785 PSIG
North Vacuum Abo East Unit Well No.6 Unit D, Section 18,	4094 PSIG

Injection Pressure Increase
Mobil Exploration & Producing U.S., Inc.
November 2, 1994
Page 2

Well and Location	Maximum Injection Surface Pressure
North Vacuum Abo East Unit Well No.7 Unit F, Section 18,	3820 PSIG
North Vacuum Abo East Unit Well No.8 Unit H, Section 18,	4230 PSIG
North Vacuum Abo East Unit Well No.9 Unit J, Section 18,	4270 PSIG
North Vacuum Abo East Unit Well No.10 Unit L, Section 18,	3905 PSIG
North Vacuum Abo East Unit Well No.11 Unit N, Section 18,	4240 PSIG
All wells located in Township 17 South, Range 35 East, Lea County, New Mexico.	

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,


William J. LeMay
Director

WJL/BES

cc: Oil Conservation Division - Hobbs
File: 4th Quarter PSI-X; Case File No.6248

DEC 12 '94