







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

June 6, 1988

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

Attention: M.E. Sweeney

RE: Injection Pressure Increase  
State "N" Lease Waterflood Project  
North Vacuum Abo Pool  
Lea County, New Mexico

Dear Sir:

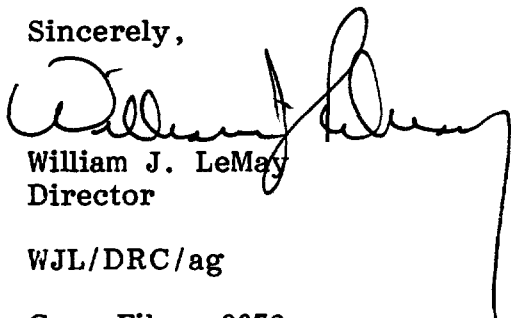
Reference is made to your request dated May 18, 1988, to increase the surface injection pressure on the State "N" Well No. 2. This request is based on a step rate test conducted on the well on April 19, 1988. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on the well is justified at this time.

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

<u>WELL &amp; LOCATION</u>	<u>MAXIMUM INJECTION SURFACE PRESSURE</u>
State "N" Well No. 2 735 FNL & 840 FWL (Unit D) Section 10, T-17 South, R-34 East, NMPM, Lea County, New Mexico	2840 PSIG

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". The signature is fluid and cursive, with a long vertical stroke extending downwards from the end of the name.

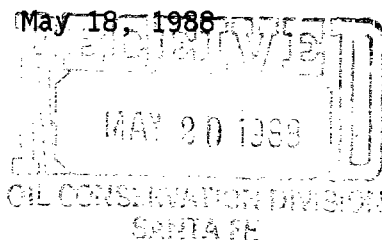
William J. LeMay  
Director

WJL/DRC/ag

Case File - 9072  
D. McDonald  
D. Catanach  
Oil Conservation Division - Hobbs

# Mobil Exploration & Producing U.S. Inc.

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



P.O. BOX 633  
MIDLAND, TEXAS 79702  
MIDLAND DIVISION

Attention: Mr. W. J. LeMay

INJECTION PRESSURE INCREASE REQUEST  
NORTH VACUUM ABO FIELD  
STATE "N"  
WELL NO. 2  
LEA COUNTY, NEW MEXICO

Gentlemen:

Under the provisions of Order No. R-8397 dated February 17, 1987; permission was granted to inject water into the Abo formation for the subject well. The order limited the pressure on the injection well to no more than 0.2 psi. per foot to the uppermost injection interval. A step-rate test for this well 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. 2 UNIT D, SEC. 10 T-17-S, R-34-E	8714-8783'	1743 psig	2840 psig

Enclosed is a copy of the Step-rate test.

Yours very truly,

M. E. Sweeney  
Environmental & Regulatory Manager

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

CCSmith/jlt

Attachments  
cc: District Director OCD - Hobbs

A:M823849A.CCS

STEP RATE TEST  
-----

COMPANY : MOBIL EXPLORATION & PRODUCING U.S. INC.  
 LEASE: STATE N  
 WELL NO. 2  
 LOCATION D-10-T17S-R34E  
 TEST DATE: 4-19-88  
 PERFORATIONS: 8714-8783'  
 TOTAL DEPTH: 8970'  
 PLUG BACK TD: 8909'  
 PACKER SET AT: 8660'

TIME	SURFACE PRESSURE (PSIG)	RATE (BWPD)
-----		
07:22	1699	0
07:23	1693	100
07:24	1688	100
07:25	1696	100
07:26	1701	100
07:27	1705	100
07:28	1708	100
07:29	1711	100
07:30	1714	100
07:31	1716	100
07:32	1719	100
07:33	1721	100
07:34	1723	100
07:35	1725	100
07:36	1727	100
07:37	1729	100
07:38	1730	100
07:39	1732	200
07:40	1734	200
07:41	1747	200
07:42	1756	200
07:43	1764	200
07:44	1772	200
07:45	1779	200
07:46	1785	200
07:47	1791	200
07:48	1797	200
07:49	1803	200
07:50	1808	200
07:51	1813	200
07:52	1818	200
07:53	1824	200
07:54	1828	300
07:55	1839	300
07:56	1854	300
07:57	1865	300
07:58	1875	300
07:59	1885	300
08:00	1894	300
08:01	1902	300
08:02	1911	300
08:03	1919	300
08:04	1927	300
08:05	1934	300

08:06	1942	300
08:07	1949	300
08:08	1956	300
08:09	1963	400
08:10	1981	400
08:11	1996	400
08:12	2009	400
08:13	2017	400
08:14	2032	400
08:15	2043	400
08:16	2053	400
08:17	2064	400
08:18	2073	400
08:19	2083	400
08:20	2092	400
08:21	2101	400
08:22	2110	400
08:23	2118	400
08:24	2126	500
08:25	2144	500
08:26	2161	500
08:27	2176	500
08:28	2188	500
08:29	2201	500
08:30	2213	500
08:31	2224	500
08:32	2238	500
08:33	2249	500
08:34	2261	500
08:35	2272	500
08:36	2282	500
08:37	2293	500
08:38	2304	500
08:39	2316	600
08:40	2337	600
08:41	2353	600
08:42	2367	600
08:43	2381	600
08:44	2393	600
08:45	2405	600
08:46	2418	600
08:47	2429	600
08:48	2440	600
08:49	2451	600
08:50	2462	600
08:51	2472	600
08:52	2482	600
08:53	2492	600
08:54	2501	700
08:55	2523	700
08:56	2538	700
08:57	2552	700
08:58	2565	700
08:59	2576	700
08:00	2588	700
09:01	2600	700
09:02	2611	700
09:03	2622	700

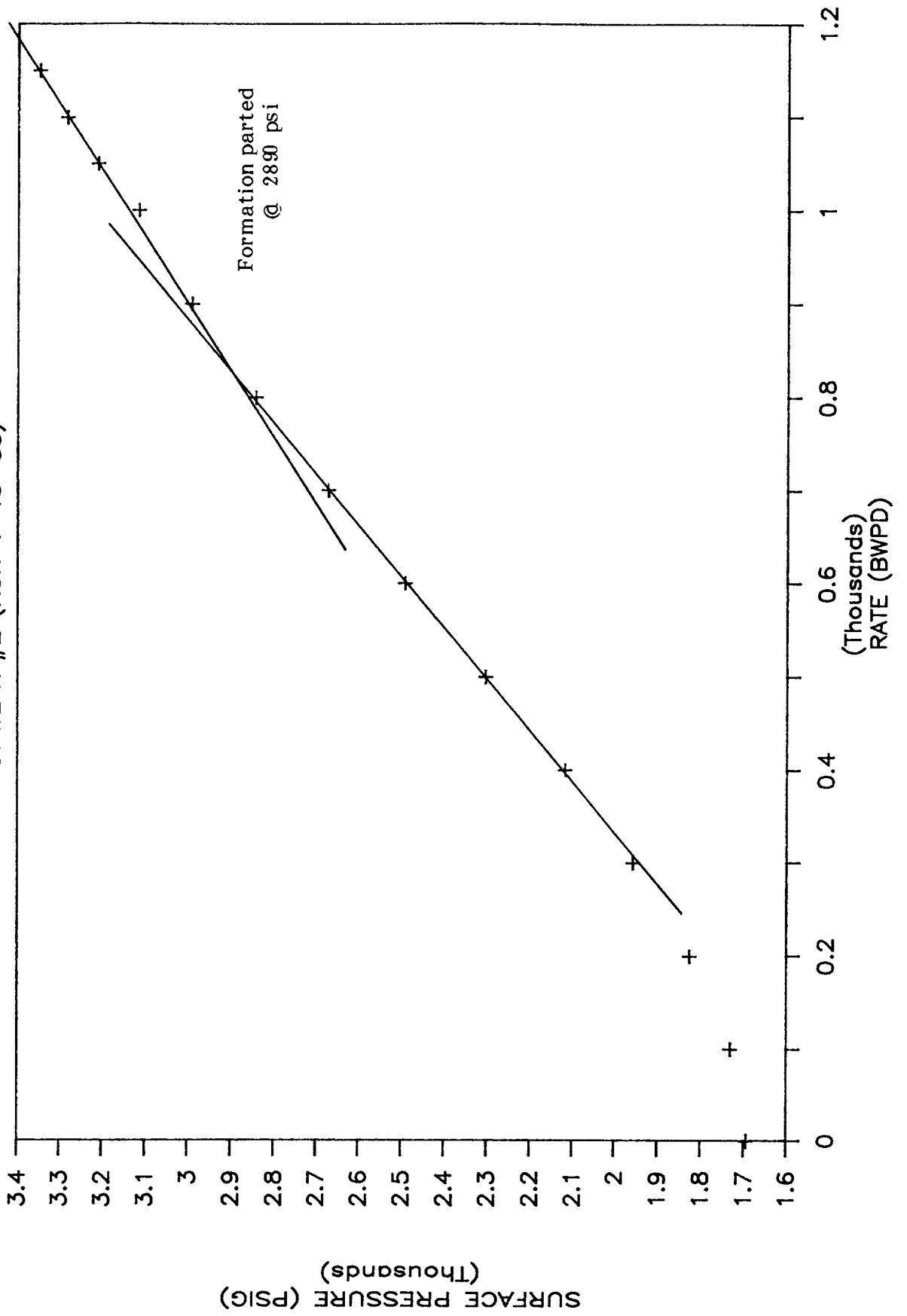
09:04	2633	700
09:05	2643	700
09:06	2652	700
09:07	2662	700
09:08	2671	700
09:09	2687	800
09:10	2703	800
09:11	2716	800
09:12	2728	800
09:13	2740	800
09:14	2750	800
09:15	2761	800
09:16	2774	800
09:17	2785	800
09:18	2794	800
09:19	2807	800
09:20	2815	800
09:21	2824	800
09:22	2833	800
09:23	2843	800
09:24	2851	900
09:25	2873	900
09:26	2890	900
09:27	2901	900
09:28	2913	900
09:29	2927	900
09:30	2935	900
09:31	2939	900
09:32	2947	900
09:33	2954	900
09:34	2962	900
09:35	2969	900
09:36	2976	900
09:37	2983	900
09:38	2992	900
09:39	2999	1000
09:40	3020	1000
09:41	3031	1000
09:42	3041	1000
09:43	3050	1000
09:44	3059	1000
09:45	3067	1000
09:46	3071	1000
09:47	3078	1000
09:48	3084	1000
09:49	3091	1000
09:50	3097	1000
09:51	3105	1000
09:52	3111	1000
09:53	3117	1000
09:54	3124	1050
09:55	3133	1050
09:56	3142	1050
09:57	3149	1050
09:58	3155	1050
09:59	3161	1050
09:00	3167	1050
10:01	3172	1050



10:02	3179	1050
10:03	3185	1050
10:04	3190	1050
10:05	3195	1050
10:06	3200	1050
10:07	3207	1050
10:08	3212	1050
10:09	3223	1100
10:10	3229	1100
10:11	3234	1100
10:12	3239	1100
10:13	3244	1100
10:14	3248	1100
10:15	3252	1100
10:16	3256	1100
10:17	3260	1100
10:18	3264	1100
10:19	3268	1100
10:20	3272	1100
10:21	3276	1100
10:22	3280	1100
10:23	3284	1100
10:24	3297	1150
10:25	3299	1150
10:26	3303	1150
10:27	3308	1150
10:28	3312	1150
10:29	3315	1150
10:30	3319	1150
10:31	3323	1150
10:32	3327	1150
10:33	3329	1150
10:34	3334	1150
10:35	3337	1150
10:36	3340	1150
10:37	3345	1150
10:38	3348	1150
10:39	3306	0
10:40	3270	0
10:41	3249	0
10:42	3232	0
10:43	3217	0
10:44	3203	0
10:45	3159	0

# STEP RATE TEST

STATE N #2 (RUN 4-19-88)





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

February 21, 1989

Mobil Exp & Prod. U.S., Inc.  
P.O. Box 633  
Midland, TX 79702

Attention: M.E. Sweeney

RE: Injection Pressure Increase  
State "N" Waterflood Project  
Lea County, New Mexico

Dear Mr. Sweeney:

Reference is made to your request dated February 9, 1989, to increase the surface injection pressure on the State "N" Lease Well No. 2. This request is based on a step rate test conducted on the well on January 27, 1989. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on the well is justified at this time.

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

<u>WELL AND LOCATION</u>	<u>MAXIMUM INJECTION SURFACE PRESSURE</u>
State "N" Well No. 2 Unit D, Section 10, T-17 South, R-34 East, NMPM, Lea County, New Mexico.	3530 PSIG

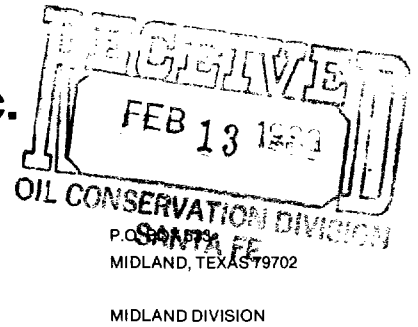
The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

William J. LeMay  
Director

cc: OCD - Hobbs  
T. Gallegos  
D. Catanach  
Case File: 9072

# Mobil Exploration & Producing U.S. Inc.



February 9, 1989

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 FIELD  
STATE "N" LEASE  
WELL NO. 2  
LEA COUNTY, NEW MEXICO**

Gentlemen:

Under the provisions of Order No. R-8397 dated February 17, 1987, 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 on 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. 2 UNIT D, SEC. 10 T-17-S, R-34-E Order No. R-8397	8714-8783'	2840 psig	3530 psig

Enclosed are copies of the Step-rate test.

Yours very truly,

M. E. Sweeney  
Environmental & Regulatory Manager

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

CCS/arr

Attachments

cc: District Director OCD - Hobbs

A:M904087A.CCS(1)

STEP RATE TEST  
-----

COMPANY: MOBIL EXPLORATION & PRODUCING U.S. INC.  
 LEASE: STATE N  
 WELL NO. 2  
 LOCATION: D18-T17S-R34E  
 TEST DATE: 01-27-89  
 PERFORATIONS: 8714' - 8783'  
 TOTAL DEPTH: 8970'  
 PLUG BACK TD: 8909'  
 PACKER SET AT: 8660'

TIME	SURFACE PRESSURE	RATE (BWPD)
-----		
10:08:19	27	0
10:09:19	27	0
10:10:19	27	0
10:11:19	27	0
10:12:19	2774	0
10:13:19	2770	0
10:14:19	2767	0
10:15:19	2765	0
10:16:19	2763	0
10:17:19	2772	0
10:18:19	2778	0
10:19:19	2782	100
10:20:19	2786	100
10:21:19	2789	100
10:22:19	2792	100
10:23:19	2795	100
10:24:19	2797	100
10:25:19	2800	100
10:26:19	2802	100
10:27:19	2804	100
10:28:19	2806	100
10:29:19	2809	100
10:30:19	2811	100
10:31:19	2813	100
10:32:19	2824	100
10:33:19	2832	100
10:34:19	2838	200
10:35:19	2844	200
10:36:19	2849	200
10:37:19	2854	200
10:38:19	2859	200
10:39:19	2864	200
10:40:19	2869	200
10:41:19	2873	200

10:42:19	2877	200
10:43:19	2881	200
10:44:19	2885	200
10:45:19	2889	200
10:46:19	2897	200
10:47:19	2910	200
10:48:19	2919	200
10:49:19	2928	300
10:50:19	2937	300
10:51:19	2944	300
10:52:19	2951	300
10:53:19	2959	300
10:54:19	2966	300
10:55:19	2973	300
10:56:19	2979	300
10:57:19	2985	300
10:58:19	2991	300
10:59:19	2997	300
11:00:19	3003	300
11:01:19	3009	300
11:02:19	3026	300
11:03:19	3036	300
11:04:19	3046	400
11:05:19	3055	400
11:06:19	3063	400
11:07:19	3071	400
11:08:19	3079	400
11:09:19	3087	400
11:10:19	3094	400
11:11:19	3102	400
11:12:19	3111	400
11:13:19	3111	400
11:14:19	3121	400
11:15:19	3128	400
11:16:19	3134	400
11:17:19	3153	400
11:18:19	3164	400
11:19:19	3175	500
11:20:19	3185	500
11:21:19	3193	500
11:22:19	3201	500
11:23:19	3210	500
11:24:19	3217	500
11:25:19	3225	500
11:26:19	3232	500
11:27:19	3240	500
11:28:19	3248	500
11:29:19	3255	500
11:30:19	3262	500
11:31:19	3270	500
11:32:19	3283	500
11:33:19	3292	500
11:34:19	3300	550
11:35:19	3308	550
11:36:19	3315	550
11:37:19	3322	550

11:38:19	3330	550
11:39:19	3337	550
11:40:19	3343	550
11:41:19	3350	550
11:42:19	3357	550
11:43:19	3363	550
11:44:19	3370	550
11:45:19	3376	550
11:46:19	3386	550
11:47:19	3397	550
11:48:19	3404	550
11:49:19	3412	600
11:50:19	3419	600
11:51:19	3426	600
11:52:19	3432	600
11:53:19	3439	600
11:54:19	3446	600
11:55:19	3450	600
11:56:19	3457	600
11:57:19	3463	600
11:58:19	3469	600
11:59:19	3474	600
12:00:19	3480	600
12:01:19	3485	600
12:02:19	3497	600
12:03:19	3504	600
12:04:19	3512	650
12:05:19	3518	650
12:06:19	3524	650
12:07:19	3529	650
12:08:19	3536	650
12:09:19	3541	650
12:10:19	3547	650
12:11:19	3552	650
12:12:19	3558	650
12:13:19	3562	650
12:14:19	3567	650
12:15:19	3572	650
12:16:19	3577	650
12:17:19	3588	650
12:18:19	3594	650
12:19:19	3599	700
12:20:19	3604	700
12:21:19	3610	700
12:22:19	3615	700
12:23:19	3621	700
12:24:19	3627	700
12:25:19	3633	700
12:26:19	3637	700
12:27:19	3643	700
12:28:19	3646	700
12:29:19	3651	700
12:30:19	3655	700
12:31:19	3659	700
12:32:19	3664	700
12:33:19	3668	700

12:34:19	3671	750
12:35:19	3679	750
12:36:19	3684	750
12:37:19	3689	750
12:38:19	3693	750
12:39:19	3697	750
12:40:19	3702	750
12:41:19	3706	750
12:42:19	3710	750
12:43:19	3714	750
12:44:19	3718	750
12:45:19	3721	750
12:46:19	3726	750
12:47:19	3733	750
12:48:19	3738	750
12:49:19	3742	800
12:50:19	3746	800
12:51:19	3749	800
12:52:19	3752	800
12:53:19	3756	800
12:54:19	3759	800
12:55:19	3763	800
12:56:19	3767	800
12:57:19	3771	800
12:58:19	3776	800
12:59:19	3776	800
13:00:19	3780	800
13:01:19	3788	800
13:02:19	3792	800
13:03:19	3796	800
13:04:19	3798	850
13:05:19	3800	850
13:06:19	3800	850
13:07:19	3803	850
13:08:19	3806	850
13:09:19	3809	850
13:10:19	3812	850
13:11:19	3815	850
13:12:19	3817	850
13:13:19	3820	850
13:14:19	3822	850
13:15:19	3825	850
13:16:19	3832	850
13:17:19	3835	850
13:18:19	3838	850
13:19:19	3841	900
13:20:19	3843	900
13:21:19	3846	900
13:22:19	3848	900
13:23:19	3849	900
13:24:19	3851	900
13:25:19	3853	900
13:26:19	3856	900
13:27:19	3856	900
13:28:19	3857	900
13:29:19	3860	900

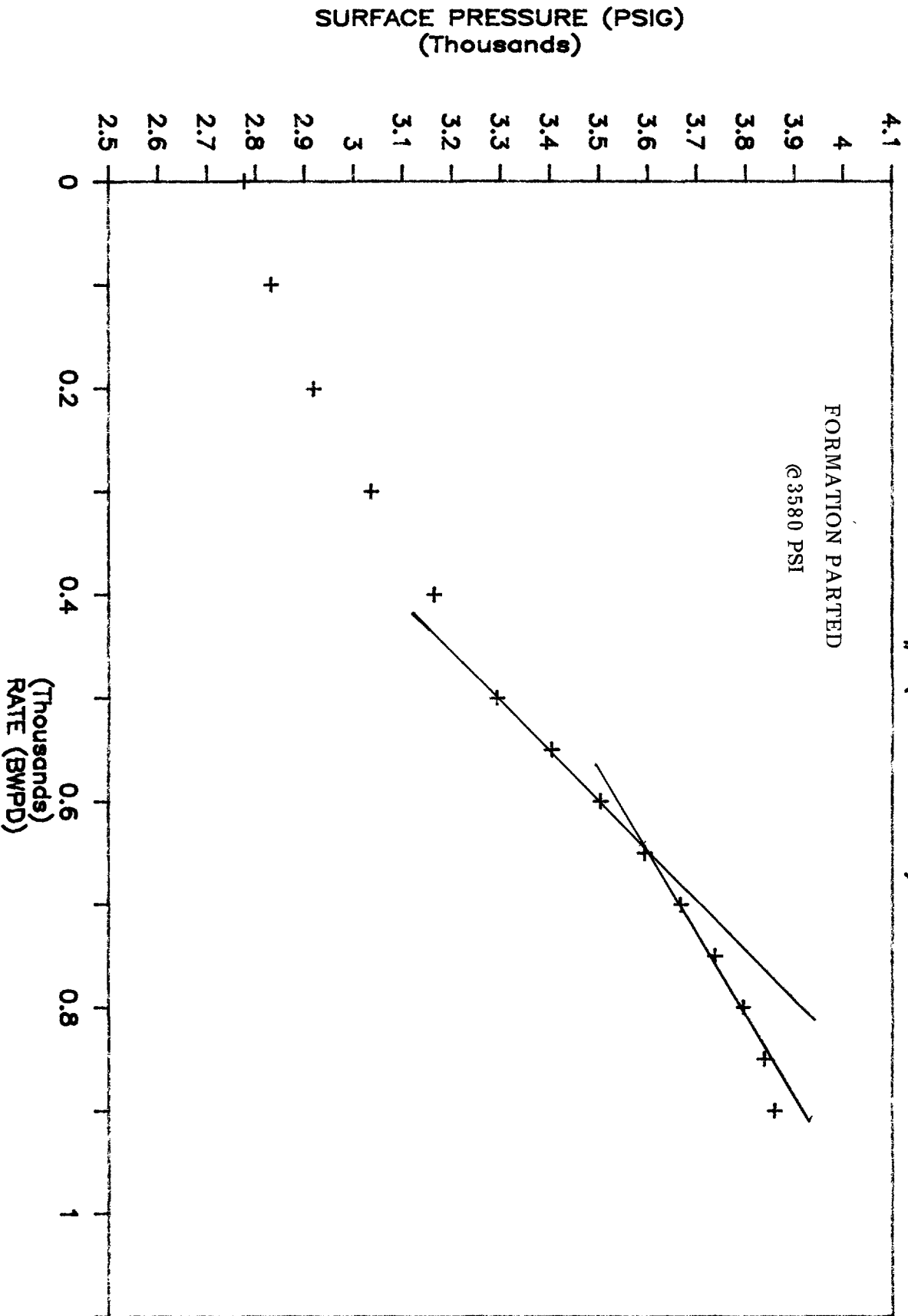


13:30:19	3862	SI
13:31:19	3864	SI
13:32:19	3778	SI
13:33:19	3775	SI
13:34:19	3766	SI
13:35:19	3757	SI
13:36:19	3750	SI
13:37:19	3743	SI
13:38:19	3736	SI
13:39:19	44	SI
13:40:19	27	SI
13:41:19	25	SI
13:42:19	23	SI
13:43:19	21	SI
13:44:19	18	SI
13:45:19	17	SI
13:46:19	16	SI
13:47:19	16	SI
13:48:19	16	SI
13:49:19	16	SI
13:50:19	16	SI
13:51:19	17	SI
13:52:19	17	SI
13:53:19	16	SI
13:54:19	16	SI
13:55:19	17	SI
13:56:19	16	SI
13:57:19	17	SI

# STEP RATE TEST

STATE N #2 (RUN 1--27-89)

FORMATION PARTED  
@3580 PSI



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

September 11, 1989

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

Attention: M.E. Sweeney

RE: Injection Pressure Increase  
State "N" Waterflood Project  
Lea County, New Mexico

Dear Mr. Sweeney:

Reference is made to your request dated August 10, 1989, to increase the surface injection pressure on the State "N" Lease Well No. 2. This request is based on a step rate test conducted on the well on July 13, 1989. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on the well is justified at this time.

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

WELL AND LOCATION

MAXIMUM INJECTION  
SURFACE PRESSURE

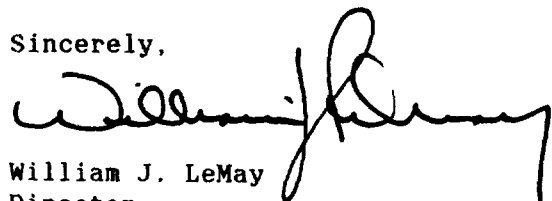
State "N" Well No. 2  
Unit D, Section, 10, T-17 South,  
R-34 East, NMPM, Lea County, New Mexico.

3890 PSIG

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.

Injection Pressure Increase  
Mobil Exploration and Producing U.S., Inc.  
September 11, 1989  
Page 2

Sincerely,

A handwritten signature in black ink, appearing to read "William J. LeMay". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

William J. LeMay  
Director

cc: Oil Conservation Division - Hobbs  
Case File 9072  
T. Gallegos  
D. Catanach

RECEIVED

Mobil Exploration & Producing U.S. Inc.

AUG 14 1989

August 10, 1989

OIL CONSERVATION DIV.  
SANTA FE

P.O. BOX 633  
MIDLAND, TEXAS 79702

MIDLAND DIVISION

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  
STATE "N"  
WELL NO. 2  
NORTH VACUUM ABO FIELD  
LEA COUNTY, NEW MEXICO


Gentlemen:

Under the provisions of Order No. R-8397 dated February 17, 1987; permission was granted to inject water into the Abo formation for the subject well. The order limited the pressure on the injection well to no more than 0.2 psi. per foot to the uppermost injection interval. A step-rate test for this well 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. 2 UNIT D, SEC. 10 T-17-S, R-34-E Order No. R-8397	8714-8783'	3530 psig	3890 psig

Enclosed are copies of the Step-rate test.

Yours very truly,

  
M. E. Sweeney  
Environmental & Regulatory Manager

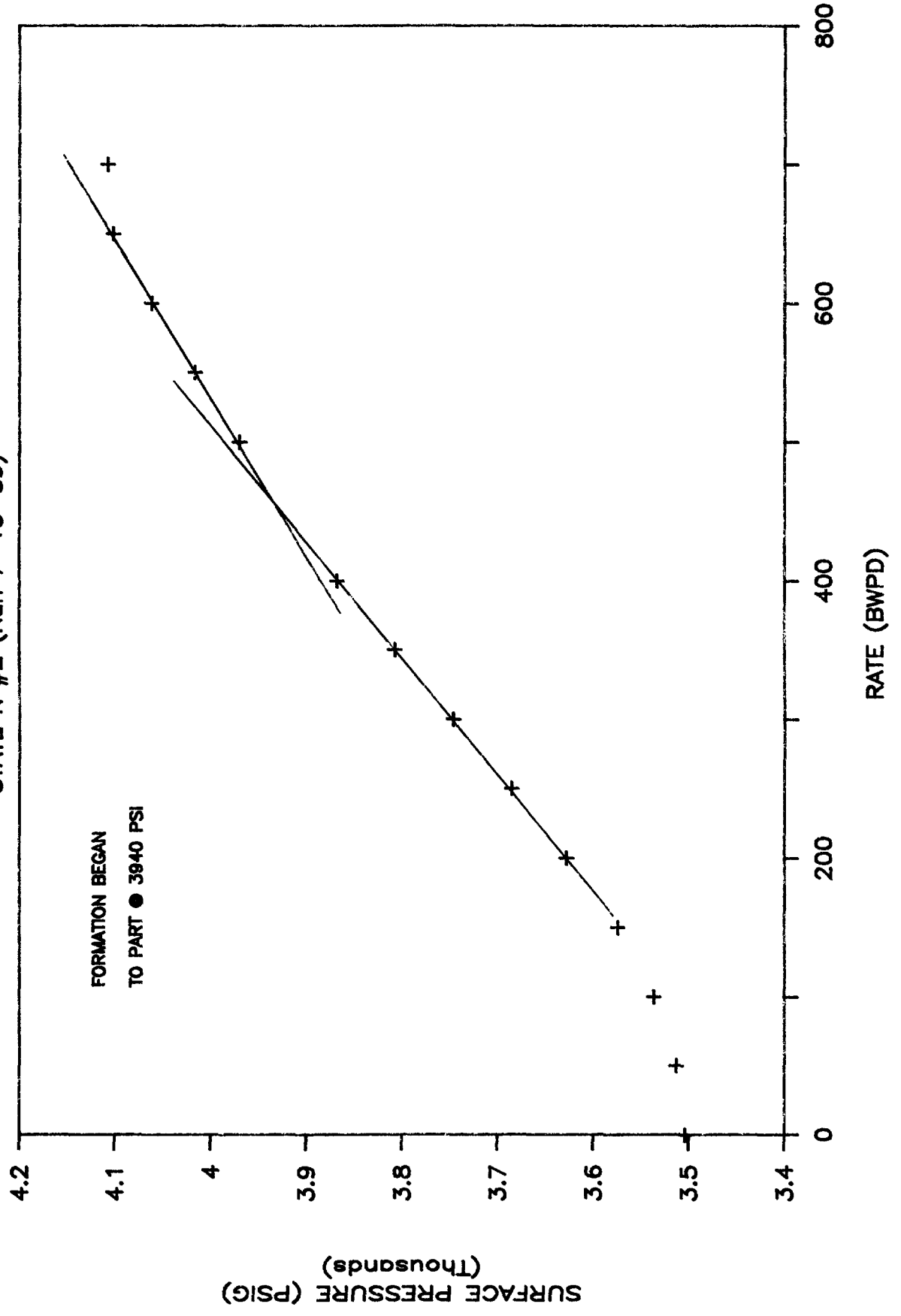
Mobil Exploration & Producing U.S. Inc.  
as Agent for  
Mobil Producing Texas & New Mexico, Inc.

CCSmith/arr  
Attachments  
cc: District Director OCD - Hobbs

A:M922287A.CCS(2)

# STEP RATE TEST

STATE N #2 (Run 7-13-89)



STEP RATE TEST  
-----

COMPANY: MOBIL EXPLORATION & PRODUCING U.S. INC.  
 LEASE: STATE N  
 WELL NO. 2  
 LOCATION: D10-T27S-R34E  
 TEST DATE: 7-13-89  
 PERFORATIONS: 8714' - 8783'  
 TOTAL DEPTH: 8970'  
 PLUG BACK TD: 8909'  
 PACKER SET AT: 8660'

TIME	SURFACE PRESSURE	RATE (BWPD)
10:16:13	3524	0
10:17:13	3521	0
10:18:13	3517	0
10:19:13	3515	0
10:20:13	3512	0
10:21:13	3510	0
10:22:13	3508	0
10:23:13	3506	0
10:24:13	3504	0
10:25:13	3504	0
10:26:13	3505	50
10:27:13	3508	50
10:28:13	3509	50
10:29:13	3510	50
10:30:13	3511	50
10:31:13	3511	50
10:32:13	3511	50
10:33:13	3511	50
10:34:13	3512	50
10:35:13	3512	50
10:36:13	3512	50
10:37:13	3512	50
10:38:13	3512	50
10:39:13	3513	50
10:40:13	3513	50
10:41:13	3516	100
10:42:13	3518	100
10:43:13	3520	100
10:44:13	3522	100
10:45:13	3524	100
10:46:13	3525	100
10:47:13	3527	100
10:48:13	3528	100
10:49:13	3529	100
10:50:13	3531	100
10:51:13	3532	100
10:52:13	3533	100
10:53:13	3534	100

10:54:13	3535	100
10:55:13	3536	100
10:56:13	3536	150
10:57:13	3542	150
10:58:13	3546	150
10:59:13	3549	150
11:00:13	3552	150
11:01:13	3554	150
11:02:13	3557	150
11:03:13	3560	150
11:04:13	3564	150
11:05:13	3565	150
11:06:13	3567	150
11:07:13	3569	150
11:08:13	3571	150
11:09:13	3573	150
11:10:13	3574	150
11:11:13	3582	200
11:12:13	3583	200
11:13:13	3588	200
11:14:13	3592	200
11:15:13	3596	200
11:16:13	3600	200
11:17:13	3602	200
11:18:13	3607	200
11:19:13	3610	200
11:20:13	3614	200
11:21:13	3617	200
11:22:13	3619	200
11:23:13	3623	200
11:24:13	3626	200
11:25:13	3628	200
11:26:13	3634	250
11:27:13	3639	250
11:28:13	3644	250
11:29:13	3648	250
11:30:13	3652	250
11:31:13	3656	250
11:32:13	3659	250
11:33:13	3662	250
11:34:13	3665	250
11:35:13	3669	250
11:36:13	3672	250
11:37:13	3675	250
11:38:13	3678	250
11:39:13	3677	250
11:40:13	3685	250
11:41:13	3689	300
11:42:13	3696	300
11:43:13	3701	300
11:44:13	3706	300
11:45:13	3710	300
11:46:13	3715	300
11:47:13	3718	300
11:48:13	3723	300
11:49:13	3726	300



11:50:13	3729	300
11:51:13	3733	300
11:52:13	3735	300
11:53:13	3740	300
11:54:13	3744	300
11:55:13	3746	300
11:56:13	3754	350
11:57:13	3759	350
11:58:13	3763	350
11:59:13	3768	350
12:00:13	3772	350
12:01:13	3776	350
12:02:13	3780	350
12:03:13	3784	350
12:04:13	3787	350
12:05:13	3791	350
12:06:13	3794	350
12:07:13	3798	350
12:08:13	3801	350
12:09:13	3804	350
12:10:13	3807	350
12:11:13	3815	400
12:12:13	3819	400
12:13:13	3823	400
12:14:13	3828	400
12:15:13	3832	400
12:16:13	3837	400
12:17:13	3840	400
12:18:13	3845	400
12:19:13	3848	400
12:20:13	3852	400
12:21:13	3856	400
12:22:13	3859	400
12:23:13	3861	400
12:24:13	3865	400
12:25:13	3868	400
12:26:13	3876	500
12:27:13	3886	500
12:28:13	3897	500
12:29:13	3902	500
12:30:13	3912	500
12:31:13	3922	500
12:32:13	3926	500
12:33:13	3930	500
12:34:13	3937	500
12:35:13	3943	500
12:36:13	3946	500
12:37:13	3953	500
12:38:13	3962	500
12:39:13	3967	500
12:40:13	3970	500
12:41:13	3952	550
12:42:13	3957	550
12:43:13	3966	550
12:44:13	3973	550
12:45:13	3977	550

12:46:13	3982	550
12:47:13	3986	550
12:48:13	3990	550
12:49:13	3996	550
12:50:13	3999	550
12:51:13	4002	550
12:52:13	4005	550
12:53:13	4008	550
12:54:13	4012	550
12:55:13	4016	550
12:56:13	4011	600
12:57:13	4014	600
12:58:13	4021	600
12:59:13	4026	600
13:00:13	4030	600
13:01:13	4033	600
13:02:13	4039	600
13:03:13	4042	600
13:04:13	4045	600
13:05:13	4048	600
13:06:13	4051	600
13:07:13	4053	600
13:08:13	4056	600
13:09:13	4058	600
13:10:13	4061	600
13:11:13	4066	650
13:12:13	4072	650
13:13:13	4075	650
13:14:13	4078	650
13:15:13	4080	650
13:16:13	4082	650
13:17:13	4084	650
13:18:13	4087	650
13:19:13	4088	650
13:20:13	4090	650
13:21:13	4092	650
13:22:13	4094	650
13:23:13	4096	650
13:24:13	4099	650
13:25:13	4101	650
13:26:13	4104	700
13:27:13	4107	700
13:28:13	4069	0
13:29:13	4060	0
13:30:13	4057	0
13:31:13	4051	0
13:32:13	23	0



STATE OF NEW MEXICO  
**ENERGY AND MINERALS DEPARTMENT**  
 OIL CONSERVATION DIVISION  
 HOBBS DISTRICT OFFICE  
 August 18, 1989

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.	State "N"	#2-D	10-17-34
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 23, 1991

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

Attention: Judy Dixon

RE: Injection Pressure Increase  
State "N" Well No. 2  
State "N" Lease Waterflood Project  
Lea County, New Mexico

Dear Ms. Dixon:

Reference is made to your request dated April 9, 1991, to increase the surface injection pressure on the State "N" Well No. 2. This request is based on a step rate test conducted on the well on February 21, 1991. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on the well is justified at this time.

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

WELL AND LOCATION

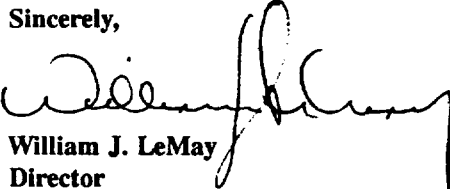
MAXIMUM INJECTION  
SURFACE PRESSURE

State "N" Well No. 2  
Unit D, Section 10, T-17 South,  
R-34 East, NMM, Lea County.

4230 PSIG

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 9072  
R. Brown  
D. Catanach

# Mobil Exploration & Producing U.S. Inc.

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  
STATE "N"  
WELL NO. 2  
NORTH VACUUM ABO FIELD  
LEA COUNTY, NEW MEXICO**

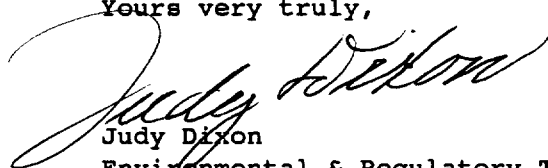
Gentlemen:

Under the provisions of Order No. R-8397 dated February 17, 1987; permission was granted to inject water into the Abo formation for the subject well. The order limited the pressure on the injection well to no more than 0.2 psi. per foot to the uppermost injection interval. A step-rate test for this well 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. 2 UNIT D, SEC. 10 T-17-S, R-34-E Order No. R-8397	8714-8783'	3890 PSIG	4230 psig

Enclosed are copies of the Step-rate test.

Yours very truly,



Judy Dixon  
Environmental & Regulatory Technician

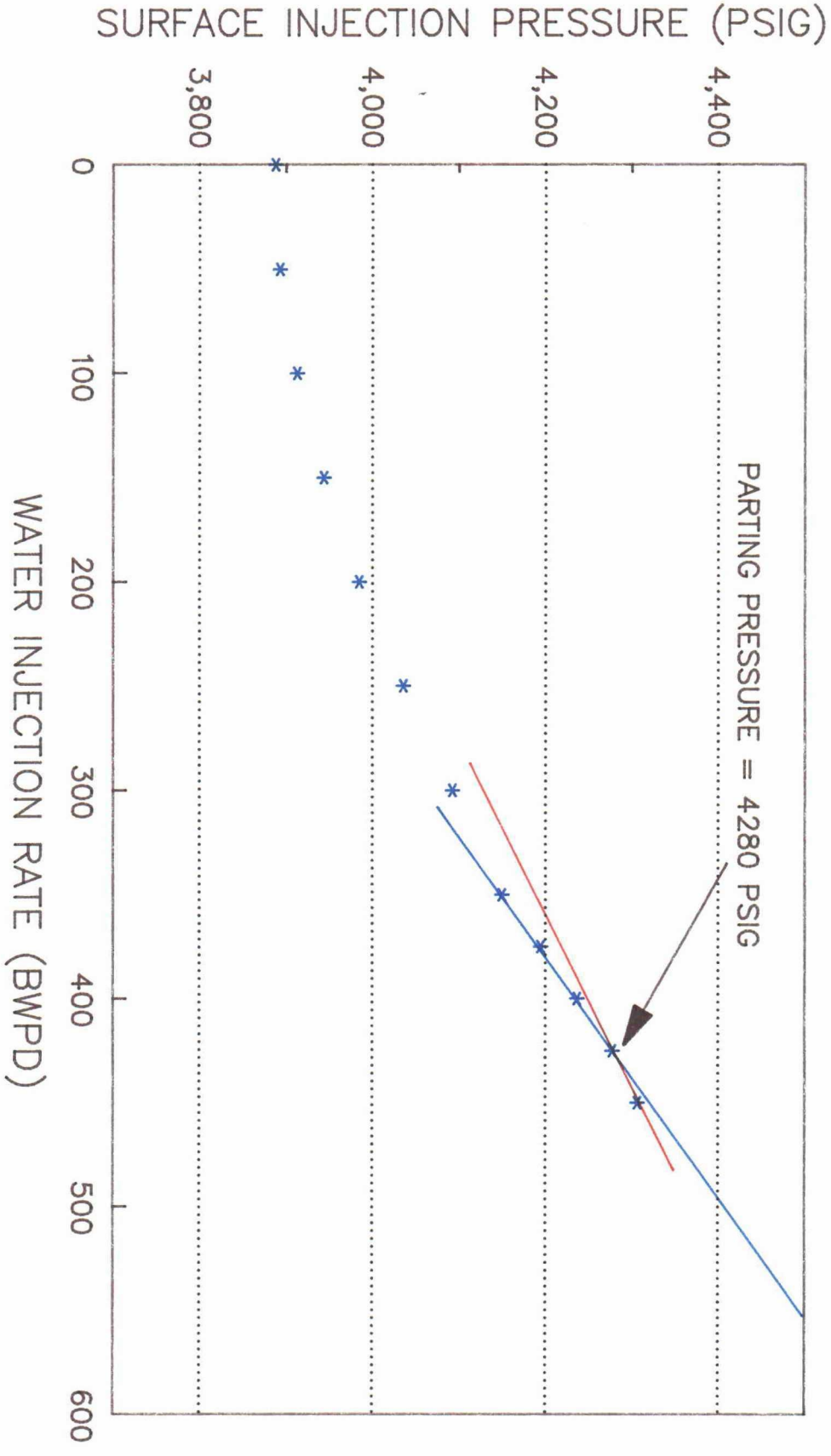
JWDixon

Attachments

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

A:M926148A.JWD(2)

STATE 'N' NO. 2 STEP RATE TEST  
 NORTH VACUUM ABO FIELD  
 LEA COUNTY, NEW MEXICO



DATE OF TEST: 2-21-91



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

OIL CONSERVATION DIVISION  
 RECEIVED

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.	State N #2-D	10-17-34
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

? Only 2 points in line

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

9072

November 9, 1994

Mobil Exploration & Producing U.S., Inc.  
P.O. Box 663  
Midland, Texas 79702-0633

Attn: Ms. Kaye Pollock-Lyon

DEC 12 1994

**RE: Injection Pressure Increase State "N" Lease Waterflood Project  
Lea County, New Mexico**

Dear Ms. Pollock-Lyon:

Reference is made to your request dated October 24, 1994, to increase the surface injection pressure on one well. This request is based on a step rate tests conducted on September 30, 1994. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on this well is justified at this time.

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

Well and Location	Maximum Injection Surface Pressure
State "N" Well No.2 735' FNL & 840' FWL Unit D, Section 10, Township 17 South, Range 34 East	4669 PSIG
This well located in Lea County, New Mexico.	

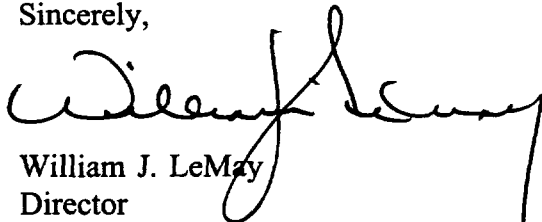


*Injection Pressure Increase*  
*Mobil Exploration & Producing U.S., Inc.*  
*November 9, 1994*  
*Page 2*

---

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: Case File No.9072

NOV 12 1994