

Mobil Exploration & Producing U.S. Inc.

P.O. BOX 633
MIDLAND, TEXAS 79702

May 12, 1989

MIDLAND DIVISION

RECEIVED

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

MAY 17 1989

OIL CONSERVATION DIV.
SANTA FE

Attention: Mr. W. J. LeMay

INJECTION PRESSURE INCREASE REQUEST
NORTH VACUUM ABO FIELD
NORTH VACUUM EAST UNIT
WELL NO. 2 & 5
LEA COUNTY, NEW MEXICO

Gentlemen:

Under the provisions of Order No. WFX-557 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:

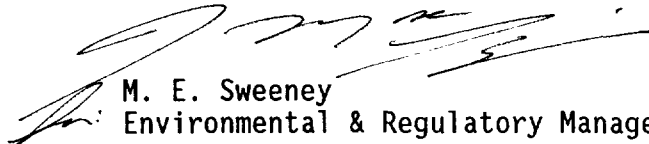
	<u>INJECTION INTERVALS</u>	<u>PRESENT SURFACE INJECTION PRESSURE LIMIT</u>	<u>REQUESTED SURFACE INJECTION PRESSURE LIMIT</u>
WELL NO. 2 UNIT J, SEC. 7 T-17-S, R-35-E Order No. WFX-551	8568-8755'	3538 psig	3990 psig
WELL No. 5 UNIT B SEC. 18 T-17-S, R-35-E Order No. WFX-551	8702-8791'	3158 psig	3325 psig

State of New Mexico
North Vacuum Abo East Unit

-2-

Enclosed are copies of the Step-rate test.

Yours very truly,



M. E. Sweeney
Environmental & Regulatory Manager

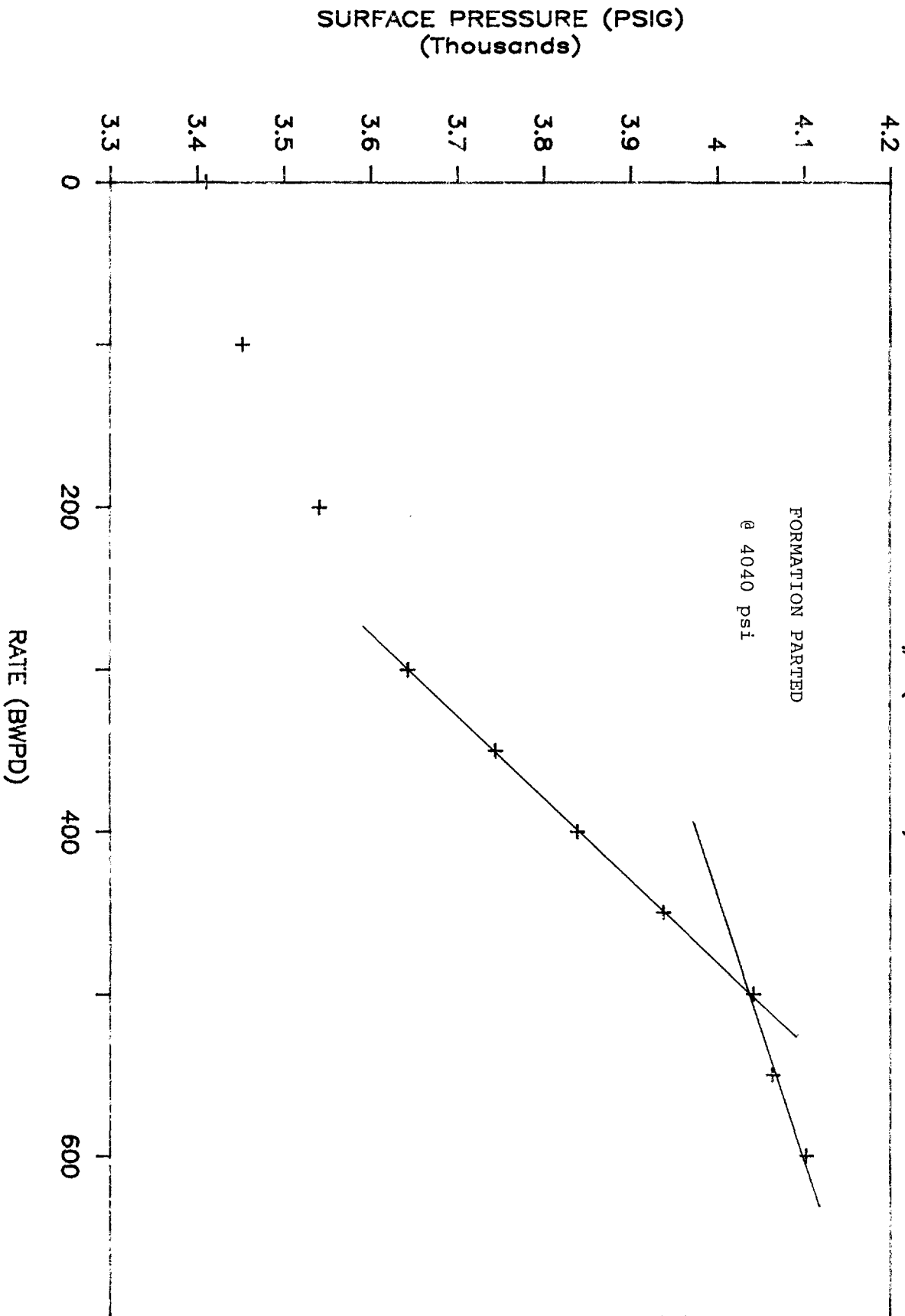
Mobil Exploration & Producing U.S. Inc.
as Agent for
Mobil Producing Texas & New Mexico, Inc.

CCSmith/arr

Attachments
cc: District Director OCD - Hobbs

STEP RATE TEST

NVAE #2 (04-25-89)



STEP RATE TEST

COMPANY: MOBIL EXPLORATION & PRODUCING U.S. INC.
 LEASE: NORTH VACUUM ABO EAST
 WELL NO. 2
 LOCATION: L7-T17S-R34E
 TEST DATE: 04-25-89
 PERFORATIONS: 8568' - 8755'
 TOTAL DEPTH: 8850'
 PLUG BACK TD: 8800'
 PACKER SET AT: 8480'

TIME	SURFACE PRESSURE	RATE (BWPD)

09:30:25	43	0
09:31:25	43	0
09:32:25	42	0
09:33:25	42	0
09:34:25	42	0
09:35:25	42	0
09:36:25	42	0
09:37:25	43	0
09:38:25	42	0
09:39:25	43	0
09:40:25	43	0
09:41:25	43	0
09:42:25	43	0
09:43:25	43	0
09:44:25	43	0
09:45:25	43	0
09:46:25	42	0
09:47:25	42	0
09:48:25	42	0
09:49:25	43	0
09:50:25	43	0
09:51:25	43	0
09:52:25	3413	0
09:53:25	3416	0
09:54:25	3412	0
09:55:25	3408	0
09:56:25	3418	0
09:57:25	3419	0
09:58:25	3427	0
09:59:25	3395	0
10:00:25	3410	0
10:01:25	3415	0
10:02:25	3407	0
10:03:25	3403	0
10:04:25	3399	0
10:05:25	3396	0
10:06:25	3403	0

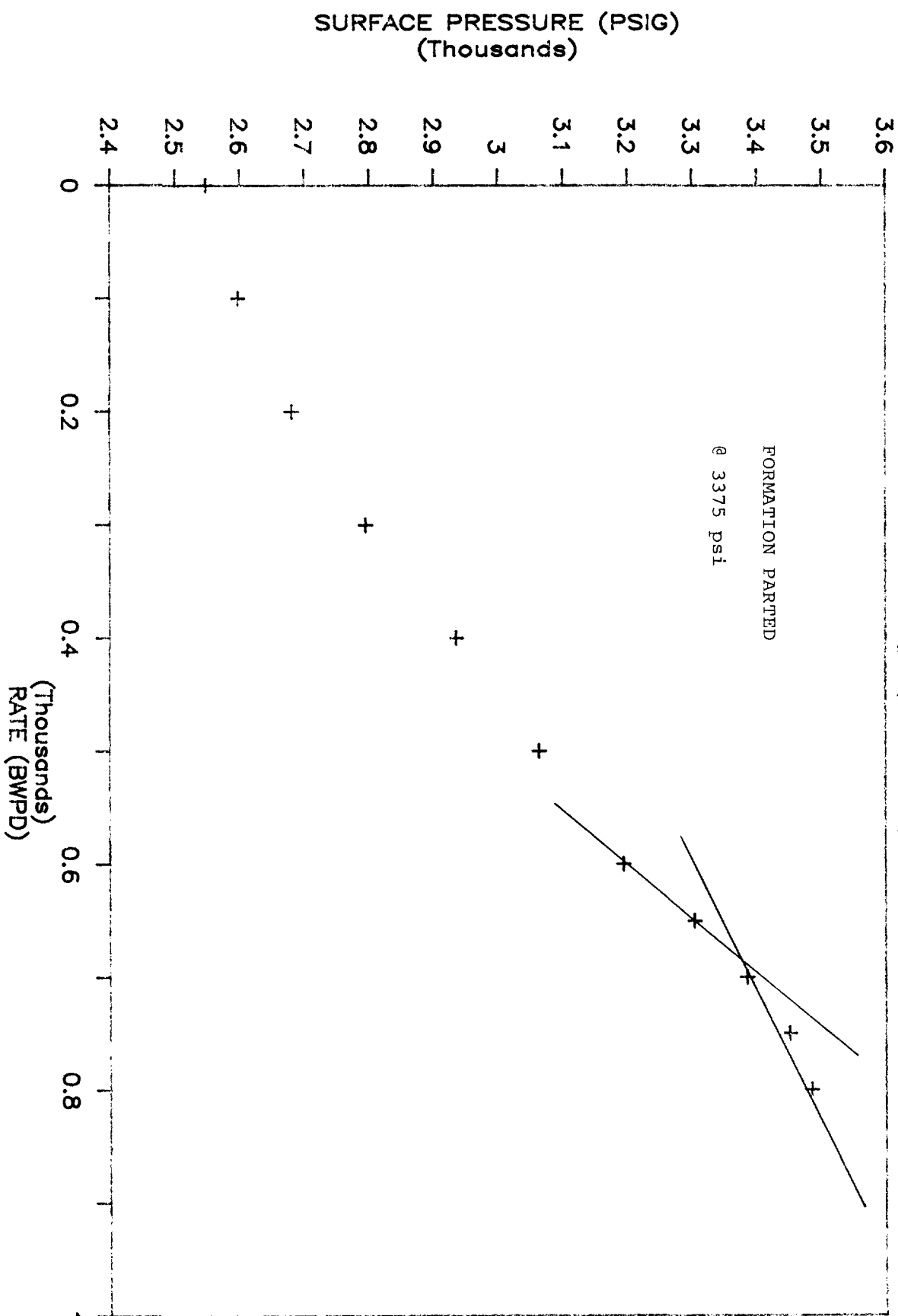
10:07:25	3406	0
10:08:25	3410	0
10:09:25	3412	100
10:10:25	3413	100
10:11:25	3415	100
10:12:25	3417	100
10:13:25	3418	100
10:14:25	3419	100
10:15:25	3421	100
10:16:25	3422	100
10:17:25	3423	100
10:18:25	3423	100
10:19:25	3423	100
10:20:25	3423	100
10:21:25	3426	100
10:22:25	3444	100
10:23:25	3452	100
10:24:25	3459	200
10:25:25	3464	200
10:26:25	3469	200
10:27:25	3474	200
10:28:25	3478	200
10:29:25	3482	200
10:30:25	3486	200
10:31:25	3489	200
10:32:25	3492	200
10:33:25	3495	200
10:34:25	3498	200
10:35:25	3501	200
10:36:25	3520	200
10:37:25	3534	200
10:38:25	3541	200
10:39:25	3548	300
10:40:25	3554	300
10:41:25	3560	300
10:42:25	3564	300
10:43:25	3572	300
10:44:25	3578	300
10:45:25	3582	300
10:46:25	3591	300
10:47:25	3597	300
10:48:25	3602	300
10:49:25	3608	300
10:50:25	3606	300
10:51:25	3619	300
10:52:25	3636	300
10:53:25	3644	300
10:54:25	3652	350
10:55:25	3659	350
10:56:25	3665	350
10:57:25	3670	350
10:58:25	3677	350
10:59:25	3682	350
11:00:25	3687	350
11:01:25	3693	350
11:02:25	3698	350

11:03:25	3703	350
11:04:25	3709	350
11:05:25	3714	350
11:06:25	3717	350
11:07:25	3738	350
11:08:25	3745	350
11:09:25	3752	400
11:10:25	3756	400
11:11:25	3762	400
11:12:25	3767	400
11:13:25	3772	400
11:14:25	3777	400
11:15:25	3782	400
11:16:25	3787	400
11:17:25	3794	400
11:18:25	3797	400
11:19:25	3802	400
11:20:25	3807	400
11:21:25	3812	400
11:22:25	3830	400
11:23:25	3839	400
11:24:25	3846	450
11:25:25	3852	450
11:26:25	3858	450
11:27:25	3868	450
11:28:25	3873	450
11:29:25	3878	450
11:30:25	3883	450
11:31:25	3888	450
11:32:25	3892	450
11:33:25	3897	450
11:34:25	3901	450
11:35:25	3905	450
11:36:25	3909	450
11:37:25	3931	450
11:38:25	3938	450
11:39:25	3946	500
11:40:25	3951	500
11:41:25	3960	500
11:42:25	3965	500
11:43:25	3970	500
11:44:25	3974	500
11:45:25	3979	500
11:46:25	3986	500
11:47:25	3990	500
11:48:25	3994	500
11:49:25	3998	500
11:50:25	4002	500
11:51:25	4005	500
11:52:25	4010	500
11:53:25	4042	500
11:54:25	4051	550
11:55:25	4052	550
11:56:25	4053	550
11:57:25	4054	550
11:58:25	4055	550

11:59:25	4056	550
12:00:25	4057	550
12:01:25	4059	550
12:02:25	4059	550
12:03:25	4060	550
12:04:25	4061	550
12:05:25	4062	550
12:06:25	4062	550
12:07:25	4063	550
12:08:25	4064	550
12:09:25	4066	600
12:10:25	4069	600
12:11:25	4073	600
12:12:25	4077	600
12:13:25	4081	600
12:14:25	4085	600
12:15:25	4092	600
12:16:25	4099	600
12:17:25	4103	600
12:18:25	3937	0
12:19:25	3923	0
12:20:25	3910	0
12:21:25	3898	0
12:22:25	641	0
12:23:25	30	0
12:24:25	33	0
12:25:25	27	0
12:26:25	24	0
12:27:25	22	0
12:28:25	20	0
12:29:25	20	0
12:30:25	20	0
12:31:25	20	0

STEP RATE TEST

NVAE #5 (04--26--89)



STEP RATE TEST

COMPANY: MOBIL EXPLORATION & PRODUCING U.S. INC.
 LEASE: NORTH VACUUM ABO EAST
 WELL NO. 5
 LOCATION: B18-T17S-R35E
 TEST DATE: 04-26-89
 PERFORATIONS: 8702' - 8791'
 TOTAL DEPTH: 8850'
 PLUG BACK TD: 8821'
 PACKER SET AT: 8606'

TIME	SURFACE PRESSURE	RATE (BWPD)

06:33:25	28	0
06:34:25	28	0
06:35:25	28	0
06:36:25	27	0
06:37:25	27	0
06:38:25	27	0
06:39:25	27	0
06:40:25	27	0
06:41:25	27	0
06:42:25	27	0
06:43:25	27	0
06:44:25	27	0
06:45:25	27	0
06:46:25	27	0
06:47:25	27	0
06:48:25	27	0
06:49:25	27	0
06:50:25	27	0
06:51:25	27	0
06:52:25	27	0
06:53:25	27	0
06:54:25	27	0
06:55:25	2566	0
06:56:25	2553	0
06:57:25	2547	0
06:58:25	2544	0
06:59:25	2541	0
07:00:25	2539	0
07:01:25	2537	0
07:02:25	2543	0
07:03:25	2548	0
07:04:25	2552	100
07:05:25	2555	100
07:06:25	2556	100
07:07:25	2558	100
07:08:25	2561	100

07:09:25	2562	100
07:10:25	2564	100
07:11:25	2565	100
07:12:25	2567	100
07:13:25	2568	100
07:14:25	2570	100
07:15:25	2571	100
07:16:25	2581	100
07:17:25	2591	100
07:18:25	2598	100
07:19:25	2604	200
07:20:25	2609	200
07:21:25	2614	200
07:22:25	2618	200
07:23:25	2622	200
07:24:25	2626	200
07:25:25	2630	200
07:26:25	2634	200
07:27:25	2637	200
07:28:25	2641	200
07:29:25	2644	200
07:30:25	2648	200
07:31:25	2664	200
07:32:25	2673	200
07:33:25	2682	200
07:34:25	2692	300
07:35:25	2700	300
07:36:25	2707	300
07:37:25	2714	300
07:38:25	2720	300
07:39:25	2726	300
07:40:25	2732	300
07:41:25	2738	300
07:42:25	2739	300
07:43:25	2747	300
07:44:25	2752	300
07:45:25	2756	300
07:46:25	2763	300
07:47:25	2781	300
07:48:25	2796	300
07:49:25	2806	400
07:50:25	2819	400
07:51:25	2828	400
07:52:25	2833	400
07:53:25	2839	400
07:54:25	2846	400
07:55:25	2853	400
07:56:25	2859	400
07:57:25	2865	400
07:58:25	2871	400
07:59:25	2878	400
08:00:25	2888	400
08:01:25	2911	400
08:02:25	2922	400
08:03:25	2935	400
08:04:25	2945	500

08:05:25	2954	500
08:06:25	2961	500
08:07:25	2969	500
08:08:25	2973	500
08:09:25	2979	500
08:10:25	2986	500
08:11:25	2993	500
08:12:25	2999	500
08:13:25	3005	500
08:14:25	3011	500
08:15:25	3017	500
08:16:25	3040	500
08:17:25	3049	500
08:18:25	3064	500
08:19:25	3072	600
08:20:25	3081	600
08:21:25	3090	600
08:22:25	3095	600
08:23:25	3103	600
08:24:25	3110	600
08:25:25	3117	600
08:26:25	3124	600
08:27:25	3130	600
08:28:25	3137	600
08:29:25	3143	600
08:30:25	3152	600
08:31:25	3170	600
08:32:25	3185	600
08:33:25	3194	600
08:34:25	3202	650
08:35:25	3209	650
08:36:25	3216	650
08:37:25	3222	650
08:38:25	3232	650
08:39:25	3238	650
08:40:25	3244	650
08:41:25	3250	650
08:42:25	3256	650
08:43:25	3261	650
08:44:25	3267	650
08:45:25	3272	650
08:46:25	3288	650
08:47:25	3295	650
08:48:25	3304	650
08:49:25	3309	700
08:50:25	3315	700
08:51:25	3318	700
08:52:25	3324	700
08:53:25	3329	700
08:54:25	3333	700
08:55:25	3338	700
08:56:25	3344	700
08:57:25	3348	700
08:58:25	3352	700
08:59:25	3357	700
09:00:25	3361	700

09:01:25	3378	700
09:02:25	3381	700
09:03:25	3385	700
09:04:25	3390	750
09:05:25	3393	750
09:06:25	3397	750
09:07:25	3399	750
09:08:25	3376	750
09:09:25	3406	750
09:10:25	3409	750
09:11:25	3412	750
09:12:25	3421	750
09:13:25	3424	750
09:14:25	3427	750
09:15:25	3429	750
09:16:25	3447	750
09:17:25	3448	750
09:18:25	3450	750
09:19:25	3451	800
09:20:25	3453	800
09:21:25	3458	800
09:22:25	3461	800
09:23:25	3464	800
09:24:25	3467	800
09:25:25	3470	800
09:26:25	3472	800
09:27:25	3475	800
09:28:25	3478	800
09:29:25	3485	800
09:30:25	3487	0
09:31:25	3490	0
09:32:25	3390	0
09:33:25	3376	0
09:34:25	3366	0
09:35:25	3357	0
09:36:25	59	0
09:37:25	33	0
09:38:25	27	0
09:39:25	24	0
09:40:25	23	0
09:41:25	23	0
09:42:25	23	0
09:43:25	23	0
09:44:25	23	0
09:45:25	23	0
09:46:25	24	0



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

May 22, 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 Expl. & Prod. U.S. Inc.	No. Vacuum Abo East Unit #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
Jerry Sexton
Supervisor, District I

/bp



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE
May 22, 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 Expl. & Prod US Inc.	No. Vacuum Abo East Unit #5-B	18-17-35
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

OK - YOU MIGHT READVISE POINTS

Very truly yours

Jerry Sexton
Supervisor, District I

/bp