

DATE IN 8/23/99	SUSPENSE N/R	ENGINEER BS	LOGGED BY KW	TYPE 1P1-14
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

2040 South Pacheco, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATION FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
[DD-Directional Drilling] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Directional Drilling

☐ NSL ☐ NSP ☐ DD ☐ SD

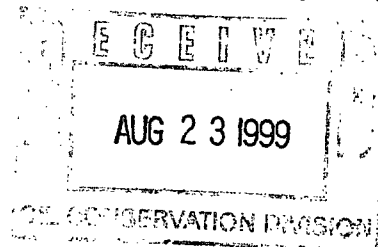
Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement

☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX ☐ PMX ☐ SWD ☒ IPI ☐ EOR ☐ PPR



[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☒ Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☐ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO

U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Certification

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Shirley Houchins
Print or Type Name

Shirley Houchins
Signature

EnvirandoRegl Technician
Title

Aug. 18, 1999
Date

Mobil Exploration & Producing U.S. Inc.

August 19, 1999

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

MIDLAND SITE
ENVIRONMENTAL, REGULATORY &
LOSS PREVENTION

State of New Mexico
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

ATTN: Lori Wrotenbery

**Injection Pressure Increase Request
North Vacuum Abo East Unit
Vacuum, Abo North
Lea County, New Mexico**

Dear Ms. Wrotenbery:

Mobil Exploration & Producing U.S. Inc., is requesting to increase injection pressures on the wells listed below. The purpose of these tests is to determine the surface injection pressure at which the formation will begin to fracture. Mobil then requests an increase in surface pressure to within 50 PSIG of the parting pressure.

<u>WELL</u>	<u>CURRENT PERMITTED INJECTION PRESSURE</u>	<u>PARTING PRESSURE</u>	<u>RECOMMENDED PRESSURE</u>
Well No. 5 Unit B, Sec. 18 T-17-S, R-35E Order # R-5801 (WFX-551)	3785	4050	4000
Well No. 6 Unit D, Sec. 18 T-17-S, R-35E Order #R-5801 (WFX-551)	4094	4400	4350
Well No. 7 Unit F, Sec. 18 T-17-S, R-35E Order #R-5801 (WFX-551)	3820	4100	4050
Well No. 10 Unit L, Sec. 18 T-17-S, R-35E Order #R-5801 (WFX-551)	3905	4175	4125



**Environmental
Awareness**

Attached are the step rate tests for each of the referenced wells. If there are any questions, please contact me at 915-688-2585.

Sincerely,

Shirley Houchins

Shirley Houchins
Environmental & Regulatory Technician

Attachments

Cc: District Office - Hobb



**Environmental
Awareness**

STEP RATE TEST

Mobil E & P US, Inc.

North Vacuum Abo East Unit

Well No. 5

Unit B 18-T17S-R35E

Perfed Interval: 8702-8820'

TD = 8850', PBTD = 8606'

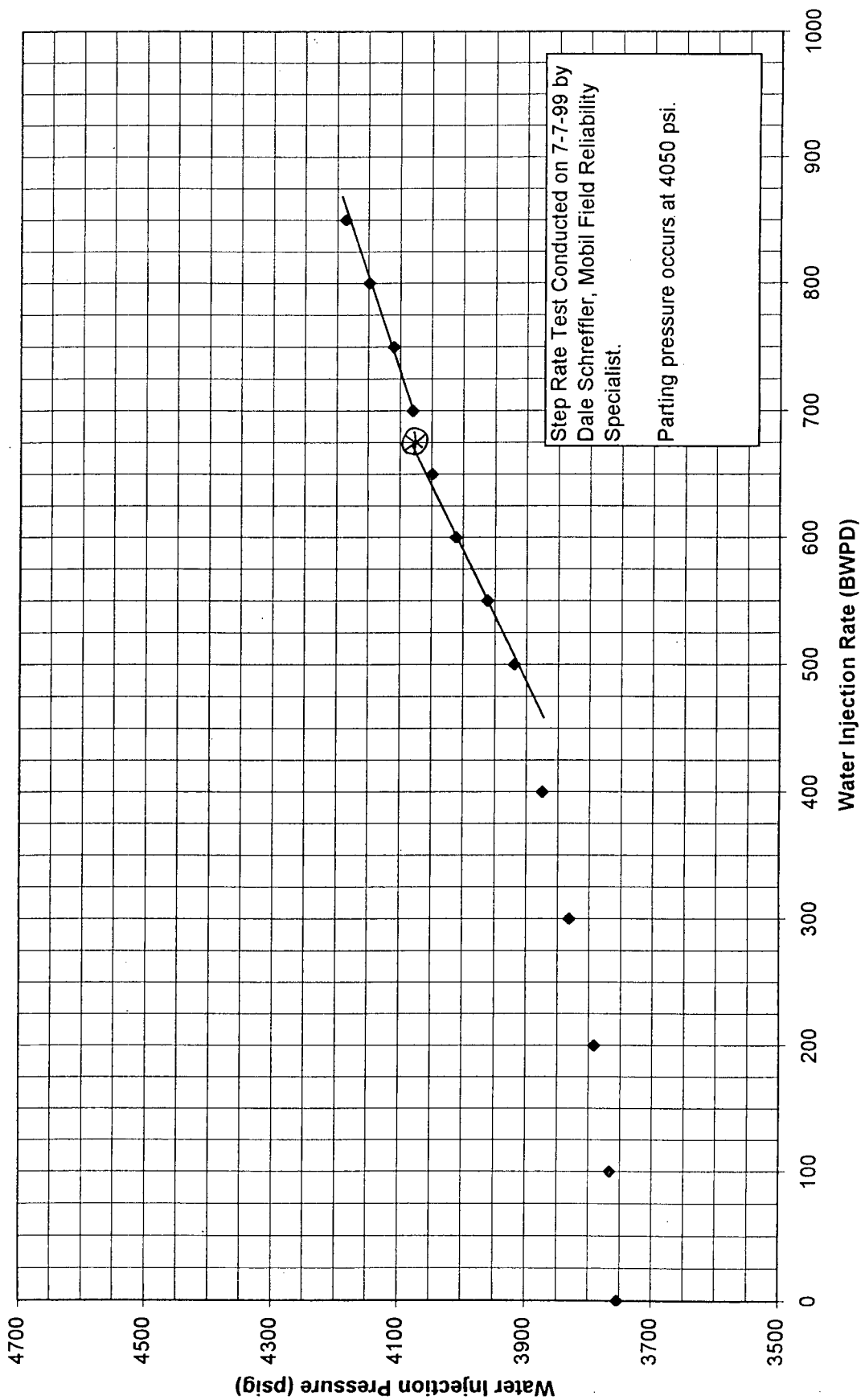
Field Reliability Specialist: Dale Shreffler

Engineer: Jeff Wells

Date of Test: July 7, 1999

Data Point	Time	Surface Pressure (psig)	Injection Rate (BWPD)
1	12:35	3755	0
2	12:40	3756	0
3	12:45	3760	100
4	12:50	3761	100
5	12:55	3767	100
6	1:00	3780	200
7	1:05	3788	200
8	1:10	3792	200
9	1:15	3814	300
10	1:20	3825	300
11	1:25	3832	300
12	1:30	3850	400
13	1:35	3866	400
14	1:40	3875	400
15	1:45	3895	500
16	1:50	3913	500
17	1:55	3920	500
18	2:00	3941	550
19	2:05	3954	550
20	2:10	3962	550
21	2:15	3982	600
22	2:20	3990	600
23	2:25	4012	600
24	2:30	4018	650
25	2:35	4023	650
26	2:40	4049	650
27	2:45	4059	700
28	2:50	4071	700
29	2:55	4080	700
30	3:00	4095	750
31	3:05	4101	750
32	3:10	4110	750
33	3:15	4129	800
34	3:20	4136	800
35	3:25	4149	800
36	3:30	4169	850
37	3:35	4179	850
38	3:40	4187	850
39	3:45	4089	SI
40	3:50	4082	SI
41	3:55	4064	SI
42	4:00	END TEST	

North Vacuum Abo East Unit #5 Step Rate Test

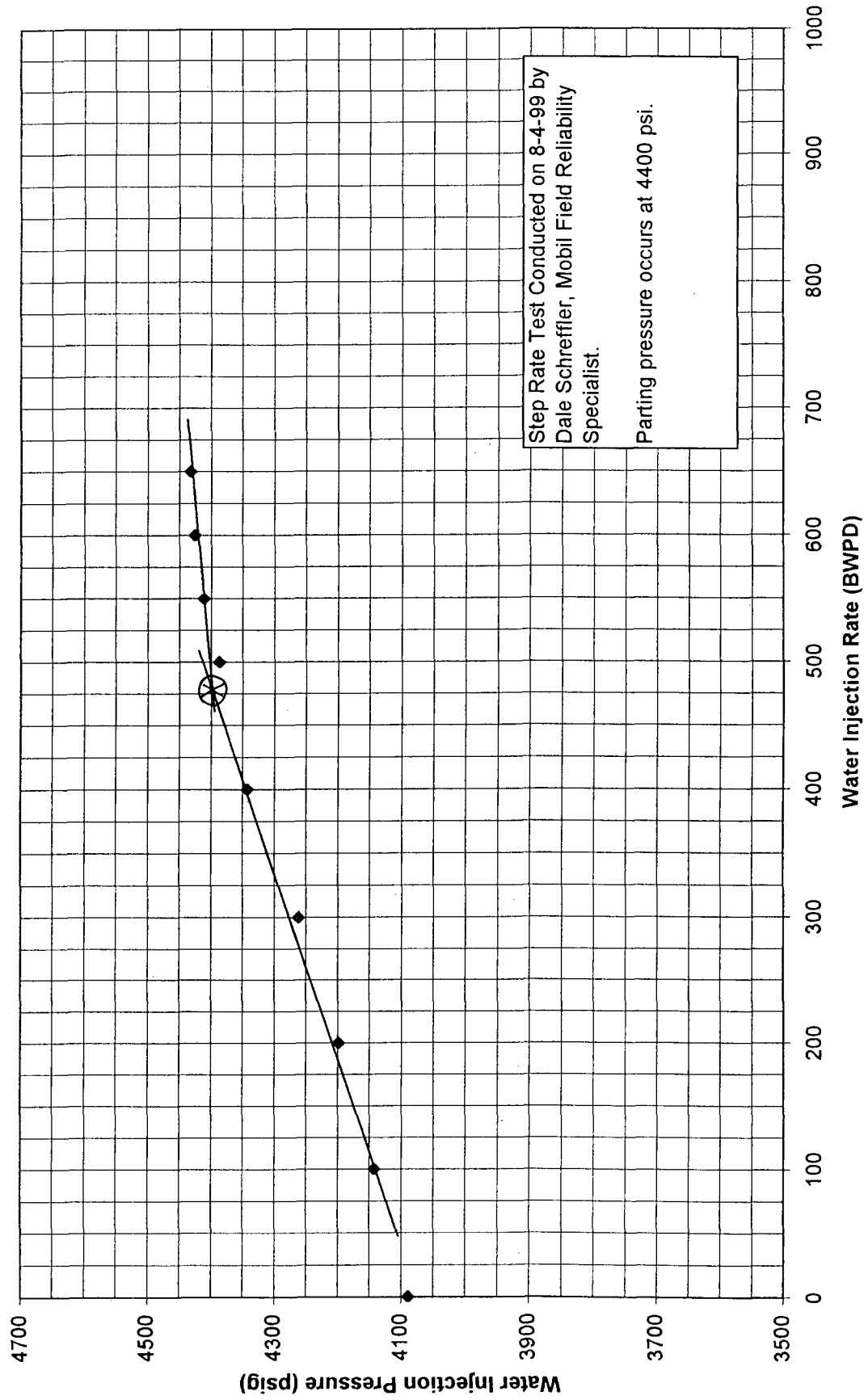


STEP RATE TEST
Mobil E & P US, Inc.
North Vacuum Abo East Unit
Well No. 6
Unit D 18-T17S-R35E
Perfed Interval: 8592-8780'
TD = 8800', PBTD = 8790'

Field Reliability Specialist: Dale Shreffler
Engineer: Jeff Wells
Date of Test: August 4, 1999

Data Point	Time	Surface Pressure (psig)	Injection Rate (BWPD)
1	7:25	4089	0
2	7:30	4092	100
3	7:35	4128	100
4	7:40	4143	100
5	7:45	4162	200
6	7:50	4179	200
7	7:55	4199	200
8	8:00	4230	300
9	8:05	4250	300
10	8:10	4262	300
11	8:15	4310	400
12	8:20	4328	400
13	8:25	4343	400
14	8:30	4372	500
15	8:35	4381	500
16	8:40	4388	500
17	8:45	4401	550
18	8:50	4408	550
19	8:55	4412	550
20	9:00	4418	600
21	9:05	4421	600
22	9:10	4426	600
23	9:15	4427	650
24	9:20	4429	650
25	9:25	4433	650
26	9:30	4368	SI
27	9:35	4333	SI
28	9:40	END OF TEST	

North Vacuum Abo East Unit #6 Step Rate Test



STEP RATE TEST

Mobil E & P US, Inc.

North Vacuum Abo East Unit

Well No. 7

Unit F 18-T17S-R35E

Perfed Interval: 8661-8809'

TD = 8850', PBTD = 8848'

Field Reliability Specialist: Dale Shreffler

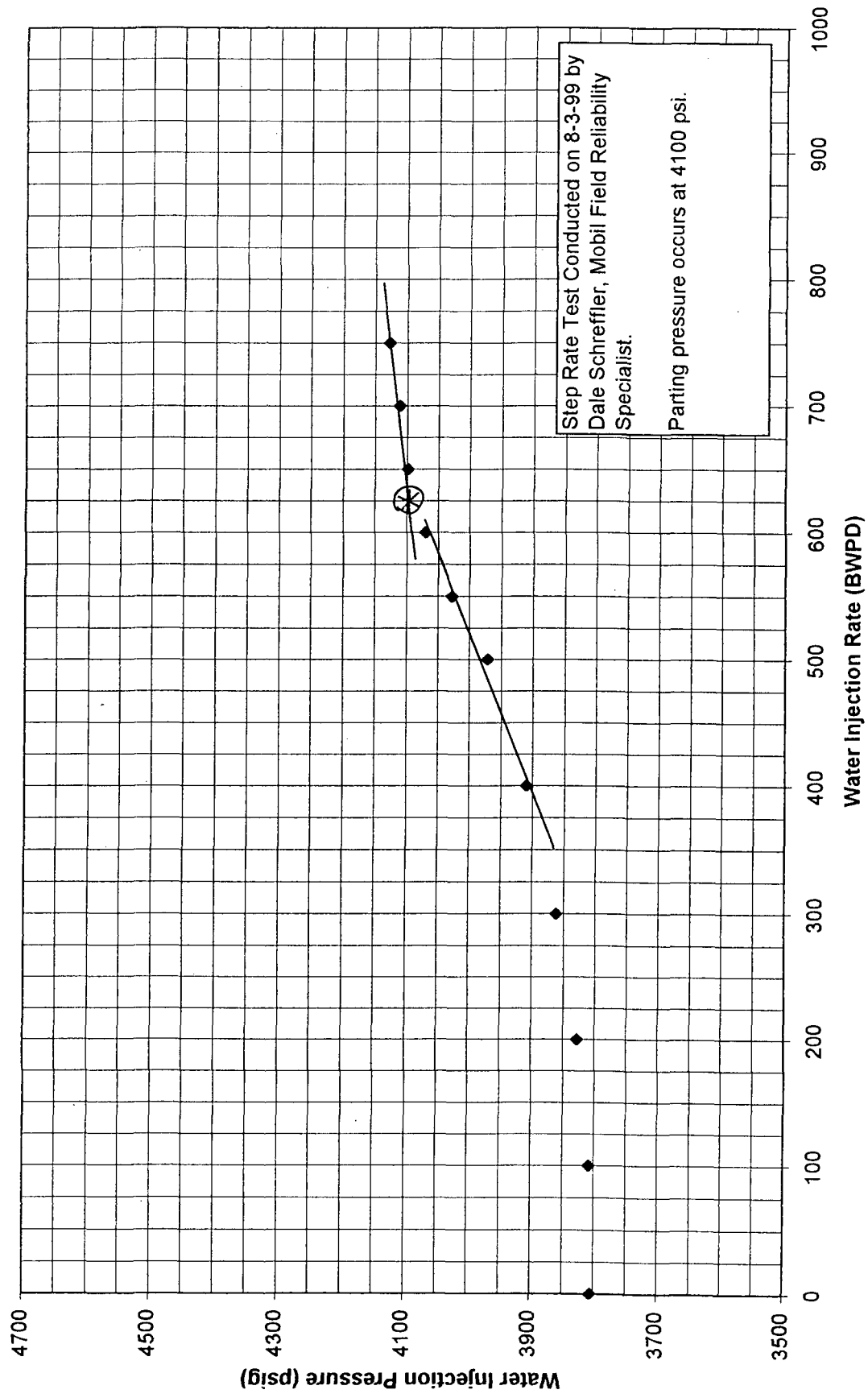
Engineer: Jeff Wells

Date of Test: August 3, 1999

Data Point	Time	Surface Pressure (psig)	Injection Rate (BWPD)
1	7:25	3806	0
2	7:30	3805	100
3	7:35	3808	100
4	7:40	3808	100
5	7:45	3824	200
6	7:50	3826	200
7	7:55	3828	200
8	8:00	3855	300
9	8:05	3859	300
10	8:10	3862	300
11	8:15	3902	400
12	8:20	3905	400
13	8:25	3910	400
14	8:30	3960	500
15	8:35	3967	500
16	8:40	3972	500
17	8:45	4000	550
18	8:50	4014	550
19	8:55	4028	550
20	9:00	4031	600
21	9:05	4044	600
22	9:10	4070	600
23	9:15	4078	650
24	9:20	4084	650
25	9:25	4099	650
26	9:30	4106	700
27	9:35	4110	700
28	9:40	4112	700
29	9:45	4115	750
30	9:50	4119	750
31	9:55	4128	750
32	10:00	3997	SI
33	10:05	3919	SI
34	10:10	3911	SI

END of TEST

North Vacuum Abo East Unit #7



STEP RATE TEST

Mobil E & P US, Inc.

North Vacuum Abo East Unit

Well No. 10

Unit L 18-T17S-R35E

Perfed Interval: 8661-8809'

TD = 8800', PBTD = 8785'

Field Reliability Specialist: Dale Shreffler

Engineer: Jeff Wells

Date of Test: July 7, 1999

Data Point	Time	Surface Pressure (psig)	Injection Rate (BWPD)
1	8:05	3804	0
2	8:10	3802	0
3	8:15	3812	100
4	8:20	3814	100
5	8:25	3815	100
6	8:30	3824	200
7	8:35	3834	200
8	8:40	3841	200
9	8:45	3864	300
10	8:50	3873	300
11	8:55	3880	300
12	9:00	3901	400
13	9:05	3914	400
14	9:10	3927	400
15	9:15	3953	500
16	9:20	3964	500
17	9:25	3975	500
18	9:30	3990	550
19	9:35	4001	550
20	9:40	4007	550
21	9:45	4025	600
22	9:50	4039	600
23	9:55	4050	600
24	10:00	4066	650
25	10:05	4075	650
26	10:10	4086	650
27	10:15	4103	700
28	10:20	4118	700
29	10:25	4124	700
30	10:30	4134	750
31	10:35	4145	750
32	10:40	4151	750
33	10:45	4169	800
34	10:50	4176	800
35	10:55	4183	800
36	11:00	4193	850
37	11:05	4204	850
38	11:10	4209	850
39	11:15	4216	900
40	11:20	4221	900
41	11:25	4230	900
42	11:30	4165	SI
43	11:35	4143	SI
44	11:40	4134	SI
45	11:45	END OF TEST	

North Vacuum Abo East Unit #10

