



BRUCE KING
GOVERNOR

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



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

April 14, 1992

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

Attention: Judy Dixon

PDEV0020700138
PDEV0020700140
PDEV0020600557

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

Dear Ms. Dixon:

Reference is made to your request dated April 6, 1992, to increase the surface injection pressure on twelve wells within the North Vacuum Abo Unit Pressure Maintenance Project. This request is based on step rate tests conducted on these wells during February, 1992. 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 AND LOCATION</u>	<u>MAXIMUM INJECTION SURFACE PRESSURE</u>
NVAU No. 95 Unit P, Section 26	4040 PSIG
NVAU No. 98 Unit J, Section 26	4140 PSIG
NVAU No. 112 Unit D, Section 25	4170 PSIG

<u>WELL AND LOCATION</u>	<u>MAXIMUM INJECTION SURFACE PRESSURE</u>
NVAU No. 116 Unit L, Section 24	4245 PSIG
NVAU No. 136 Unit D, Section 26	4050 PSIG
NVAU No. 138 Unit I, Section 26	4365 PSIG
NVAU No. 143 Unit B, Section 27	4280 PSIG
NVAU No. 149 Unit J, Section 27	4215 PSIG
NVAU No. 152 Unit B, Section 13	4035 PSIG
NVAU No. 156 Unit J, Section 23	4200 PSIG
NVAU, No. 206 Unit D, Section 19	3100 PSIG
NVAU No. 211 Unit J, Section 24	4270 PSIG

All in Township 17 South, Range 34 East, NMPM
Lea County, New Mexico.

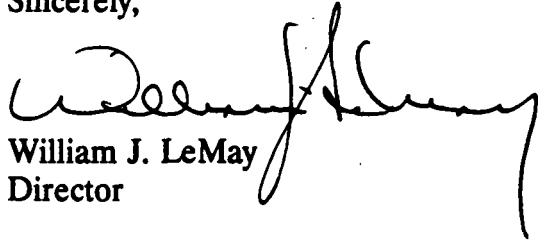
Mobil Exploration & Producing U.S. Inc.

Page 3

April 20, 1992

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/DC/jc

cc: Oil Conservation Division - Hobbs

File: PMX-138

PMX-140

WFX-557

D. Catanach

R. Brown

NO WAITING PERIOD

COMPANY: Mobil Exploration & Producing U.S. Inc.
ADDRESS: P.O. Box 633
CITY, STATE, ZIP: Midland, Texas 79701-0633
ATTENTION: Judy Dixon

Re: Injection Pressure Increase
North Vacuum Abo Unit
Pressure Maintenance Project
Lea County, New Mexico

Dear Sir:

Reference is made to your request dated April 6 1992, to increase the surface injection pressure on twelve wells within the North Vacuum Abo Unit Pressure Maintenance Project. This request is based on step rate tests conducted on these wells during February, 1992. 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>NVAU No. 95</u> <u>Unit P, Section 26</u>	<u>4040 PSI</u>
<u>NVAU No. 98</u> <u>Unit J, Section 26</u>	<u>4140 PSI</u>
<u>NVAU No. 112</u> <u>Unit D, Section 25</u>	<u>4170 PSI</u>
<u>NVAU No. 116</u> <u>Unit L, Section 24</u>	<u>4245 PSI</u>

Cont
↓
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. GALLEGO D. CATANACH FILE- PMX-13P OCD- Hobbs
R. Brown PMX-146
WFX-557

NUAU No. 136
Unit D, Section 26

4050 AS/6

NUAU No. 138
Unit I, Section 26

4365 AS/6

NUAU No. 143
Unit B, Section 27

4280 AS/6

NUAU No. 149
Unit J, Section 27

4215 AS/6

NUAU No. 152
Unit B, Section 13

4035 AS/6

NUAU No. 156
Unit J, Section 23

4200 AS/6

NUAU No. 206
Unit D, Section 19

3100 AS/6

NUAU No. 211
Unit J, Section 24

4270 AS/6

All in Township 17 South, Range 34 East, NMPM
Lea County, New Mexico

Mobil Exploration & Producing U.S. Inc.

OIL CONSERVATION DIVISION
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'92 APR 8 AM 8 42

April 6, 1992

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

Attention: Mr. W. J. LeMay

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

MIDLAND SOUTH ASSET TEAM
ENVIRONMENTAL, REGULATORY &
LOSS PREVENTION

PHONE (915) 688-1753
FACSIMILE (915) 688-2445

**INJECTION PRESSURE INCREASE REQUEST
NORTH VACUUM ABO FIELD
NORTH VACUUM ABO UNIT
WELL NO'S. 95, 98, 112, 116, 136, 138,
143, 149, 152, 156, 206, & 211
LEA COUNTY, NEW MEXICO**

Gentlemen:

Under the provisions of Order No. PMX-138 dated November 12, 1985; Order No. WFX-557 dated February 11, 1986, and Order No. PMX-140 dated March 7, 1986, 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. 95 UNIT P, SEC. 26 T-17-S, R-34-E ORDER NO. R-4430	8360-8520'	3905 PSIG	4040 PSIG
WELL NO. 98 UNIT J, SEC. 26 T-17-S, R-34-E ORDER NO. PMX-138	8458-8580'	3795 PSIG	4140 PSIG
WELL NO. 112 UNIT D, SEC. 25 T-17-S, R-34-E ORDER NO. PMX-138	8336-8533	4050 PSIG	4170 PSIG
WELL NO. 116 UNIT L, SEC. 24 T-17-S, R-34-E ORDER NO. PMX-138	8438-8497'	3790 PSIG	4245 PSIG

B:MM09848A.JWD



**Environmental
Awareness**

WELL NO. 136
UNIT D, SEC. 26
T-17-S, R-34-E
ORDER NO. PMX-138

8525-8680

3530 PSIG

4050 PSIG

UNIT NO. 138
UNIT I, SEC. 26
T-17-S, R-34-E
ORDER NO. PMX-138

8506-8600

4110 PSIG

4365 PSIG

WELL NO. 143
UNIT B, SEC. 27
T-17-S, R-34-E
ORDER NO. WFX-557

8605-8680

4170 PSIG

4280 PSIG

WELL NO. 149
UNIT J, SEC. 27
T-17-S, R-34-E
ORDER NO. WFX-557

8577-8681

4025 PSIG

4215 PSIG

UNIT NO. 152
UNIT B, SEC. 13
T-17-S, R-34-E
ORDER NO. PMX-140

8535-8595

3420 PSIG

4035 PSIG

WELL NO. 156
UNIT J, SEC. 23
T-17-S, R-34-E
ORDER NO. PMX-138

8472-8650'

3930 PSIG

4200 PSIG

WELL NO. 206
UNIT D, SEC. 19
T-17-S, R-34-E
ORDER NO. WFX-557

8597-8763

2310 PSIG

3100 PSIG

WELL NO. 211
UNIT J, SEC. 24
T-17-S, R-34-E
ORDER NO. PMX-183

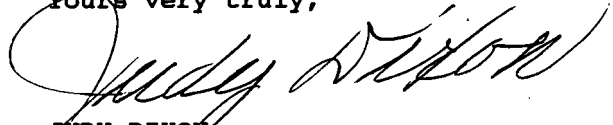
8458-8518

3875 PSIG

4270 PSIG

Enclosed are copies of the Step-rate test.

Yours very truly,

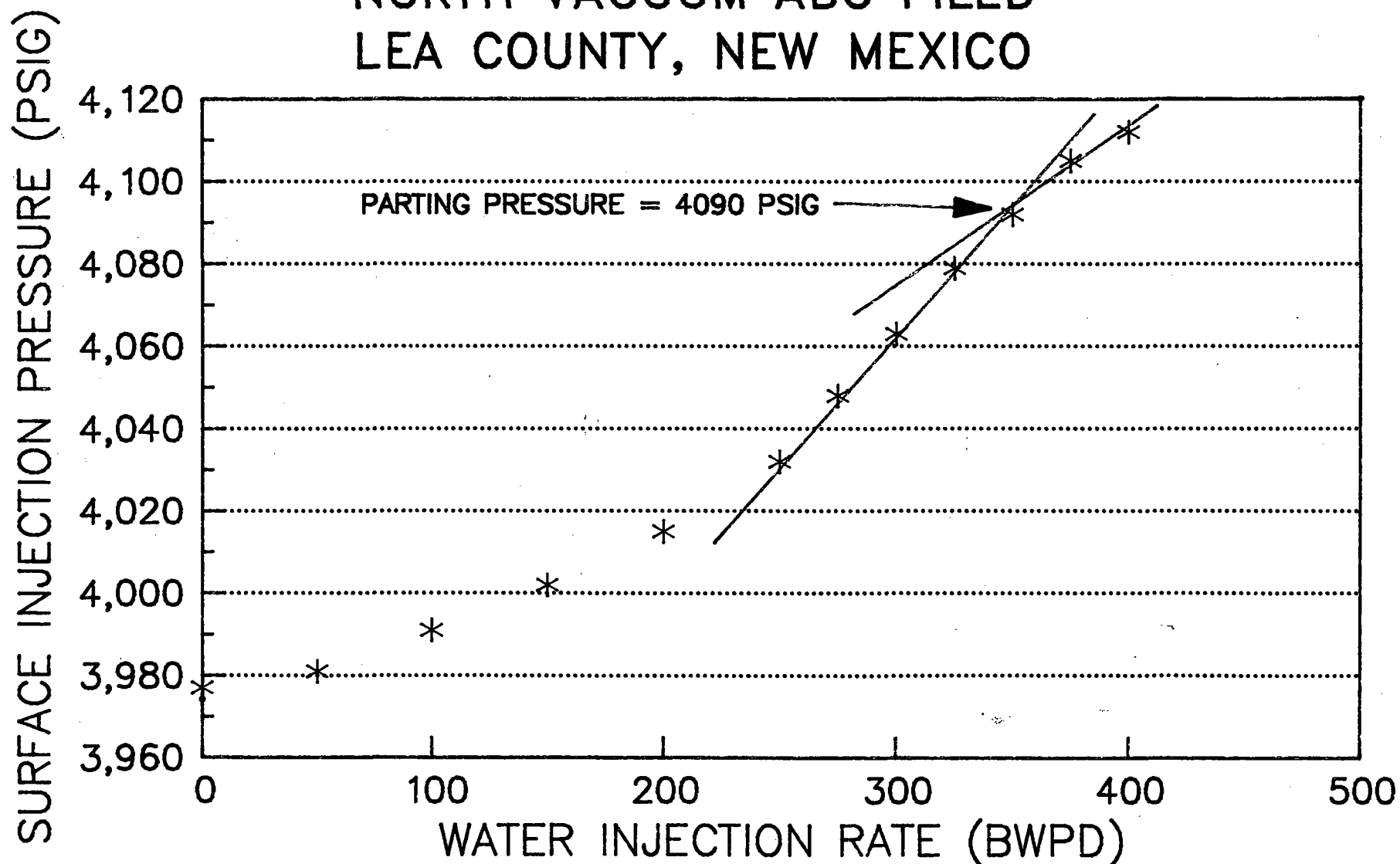

JUDY DIXON
ENVIRONMENTAL/REGULATORY TECHNICIAN

JWDixon
Attachments
cc: District Director OCD - Hobbs

B:MM09848A.JWD

NVAU NO. 95 STEP RATE TEST

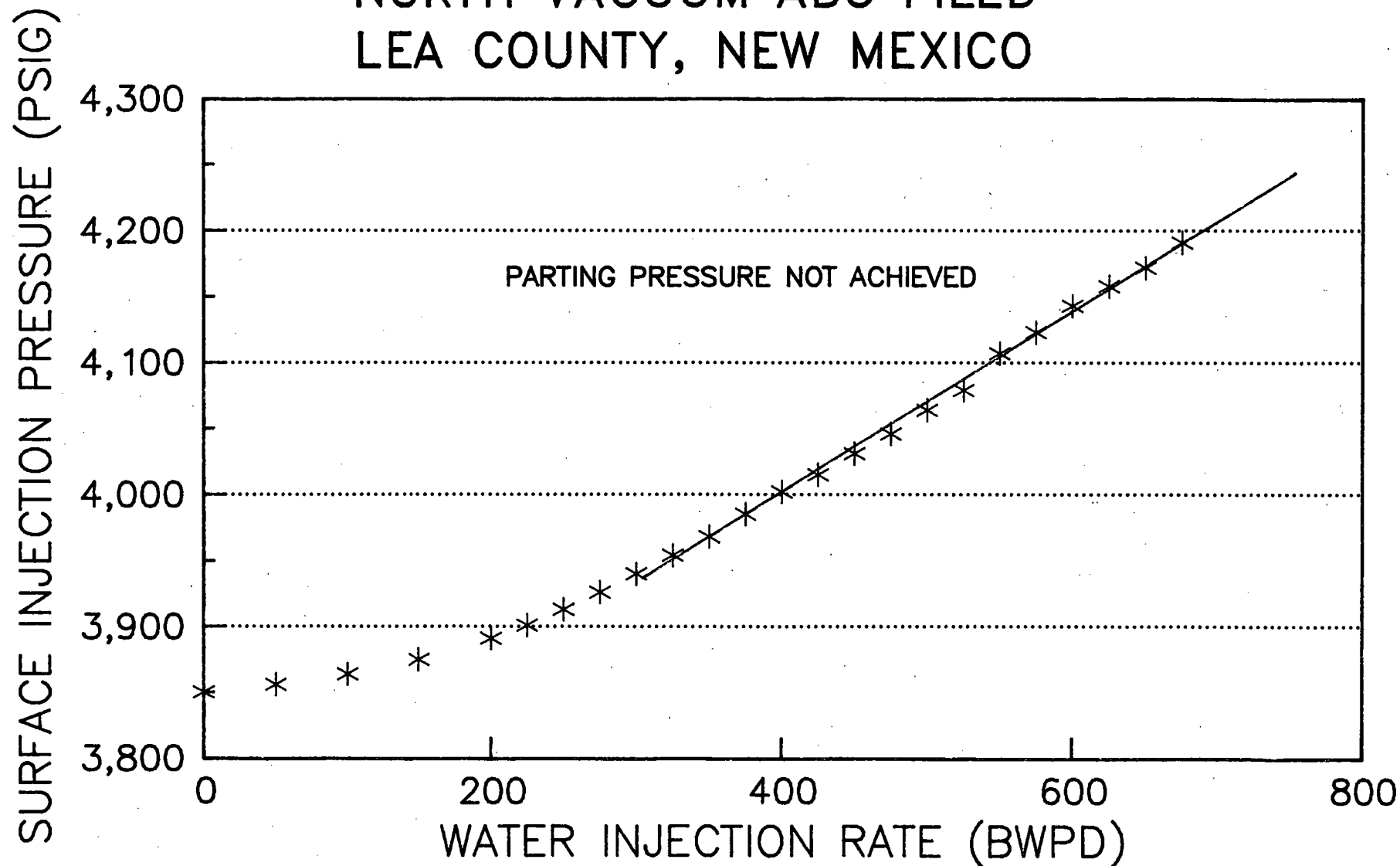
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO



DATE OF TEST: 2-26-92

NVAU NO. 98 STEP RATE TEST

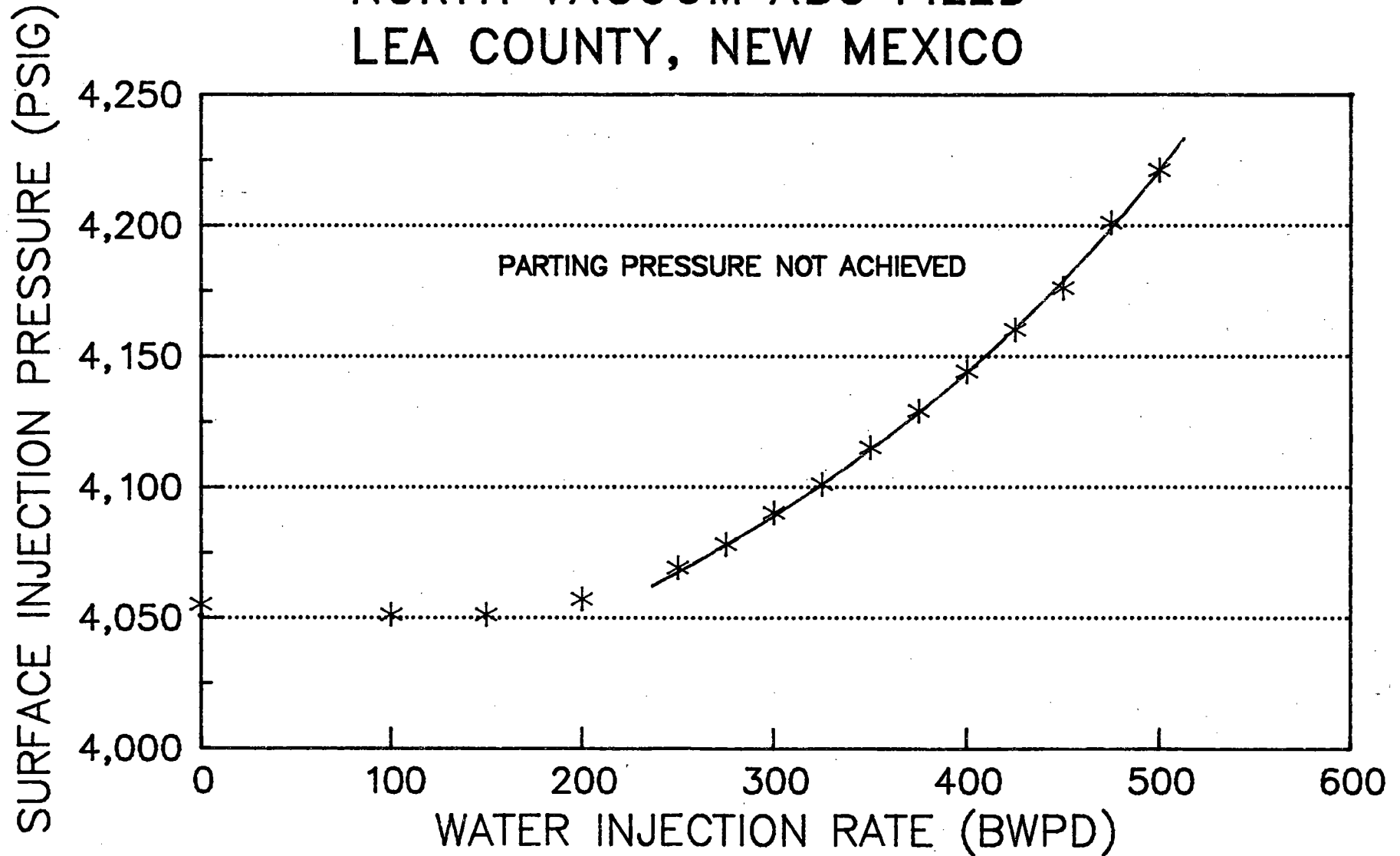
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO



DATE OF TEST: 2-19-92

NVAU NO. 112 STEP RATE TEST

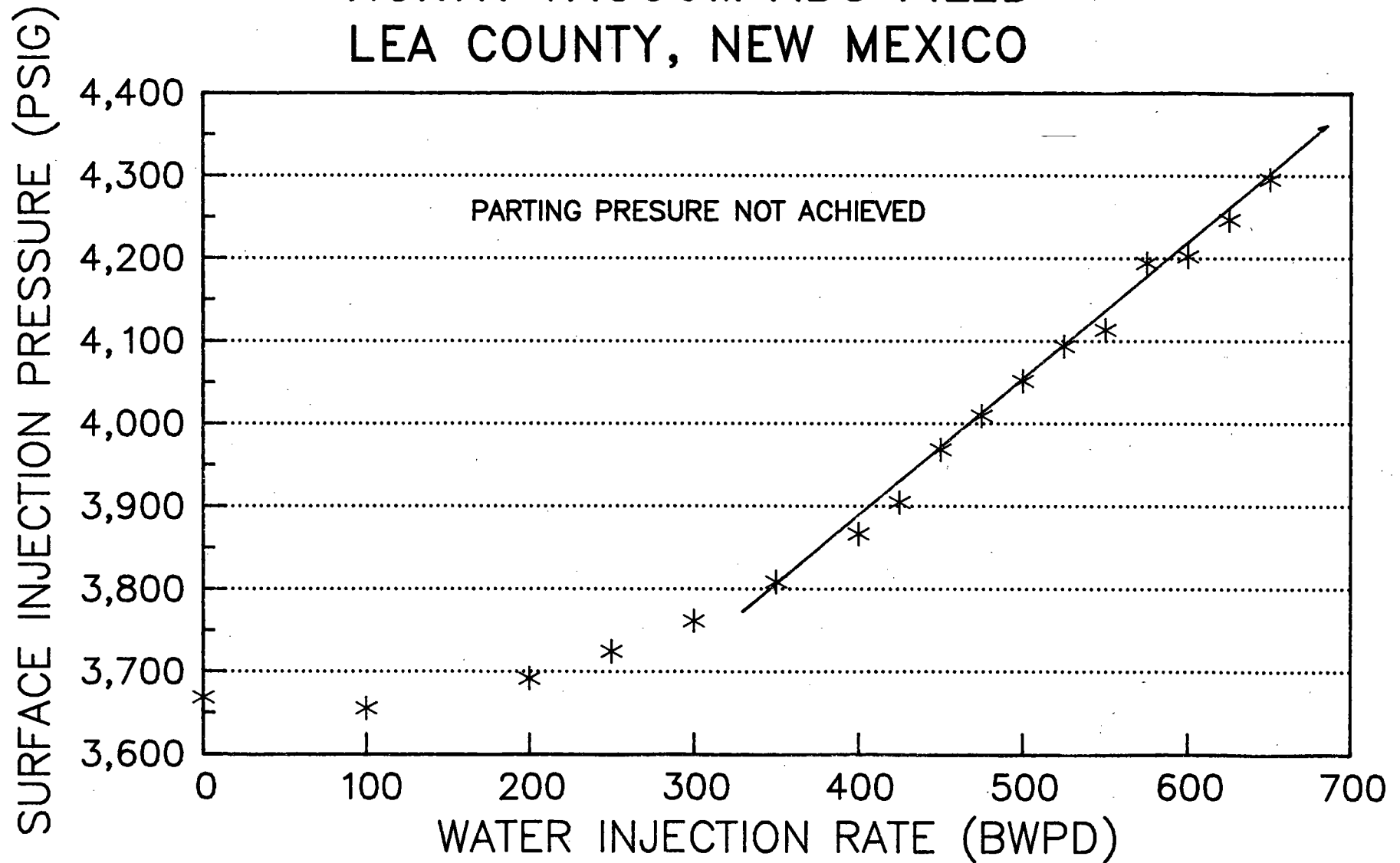
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO



DATE OF TEST: 2-20-92

NVAU NO. 116 STEP RATE TEST

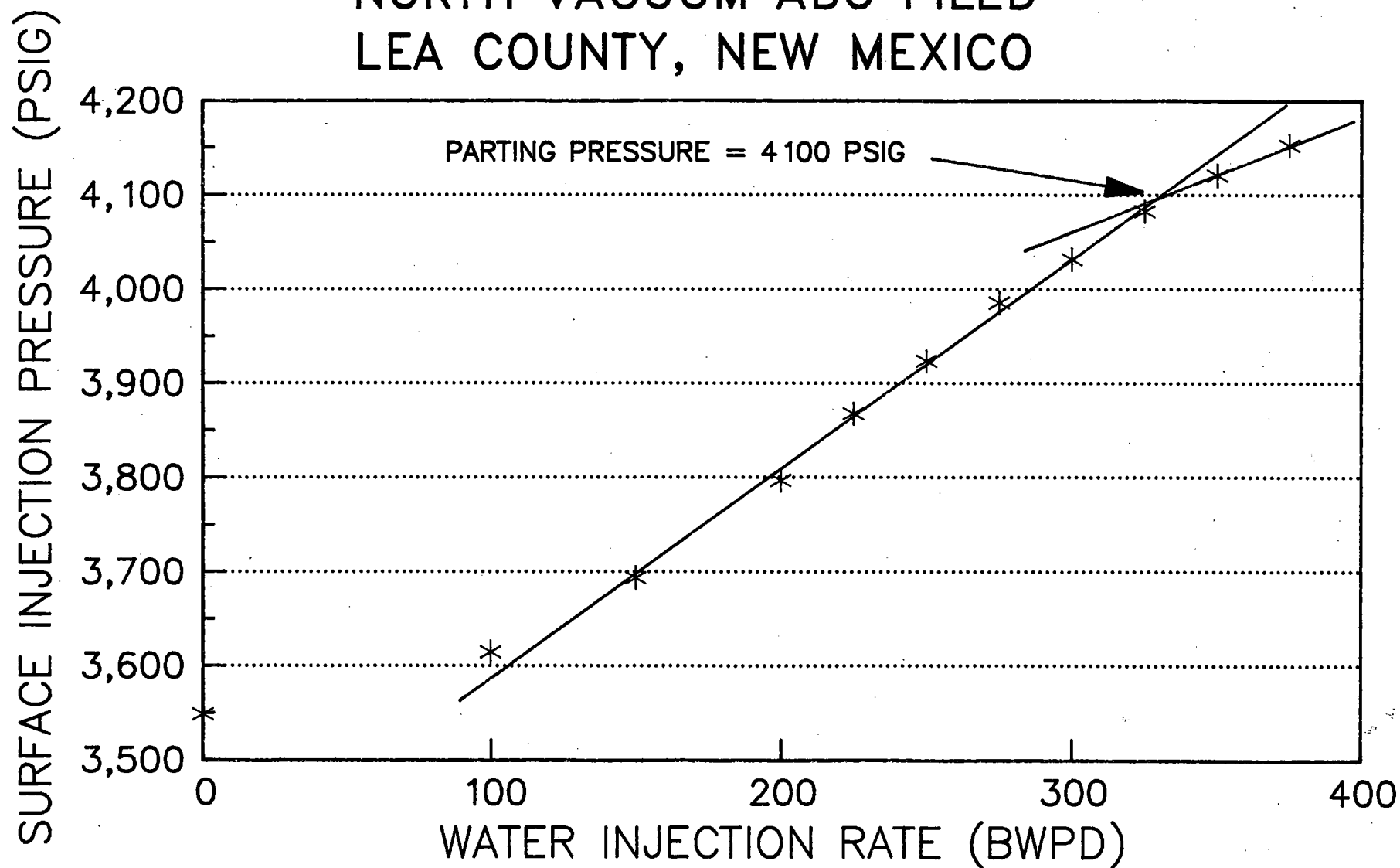
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO



DATE OF TEST: 2-2-92

NVAU NO. 136 STEP RATE TEST

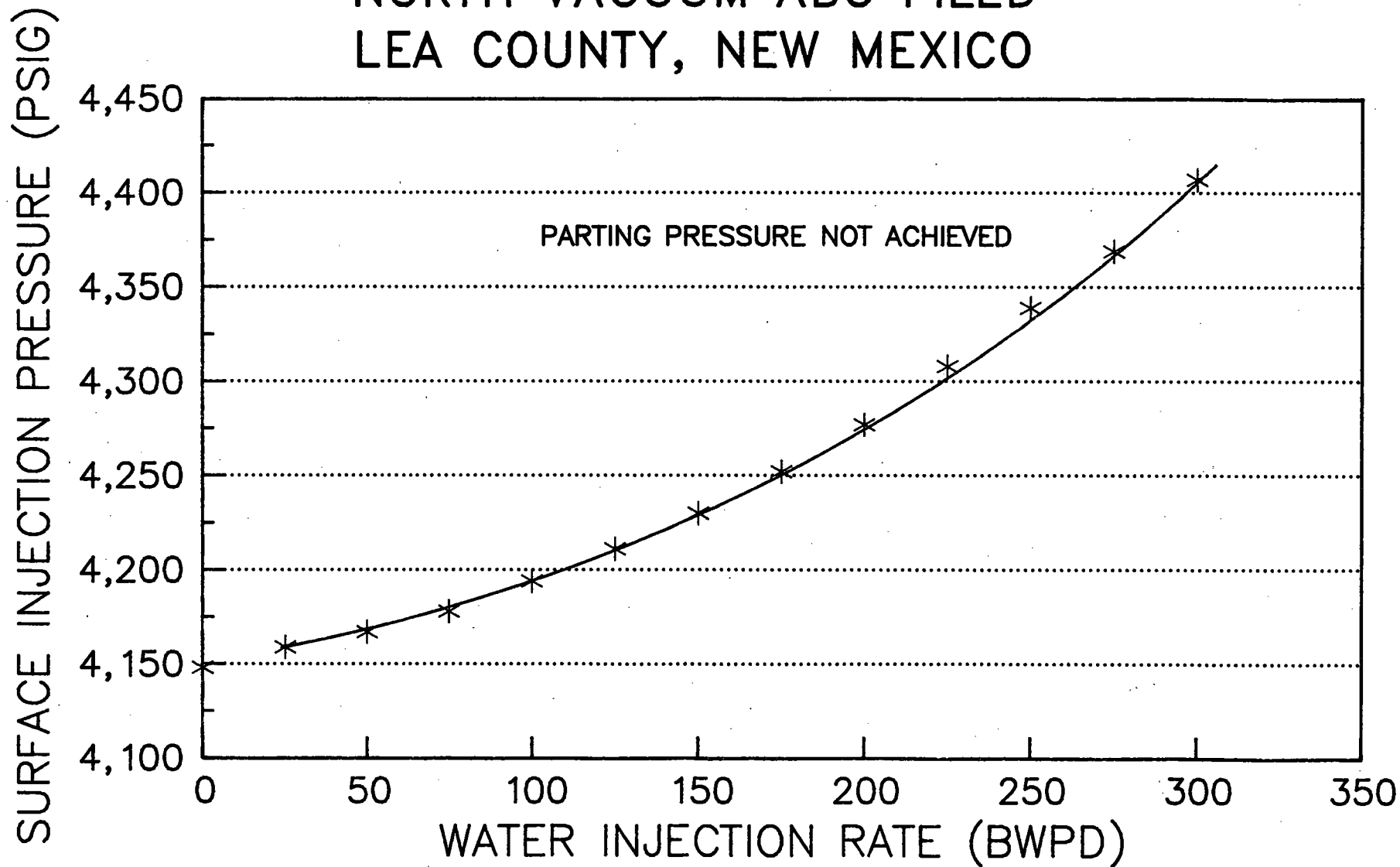
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO



DATE OF TEST: 2-5-92

NVAU NO. 138 STEP RATE TEST

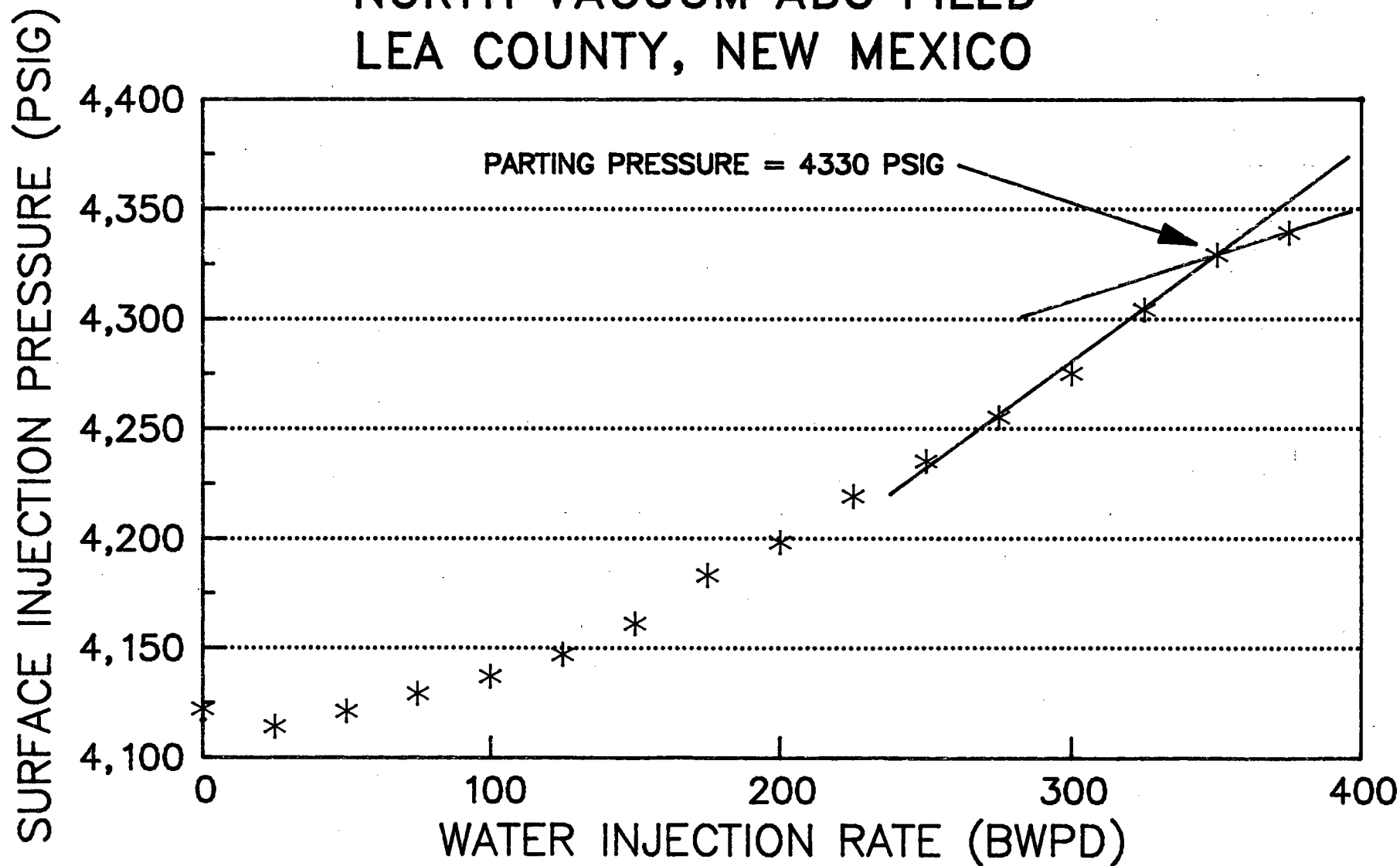
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO



DATE OF TEST: 2-18-92

NVAU NO. 143 STEP RATE TEST

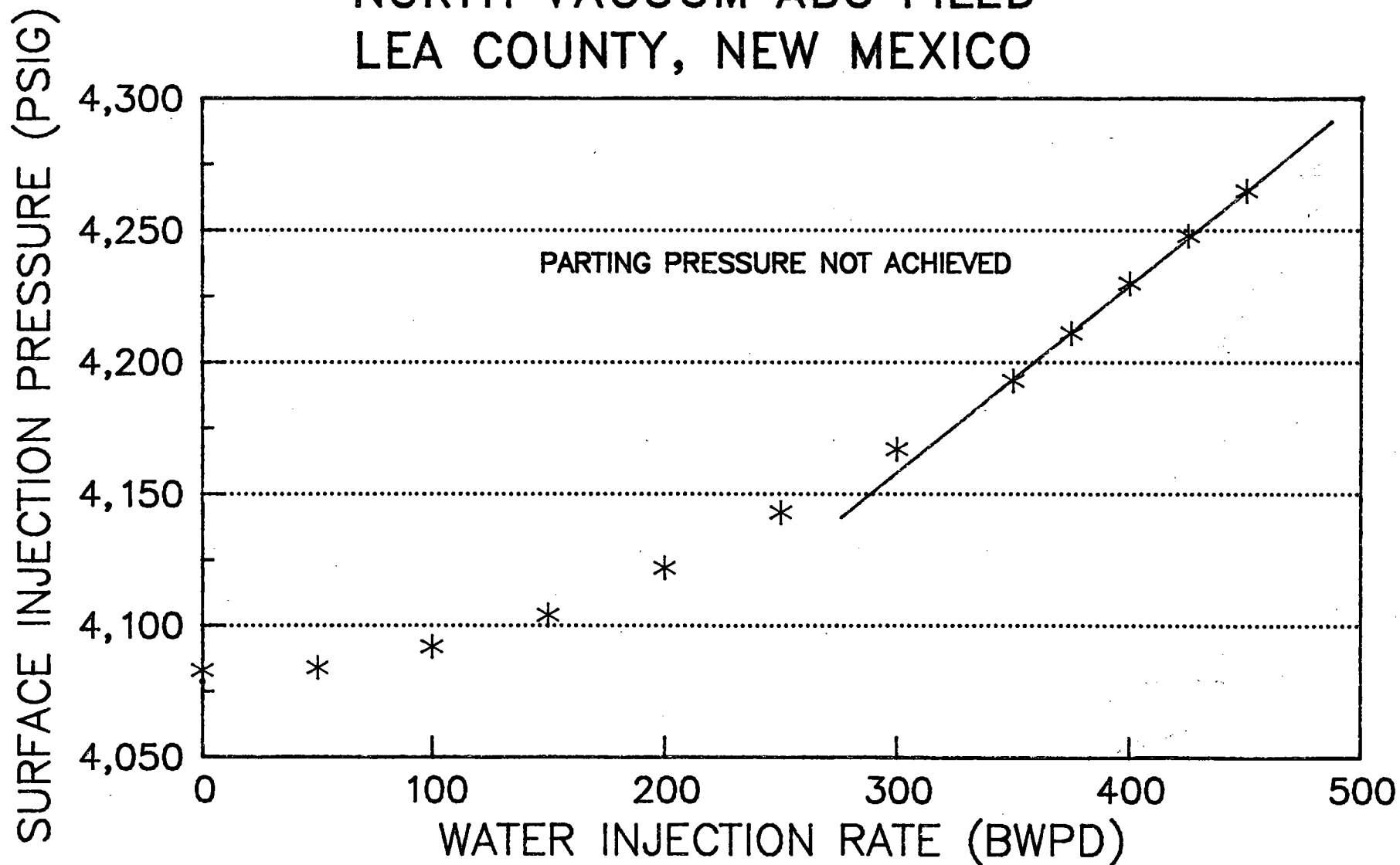
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO



DATE OF TEST: 2-17-92

NVAU NO. 149 STEP RATE TEST

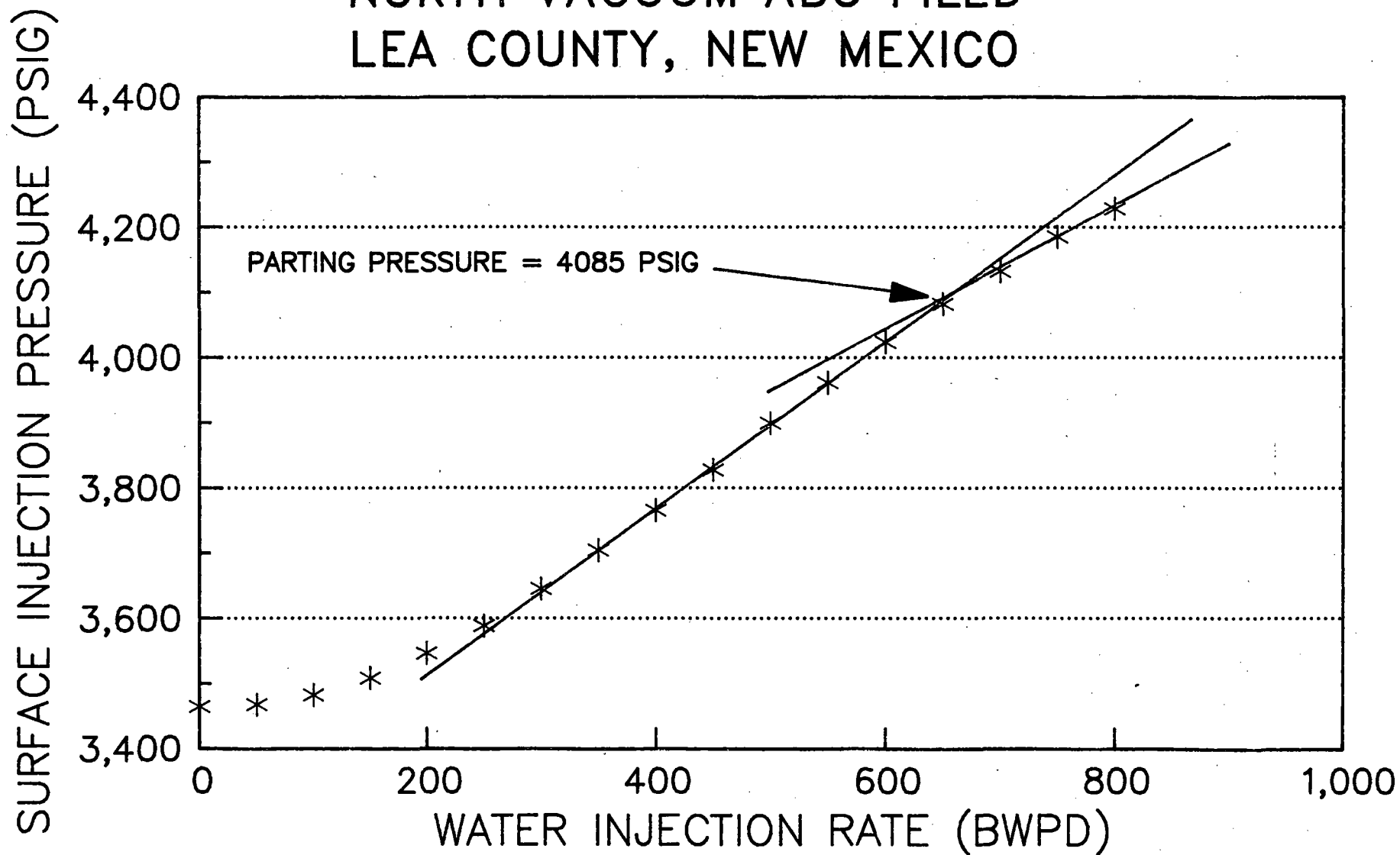
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO



DATE OF TEST: 2-14-92

NVAU NO. 152 STEP RATE TEST

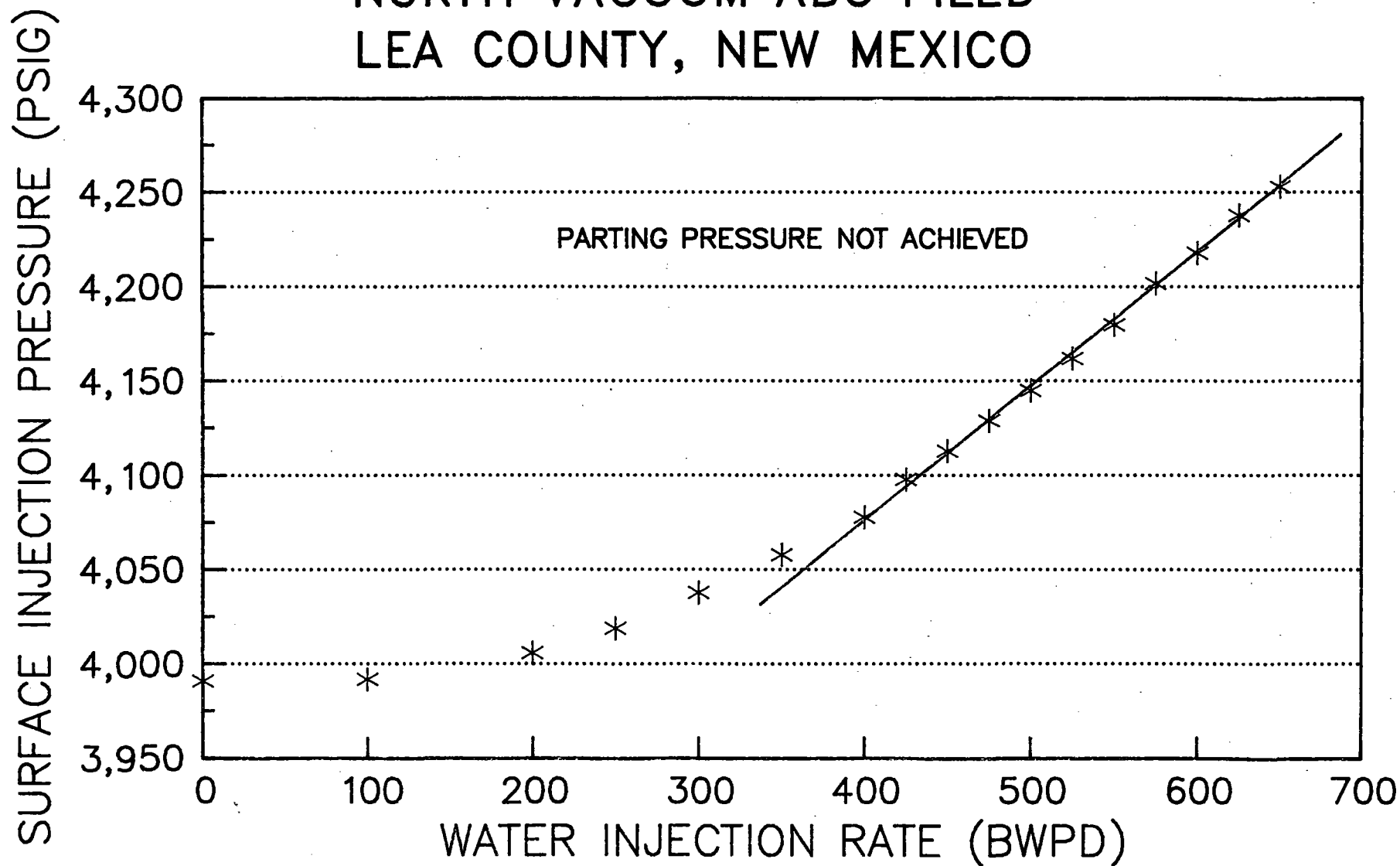
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO



DATE OF TEST: 2-10-92

NVAU NO. 156 STEP RATE TEST

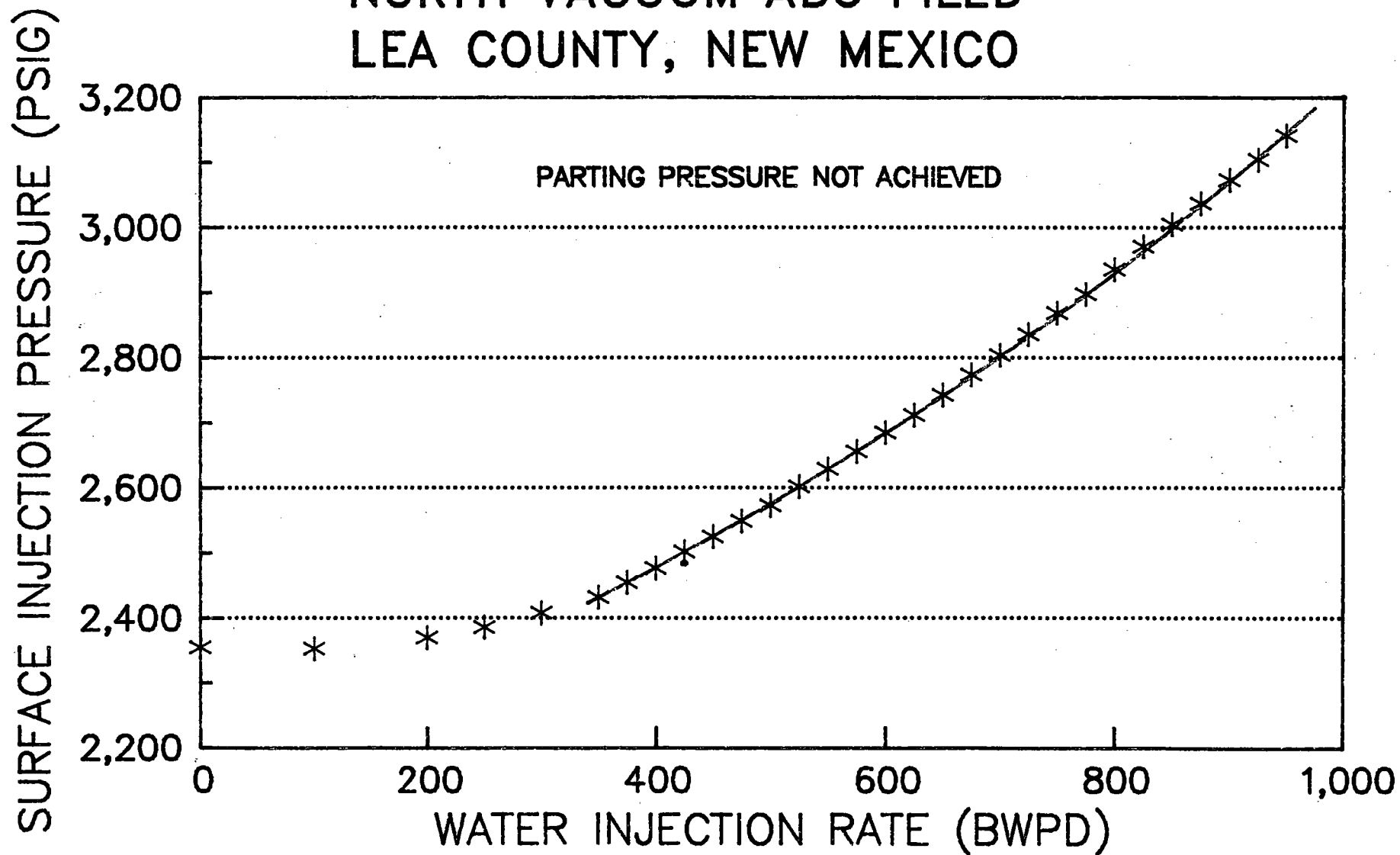
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO



DATE OF TEST: 2-7-92

NVAU NO. 206 STEP RATE TEST

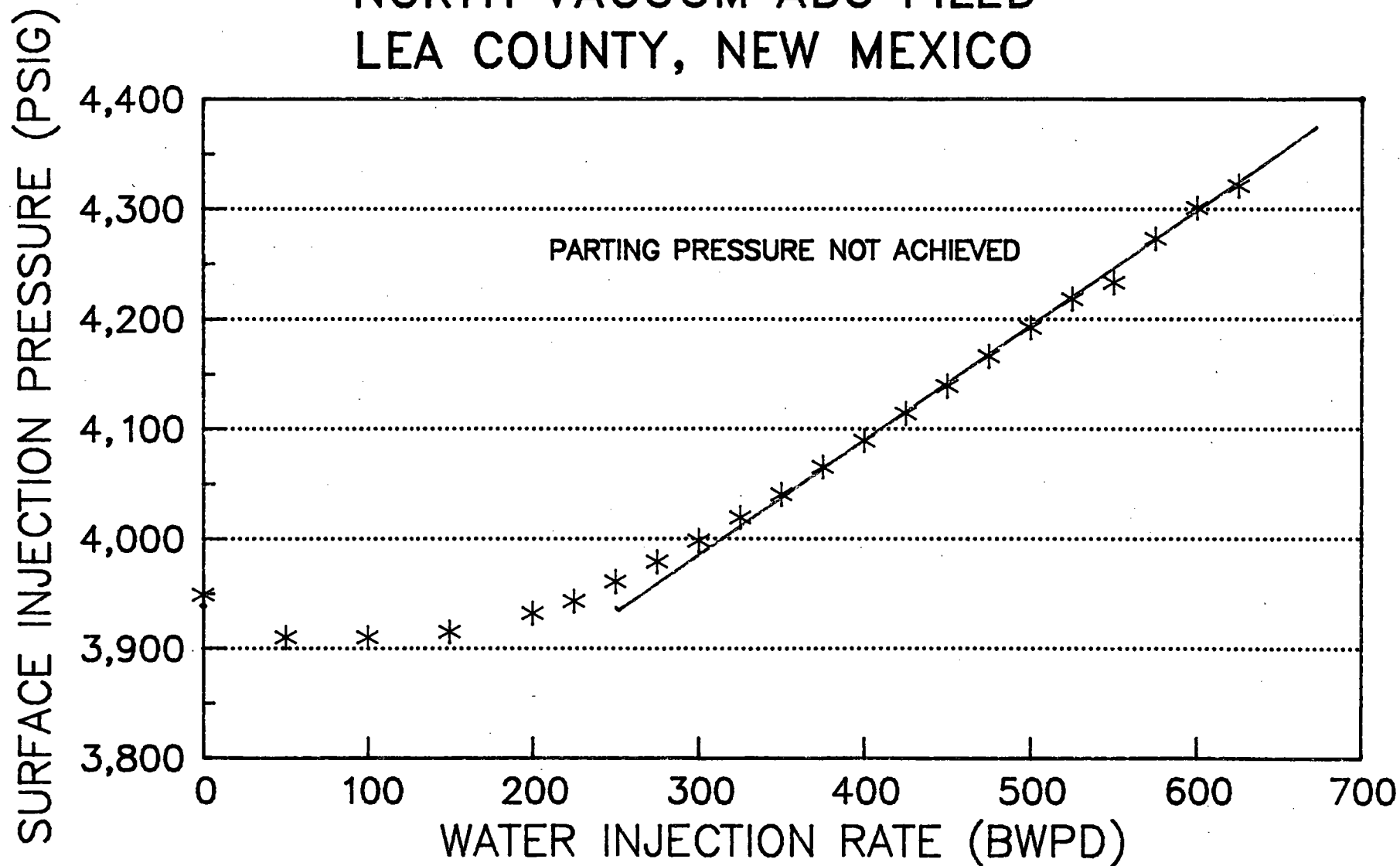
NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO



DATE OF TEST: 2-24-92

NVAU NO. 211 STEP RATE TEST

NORTH VACUUM ABO FIELD
LEA COUNTY, NEW MEXICO



DATE OF TEST: 2-6-92



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

April 9, 1992

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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 Producing TX & NM Inc.	North Vacuum Abo Unit #95-P	26-17-34
Operator	Lease & Well No.	Unit
		S-T-R

and my recommendations are as follows:

Maybe high

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



STATE OF NEW MEXICO
OIL CONSERVATION DIVISION
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ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE
APR 9 1992

BRUCE KING
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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 Producing TX & NM Inc.	North Vacuum Abo Unit	98-J	26-17-34
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

OK No breach

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



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

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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 Producing TX & NM Inc.	North Vacuum Abo Unit	112-D	25-17-34
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

OK No Breach

Very truly yours

Jerry Sexton
Supervisor, District I

/bp

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

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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 Producing TX & NM Inc.	North Vacuum Abo Unit	116-L	24-17-34
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

OK

Very truly yours

A handwritten signature in cursive script, appearing to read "Jerry Sexton".

Jerry Sexton
Supervisor, District I

/bp



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

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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 Producing TX & NM Inc.	North Vacuum Abo Unit	136-D	26-17-34
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



BRUCE KING
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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
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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 Producing TX & NM Inc.	North Vacuum Abo Unit	138-I	26-17-34
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

JS

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



BRUCE KING
GOVERNOR

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

April 9, 1992

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1992 APR 14 AM 8 56

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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

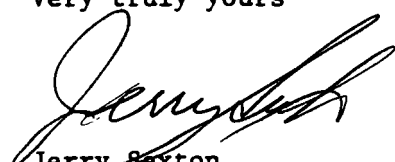
Gentlemen:

I have examined the step rate test for the:

Mobil Producing TX & NM Inc.	North Vacuum Abo Unit	143-B	27-17-34
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

Very truly yours


Jerry Sexton
Supervisor, District I

/bp



BRUCE KING
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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
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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 Producing TX & NM Inc.	North Vacuum Abo Unit	149-J	27-17-34
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 AND MINERALS DEPARTMENT
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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 Producing TX & NM Inc.	North Vacuum Abo Unit	152-B	13-17-34
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

Very truly yours


Jerry Sexton
Supervisor, District I

/bp



BRUCE KING
GOVERNOR

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

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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 Producing TX & NM Inc.	North Vacuum Abo Unit	156-J	23-17-34
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



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

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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 Producing TX & NM Inc.	North Vacuum Abo Unit	206-D	19-17-34
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

CB

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 9, 1992

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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 Producing TX & NM Inc.	North Vacuum Abo Unit	211-J	24-17-34
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

DA

Very truly yours

Jerry Sexton
Supervisor, District I

/bp