

Date: 4-20-90

To : State of New Mexico
Energy & Minerals Dept.
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501
Attn: David Latanech

New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, New Mexico 88240
Attn: Jerry Sexton

From: Singo Operating Inc.
P.O. Box 3531
Midland, Texas 79702

Re : West Dolarhide Queen Sand Unit
Amendment to C-108 to increase injection pressure

Gentlemen,

As requested, we have performed step rate test on the newly drilled water injection wells in the subject field. All of the test were run with produced water. Below is a table of the results.

Well No.	Surface Fracture Pressure	Comments
108	1350 ✓	
110	1370 ✓	
126	1410 ✓	
128	1350 ✓	
129	1450 ✓	
131	1240 ✓	
133	1375 ✓	
136	1200 ?	
140	1420 ✓	
142	1350 ✓	
143	1375 ✓	
152	1260 ✓	
153	1300 ✓	
155	1425 ✓	

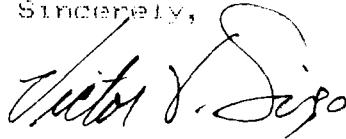
Please find attached a copy of each step rate test that was run.

The average of these test is 1350 psi. We are very interested in staying below the fracture pressure, because we understand the consequences of injection into the reservoir above fracture pressure.

Singo Operating Inc. hereby request that the D-103 for the subject well be amended to reflect an authorized wellhead injection pressure equal to that of the wellhead fracture pressure of each well, minus 100 psi.

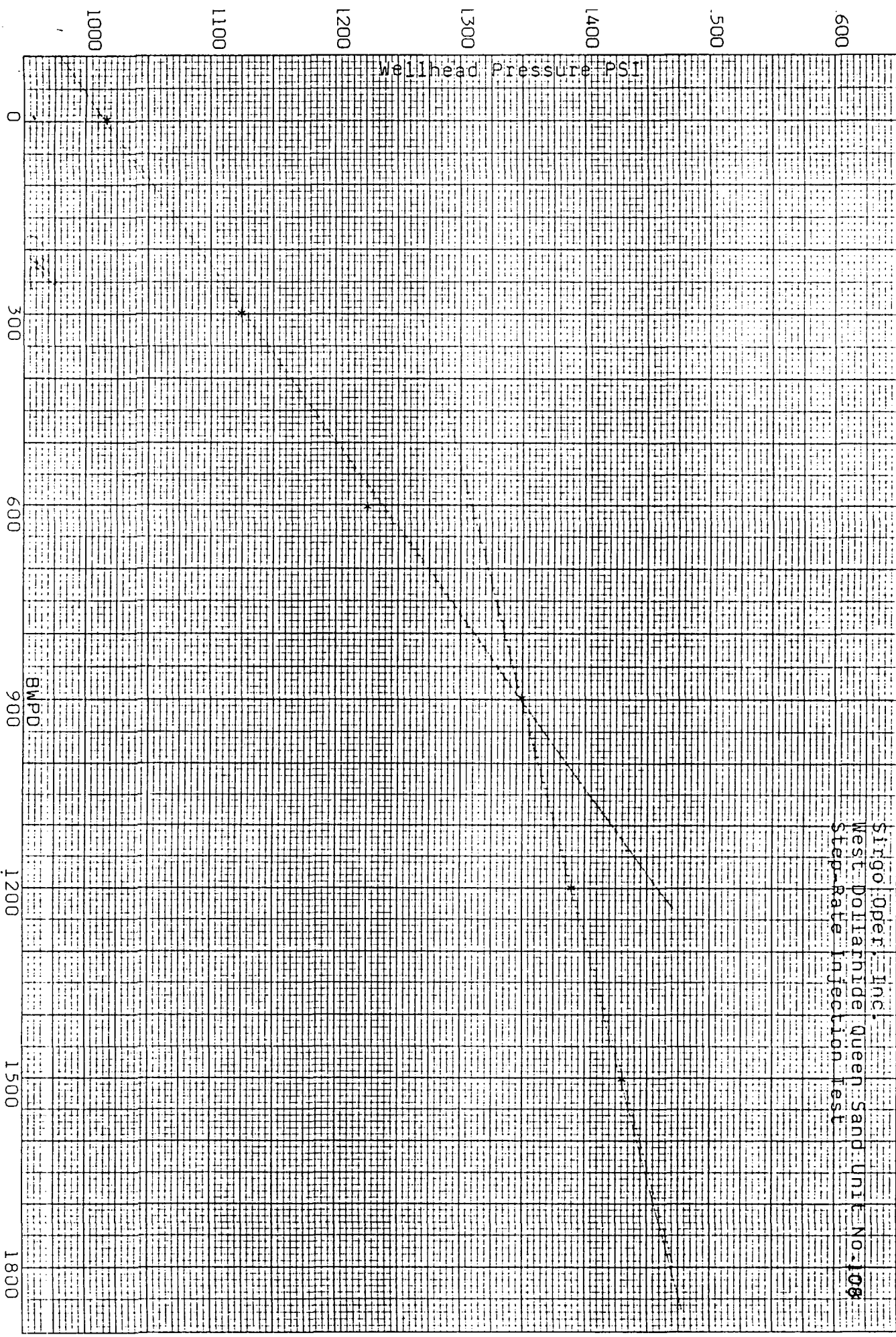
Please let me know if you need any further information. We would greatly appreciate a timely response to this situation.

Sincerely,

A handwritten signature in black ink, appearing to read "Victor J. Singo". The signature is fluid and cursive, with the first name "Victor" and last name "Singo" being clearly legible.

Victor J. Singo

* Indicates Wellhead Pressure



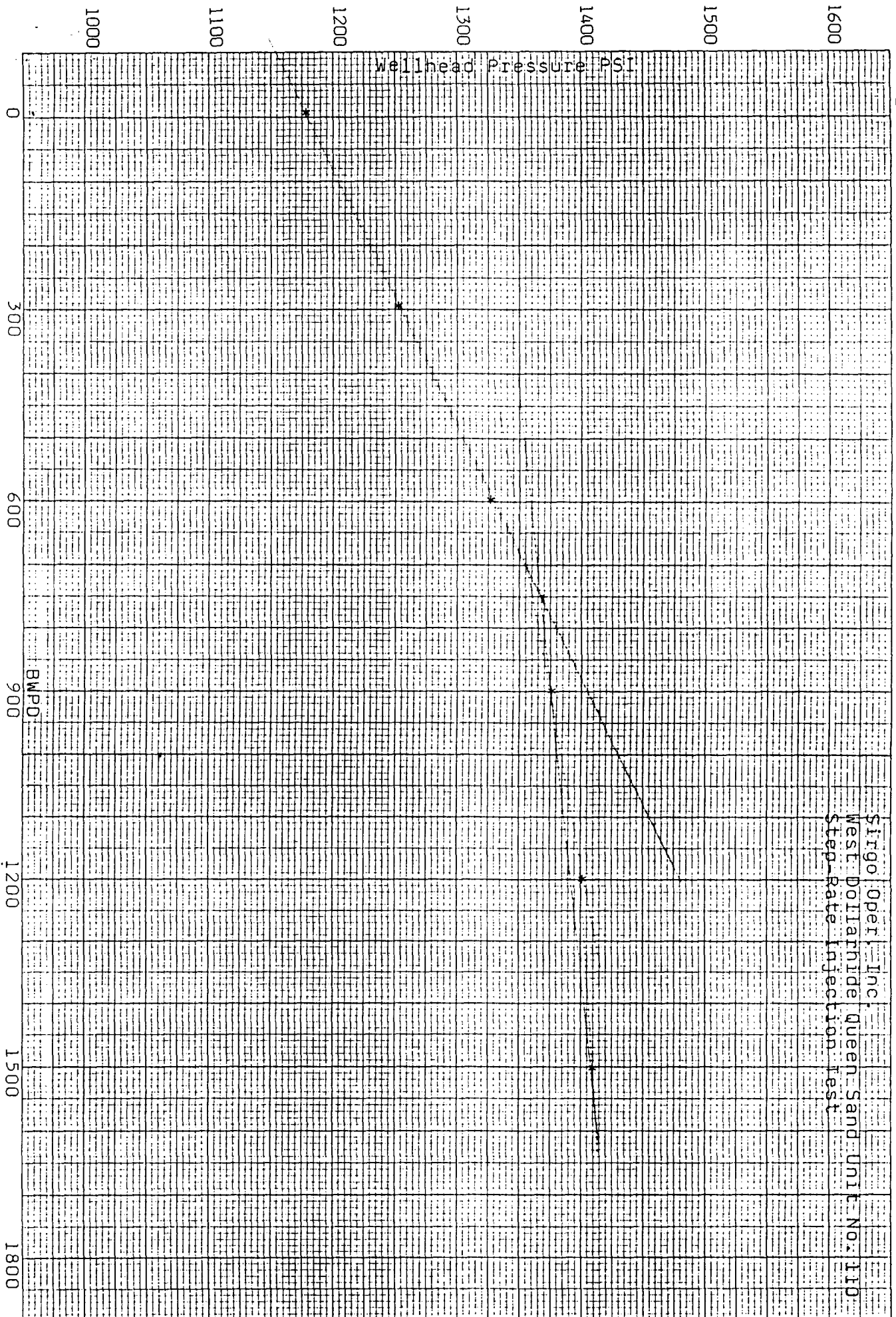
STEP RATE INJECTION TEST

WELL NAME WDQSU # 108
OPERATER Sirgo Oper. Inc.

DATE 4/10/90

[illegible]

* Indicates Wellhead Pressure



STEP RATE INJECTION TEST

WELL NAME WDQSU #110
OPERATER Sirgo Oper. Inc.

DATE 4/8/90

TIME

TBG. PRESS.

RATE BPD

11:00

1180

0

11:10

1250

300

11:20

1325

600

11:30

1375

900

11:40

1400

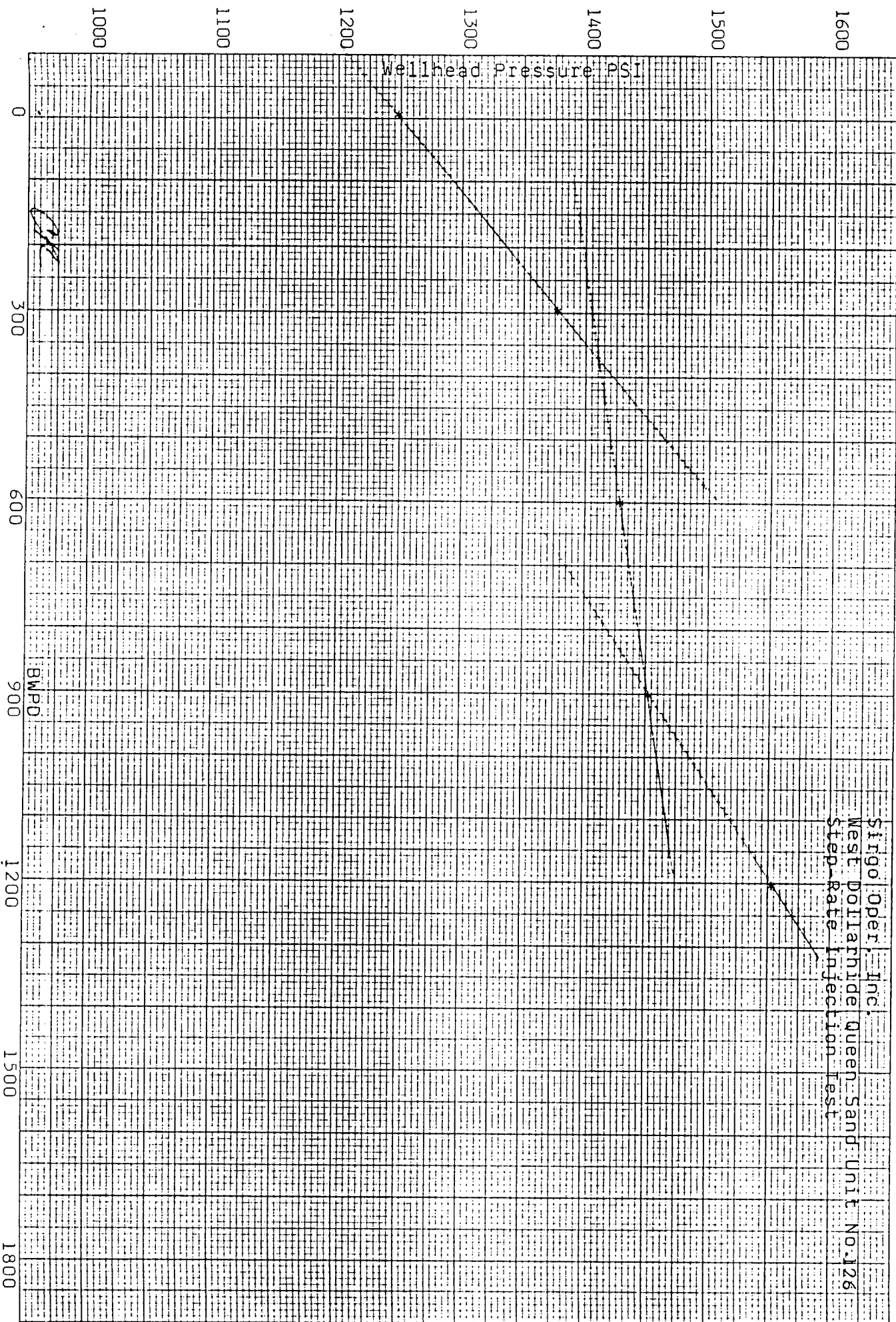
1200

11:50

1415

1500

* Indicates Wellhead Pressure



STEP RATE INJECTION TEST

WELL NAME WDQSU #126DATE 4/7/90OPERATER Sirgo Oper. Inc.

TIME

TBG. PRESS.

RATE BPD

9:30

1250

0

9:40

1375

300

9:50

1425

600

10:00

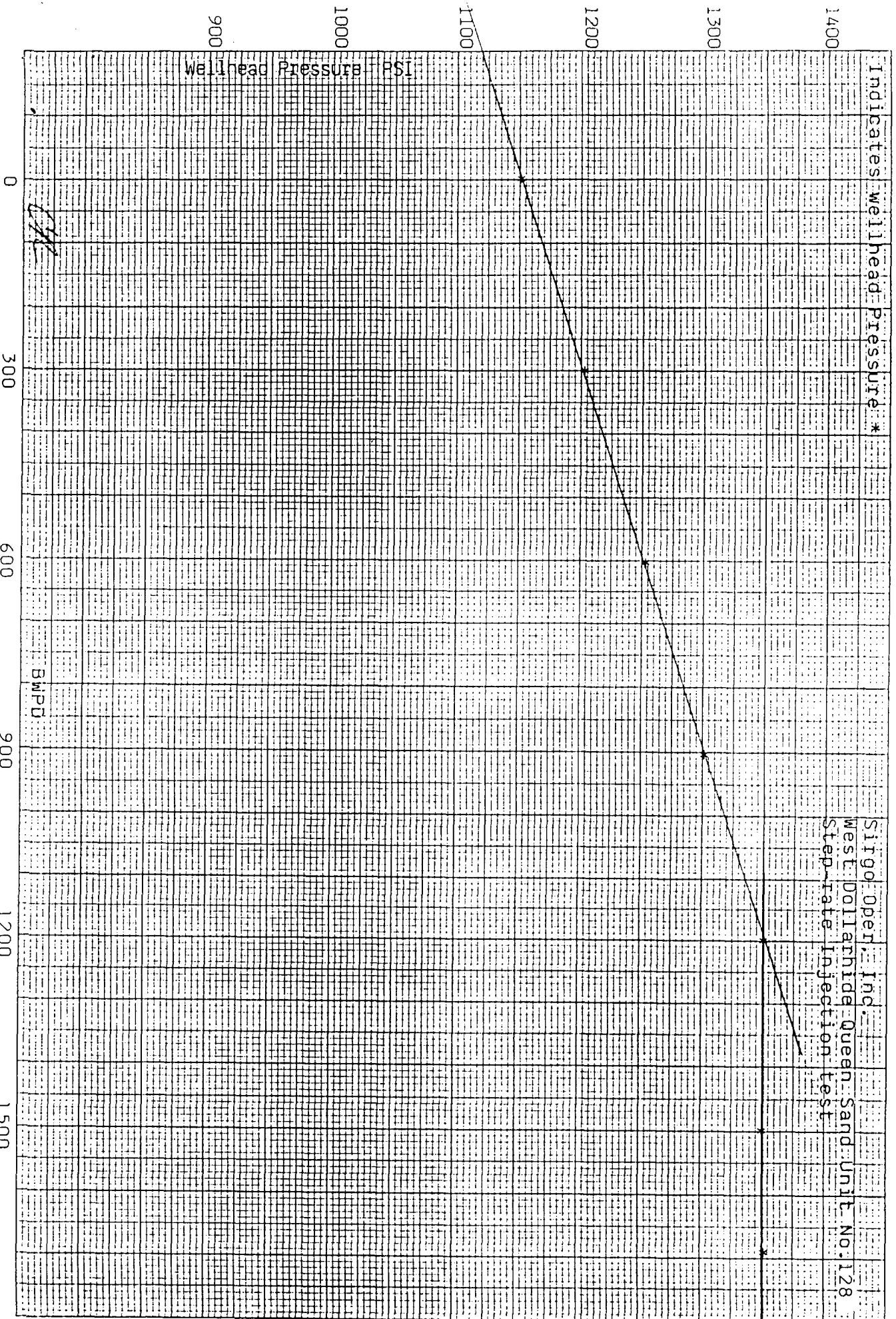
1450

900

10:10

1550

1200



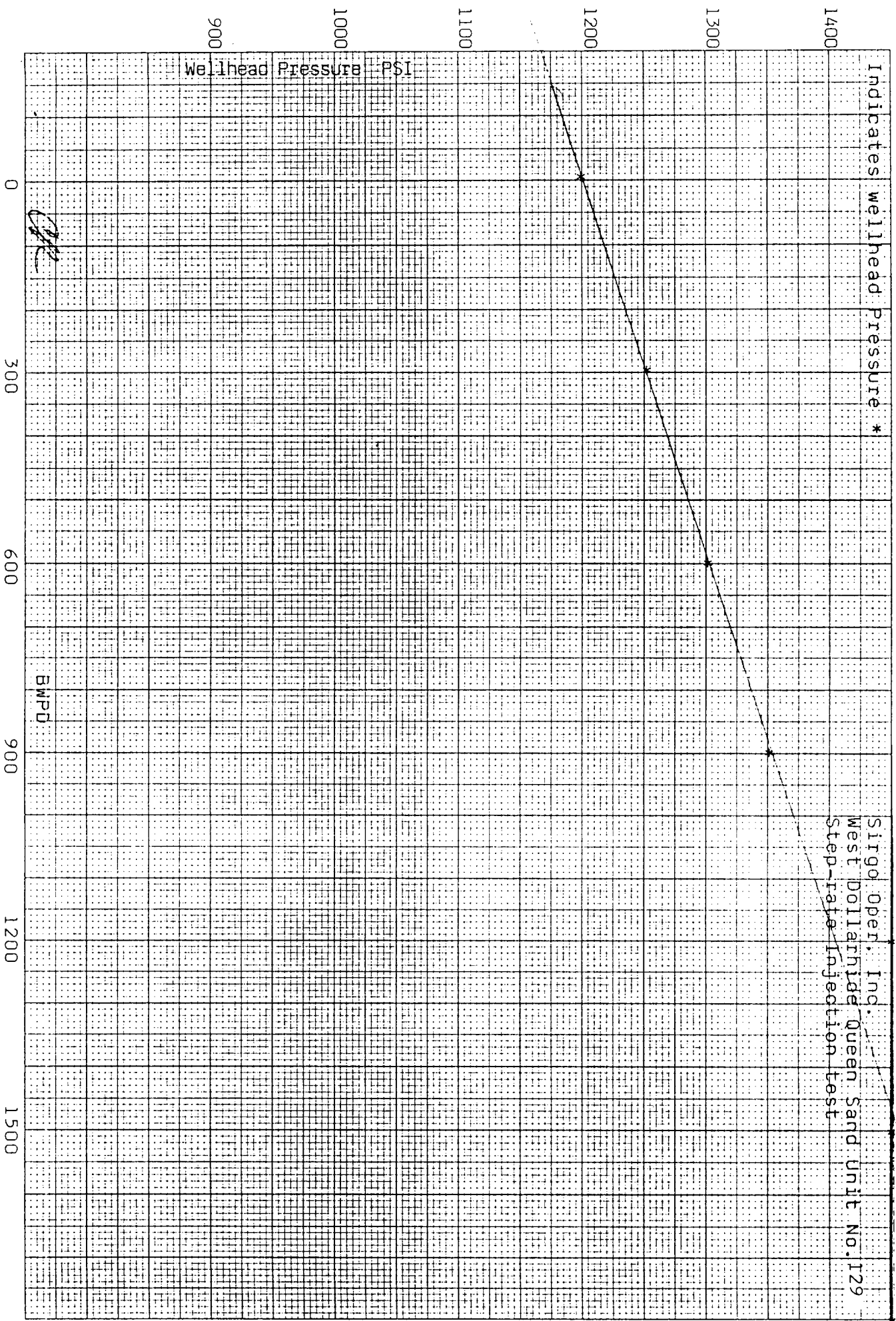
STEP RATE INJECTION TEST

WELL NAME WDQSU #128
OPERATER Sirgo Oper Inc.

DATE 4/5/90

[illegible]

Sirgo Oper. Inc.
West Dollarnide Queen Sand Unit No. 129
Step-rate Injection test



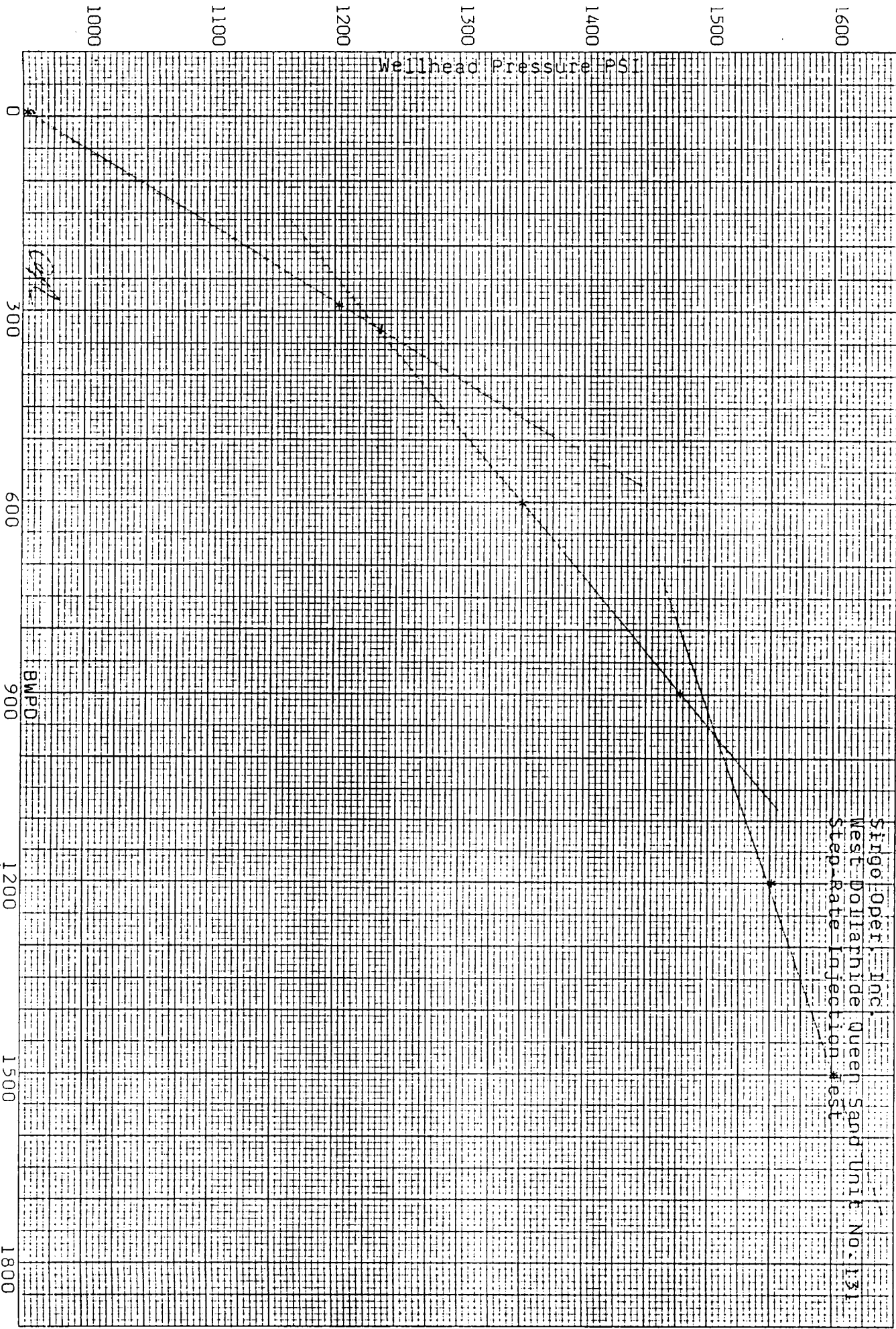
STEP RATE INJECTION TEST

WELL NAME WDQSU #129
OPERATER Sirgo Oper. Inc.

DATE 4/5/90

[illegible]

* Indicates Wellhead Pressure



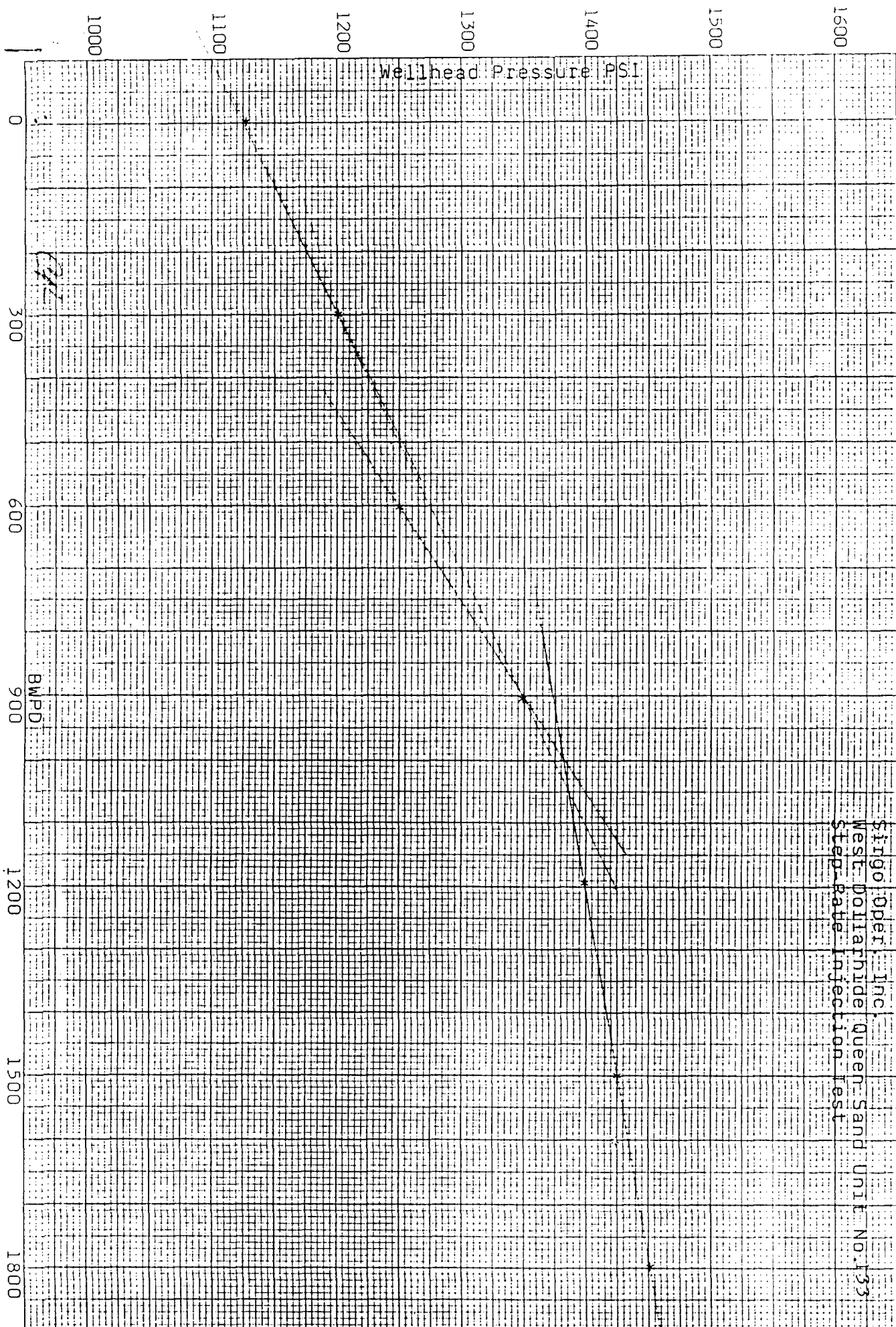
STEP RATE INJECTION TEST

WELL NAME WDQSU#131
OPERATER Sirgo Oper. Inc.

DATE 4/ 6/90

[illegible]

* Indicates Wellhead Pressure



Sirgo Oper. Inc.
West Poliarhide Queen Sand Unit No. 433
Step-Rate Injection Test

STEP RATE INJECTION TEST

WELL NAME WDQSU #133
 OPERATER Sirgo Oper Inc.

DATE 4/6/90

TIME

TBG. PRESS.

RATE BPD

8:00

1125

0

8:10

1200

300

8:20

1250

600

8:30

1350

900

8:40

1400

1200

8:50

1425

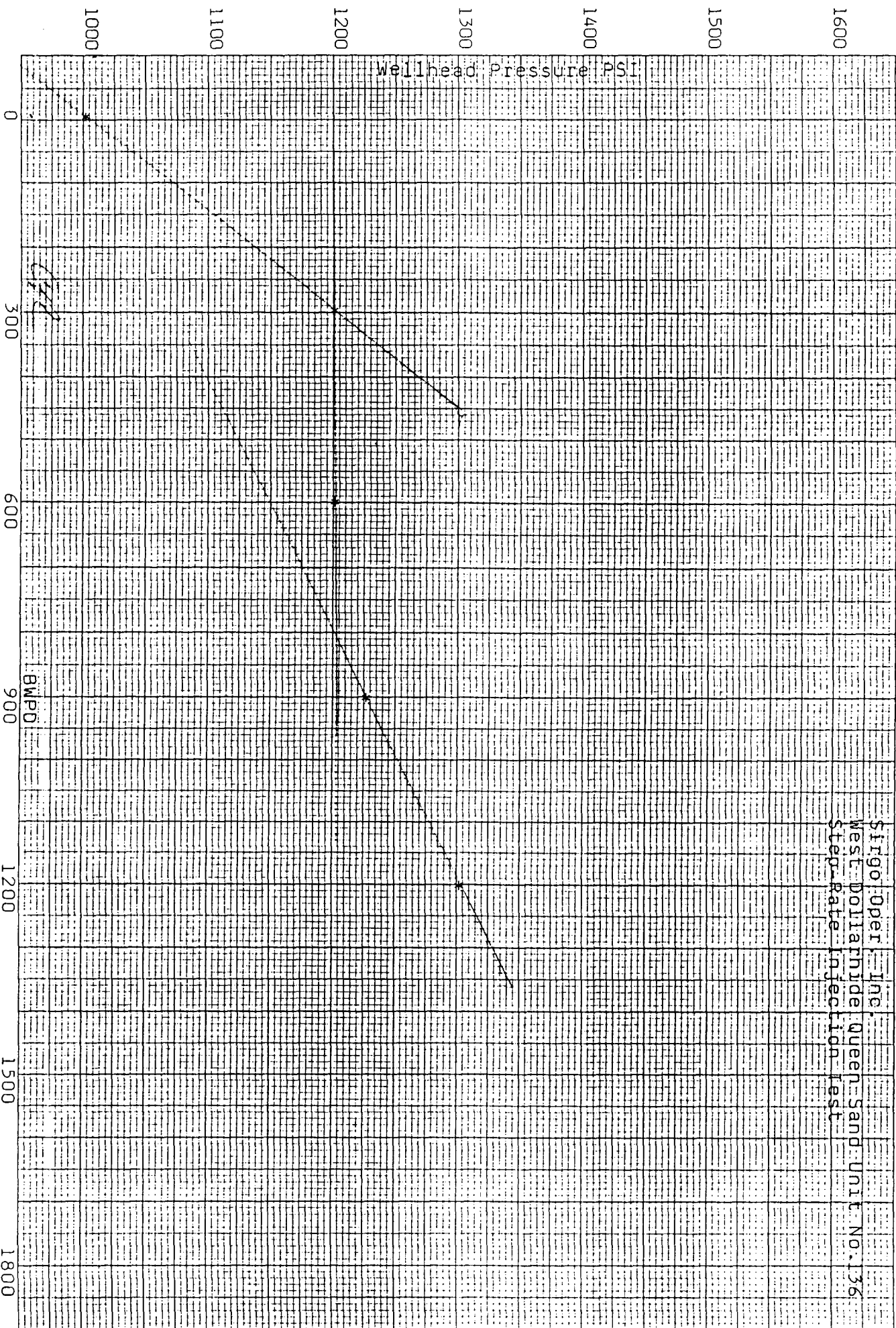
1500

9:00

1450

1800

* Indicates Wellhead Pressure



STEP RATE INJECTION TEST

WELL NAME WDQSU #136
OPERATER Sirgo Oper. Inc.

DATE 4/10/90

TIME

TBG. PRESS.

RATE BPD

11:15

1000

0

11:25

1200

300

11:35

1200

600

11:45

1225

900

11:55

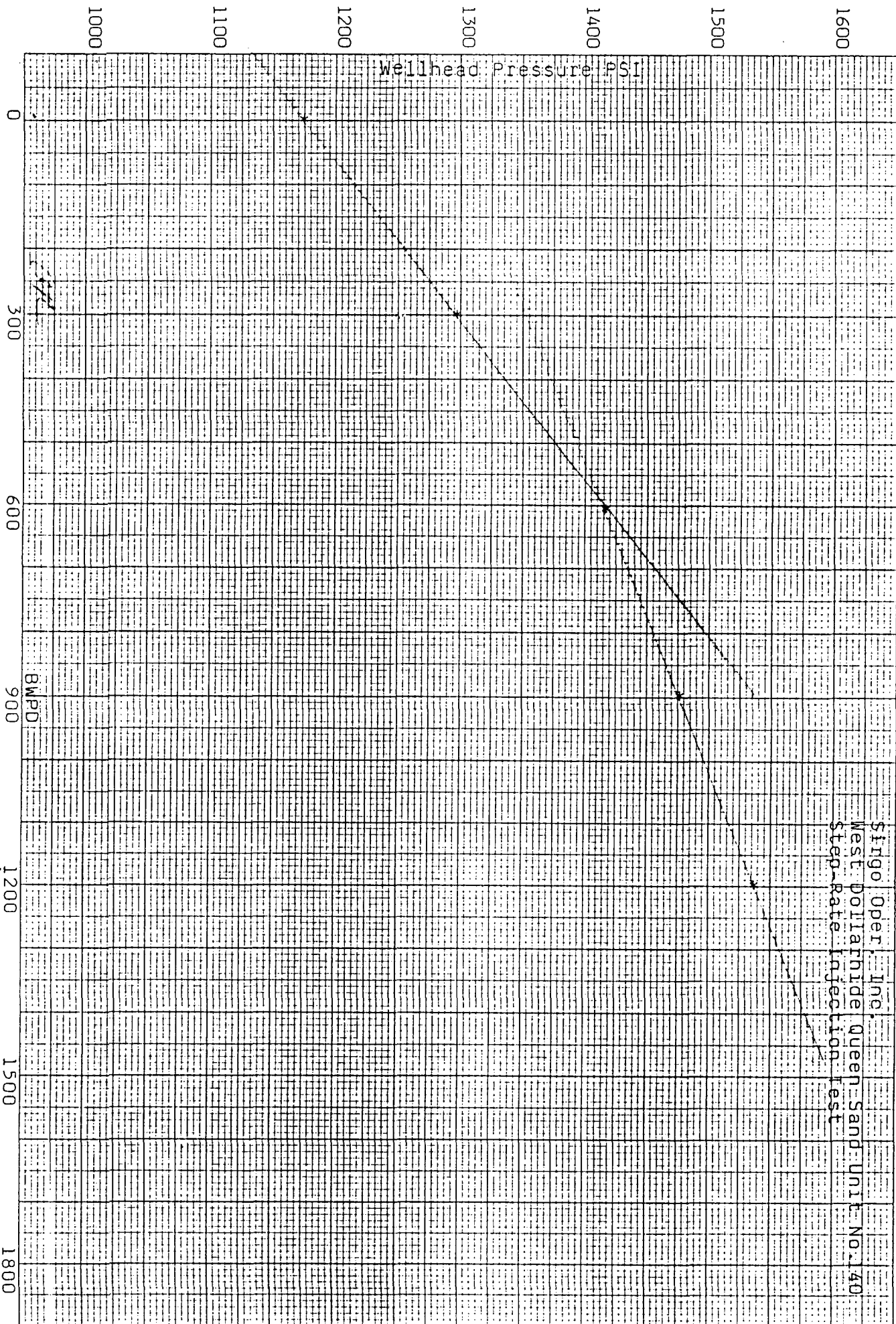
1300

1200

* Indicates Wellhead Pressure

Wellhead Pressure PSI

Sirgo Oper. Inc.
West DollaRhide Queen Sand Unit No. 140
Step-Rate Injection Test



STEP RATE INJECTION TEST

WELL NAME WDQSU #140
 OPERATER Sirgo Oper. Inc.

DATE 4/8/90

TIME

TBG. PRESS.

RATE BPD

8:45

1175

0

8:55

1290

300

9:05

1430

600

9:15

1475

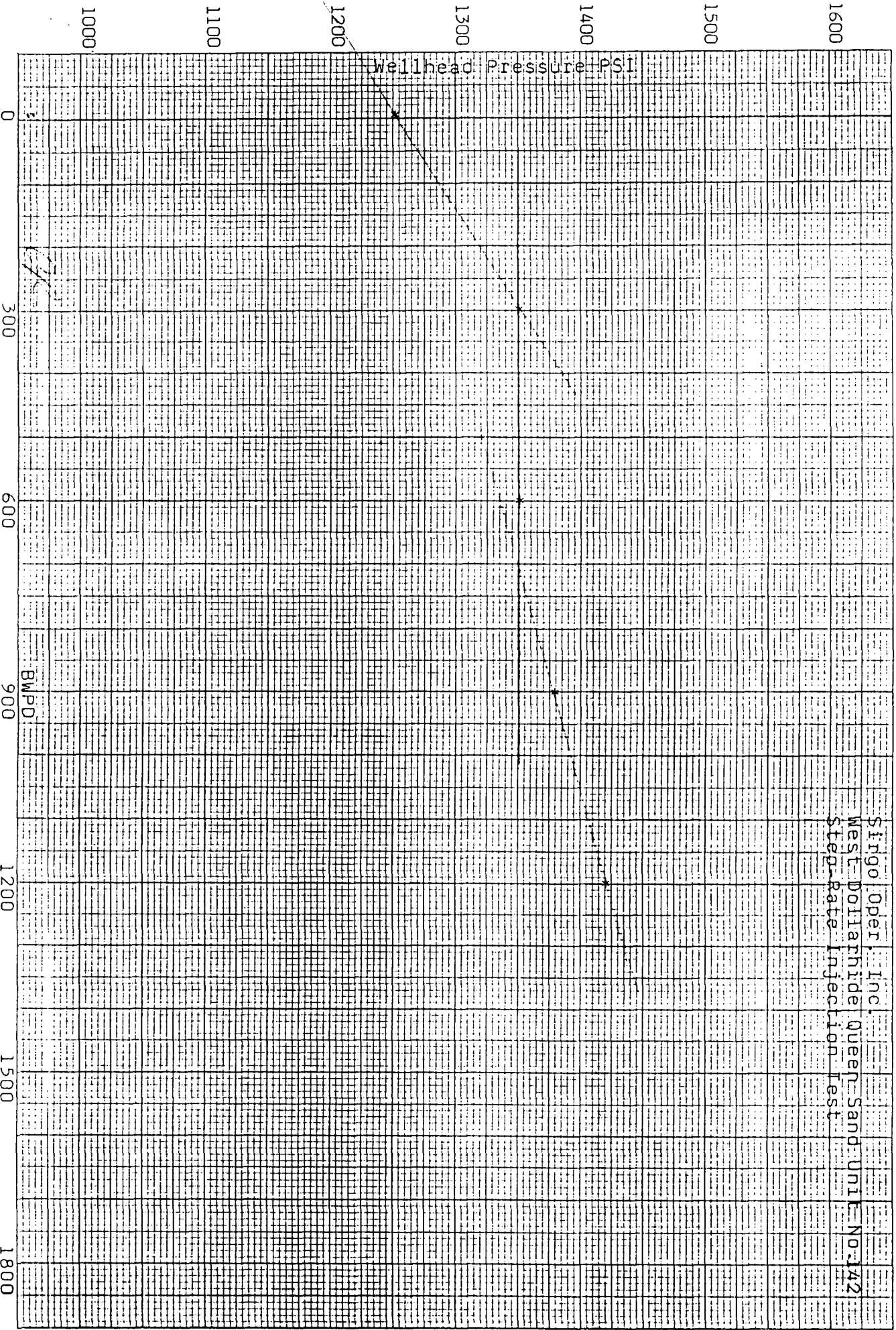
900

9:25

1540

1200

* Indicates Wellhead Pressure



STEP RATE INJECTION TEST

WELL NAME WDQSU #142DATE 4/10/90OPERATER Sirgo Oper. Inc.

TIME

TBG. PRESS.

RATE BPD

9:00

1250

0

9:10

1350

300

9:20

1355

600

9:30

1380

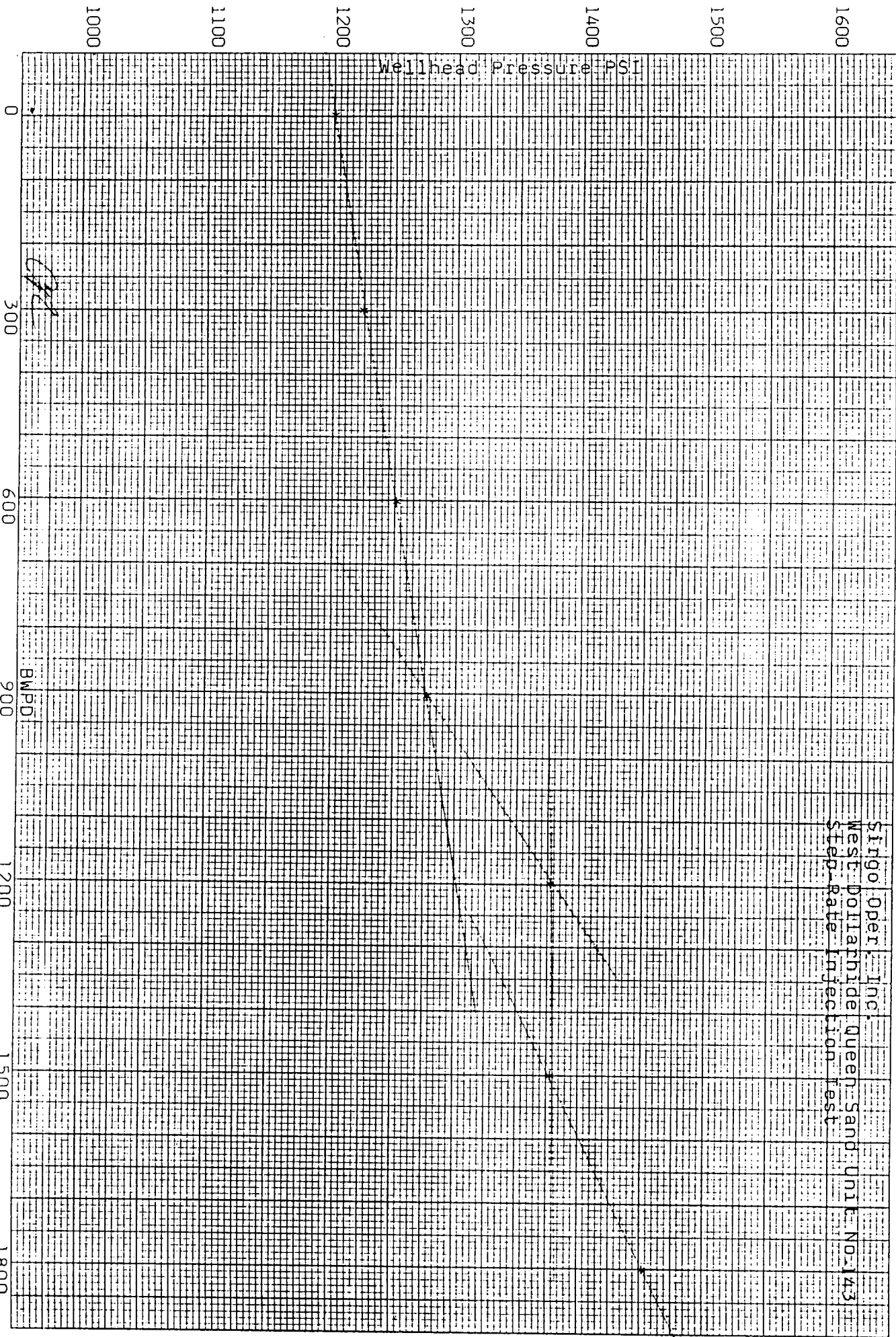
900

9:40

1420

1200

* Indicates Wellhead Pressure



STEP RATE INJECTION TEST

WELL NAME WDQSU #143DATE 4/11/90OPERATER Sirgo Oper. Inc.

TIME

TBG. PRESS.

RATE BPD

1:00

1200

0

1:10

1225

300

1:20

1250

600

1:30

1275

900

1:40

1375

1200

1:50

1380

1500

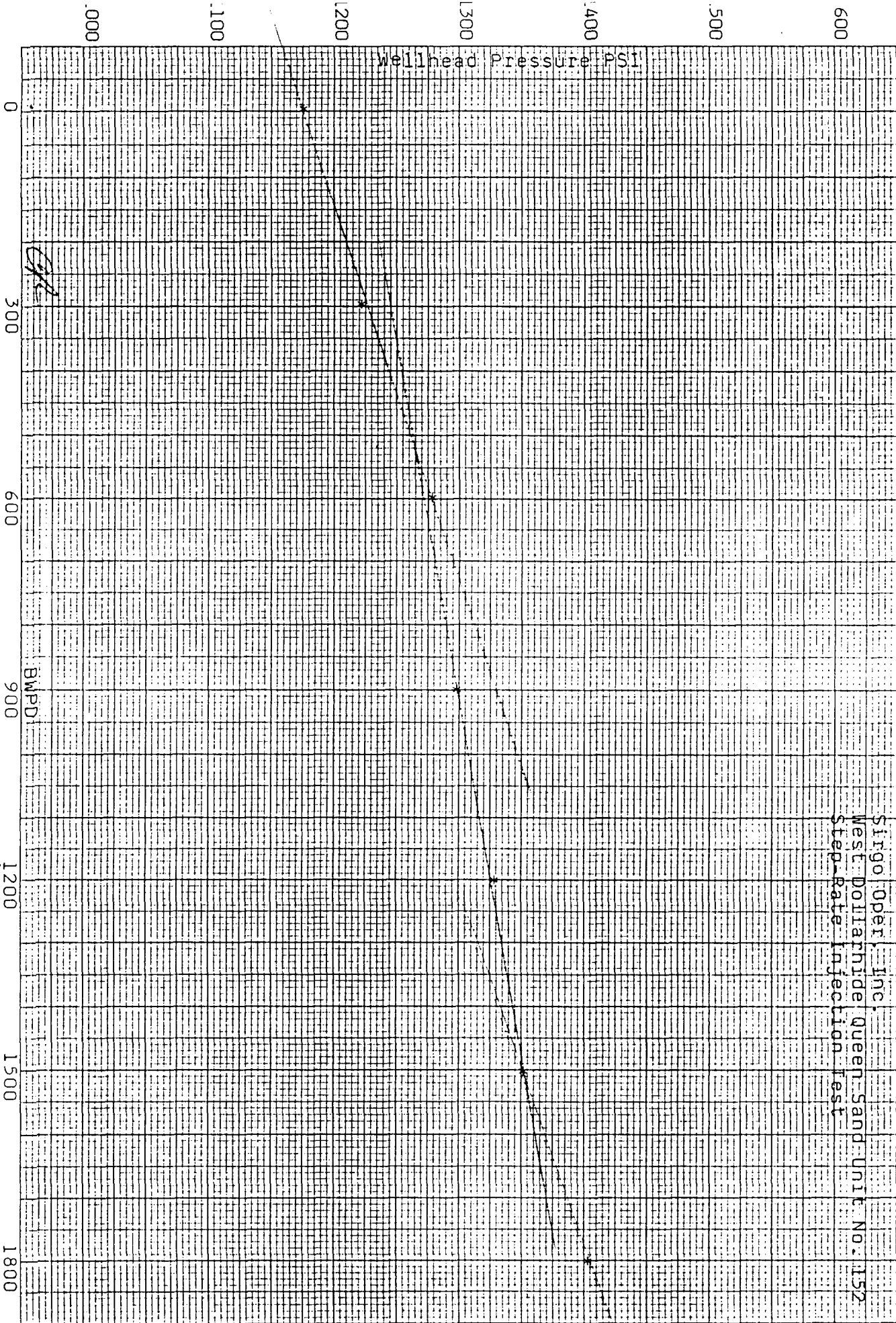
2:00

1450

1800

* Indicates Wellhead Pressure

Wellhead Pressure, PSI



STEP RATE INJECTION TEST

WELL NAME WDQSU #152DATE 4/11/90OPERATER Sirgo Oper. Inc.

TIME

TBG. PRESS.

RATE BPD

8:00

1175

0

8:10

1220

300

8:20

1250

600

8:30

1300

900

8:40

1325

1200

8:50

1350

1500

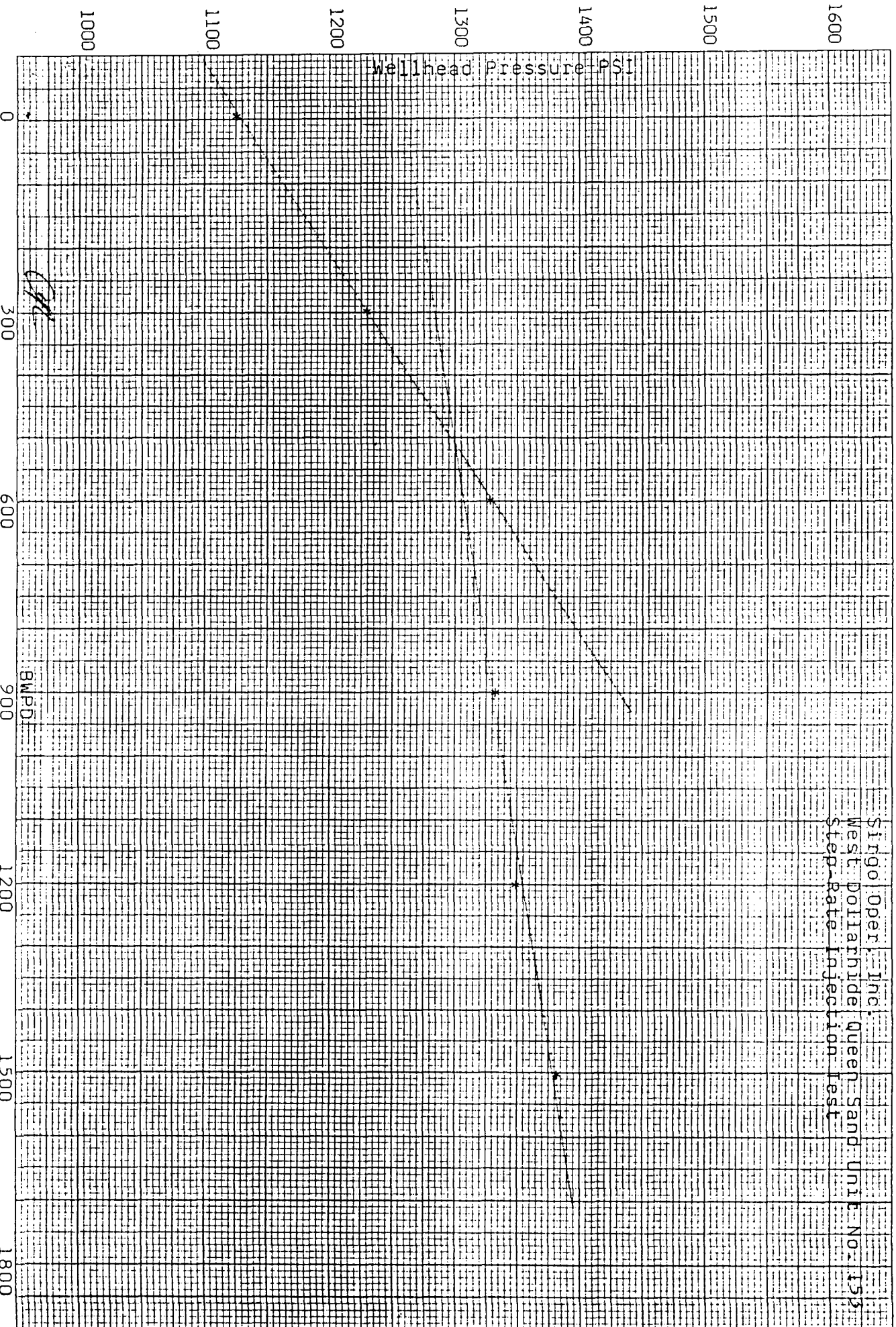
9:00

1400

1800

* Indicates Wellhead Pressure

Wellhead Pressure - PSI



Sirgo Oper. Inc.
West. Dollardude
Step-Rate Injection Test
Queen Sand Unit No. 152

STEP RATE INJECTION TEST

WELL NAME WDQSU # 153DATE 4/11/90OPERATER Sirgo Oper. Inc.

TIME

TBG. PRESS.

RATE BPD

10:15

1130

0

10:25

1235

300

10:35

1330

600

10:45

1335

900

10:55

1350

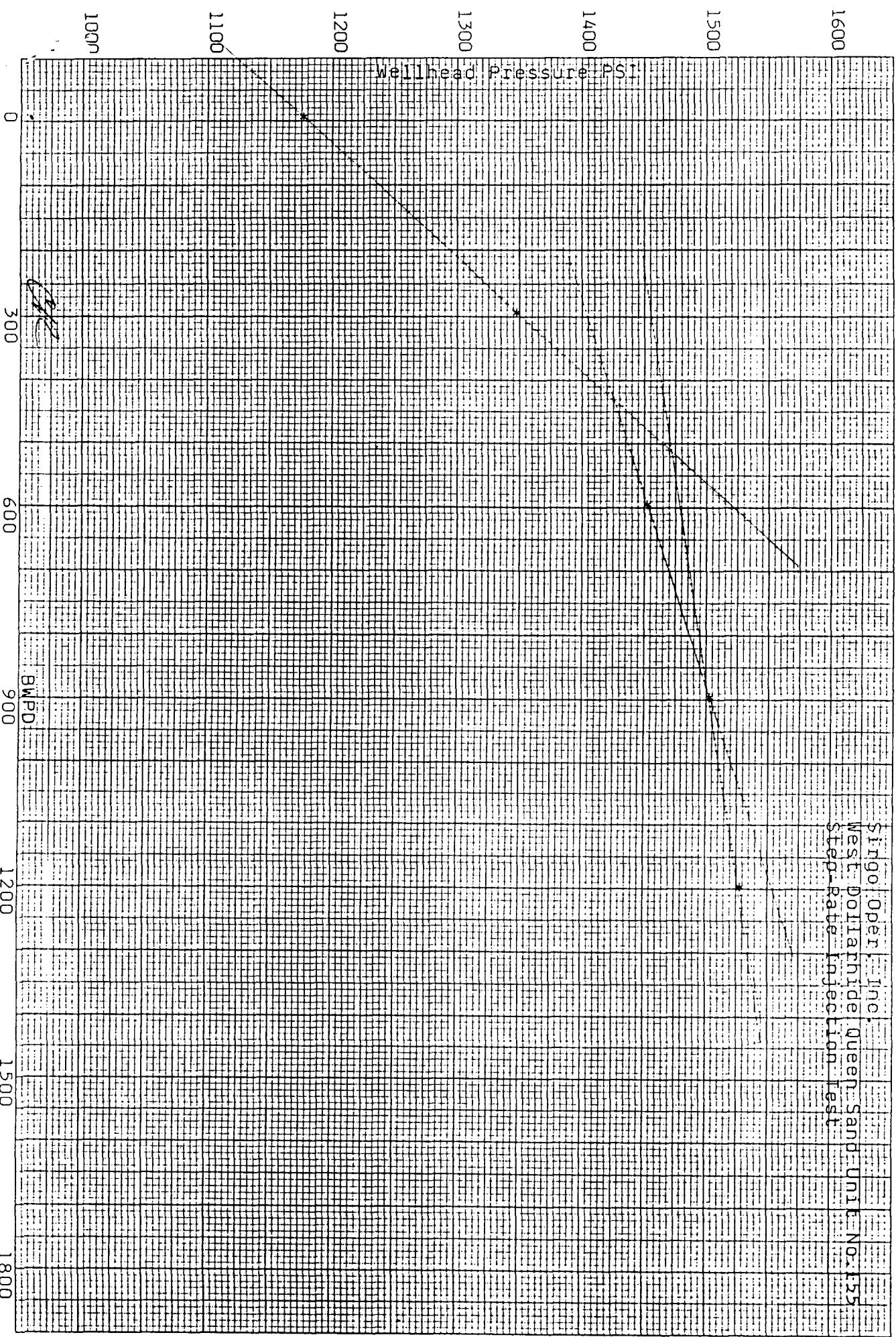
1200

11:05

1380

1500

* Indicates Wellhead Pressure



Singo Oper. Inc.
West Dollardide Queen Sand Unit No. 155
Step-Rate Injection Test

STEP RATE INJECTION TEST

WELL NAME WDQSU #155
OPERATER Sirgo Oper. Inc.

DATE 4/17/90

TIME

TBG. PRESS.

RATE BPD

10:00

1175

0

10:10

1350

300

10:20

1450

600

10:30

1500

900

10:40

1550

1200



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

April 30, 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:

Sirgo Operating Inc.	West Dollarhide Queen Sand Unit	#126-X	32-24-38
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

OIL - LOOKS LIKE FRACTURE - CLOSED THEN WENT BACK
TO ORIGINAL SCOPE

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
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April 30, 1990

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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:

Sirgo Operating Inc.	West Dollarhide Queen Sand Unit #128-N	19-24-38
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



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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:

Sirgo Operating Inc.	West Dollarhide Queen Sand Unit #129-M	19-24-38
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

OK VB 1400

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



STATE OF NEW MEXICO
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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:

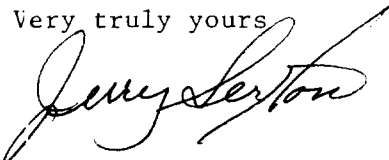
I have examined the step rate test for the:

Sirgo Operating Inc.	West Dollarhide Queen Sand Unit #108-E	29-24-38
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

OK

Very truly yours


Jerry Sexton
Supervisor, District I

/bp



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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:

Sirgo Operating Inc.	West Dollarhide Queen Sand Unit	#110-C	32-24-38
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



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HOBBS DISTRICT OFFICE

April 30, 1990

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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:

Sirgo Operating Inc.	West Dollarhide Queen Sand Unit #131-C	30-24-38
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

REC. 1450 (SAFE) (AT LEAST)

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



STATE OF NEW MEXICO
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HOBBS DISTRICT OFFICE

April 30, 1990

GARREY CARRUTHERS
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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:

Sirgo Operating Inc.	West Dollarhide Queen Sand Unit #133-D	31-24-38
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
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April 30, 1990

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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:

Sirgo Operating Inc.	West Dollarhide Queen Sand Unit #136-E	32-24-38
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

Neal Greer

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

April 30, 1990

GARREY CARRUTHERS
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HOBBS, NEW MEXICO 88240
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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:

Sirgo Operating Inc.	West Dollarhide Queen Sand Unit #140-L	32-24-38
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
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April 30, 1990

GARREY CARRUTHERS
GOVERNOR

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(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:

Sirgo Operating Inc.	West Dollarhide Queen Sand Unit #142-P	32-24-38
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

NOT A GOOD TEST

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
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HOBBS DISTRICT OFFICE

April 30, 1990

GARREY CARRUTHERS
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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:

Sirgo Operating Inc.	West Dollarhide Queen Sand Unit #143-J	32-24-38
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

NOT A GOOD TEST

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



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

April 30, 1990

GARREY CARRUTHERS
GOVERNOR

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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:

Sirgo Operating Inc.	West Dollarhide Queen Sand Unit #152-I	30-24-38
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

OK FOR 1250

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



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

April 30, 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:

Sirgo Operating Inc.	West Dollarhide Queen Sand Unit #153-0	30-24-38
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

SAFE AT 1275

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



STATE OF NEW MEXICO
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HOBBS DISTRICT OFFICE

April 30, 1990

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GOVERNOR

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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:

Sirgo Operating Inc.	West Dollarhide Queen Sand Unit #155-F	30-24-38
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

1. PROBABLY 1400 PSI IS SAFE

Very truly yours

Jerry Sexton
Supervisor, District I

/bp