



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Jennifer A. Salisbury

Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

August 7, 2000

Texaco Exploration & Production, Inc.
P.O. Box 3109
Midland, Texas 79701

Attn: Mr. Russell Pool

**RE: Injection Pressure Increase,
CVU Well No. 345
Lea County, New Mexico**

Reference is made to your request dated August 2, 2000 to increase the surface injection pressure on the above referenced well. This request is based on a step rate test conducted on July 31, 2000. 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:

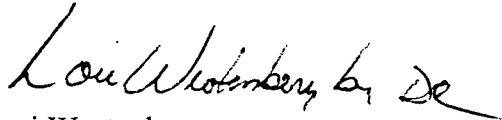
<i>Well and Location</i>	<i>Maximum Surface Injection Pressure Water</i>	<i>Maximum Surface Injection Pressure CO₂</i>
<i>CVU Well No. 345 Unit N, Section 31, Township 17 South, Range 35 East</i>	<i>1945 PSIG</i>	<i>1850 PSIG</i>
<i>Lea County, New Mexico.</i>		

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
Texaco Exploration & Production, Inc.
August 7, 2000
Page 2

In addition to the operator name, well name and test data; please include the legal location of the well, the name of a contact person, a phone number and a return address with any future requests for pressure increase.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lori Wrotenbery by de".

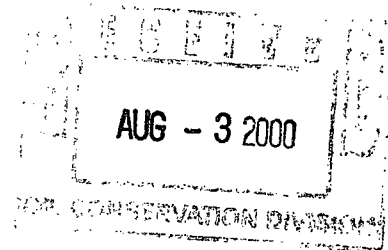
Lori Wrotenbery
Director

LW/MWA/kv

cc: Oil Conservation Division - Hobbs
Files: Case No. 6008 (Order No. R-5530), PMX-121, IPI 3rd QTR-2000

1 P1

N/R



Step Rate Injection Test Report

for

Texaco Expl. & Prod. Inc.

CVU #345

P.O. Box 3109
Midway, TX
79701

Send to David C. ✓
Forward to Mark Ashley
8/3/00

CASE# 5970
R-546

8/11 100pm

Gerry Smith

dropped this off -

They had a problem
w/ test - will call
you later today

RUSSELL PRO

1945pm

Jinda
N-33-175-35E

Production Testing Services

COMPANY : Texaco Expl. & Prod. Inc.
 WELL: CVU #345
 COMPANY REP: Don Diamond
 PACKER DEPTH: 4243

SERVICE DATES : 7/31/00
 TEST TYPE : Step Rate Injection
 PTS TECHNICIANS : D. Ginanni

DATE	TIME	REMARKS
07/31/00	15:10	Start injecting @ 2000 BPD
07/31/00	15:15	
07/31/00	15:20	
07/31/00	15:25	Increase Rate to 2500 BPD
07/31/00	15:30	
07/31/00	15:35	
07/31/00	15:40	Increase Rate to 3200 BPD
07/31/00	15:45	
07/31/00	15:50	
07/31/00	15:55	Increase Rate to 3900 BPD
07/31/00	16:00	
07/31/00	16:05	
07/31/00	16:10	Increase Rate to 4600 BPD
07/31/00	16:15	
07/31/00	16:20	
07/31/00	16:25	Increase Rate to 5300 BPD
07/31/00	16:30	
07/31/00	16:35	
07/31/00	16:40	Increase Rate to 6000 BPD
07/31/00	16:45	
07/31/00	16:50	
07/31/00	16:55	Kill truck at maximum rate. End Test

Production Testing Services

COMPANY : Texaco Expl. & Prod. Inc.

WELL: CVU #345

COMPANY REP: Don Diamond

PERFORATIONS:

PACKER DEPTH: 4243

SERVICE DATES : 7/31/00

TEST TYPE : Step Rate Injection

PTS TECHNICIANS : D. Ginanni

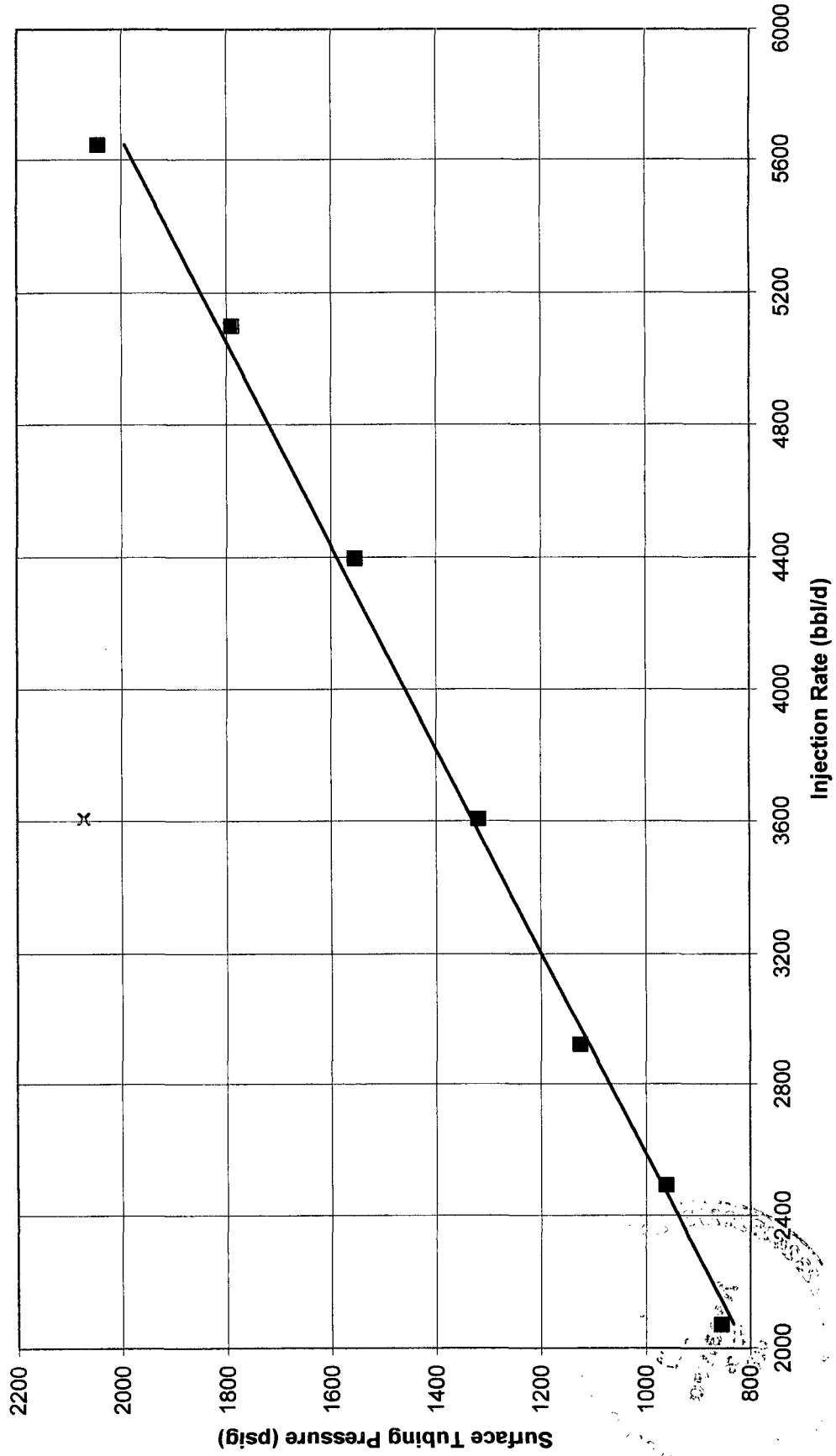
BHP GAUGE DEPTH:

STEP NO.	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMULATIVE VOL INJECTED (bbis)	(3) INJECTION RATE (bbis/day)	(4) FRICTION HEAD LOSS (psi)	(5) CORRECTED TUBING PRESS. (psi) (1) - (4)	(6) INJECTION RATE (gpm) (3)/34.2857	(7) MEASURED BHP (psi)
	15:10	759.8						
	15:15	820.8	7.1	2046.5	71.898	748.9	59.69	
	15:20	847.7	14.4	2104.1	75.690	772.0	61.37	
1	15:25	854.2	21.6	2068.5	73.336	780.9	60.33	
	15:30	935.3	30.2	2476.8	102.342	832.9	72.24	
	15:35	952.1	38.9	2512.8	105.113	847.0	73.29	
2	15:40	960.5	47.6	2489.5	103.319	857.1	72.61	
	15:45	959.7	56.1	2453.6	100.580	859.1	71.56	
	15:50	1100.2	67.0	3141.4	158.865	941.3	91.62	
3	15:55	1124.9	78.0	3174.0	161.927	963.0	92.57	
	16:00	1333.8	89.2	3226.7	166.941	1166.8	94.11	
	16:05	1297.4	102.5	3837.2	230.031	1067.3	111.92	
4	16:10	1318.9	115.6	3763.2	221.889	1097.0	109.76	
	16:15	1540.4	130.5	4279.8	281.510	1258.9	124.83	
	16:20	1506.3	146.1	4488.3	307.410	1198.9	130.91	
5	16:25	1553.3	161.4	4425.3	299.466	1253.9	129.07	
	16:30	1762.0	178.7	4989.3	373.873	1388.2	145.52	
	16:35	1782.4	196.7	5176.6	400.265	1382.1	150.99	
6	16:40	1789.7	214.5	5136.2	394.498	1395.2	149.81	
	16:45	1995.7	233.0	5321.8	421.281	1574.4	155.22	
	16:50	2033.5	253.3	5831.5	498.940	1534.5	170.08	
7	16:55	2045.0	273.4	5789.9	492.386	1552.6	168.87	

1995 inj pressure - cul

Production Testing Services

Step Rate Injection Test



1247 Broadway Pl.
P.O. Box 7125
Hobbs, NM 88240

Phone: (505) 391-8703
Fax: (505) 393-4753



Step Rate Injection Test Report
for
Texaco Expl. & Prod. Inc.
CVU #345

Production Testing Services

COMPANY : Texaco Expl. & Prod. Inc.
WELL: CVU #345
COMPANY REP: Don Diamond
PACKER DEPTH: 4243

SERVICE DATES : 7/31/00
TEST TYPE : Step Rate Injection
PTS TECHNICIANS : D. Ginanni

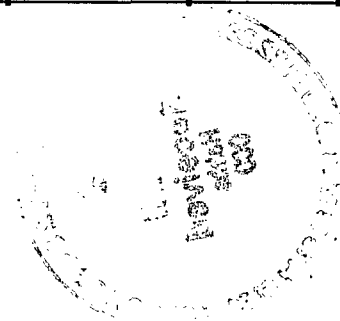
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07/31/00	15:15	
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07/31/00	15:45	
07/31/00	15:50	
07/31/00	15:55	Increase Rate to 3900 BPD
07/31/00	16:00	
07/31/00	16:05	
07/31/00	16:10	Increase Rate to 4600 BPD
07/31/00	16:15	
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07/31/00	16:25	Increase Rate to 5300 BPD
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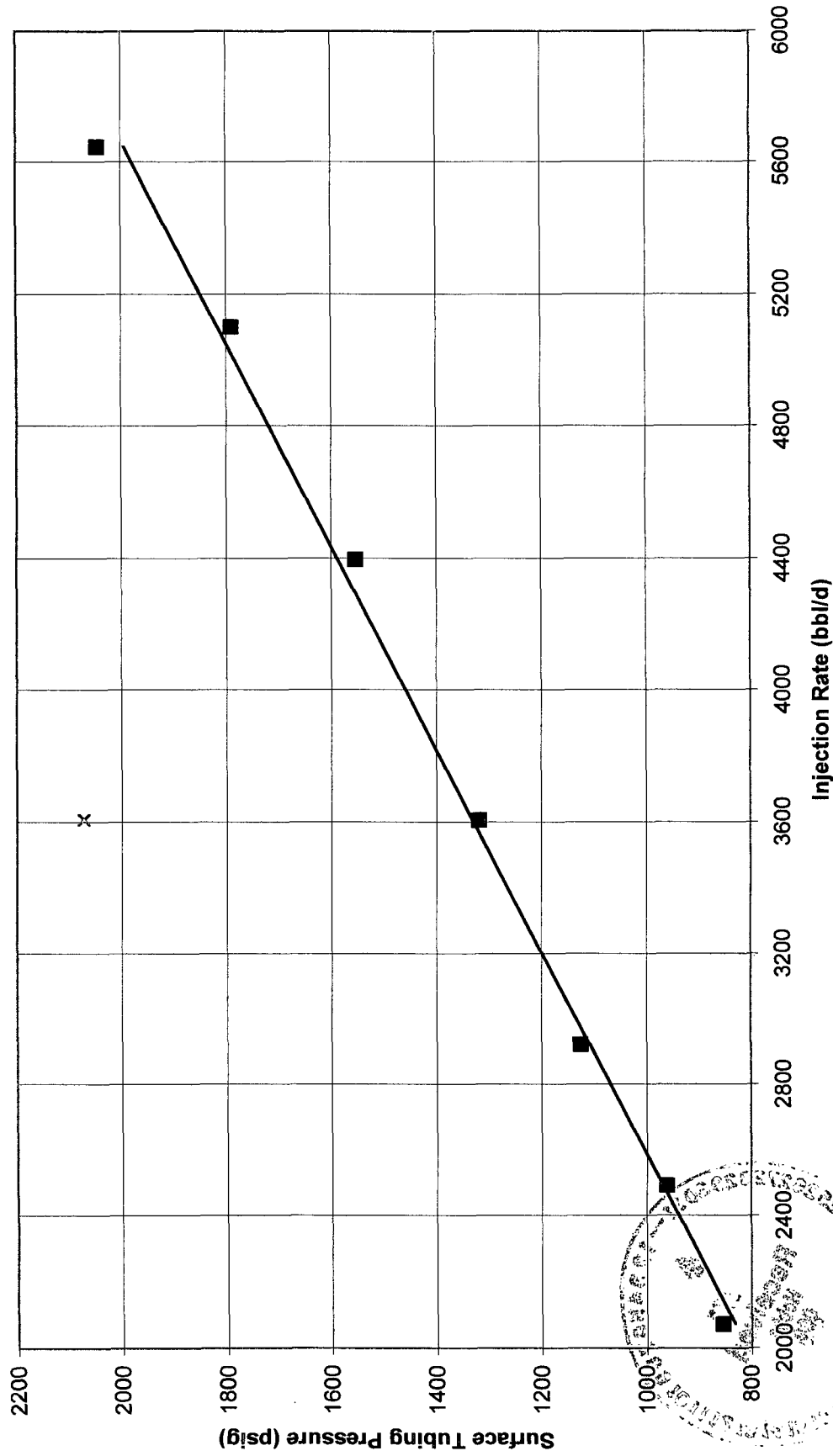
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Production Testing Services

Step Rate Injection Test



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P.O. Box 7125
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Texaco Exploration and Production Inc
Permian Basin Business Unit
Hobbs Operating Unit

P. O. Box 3109
Midland TX 79702-3019
505 688 4100

August 10, 2000

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe NM 87501

100-100000-100000
AUG 14 2000
NEW MEXICO OIL CONSERVATION DIVISION

Attention: Mr. David R. Catanach

RE: **Request for Increase in Surface Injection Pressure Limit**
Texaco Exploration & Production Inc
Central Vacuum Unit Well No. 345
T 17/18 S, R 34/35 E, Lea County, New Mexico

Dear Mr. Catanach,

Texaco requests permission to inject into the subject well at a higher pressure than what is currently permitted. A step rate test was performed on July 31, 2000 and no break in the rate vs. pressure curve was observed up to a surface water injection pressure of 2045 psig.

Based on this we are asking for pressure limits of 1500 psig while injecting water and 1850 psig for CO₂ injection. The higher injection pressure is needed for optimum CO₂ flood efficiency in this pattern. We plan to begin CO₂ injection soon after obtaining your approval of this request. Please call me at 915-688-4577 if you would like to discuss this request.

Yours truly,

Stephen Guillot
Production Engineer

Attachment
Cc: Mr. Jerry Sexton
Hobbs NMOCD



Step Rate Injection Test Report
for
Texaco Expl. & Prod. Inc.
CVU #345

Production Testing Services

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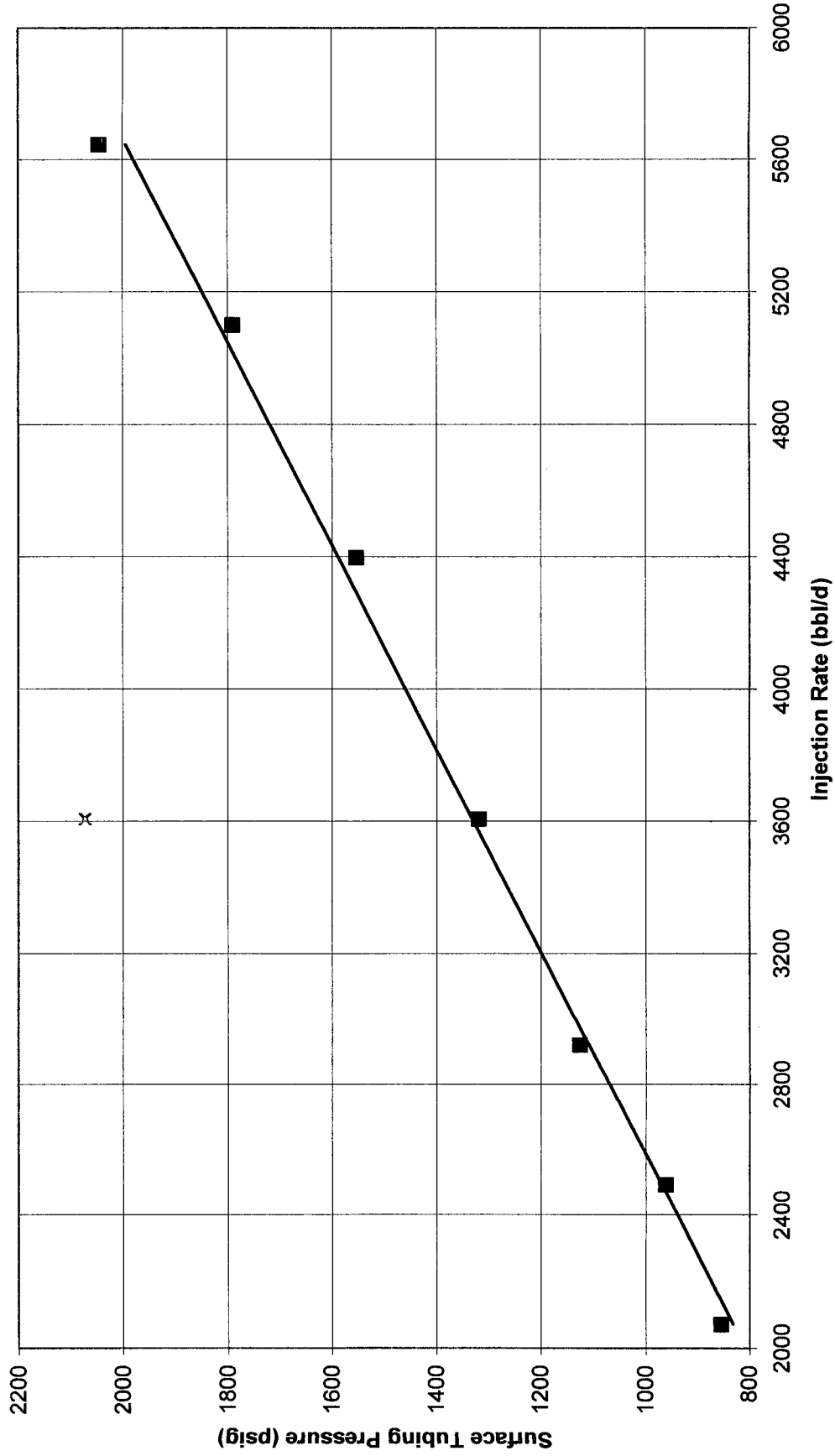
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