

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

BRUCE KING  
GOVERNOR

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

May 23, 1991

Texaco USA, Inc.  
P.O. Box 730  
Hobbs, NM 88240

Attention: R. J. Ryan

RE: *Injection Pressure Increase  
State "AA" SWD Well No. 1  
Lea County, New Mexico*

Dear Mr. Ryan:

Reference is made to your request dated April 30, 1991, to increase the surface injection pressure on the State "AA" SWD Well No. 1. This request is based on a step rate test conducted on the well on February 2, 1991. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on the well is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following well:

WELL AND LOCATION

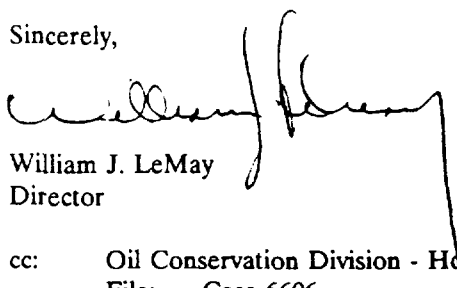
MAXIMUM INJECTION  
SURFACE PRESSURE

State "AA" SWD Well No. 1  
Unit I, Section 35, T-21 South,  
R-34 East, NMPM, Lea County, NM.

950 PSIG

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

cc: Oil Conservation Division - Hobbs  
File: Case 6606  
R. Brown  
D. Catanach

NO WAITING PERIOD

COMPANY: Texaco USA  
ADDRESS: P.O. Box 730  
CITY, STATE, ZIP: Hobbs, N.M. 88240  
ATTENTION: R. J. Ryan

Re: Injection Pressure Increase  
State "AA" SWD Well No. 1

Lea County, New Mexico

Dear Sir:

Reference is made to your request dated April 30, 1991, to increase the surface injection pressure on State "AA" SWD Well No. 1. This request is based on a step rate test conducted on the well on February 2, 1991. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on the well is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following well:

Well & Location

Maximum Injection  
Surface Pressure

State "AA" SWD Well No. 1  
Unit I, Sector 35, T-2N, R-2E, N.M.M.  
Lea County, New Mexico

950 PSIG

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.

R. Brown  
XC: T. GALLEGOS  
D. CATANACH  
FILE- Case 6606  
OCD- Hobbs



Texaco USA

PO BOX 211  
Hobbs NM 88240  
(505) 397-0425

OIL CONSERVATION DIVISION  
RECEIVED

'91 MAY 3 AM 9 05

April 30, 1991

Mr. David R. Catanach  
State of New Mexico  
Energy, Minerals and Resources Department  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87504

Re: State AA SWD No.1  
Section 35, T21S, R34E, NE/4 SE/4

Dear Mr. Catanach:

This letter is in response to your notice (Attachment I) concerning salt water disposal operations on the captioned lease. The attachment documents the results of a bradenhead survey recently conducted on the subject well (12-12-90). During the test, a NMOCDD representative witnessed injection pressures (900 psi) in excess of the approved limit (750 psi). The stated limit was set forth by Division Order R-6080.

In order to remain in compliance with the stated order, Texaco has subsequently installed a "kill-switch" which effectively limits the system to approved operating pressures.

In a concurrent effort to justify an increased pressure limit, Texaco performed a step rate test on February 2, 1991. Advance notice of the test was given to the Hobbs District Office prior to this date. The results of this test are given in Attachment II. On the basis of the results that were obtained, Texaco respectfully requests increasing the injection pressure limit to 950 psi (60 psi below the observed parting pressure).

Your prompt attention to granting this request would be greatly appreciated. If any further questions may arise, please feel free to contact me at (505)397-0425.

Sincerely,

R.J. Ryan  
Production Engineer  
Hobbs Area

Attachment I



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

GARREY CARRUTHERS  
GOVERNOR

December 27, 1990

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88241-1980  
(505) 393-6161

Texaco Producing Inc.  
P. O. Box 730  
Hobbs, New Mexico 88241-0730

Re: State AA SWD #1-I, Sec 35, T21S, R34E

Gentlemen:

The Oil Conservation Division recently witnessed a  
bradenhead test on the above referenced well.

The injection pressure was 900 psi when running and  
according to Division Order R-6080, the injection pressure  
is not to exceed 750 psi.

We request that you curtail the injection pressure to  
conform to the approved limit.

If you feel an approved pressure increase is justified, you  
may wish to conduct a step rate test and request the limit  
be increased.

If you choose to go with this procedure, we request that you  
notify this office 24 hours prior to the test.

The step rate test with a letter requesting the increase  
should be sent to the OCD office in Santa Fe with a copy to  
be sent to this office. Mr. Sexton will evaluate the  
information on the test and send a recommendation to the  
Examiner in Santa Fe.

We are enclosing a copy of the test sheet for your  
information.

Very truly yours

OIL CONSERVATION DIVISION

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

Jerry Sexton  
Supervisor, District I

JS:bp

cc: William J. LeMay  
File

Encl.

NEW MEXICO OIL CONSERVATION DIVISION  
CASING--BRADENHEAD TEST

OPERATOR: TEXACO PROD. INC

LEASE: STATE AA

POOL: YATES

FOOTAGE 660-E

FOOTAGE 1980-S

ORDER NO. R-6080

SECTION

PRESS LMT

35

750 TYPE LEASE

DATE INJ. BEGAN

UNIT LTR I

TWN

21 S

RANGE

34 E

TYPE WELL

S

WELL # 1 --

TEST DATE 13-Dec-88 TEST TYPE BHT PASS/FAIL BSD4

OPERATOR REP: JOE OCD REP: SMITH

CASING SIZE SET AT TOP CMT CEMENTED PRESSURE REMARKS

SURFACE 8 5/8 240 0 200SX

INTERM-1

INTERM-2

PROD 5 1/2 3822 0 850SX

72 WTR WON'T BLOW DOW

LINER

TUBING 2 3/8

3747 PKR

VAC

SMALL VAC TBG

IF WELL IS ON VACUUM: SI.

MIN.

TBG PRESS.

CSG: VACUUM . . . . . STATIC .

APPROX. HRS/DAY WELL .

REMARKS: PRESS TBG & CSG RISES TOGETHER

SNC NO

REPAIR LETTER DATE 15-Dec-88

DATE REPAIR

16-Dec-88

TEST DATE 29-Nov-89 TEST TYPE BHT PASS/FAIL BSD4

OPERATOR REP: JOE OCD REP: SADLER

CASING SIZE SET AT TOP CMT CEMENTED PRESSURE REMARKS

SURFACE 8 5/8 240 0 200SX

INTERM-1

INTERM-2

PROD 5 1/2 3822 0 850SX

0 .

LINER

TUBING 2 3/8

3747 PKR

500#

IF WELL IS ON VACUUM: SI.

MIN..

TBG PRESS.

CSG: VACUUM . . . . . STATIC .

APPROX. HRS/DAY WELL .

REMARKS: 5/24/90 RIG UP TO REPAIR

SNC NO

REPAIR LETTER DATE .

DATE REPAIR .

TEST DATE 12-19-90 TEST TYPE 13 1/2 PASS/FAIL

OPERATOR REP: JOHNNY OCD REP: LYLE

CASING SIZE SET AT TOP CMT CEMENTED PRESSURE REMARKS

SURFACE 8 5/8 240 0 200SX

INTERM-1

INTERM-2

PROD 5 1/2 3822 0 850SX

LINER

TUBING 2 3/8

3747 PKR

675 NOT INT  
900 INT. 150' C.L.

IF WELL IS ON VACUUM: SI MIN.

TBG PRESS.

CSG: VACUUM

STATIC

APPROX. HRS/DAY WELL 24 HRS. AUTO

REMARKS:

USED

REPAIR LETTER DATE

DATE REPAIRED

SNC

## STEP RATE TESTERS, INC.

915/366-3409

P. O. Box 13094

ODESSA, TEXAS 79768

No. \_\_\_\_\_

COMPANY TEXACO INC. DATE 2-2-51

ADDRESS \_\_\_\_\_

WELL # 1 SWD LEASE GETTY STATE 35 AA  
NE 1/4 SE 1/4 Sec. 35 T21S R34E E1S4

## WELL FILE DATA:

T.D. 3949 PACKERS @ ? PERFS. ? OH-3822-4172  
TBG. ID. 2 3/4 TBG. COATING \_\_\_\_\_ DEPTH SN. \_\_\_\_\_ BHP @ 3875'

## STABILIZATION:

RATE 0 BHPD PRES. 444 2180 PSIG. CUMULATIVE \_\_\_\_\_ BBLS.

## INCREMENTS:

RATE 200 BHPD PRES. \_\_\_\_\_ PSIG. STEP LENGTH 15 MINS.TEST RESULTS: SURFACE WITH FRICTION 1010 - 700  
1" less " 995 690  
FORMATION PARTING POINT BHP - 2733 PSIG. @ 690 BHPD

	RATE BHPD	PRESSURE SURFACE PSIG.	PRESSURE MINUS FRICTION PSIG.	PRESSURE BOTTOM HOLE PSIG.
1.	<u>0</u>	<u>444</u>	<u>444</u>	<u>2180</u>
2.	<u>200</u>	<u>605</u>	<u>606</u>	<u>2342</u>
3.	<u>400</u>	<u>750</u>	<u>754</u>	<u>2490</u>
4.	<u>600</u>	<u>929</u>	<u>923</u>	<u>2659</u>
5.	<u>800</u>	<u>1037</u>	<u>1012</u>	<u>2748</u>
6.	<u>1000</u>	<u>1091</u>	<u>1051</u>	<u>2787</u>
7.	<u>1200</u>	<u>1146</u>	<u>1077</u>	<u>2813</u>
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				

REMARKS \_\_\_\_\_

TESTER

Wade Riser

COMPANY REP.

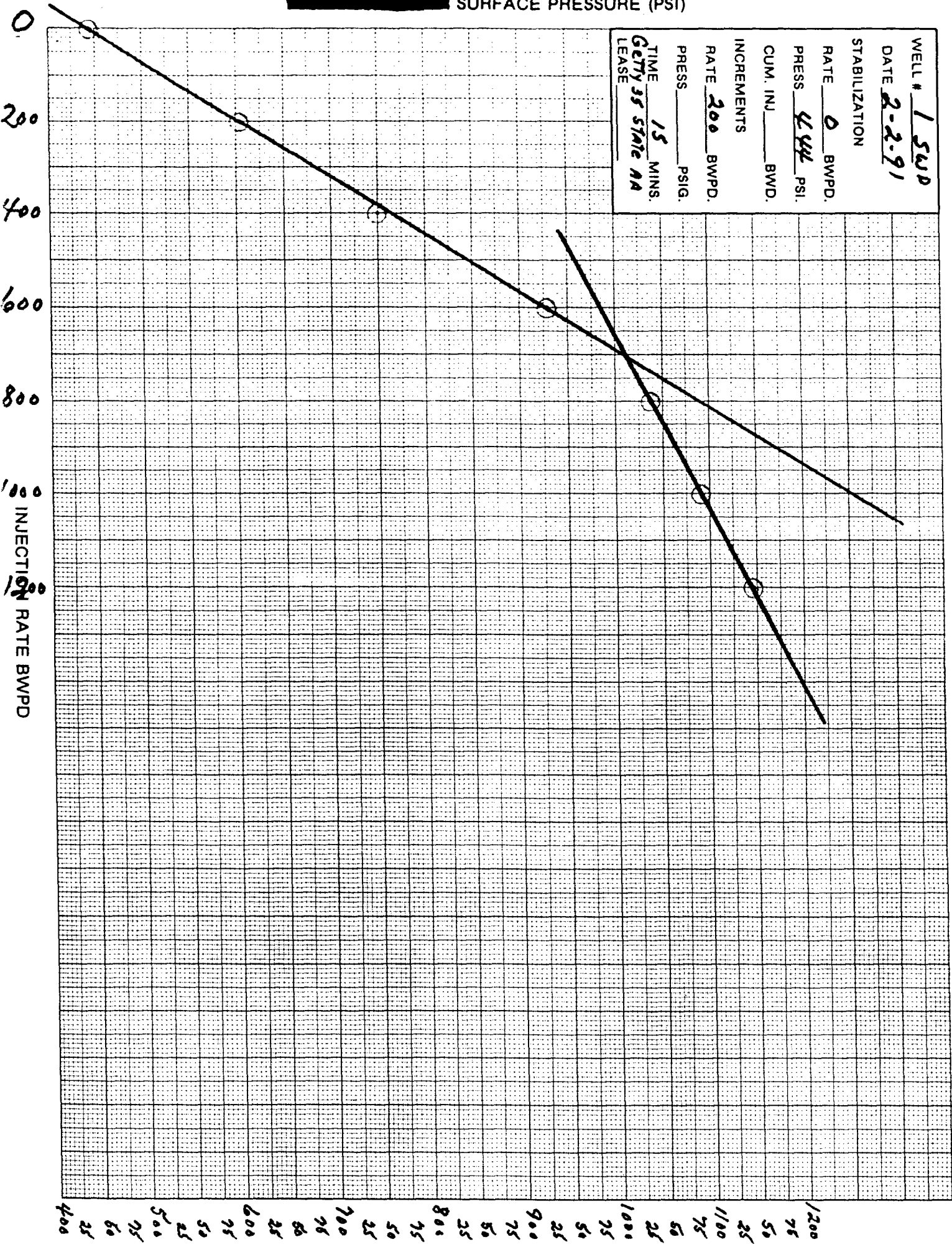
DAN JONES

# STEP RATE TESTERS INC.

With Friction

SURFACE PRESSURE (PSI)

WELL # 1540  
 DATE 2-2-91  
 STABILIZATION  
 RATE 0 BWPD.  
 PRESS 444 PSI.  
 CUM. INJ.        BWD.  
 INCREMENTS  
 RATE 200 BWPD.  
 PRESS        PSIG.  
 TIME 15 MINS.  
 GETTYS STATE AA  
 LEASE





OIL CONSERVATION DIVISION  
STATE OF NEW MEXICO  
**ENERGY AND MINERALS DEPARTMENT**  
OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE  
May 3, 1991

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:

Texaco Inc.	State AA SWD	#1-I	35-21-34
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

*OK*

Very truly yours

Jerry Sexton  
Supervisor, District I

/bp