

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

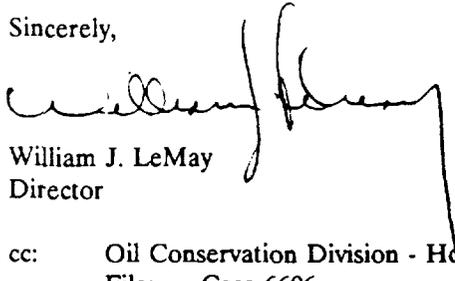
MAXIMUM INJECTION  
SURFACE PRESSURE

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 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:

<u>Well &amp; Location</u>	<u>Maximum Injection Surface Pressure</u>
<u>State "AA" SWD Well No. 1</u> <u>Unit I, Sector 35, T-2 South, R-31 East, N.M.P.M.</u> <u>Lea County, New Mexico</u>	<u>950 PSIG</u>

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 88301  
(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  
Sante 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 NMOCD 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

LFASE: STATE AA

WELL # 1 --

FOUL: YATES

UNIT LTR I

FOOTAGE 660-E

SECTION

35

TWN

21 S

RANGE

34 E

FOOTAGE 1980-S

PRESS LMT

750

TYPE LEASE .

TYPE WELL

S

ORDER NO. R-6080

DATE INJ. BEGAN

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 BS04

OPERATOR REP: JOE

OCD REP: SADLER

CASING SIZE

SET AT

TOP CMT

CEMENTED

PRESSURE REMARKS

SURFACE 8 5/8

240

0 200SX

TEST O.K.

INTERM-1 .

INTERM-2 .

PROD 5 1/2

3822

0 850SX

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 BHT

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 INS.

900 INS. 150' G.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/4 SE/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 PSIG. CUMULATIVE \_\_\_\_\_ BBLs.

INCREMENTS:  
 RATE 200 BHPD PRES. \_\_\_\_\_ PSIG. STEP LENGTH 15 MINS.

TEST RESULTS: SURFACE WITH FRICTION 1010 - 700  
 " 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.	0	444	444	2180
2.	200	605	606	2342
3.	400	750	754	2490
4.	600	929	923	2659
5.	800	1037	1012	2748
6.	1000	1091	1051	2787
7.	1200	1146	1077	2813
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				

REMARKS \_\_\_\_\_

TESTER Wade Rice COMPANY REP. DAN JONES

With Friction

SURFACE PRESSURE (PSI)

WELL # 1 SWD

DATE 2-2-91

STABILIZATION

RATE 0 BWPD.

PRESS 444 PSI.

CUM. INJ. \_\_\_\_\_ BWD.

INCREMENTS

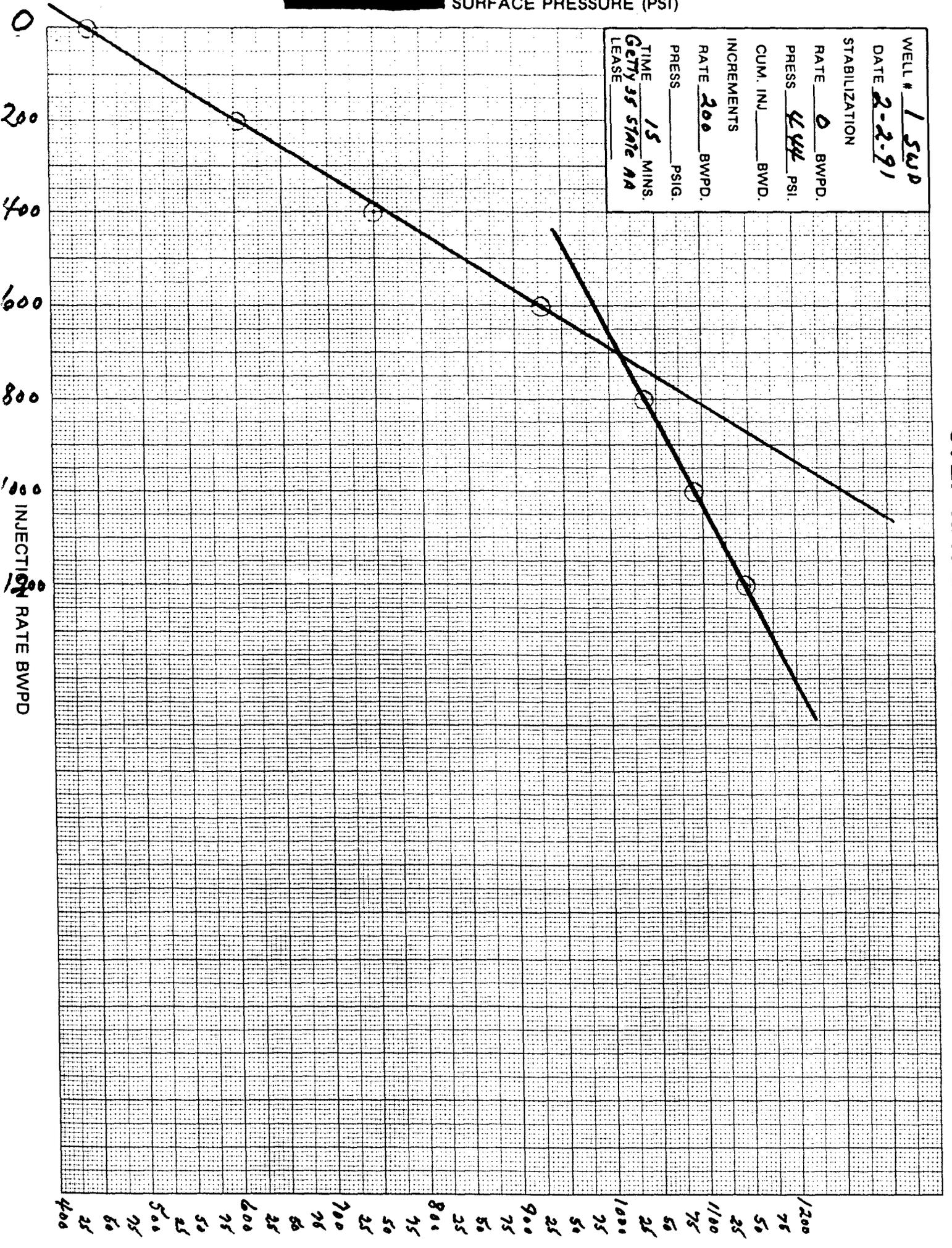
RATE 200 BWPD.

PRESS \_\_\_\_\_ PSIG.

TIME 15 MINS.

Getty 35 State AA LEASE

STEP RATE TESTERS INC.





OIL CONSERVATION DIVISION STATE OF NEW MEXICO  
**ENERGY AND MINERALS DEPARTMENT**

'91 MAY 10 AM 8:47  
 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