

FILE SWD-287



CITIES SERVICE OIL AND GAS CORPORATION  
P. O. BOX 1919 MIDLAND, TEXAS 79702

December 12, 1985

(915) 685-5600

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

Dear Sirs:

On June 21, 1985, approval was granted to convert the State DW #4 to a salt water disposal well (Order SWD-287). Approximately 50,000 barrels have been injected into the San Andres since August, 1985.

Because of our current water disposal needs, it is requested that the maximum allowed wellhead pressure be increased from 1109 PSI to 1675 PSI. A Step Rate Test was conducted on December 10, 1985 to support this request. As illustrated by the attached graph, the formation fractures at 1725 PSIG surface pressure (3800 PSI at perforations). Additional information concerning the well completion and the test is attached.

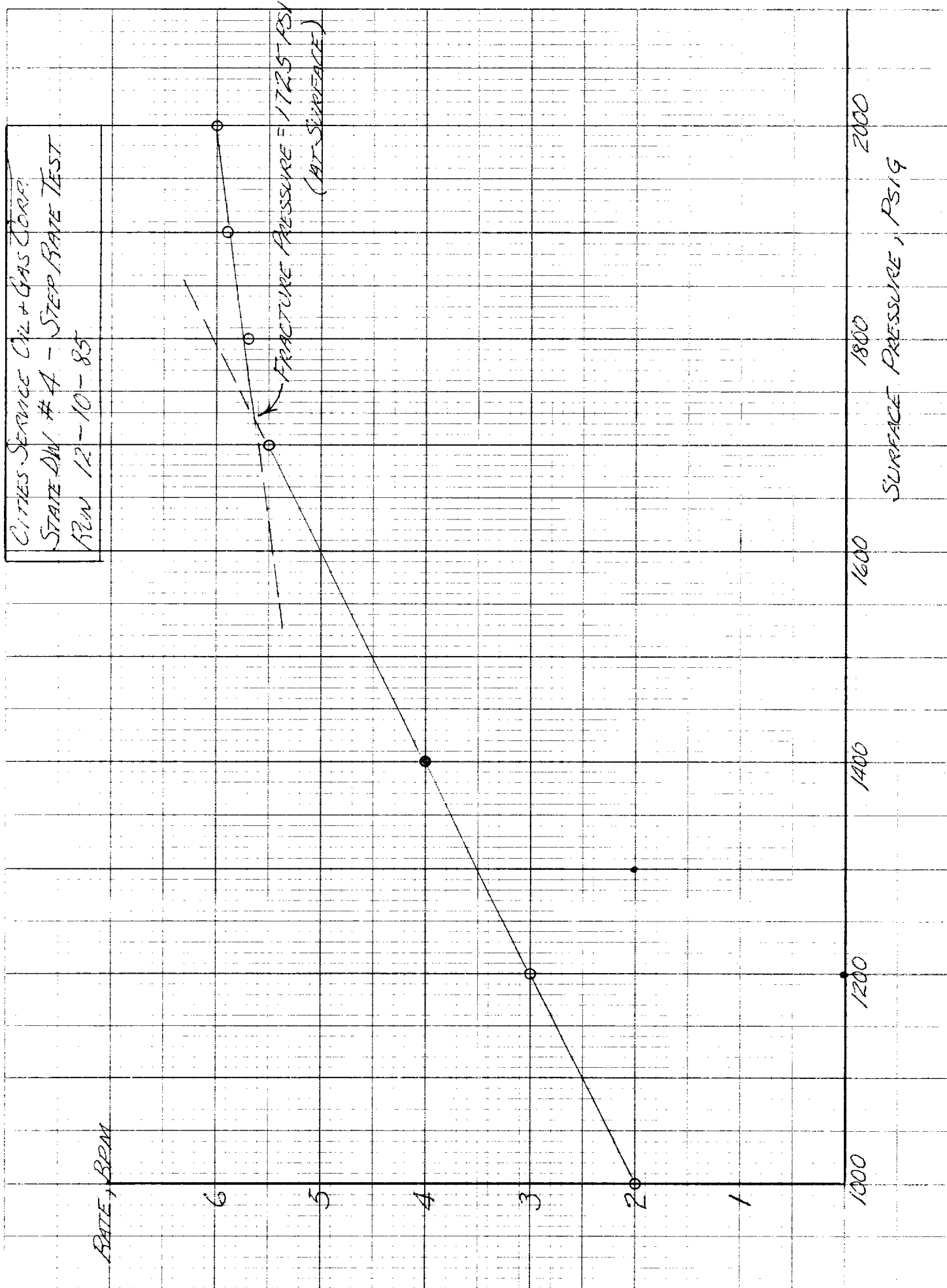
If additional information is needed, please contact me at 915/685-5897.

Sincerely,

*Rebecca Egg*  
Rebecca Egg  
Petroleum Engineer  
Southwest Region

RAE/dty

Attachments



WELL DATA

Well Name	State DW #4
Location	1880' FNL & 1980' FWL
	Section 12-T18S-R33E
TD	9050'
PBTD	6645'
Perforations	5546-5730'; 318 holes (San Andres)
Treatment	AZ w/15,000 gal 15% HCl
Packer	5-1/2" Baker NP Lok-Set @ 5449'
Tubing	2-7/8" 6.5# EUE PL J55

STEP RATE TEST DATA

Pressure (Surface PSIG)	Stabilized Rate (Bbl/Min)
1000	2.0
1200	3.0
1400	4.0
1700	5.5
1800	5.7
1900	5.9
2000	6.0



TONEY ANAYA  
GOVERNOR

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

50 YEARS



1935 - 1985

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-5800

December 26, 1985

Cities Service Oil & Gas  
Corporation  
P. O. Box 1919  
Midland, Tx 79702

Attention: Rebecca Egg

RE: Amendment to Administrative  
Order SWD-287

Dear Ms. Egg:

Reference is made to your request of December 12, 1985 to increase the surface injection pressure on your State DW No. 4 well. The request was based on a step rate test conducted on the well on December 10, 1985. The result of the test showed a formation fracture pressure of 1725 psig surface pressure, and according to the calculations, a bottom hole pressure of 3800 psi.

You are therefore authorized to increase your surface injection pressure to 1675 psig. on your State DW No. 4 well located in Unit F of Section 12, Township 18 South, Range 33 East, NMPM, Lea County, New Mexico. All other provisions contained in Administrative Order SWD-287 shall remain in effect.

Sincerely,

R. L. Stamets  
Division Director

cc: ✓ File SWD-287  
OCD-Hobbs

RLS/DC/bok