

COMPANY: Texaco Inc.
ADDRESS: West Star Rt. Box 423
CITY, STATE, ZIP: Losington, New Mexico 89260
ATTENTION: A. Gerhardt

Re: Injection Pressure Increase

Central Vacuum Unit

San Juan County, New Mexico

Dear Sir:

Reference is made to your request dated October 17, 1988, to increase the surface injection pressure on Seven wells within the Central Vacuum Unit (Wabigoon Project). This request is based on ~~a~~ step rate test(s) conducted on ~~the~~ these well(s) ~~on~~ during September 12-15, 1988. The results of the test(s) have been reviewed by my staff and we feel an increase in injection pressure on ~~this~~ these well(s) is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following well(s): wells shown on Exhibit "A" attached hereto.

Well & Location

Maximum Injection
Surface Pressure

See Attached

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.

VC. OGD - Hobbs
 D. McDonald
 D. Cernan
 Case File - 6008, 6256

Sincerely,
William J. LeMay

Exhibit "A"

Well & Location

Maximum Injection
Surface Pressure

Central Vacuum Unit No. 27

1270 PSIG

Unit J, Section 25, T-178000, Range 34 East.

Central Vacuum Unit No. 29

1360 PSIG

Unit L, Section 30, T-178000, R-35 East

Central Vacuum Unit No. 72

1031 PSIG

Unit G, Section 36, T-178000, R-34 East

Central Vacuum Unit No. 94

1270 PSIG

Unit O, Section 31, T-178000, R-35 East

Central Vacuum Unit No. 106

940 PSIG

Unit E, Section 6, T-188000, R-35 East

Central Vacuum Unit No. 138

1104 PSIG

Unit P, Section 36, T-178000, R-34 East

Central Vacuum Unit No. 141

Unit M, Section 36, T-178000, R-34 East

1012 PSIG

All in Lea County, New Mexico



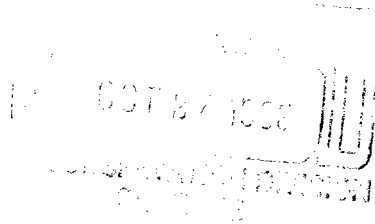
STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

October 26, 1988

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:

Texaco Producing Inc.	Central Vacuum Unit 141-M	36-17-34
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

OK

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

October 26, 1988

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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 Producing Inc.	Central Vacuum Unit 138-P	36-17-34
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



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October 26, 1988.

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OCT 27 1988
HOBBS DISTRICT OFFICE

OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE, NEW MEXICO 87504-2088

RE: APPLICATION FOR PRESSURE LIMIT INCREASE FOR DISPOSAL & INJECTION WELLS

Gentlemen:

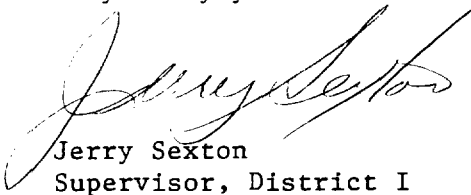
I have examined the step rate test for the:

Texaco Producing Inc.	Central Vacuum Unit 106-E	6-18-35
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

OK

Very truly yours


Jerry Sexton
Supervisor, District I

/bp

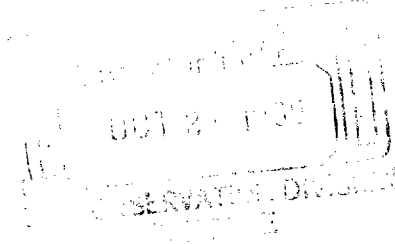


STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
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October 26, 1988

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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:

Texaco Producing Inc.	Central Vacuum Unit 94-0	31-17-35
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton
Jerry Sexton
Supervisor, District I

/bp

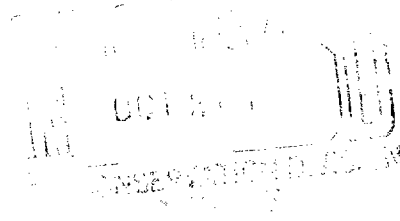


STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
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HOBBS DISTRICT OFFICE

October 26, 1988

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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:

Texaco Producing Inc.	Central Vacuum Unit 72-G	36-17-34
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



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

GARREY CARRUTHERS
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October 26, 1988

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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:

Texaco Producing Inc.	Central Vacuum Unit #29-L	30-17-35
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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ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

October 26, 1988

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:

Texaco Producing Inc.	Central Vacuum Unit #27-J	25-17-34
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton
Supervisor, District I

/bp

TEXACO INC.
WEST STAR RT. BOX 423
LOVINGTON, NM 88260

October 17, 1988

State of New Mexico
Department of Energy and Minerals
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501


Attention: Mr. William Lemay

In accordance with Paragraph (6) of NMOCD Order No. R-5530, Texaco Inc. respectfully requests that authorization be granted to increase surface injection pressure on seven wells in the Central Vacuum Unit, Vacuum Grayburg San Andres Field, Lea County, New Mexico. This request is based on results of individual step rate tests conducted September 12-15, 1988. Results of the seven attached tests are summarized below:

<u>Well</u>	<u>Location</u>	<u>Step Rate Surface Parting Pressure, PSIG</u>	<u>Current Injection Limit, PSIG</u>
CVU No. 27	J,25-17S-34E	1320	906
CVU No. 29	L,30-17S-35E	1410	900
CVU No. 72	G,36-17S-34E	1081	875
CVU No. 94	O,31-17S-35E	1320	869
CVU No. 106	E, 6-18S-35E	990	870
CVU No. 138	P,36-17S-34E	1154	953
CVU No. 141	M,36-17S-34E	1062	872

Your prompt consideration of this request is appreciated. Please advise if any further information is needed.

Yours very truly,


A. Gernandt
Area Superintendent

MAS

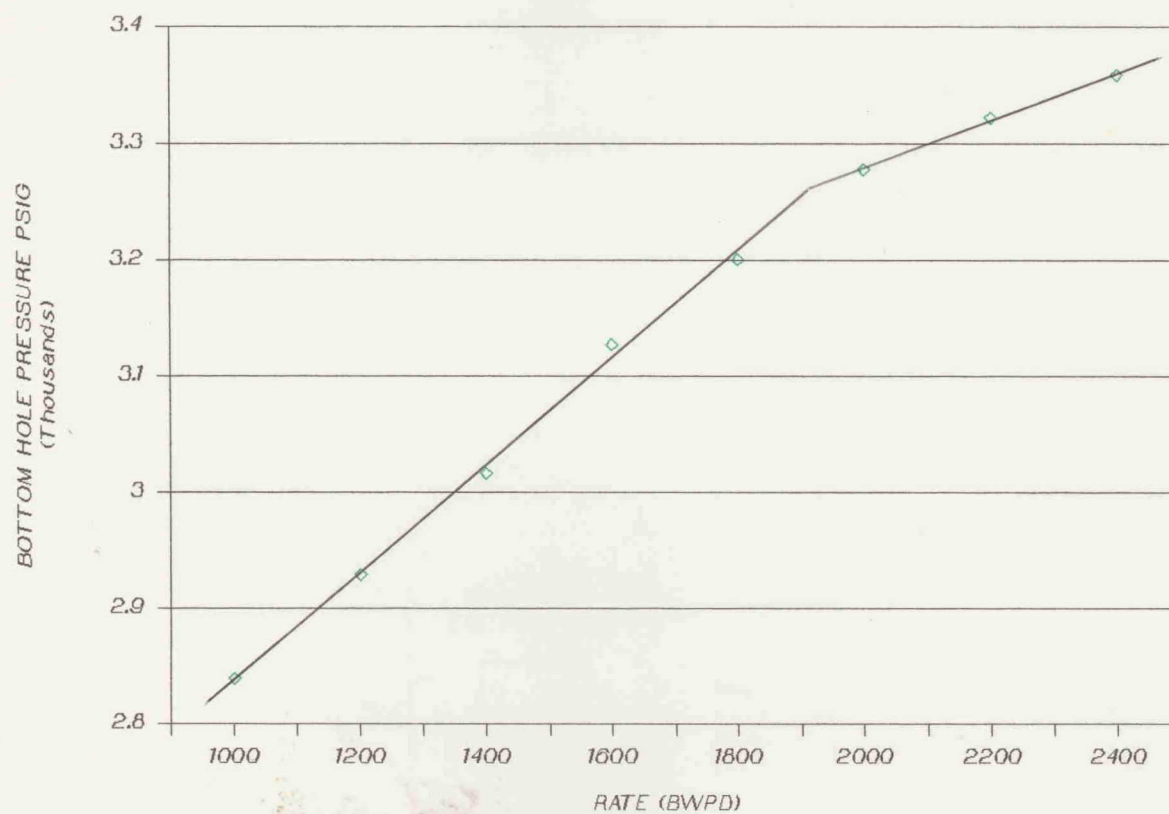
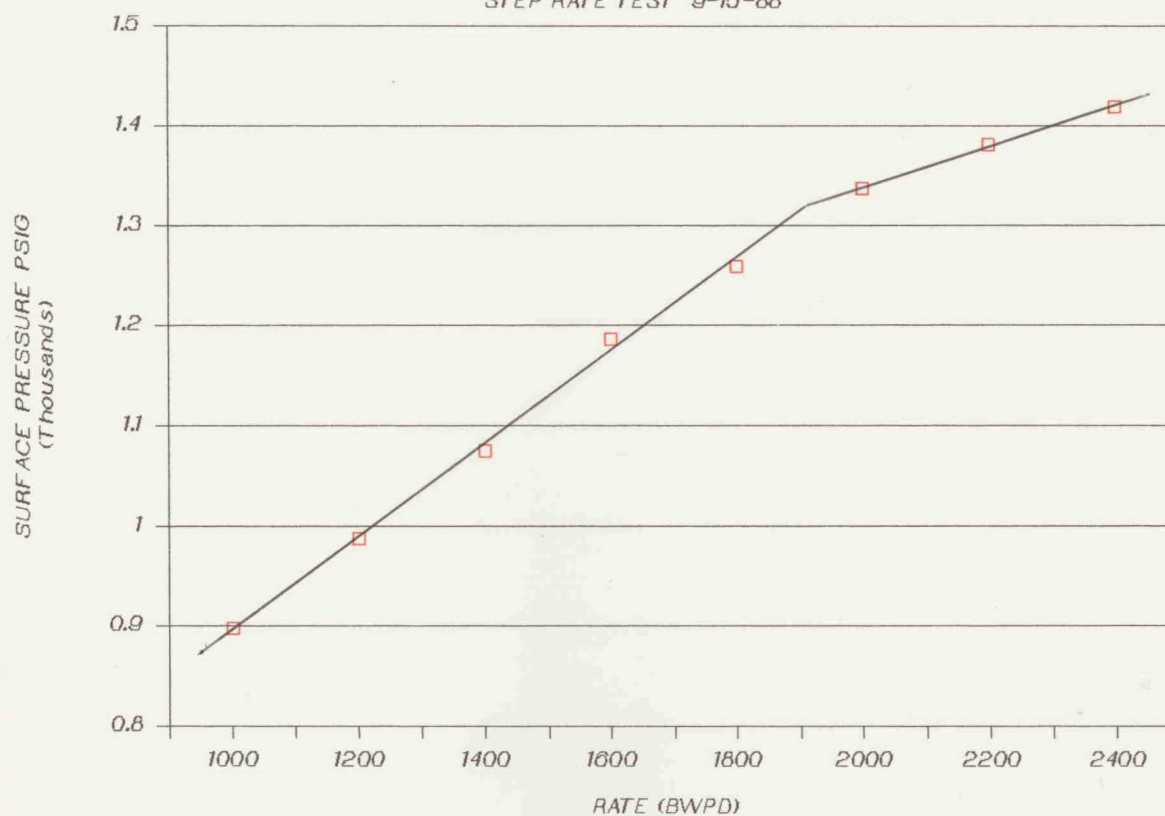
STEP RATE TEST

TEXACO PRODUCING INC.
CENTRAL VACUUM UNIT NO. 27
UNIT J, SEC. 25-17S-34E
LEA CO., NEW MEXICO
9-15-88

RATE (BWPd)	SURFACE PRESSURE CORRECTED FOR FRICTION (PSIG)	BOTTOM HOLE PRESSURE (PSIG)
1000	898	2839
1200	988	2929
1400	1075	3016
1600	1186	3127
1800	1259	3200
2000	1337	3278
2200	1381	3322
2400	1418	3359

CENTRAL VACUUM UNIT NO. 27

STEP RATE TEST 9-15-88



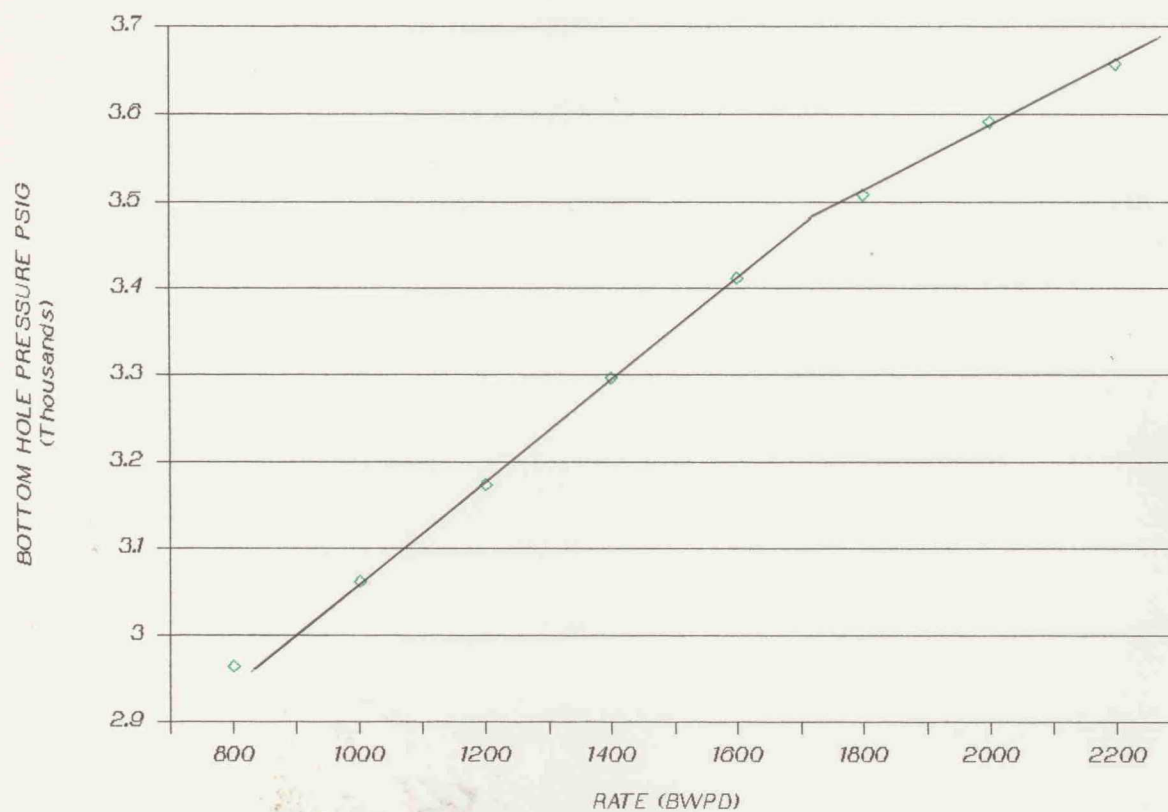
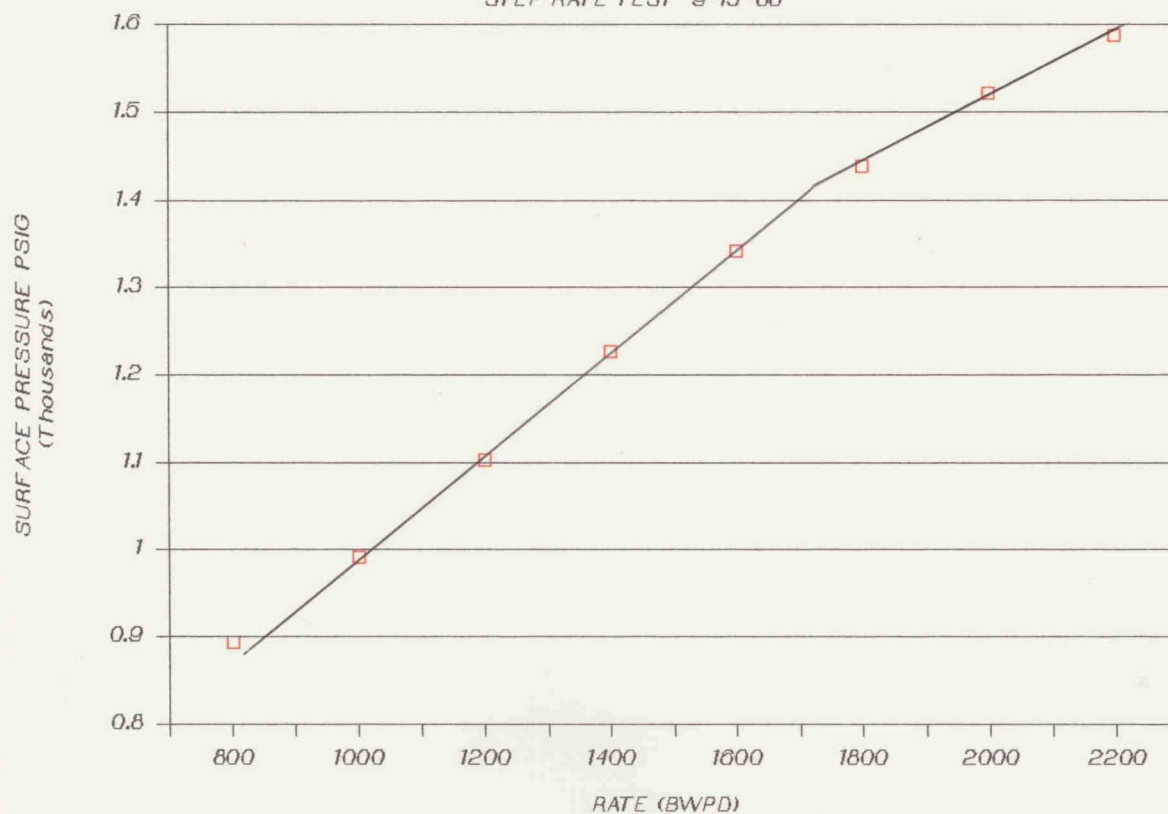
STEP RATE TEST

TEXACO PRODUCING INC.
CENTRAL VACUUM UNIT NO. 29
UNIT L, SEC. 30-17S-35E
LEA CO., NEW MEXICO
9-15-88

RATE (BWPD)	SURFACE PRESSURE CORRECTED FOR FRICTION (PSIG)	BOTTOM HOLE PRESSURE (PSIG)
800	894	2964
1000	992	3062
1200	1103	3173
1400	1226	3296
1600	1342	3412
1800	1438	3508
2000	1521	3591
2200	1587	3657

CENTRAL VACUUM UNIT NO. 29

STEP RATE TEST 9-15-88



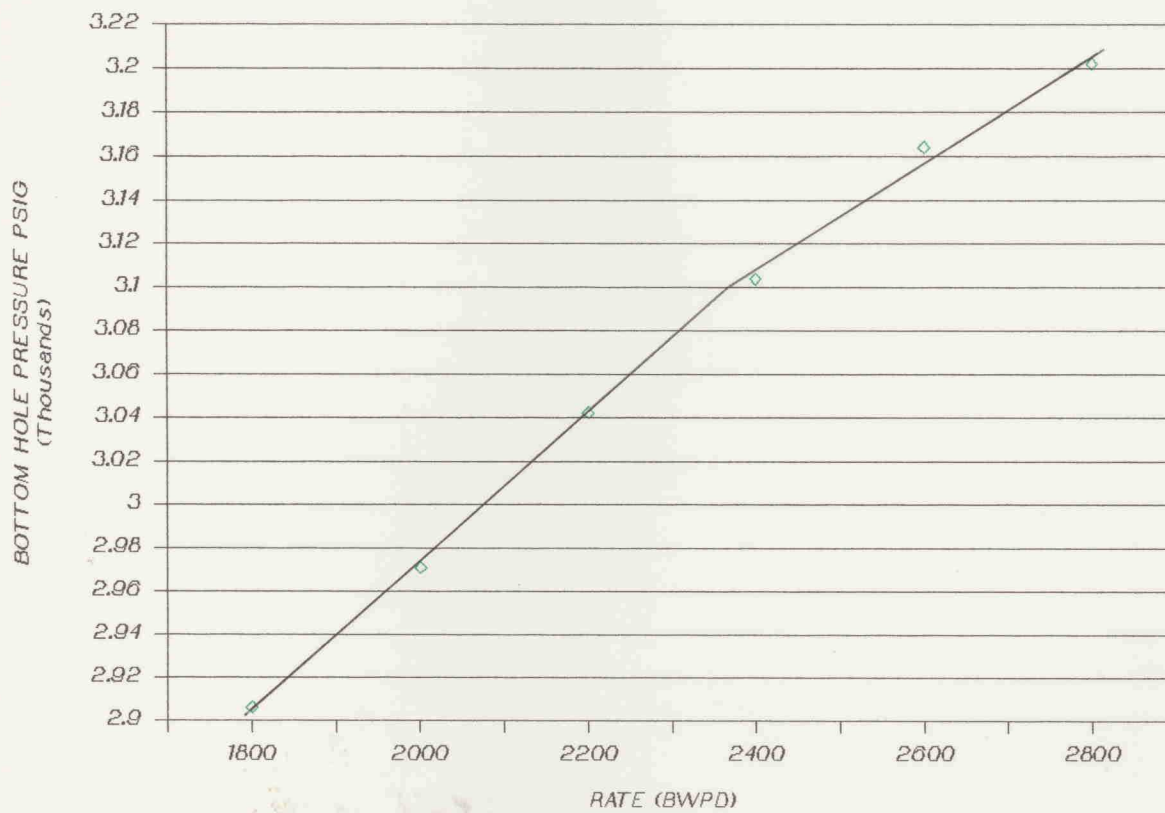
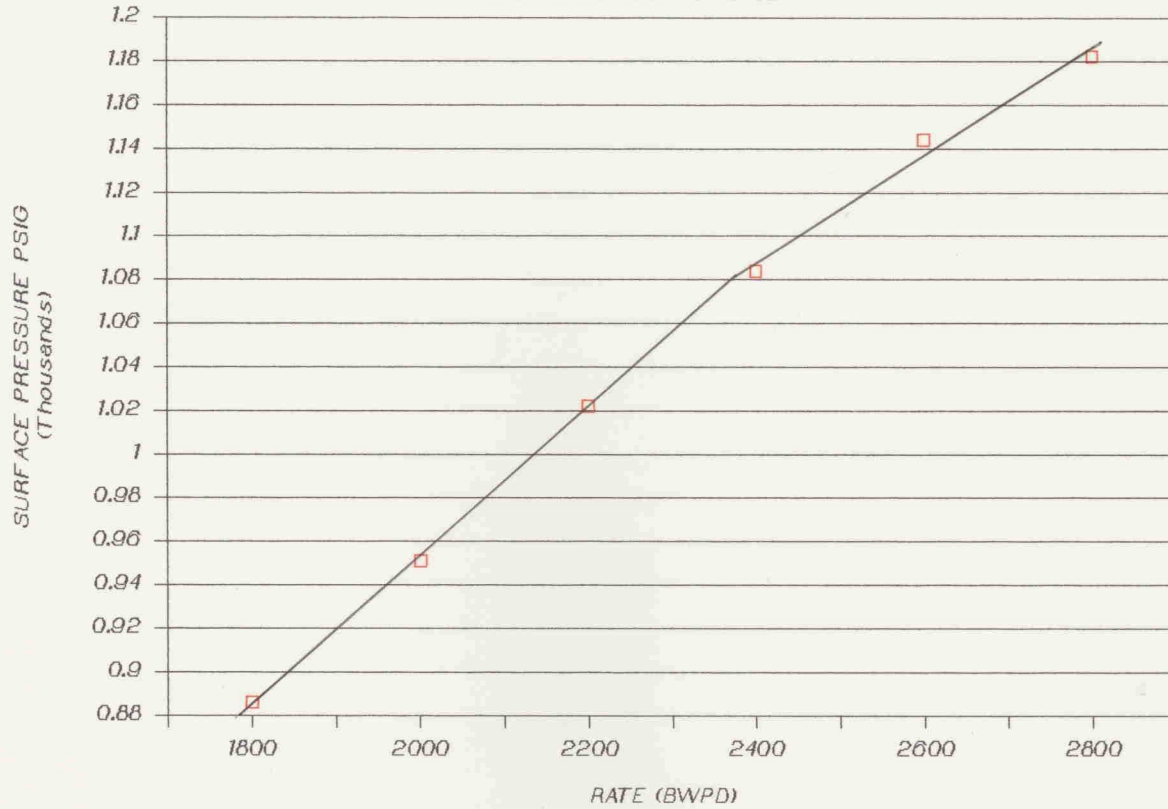
STEP RATE TEST

TEXACO PRODUCING INC.
CENTRAL VACUUM UNIT NO. 72
UNIT G, SEC. 36-17S-34E
LEA CO., NEW MEXICO
9-13-88

RATE (BWPd)	SURFACE PRESSURE CORRECTED FOR FRICTION (PSIG)	BOTTOM HOLE PRESSURE (PSIG)
1800	886	2906
2000	951	2971
2200	1022	3042
2400	1084	3104
2600	1144	3164
2800	1182	3202

CENTRAL VACUUM UNIT NO. 72

STEP RATE TEST 9-13-88



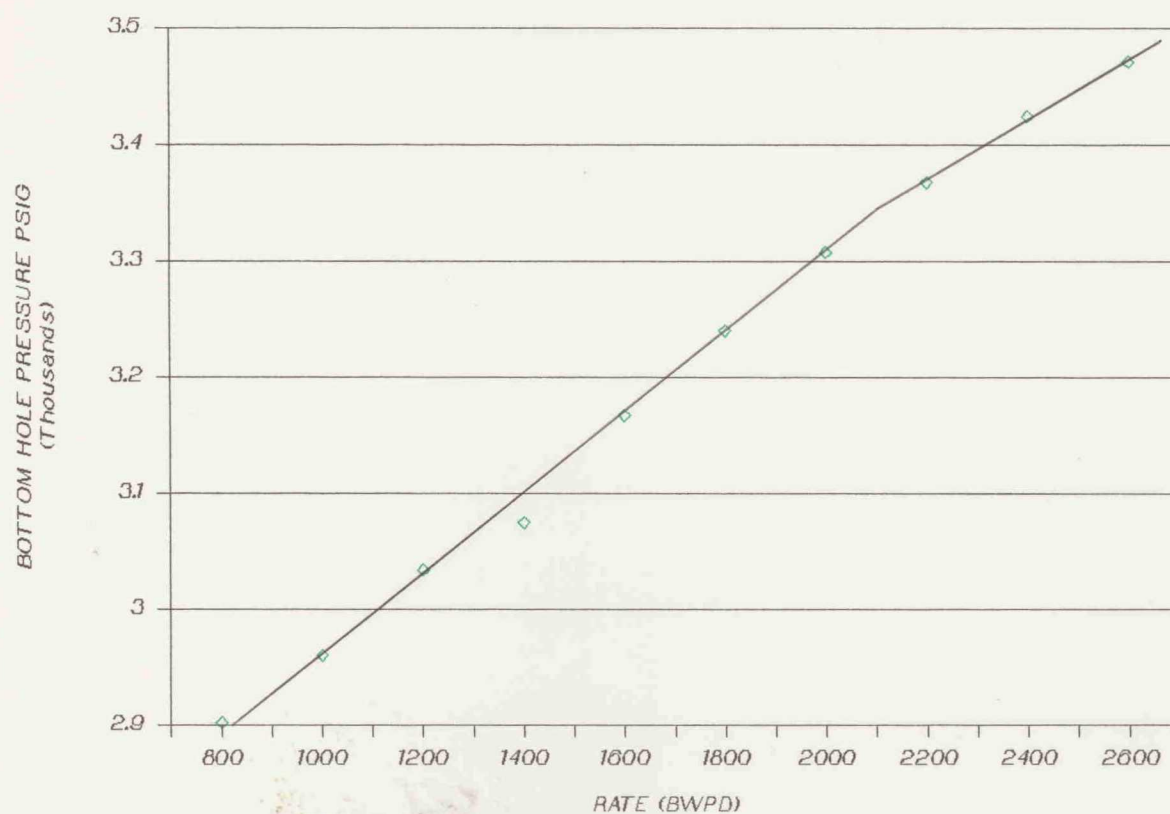
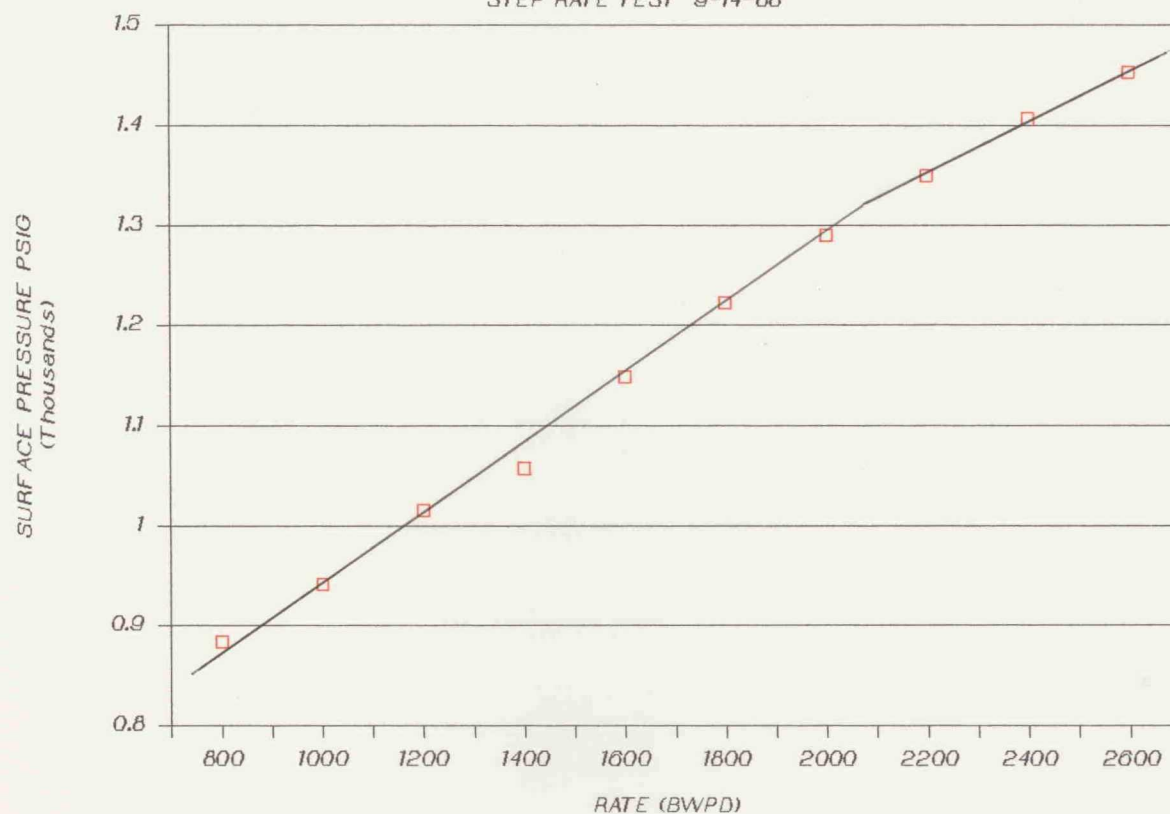
STEP RATE TEST

TEXACO PRODUCING INC.
CENTRAL VACUUM UNIT NO. 94
UNIT O, SEC. 31-17S-35E
LEA CO., NEW MEXICO
9-14-88

RATE (BWPd)	SURFACE PRESSURE CORRECTED FOR FRICTION (PSIG)	BOTTOM HOLE PRESSURE (PSIG)
800	884	2902
1000	942	2960
1200	1016	3034
1400	1057	3075
1600	1149	3167
1800	1222	3240
2000	1290	3308
2200	1350	3368
2400	1406	3424
2600	1453	3471

CENTRAL VACUUM UNIT NO. 94

STEP RATE TEST 9-14-88



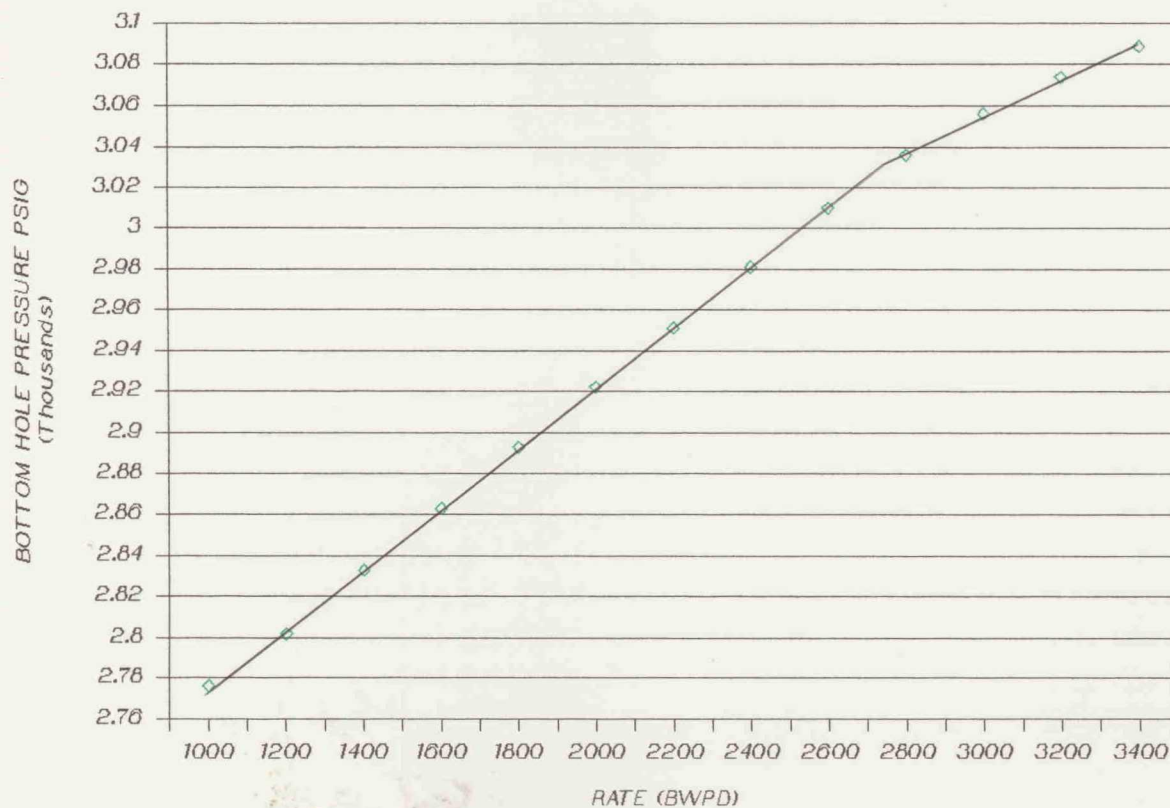
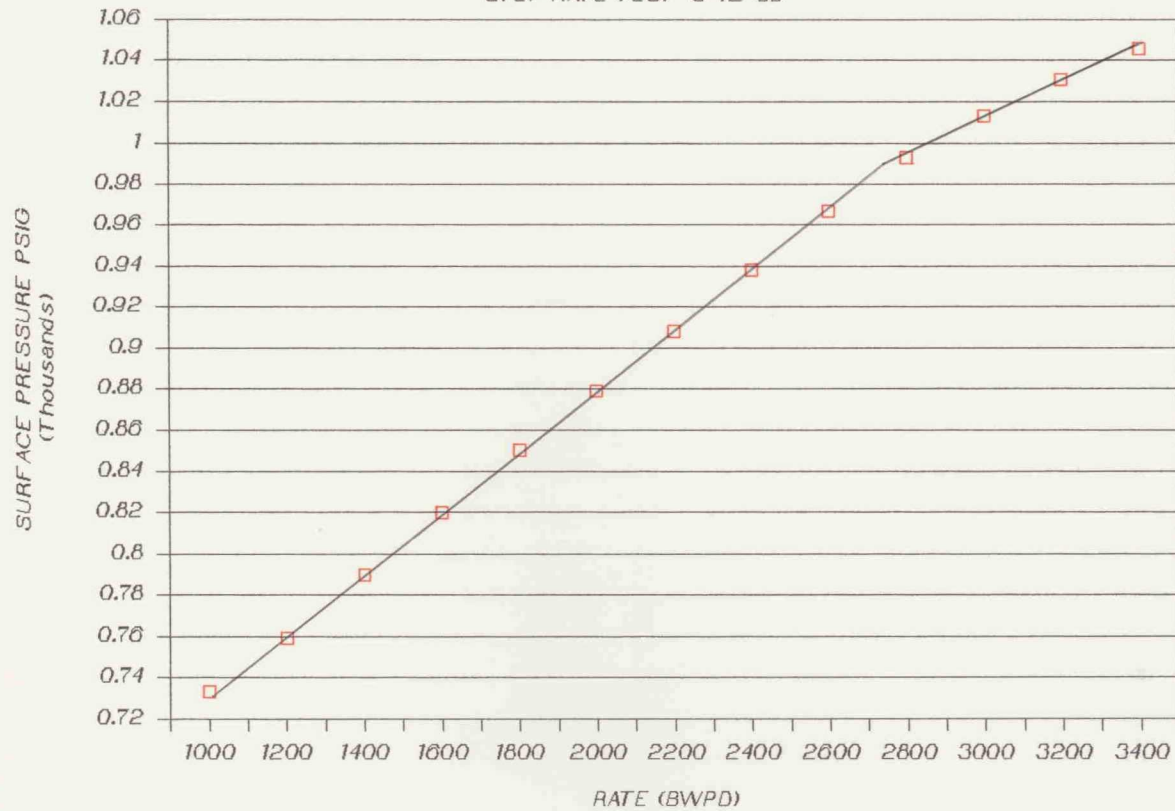
STEP RATE TEST

TEXACO PRODUCING INC.
CENTRAL VACUUM UNIT NO. 106
UNIT E, SEC. 6-18S-35E
LEA CO., NEW MEXICO
9-12-88

RATE (BWPD)	SURFACE PRESSURE CORRECTED FOR FRICTION (PSIG)	BOTTOM HOLE PRESSURE (PSIG)
1000	733	2776
1200	759	2802
1400	790	2833
1600	820	2863
1800	850	2893
2000	879	2922
2200	908	2951
2400	938	2981
2600	967	3010
2800	993	3036
3000	1013	3056
3200	1031	3074
3400	1046	3089

CENTRAL VACUUM UNIT NO. 106

STEP RATE TEST 9-12-88



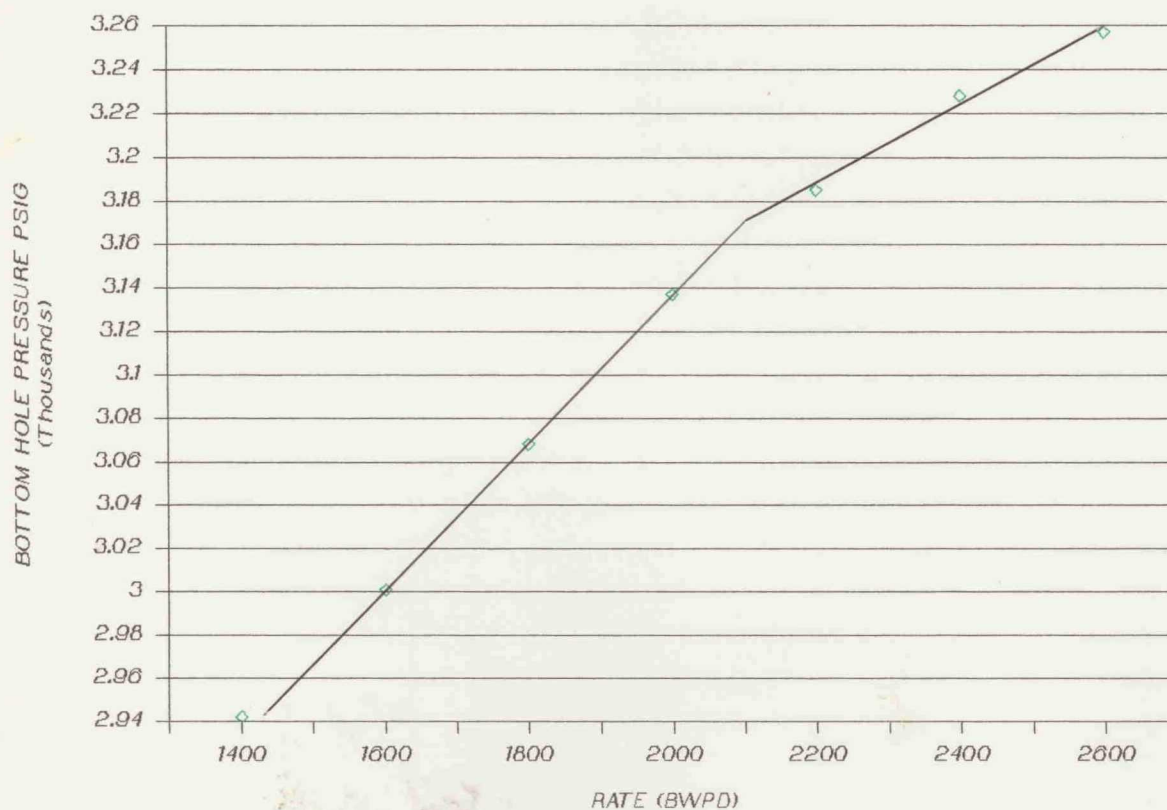
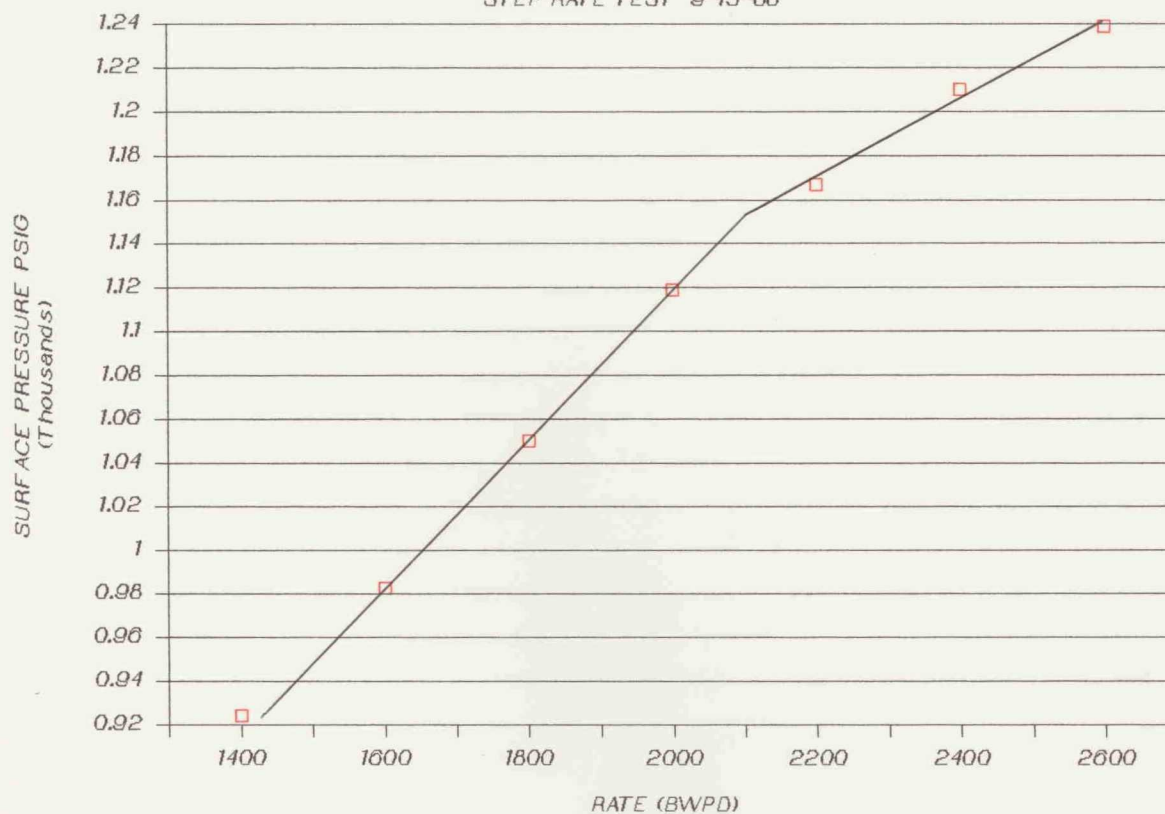
STEP RATE TEST

TEXACO PRODUCING INC.
CENTRAL VACUUM UNIT NO. 138
UNIT P, SEC. 36-17S-34E
LEA CO., NEW MEXICO
9-13-88

RATE (BWPd)	SURFACE PRESSURE CORRECTED FOR FRICTION (PSIG)	BOTTOM HOLE PRESSURE (PSIG)
1400	924	2942
1600	983	3001
1800	1050	3068
2000	1119	3137
2200	1167	3185
2400	1210	3228
2600	1239	3257

CENTRAL VACUUM UNIT NO. 138

STEP RATE TEST 9-13-88



STEP RATE TEST

TEXACO PRODUCING INC.
CENTRAL VACUUM UNIT NO. 141
UNIT M, SEC. 36-17S-34E
LEA CO., NEW MEXICO
9-12-88

RATE (BWPD)	SURFACE PRESSURE CORRECTED FOR FRICTION (PSIG)	BOTTOM HOLE PRESSURE (PSIG)
1800	797	2804
2000	852	2859
2200	906	2913
2400	959	2966
2600	1010	3017
2800	1062	3069
3000	1111	3118
3200	1151	3158

CENTRAL VACUUM UNIT NO. 141

STEP RATE TEST 9-12-88

