

CF 6008



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



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

July 8, 1993

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

Texaco Exploration and Production, Inc.
P.O. Box 730
Hobbs, NM 88241

Attention: M.C. Duncan

**RE: *Injection Pressure Increase Central Vacuum Unit,
Lea County, New Mexico***

Dear Mr. Duncan:

Reference is made to your request dated June 23, 1993 to increase the surface injection pressure on eleven wells in your Central Vacuum Unit. This request is based on step rate tests conducted on these wells between May 18 and June 17, 1993. The results of the tests have been reviewed by my staff and we feel an increase in injection pressure on these wells is justified at this time.

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

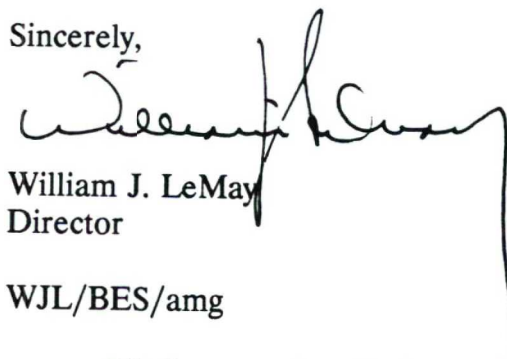
Well and Location	Maximum Injection Surface Pressure (PSIG)
Central Vacuum Unit Well No. 5 Unit D, Section 30, Township 17 South, Range 35 East	2300
Central Vacuum Unit Well No. 6 Unit C, Section 30, Township 17 South, Range 35 East	2180
Central Vacuum Unit Well No. 28 Unit P, Section 25, Township 17 South, Range 34 East	1200
Central Vacuum Unit Well No. 29 Unit L, Section 30, Township 17 South, Range 35 East	1670

*Injection Pressure Increase
Texaco Exploration and Production, Inc.
July 8, 1993
Page 2*

Well and Location	Maximum Injection Surface Pressure (PSIG)
Central Vacuum Unit Well No. 30 Unit K, Section 30, Township 17 South, Range 35 East	2100
Central Vacuum Unit Well No. 31 Unit J, Section 30, Township 17 South, Range 35 East	2300
Central Vacuum Unit Well No. 59 Unit E, Section 31, Township 17 South, Range 35 East	1970
Central Vacuum Unit Well No. 100 Unit F, Section 6, Township 18 South, Range 35 East	1700
Central Vacuum Unit Well No. 114 Unit K, Section 6, Township 18 South, Range 35 East	1935
Central Vacuum Unit Well No. 121 Unit N, Section 6, Township 18 South, Range 35 East	1485
Central Vacuum Unit Well No. 133 Unit B, Section 12, Township 18 South, Range 34 East	1795
All wells located in Lea County, New Mexico.	

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

WJL/BES/amg

cc: Oil Conservation Division - Hobbs
File: Case No. 6008

NO WAITING PERIOD

COMPANY: Texaco Exploration & Production, Inc.
ADDRESS: P.O. Box 730
CITY, STATE, ZIP: Hobbs, New Mexico 88241
ATTENTION: Mr. M.C. Duncan

Re: Injection Pressure Increase
Central Vacuum Unit
Lea County, New Mexico

Dear Sir:

Reference is made to your request dated **June 23, 1993**, to increase the surface injection pressure on **11 wells in your Central Vacuum Unit**. This request is based on a step rate test conducted on these wells between **May 18, and June 17, 1993**. The results of the tests have been reviewed by my staff and we feel an increase in injection pressure on these wells is justified at this time.

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

<u>Well & Location</u>	<u>Maximum Injection Surface Pressure</u>
Central Vacuum Unit Well No.5 Unit D, Section 30 T17S, R35E	2300 psig
Central Vacuum Unit Well No.6 Unit C, Section 30, T17S, R35E	2180 psig
Central Vacuum Unit Well No.28 Unit P, Section 25, T17S, R34E	1200 psig
Central Vacuum Unit Well No.29 Unit L, Section 30, T17S, R35E	1670 psig
Central Vacuum Unit Well No.30 Unit K, Section 30, T17S, R35E	2100 psig
Central Vacuum Unit Well No.31 Unit J, Section 30, T17S, R35E	2300 psig
Central Vacuum Unit Well No.59 Unit E, Section 31, T17S, R35E	1970 psig

Well & Location

Maximum Injection
Surface Pressure

**Central Vacuum Unit Well No.100
Unit F, Section 6, T18S, R35E**

1700 psig

**Central Vacuum Unit Well No.114
Unit K, Section 6, T18S, R35E**

1935 psig

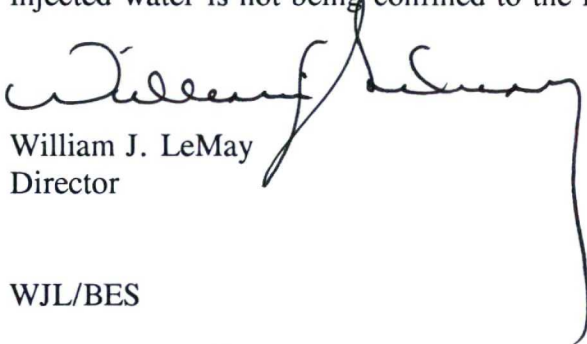
**Central Vacuum Unit Well No.121
Unit N, Section 6, T18S, R35E**

1485 psig

**Central Vacuum Unit Well No.133
Unit B, Section 12, T18S, R34E**

1795 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.



William J. LeMay
Director

WJL/BES

xc: OCD - Hobbs
 FILE- Case No.6008

OIL CONSERVATION DIVISION
RECEIVED

'93 JUN 25 AM 9 18

June 23, 1993

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe N.M. 87504

Attn: Mr. David Catanach
Engineer, New Mexico Oil Conservation Division

Re: PRESSURE INCREASE ON INJECTION WELL
Central Vacuum Unit #5
Unit D, Section 30
T-17-S, R-35-E
Lea County, New Mexico

1310' FN + FNL

Dear David:

Texaco Exploration and Production Inc. requests an increase in the maximum allowable pressure on the above well from 1025 psig to 2300 psig. A step rate injection test was ran on the well. Results of the test are attached. OK

If you have any questions concerning this request, please contact me at 397-0418 or 393-7191. The engineer assigned to this well is Darlene de Aragao. Her number is 397-0424. Thank you for your assistance in this matter.

Yours very truly,



M.C. Duncan
Engineer's Assistant

/mcd
Chrono
Attachments
cc: Jerry Sexton/NMOCD/Hobbs

JOHN WEST ENGINEERING COMPANY

Hobbs, New Mexico

STEP RATE INJECTION TEST

CLIENT: TEXACO INC.

DATE: JUNE 17, 1989

WELL NAME: CENTRAL VACUUM UNIT WELL NO. 5

WO#: 93-14-1084

Lea County, New Mexico

MID-PERFS. = 4580

MDR = 4450

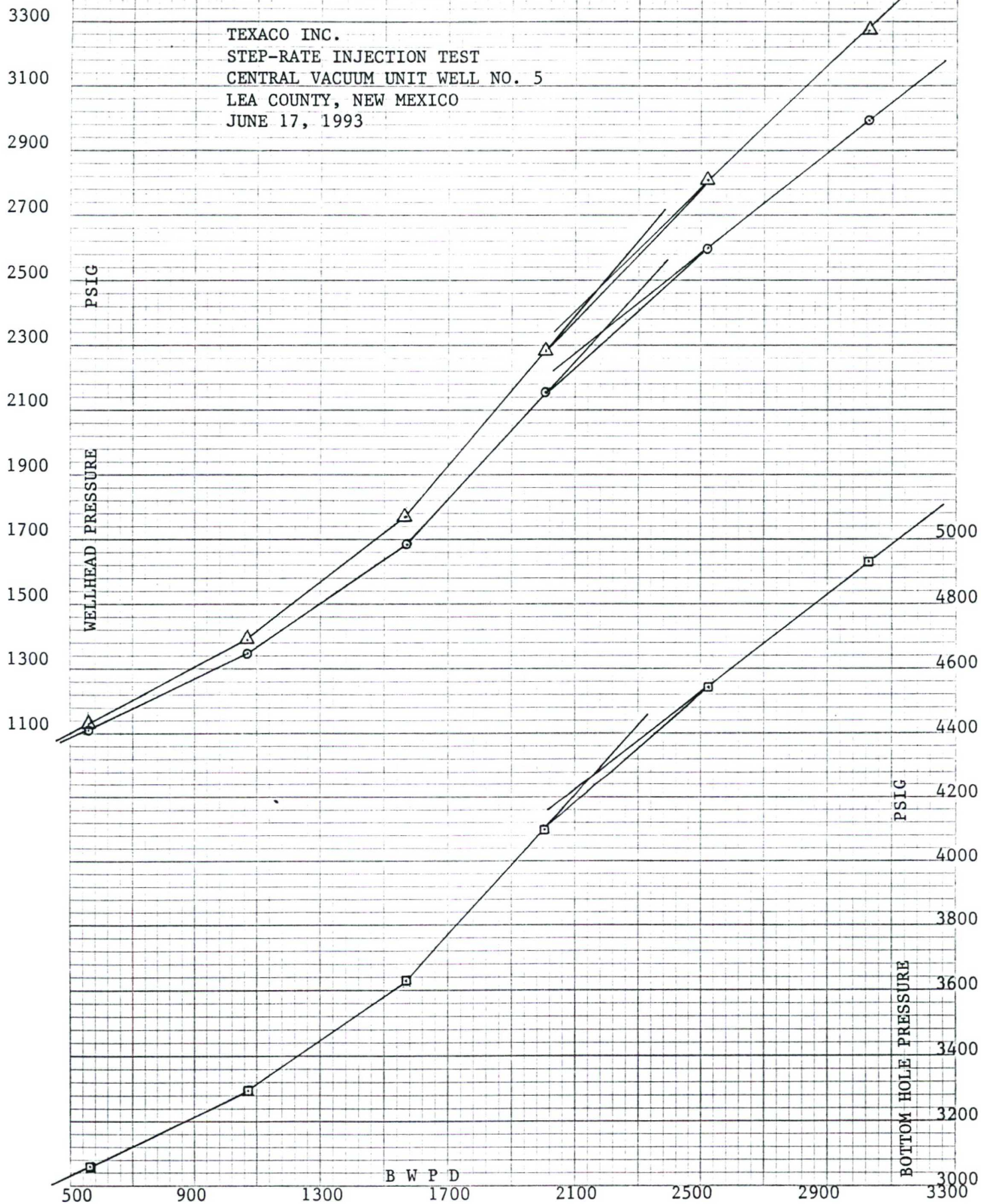
BHP GAUGE DEPTH = 4445

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psf)	(5) CORRECTED TUBING PRESS. (psf) (1)-(4)	(6) INJECTION RATE (gpm) (8)/34.2857	(7) MEASURED BHP (psf)
CASING PRESS	9:30	797.3				797.3		2818
0	9:35	1423.5	1.5	432.0	8.125	1415.4	12.60	3433
PSIG	9:40	1460.4	2.6	316.8	4.578	1455.8	9.24	3471
	9:45	1480.8	3.8	345.6	5.377	1475.4	10.08	3496
	9:50	1496.2	4.9	316.8	4.578	1491.6	9.24	3510
	9:55	1510.3	6.0	316.8	4.578	1505.7	9.24	3534
1	10:00	1523.1	7.1	316.8	4.578	1518.5	9.24	3538
				340.8				
CASING PRESS	10:05	1776.0	9.0	547.2	12.583	1763.4	15.96	3782
0	10:10	1792.8	10.9	547.2	12.583	1780.2	15.96	3801
PSIG	10:15	1799.2	12.8	547.2	12.583	1786.6	15.96	3802
	10:20	1805.6	14.7	547.2	12.583	1793.0	15.96	3807
	10:25	1801.8	16.6	547.2	12.583	1789.2	15.96	3804
2	10:30	1799.3	18.5	547.2	12.583	1786.7	15.96	3801
				547.2				
CASING PRESS	10:35	1936.1	21.1	748.8	22.479	1913.6	21.84	3917
0	10:40	1929.8	23.7	748.8	22.479	1907.3	21.84	3917
PSIG	10:45	1918.5	26.3	748.8	22.479	1896.0	21.84	3914
	10:50	1932.4	28.9	748.8	22.479	1909.9	21.84	3912
	10:55	1930.0	31.5	748.8	22.479	1907.5	21.84	3910
3	11:00	1914.9	34.1	748.8	22.479	1892.4	21.84	3907
				748.8				
CASING PRESS	11:05	2035.2	37.5	979.2	36.925	1998.3	28.56	3994
0	11:10	2030.2	40.8	950.4	34.941	1995.3	27.72	3986
PSIG	11:15	2025.1	44.2	979.2	36.925	1988.2	28.56	3976
	11:20	2002.3	47.5	950.4	34.941	1967.4	27.72	3958
	11:25	1989.7	50.8	950.4	34.941	1954.8	27.72	3960
4	11:30	1988.4	54.1	950.4	34.941	1953.5	27.72	3959
				959.9				

		(1)	(2)	(3)	(4)	(5)	(6)	(7)
STEP NO.		SURFACE	CUMULATIVE	INJECTION	FRICTION	CORRECTED	INJECTION	MEASURED
REMARKS	TIME	TUBING PRESS.	VOL. INJECTED	RATE	HEAD LOSS	TUBING PRESS.	RATE (gpm)	BHP
		(psig)	(bbls)	(bbls/day)	(psf)	(psf) (1)-(4)	(8)/34.2887	(psf)
CASING	11:35	2094.6	58.2	1180.8	52.207	2042.4	34.44	4033
PRESS	11:40	2097.1	62.2	1152.0	49.876	2047.2	33.60	4030
0	11:45	2104.7	66.2	1152.0	49.876	2054.8	33.60	4031
PSIG	11:50	2093.4	70.3	1180.8	52.207	2041.2	34.44	4026
	11:55	2093.4	74.3	1152.0	49.876	2043.5	33.60	4025
5	12:00	2032.7	78.3	1152.0	49.876	1982.8	33.60	4024
				1161.6				
FALLOFF	12:01	1544.1				1544.1		3570
	12:02	1429.0				1429.0		3453
	12:03	1370.7				1370.7		3395
	12:04	1339.1				1339.1		3364
	12:05	1320.1				1320.1		3344
	12:10	1270.8				1270.8		3295
	12:15	1246.7				1246.7		3271

- △ RECORDED WELLHEAD PRESSURE
- CORRECTED WELLHEAD PRESSURE BASED ON 2 3/8" TUBING
- BOTTOM HOLE PRESSURE @ 4450 FEET

TEXACO INC.
 STEP-RATE INJECTION TEST
 CENTRAL VACUUM UNIT WELL NO. 5
 LEA COUNTY, NEW MEXICO
 JUNE 17, 1993



OIL CONSERVATION DIVISION
RECEIVED

'93 JUN 24 AM 9 02

June 22, 1993

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe N.M. 87504

Attn: Mr. David Catanach
Engineer, New Mexico Oil Conservation Division

Re: PRESSURE INCREASE ON INJECTION WELL
Central Vacuum Unit #6
Unit C, Section 30 1310' to 2630 W
T-17-S, R-35-E
Lea County, New Mexico

Dear David:

Texaco Exploration and Production Inc. requests an increase in the maximum allowable pressure on the above well from 905 psig to 2180 psig. A step rate injection test was ran on the well. Results of the test are attached. OK

If you have any questions concerning this request, please contact me at 397-0418 or 393-7191. The engineer assigned to this well is Darlene de Aragao. Her number is 397-0424. Thank you for your assistance in this matter.

Yours very truly,



M.C. Duncan
Engineer's Assistant

/mcd
Chrono
Attachments
cc: Jerry Sexton/NMOCD/Hobbs

JOHN WEST ENGINEERING COMPANY

Hobbs, New Mexico

STEP RATE INJECTION TEST

CLIENT: TEXACO INC.

DATE: JUNE 8, 1983

WELL NAME: CENTRAL VACUUM UNIT WELL NO. 6

WO#: 83-14-1065

Lea County, New Mexico

MID-PERF8. - 4624 - 4647

PACKER DEPTH -

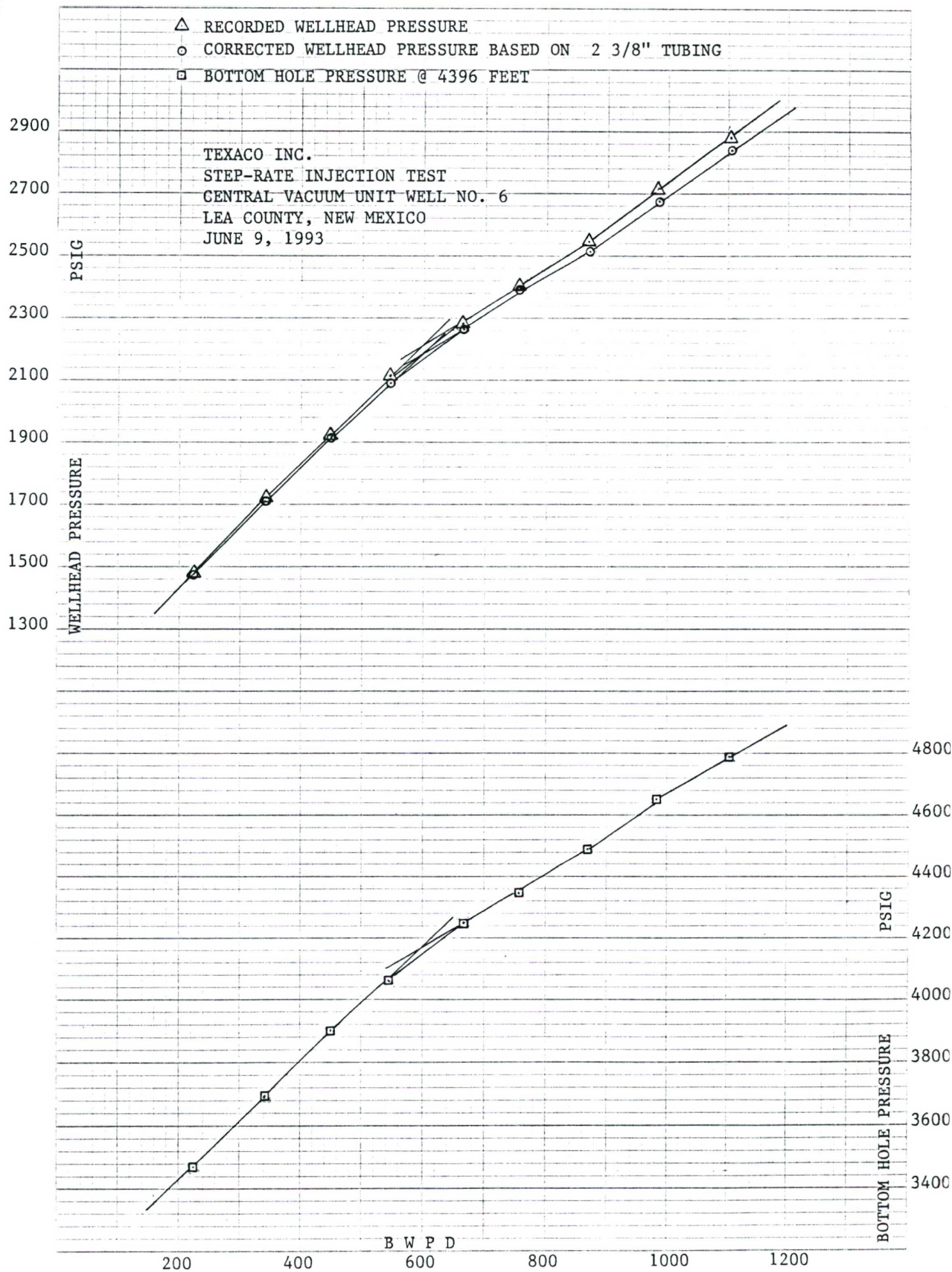
MDR = 4386

BHP GAUGE DEPTH - 4383

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psf)	(5) CORRECTED TUBING PRESS. (psf) (1)-(4)	(6) INJECTION RATE (gpm) (5)/34.2857	(7) MEASURED BHP (psf)
CASING	9:45	1212.4				1212.4		3203
PRESS	9:50	1323.8	0.7	201.6	1.960	1321.8	5.88	3318
0 PSIG	9:55	1388.4	1.4	201.6	1.960	1386.4	5.88	3371
	10:00	1426.4	2.3	259.2	3.120	1423.3	7.56	3416
	10:05	1447.9	3.1	230.4	2.509	1445.4	6.72	3435
	10:10	1468.2	3.9	230.4	2.509	1465.7	6.72	3460
1	10:15	1479.6	4.7	230.4	2.509	1477.1	6.72	3472
				225.6				
CASING	10:20	1606.2	6.0	374.4	6.160	1600.0	10.92	3593
PRESS	10:25	1640.4	7.2	345.6	5.312	1635.1	10.08	3623
0 PSIG	10:30	1655.6	8.3	316.8	4.522	1651.1	9.24	3644
	10:35	1675.8	9.5	345.6	5.312	1670.5	10.08	3653
	10:40	1692.3	10.6	316.8	4.522	1687.8	9.24	3676
2	10:45	1711.3	11.8	345.6	5.312	1706.0	10.08	3686
				340.8				
CASING	10:50	1858.1	13.4	460.8	9.045	1849.1	13.44	3837
PRESS	10:55	1878.4	15.0	460.8	9.045	1869.4	13.44	3859
0 PSIG	11:00	1898.6	16.6	460.8	9.045	1889.6	13.44	3872
	11:05	1905.0	18.1	432.0	8.027	1897.0	12.60	3884
	11:10	1915.1	19.7	460.8	9.045	1906.1	13.44	3893
3	11:15	1924.0	21.2	432.0	8.027	1916.0	12.60	3907
				451.2				
CASING	11:20	2045.5	23.1	547.2	12.430	2033.1	15.96	4024
PRESS	11:25	2053.1	25.1	576.0	13.667	2039.4	16.80	4012
0 PSIG	11:30	2068.3	27.0	547.2	12.430	2055.9	15.96	4038
	11:35	2072.1	28.9	547.2	12.430	2059.7	15.96	4039
	11:40	2096.2	30.8	547.2	12.430	2083.8	15.96	4050
4	11:45	2105.0	32.6	518.4	11.247	2093.8	15.12	4060
				547.2				

STEP NO. (1)	TIME (2)	SURFACE TUBING PRESS. (3) (psig)	CUMULATIVE VOL. INJECTED (4) (bbls)	INJECTION RATE (5) (bbls/day)	FRICTION HEAD LOSS (6) (psi)	CORRECTED TUBING PRESS. (7) (psi) (3)-(6)	INJECTION RATE (gpm) (8) (8)/(24.2887)	MEASURED BHP (9) (psi)
CASING PRESS 0 PSIG	11:50 11:55 12:00 12:05 12:10 12:15	2258.2 2269.6 2277.2 2284.8 2282.3 2283.6	35.0 37.3 39.6 41.9 44.2 46.5	691.2 662.4 662.4 662.4 662.4 662.4 667.2	19.150 17.700 17.700 17.700 17.700 17.700	2239.0 2251.9 2259.5 2267.1 2264.6 2265.9	20.16 19.32 19.32 19.32 19.32 19.32	4230 4230 4231 4244 4238 4248
5								
CASING PRESS 30 PSIG	12:20 12:25 12:30 12:35 12:40 12:45	2416.5 2407.6 2438.0 2432.9 2411.4 2411.4	49.2 51.8 54.4 57.0 59.7 62.3	777.6 748.8 748.8 748.8 777.6 748.8 758.4	23.812 22.206 22.206 22.206 23.812 22.206	2392.7 2385.4 2415.8 2410.7 2387.6 2389.2	22.68 21.84 21.84 21.84 22.68 21.84	4369 4355 4391 4374 4368 4350
6								
CASING PRESS 70 PSIG	12:50 12:55 1:00 1:05 1:10 1:15	2520.3 2524.1 2519.0 2535.6 2522.9 2541.9	65.4 68.4 71.5 74.4 77.4 80.4	892.8 864.0 892.8 835.2 864.0 864.0 868.8	30.747 28.937 30.747 27.178 28.937 28.937	2489.6 2495.2 2488.3 2508.4 2494.0 2513.0	26.04 25.20 26.04 24.36 25.20 25.20	4452 4469 4455 4473 4460 4489
7								
CASING PRESS 105 PSIG	1:20 1:25 1:30 1:35 1:40 1:45	2721.2 2717.4 2711.1 2717.4 2728.9 2714.9	83.8 87.2 90.7 94.1 97.5 100.9	979.2 979.2 1008.0 979.2 979.2 979.2 983.9	36.477 36.477 38.486 36.477 36.477 36.477	2684.7 2680.9 2672.6 2680.9 2692.4 2678.4	28.56 28.56 29.40 28.56 28.56 28.56	4652 4646 4625 4656 4663 4651
8								
CASING PRESS 150 PSIG	1:50 1:55 2:00 2:05 2:10 2:15	2887.8 2880.2 2884.0 2892.9 2861.1 2876.4	104.7 108.6 112.5 116.2 120.1 123.9	1094.4 1123.2 1123.2 1065.6 1123.2 1094.4 1104.0	44.810 47.016 47.016 42.653 47.016 44.810	2843.0 2833.2 2837.0 2850.2 2814.1 2831.6	31.92 32.76 32.76 31.08 32.76 31.92	4802 4794 4798 4806 4778 4796
9								

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psf)	(5) CORRECTED TUBING PRESS. (psf) (1)-(4)	(6) INJECTION RATE (gpm) (3)/34.2857	(7) MEASURED BHP (psf)
FALLOFF	2:16	1978.6				1978.6		3979
	2:17	1969.7				1969.7		3970
	2:18	1963.4				1963.4		3962
CASING	2:19	1957.0				1957.0		3956
PRESS	2:20	1952.0				1952.0		3951
105	2:25	1933.0				1933.0		3931
PSIG	2:30	1916.6				1916.6		3915



'93 JUN 24 AM 9 02

June 22, 1993

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe N.M. 87504

Attn: Mr. David Catanach
Engineer, New Mexico Oil Conservation Division

Re: PRESSURE INCREASE ON INJECTION WELL
Central Vacuum Unit #28
Unit P, Section 25 1330'S & 10'E
T-17-S, R-34-E
Lea County, New Mexico

Dear David:

Texaco Exploration and Production Inc. requests an increase in the maximum allowable pressure on the above well from 881 psig to 1200 psig. A step rate injection test was ran on the well. Results of the test are attached. OK

If you have any questions concerning this request, please contact me at 397-0418 or 393-7191. The engineer assigned to this well is Darlene de Aragao. Her number is 397-0424. Thank you for your assistance in this matter.

Yours very truly,



M.C. Duncan
Engineer's Assistant

/mcd
Chrono
Attachments
cc: Jerry Sexton/NMOCD/Hobbs

JOHN WEST ENGINEERING COMPANY

Hobbs, New Mexico

STEP RATE INJECTION TEST

CLIENT: Texaco Production Inc.

DATE: May 19, 1992

WELL NAME: Central Vacuum Unit No. 28
Lea County, New Mexico

WO#: 92140695

MID-PERFS. = 4565

PACKER DEPTH =

BHP GAUGE DEPTH = 4371

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psf)	(5) CORRECTED TUBING PRESS. (psf) (1)-(4)	(6) INJECTION RATE (gpm) (8)/34.2857	(7) MEASURED BHP (psf)
1	10:35	40.6				40.6		2090
	10:40	40.6	2.3	662.4	17.599	23.0	19.32	2088
	10:45	40.5	4.5	633.6	16.210	24.3	18.48	2090
	10:50	40.5	6.6	604.8	14.873	25.6	17.64	2092
				633.6				
2	10:55	171.1	10.3	1065.6	42.411	128.7	31.08	2170
	11:00	193.8	14.0	1065.6	42.411	151.4	31.08	2194
	11:05	217.7	17.7	1065.6	42.411	175.3	31.08	2214
				1065.6				
3	11:10	389.3	23.0	1526.4	82.454	306.8	44.52	2309
	11:15	434.8	28.5	1584.0	88.302	346.5	46.20	2346
	11:20	455.0	33.9	1555.2	85.355	369.6	45.36	2369
				1555.2				
4	11:25	627.9	41.0	2044.8	141.622	486.3	59.64	2456
	11:30	678.4	48.0	2016.0	137.954	540.4	58.80	2492
	11:35	708.6	55.2	2073.6	145.334	563.3	60.48	2521
				2044.8				
5	11:40	911.7	64.0	2534.4	210.666	701.0	73.92	2606
	11:45	942.0	72.7	2505.6	206.259	735.7	73.08	2637
	11:50	959.7	81.6	2563.2	215.116	744.6	74.76	2665
				2534.4				
6	11:55	1168.2	92.1	3024.0	292.080	876.1	88.20	2745
	12:00	1197.3	102.4	2966.4	281.871	915.4	86.52	2779
	12:05	1294.6	112.9	3024.0	292.080	1002.5	88.20	2822
				3044.8				
7	12:10	1556.5	125.2	3542.4	391.405	1165.1	103.32	2924
	12:15	1582.0	137.4	3513.6	385.538	1196.5	102.48	2957
	12:20	1613.7	149.3	3427.2	368.183	1245.5	99.96	2999
				3494.4				

OUT OF WATER

		(1)	(2)	(3)	(4)	(5)	(6)	(7)
STEP NO. & REMARKS	TIME	SURFACE TUBING PRESS. (psig)	CUMULATIVE VOL. INJECTED (bbls)	INJECTION RATE (bbls/day)	FRICTION HEAD LOSS (psi)	CORRECTED TUBING PRESS. (psi) (1)-(4)	INJECTION RATE (gpm) (8)/34.2857	MEASURED BHP (psi)
8	12:25	1859.3	163.2	4003.2	490.771	1368.5	116.76	3058
	12:30	1880.9	177.0	3974.4	484.259	1396.6	115.92	3095
	12:35	1907.5	190.7	3945.6 3974.4	477.788	1429.7	115.08	3126
Fall-Off	12:36	863.9				863.9		2925
	12:37	794.5				794.5		2860
	12:38	750.4				750.4		2816
	12:39	713.8				713.8		2781
	12:40	686.1				686.1		2752
	12:41	659.6				659.6		2727
	12:42	638.2				638.2		2705
	12:43	618.0				618.0		2685
	12:44	601.6				601.6		2668
	12:45	584.0				584.0		2651

- △ RECORDED WELLHEAD PRESSURE
- CORRECTED WELLHEAD PRESSURE BASED ON 2 3/8" TUBING
- BOTTOM HOLE PRESSURE @ 4371 FEET

PSIG

WELLHEAD PRESSURE

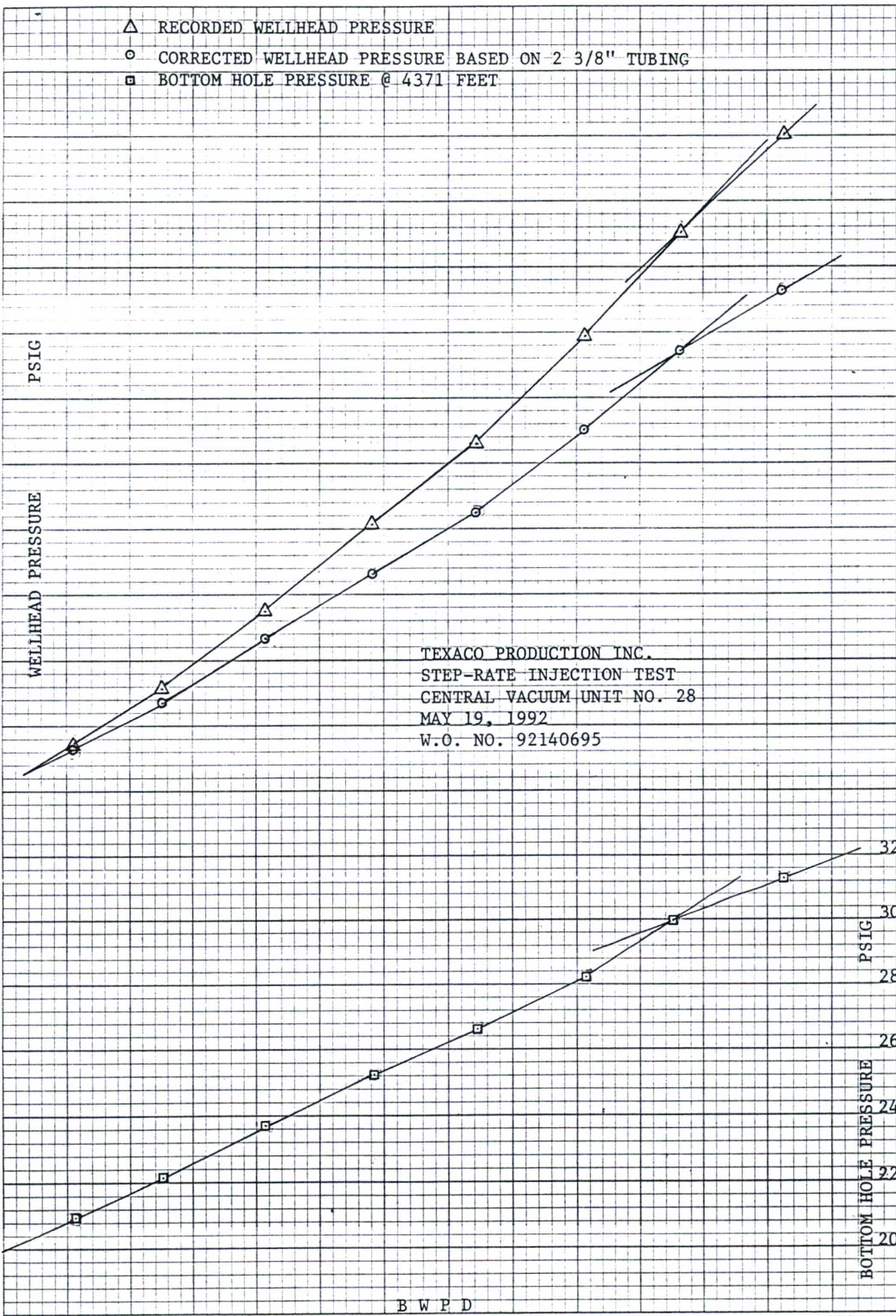
TEXACO PRODUCTION INC.
 STEP-RATE INJECTION TEST
 CENTRAL VACUUM UNIT NO. 28
 MAY 19, 1992
 W.O. NO. 92140695

PSIG

BOTTOM HOLE PRESSURE

B W P D

600 1200 1800 2400 3000 3600 4200



June 22, 1993

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe N.M. 87504

Attn: Mr. David Catanach
Engineer, New Mexico Oil Conservation Division

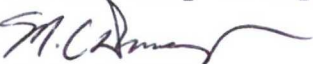
Re: PRESSURE INCREASE ON INJECTION WELL
Central Vacuum Unit #29
Unit L, Section 30
T-17-S, R-35-E 1330' FSL + 1310 W
Lea County, New Mexico

Dear David:

Texaco Exploration and Production Inc. requests an increase in the maximum allowable pressure on the above well from 1360 psig to 1670 psig. A step rate injection test was ran on the well. Results of the test are attached. OK

If you have any questions concerning this request, please contact me at 397-0418 or 393-7191. The engineer assigned to this well is Darlene de Aragao. Her number is 397-0424. Thank you for your assistance in this matter.

Yours very truly,



M.C. Duncan
Engineer's Assistant

/mcd
Chrono
Attachments
cc: Jerry Sexton/NMOCD/Hobbs

JOHN WEST ENGINEERING COMPANY

Hobbs, New Mexico

STEP RATE INJECTION TEST

CLIENT: TEXACO INC.

DATE: JUNE 11, 1988

WELL NAME: CENTRAL VACUUM UNIT WELL NO. 28
Lea County, New Mexico

WO#: 83-14-1068

MID-PERF8. - 4460 - 4752

TUBING - 4389

BHP GAUGE DEPTH - 4427

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psf)	(5) CORRECTED TUBING PRESS. (psf) (1) - (4)	(6) INJECTION RATE (gpm) (3)/34.5657	(7) MEASURED BHP (psf)
CASING PRESS.	9:35	251.1				251.1		2246
0	9:40	346.2	1.4	403.2	7.115	339.1	11.76	2331
PSIG	9:45	379.3	2.8	403.2	7.115	372.2	11.76	2355
	9:50	378.3	4.2	403.2	7.115	371.2	11.76	2367
	9:55	391.1	5.5	374.4	6.203	384.9	10.92	2379
	10:00	406.4	6.9	403.2	7.115	399.3	11.76	2391
1	10:05	414.1	8.2	374.4	6.203	407.9	10.92	2400
				393.6				
CASING PRESS.	10:10	597.2	11.2	864.0	29.141	568.1	25.20	2536
	10:15	633.9	14.3	892.8	30.963	602.9	26.04	2573
0	10:20	649.1	17.4	892.8	30.963	618.1	26.04	2594
PSIG	10:25	680.6	20.4	864.0	29.141	651.5	25.20	2616
	10:30	692.0	23.4	864.0	29.141	662.9	25.20	2640
2	10:35	705.9	26.4	864.0	29.141	676.8	25.20	2654
				873.6				
CASING PRESS.	10:40	868.7	30.8	1267.2	59.186	809.5	36.96	2751
	10:45	902.8	35.2	1267.2	59.186	843.6	36.96	2788
0	10:50	941.9	39.6	1267.2	59.186	882.7	36.96	2823
PSIG	10:55	963.4	44.0	1267.2	59.186	904.2	36.96	2850
	11:00	987.4	48.4	1267.2	59.186	928.2	36.96	2876
3	11:05	1010.1	52.7	1238.4	56.721	953.4	36.12	2898
				1262.4				
CASING PRESS.	11:10	1213.9	58.5	1670.4	98.667	1115.2	48.72	3011
	11:15	1258.2	64.3	1670.4	98.667	1159.5	48.72	3062
0	11:20	1292.4	70.1	1670.4	98.667	1193.7	48.72	3092
PSIG	11:25	1316.4	75.8	1641.6	95.543	1220.9	47.88	3117
	11:30	1339.2	81.5	1641.6	95.543	1243.7	47.88	3143
4	11:35	1363.2	87.3	1670.4	98.667	1264.5	48.72	3168
				1660.8				

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psf)	(5) CORRECTED TUBING PRESS. (psf) (1)-(4)	(6) INJECTION RATE (gpm) (U)/34.2857	(7) MEASURED BHP (psf)
CASING PRESS.	11:40	1569.5	94.4	2044.8	143.436	1426.1	59.64	3273
0	11:45	1606.3	101.5	2044.8	143.436	1462.9	59.64	3315
PSIG	11:50	1636.6	108.6	2044.8	143.436	1493.2	59.64	3348
	11:55	1668.3	115.7	2044.8	143.436	1524.9	59.64	3376
	12:00	1689.8	122.8	2044.8	143.436	1546.4	59.64	3402
5	12:05	1715.1	129.9	2044.8	143.436	1571.7	59.64	3426
				2044.8				
CASING PRESS.	12:10	1982.2	138.8	2563.2	217.872	1764.3	74.76	3544
	12:15	2007.5	147.7	2563.2	217.872	1789.6	74.76	3577
0	12:20	2048.0	156.4	2505.6	208.901	1839.1	73.08	3608
PSIG	12:25	2064.7	165.4	2592.0	222.423	1842.3	75.60	3634
	12:30	2088.5	174.3	2563.2	217.872	1870.6	74.76	3649
6	12:35	2101.2	183.2	2563.2	217.872	1883.3	74.76	3668
				2558.4				
CASING PRESS.	12:40	2305.0	193.8	3052.8	301.055	2003.9	89.04	3736
	12:45	2337.9	204.4	3052.8	301.055	2036.8	89.04	3759
0	12:50	2343.0	215.0	3052.8	301.055	2041.9	89.04	3777
PSIG	12:55	2354.3	225.6	3052.8	301.055	2053.2	89.04	3790
	1:00	2392.3	236.2	3052.8	301.055	2091.2	89.04	3806
7	1:05	2405.0	246.9	3081.6	306.331	2098.7	89.88	3820
				3057.6				
FALLOFF	1:06	1669.6				1669.6		3668
	1:07	1617.7				1617.7		3619
	1:08	1581.0				1581.0		3584
	1:09	1550.6				1550.6		3552
	1:10	1521.5				1521.5		3523
	1:15	1403.8				1403.8		3407
	1:20	1319.0				1319.0		3321
LOW ON WATER END TEST								

△ RECORDED WELLHEAD PRESSURE
 ○ CORRECTED WELLHEAD PRESSURE BASED ON 2 /38" TUBING
 □ BOTTOM HOLE PRESSURE @ 4427 FEET
 TEXACO INC.
 STEP-RATE INJECTION TEST
 CENTRAL VACUUM UNIT WELL NO. 29
 LEA COUNTY, NEW MEXICO
 JUNE 11, 1993

2400

2200

2000

1800

1600

1400

1200

1000

800

600

400

PSIG

WELLHEAD PRESSURE

PSIG

BOTTOM HOLE PRESSURE

3800

3600

3400

3200

3000

2800

2600

2400

300

800

B W P D
1300

1800

2300

2800

3300

OIL CONSERVATION DIVISION
RECEIVED

JUN 24 AM 9 02

June 22, 1993

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe N.M. 87504

Attn: Mr. David Catanach
Engineer, New Mexico Oil Conservation Division

Re: PRESSURE INCREASE ON INJECTION WELL
Central Vacuum Unit #30
Unit K, Section 30
T-17-S, R-35-E
Lea County, New Mexico

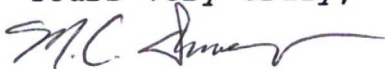
1330'S + 2630 W

Dear David:

Texaco Exploration and Production Inc. requests an increase in the maximum allowable pressure on the above well from 903 psig to 2100 psig. A step rate injection test was ran on the well. Results of the test are attached. OK

If you have any questions concerning this request, please contact me at 397-0418 or 393-7191. The engineer assigned to this well is Darlene de Aragao. Her number is 397-0424. Thank you for your assistance in this matter.

Yours very truly,



M.C. Duncan
Engineer's Assistant

/mcd
Chrono
Attachments
cc: Jerry Sexton/NMOCD/Hobbs

JOHN WEST ENGINEERING COMPANY

Hobbs, New Mexico

STEP RATE INJECTION TEST

CLIENT: Texaco Production Inc.

DATE: 5/18/92

WELL NAME: Central Vacuum Unit No. 30
Lea County, New Mexico

WO#: 92140695

Re-Test

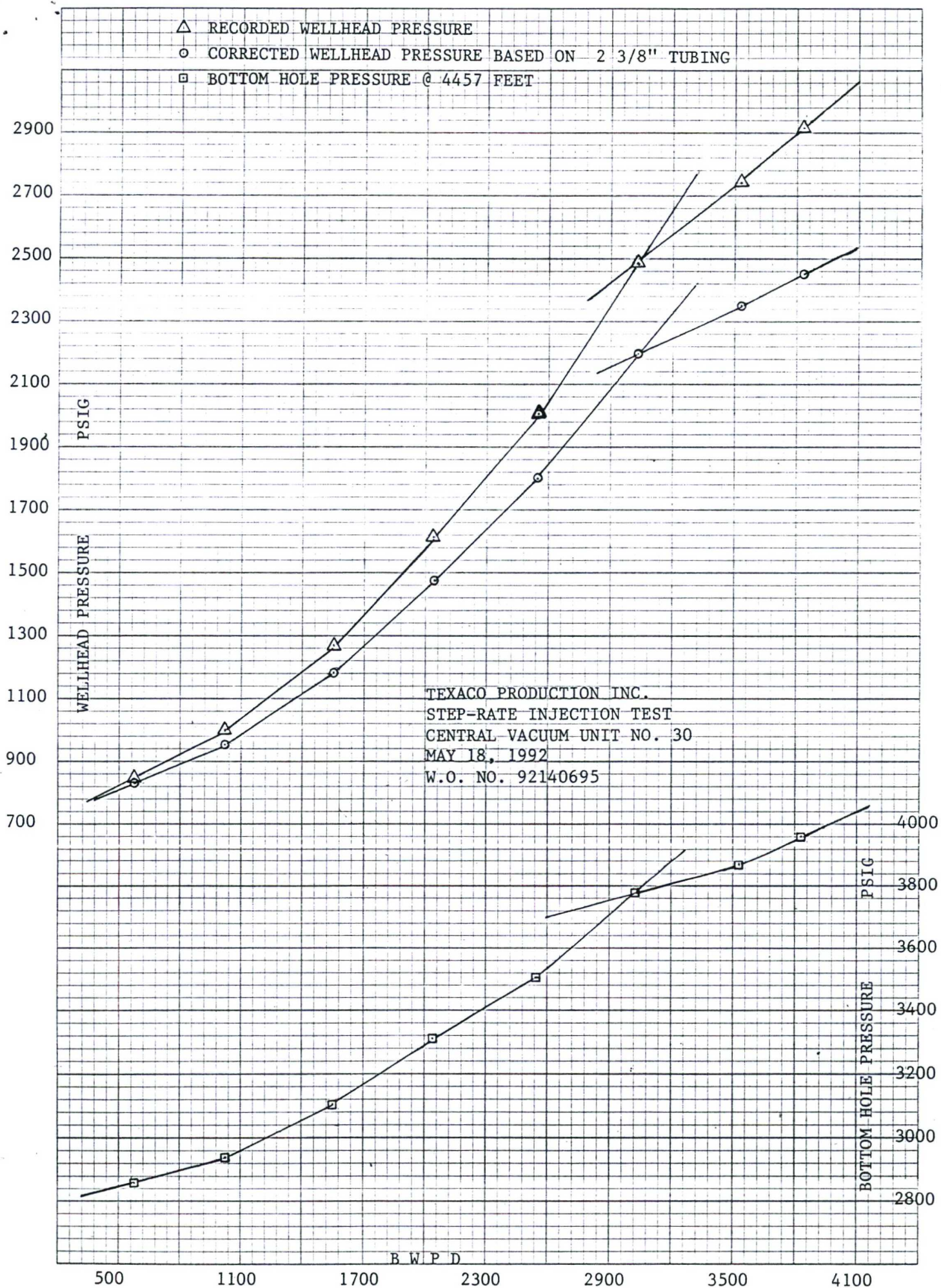
MID-PERF8. = 4650

MAXIMUM DEPTH REACHED = 4457

BHP GAUGE DEPTH =

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psf)	(5) CORRECTED TUBING PRESS. (psf) (1)-(4)	(6) INJECTION RATE (gpm) (8)/34.2857	(7) MEASURED BHP (psf)
1	12:10	1075.5				1075.5		3076
	12:15	964.5	1.9	547.2	12.603	951.9	15.96	2974
	12:20	905.2	3.9	576.0	13.857	891.3	16.80	2910
	12:25	853.3	5.9	576.0	13.857	839.4	16.80	2864
				566.4				
2	12:30	980.8	9.5	1036.8	41.108	939.7	30.24	2936
	12:35	989.4	13.1	1036.8	41.108	948.3	30.24	2937
	12:40	993.0	16.7	1036.8	41.108	951.9	30.24	2936
3				1036.8				
	12:45	1212.0	22.1	1555.2	87.035	1125.0	45.36	3056
	12:50	1245.3	27.5	1555.2	87.035	1158.3	45.36	3088
	12:55	1268.1	32.9	1555.2	87.035	1181.1	45.36	3109
4				1555.2				
	1:00	1533.8	40.0	2044.8	144.408	1389.4	59.64	3236
	1:05	1588.4	47.1	2044.8	144.408	1444.0	59.64	3283
	1:10	1616.3	54.2	2044.8	144.408	1471.9	59.64	3315
				2044.8				
5	1:15	1922.6	63.0	2534.4	214.811	1707.8	73.92	3433
	1:20	1980.8	71.9	2563.2	219.349	1761.5	74.76	3477
	1:25	2011.2	80.7	2534.4	214.811	1796.4	73.92	3508
				2544.0				
6	1:30	2475.8	91.3	3052.8	303.095	2172.7	89.04	3754
	1:35	2485.9	101.8	3024.0	297.827	2188.1	88.20	3772
	1:40	2489.6	112.3	3024.0	297.827	2191.8	88.20	3782
				3033.6				
7	1:45	2813.9	124.6	3542.4	399.106	2414.8	103.32	3902
	1:50	2742.7	136.9	3542.4	399.106	2343.6	103.32	3882
	1:55	2740.2	149.1	3513.6	393.124	2347.1	102.48	3877
				3532.8				

		(1)	(2)	(3)	(4)	(5)	(6)	(7)
STEP NO. & REMARKS	TIME	SURFACE TUBING PRESS. (psig)	CUMMULATIVE VOL. INJECTED (bbls)	INJECTION RATE (bbls/day)	FRICTION HEAD LOSS (psi)	CORRECTED TUBING PRESS. (psig) (1)-(4)	INJECTION RATE (gpm) (3)/34.2857	MEASURED BHP (psig)
8	2:00	2948.8	162.4	3830.4	461.200	2487.6	111.72	3953
	2:05	2941.2	175.7	3830.4	461.200	2480.0	111.72	3958
	2:10	2918.3	189.0	3830.4 3830.4	461.200	2457.1	111.72	3960
Fall-Off	2:11	1498.7				1498.7		3531
	2:12	1454.4				1454.4		3486
	2:13	1417.7				1417.7		3449
	2:14	1387.3				1387.3		3421
	2:15	1358.2				1358.2		3389
	2:16	1329.1				1329.1		3361
	2:17	1305.0				1305.0		3337
	2:18	1281.0				1281.0		3313
	2:19	1259.4				1259.4		3290
	2:20	1236.6				1236.6		3269



OIL CONSERVATION DIVISION
RECEIVED

'93 JUN 25 AM 9 18

June 23, 1993

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe N.M. 87504

Attn: Mr. David Catanach
Engineer, New Mexico Oil Conservation Division

Re: PRESSURE INCREASE ON INJECTION WELL
Central Vacuum Unit #31
Unit J, Section 30
T-17-S, R-35-E
Lea County, New Mexico

1330 S + 1330 E

Dear David:

Texaco Exploration and Production Inc. requests an increase in the maximum allowable pressure on the above well from 1290 psig to 2300 psig. A step rate injection test was ran on the well. Results of the test are attached. OK

If you have any questions concerning this request, please contact me at 397-0418 or 393-7191. The engineer assigned to this well is Darlene de Aragao. Her number is 397-0424. Thank you for your assistance in this matter.

Yours very truly,



M.C. Duncan
Engineer's Assistant

/mcd
Chrono
Attachments
cc: Jerry Sexton/NMOCD/Hobbs

JOHN WEST ENGINEERING COMPANY

Hobbs, New Mexico

STEP RATE INJECTION TEST

CLIENT: TEXACO INC.

DATE: JUNE 16, 1989

WELL NAME: CENTRAL VACUUM UNIT WELL NO. 31

WO#: 89-14-1069

Lea County, New Mexico

MID-PERF8. - 4374 - 4742

TUBING - 4123

MDR = 4310

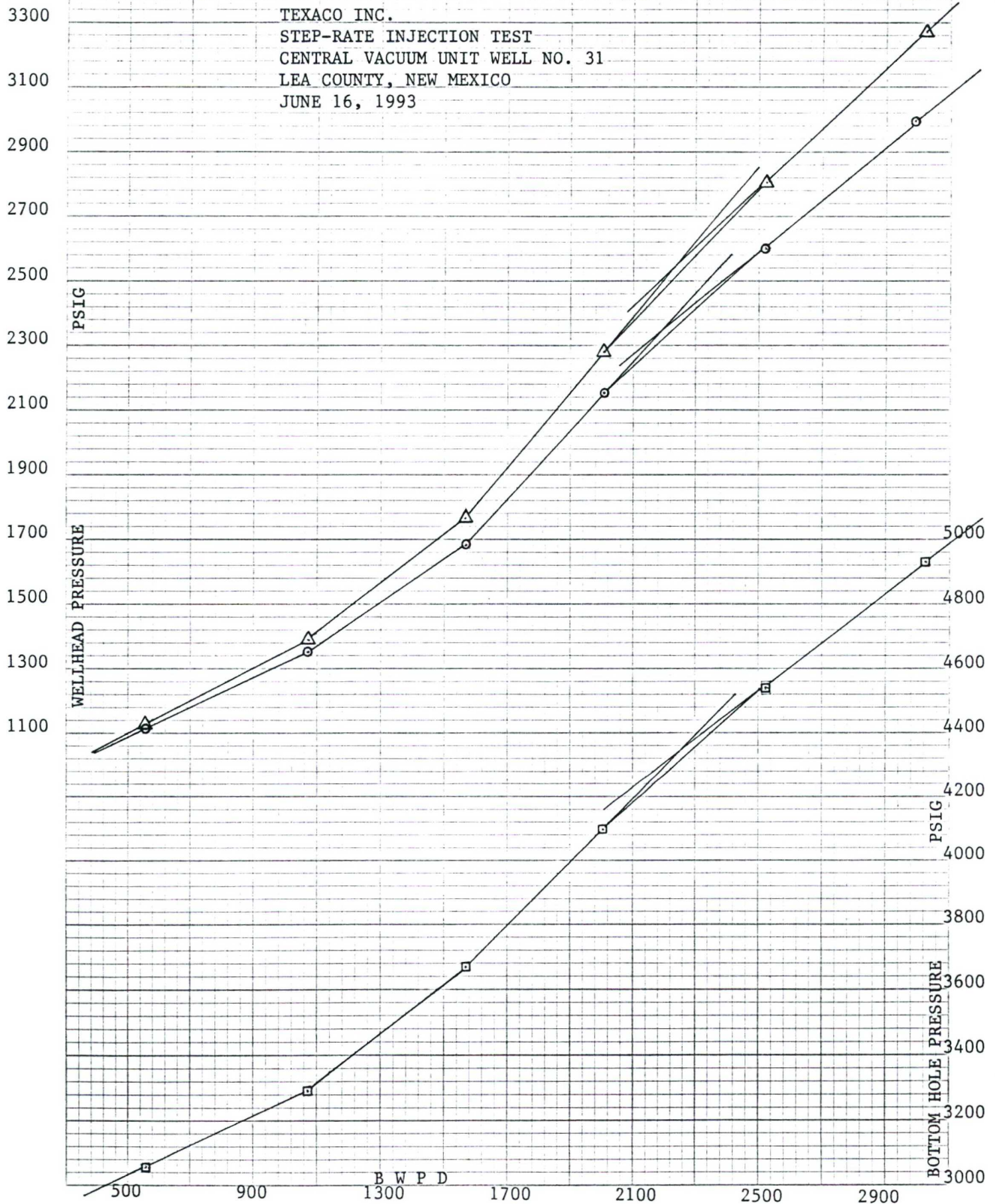
BHP GAUGE DEPTH - 4305

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psf)	(5) CORRECTED TUBING PRESS. (psf) (1)-(4)	(6) INJECTION RATE (gpm) (8)/34.2857	(7) MEASURED BHP (psf)
CASING	10:05	1013.0				1013.0		2966
PRESS	10:10	1104.1	1.7	489.6	9.920	1094.2	14.28	3046
0	10:15	1111.6	3.7	576.0	13.400	1098.2	16.80	3068
PSIG	10:20	1111.6	5.7	576.0	13.400	1098.2	16.80	3071
	10:25	1116.8	7.6	547.2	12.187	1104.6	15.96	3066
	10:30	1129.5	9.6	576.0	13.400	1116.1	16.80	3072
1	10:35	1123.2	11.6	576.0	13.400	1109.8	16.80	3060
				556.8				
CASING	10:40	1306.8	15.2	1036.8	39.752	1267.0	30.24	3230
PRESS	10:45	1342.2	18.9	1065.6	41.819	1300.4	31.08	3252
0	10:50	1361.1	22.7	1094.4	43.934	1317.2	31.92	3263
PSIG	10:55	1371.3	26.4	1065.6	41.819	1329.5	31.08	3272
	11:00	1371.3	30.2	1094.4	43.934	1327.4	31.92	3276
2	11:05	1385.3	33.9	1064.6	41.746	1343.6	31.05	3288
				1070.4				
CASING	11:10	1668.8	39.5	1612.8	90.021	1578.8	47.04	3532
PRESS	11:15	1701.9	44.9	1555.2	84.164	1617.7	45.36	3567
0	11:20	1718.3	50.4	1584.0	87.070	1631.2	46.20	3581
PSIG	11:25	1722.1	55.8	1555.2	84.164	1637.9	45.36	3592
	11:30	1751.3	61.2	1555.2	84.164	1667.1	45.36	3618
3	11:35	1770.4	66.6	1555.2	84.164	1686.2	45.36	3635
				1569.6				
CASING	11:40	2192.3	73.7	2044.8	139.645	2052.7	59.64	4007
PRESS	11:45	2216.4	80.6	1987.2	132.455	2083.9	57.96	4031
190	11:50	2231.5	87.6	2016.0	136.028	2095.5	58.80	4049
PSIG	11:55	2240.4	94.6	2016.0	136.028	2104.4	58.80	4066
	12:00	2258.1	101.5	1987.2	132.455	2125.6	57.96	4079
4	12:05	2284.6	108.5	2016.0	136.028	2148.6	58.80	4101
				2011.2				

		(1)	(2)	(3)	(4)	(5)	(6)	(7)
STEP NO. & REMARKS	TIME	SURFACE TUBING PRESS. (psig)	CUMMULATIVE VOL. INJECTED (bbls)	INJECTION RATE (bbls/day)	FRICTION HEAD LOSS (psf)	CORRECTED TUBING PRESS. (psf) (1)-(4)	INJECTION RATE (gpm) (8)/34.2057	MEASURED BHP (psf)
CASING	12:10	2690.4	117.3	2534.4	207.726	2482.7	73.92	4428
PRESS	12:15	2711.9	125.9	2476.8	199.077	2512.8	72.24	4452
260	12:20	2766.4	134.7	2534.4	207.726	2558.7	73.92	4499
PSIG	12:25	2789.1	143.5	2534.4	207.726	2581.4	73.92	4514
	12:30	2802.9	152.3	2534.4	207.726	2595.2	73.92	4530
5	12:35	2809.1	161.1	2534.4	207.726	2601.4	73.92	4540
				2524.8				
CASING	12:40	3274.4	171.6	3024.0	288.004	2986.4	88.20	4920
PRESS	12:45	3297.1	182.1	3024.0	288.004	3009.1	88.20	4945
285	12:50	3302.1	192.6	3024.0	288.004	3014.1	88.20	4953
PSIG	12:55	3305.9	203.2	3052.8	293.099	3012.8	89.04	4959
	1:00	3302.1	213.7	3024.0	288.004	3014.1	88.20	4953
6	1:05	3271.0	224.1	2995.2	282.950	2988.0	87.36	4924
				3024.0				
FALLOFF								
	1:06	1737.1				1737.1		3692
	1:07	1696.6				1696.6		3652
	1:08	1670.0				1670.0		3624
	1:09	1647.2				1647.2		3602
	1:10	1628.2				1628.2		3583
	1:15	1553.7				1553.7		3510
	1:20	1504.6				1504.6		3461

- △ RECORDED WELLHEAD PRESSURE
- CORRECTED WELLHEAD PRESSURE BASED ON 2 3/8" TUBING
- BOTTOM HOLE PRESSURE @ 4910 FEET

TEXACO INC.
 STEP-RATE INJECTION TEST
 CENTRAL VACUUM UNIT WELL NO. 31
 LEA COUNTY, NEW MEXICO
 JUNE 16, 1993



N/R

OIL CONSERVATION DIVISION
RECEIVED

'93 JUN 25 AM 9 18

June 23, 1993

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe N.M. 87504

Attn: Mr. David Catanach
Engineer, New Mexico Oil Conservation Division

Re: PRESSURE INCREASE ON INJECTION WELL
Central Vacuum Unit #59
Unit E, Section 31
T-17-S, R-35-E 1310 N & W
Lea County, New Mexico

Dear David:

Texaco Exploration and Production Inc. requests an increase in the maximum allowable pressure on the above well from 884 psig to 2000 psig. A step rate injection test was ran on the well. Results of the test are attached. 1970

If you have any questions concerning this request, please contact me at 397-0418 or 393-7191. The engineer assigned to this well is Darlene de Aragao. Her number is 397-0424. Thank you for your assistance in this matter.

Yours very truly,



M.C. Duncan
Engineer's Assistant

/mcd
Chrono
Attachments
cc: Jerry Sexton/NMOCD/Hobbs

JOHN WEST ENGINEERING COMPANY

Hobbs, New Mexico

STEP RATE INJECTION TEST

CLIENT: TEXACO INC.

DATE: JUNE 15, 1988

WELL NAME: CENTRAL VACUUM UNIT WELL NO. 58

WO#: 88-14-1074

Lea County, New Mexico

MID-PERFS. = 4579

MDR = 4430

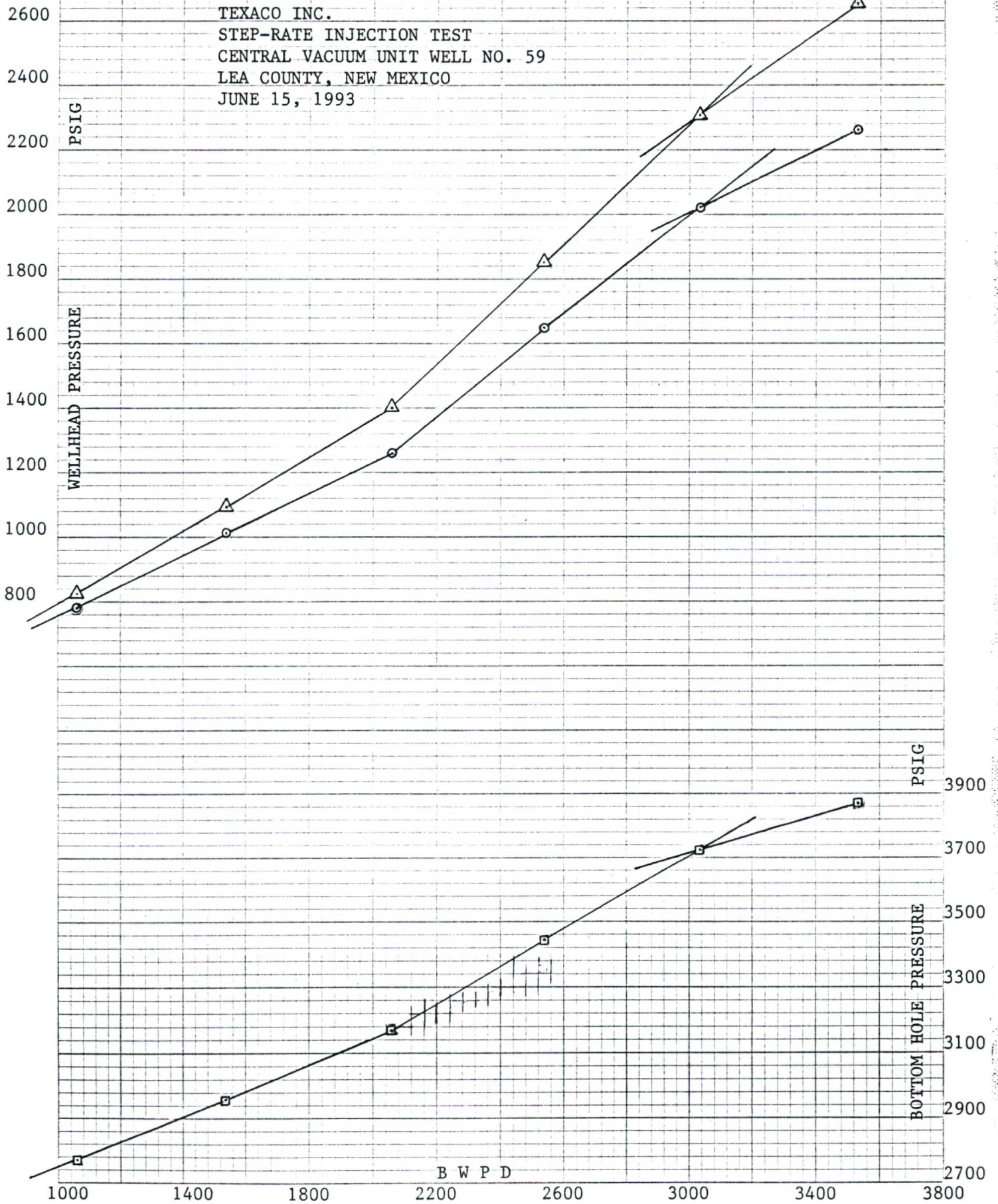
BHP GAUGE DEPTH = 4425

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psf)	(5) CORRECTED TUBING PRESS. (psf) (1)-(4)	(6) INJECTION RATE (gpm) (8)/34.2857	(7) MEASURED BHP (psf)
CASING PRESS.	9:25	554.4				554.4		2560
80	9:30	737.4	3.6	1036.8	40.859	696.5	30.24	2677
PSIG	9:35	775.3	7.3	1065.6	42.983	732.3	31.08	2708
	9:40	787.9	10.9	1036.8	40.859	747.0	30.24	2730
	9:45	818.2	14.6	1065.6	42.983	775.2	31.08	2749
	9:50	815.7	18.4	1094.4	45.157	770.5	31.92	2766
1	9:55	824.5	22.1	1065.6	42.983	781.5	31.08	2774
				1060.8				
CASING PRESS.	10:00	994.9	27.5	1555.2	86.507	908.4	45.36	2863
80	10:05	1023.8	32.8	1526.4	83.567	940.2	44.52	2895
PSIG	10:10	1050.3	38.2	1555.2	86.507	963.8	45.36	2917
	10:15	1066.6	43.5	1526.2	83.547	983.1	44.51	2933
	10:20	1087.0	48.0	1526.4	83.567	1003.4	44.52	2950
2	10:25	1092.2	54.2	1555.2	86.507	1005.7	45.36	2962
				1540.8				
CASING PRESS.	10:30	1312.5	61.4	2073.6	147.296	1165.2	60.48	3058
85	10:35	1335.2	68.5	2044.8	143.533	1191.7	59.64	3097
PSIG	10:40	1346.7	75.7	2073.6	147.296	1199.4	60.48	3115
	10:45	1375.8	82.8	2044.8	143.533	1232.3	59.64	3133
	10:50	1383.5	90.0	2073.6	147.296	1236.2	60.48	3154
3	10:55	1400.0	97.1	2044.8	143.533	1256.5	59.64	3171
				2059.2				
CASING PRESS.	11:00	1691.0	106.0	2563.2	218.020	1473.0	74.76	3284
90	11:05	1732.9	114.8	2534.4	213.510	1519.4	73.92	3331
PSIG	11:10	1769.6	123.6	2534.4	213.510	1556.1	73.92	3368
	11:15	1792.4	132.4	2534.4	213.510	1578.9	73.92	3394
	11:20	1816.4	141.2	2534.4	213.510	1602.9	73.92	3420
4	11:25	1854.4	149.9	2505.6	209.043	1645.4	73.08	3446
				2534.4				

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psd)	(5) CORRECTED TUBING PRESS. (psd) (1) - (4)	(6) INJECTION RATE (gpm) (5)/34.2857	(7) MEASURED BHP (psd)
CASING PRESS 95 PSIG	11:30	2140.4	160.5	3052.8	301.259	1839.1	89.04	3563
	11:35	2183.5	171.0	3024.0	296.023	1887.5	88.20	3608
	11:40	2227.8	181.6	3052.8	301.259	1926.5	89.04	3646
	11:45	2272.1	192.0	2995.2	290.828	1981.3	87.36	3680
	11:50	2291.1	202.6	3052.8	301.259	1989.8	89.04	3706
5	11:55	2313.9	213.2	3052.8	301.259	2012.6	89.04	3727
				3038.4				
CASING PRESS 105 PSIG	12:00	2601.6	225.5	3542.4	396.688	2204.9	103.32	3825
	12:05	2619.5	237.7	3513.6	390.742	2228.8	102.48	3811
	12:10	2606.7	249.9	3513.6	390.742	2216.0	102.48	3810
	12:15	2613.1	262.2	3542.4	396.688	2216.4	103.32	3831
	12:20	2634.7	274.5	3542.4	396.688	2238.0	103.32	3853
6	12:25	2648.7	286.7	3513.6	390.742	2258.0	102.48	3871
				3528.0				
FALLOFF	12:26	1733.0				1733.0		3784
	12:27	1655.8				1655.8		3660
	12:28	1582.4				1582.4		3588
	12:29	1526.7				1526.7		3533
	12:30	1479.8				1479.8		3487
	12:35	1439.4				1439.4		3447
	12:40	1288.8				1288.8		3297
	12:45	1183.8				1183.8		3192

- △ RECORDED WELLHEAD PRESSURE
- CORRECTED WELLHEAD PRESSURE BASED ON 2 3/8" TUBING
- BOTTOM HOLE PRESSURE @ 4425 FEET

TEXACO INC.
 STEP-RATE INJECTION TEST
 CENTRAL VACUUM UNIT WELL NO. 59
 LEA COUNTY, NEW MEXICO
 JUNE 15, 1993



OIL CONSERVATION DIVISION
RECEIVED

'93 JUN 24 AM 9 02

June 22, 1993

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe N.M. 87504

Attn: Mr. David Catanach
Engineer, New Mexico Oil Conservation Division

Re: PRESSURE INCREASE ON INJECTION WELL
Central Vacuum Unit #100
Unit F, Section 6
T-18-S, R-35-E
Lea County, New Mexico

1310 N & 2630 W

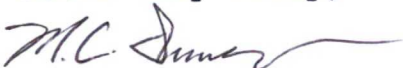
Dear David:

Texaco Exploration and Production Inc. requests an increase in the maximum allowable pressure on the above well from 1025 psig to 1750 psig. A step rate injection test was ran on the well. Results of the test are attached.

1700

If you have any questions concerning this request, please contact me at 397-0418 or 393-7191. The engineer assigned to this well is Darlene de Aragao. Her number is 397-0424. Thank you for your assistance in this matter.

Yours very truly,


M.C. Duncan
Engineer's Assistant

/mcd
Chrono
Attachments
cc: Jerry Sexton/NMOCD/Hobbs

JOHN WEST ENGINEERING COMPANY

Hobbs, New Mexico

STEP RATE INJECTION TEST

CLIENT: TEXACO INC.

DATE: JUNE 8, 1993

WELL NAME: CENTRAL VACUUM UNIT WELL NO. 100

WO#: 93-14-1080

Lea County, New Mexico

MID-PERFS. = 4338 - 4719

PACKER DEPTH = 4304

MDR = 4338

BHP GAUGE DEPTH = 4330

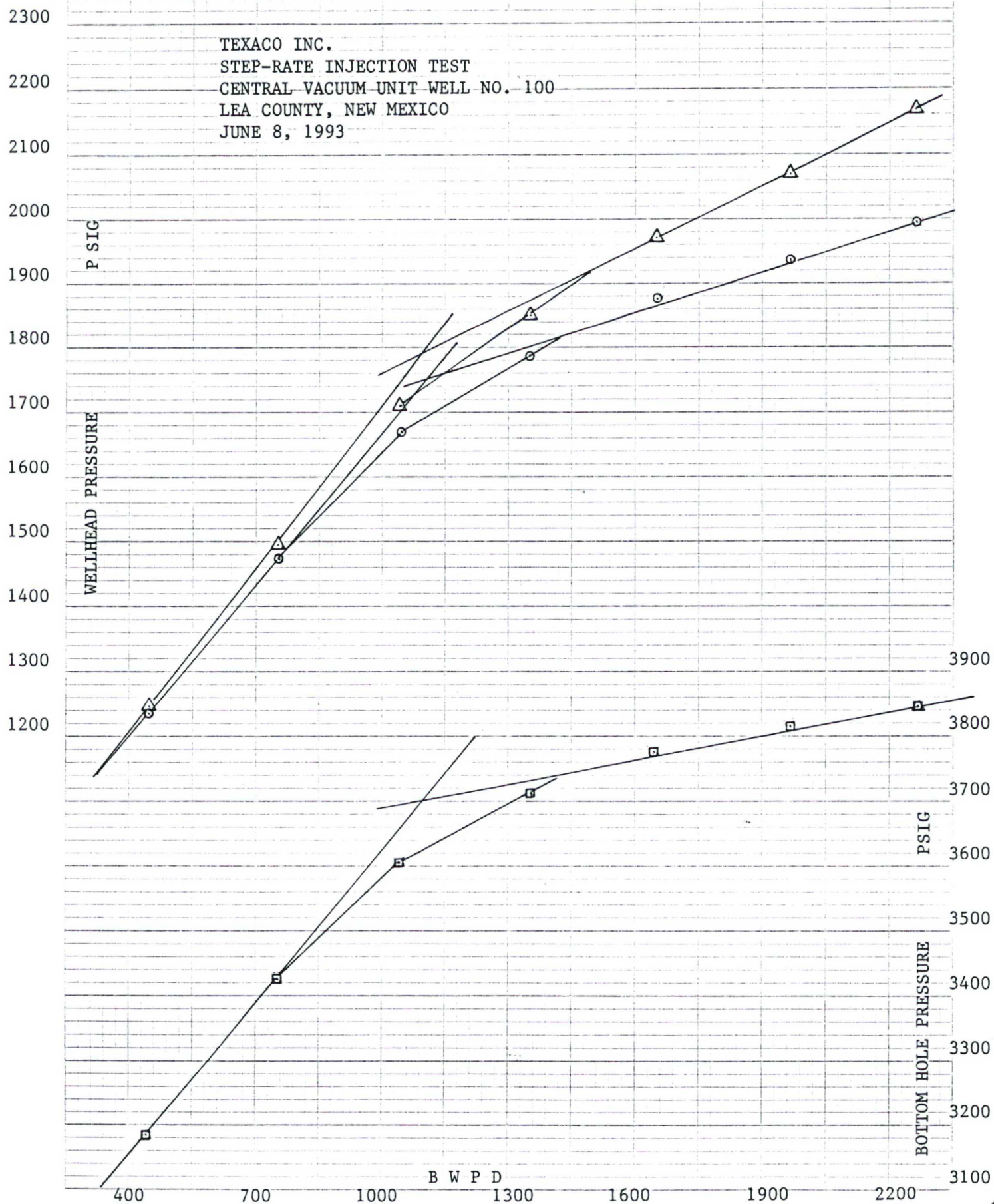
STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psf)	(5) CORRECTED TUBING PRESS. (psf) (1)-(4)	(6) INJECTION RATE (gpm) (3)/34.2867	(7) MEASURED BHP (psf)
CASING PRESS	10:40	969.4				969.4		2943
180 PSIG	10:45	1109.9	1.6	460.8	8.925	1101.0	13.44	3069
	10:50	1163.1	3.2	460.8	8.925	1154.2	13.44	3109
	10:55	1172.0	4.7	432.0	7.921	1164.1	12.60	3135
	11:00	1184.6	6.3	460.8	8.925	1175.7	13.44	3155
	11:05	1206.1	7.8	432.0	7.921	1198.2	12.60	3170
1	11:10	1246.6	9.3	432.0	7.921	1238.7	12.60	3183
				446.4				
	11:15	1383.3	12.0	777.6	23.498	1359.8	22.68	3300
	11:20	1407.4	14.7	777.6	23.498	1383.9	22.68	3341
	11:25	1456.8	17.2	720.0	20.380	1436.4	21.00	3373
	11:30	1465.7	19.8	748.8	21.913	1443.8	21.84	3393
	11:35	1496.0	22.4	748.8	21.913	1474.1	21.84	3412
2	11:40	1497.3	25.0	748.8	21.913	1475.4	21.84	3425
				753.6				
	11:45	1625.2	28.7	1065.6	42.090	1583.1	31.08	3524
	11:50	1658.1	32.3	1036.8	40.010	1618.1	30.24	3551
	11:55	1675.2	35.9	1036.8	40.010	1635.2	30.24	3570
	12:00	1689.8	39.5	1036.8	40.010	1649.8	30.24	3583
	12:05	1694.9	43.1	1036.8	40.010	1654.9	30.24	3595
3	12:10	1708.8	46.7	1036.8	40.010	1668.8	30.24	3604
				1041.6				
CASING PRESS	12:15	1818.9	51.4	1353.6	65.523	1753.4	39.48	3674
220 PSIG	12:20	1835.3	56.2	1382.4	68.125	1767.2	40.32	3684
	12:25	1840.4	60.9	1353.6	65.523	1774.9	39.48	3691
	12:30	1851.8	65.6	1353.6	65.523	1786.3	39.48	3699
	12:35	1850.6	70.2	1324.8	62.967	1787.6	38.64	3705
4	12:40	1850.6	75.0	1382.4	68.125	1782.5	40.32	3709
				1358.4				

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psf)	(5) CORRECTED TUBING PRESS. (psf) (1)-(4)	(6) INJECTION RATE (gpm) (8)/34.2857	(7) MEASURED BHP (psf)
5	12:45	1951.8	80.8	1670.4	96.683	1855.1	48.72	3754
	12:50	1962.0	86.5	1641.6	93.622	1868.4	47.88	3762
	12:55	1962.0	92.2	1641.6	93.622	1868.4	47.88	3766
	1:00	1962.0	97.9	1641.6	93.622	1868.4	47.88	3771
	1:05	1962.0	103.7	1670.4	96.683	1865.3	48.72	3773
	1:10	1970.9	109.4	1641.6 1651.2	93.622	1877.3	47.88	3776
CASING 400 PSIG	1:15	2073.4	116.1	1929.6	126.255	1947.1	56.28	3814
	1:20	2073.4	123.0	1987.2	133.316	1940.1	57.96	3817
	1:25	2074.6	129.8	1958.2	129.739	1944.9	57.11	3818
	1:30	2070.8	136.7	1987.2	133.316	1937.5	57.96	3817
	1:35	2074.6	143.4	1929.6	126.255	1948.3	56.28	3815
6	1:40	2070.8	150.3	1987.2 1963.2	133.316	1937.5	57.96	3816
CASING PRESS 460 PSIG	1:45	2173.4	158.2	2275.2	171.246	2002.2	66.36	3845
	1:50	2170.9	166.0	2246.4	167.257	2003.6	65.52	3843
	1:55	2178.5	173.9	2275.2	171.246	2007.3	66.36	3843
	2:00	2162.0	181.6	2217.6	163.312	1998.7	64.68	3840
	2:05	2162.0	189.7	2332.8	179.353	1982.6	68.04	3842
7	2:10	2162.0	197.5	2246.4 2265.6	167.257	1994.7	65.52	3842
CASING PRESS 510 PSIG								
FALLOFF	2:11	1770.9				1770.9		3724
CASING	2:12	1731.7				1731.7		3687
PRESS	2:13	1705.1				1705.1		3660
495	2:14	1686.1				1686.1		3641
PSIG	2:15	1665.9				1665.9		3622
	2:16	1650.7				1650.7		3607
	2:17	1635.5				1635.5		3592
CASING	2:18	1624.1				1624.1		3579
PRESS	2:19	1611.5				1611.5		3567
475	2:20	1600.1				1600.1		3557
PSIG	2:21	1590.0				1590.0		3546
	2:22	1581.1				1581.1		3536
	2:23	1572.3				1572.3		3529

Page 3

- △ RECORDED WELLHEAD PRESSURE
- CORRECTED WELLHEAD PRESSURE BASED ON 2 3/8" TUBING
- BOTTOM HOLE PRESSURE @ 4338 FEET

TEXACO INC.
 STEP-RATE INJECTION TEST
 CENTRAL VACUUM UNIT WELL NO. 100
 LEA COUNTY, NEW MEXICO
 JUNE 8, 1993



1993 JUN 24 AM 9 02

June 22, 1993

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe N.M. 87504

Attn: Mr. David Catanach
Engineer, New Mexico Oil Conservation Division

Re: PRESSURE INCREASE ON INJECTION WELL
Central Vacuum Unit #114
Unit K, Section 6
T-18-S, R-35-E
Lea County, New Mexico

1460' S x 2100' W

Dear David:

Texaco Exploration and Production Inc. requests an increase in the maximum allowable pressure on the above well from 893 psig to 1980 psig. A step rate injection test was ran on the well. Results of the test are attached.

1935

If you have any questions concerning this request, please contact me at 397-0418 or 393-7191. The engineer assigned to this well is Darlene de Aragao. Her number is 397-0424. Thank you for your assistance in this matter.

Yours very truly,



M.C. Duncan
Engineer's Assistant

/mcd
Chrono
Attachments
cc: Jerry Sexton/NMOCD/Hobbs

JOHN WEST ENGINEERING COMPANY

Hobbs, New Mexico

STEP RATE INJECTION TEST

CLIENT: TEXACO INC.

DATE: JUNE 10, 1989

WELL NAME: CENTRAL VACUUM UNIT WELL NO. 114
Lea County, New Mexico

W.O.: 89-14-1081

MID-PERF. = 4582

PACKER DEPTH = 4439

MDR = 4398

BHP GAUGE DEPTH = 4336

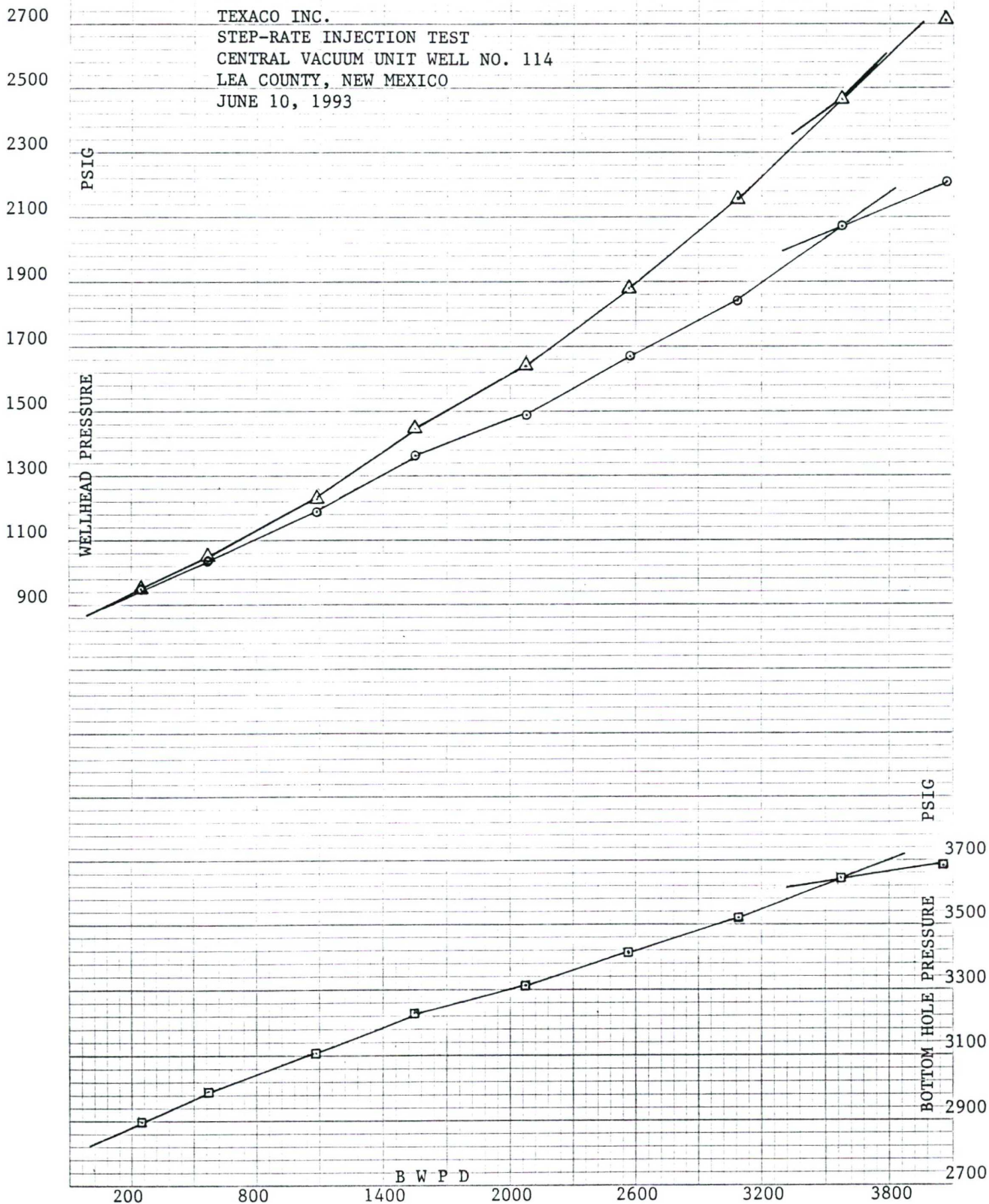
STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psi)	(5) CORRECTED TUBING PRESS. (psi) (1)-(4)	(6) INJECTION RATE (gpm) (8)/34.2857	(7) MEASURED BHP (psi)
ON BOTTOM	11:10	880.1				880.1		2837
9:30	11:15	905.4	0.8	230.4	2.476	902.9	6.72	2862
WAITING	11:20	920.6	1.7	259.2	3.079	917.5	7.56	2872
CREW	11:25	930.7	2.5	230.4	2.476	928.2	6.72	2879
TO FIX	11:30	930.7	3.4	259.2	3.079	927.6	7.56	2883
F-LINE	11:35	939.5	4.3	259.2	3.079	936.4	7.56	2894
1	11:40	948.3	5.3	288.0	3.742	944.6	8.40	2899
				254.4				
CASING	11:45	1015.1	7.3	576.0	13.490	1001.6	16.80	2945
PRESS	11:50	1021.4	9.2	547.2	12.269	1009.1	15.96	2958
0	11:55	1026.4	11.2	576.0	13.490	1012.9	16.80	2967
PSIG	12:00	1039.0	13.2	576.0	13.490	1025.5	16.80	2973
	12:05	1046.5	15.1	547.2	12.269	1034.2	15.96	2981
2	12:10	1054.2	17.1	576.0	13.490	1040.7	16.80	2988
				566.4				
CASING	12:15	1206.2	20.8	1065.6	42.100	1164.1	31.08	3080
PRESS	12:20	1210.1	24.6	1094.4	44.229	1165.9	31.92	3090
0	12:25	1222.7	28.4	1094.4	44.229	1178.5	31.92	3096
PSIG	12:30	1225.2	32.3	1123.2	46.407	1178.8	32.76	3103
	12:35	1229.0	36.1	1094.4	44.229	1184.8	31.92	3103
3	12:40	1231.5	39.9	1094.4	44.229	1187.3	31.92	3106
				1094.4				
CASING	12:45	1417.5	45.3	1555.2	84.730	1332.8	45.36	3205
PRESS	12:50	1417.5	50.7	1555.2	84.730	1332.8	45.36	3206
0	12:55	1417.5	56.1	1555.2	84.730	1332.8	45.36	3213
PSIG	1:00	1427.7	61.5	1555.2	84.730	1343.0	45.36	3219
	1:15	1434.1	66.9	1555.2	84.730	1349.4	45.36	3227
4	1:10	1445.4	72.3	1555.2	84.730	1360.7	45.36	3234
				1555.2				

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psf)	(5) CORRECTED TUBING PRESS. (psf) (1)-(4)	(6) INJECTION RATE (gpm) (3)/34.2857	(7) MEASURED BHP (psf)
CASING PRESS 0 PSIG	1:15	1623.9	79.5	2073.6	144.270	1479.6	60.48	3308
	1:20	1631.4	86.7	2073.6	144.270	1487.1	60.48	3307
	1:25	1636.5	93.9	2073.6	144.270	1492.2	60.48	3318
	1:30	1644.1	101.1	2073.6	144.270	1499.8	60.48	3318
	1:35	1634.0	108.3	2073.6	144.270	1489.7	60.48	3308
5	1:40	1637.8	115.5	2073.6 2073.6	144.270	1493.5	60.48	3312
CASING PRESS 70 PSIG	1:45	1854.2	124.5	2592.0	218.001	1636.2	75.60	3396
	1:50	1875.8	133.4	2563.2	213.541	1662.3	74.76	3402
	1:55	1873.3	142.3	2563.2	213.541	1659.8	74.76	3406
	2:00	1878.4	151.3	2592.0	218.001	1660.4	75.60	3412
	2:05	1877.2	160.2	2563.2	213.541	1663.7	74.76	3413
6	2:10	1879.7	169.1	2563.2 2572.8	213.541	1666.2	74.76	3415
CASING PRESS 100 PSIG	2:15	2158.1	179.8	3081.6	300.241	1857.9	89.88	3517
	2:20	2159.3	190.4	3052.8	295.071	1864.2	89.04	3520
	2:25	2160.6	201.1	3081.6	300.241	1860.4	89.88	3522
	2:30	2155.6	211.8	3081.6	300.241	1855.4	89.88	3520
	2:35	2156.9	222.5	3081.6	300.241	1856.7	89.88	3521
7	2:40	2154.3	233.3	3110.4 3081.6	305.453	1848.8	90.72	3519
CASING PRESS 140 PSIG	2:45	2493.5	245.6	3542.4	388.539	2105.0	103.32	3674
	2:50	2487.2	258.1	3600.0	400.308	2086.9	105.00	3660
	2:55	2469.5	270.4	3542.4	388.539	2081.0	103.32	3655
	3:00	2459.4	282.8	3571.2	394.403	2065.0	104.16	3651
	3:05	2460.7	295.2	3571.2	394.403	2066.3	104.16	3651
8	3:10	2463.2	307.6	3571.2 3566.4	394.403	2068.8	104.16	3649
CASING PRESS 180 PSIG	3:15	2705.9	321.7	4060.8	500.226	2205.7	118.44	3699
	3:20	2714.8	335.8	4060.8	500.226	2214.6	118.44	3695
	3:25	2710.9	349.8	4032.0	493.682	2217.2	117.60	3692
	3:30	2704.6	363.9	4060.8	500.226	2204.4	118.44	3689
	3:35	2730.0	378.1	4089.6	506.809	2223.2	119.28	3698
9	3:40	2709.7	392.2	4060.8 4060.8	500.226	2209.5	118.44	3691

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psf)	(5) CORRECTED TUBING PRESS. (psf) (1)-(4)	(6) INJECTION RATE (gpm) (8)/34.2857	(7) MEASURED BHP (psf)
FALLOFF	3:41							
	3:42	1284.7				1284.7		3231
	3:43	1279.7				1279.7		3223
	3:44	1274.6				1274.6		3218
	3:45	1270.8				1270.8		3214
	3:50	1254.3				1254.3		3198
	3:55	1242.9				1242.9		3187

- △ RECORDED WELLHEAD PRESSURE
- CORRECTED WELLHEAD PRESSURE BASED ON 2 3/8" TUBING
- BOTTOM HOLE PRESSURE @ 4339 FEET

TEXACO INC.
 STEP-RATE INJECTION TEST
 CENTRAL VACUUM UNIT WELL NO. 114
 LEA COUNTY, NEW MEXICO
 JUNE 10, 1993



OIL CONSERVATION DIVISION
RECEIVED

JUN 23 1993 AM 9 02

June 22, 1993

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe N.M. 87504

Attn: Mr. David Catanach
Engineer, New Mexico Oil Conservation Division

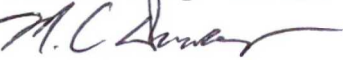
Re: PRESSURE INCREASE ON INJECTION WELL
Central Vacuum Unit #121
Unit N, Section 6
T-18-S, R-35-E 4005 2380 W
Lea County, New Mexico

Dear David:

Texaco Exploration and Production Inc. requests an increase in the maximum allowable pressure on the above well from 1100 psig to 1540 psig. A step rate injection test was ran on the well. Results of the test are attached. 1485

If you have any questions concerning this request, please contact me at 397-0418 or 393-7191. The engineer assigned to this well is Darlene de Aragao. Her number is 397-0424. Thank you for your assistance in this matter.

Yours very truly,



M.C. Duncan
Engineer's Assistant

/mcd
Chrono
Attachments
cc: Jerry Sexton/NMOCD/Hobbs

JOHN WEST ENGINEERING COMPANY

Hobbs, New Mexico

STEP RATE INJECTION TEST

CLIENT: TEXACO INC.

DATE: JUNE 7, 1989

WELL NAME: CENTRAL VACUUM UNIT WELL NO. 121

WO#: 89-14-1084

Lea County, New Mexico

MID-PERFS. = 4610 - 4721

MDR = 4551

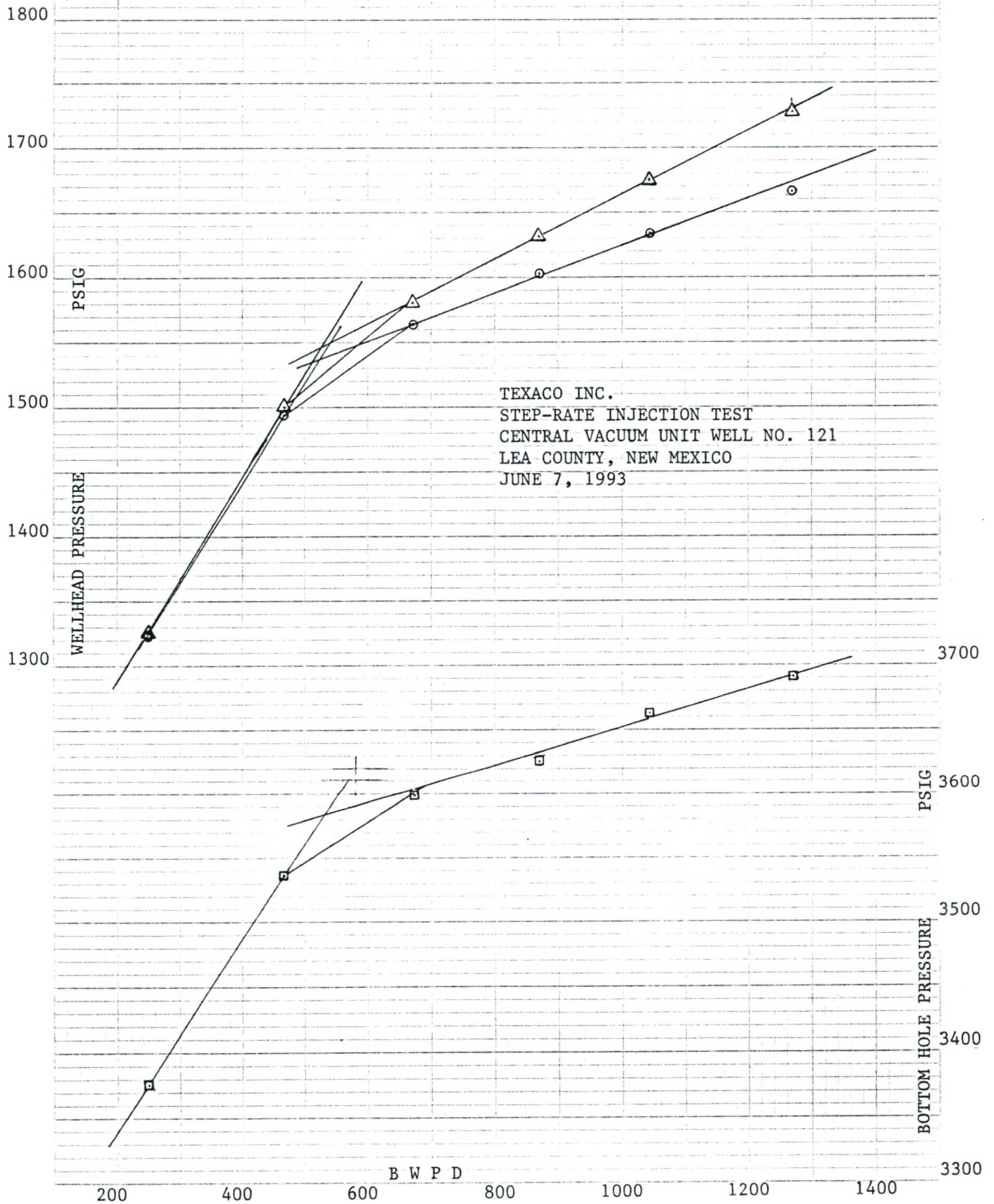
PACKER DEPTH =

BHP GAUGE DEPTH = 4550

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psi)	(5) CORRECTED TUBING PRESS. (psi) (1)-(4)	(6) INJECTION RATE (gpm) (1)/34.567	(7) MEASURED BHP (psi)
ON BOTTOM	10:45	1126.6				1126.6		3179
9:30 AM	10:50	1127.8	0.9	259.2	3.230	1124.6	7.56	3273
WAITING	10:55	1254.4	1.7	230.4	2.597	1251.8	6.72	3300
ON CREW	11:00	1270.9	2.6	259.2	3.230	1267.7	7.56	3317
TO FIX	11:05	1297.5	3.4	230.4	2.597	1294.9	6.72	3343
FL LEAK	11:10	1307.6	4.3	259.2	3.230	1304.4	7.56	3357
1	11:15	1325.4	5.2	259.2	3.230	1322.2	7.56	3376
				249.6				
	11:20	1436.7	6.8	460.8	9.364	1427.3	13.44	3482
	11:25	1469.7	8.5	489.6	10.475	1459.2	14.28	3507
	11:30	1478.5	10.1	460.8	9.364	1469.1	13.44	3517
	11:35	1491.2	11.7	460.8	9.364	1481.8	13.44	3526
	11:40	1482.3	13.3	460.8	9.364	1472.9	13.44	3530
2	11:45	1498.8	14.9	460.8	9.364	1489.4	13.44	3536
				465.6				
	11:50	1573.5	17.3	691.2	19.825	1553.7	20.16	3593
	11:55	1576.0	19.6	662.4	18.324	1557.7	19.32	3600
	12:00	1573.5	22.0	691.2	19.825	1553.7	20.16	3606
	12:05	1581.0	24.3	662.4	18.324	1562.7	19.32	3603
	12:10	1581.0	26.6	662.4	18.324	1562.7	19.32	3605
3	12:15	1581.0	28.9	662.4	18.324	1562.7	19.32	3599
				671.9				
	12:20	1635.5	32.0	892.8	31.831	1603.7	26.04	3633
	12:25	1617.8	35.0	864.0	29.957	1587.8	25.20	3629
	12:30	1625.4	37.9	835.2	28.136	1597.3	24.36	3633
	12:35	1630.4	41.0	892.8	31.831	1598.6	26.04	3630
	12:40	1629.1	44.0	864.0	29.957	1599.1	25.20	3630
4	12:45	1631.7	47.0	864.0	29.957	1601.7	25.20	3626
				868.8				

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psf)	(5) CORRECTED TUBING PRESS. (psf) (1)-(4)	(6) INJECTION RATE (gpm) (3)/34.2857	(7) MEASURED BHP (psf)
5	12:50	1674.7	50.0	1036.8	41.975	1632.7	30.24	3661
	12:55	1687.4	54.2	1036.8	41.975	1645.4	30.24	3665
	1:00	1684.8	57.9	1065.6	44.157	1640.6	31.08	3665
	1:05	1682.3	61.5	1036.8	41.975	1640.3	30.24	3667
	1:10	1679.8	65.0	1008.0	39.843	1640.0	29.40	3661
	1:15	1677.2	68.7	1065.6	44.157	1633.0	31.08	3663
				1041.6				
	1:20	1740.5	73.1	1267.2	60.844	1679.7	36.96	3690
	1:25	1729.1	77.6	1296.0	63.427	1665.7	37.80	3684
	1:30	1726.6	82.0	1267.2	60.844	1665.8	36.96	3690
	1:35	1729.1	86.4	1267.2	60.844	1668.3	36.96	3690
	1:40	1729.1	90.8	1267.2	60.844	1668.3	36.96	3690
	1:45	1727.9	95.2	1267.2	60.844	1667.1	36.96	3691
				1271.9				
FALLOFF	1:46	1502.6				1502.6		3577
	1:47	1490.0				1490.0		3564
	1:48	1481.1				1481.1		3555
	1:49	1473.5				1473.5		3547
	1:50	1467.2				1467.2		3540
	1:51	1463.4				1463.4		3535
	1:52	1458.3				1458.3		3532
	1:53	1454.5				1454.5		3527
	1:54	1450.7				1450.7		3523
	1:55	1448.2				1448.2		3521
	1:56	1444.4				1444.4		3517
	1:57	1443.1				1443.1		3515
	1:58	1440.6				1440.6		3512
	1:59	1438.1				1438.1		3510
	2:00	1435.5				1435.5		3508

- △ RECORDED WELLHEAD PRESSURE
- CORRECTED WELLHEAD PRESSURE BASED ON 23/8" TUBING
- BOTTOM HOLE PRESSURE @ 4551 FEET



OIL CONSERVATION DIVISION
RECEIVED

'93 JUN 24 AM 9 02

June 22, 1993

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe N.M. 87504

Attn: Mr. David Catanach
Engineer, New Mexico Oil Conservation Division

Re: PRESSURE INCREASE ON INJECTION WELL
Central Vacuum Unit #133
Unit B, Section 12
T-18-S, R-34-E 10' N - 1550' E
Lea County, New Mexico

Dear David:

Texaco Exploration and Production Inc. requests an increase in the maximum allowable pressure on the above well from 909 psig to 1840 psig. A step rate injection test was ran on the well. Results of the test are attached. 1795

If you have any questions concerning this request, please contact me at 397-0418 or 393-7191. The engineer assigned to this well is Darlene de Aragao. Her number is 397-0424. Thank you for your assistance in this matter.

Yours very truly,



M.C. Duncan
Engineer's Assistant

/mcd
Chrono
Attachments
cc: Jerry Sexton/NMOCD/Hobbs

JOHN WEST ENGINEERING COMPANY

Hobbs, New Mexico

STEP RATE INJECTION TEST

CLIENT: Texaco Inc.

DATE: JUNE 3, 1993

WELL NAME: Central Vacuum Unit Well No. 133

WO# 93-14-1024

Lea County, New Mexico

MID-PERFS. = 4543 - 4647

MDR = 4427

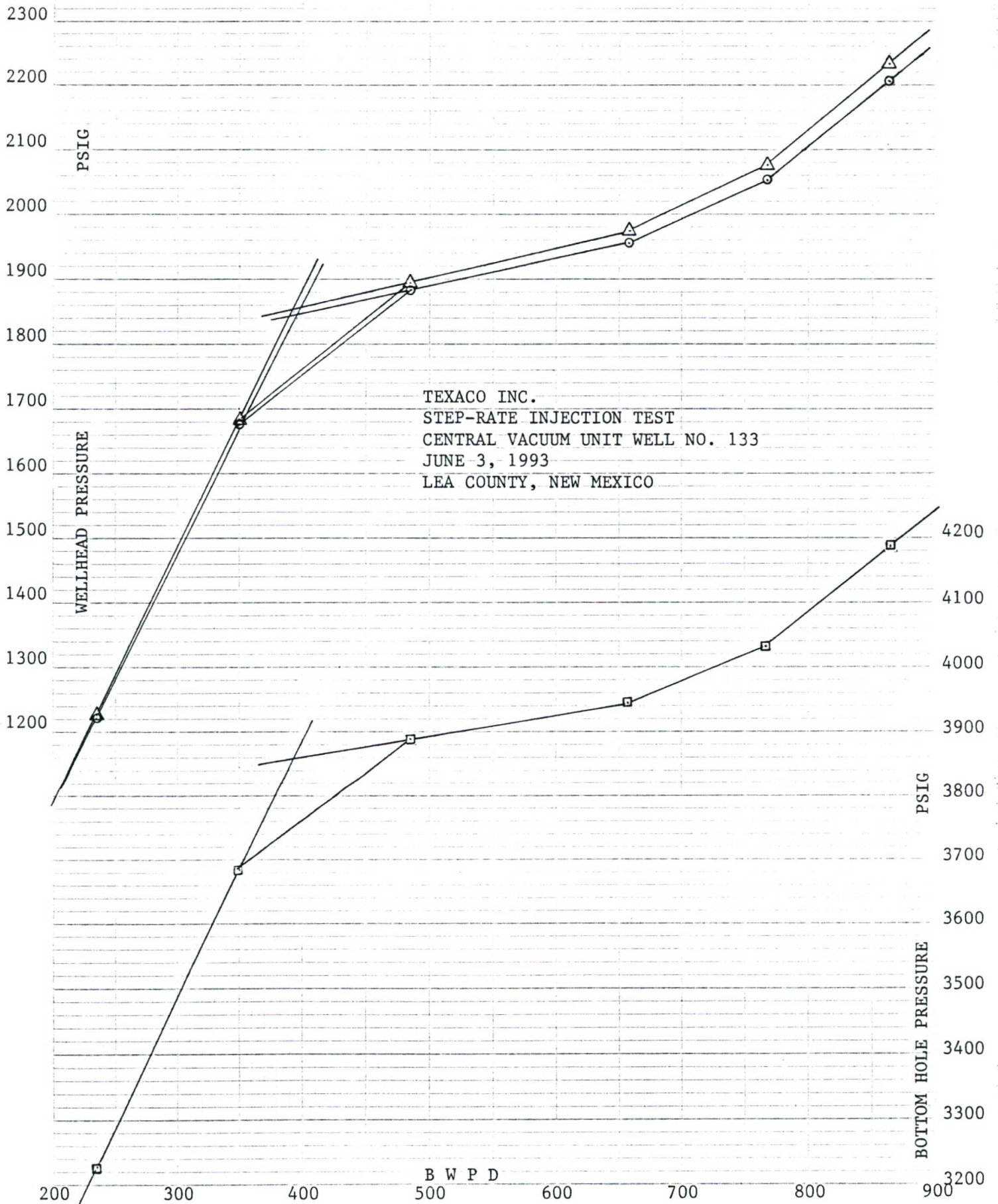
PACKER DEPTH =

BHP GAUGE DEPTH = 4400

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psi)	(5) CORRECTED TUBING PRESS. (psi) (1)-(4)	(6) INJECTION RATE (gpm) (3)/34.2857	(7) MEASURED BHP (psi)
1	1:00	445.6				445.6		2448
	1:05	957.6	0.9	259.2	3.142	954.5	7.56	2965
	1:10	1068.7	1.7	230.4	2.527	1066.2	6.72	3054
	1:15	1078.8	2.5	230.4	2.527	1076.3	6.72	3087
	1:20	1170.0	3.3	230.4	2.527	1167.5	6.72	3158
	1:25	1181.4	4.1	230.4	2.527	1178.9	6.72	3179
	1:30	1226.9	4.9	230.4	2.527	1224.4	6.72	3228
				235.2				
	1:35	1500.2	6.2	374.4	6.203	1494.0	10.92	3489
	1:40	1542.0	7.4	345.6	5.350	1536.7	10.08	3537
2	1:45	1561.0	8.7	374.4	6.203	1554.8	10.92	3562
	1:50	1580.0	9.9	345.6	5.350	1574.7	10.08	3582
	1:55	1605.3	11.0	316.8	4.554	1600.7	9.24	3608
	2:00	1681.2	12.2	345.6	5.350	1675.9	10.08	3684
				350.4				
	2:05	1882.4	13.9	489.6	10.190	1872.2	14.28	3883
	2:10	1891.3	15.5	460.8	9.109	1882.2	13.44	3891
	2:15	1907.7	17.2	489.6	10.190	1897.5	14.28	3904
	2:20	1900.1	18.9	489.6	10.190	1889.9	14.28	3899
	2:25	1901.4	20.6	489.6	10.190	1891.2	14.28	3884
3	2:30	1896.3	22.3	489.6	10.190	1886.1	14.28	3890
				484.8				
	2:35	2014.0	24.6	662.4	17.825	1996.2	19.32	3984
	2:40	2001.3	26.9	662.4	17.825	1983.5	19.32	3967
	2:45	1992.5	29.2	662.4	17.825	1974.7	19.32	3970
	2:50	1989.9	31.4	633.6	16.418	1973.5	18.48	3960
	2:55	1976.0	33.7	662.4	17.825	1958.2	19.32	3952
	3:00	1974.7	36.0	662.4	17.825	1956.9	19.32	3944
				657.6				

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMMULATIVE 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)
5	3:05	2110.2	38.7	777.6	23.980	2086.2	22.68	4064
	3:10	2105.1	41.4	777.6	23.980	2081.1	22.68	4063
	3:15	2095.0	44.0	748.8	22.363	2072.6	21.84	4062
	3:20	2089.9	46.7	777.6	23.980	2065.9	22.68	4049
	3:25	2084.9	49.3	748.8	22.363	2062.5	21.84	4047
	3:30	2078.5	52.0	777.6	23.980	2054.5	22.68	4035
				767.9				
	3:35	2240.6	55.0	864.0	29.141	2211.5	25.20	4178
	3:40	2227.9	58.1	892.8	30.963	2196.9	26.04	4172
	3:45	2232.9	61.1	864.0	29.141	2203.8	25.20	4183
	3:50	2240.5	64.1	864.0	29.141	2211.4	25.20	4190
	3:55	2236.7	67.0	835.2	27.369	2209.3	24.36	4189
	4:00	2236.7	70.0	864.0	29.141	2207.6	25.20	4192
				864.0				
FALLOFF	4:01	1362.2				1362.2		3371
	4:02	1316.7				1316.7		3327
	4:03	1296.4				1296.4		3306
	4:04	1286.3				1286.3		3295
	4:05	1272.4				1272.4		3282
	4:06	1261.0				1261.0		3269
	4:07	1247.0				1247.0		3256
	4:08	1234.4				1234.4		3243
	4:09	1223.0				1223.0		3230
	4:10	1210.3				1210.3		3219
	4:11	1199.0				1199.0		3206
	4:12	1190.1				1190.1		3199
	4:13	1182.5				1182.5		3189
	4:14	1173.6				1173.6		3182
	4:15	1166.0				1166.0		3174

- △ RECORDED WELLHEAD PRESSURE
- CORRECTED WELLHEAD PRESSURE BASED ON 2 3/8" TUBING
- BOTTOM HOLE PRESSURE @ 4427 FEET





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

OIL CONSERVATION DIVISION
RECEIVED
'93 JUL 7 AM 9 30

July 1, 1993

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 Expl. & Prod. Inc.	Central Vacuum Unit 5-D,	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



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

June 25, 1993

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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 Expl & Prod Inc.	Central Vacuum Unit	6-C	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



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

June 25, 1993

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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 Expl & Prod Inc.	Central Vacuum Unit	28-P	25-17-34
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

Dr limit to 1300

Very truly yours

Jerry Sexton
Jerry Sexton
Supervisor, District I

/bp



BRUCE KING
GOVERNOR

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

June 25, 1993

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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 Expl & Prod Inc.	Central Vacuum Unit	29-L	30-17-35
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

Rec Unit 1550

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE
June 25, 1993

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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 Expl & Prod Inc.	Central Vacuum Unit	30-K	30-17-35
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
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

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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 Expl. & Prod. Inc.	Central Vacuum Unit	31-J	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



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

July 1, 1993

BRUCE KING
GOVERNOR

OIL CONSERVATION DIVISION
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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 Expl. & Prod. Inc.	Central Vacuum Unit 59-E,	31-17-35
Operator	Lease & Well No. Unit	S-T-R

and my recommendations are as follows:

OK

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



BRUCE KING
GOVERNOR

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

June 25, 1993

OIL CONSERVATION DIVISION
RECEIVED

JUN 27 AM 9 31

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 Expl & Prod Inc.	Central Vacuum Unit	100-F	6-18-35
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

1700

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



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

June 25, 1993

OIL CONSERVATION DIVISION
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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 Expl & Prod Inc.	Central Vacuum Unit	114-K	6-18-35
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

eliminate last point

Very truly yours

Jerry Sexton
Supervisor, District I

/bp



BRUCE KING
GOVERNOR

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

June 25, 1993

OIL CONSERVATION DIVISION
RECEIVED

'93 JUL 7 AM 9 30

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 Expl & Prod Inc.	Central Vacuum Unit	121-N	6-18-35
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

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

June 25, 1993

OIL CONSERVATION DIVISION
RECEIVED
'93 JUL 7 AM 9 31

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 Expl & Prod Inc.	Central Vacuum Unit	133-B	12-18-34
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

looks like 1700

Very truly yours

Jerry Sexton
Supervisor, District I

/bp