



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

CF 6008 R-5530

July 15, 1996

Texaco Exploration & Production, Inc.
P.O. Box 730
Hobbs, New Mexico 88241-0730

Attn: Mr. Robert McNaughton

**RE: Injection Pressure Increase, Central Vacuum Unit Well No.61
Lea County, New Mexico**

Dear Mr. McNaughton:

Reference is made to your request dated May 9, 1996 to increase the surface injection pressure on the above referenced well. This request is based on a step rate test conducted on April 17, 1996. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on this well is justified at this time.

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

<i>Well and Location</i>	<i>Maximum Surface Injection Pressure</i>
Central Vacuum Unit Well No.61	2775 PSIG
Located in Unit Letter 'A' of Section 31, Township 17 South, Range 35 East, 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

cc: Oil Conservation Division - Hobbs
Files: Case No.6008; PSI-X 1st QTR-97 /



Texaco E & P



PSI-X N/R

May 9, 1996

New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Attention: David R. Catanach

Re: Request for Increase in Surface Injection Pressure Limits
Texaco Exploration and Production Inc.

Central Vacuum Unit, Well No. 61

Unit A, Section 31, T-17-S, R-35-E, Lea County, New Mexico

Dear Mr. Catanach

Texaco Exploration and Production Inc. requests that the surface injection pressure limit be increased for the subject well. A step rate test was recently run and the results are attached. A summary is given below:

<u>Well No.</u>	<u>Present Injection Rate & Pressure</u>	<u>Observed Surface Parting Pressure</u>	<u>Requested Injection Pressure Limit</u>
61	438 bw @ 875 psi	2825 psi	2500 psi

If additional information is needed, please contact Robert McNaughton at 505-397-0428.

Yours very truly,

Robert McNaughton
Production Engineer

RTM/

attachments

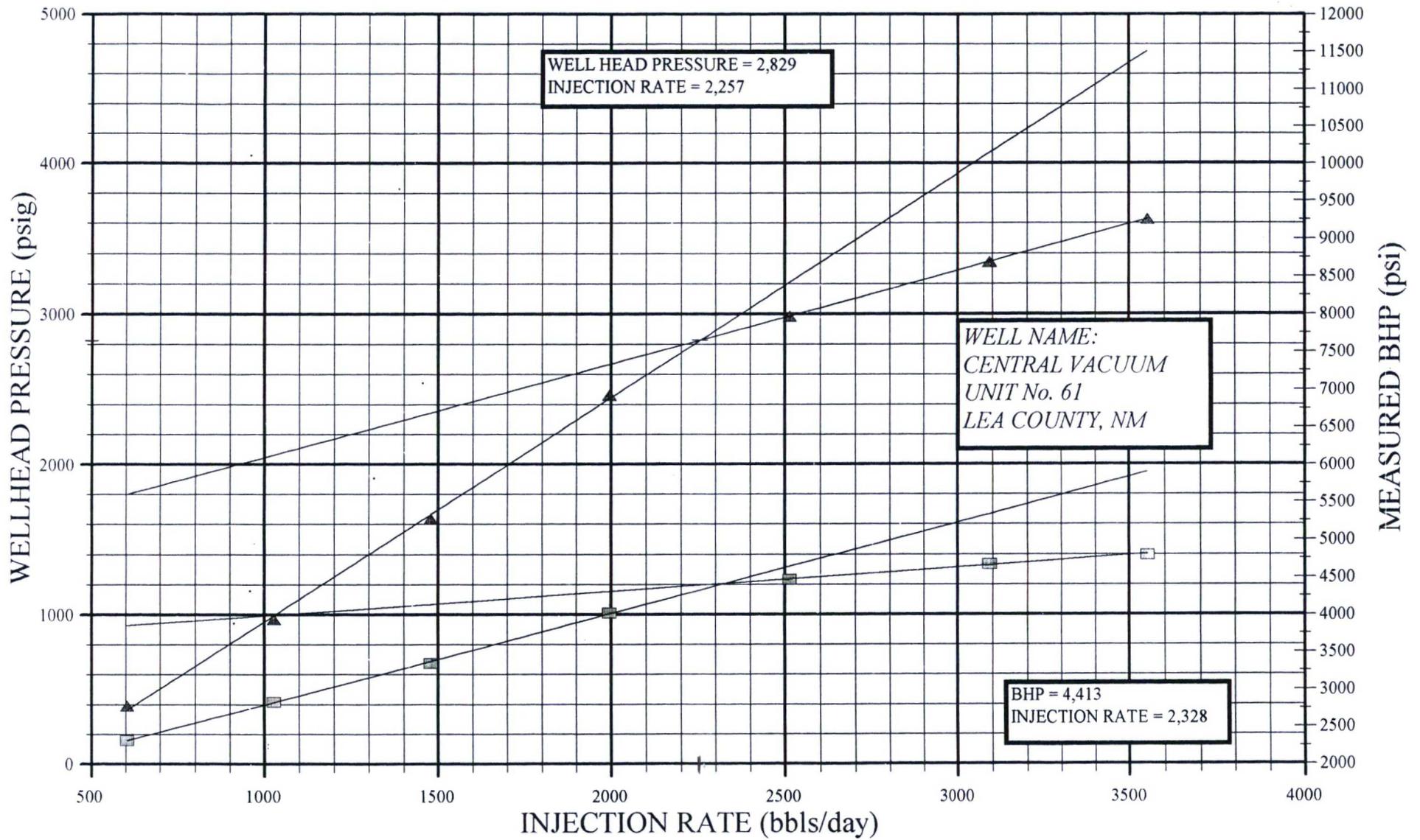
cc: Mr. Jerry Sexton
Hobbs NMOCD

R-5530
CASE 6007

178-1
121-7
86-10

STEP RATE INJECTION TEST

TEXACO EXPLORATION & PRODUCTION



▲ RECORDED WELLHEAD PRESSURE

□ BOTTOM HOLE PRESSURE AT 4250 FEET

WEST-TEST, INC.

A SUBSIDIARY OF JOHN WEST ENGINEERING COMPANY

Hobbs, New Mexico

STEP RATE INJECTION TEST

CLIENT: TEXACO EXPLORATION AND PRODUCTION

DATE: APRIL 17, 1996

WELL NAME: CENTRAL VACUUM UNIT NO. 61
LEA COUNTY, NEW MEXICO

WO#: 96-14-0447

PERFS = 4352-4212

PACKER DEPTH = 4300-4305

BHP GAUGE DEPTH = 4250

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)
	9:15	23.8				23.8		1923.2
	9:20	316.1	2.1	604.8	14.462	301.6	17.64	2221.8
	9:25	357.3	4.2	604.8	14.462	342.8	17.64	2279.4
1	9:30	392.2	6.3	604.8	14.462	377.7	17.64	2326.2
				604.8				
	9:35	753.7	9.9	1036.8	39.199	714.5	30.24	2643.8
	9:40	853.4	13.4	1008.0	37.208	816.2	29.40	2730.0
2	9:45	973.1	17.0	1036.8	39.199	933.9	30.24	2832.9
				1027.2				
	9:50	1452.8	22.1	1468.8	74.665	1378.1	42.84	3195.9
	9:55	1517.8	27.3	1497.6	77.396	1440.4	43.68	3268.9
3	10:00	1641.6	32.4	1468.8	74.665	1566.9	42.84	3358.7
				1478.4				
	10:05	2230.3	39.4	2016.0	134.135	2096.2	58.80	3821.0
	10:10	2360.3	46.3	1987.2	130.611	2229.7	57.96	3934.6
4	10:15	2464.1	53.2	1987.2	130.611	2333.5	57.96	4024.4
				1996.8				
	10:20	2945.3	62.0	2534.4	204.834	2740.5	73.92	4419.1
	10:25	3023.0	70.6	2476.8	196.305	2826.7	72.24	4448.7
5	10:30	2987.8	79.4	2534.4	204.834	2783.0	73.92	4465.7
				2515.2				
	10:35	3367.1	90.1	3081.6	294.083	3073.0	89.88	4615.5
	10:40	3321.9	100.8	3081.6	294.083	3027.8	89.88	4639.8
6	10:45	3348.2	111.6	3110.4	299.188	3049.0	90.72	4675.1
				3091.2				
	10:50	3625.9	123.9	3542.4	380.570	3245.3	103.32	4737.6
	10:55	3677.4	136.2	3542.4	380.570	3296.8	103.32	4768.2
7	11:00	3630.9	148.6	3571.2	386.314	3244.6	104.16	4795.6
				3552.0				

		(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. (psi) (1) - (4)	INJECTION RATE (gpm) (3)/34.2857	MEASURED BHP (psi)
FALLOFF	11:01	2454.1				2454.1		4522.9
	11:02	2411.6				2411.6		4477.8
	11:03	2375.3				2375.3		4442.0
	11:04	2345.3				2345.3		4410.6
	11:05	2316.6				2316.6		4381.1
	11:10	2184.0				2184.0		4246.1
	11:15	2061.5				2061.5		4109.7