



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

July 8, 1997

Texaco Exploration & Production, Inc.
205 East Bender Blvd.
Hobbs, New Mexico 88240

Attn: Mr. Greg Maes

**RE: *Injection Pressure Increase,
Remuda Basin Well No.2,
Eddy County, New Mexico***

Dear Mr. Maes:

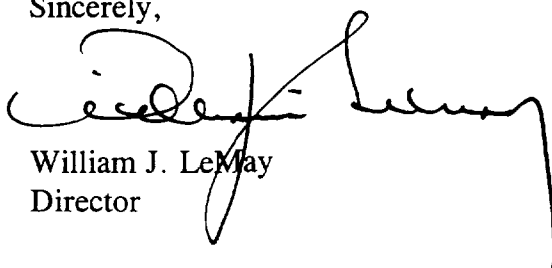
Reference is made to your request dated July 2, 1997 to increase the surface injection pressure on the above referenced well. This request is based on a step rate tests conducted on June 17, 1997. The results of the test have been reviewed by my staff and we feel an increase in inection pressure on this 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>
Remuda Basin Well No.2 Unit Letter 'A', Section 19, Township 23 South, Range 30 East	1088 PSIG
Located in Eddy 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

Injection Pressure Increase
Texaco Exploration & Production, Inc.
July 8, 1997
Page 2

WJL/BES

cc: Oil Conservation Division - Hobbs
Files: PSI-X 4th QTR-97



Texaco E & P

205 E. Bender Blvd.
Hobbs NM 88240
505 393 7191

July 2, 1997

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

Attention: Ben Stone

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

Remuda Basin Federal No. 2

Unit A, Section 19, T-23-S, R-30-E, Eddy County, New Mexico

Dear Mr. Stone

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>
2	972 bw @ 680 psi	1138 psi	1088 psi

If additional information is needed, please contact Greg Maes at 505-397-0431.

Yours very truly,

Greg Maes
Engineer Assistant

VGM/

attachments

cc: Mr. Chris Williams
Hobbs NMOCD

WEST-TEST, INC.

A SUBSIDIARY OF JOHN WEST ENGINEERING COMPANY

Hobbs, New Mexico

STEP RATE INJECTION TEST

CLIENT: TEXACO EXPLORATION AND PRODUCTION, INC.

DATE: JUNE 17, 1997

WELL NAME: REMUDA BASIN FEDERAL NO.2
EDDY COUNTY, NEW MEXICO

WO#: 97-14-1010

ERFS = 3402-3912

ACKER DEPTH = 3345

HP GAUGE DEPTH = SURFACE ONLY

STEP NO.		(1)	(2)	(3)	(4)	(5)	(6)	(7)
2		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)	(psi)	(psi) (1)-(4)	(3)/(24.2657)	(psi)
1	10:40	388.8				388.8		
	10:45	439.7	1.4	403.2	2.202	437.5	11.76	
	10:50	462.4	2.8	403.2	2.202	460.2	11.76	
	10:55	513.3	4.2	403.2	2.202	511.1	11.76	
	11:00	533.5	5.6	403.2	2.202	531.3	11.76	
	11:05	460.3	7.1	432.0	2.502	457.8	12.60	
	11:10	515.1	8.8	489.6	3.154	511.9	14.28	
				422.4				
	11:15	600.6	11.5	777.6	7.422	593.2	22.68	
	11:20	501.8	14.2	777.6	7.422	494.4	22.68	
2	11:25	510.6	17.0	806.4	7.939	502.7	23.52	
	11:30	616.7	19.7	777.6	7.422	609.3	22.68	
	11:35	617.8	22.5	806.4	7.939	609.9	23.52	
	11:40	537.0	25.3	806.4	7.939	529.1	23.52	
				792.0				
	11:45	629.0	30.0	1353.6	20.696	608.3	39.48	
	11:50	633.9	35.1	1468.8	24.072	609.8	42.84	
	11:55	641.5	40.3	1497.6	24.952	616.5	43.68	
	12:00	649.0	45.6	1526.4	25.847	623.2	44.52	
	12:05	653.9	50.5	1411.2	22.355	631.5	41.16	
3	12:10	657.6	55.7	1497.6	24.952	632.6	43.68	
				1459.2				
	12:15	684.4	62.8	2044.8	44.395	640.0	59.64	
	12:20	702.2	70.1	2102.4	46.736	655.5	61.32	
	12:25	697.0	77.4	2102.4	46.736	650.3	61.32	
	12:30	718.6	84.6	2073.6	45.559	673.0	60.48	
	12:35	723.7	91.9	2102.4	46.736	677.0	61.32	
	12:40	713.3	99.3	2131.2	47.928	665.4	62.16	
				2092.8				

STEP NO. & REMARKS	(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)/24-2857	(7) MEASURED BHP (psi)
	12:45	761.9	108.5	2649.6	71.699	690.2	77.28
	12:50	776.5	118.3	2822.4	80.589	697.9	82.32
	12:55	782.2	128.1	2822.4	80.589	701.6	82.32
	1:00	783.5	DOWN*		783.5		
	1:05	684.7	DOWN*		684.7		
5	1:10	856.3	140.4		856.3		
	1:15	1031.7	152.4	3456.0	117.217	914.5	100.80
	1:20	1079.0	164.4	3456.0	117.217	961.8	100.80
	1:25	1087.9	176.5	3484.8	119.031	968.9	101.64
	1:30	1100.7	188.7	3513.6	120.857	979.8	102.48
	1:35	1098.1	200.9	3513.6	120.857	977.2	102.48
6	1:40	1112.1	213.2	3542.4	122.696	989.4	103.32
			3494.4				
	1:45	1151.8	227.6	4147.2	164.240	987.6	120.96
	1:50	1154.3	242.0	4147.2	164.240	990.1	120.96
	1:55	1154.3	256.3	4118.4	162.136	992.2	120.12
	2:00	1161.9	270.6	4118.4	162.136	999.8	120.12
	2:05	1156.8	284.9	4118.4	162.136	994.7	120.12
7	2:10	1169.2	299.2	4118.4	162.136	1007.1	120.12
			4128.0				
	2:15	1216.9	314.6	4435.2	185.960	1030.9	129.36
	2:20	1214.4	331.4	4838.4	218.439	996.0	141.12
	2:25	1218.2	347.5	4636.8	201.899	1016.3	135.24
	2:30	1211.7	364.3	4838.4	218.439	993.3	141.12
	2:35	1210.4	380.5	4665.6	204.225	1006.2	136.08
8	2:40	**1041.4	397.5	4896.0	223.274	818.1	142.80
			4718.4				
ALLOFF	2:41	790.3				790.3	
	2:42	787.7				787.7	
	2:43	785.2				785.2	
	2:44	782.6				782.6	
	2:45	778.7				778.7	
	2:50	764.6				764.6	
	2:55	751.7				751.7	
*NOTE: METER PLUGGED UP WITH TRASH ON RATE NO.5							
**NOTE: THE LAST 5 MINUTE READING ON STEP NO.8 DROPPED DUE TO RESTRICTION IN PRESSURE SOURCE. THE 25 MINUTE READING WAS USED FOR PLOTTING RATE NO. 8.							

EST-TEST, INC. (A SUBSIDIARY OF JOHN WEST ENGINEERING COMPANY)

STEP RATE INJECTION TEST

TEXACO EXPLORATION AND PRODUCTION, INC

Well Name:
REMUDA BASIN FEDERAL No.2
EDDY COUNTY, NEW MEXICO

Wellhead Pressure = 1,138psig
Injection Rate = 3.677bbls/day

