



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



BRUCE KING  
 GOVERNOR

June 26, 1992

ANITA LOCKWOOD  
 CABINET SECRETARY

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

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

Attention: M.C. Duncan

*RE: Injection Pressure Increase  
 Central Vacuum Unit  
 Well No. 101  
 Lea County, New Mexico*

Dear Sir:

Reference is made to your request dated May 15, 1992, to increase the surface injection pressure on the Central Vacuum Unit Well No. 101. This request is based on a step rate test conducted on the well on April 6, 1992. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on the well is justified at this time.

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

WELL AND LOCATION

MAXIMUM INJECTION  
 SURFACE PRESSURE

CVU Well No. 101  
 Unit G, Section 6, T-18 South,  
 R-35 East, NMPM  
 Lea County, New Mexico

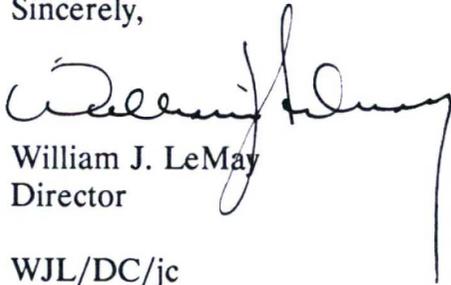
2200 PSIG

Texaco Exploration & Production, Inc.  
June 26, 1992  
Page 2

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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/DC/jc

cc: Oil Conservation Division - Hobbs  
File: Case No. 6008  
David Catanach  
Rick Brown

NO WAITING PERIOD

COMPANY: Texaco Exploration & Production Inc.  
ADDRESS: P.O. Box 730  
CITY, STATE, ZIP: Hobbs, New Mexico 88241-0730  
ATTENTION: M.C. Duncan

Re: Injection Pressure Increase  
Central Vacuum Unit  
Well No. 101  
Lea County, New Mexico

Dear Sir:

Reference is made to your request dated May 15, 1992, to increase the surface injection pressure on the Central Vacuum Unit Well No. 101. This request is based on a step rate test conducted on the well on April 6, 1992. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on the well is justified at this time.

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

<u>Well &amp; Location</u>	<u>Maximum Injection Surface Pressure</u>
<u>CVU Well No. 101</u> <u>Unit 6, Section 6, T-18 South, R-35 East, NMPM,</u> <u>Lea County, New Mexico</u>	<u>2200 PSIG</u>

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.

xc: R. Brown  
T. GALLEGOS  
D. CATANACH  
FILE- Case No. 6008  
OCD- Hobbs

OKR 6/25/92



Texaco USA

PO Box 730  
Hobbs NM 88241-0730  
505 393 7191

OIL CONSERVATION DIVISION  
RECEIVED

'92 MAY 21 AM 8.44

May 15, 1992

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 #101  
Unit G, Section 6  
T-18-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 985 psig to 2200 psig. A step rate injection test was ran on the well. Results of the test are attached.

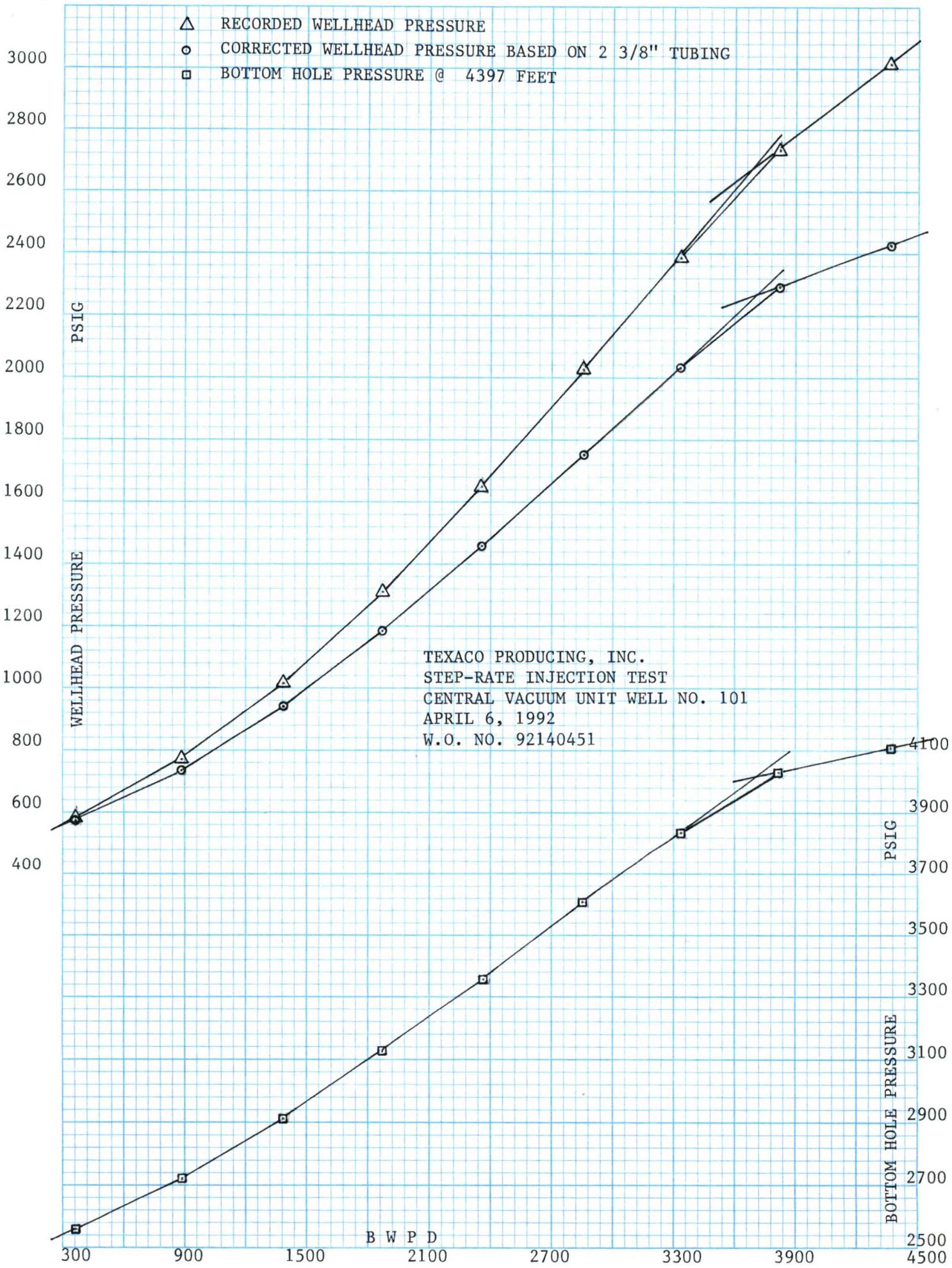
If you have any questions concerning this request, please contact me at 397-0418 or 393-7191. The engineer assigned to this well is Darlene de Aragao. Her number is 397-0424. Thank you for your assistance in this matter.

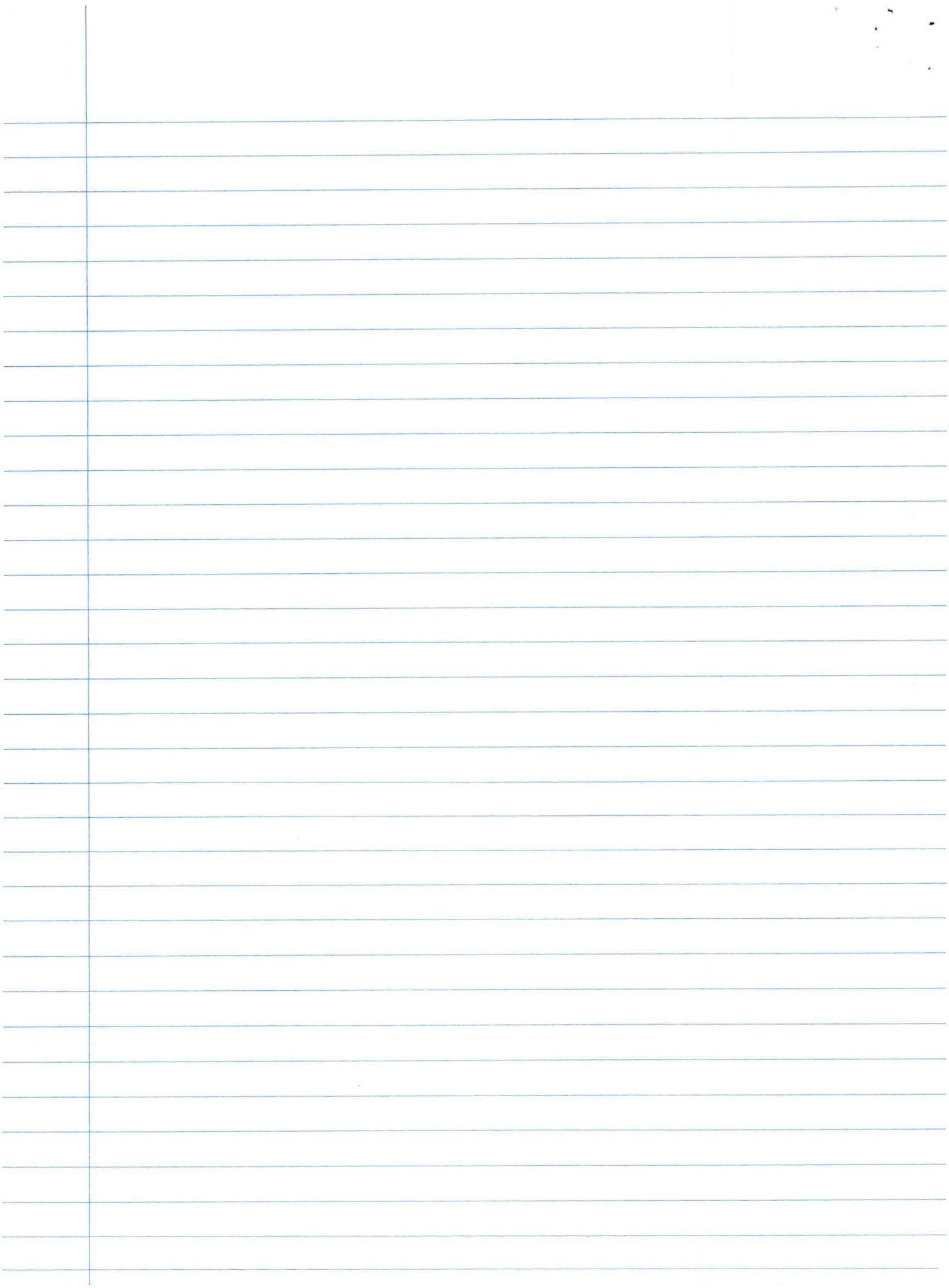
Yours very truly,

M.C. Duncan  
Engineer's Assistant

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

- △ RECORDED WELLHEAD PRESSURE
- CORRECTED WELLHEAD PRESSURE BASED ON 2 3/8" TUBING
- BOTTOM HOLE PRESSURE @ 4397 FEET





# JOHN WEST ENGINEERING COMPANY

Hobbs, New Mexico

## STEP RATE INJECTION TEST

CLIENT: Texaco Producing, Inc.

DATE: April 6, 1992

WELL NAME: Central Vacuum Unit Well No. 101  
Lea County, New Mexico

WO#: 92140451

MID-PERFS. = 4591

PACKER DEPTH =

Maximum Depth Reached = 4397

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMMULATIVE VOL. INJECTED (bbbls)	(3) INJECTION RATE (bbbls/day)	(4) FRICTION HEAD LOSS (psi)	(5) CORRECTED TUBING PRESS. (psi) (1)-(4)	(6) INJECTION RATE (gpm) (3)/34.2857	(7) MEASURED BHP (psi)
	9:50	479.8				479.8		2485
	9:55	529.2	1.3	374.4	6.161	523.0	10.92	2528
	10:00	559.7	2.6	374.4	6.161	553.5	10.92	2544
1	10:05	573.7	3.8	345.6	5.313	568.4	10.08	2559
				364.8				
	10:10	710.2	7.0	921.6	32.614	677.6	26.88	2667
	10:15	740.6	10.0	864.0	28.944	711.7	25.20	2698
2	10:20	768.4	13.1	892.4	30.728	737.7	26.03	2723
				892.4				
	10:25	938.9	17.9	1382.4	69.052	869.8	40.32	2839
	10:30	978.1	22.7	1382.4	69.052	909.0	40.32	2879
3	10:35	1008.5	27.5	1382.4	69.052	939.4	40.32	2909
				1382.4				
	10:40	1212.3	34.0	1872.0	120.995	1091.3	54.60	3034
	10:45	1266.8	40.5	1872.0	120.995	1145.8	54.60	3088
4	10:50	1313.7	47.0	1872.0	120.995	1192.7	54.60	3129
				1872.0				
	10:55	1553.0	55.2	2361.6	185.966	1367.0	68.88	3266
	11:00	1604.9	63.5	2390.4	190.183	1414.7	69.72	3315
5	11:05	1645.5	71.7	2361.6	185.966	1459.5	68.88	3357
				2371.2				
	11:10	1931.6	81.7	2880.0	268.459	1663.1	84.00	3517
	11:15	1982.3	91.6	2851.2	263.513	1718.8	83.16	3569
6	11:20	2021.7	101.5	2851.2	263.513	1758.2	83.16	3609
				2860.8				
	11:25	2311.8	113.1	3340.8	353.285	1958.5	97.44	3757
	11:30	2352.4	124.7	3340.8	353.285	1999.1	97.44	3804
7	11:35	2387.9	136.3	3340.8	353.285	2034.6	97.44	3838
				3340.8				

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMMULATIVE VOL. INJECTED (bbie)	(3) INJECTION RATE (bbie/day)	(4) FRICTION HEAD LOSS (psi)	(5) CORRECTED TUBING PRESS. (psi) (1)-(4)	(6) INJECTION RATE (gpm) (3)/34.2867	(7) MEASURED BHP (psi)
8	11:40	2601.0	149.6	3830.4	454.991	2146.0	111.72	3878
	11:45	2686.3	163.0	3859.2	461.340	2225.0	112.56	3969
	11:50	2741.0	176.2	3801.6 3830.4	448.683	2292.3	110.88	4029
9	11:55	3081.8	191.4	4377.6	582.489	2499.3	127.68	4178
	12:00	3135.3	206.5	4348.8	575.420	2559.9	126.84	4212
	12:05	3017.0	221.8	4406.4 4377.6	589.599	2427.4	128.52	4107
Fall-Off	12:06	1687.3				1687.3		3696
	12:07	1584.1				1584.1		3593
	12:08	1528.4				1528.4		3537
	12:09	1490.4				1490.4		3499
	12:10	1461.3				1461.3		3470
	12:15	1361.3				1361.3		3370
	12:20	1293.0				1293.0		3300



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

June 15, 1992

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 Vac Unit #101-G	6-18-35
Operator	Lease & Well No. Unit	S-T-R

and my recommendations are as follows:

WOULD GIVE NOT MORE THAN 2400

Very truly yours

Jerry Sexton  
Supervisor, District I

/bp