



## FOR INFORMATION ONLY

April 28, 1994

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  
W.H. Rhodes "B" NCT-1 #14  
Unit E, Section 26  
T-26-S, R-37-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 600 psig to 840 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 397-0424. Thank you for your assistance in this matter.

Yours very truly,

Darlene de Aragao  
Production Engineer

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

**RECEIVED**

MAY 02 1994

--- JOBS  
OFFICE

**WEST-TEST, INC.**  
A SUBSIDIARY OF JOHN WEST ENGINEERING COMPANY  
Hobbs, New Mexico

**STEP RATE INJECTION TEST**

CLIENT: TEXACO EXPLORATION AND PRODUCTION

DATE: APRIL 15, 1994

WELL NAME: RHODES "B" FED. NCT-1 NO.14  
LEA COUNTY, NEW MEXICO

WO#: 94-14-0660

MID-PERFS. = 3095-3120

PACKER DEPTH = 3048

BHP GAUGE DEPTH = 3108

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	8:35	31.0				31.0		1403.4
	8:40	308.9	1.5	432.0	5.675	303.2	12.60	1704.7
	8:45	362.5	2.7	345.6	3.756	358.7	10.08	1733.5
	8:50	357.3	3.9	345.6	3.756	353.5	10.08	1758.3
	8:55	382.8	5.0	316.8	3.197	379.6	9.24	1786.5
	9:00	416.0	6.1	316.8	3.197	412.8	9.24	1794.2
	9:05	404.6	7.3	345.6	3.756	400.8	10.08	1810.8
				350.4				
	9:10	566.9	9.2	547.2	8.788	558.1	15.96	1951.6
	9:15	610.3	11.1	547.2	8.788	601.5	15.96	1991.5
2	9:20	608.9	13.1	576.0	9.663	599.2	16.80	1989.5
	9:25	628.0	15.1	576.0	9.663	618.3	16.80	2005.4
	9:30	645.9	17.0	547.2	8.788	637.1	15.96	2012.2
	9:35	644.5	18.9	547.2	8.788	635.7	15.96	2020.5
				556.8				
	9:40	740.3	21.6	777.6	16.835	723.5	22.68	2096.2
	9:45	722.3	24.2	748.8	15.700	706.6	21.84	2110.1
	9:50	732.2	26.8	748.8	15.700	716.5	21.84	2120.7
	9:55	742.2	29.3	720.0	14.601	727.6	21.00	2128.7
	10:00	736.8	31.9	748.8	15.700	721.1	21.84	2134.3
3	10:05	754.6	34.4	720.0	14.601	740.0	21.00	2141.5
				744.0				
	10:10	843.8	37.8	979.2	25.789	818.0	28.56	2208.4
	10:15	855.0	41.1	950.4	24.404	830.6	27.72	2220.6
	10:20	863.9	44.4	950.4	24.404	839.5	27.72	2229.4
	10:25	872.7	47.7	950.4	24.404	848.3	27.72	2238.5
	10:30	882.7	51.0	950.4	24.404	858.3	27.72	2245.2
	10:35	887.8	54.3	950.4	24.404	863.4	27.72	2285.9
				955.2				

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MAY 13 1994

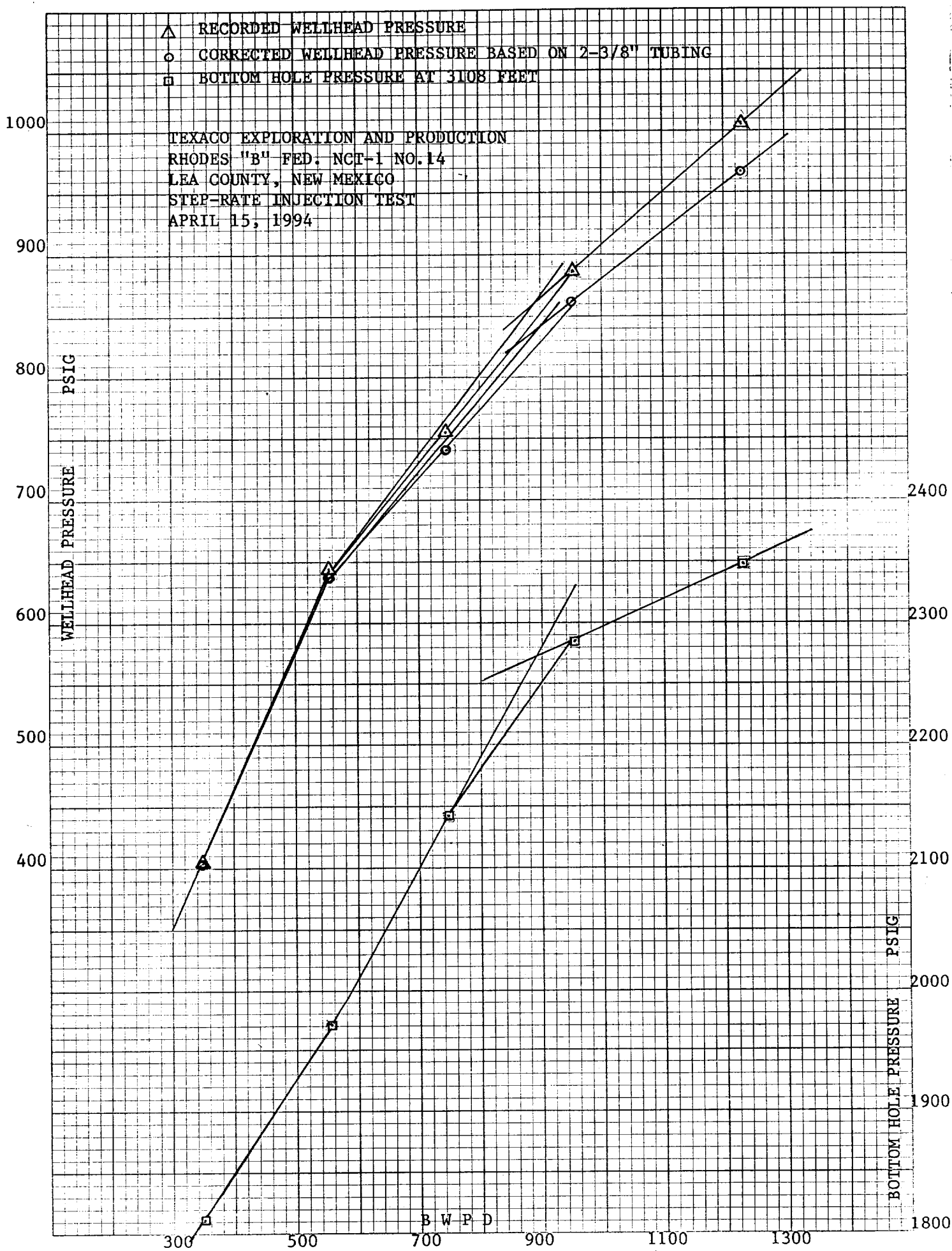
OFFICE

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)/34.2657	(7) MEASURED BHP (psig)
5  FALLOFF	10:40	983.6	58.7	1267.2	41.552	942.0	36.96	2311.9
	10:45	993.6	62.9	1209.6	38.125	955.5	35.28	2322.3
	10:50	1004.9	67.2	1238.4	39.822	965.1	36.12	2331.0
	10:55	1013.8	71.4	1209.6	38.125	975.7	35.28	2337.3
	11:00	1007.3	75.6	1209.6	38.125	969.2	35.28	2343.7
	11:05	1007.3	79.9	1238.4	39.822	967.5	36.12	2349.3
				1228.8				
	11:06	712.0				712.0		2127.0
	11:07	636.6				636.6		2052.7
	11:08	585.5				585.5		2001.8
	11:09	548.4				548.4		1964.8
	11:10	517.7				517.7		1933.6
	11:15	416.7				416.7		1832.5
	11:20	356.4				356.4		1771.7
	11:25	314.1				314.1		1730.6
	11:30	283.4				283.4		1699.4
	11:35	259.1				259.1		1674.7

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**MAY 11 1994**

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MAY 02 1994

U.S. DEPT. OF JUSTICE  
OFFICE



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

N.M. OIL CONS. COMMISSION  
P.O. BOX 1980  
HOBBS, NEW MEXICO 88240

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT --" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well: OIL WELL ☐ GAS WELL ☐ OTHER ☐ Injection  
2. Name of Operator: TEXACO EXPLORATION & PRODUCTION INC  
3. Address and Telephone No.: P.O. BOX 730, HOBBS, NM 88240 397-0426  
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Unit Letter E : 1980 Feet From The NORTH Line and 864 Feet From The  
WEST Line Section 26 Township 26S Range 37E

5. State Oil / Gas Lease No. LC030174B  
6. If Indian, Alottee or Tribe Name  
7. If Unit or CA, Agreement Designation  
8. Well Name and Number W H RHODES B FEDERAL NCT 1  
14  
9. API Well No. 30 025 21952  
10. Field and Pool, Exploratory Area RHODES YATES SEVEN RIVERS  
11. County or Parish, State LEA, NEW MEXICO

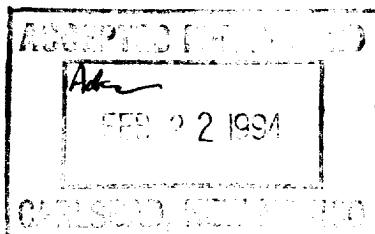
12. Check Appropriate Box(s) To Indicate Nature of Notice, Report, or Other Data

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> OTHER: Convert to Injection
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log Form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true verticle depths for all markers and zones pertinent to this work.)

- 1) MIRU. Pull production equipment, install BOP.
- 2) Clean out to 3242', perforate 3095' - 3120' w/6, 4 JSPI (total 100 holes).
- 3) Set RBP @ 3152', test OK, set treating packer @ 2958', acidize perms w/3K 15% NEFE.
- 4) Circulate hole clean, run HDPC 2 3/8" inj tubing w/packer set @ 3048'.
- 5) Circulate packer fluid, test casing/tubing to 500# 30 min (Chart to NMOCD, copy on reverse).
- 6) 11-27-93: Inj 250 BWPD @ 400#



RECEIVED  
FEB 2 11 20 AM '94  
CARLSBAD AREA HEADQUARTERS

14. I hereby certify that the foregoing is true and correct

SIGNATURE Larry W. Johnson TITLE Engr Asst DATE 1/31/94

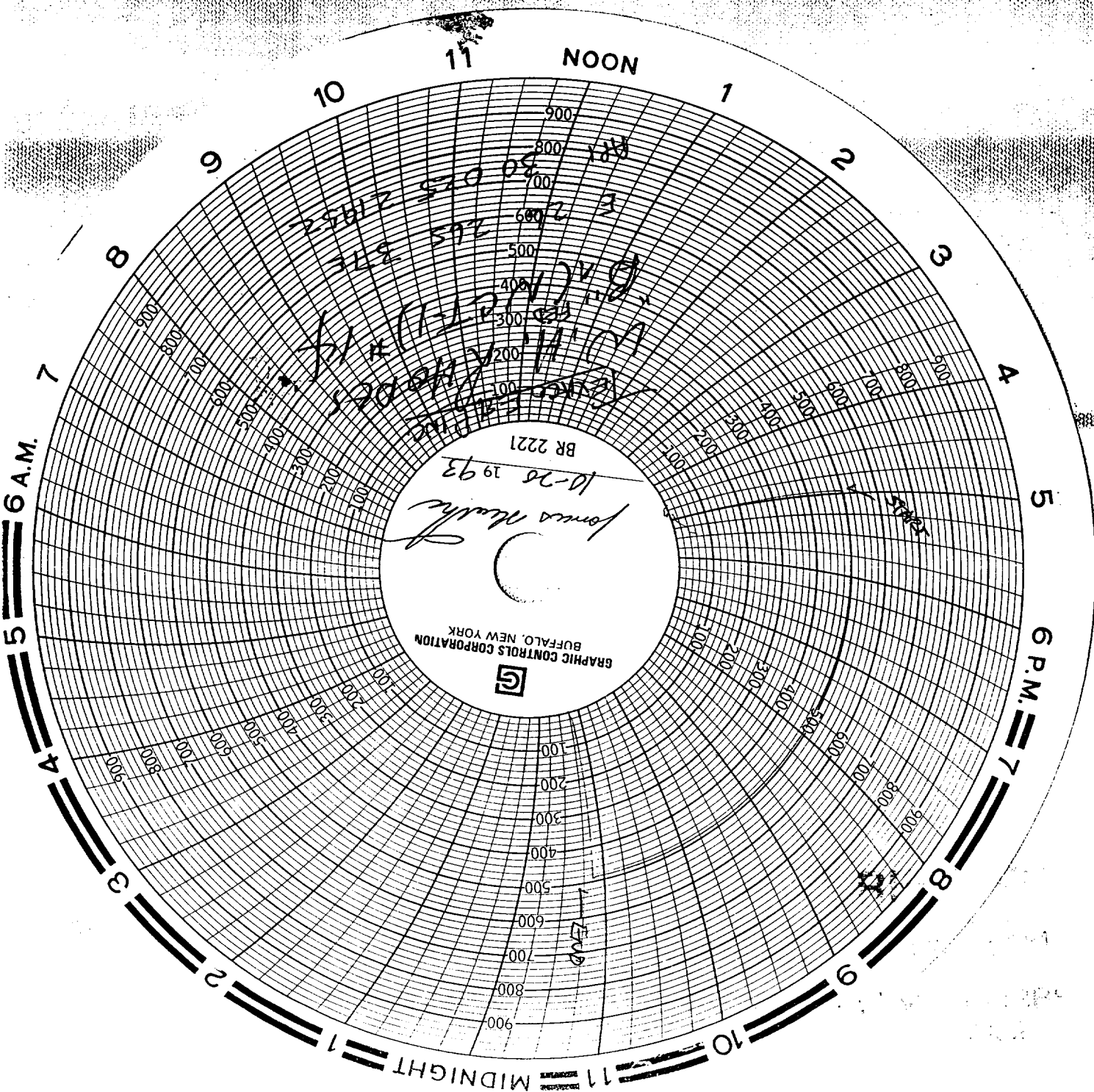
TYPE OR PRINT NAME Larry W. Johnson

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



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BUREAU OF LAND MANAGEMENT

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WEST Line Section 26 Township 26S Range 37E

5. State Oil / Gas Lease No. LC0301748  
6. If Indian, Allottee or Tribe Name  
7. If Unit or CA, Agreement Designation  
8. Well Name and Number W H RHODES B FEDERAL NCT 1 14  
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11. County or Parish, State LEA, NEW MEXICO

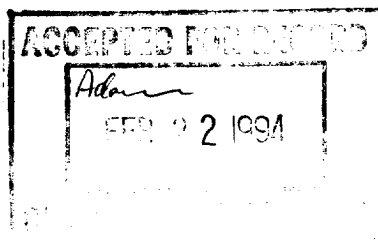
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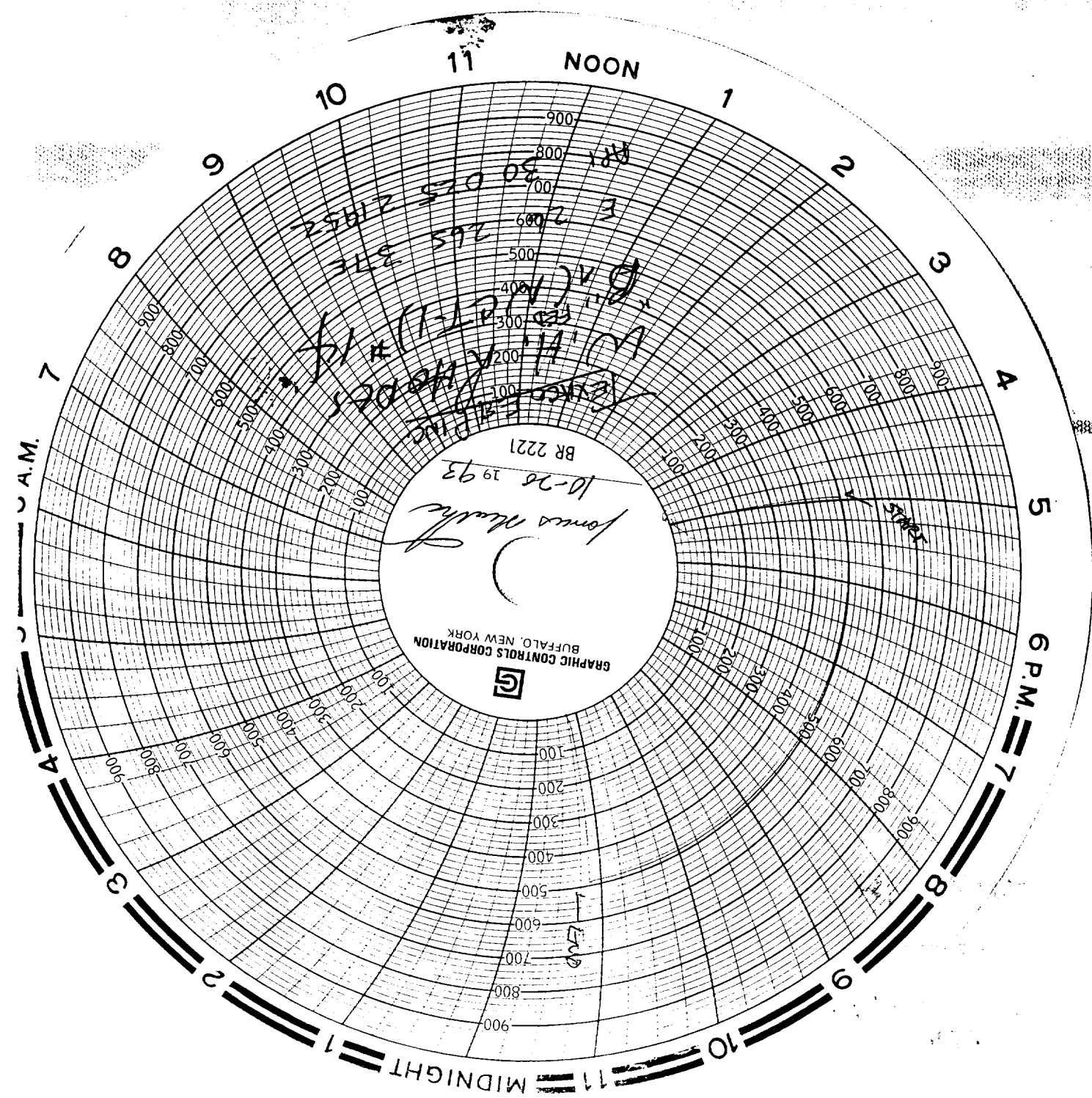
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STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

4-14-93

BRUCE KING  
GOVERNOR

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88241-1980  
(505) 393-6161

OIL CONSERVATION DIVISION  
P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC \_\_\_\_\_  
DHC \_\_\_\_\_  
NSL \_\_\_\_\_  
NSP \_\_\_\_\_  
SWD \_\_\_\_\_  
WFX X \_\_\_\_\_  
PMX \_\_\_\_\_

*Rhodes gates unit 4-A 28-26-37*  
*6-C 27-26-37*  
*11-K 27-26-37*

Gentlemen:

I have examined the application for the:

*Jexaco Expl. & Prod. Inc.*

Operator

Lease & Well No. Unit

S-T-R

*W.H. Rhodes Fed NCT-1 #1-G 27-26-3*  
*#8-m 26-26-3*  
*#14-E "*  
*#15-A 27-26-3*  
*W.H. Rhodes B Fed NCT-2 #3-I 28-26-*  
*#4-P 28-26-3;*

and my recommendations are as follows:

*OIS*

Yours very truly,

*Jerry Sexton*

Jerry Sexton  
Supervisor, District 1

/ed

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

U.S. DEPT. OF THE INTERIOR  
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Use "APPLICATION FOR PERMIT—" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	5. Lease Designation and Serial No. LC- 030174 b
2. Name of Operator Texaco Exploration and Production Inc.	6. If Indian, Allottee or Tribe Name
3. Address and Telephone No. P.O. Box 730, Hobbs, NM 88240 505-397-0428	7. If Unit or CA, Agreement Designation
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Unit E, 1980 FNL, 864 FWL Sec. 26, T-26-S, R-37-E	8. Well Name and No. W.H. Rhodes B Fed NCT-1
	9. API Well No. 14
	10. Field and Pool, or Exploratory Area Rhodes Yates 7-R
	11. County or Parish, State Lea County, NM

**12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION	
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(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

- 1) MIRU. Pull rods and pump. NU BOP. Pull tubing and lay down.
- 2) TIH w/ bit and scraper. Clean casing to TD.
- 3) Tag fill and clean out w/ bailer.
- 4) Perf Yates from 3095'-3120' @ 4 spf.
- 5) Set RBP @ 3150', GIH with packer and set at 2950'.
- 6) Acidize Yates with 3000 gals 15% NEFE in three stages with rock salt blocks.
- 7) Pull packer, RBP. Run inj tbg w/pkr set @ 3050'. Circ packer fluid.
- 8) ND BOP, flange up tubing head. Test csg to 500# for 30 min.
- 9) Commence injection @ 617 psi.
- 10) After rates stabilize, run profile and step-rate tests.

RECEIVED  
SEP 10 11 42 AM '93  
OIL FIELD  
AREA

RE: WFX-645

14. I hereby certify that the foregoing is true and correct

Signed R.T. McNaughton Title Production Engineer Date 9-07-93

(This space for Federal or State office use)

Approved by Adam Salameh Title PETROLEUM ENGINEER Date 9-29-93  
Conditions of approval, if any: Subject to Title  
Like Approval  
By State

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See instruction on Reverse Side

PO-108  
(8/92)

PROPOSED INJECTION WELL CONVERSION

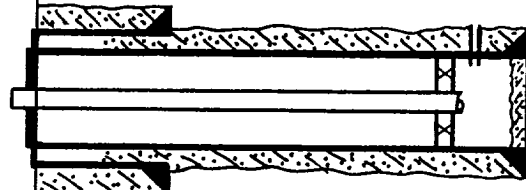
OPERATOR: Texaco Exploration & Production Inc. Lease: Rhodes B Fed NCT-1 #14

FOOTAGE LOCATION: 1980 FNL X 864 FWL Sec./Twn/Rng: Unit E, Sec 26, T-26-S, R-37-E

Lea County, New Mexico

SCHEMATIC

Gr \_\_\_\_\_ 2985' GL  
(KB=10')



7-5/8", 15&24#, 600 sx,  
cement circulated

AD-1 Injection packer  
T/ Yates perfs (+/-)  
4-1/2", 9.5#, 425 sx,  
TOC @ 725', calc. 80%

TABULAR DATA

Surface Casing: Set at 1197'  
Size 7-5/8, 15&24# Cemented with 600 sx.  
TOC surface ' determined by circulated  
Hole Size 9-7/8" Comp. Date 2-16-67  
Intermediate casing: Set at \_\_\_\_\_  
Size NONE Cemented with \_\_\_\_\_ sx.  
TOC \_\_\_\_\_ ' determined by \_\_\_\_\_  
Hole Size \_\_\_\_\_  
Production Casing: Set at 3295'  
Size 4-1/2", 9.5# Cemented with 425 sx.  
TOC 725 ' determined by calculated

Note: current perfs from 3160'-3240', add  
new perfs from 3120' up to 3000'.

Injection Interval:

3000 ' to 3200 ' through: perforations

Tubing: 2-3/8", 4.7#, J-55, IPC 2000# WP

Tops:

Salt 1465'-2690'

Yates 2990'

Seven Rivers na