

(SUBMIT IN TRIPLICATE)

Land Office **Las Cruces**Lease No. **LC-028793-C**

Unit \_\_\_\_\_

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....		SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....		SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....		SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO ABANDON WELL.....			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

April 21,

1958

Grayburg Deep Unit No. 4

Well No. **1 (7-4)** is located **990** ft. from **N** line and **990** ft. from **E** line of sec. **23**

NW 1/4 Sec. 23

(1/4 Sec. and Sec. No.)

17-8

(Twp.)

29-8

(Range)

(Meridian)

Wildcat

(Field)

Eddy

(County or Subdivision)

New Mexico

(State or Territory)

The elevation of the derrick floor above sea level is \_\_\_\_\_ ft.

## DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

We propose to drill this well to 12,500' for a Devonian Test.

Casing Program: 13-3/8" 48# Sals. N-40 - 750' with cement circulated.  
9-5/8" 36# & 40# Sals. J-55 - 3500' with 2,400 sacks cement.  
7" 23# & 26# & 29# Sals. N-60 - 12,500' with 600 sacks cement.

(Enclosed 6 copies - 2 to be returned to us.)

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company **TEXAS PACIFIC COAL AND OIL COMPANY**Address **P. O. Box 2110****Fort Worth 1, Texas**

By



Title

**Manager of Production**

NEW MEXICO OIL CONSERVATION COMMISSION  
Well Location and Acreage Dedication Plat

Section A.

Date 4-17-58

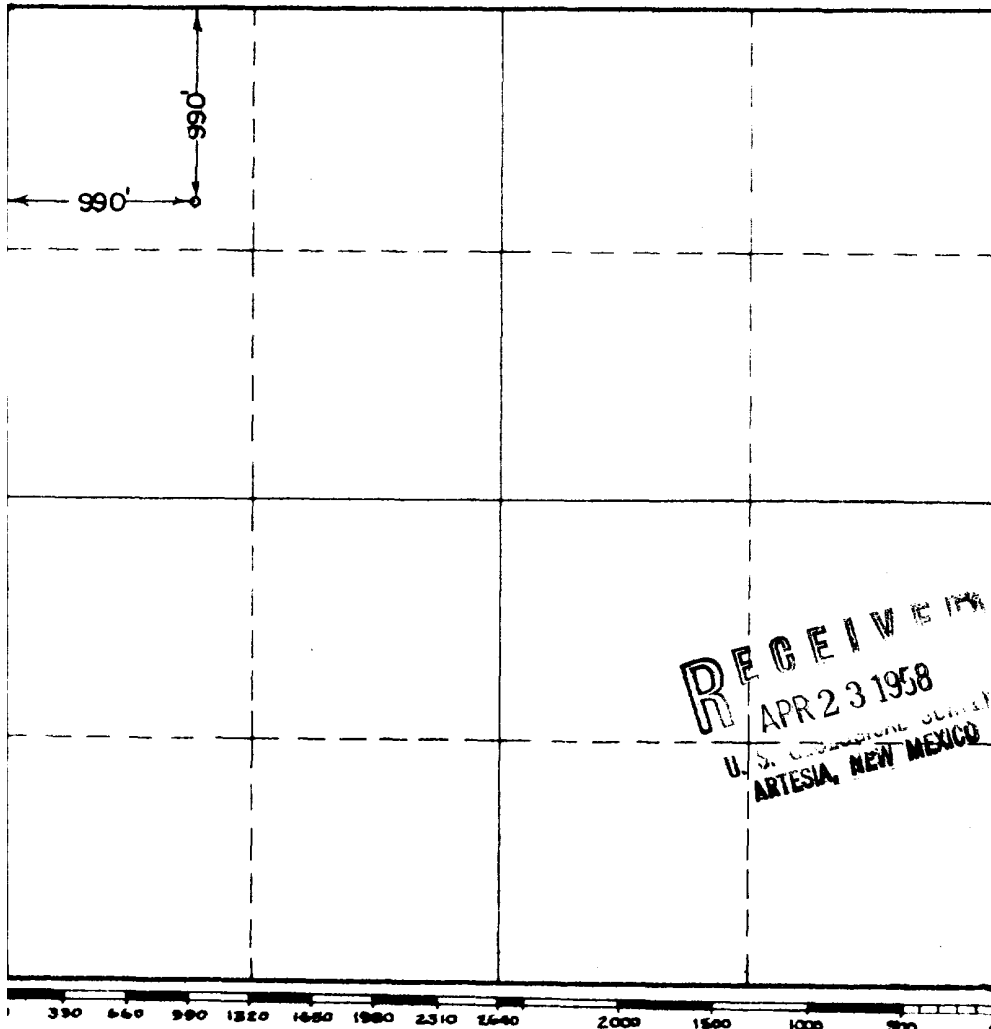
Operator Texas Pacific Coal & Oil Lease Grayburg Deep Unit  
Well No. 1 Unit Letter D Section 23 Township 17 South Range 29 East NMFM  
Located 990 Feet From North Line, 990 Feet From West Line  
County Eddy C. L. Elevation 3594.2 Dedicated Acreage \_\_\_\_\_ Acres  
Name of Producing Formation \_\_\_\_\_ Pool \_\_\_\_\_

1. Is the Operator the only owner\* in the dedicated acreage outlined on the plat below?  
Yes \_\_\_\_\_ No X.
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes X No \_\_\_\_\_. If answer is "yes," Type of Consolidation Unit Agreement
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner

Land Description

Section B



This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

**TEXAS PACIFIC COAL AND OIL COMPANY**

(Operator)

R. W. Linn

(Representative)

Fort Worth, Texas

Address

This is to certify that the well location shown on the plat in Section B was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed 2-17-58

John W. West

Registered Professional  
Engineer and/or Land Surveyor.

Certificate No. 676

(See instructions for completing this form on the reverse side)

TO: DIRECTOR, UNITED STATES GEOLOGICAL SURVEY

DESIGNATION OF AGENT

The undersigned is Unit Operator of the Grayburg Deep Unit No. 14-08-001-1062, embracing among other lands, the acreage described below, and the undersigned does hereby designate

NAME: TEXAS PACIFIC COAL AND OIL COMPANY

ADDRESS: FORT WORTH NATIONAL BANK BUILDING,  
FORT WORTH, TEXAS

as its agent with full power and authority to act in its behalf in complying with the terms of the Grayburg Deep Unit Agreement and rules and regulations applicable thereto and as the party upon whom written or oral instructions may be served in securing compliance with the Oil and Gas Operating Regulations with respect to all operations involving the following lands committed to said Grayburg Deep Unit Agreement:

IN EDDY COUNTY, NEW MEXICO

TOWNSHIP 17 SOUTH, RANGE 29 EAST

Section 13: S $\frac{1}{2}$   
Section 23: All  
Section 24: All  
Section 26: N $\frac{1}{2}$

TOWNSHIP 17 SOUTH, RANGE 30 EAST

Section 19: All  
Section 30: All

It is understood that this "Designation of Agent" does not relieve the Unit Operator of responsibility for compliance with the terms of leases, the Grayburg Deep Unit Agreement and Oil and Gas Operating Regulations. It is also understood that this "Designation of Agent" does not constitute an assignment of any interest in the leases involved.

In case of default on the part of the designated agent, the Unit Operator will make full and prompt compliance with all lease terms or regulations, or orders of the Secretary of the Interior or his representative.

The Unit Operator will promptly notify the Director of any change in the designated agent.

GENERAL AMERICAN OIL COMPANY OF TEXAS

By:   
Unit Operator

April 16, 1958

1. The first part of the paper is devoted to the study of the properties of the function  $f(x)$  defined by the equation

$$f(x) = \int_0^x \frac{1}{1+t^2} dt, \quad (1)$$

where  $x$  is a real number. It is shown that the function  $f(x)$  is increasing and concave down on the interval  $(-\infty, \infty)$ .

2. In the second part of the paper, we consider the function  $F(x)$  defined by the equation

$$F(x) = \int_0^x \frac{1}{1+t^2} dt, \quad (2)$$

where  $x$  is a real number. It is shown that the function  $F(x)$  is increasing and concave down on the interval  $(-\infty, \infty)$ .

$$F(x) = \int_0^x \frac{1}{1+t^2} dt, \quad (3)$$

$$F(x) = \int_0^x \frac{1}{1+t^2} dt, \quad (4)$$

3. In the third part of the paper, we consider the function  $G(x)$  defined by the equation

$$G(x) = \int_0^x \frac{1}{1+t^2} dt, \quad (5)$$

where  $x$  is a real number. It is shown that the function  $G(x)$  is increasing and concave down on the interval  $(-\infty, \infty)$ .

4. In the fourth part of the paper, we consider the function  $H(x)$  defined by the equation

$$H(x) = \int_0^x \frac{1}{1+t^2} dt, \quad (6)$$

where  $x$  is a real number. It is shown that the function  $H(x)$  is increasing and concave down on the interval  $(-\infty, \infty)$ .

5. In the fifth part of the paper, we consider the function  $I(x)$  defined by the equation

$$I(x) = \int_0^x \frac{1}{1+t^2} dt, \quad (7)$$

where  $x$  is a real number. It is shown that the function  $I(x)$  is increasing and concave down on the interval  $(-\infty, \infty)$ .