

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico HOBBS OFFICE O. C. C.

MISCELLANEOUS NOTICES 3 45 PM '64

Submit this notice in TRIPLICATE to the District Office, Oil Conservation Commission, before the work specified is to begin. A copy will be returned to the sender on which will be given the approval, with any modifications considered advisable, or the rejection by the Commission or agent, of the plan submitted. The plan as approved should be followed, and work should not begin until approval is obtained. See additional instructions in the Rules and Regulations of the Commission.

Indicate Nature of Notice by Checking Below

NOTICE OF INTENTION TO CHANGE PLANS		NOTICE OF INTENTION TO TEMPORARILY ABANDON WELL		NOTICE OF INTENTION TO DRILL DEEPER	
NOTICE OF INTENTION TO PLUG WELL		NOTICE OF INTENTION TO PLUG BACK		NOTICE OF INTENTION TO SET LINER	
NOTICE OF INTENTION TO SQUEEZE		NOTICE OF INTENTION TO ACIDIZE		NOTICE OF INTENTION TO SHOOT (Nitro)	
NOTICE OF INTENTION TO GUN PERFORATE		NOTICE OF INTENTION (OTHER)		NOTICE OF INTENTION (OTHER) <b>complete as a water supply</b>	

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

Hobbs, New Mexico

(Place)

well for Northwestumont Unit.

May 5, 1964

(Date)

Gentlemen:

Following is a Notice of Intention to do certain work as described below at the.....

**Gulf Oil Corporation** **B. V. Gulp (NCT-A)** Well No. **8** in **F**  
(Company or Operator) Lease (Unit)  
**SE 1/4 NW 1/4** of Sec. **19**, T. **19-S**, R. **37-E**, NMPM, **Wildcat** Pool  
(40-acre Subdivision) **Lee** County.

FULL DETAILS OF PROPOSED PLAN OF WORK  
(FOLLOW INSTRUCTIONS IN THE RULES AND REGULATIONS)

It is proposed to complete as a water supply well for the Northwestumont Unit as follows:  
Run GI BP on wire line and set at approximately 5800'. Dump 2 sacks cement on top. Load casing with water and test plug with 1000#. Run GR-N log from 5300' to 3800'. Perforate selectively 7" casing in the interval 4150' to 4275' and 4450' to 4900' with 2, 1/2" JHFF. Run packer and retrievable BP on 2-7/8" tubing and selectively acidise each interval with 5000 gallons of 15% HCL acid. Pull tubing, packer and BP. Run pump on 5-1/2" tubing and set at approximately 3000'. Test and complete well.

Approved....., 19.....  
Except as follows:

Approved  
OIL CONSERVATION COMMISSION

By *John J. Ames*  
Title **SUPERVISOR DISTRICT**

**Gulf Oil Corporation**

Company or Operator

ORIGINAL SIGNED BY

By **C. D. BORLAND**

Position **Area Production Manager**

Send Communications regarding well to:

Name **Gulf Oil Corporation**

Address **Box 670, Hobbs, New Mexico**

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

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

It is well known that the function  $f(x)$  is increasing and concave down on the interval  $(-\infty, \infty)$ . Moreover, the function  $f(x)$  is bounded on the interval  $(-\infty, \infty)$  and its range is the interval  $(-\frac{\pi}{2}, \frac{\pi}{2})$ . The function  $f(x)$  is also a solution of the differential equation  $f'(x) = \frac{1}{1+x^2}$  and the initial condition  $f(0) = 0$ .

2. The second part of the paper is devoted to the study of the properties of the function  $g(x)$  defined by the equation

$$g(x) = \int_0^x \frac{1}{1+t^2} dt, \quad x \in \mathbb{R}.$$

It is well known that the function  $g(x)$  is increasing and concave down on the interval  $(-\infty, \infty)$ . Moreover, the function  $g(x)$  is bounded on the interval  $(-\infty, \infty)$  and its range is the interval  $(-\frac{\pi}{2}, \frac{\pi}{2})$ . The function  $g(x)$  is also a solution of the differential equation  $g'(x) = \frac{1}{1+x^2}$  and the initial condition  $g(0) = 0$ .