

NE. EXICO OIL CONSERVATION CO. SION  
Santa Fe, New Mexico

# MISCELLANEOUS NOTICES

Submit this notice in triplicate to the Oil Commission or its proper agent 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 Commissioner 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 TEST CASING SHUT-OFF	<input checked="" type="checkbox"/>	NOTICE OF INTENTION TO SHOOT OR CHEMICALLY TREAT WELL	
NOTICE OF INTENTION TO CHANGE PLANS		NOTICE OF INTENTION TO PULL OR OTHERWISE ALTER CASING	
NOTICE OF INTENTION TO REPAIR WELL			
NOTICE OF INTENTION TO DEEPEN WELL		NOTICE OF INTENTION TO PLUG WELL	

Lovington, New Mexico.

June 12th, 1939.

Place

Date

OIL CONSERVATION COMMISSION,  
Santa Fe, New Mexico.

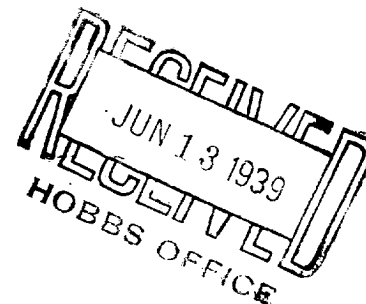
Gentlemen:

DUPLICATE

Following is a notice of intention to do certain work as described below at the  
**Magnolia Petroleum Co.** **Marshall Unit** Well No. **3** in **NW $\frac{1}{4}$  NW $\frac{1}{4}$**   
 Company or Operator of Sec. **34**, T. **21S**, R. **37E**, N. M. P. M., **Hardy Area** Field,  
**Lea** County.

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

9-5/8" Casing Set at 1185' Cemented to Surface with 325 Sx.  
Cement & 7 Aquagel will Drill Plug and Test Casing Shut-off.



JUN 13 '39

Approved \_\_\_\_\_, 19\_\_\_\_  
except as follows:

MAGNOLIA PETROLEUM CO.

Company or Operator

By R H Alexander  
Supt.  
Position \_\_\_\_\_

Send communications regarding well to

Name Magnolia Petroleum Co.,  
Address Box 68, Lovington, New Mexico.

OIL CONSERVATION COMMISSION  
By Roy Garbrough  
Title OIL & GAS INSPECTOR

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

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

and to the investigation of its behavior as  $x \rightarrow \infty$ . It is shown that the function  $f(x)$  is increasing and concave down, and that it approaches a horizontal asymptote as  $x \rightarrow \infty$ .

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

$$g(x) = \int_0^x \frac{1}{1+t^2} dt - \frac{1}{1+x^2}$$

and study its properties. It is shown that the function  $g(x)$  is increasing and concave up, and that it approaches a horizontal asymptote as  $x \rightarrow \infty$ .

3. Finally, in the third part of the paper, we consider the function  $h(x)$  defined by the equation

$$h(x) = \int_0^x \frac{1}{1+t^2} dt - \frac{1}{1+x^2} + \frac{1}{1+x^4}$$

and study its properties. It is shown that the function  $h(x)$  is increasing and concave up, and that it approaches a horizontal asymptote as  $x \rightarrow \infty$ .

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

$$k(x) = \int_0^x \frac{1}{1+t^2} dt - \frac{1}{1+x^2} + \frac{1}{1+x^4} - \frac{1}{1+x^6}$$

and study its properties. It is shown that the function  $k(x)$  is increasing and concave up, and that it approaches a horizontal asymptote as  $x \rightarrow \infty$ .

5. Finally, in the fifth part of the paper, we consider the function  $l(x)$  defined by the equation

$$l(x) = \int_0^x \frac{1}{1+t^2} dt - \frac{1}{1+x^2} + \frac{1}{1+x^4} - \frac{1}{1+x^6} + \frac{1}{1+x^8}$$

and study its properties. It is shown that the function  $l(x)$  is increasing and concave up, and that it approaches a horizontal asymptote as  $x \rightarrow \infty$ .

6. In the sixth part of the paper, we consider the function  $m(x)$  defined by the equation

$$m(x) = \int_0^x \frac{1}{1+t^2} dt - \frac{1}{1+x^2} + \frac{1}{1+x^4} - \frac{1}{1+x^6} + \frac{1}{1+x^8} - \frac{1}{1+x^{10}}$$

and study its properties. It is shown that the function  $m(x)$  is increasing and concave up, and that it approaches a horizontal asymptote as  $x \rightarrow \infty$ .

7. Finally, in the seventh part of the paper, we consider the function  $n(x)$  defined by the equation

$$n(x) = \int_0^x \frac{1}{1+t^2} dt - \frac{1}{1+x^2} + \frac{1}{1+x^4} - \frac{1}{1+x^6} + \frac{1}{1+x^8} - \frac{1}{1+x^{10}} + \frac{1}{1+x^{12}}$$

and study its properties. It is shown that the function  $n(x)$  is increasing and concave up, and that it approaches a horizontal asymptote as  $x \rightarrow \infty$ .