

NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

NOTICE OF INTENTION TO DRILL

Notice must be given to the Oil Conservation Commission or its proper agent and approval obtained before drilling begins. If changes in the proposed plan are considered advisable, a copy of this notice showing such changes will be returned to the sender. Submit this notice in triplicate. One copy will be returned following approval. See additional instructions in Rules and Regulations of the Commission.

Tulsa, Oklahoma

February 10, 1937

OIL CONSERVATION COMMISSION,
 Santa Fe, New Mexico.

Place

Date

Gentlemen:

You are hereby notified that it is our intention to commence the drilling of a well to be known as

Gulf Oil Corporation

Graham State F

Well No. **4** in **SW SE**

Company or Operator

Lease

of Sec. **36**, T. **19S**

R. **34E**

N. M. P. M.,

Monument

Field,

Lea

County.

N.

The well is **660** feet (N.) (~~X~~) of the **South** line and **660** feet

(E.) (~~X~~) of the **West** line of **SW SE**

(Give location from section or other legal subdivision lines. Cross out wrong directions.)

If state land the oil and gas lease is No. **A-1545**. Assignment No.

If patented land the owner is

Address

If government land the permittee is

Address

The lessee is **Gulf Oil Corporation**

Address **Tulsa, Oklahoma**

We propose to drill well with drilling equipment as follows: **Rotary tools**

AREA 640 ACRES
 LOCATE WELL CORRECTLY

The status of a bond for this well in conformance with Rule 39 of the General Rules and Regulations of the Commission is as follows:

We propose to use the following strings of casing and to land or cement them as indicated:

Size of Hole	Size of Casing	Weight Per Foot	New or Second Hand	Depth	Landed or Cemented	Sacks Cement
18-5/4	10-5/4	52.75	New	500'	Cemented	200
9-7/8	7-5/8	22	New	2400	Cemented	250 600 F.P.
6-5/4	5-1/2	17	New	3850	Cemented	150

If changes in the above plan become advisable we will notify you before cementing or landing casing. We estimate that the first productive oil or gas sand should occur at a depth of about **3850** feet.

Additional information:

Approved _____, 19____
 except as follows:

Sincerely yours,

Gulf Oil Corporation
 Company or Operator

By

Position **General Superintendent**

Send communication regarding well to

Name **S. C. Sandersen**

Address **Tulsa, Oklahoma**

OIL CONSERVATION COMMISSION,

By

Title

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

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

It is shown that this function is increasing and concave down on the interval $(-\infty, \infty)$. Moreover, it is proved that the function $f(x)$ has a horizontal asymptote at $y = \frac{\pi}{2}$ as $x \rightarrow \pm\infty$.

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

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

It is shown that this function is an odd function and that it has a horizontal asymptote at $y = \frac{\pi}{2}$ as $x \rightarrow \pm\infty$.

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

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

It is shown that this function is an even function and that it has a horizontal asymptote at $y = \frac{\pi}{2}$ as $x \rightarrow \pm\infty$.

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

$$k(x) = \int_0^x \frac{t^3}{1+t^2} dt.$$

It is shown that this function is an odd function and that it has a horizontal asymptote at $y = \frac{\pi}{2}$ as $x \rightarrow \pm\infty$.

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

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

It is shown that this function is an even function and that it has a horizontal asymptote at $y = \frac{\pi}{2}$ as $x \rightarrow \pm\infty$.

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

$$m(x) = \int_0^x \frac{t^5}{1+t^2} dt.$$

It is shown that this function is an odd function and that it has a horizontal asymptote at $y = \frac{\pi}{2}$ as $x \rightarrow \pm\infty$.

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

$$n(x) = \int_0^x \frac{t^6}{1+t^2} dt.$$

It is shown that this function is an even function and that it has a horizontal asymptote at $y = \frac{\pi}{2}$ as $x \rightarrow \pm\infty$.

8. In the eighth part of the paper, we consider the function $o(x)$ defined by the equation

$$o(x) = \int_0^x \frac{t^7}{1+t^2} dt.$$

It is shown that this function is an odd function and that it has a horizontal asymptote at $y = \frac{\pi}{2}$ as $x \rightarrow \pm\infty$.

9. In the ninth part of the paper, we consider the function $p(x)$ defined by the equation

$$p(x) = \int_0^x \frac{t^8}{1+t^2} dt.$$

It is shown that this function is an even function and that it has a horizontal asymptote at $y = \frac{\pi}{2}$ as $x \rightarrow \pm\infty$.

10. In the tenth part of the paper, we consider the function $q(x)$ defined by the equation

$$q(x) = \int_0^x \frac{t^9}{1+t^2} dt.$$

It is shown that this function is an odd function and that it has a horizontal asymptote at $y = \frac{\pi}{2}$ as $x \rightarrow \pm\infty$.

11. In the eleventh part of the paper, we consider the function $r(x)$ defined by the equation