

NEW MEXICO STATE LAND OFFICE
OFFICE OF THE STATE GEOLOGIST
SANTA FE, NEW MEXICO

MISCELLANEOUS NOTICES

Submit this notice in triplicate to the State Geologist or proper Oil and Gas Inspector at least five days 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 State Geologist or Oil and Gas Inspector of the plan submitted. The plan as approved should be followed and work should not begin until approval is obtained.

Indicate nature of notice by checking below:

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 TREAT	X
NOTICE OF INTENTION TO DEEPEN WELL		WITH ACID	

Hobbs, New Mexico

August 20th 1934

PLACE

DATE

Mr. E. H. Wells State Geologist,
Santa Fe, N. Mex.

Following is a notice of intention to do certain work as described below at the

Stanolind Oil and Gas Company Turner Well No. 8 in NW 1/4

COMPANY OR OPERATOR

LEASE

of Sec. 34, T. 18 S, R. 30 E, N. M. P. M., Hobbs

Oil Field, Lee County.

DETAILS OF PROPOSED PLAN OF WORK

We propose to treat the well with 2,000 gallons of acid to raise the potential.

This is an incomplete well which has not been tested for potential.

DUPLICATE

Approved AUG 25 1934, 19____
except as follows:

[Signature]
NAME TITLE

Address _____

Stanolind Oil and Gas Company
COMPANY OR OPERATOR

By [Signature]

Position Production Foreman

Send communications regarding well to

Name Stanolind Oil and Gas Company

Address Hobbs, New Mexico

1- C.R.

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 the function $f(x)$ 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 $x \rightarrow \infty$ and a vertical asymptote at $x = 0$ as $x \rightarrow -\infty$.

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

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

It is shown that the function $g(x)$ is increasing and concave down on the interval $(-\infty, \infty)$.

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

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

It is shown that the function $h(x)$ is increasing and concave down on the interval $(-\infty, \infty)$.

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

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

It is shown that the function $k(x)$ is increasing and concave down on the interval $(-\infty, \infty)$.

REFERENCES

1. J. K. P. Wang, *Journal of Mathematical Analysis and Applications*, **10**, 1 (1964), 1-10.
2. J. K. P. Wang, *Journal of Mathematical Analysis and Applications*, **10**, 2 (1964), 11-20.

RECEIVED 1964

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