

NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

MISCELLANEOUS REPORTS ON WELLS

Submit this report in triplicate to the Oil Conservation Commission or its proper agent within ten days after the work specified is completed. It should be signed and sworn to before a notary public for reports on beginning drilling operations, results of shooting well, results of test of casing shut-off, result of plugging of well, and other important operations, even though the work was witnessed by an agent of the Commission. Reports on minor operations need not be signed and sworn to before a notary public. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of report by checking below:

REPORT ON BEGINNING DRILLING OPERATIONS	<input checked="" type="checkbox"/>	REPORT ON REPAIRING WELL	
REPORT ON RESULT OF SHOOTING OR CHEMICAL TREATMENT OF WELL		REPORT ON PULLING OR OTHERWISE ALTERING CASING	
REPORT ON RESULT OF TEST OF CASING SHUT-OFF		REPORT ON DEEPENING WELL	
REPORT ON RESULT OF PLUGGING OF WELL			

Borger, Texas,

Jan 18 1937

Place

Date

OIL CONSERVATION COMMISSION,
Santa Fe, New Mexico.

Gentlemen:

Following is a report on the work done and the results obtained under the heading noted above at the _____

Clyde B. Neill

Bonzales

Well No. 1 in the _____

Company or Operator

Lease

Center of SW of SW of Sec. 28, T. 21 N, R. 30 E, N. M. P. M.,

Bueyeros Field, Harding County.

The dates of this work were as follows: Spudded in on Jan 15 1937.

Notice of intention to do the work was [~~was~~] submitted on Form C-102 on Dec 29 1936, 19____

and approval of the proposed plan was [~~was~~] obtained. (Cross out incorrect words.)

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

Well spudded in on Jan 15 1937, Will be continued until completed.

ORIGINAL

Witnessed by _____

Name

Company

Title

Subscribed and sworn to before e this 18

18 day of January, 1937

J. Sericiana
Notary Public

My Commission expires June 1 1937

I hereby swear or affirm that the information given above is true and correct.

Name Clyde B. Neill

Position Operator

Representing Clyde B. Neill
Company or Operator

Address Box 457, Borger, Texas.

Remarks:

RECEIVED BY [Signature]
State Oil & Gas Inspector.

[Signature]
Name
owner
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

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

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

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

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

3. Finally, we consider the function $h(x)$ defined by the equation

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

and study its properties. It is shown that the function $h(x)$ is increasing and concave down, and that it approaches a horizontal asymptote as $x \rightarrow \infty$. The results of the previous parts of the paper are used to establish the following theorem:

Theorem. Let $f(x)$ be the function defined by the equation $f(x) = \int_0^x \frac{1}{1+t^2} dt$. Then

$$\lim_{x \rightarrow \infty} f(x) = \frac{\pi}{2}$$

• The function $f(x)$ is increasing and concave down, and it approaches a horizontal asymptote as $x \rightarrow \infty$.

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

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

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