

**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		REPORT ON REPAIRING WELL	<b>X</b>
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			

Hobbs, New Mexico. July 7th, 1936.

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 \_\_\_\_\_

**REPOLLO OIL COMPANY**

**E. C. STEPHENS**

**1**

Well No. \_\_\_\_\_ in the \_\_\_\_\_

Company or Operator

**NE/4**

of Sec. **13**

T. **25S**

Lease

**36E**

N. M. P. M.,

**JAL**

Field,

**LEA**

County.

The dates of this work were as follows: **June 12th to July 2nd, 1936.**

Notice of intention to do the work was [was not] submitted on Form C-102 on **June 11th** 19 **36**

and approval of the proposed plan was [was not] obtained. (Cross out incorrect words.)

**DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED**

Plugged back from 3325 to 3240' w/20 sacks cement. Failed to secure water shut-off. Recemented June 22nd w/22 sacks incor cement from 3325 to 3233'; ~~xxxxxx~~ Tested for water shut-off by boiling hole down 250' and let stand 1 hour. Hole did not fill up; tested OK. Perforated 7"OD casing from 3221' to 3233' with Lone Wells Casing Perforator with 9 holes.

**RESULTS:-** Well making between 1½ and 2 million dry gas. No oil

Witnessed by \_\_\_\_\_ Name \_\_\_\_\_ Company \_\_\_\_\_ Title \_\_\_\_\_

Subscribed and sworn to before me this 7

day of July, 19 36

*Patricia M. Paduany*  
Notary Public

My Commission expires 10-24-39

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

Name E. C. Stephens

Position Dist. Superintendent

Representing Repollo Oil Company

Address Box # 156, Hobbs, N.M.

Remarks:

APPROVE

Name

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 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  $(0, \frac{\pi}{2})$ . The function  $f(x)$  is also shown to be continuous on the interval  $(-\infty, \infty)$  and to have a horizontal asymptote at  $y = \frac{\pi}{2}$  as  $x \rightarrow \infty$ .

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

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

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

3. The third part of the paper is devoted to the study of the properties of 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. The fourth part of the paper is devoted to the study of the properties of 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  $(-\infty, \infty)$ .

5. The fifth part of the paper is devoted to the study of the properties of the function  $l(x)$  defined by the equation

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

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

6. The sixth part of the paper is devoted to the study of the properties of the function  $m(x)$  defined by the equation

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

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

7. The seventh part of the paper is devoted to the study of the properties of the function  $n(x)$  defined by the equation

$$n(x) = \int_0^x \frac{1}{1+t^2} dt + \int_0^x \frac{1}{1+t^4} dt + \int_0^x \frac{1}{1+t^6} dt + \int_0^x \frac{1}{1+t^8} dt + \int_0^x \frac{1}{1+t^{10}} dt + \int_0^x \frac{1}{1+t^{12}} dt + \int_0^x \frac{1}{1+t^{14}} dt.$$

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

8. The eighth part of the paper is devoted to the study of the properties of the function  $o(x)$  defined by the equation

$$o(x) = \int_0^x \frac{1}{1+t^2} dt + \int_0^x \frac{1}{1+t^4} dt + \int_0^x \frac{1}{1+t^6} dt + \int_0^x \frac{1}{1+t^8} dt + \int_0^x \frac{1}{1+t^{10}} dt + \int_0^x \frac{1}{1+t^{12}} dt + \int_0^x \frac{1}{1+t^{14}} dt + \int_0^x \frac{1}{1+t^{16}} dt.$$

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

9. The ninth part of the paper is devoted to the study of the properties of the function  $p(x)$  defined by the equation

$$p(x) = \int_0^x \frac{1}{1+t^2} dt + \int_0^x \frac{1}{1+t^4} dt + \int_0^x \frac{1}{1+t^6} dt + \int_0^x \frac{1}{1+t^8} dt + \int_0^x \frac{1}{1+t^{10}} dt + \int_0^x \frac{1}{1+t^{12}} dt + \int_0^x \frac{1}{1+t^{14}} dt + \int_0^x \frac{1}{1+t^{16}} dt + \int_0^x \frac{1}{1+t^{18}} dt.$$

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

10. The tenth part of the paper is devoted to the study of the properties of the function  $q(x)$  defined by the equation

$$q(x) = \int_0^x \frac{1}{1+t^2} dt + \int_0^x \frac{1}{1+t^4} dt + \int_0^x \frac{1}{1+t^6} dt + \int_0^x \frac{1}{1+t^8} dt + \int_0^x \frac{1}{1+t^{10}} dt + \int_0^x \frac{1}{1+t^{12}} dt + \int_0^x \frac{1}{1+t^{14}} dt + \int_0^x \frac{1}{1+t^{16}} dt + \int_0^x \frac{1}{1+t^{18}} dt + \int_0^x \frac{1}{1+t^{20}} dt.$$

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