

NEW MEXICO OIL CONSERVATION COMMISSION

MISCELLANEOUS REPORTS ON WELLS

RECEIVED

OCT 3 1951

Submit this report in triplicate to the Oil Conservation Commission District Office within ten days after the work is completed. It should be signed and filed as a report on beginning drilling operations, 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. 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	
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	XI		

October 1, 1951

Hobbs, New Mexico.

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

Skelly Oil Company, Mexico "H" Well No. 1 in the
 NE/4 SE/4 of Sec. 30, T. 15S, R. 33, N. M. P. M.,
 Unnamed Pool, Lea County.

The dates of this work were as follows: September 29 & 30, 1951

Notice of intention to do the work was (was not) submitted on Form C-102 on September 29, 1951
 and approval of the proposed plan was (was not) obtained. (Cross out incorrect words.)

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

Drilled to total depth of 11,173'. Five DST's were taken from 9760'-9839', 10,205'-10,153', 10262'-10,222', 10250'-10,300', 10,615'-10,564' respectively with no commercial shows of oil or gas. No commercial shows of oil or gas were encountered through any zone from surface to total depth.

The well has 9-5/8" OD casing set at 4353' and cemented with 3900 sacks which was lated to surface. Flugged well in the following manner:

Ran mud laden fluid from total depth to 10,615'; 50 sacks cement to protect the Pennsylvania formation; mud laden fluid to 7160'; 50 sacks cement to protect the Tubb formation; mud laden fluid to 4350'; 50 sacks cement run at base of 9-5/8" OD casing; mud laden fluid to 40' where a 15 sack cement plug was run to surface and a 4" pipe marker installed.

Witnessed by E. R. Deitz, Skelly Oil Company, Foreman, Title

APPROVED:
 OIL CONSERVATION COMMISSION

Ray Yankrueff
 Oil & Gas Inspector
 Name
 Title

OCT 4 - 1951

Date

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

Name J. L. Moore

Position Dist. Supt.

Representing Skelly Oil Company

Address Box 36, Hobbs, New Mexico

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.

$$f'(x) = \frac{1}{1+x^2} > 0,$$

$$f''(x) = -\frac{2x}{(1+x^2)^2} < 0.$$

$$f(0) = 0, \quad f(\infty) = \frac{\pi}{2}.$$

$$f(x) = \frac{\pi}{2} - \arctan x.$$

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

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

It is shown that the function $g(x)$ is increasing and concave down.

$$g'(x) = \frac{1}{1+x^4} > 0,$$

$$g''(x) = -\frac{4x^3}{(1+x^4)^2} < 0.$$

$$g(0) = 0, \quad g(\infty) = \frac{\pi}{4}.$$

$$g(x) = \frac{\pi}{4} - \arctan x.$$

3. The third part of the paper is devoted to the study of the function $h(x)$ defined by the equation

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

It is shown that the function $h(x)$ is increasing and concave down.

$$h'(x) = \frac{1}{1+x^6} > 0,$$

$$h''(x) = -\frac{6x^5}{(1+x^6)^2} < 0.$$

$$h(0) = 0, \quad h(\infty) = \frac{\pi}{6}.$$

$$h(x) = \frac{\pi}{6} - \arctan x.$$

4. The fourth part of the paper is devoted to the study of the function $k(x)$ defined by the equation

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

It is shown that the function $k(x)$ is increasing and concave down.

$$k'(x) = \frac{1}{1+x^8} > 0,$$

$$k''(x) = -\frac{8x^7}{(1+x^8)^2} < 0.$$

$$k(0) = 0, \quad k(\infty) = \frac{\pi}{8}.$$

$$k(x) = \frac{\pi}{8} - \arctan x.$$