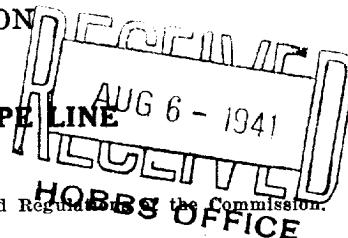


NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

REQUEST FOR PERMISSION TO CONNECT WITH PIPE LINE



THIS REQUEST SHOULD BE SUBMITTED IN TRIPLICATE. See instructions in the Rules and Regulations of the Commission.

TRIPPLICATE

Hobbs, New Mexico

August 1st, 1941

Place

Date

OIL CONSERVATION COMMISSION,
Santa Fe, New Mexico.

Gentlemen:

Permission is requested to connect Stanolind Oil and Gas Company's C. M. Farnsworth "A"

Company or Operator

Lease

Wells No. 7 in SW/4 SW/4 of Sec. 18, T. 26-S, R. 37-E, N. M. P. M.,

Haves Field, Lea County, with the pipe line of the

Texas - New MexicoMidland, Texas

Pipe Line Co.

Address

Status of land (State, Government or privately owned) Government

Location of tank battery Approximately 550' in a northwesterly direction from "A" #7

Description of tanks Four - 600 barrel tanks

Logs of the above wells were filed with the Oil Conservation Commission June 27th, 19 41

All other requirements of the Commission have ~~been~~ been complied with. (Cross out incorrect words.)

Additional information:

This well to be on September production schedule as an oil well. Permission has been granted to run ten (10) barrels of oil daily from this well during the month of August by the production office as set out in their letter of August 1st, 1941 to the Texas-New Mexico Pipe Line Company, Midland, Texas.

This well was completed as a gas well but will be reclassified as an oil well.

Yours truly,

Permission is hereby granted to make pipe line connections requested above.

OIL CONSERVATION COMMISSION,

By

Ray Yerckrough
JOHN M. KELLY
Geologist

Title

Secretary, Oil Conservation Commission

Date

Stanolind Oil and Gas Company

Owner or Operator

By

Ralph L. Hendrickson

Position

Field Superintendent

Address

P. O. Box "T", 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

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

for $x \in \mathbb{R}$.

2. It is shown that

$$f(x) = \arctan x$$

for all $x \in \mathbb{R}$. The proof is based on the fact that the derivative of $f(x)$ is $\frac{1}{1+x^2}$.

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

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

for $x \in \mathbb{R}$.

4. It is shown that

$$g(x) = \frac{1}{3} \arctan \left(\frac{x}{1-x^2} \right)$$

for all $x \in \mathbb{R}$. The proof is based on the fact that the derivative of $g(x)$ is $\frac{1}{1+x^4}$.

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

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

for

$x \in \mathbb{R}$.

6. It is shown that

$$h(x) = \frac{1}{5} \arctan \left(\frac{x}{1-x^2} \right)$$