

Form C-110
Revised 7/1/55

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

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

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

where x is a real number.

It is well known that

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

2. In the second part of the paper we shall study the

properties of the function $f(x)$ defined by the equation

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

where x is a real number.

It is well known that

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

3. In the third part of the paper we shall study the

$$f(x) = \int_0^x \frac{1}{1+t^2} dt, \quad (3)$$

where x is a real number.