

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

(File the original and 4 copies with the appropriate district office)

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Company or Operator Humble Oil & Refining Company Lease New Mexico State "C"

Well No. 2 Unit Letter B S & T 17-S R 36-E Pool West Lovington

County Las Kind of Lease (State, Fed. or Patented) State

If well produces oil or condensate, give location of tanks: Unit G S & T 17-S R 36-E

Authorized Transporter of Oil or Condensate Texas New Mexico Pipe Line Company

Address Box 652, Lovington, New Mexico
(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas Skelly Oil Company

Address Box 1135, Demise, New Mexico
(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:

Reasons for Filing: (Please check proper box) New Well ()

Change in Transporter of (Check One): Oil () Dry Gas () C'head () Condensate ()

Change in Ownership () Other (x)

Remarks: (Give explanation below)

Skelly Oil Company is to transport casing head gas from this well.

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 14th day of February 19 56

By M. M. / [Signature]

Approved FEB 17 1956 19 56

Title Agent

OIL CONSERVATION COMMISSION

Company Humble Oil & Refining Company

By [Signature]

Address Box 2347

Title [Signature]

Hebbs, 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

$$f(x) = \sum_{n=0}^{\infty} \frac{a_n}{n!} x^n, \quad (1)$$

where a_n are the coefficients of the power series. It is shown that the function $f(x)$ is analytic in the whole plane and that it satisfies the differential equation

$$f'(x) = f(x) + x f(x)^2. \quad (2)$$

2.

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

$$f(x) = \sum_{n=0}^{\infty} \frac{a_n}{n!} x^n, \quad (3)$$

where

$$a_n = \frac{1}{n!} \int_0^1 f(x)^n dx.$$

It is shown

that the function

$$f(x) = \sum_{n=0}^{\infty} \frac{a_n}{n!} x^n$$