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NEW MEXICO OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

**CERTIFICATE OF COMPLIANCE AND AUTHORIZATION  
TO TRANSPORT OIL AND NATURAL GAS**

FILE THE ORIGINAL AND 4 COPIES WITH THE APPROPRIATE OFFICE

FORM C-110  
(Rev. 7-60)

Company or Operator <b>Pan American Petroleum Corporation</b>				Lease <b>USA Russell E. Horton</b>		Well No. <b>17</b>	
Unit Letter <b>I</b>	Section <b>30</b>	Township <b>8-S</b>	Range <b>35-E</b>	County <b>Roosevelt</b>			
Pool <b>Milnesand San Andres</b>				Kind of Lease (State, Fed, Fee) <b>Federal</b>			
If well produces oil or condensate give location of tanks			Unit Letter <b>D</b>	Section <b>30</b>	Township <b>8-S</b>	Range <b>35-E</b>	
Authorized transporter of oil <input checked="" type="checkbox"/> or condensate <input type="checkbox"/> <b>Magnolia Pipe Line Co.,</b>				Address (give address to which approved copy of this form is to be sent) <b>Box 900, Dallas, Texas</b>			

Is Gas Actually Connected? Yes ☒ No ☐

Authorized transporter of casing head gas <input checked="" type="checkbox"/> or dry gas <input type="checkbox"/> <del>Simulady Oil &amp; Gas Co.,</del> <i>Wagon</i>	Date Connected <b>9-21-64</b>	Address (give address to which approved copy of this form is to be sent) <del>Box 1470 - Midland, Texas</del> <i>Box 1589 - Dallas, Okla.</i>
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If gas is not being sold, give reasons and also explain its present disposition:

**REASON(S) FOR FILING** (please check proper box)

New Well ☒ Change in Ownership ☐  
Change in Transporter (check one) Other (explain below)  
Oil ☐ Dry Gas ☐  
Casing head gas ☐ Condensate ☐

Remarks

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

Executed this the **23rd** day of **September**, 19 **64**.

**OIL CONSERVATION COMMISSION**

Approved by

Title

Date

By

Original Signed by:  
**V. E. STALEY**

Title

**Area Superintendent**

Company

**Pan American Petroleum Corporation**

Address

**Box 68 - Hobbs, New Mexico - 88240**

1. The first part of the paper is devoted to the study of the

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

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

It is well known that

$$f(x) = \arctan x, \quad x \in \mathbb{R},$$

and

$$f'(x) = \frac{1}{1+x^2}, \quad x \in \mathbb{R}.$$

It is

clear that the function  $f(x)$  is

strictly increasing on  $\mathbb{R}$ .

On the other hand, we have

$$\lim_{x \rightarrow -\infty} f(x) = -\frac{\pi}{2}, \quad \lim_{x \rightarrow +\infty} f(x) = \frac{\pi}{2}.$$