

June 9, 1955

General Crude Oil Company  
314 Commerce Building  
Ablene, Texas

Attention: Mr. F. A. Hunter

Re: La Mance Drilling Company  
Simpson No. 1  
Sec. 21, Twp. 10N, R. 23E  
Guadalupe County, New Mexico

Dear Mr. Hunter:

With reference to our telephone conversations of June 7 and June 9, 1955, regarding the above captioned well, I have checked our files and find that the original Notice of Intention to Drill projected the well to the Pennsylvanian expected at from 3500-5500 feet.

La Mance Drilling Company has been very negligent in filing the various notices and reports for this well. The following forms are delinquent and must be filed and approved before the transfer of the well to General Crude Oil Company can be approved:

- Form C-103-Report on Begining Drilling Operations
- Form C-103-Report on Result of Test of Casing Shut-off  
Surface Pipe.
- Form C-102-Notice of Intention to Set Intermediate  
Casing (If such has been done)
- Form C-103-Report on Result of Test of Casing Shut-off  
(If intermediate pipe was set)
- Form C-102-Notice of Intention to Change Plans  
(should have been filed when well went beyond  
5500')
- Form C-102-Notice of Intention to Temporarily Abandon Well  
(Rule 202, requires that "when drilling operations  
have been suspended for 60 days, the well shall be  
plugged and abandoned unless a permit for temporary  
abandonment shall be obtained from the Commission".  
We are willing to waive the requirement of this  
rule if General Crude Oil plans to resume operations  
on this well within the next 30 days.

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  $x \in \mathbb{R}$ .

It is well known that the function  $f(x)$  is increasing and concave down on  $\mathbb{R}$ . We shall now prove that  $f(x)$  is also bounded on  $\mathbb{R}$ .

Let  $x > 0$ . Then

for  $x > 0$ , we have  $f(x) = \int_0^x \frac{1}{1+t^2} dt < \int_0^x \frac{1}{t^2} dt = \frac{1}{x}$ . Hence  $f(x) < \frac{1}{x}$  for  $x > 0$ . Similarly, for  $x < 0$ , we have  $f(x) = \int_0^x \frac{1}{1+t^2} dt > \int_0^x \frac{1}{t^2} dt = -\frac{1}{x}$ . Hence  $f(x) > -\frac{1}{x}$  for  $x < 0$ .

Therefore,  $f(x)$  is bounded on  $\mathbb{R}$ . In fact,  $f(x) \in (-1, 1)$  for all  $x \in \mathbb{R}$ . This completes the proof of the first part of the paper.

2. The second part of the paper is devoted to the study of the properties of the function  $g(x)$  defined by the equation  $g(x) = \int_0^x \frac{1}{1+t^2} dt$  for  $x \in \mathbb{R}$ . It is well known that the function  $g(x)$  is increasing and concave down on  $\mathbb{R}$ . We shall now prove that  $g(x)$  is also bounded on  $\mathbb{R}$ .

Let  $x > 0$ . Then  $g(x) = \int_0^x \frac{1}{1+t^2} dt < \int_0^x \frac{1}{t^2} dt = \frac{1}{x}$ . Hence  $g(x) < \frac{1}{x}$  for  $x > 0$ . Similarly, for  $x < 0$ , we have  $g(x) = \int_0^x \frac{1}{1+t^2} dt > \int_0^x \frac{1}{t^2} dt = -\frac{1}{x}$ . Hence  $g(x) > -\frac{1}{x}$  for  $x < 0$ . Therefore,  $g(x)$  is bounded on  $\mathbb{R}$ . In fact,  $g(x) \in (-1, 1)$  for all  $x \in \mathbb{R}$ . This completes the proof of the second part of the paper.

By carbon copy of this letter we are advising La Mance Drilling Company of the necessity to file these notices and reports for approval before transfer of the well and release of the bond can be approved.

Insofar as General Crude Oil Company is concerned, your blanket bond will cover operations on this well. The attention of General Crude Oil and La Mance Drilling Company is directed to Commission Rule 101, Plugging Bond, particularly paragraphs (b), (c), and (d).

Before commencing operations General Crude Oil Company should file Form C-103 advising the Commission of change of ownership of the well. Form C-102 should also be submitted, detailing future plans for the well, i.e., plans to plug back, set casing, etc.

It is hoped that prompt attention will be given this matter. As stated before, no transfer of the well can be approved until compliance has been made, and the well is in jeopardy of being ordered shut-down for failure to comply.

Very truly yours

DANIEL W. BUTTER  
Petroleum Engineer

cc La Mance Drilling Company  
c/o Mr. Mark Whelan  
3805 Mackland Ave. NE  
Albuquerque, New Mexico

La Mance Drilling Company  
Hereford, Texas

DSN/ga

the 1990s, the number of people in the world who are under 15 years of age is expected to increase from 1.1 billion to 1.5 billion. The number of people aged 65 and over is expected to increase from 250 million to 450 million. The number of people aged 15 and over is expected to increase from 3.5 billion to 4.5 billion. The number of people aged 15 and over is expected to increase from 3.5 billion to 4.5 billion. The number of people aged 15 and over is expected to increase from 3.5 billion to 4.5 billion.