

AFFIDAVIT

Before me, the undersigned authority, on this day personally appeared Curtis J. Little of 2929 Monte Vista, NE, Albuquerque, New Mexico, known to me to be a credible person of legal age, who after being by me first duly sworn, on oath, deposes and says:

On December 6 and 8, 1963 deviation tests were conducted by employees of Scott Brothers Drilling Company in the 1-A-27 Navajo located 660' from the South line and 990' from the West line of Section 27, T. 32N, R. 17W, NMPM, San Juan County, New Mexico.

Eastman Oil Well Surveying Company equipment was used as follows:


1. First survey at approximate depth of 520' below the surface indicated a drift of  $1/2^{\circ}$  from vertical.
2. Second survey at approximately 1280' below the surface showed a drift of  $3/4^{\circ}$  from vertical.

The records of the above surveys are on file in the office of Curtis J. Little.

Affiant further states that he is his own agent and representative and operator of the 1-A-27 Navajo well and as such is duly authorized to make this affidavit.

  
CURTIS J. LITTLE  
Operator

SUBSCRIBED AND SWORN TO, before me, this the 8th day of January, A. D., 1964.

  
Notary Public

My Commission Expires January 13, 1967



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

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

It is well known that the function  $f(x)$  is increasing and concave down on the interval  $(-\infty, \infty)$ . Moreover,  $f(x) \rightarrow 0$  as  $x \rightarrow -\infty$  and  $f(x) \rightarrow \frac{\pi}{2}$  as  $x \rightarrow \infty$ . The function  $f(x)$  is also continuous and differentiable on the interval  $(-\infty, \infty)$ .

2. In the second part of the paper, we study the properties of the function  $g(x)$  defined by the equation

$$g(x) = \int_0^x \frac{1}{1+t^2} dt + \int_0^x \frac{1}{1+t^4} dt$$

It is well known that the function  $g(x)$  is increasing and concave down on the interval  $(-\infty, \infty)$ . Moreover,  $g(x) \rightarrow 0$  as  $x \rightarrow -\infty$  and  $g(x) \rightarrow \frac{\pi}{2} + \frac{\pi}{4}$  as  $x \rightarrow \infty$ . The function  $g(x)$  is also continuous and differentiable on the interval  $(-\infty, \infty)$ .

3. In the third part of the paper, we study the properties of the function  $h(x)$  defined by the equation

$$h(x) = \int_0^x \frac{1}{1+t^2} dt + \int_0^x \frac{1}{1+t^4} dt + \int_0^x \frac{1}{1+t^6} dt$$

It is well known that the function  $h(x)$  is increasing and concave down on the interval  $(-\infty, \infty)$ . Moreover,  $h(x) \rightarrow 0$  as  $x \rightarrow -\infty$  and  $h(x) \rightarrow \frac{\pi}{2} + \frac{\pi}{4} + \frac{\pi}{6}$  as  $x \rightarrow \infty$ . The function  $h(x)$  is also continuous and differentiable on the interval  $(-\infty, \infty)$ .

4. In the fourth part of the paper, we study the properties of the function  $k(x)$  defined by the equation

$$k(x) = \int_0^x \frac{1}{1+t^2} dt + \int_0^x \frac{1}{1+t^4} dt + \int_0^x \frac{1}{1+t^6} dt + \int_0^x \frac{1}{1+t^8} dt$$

It is well known that the function  $k(x)$  is increasing and concave down on the interval  $(-\infty, \infty)$ . Moreover,  $k(x) \rightarrow 0$  as  $x \rightarrow -\infty$  and  $k(x) \rightarrow \frac{\pi}{2} + \frac{\pi}{4} + \frac{\pi}{6} + \frac{\pi}{8}$  as  $x \rightarrow \infty$ . The function  $k(x)$  is also continuous and differentiable on the interval  $(-\infty, \infty)$ .