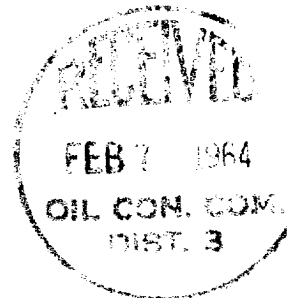


# DEVIATION TABULATION REPORT

HURON DRILLING COMPANY, INC.	DAVIS	1	SW/4, NE/4	5	26-N	8-W
OPERATOR	LEASE	No.	1/4 SEC.	SEC.	TWP.	RGE.

<u>DEPTH</u>	<u>DEVIATION</u>	<u>DEPTH</u>	<u>DEVIATION</u>
500 FT.	1/2 DEG.	1500 FT.	3/4 DEG.
1000 FT.	1/2 DEG.	2200 FT.	3/4 DEG.

STATE OF NEW MEXICO )  
 ) ss.  
COUNTY OF SAN JUAN )



ON THIS 31ST DAY OF JANUARY, 1964, BEFORE AS PERSONALLY APPEARED

R. H. Phillips

R. N. PHILLIPS

TO ME KNOWN TO BE THE PERSON (S) DESCRIBED IN AND WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED THAT THEY EXECUTED THE SAME AS THEIR FREE ACT AND DEED.

IN WITNESS WHEREOF, I HAVE SET MY HAND AND SEAL OF OFFICE ON THIS 31st  
DAY OF JANUARY, 1964.

*James F. Harris*  
NOTARY PUBLIC IN AND FOR  
*Santa Fe* COUNTY, *New Mexico*

My COMMISSION EXPIRES:

July 8, 1966

## 1. Introduction

The purpose of this paper is to study the properties of the function  $f(x)$  defined by the following equation:

$$f(x) = \begin{cases} x^2 & \text{if } x \in \mathbb{Q} \\ x^3 & \text{if } x \notin \mathbb{Q} \end{cases}$$

$$f(x) = \begin{cases} x^2 & \text{if } x \in \mathbb{Q} \\ x^3 & \text{if } x \notin \mathbb{Q} \end{cases}$$

1.1. Definition of  $f(x)$

Let  $f(x)$  be a function defined on the real numbers  $\mathbb{R}$ . We define  $f(x)$  as follows:

$$f(x) = \begin{cases} x^2 & \text{if } x \in \mathbb{Q} \\ x^3 & \text{if } x \notin \mathbb{Q} \end{cases}$$

It is easy to see that  $f(x)$  is not continuous at any point  $x \in \mathbb{R}$ . In fact, if  $x \in \mathbb{Q}$ , then  $f(x) = x^2$ , but for any  $\epsilon > 0$ , there exists a  $\delta > 0$  such that for all  $y \in \mathbb{R}$  with  $|y - x| < \delta$ , we have  $|f(y) - f(x)| > \epsilon$ .

On the other hand, if  $x \notin \mathbb{Q}$ , then  $f(x) = x^3$ , but for any  $\epsilon > 0$ , there exists a  $\delta > 0$  such that for all  $y \in \mathbb{Q}$  with  $|y - x| < \delta$ , we have  $|f(y) - f(x)| > \epsilon$ .

1.2. Properties of  $f(x)$