

NEW MEXICO OIL CONSERVATION COMMISSION  
1000 RIO BRAZOS ROAD  
Aztec, New Mexico

*Hughes & Hughes  
PO Box 152  
Durango, Colo*

RE: Plugging Reports

Gentlemen:

Form C-103, Notice of Intention to Plug, your *Santa Fe Tract 10 #1 D-35-17N-8W*  
Lease Well No. Unit-S-T-R  
was approved on *6-16-66*. Your subsequent notice of plugging cannot be  
approved until a commission representative has made an inspection of the location  
to see:

- (1) all pits have been filled and leveled;
- (2) a steel marker, 4" in diameter and approximately 4' above mean ground level, must be set in concrete, this marker must have the quarter-quarter section or unit designation, section, township and range numbers, which shall be permanently stenciled or welded on the marker;
- (3) the location shall be cleared and cleaned of all junk;
- (4) the dead man wires must be cut.

The above are the minimum requirements.

Please notify us by filling in the blank form below when this work has been done so that our representative will not have to make more than one trip to the location.

OIL CONSERVATION COMMISSION

By

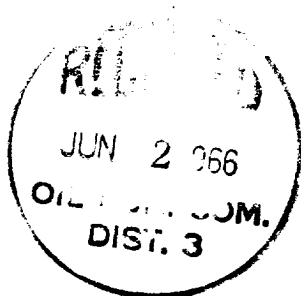
*Emory C. Dumas*

*imp 6-24-66  
eq*

Fill in below and return:

*Santa Fe Tr. 10 #1 D-35-17N-8W*  
Lease Well No. Unit-S-T-R

is ready for your inspection and approval.



*HUGHES & HUGHES*  
Operator

*Philip R. Brown* *Geologist - Present*  
Name and title

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

$$f(x) = \frac{1}{x}$$

for  $x > 0$ .

It is well known that the function  $f(x)$  is strictly decreasing on the interval  $(0, \infty)$  and that it has a horizontal asymptote at  $y = 0$  as  $x \rightarrow \infty$ . Moreover, the function is convex on the interval  $(0, \infty)$ . These properties are used in the following sections to establish the inequalities.

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

$$g(x) = \frac{1}{x} - \frac{1}{x+1}$$

for  $x > 0$ . It is easy to see that the function  $g(x)$  is strictly increasing on the interval  $(0, \infty)$  and that it has a horizontal asymptote at  $y = 0$  as  $x \rightarrow \infty$ .

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

$$h(x) = \frac{1}{x} - \frac{1}{x+1} + \frac{1}{x+2}$$

for  $x > 0$ . It is easy to see that the function  $h(x)$  is strictly increasing on the interval  $(0, \infty)$  and that it has a horizontal asymptote at  $y = 0$  as  $x \rightarrow \infty$ .

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

$$k(x) = \frac{1}{x} - \frac{1}{x+1} + \frac{1}{x+2} - \frac{1}{x+3}$$

for  $x > 0$ .

It is easy to see that the function  $k(x)$  is strictly increasing on the interval  $(0, \infty)$  and that it has a horizontal asymptote at  $y = 0$  as  $x \rightarrow \infty$ .

5. In the fifth part of the paper, we consider the function  $l(x)$  defined by the equation

$$l(x) = \frac{1}{x} - \frac{1}{x+1} + \frac{1}{x+2} - \frac{1}{x+3} + \frac{1}{x+4}$$

for  $x > 0$ . It is easy to see that the function  $l(x)$  is strictly increasing on the interval  $(0, \infty)$  and that it has a horizontal asymptote at  $y = 0$  as  $x \rightarrow \infty$ .