



OIL CONSERVATION DIVISION

Drawer DD Artesia, N.M.

DISTRICT OFFICE IT

January thru April 1988

NO. 2042 T

SUPPLEMENT TO THE OIL PRORATION SCHEDULE

DATE March 14, 1988

PURPOSE ALLOWABLE ASSIGNMENT - TESTING

Effective March 1, 1988 a testing allowable of 500 barrels of oil is hereby assigned to Primary Fuels, Inc., DEI Amoco 19 Federal #2-K-19-22-26 in the Wildcat Delaware Pool for the month of March 1988.

MM/nn

Primary Fuels, Inc.

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OIL CONSERVATION DIVISION

*Mr. Williams*  
DISTRICT SUPERVISOR

# PROPOSITION 1

Let  $f$  be a function defined on a domain  $D$  and let  $a$  be a point in  $D$ . Then  $f$  is continuous at  $a$  if and only if

$$\lim_{x \rightarrow a} f(x) = f(a)$$

Proof. Suppose  $f$  is continuous at  $a$ . Then for every  $\epsilon > 0$  there exists a  $\delta > 0$  such that if  $x$  is in  $D$  and  $|x - a| < \delta$  then  $|f(x) - f(a)| < \epsilon$ . This is exactly the definition of the limit  $\lim_{x \rightarrow a} f(x) = f(a)$ .

Conversely, suppose  $\lim_{x \rightarrow a} f(x) = f(a)$ . Then for every  $\epsilon > 0$  there exists a  $\delta > 0$  such that if  $x$  is in  $D$  and  $|x - a| < \delta$  then  $|f(x) - f(a)| < \epsilon$ . This is exactly the definition of continuity at  $a$ .

Q.E.D.

## PROPOSITION 2

Let  $f$  and  $g$  be functions defined on a domain  $D$  and let  $a$  be a point in  $D$ . Then

$\lim_{x \rightarrow a} (f(x) + g(x)) = \lim_{x \rightarrow a} f(x) + \lim_{x \rightarrow a} g(x)$