

OIL CONSERVATION COMMISSION

BOX 2045

HOBBS, NEW MEXICO

DATE Sept. 25, 1958

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

Re: Proposed NSP _____

Proposed NSL _____

Proposed NFO _____

Proposed DC X

Gentlemen:

I have examined the application dated _____
for the Magnolia Pet. Co. J. N. Carson #2-H 33-21-37
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

O.K. — E.F.E.

O.K. — J.W.R.

Yours very truly,

OIL CONSERVATION COMMISSION

1. The first part of the paper is devoted to the study of the properties of the function $f(x)$ defined by the equation $f(x) = \int_0^x f(t) dt$. It is shown that $f(x)$ is a constant function, and its value is determined by the initial condition $f(0) = 1$.

2. In the second part, we consider the function $f(x)$ defined by the equation $f(x) = \int_0^x f(t) dt + x$. It is shown that $f(x)$ is a linear function, and its value is determined by the initial condition $f(0) = 1$.

3. In the third part, we consider the function $f(x)$ defined by the equation $f(x) = \int_0^x f(t) dt + x^2$. It is shown that $f(x)$ is a quadratic function, and its value is determined by the initial condition $f(0) = 1$.

4. In the fourth part, we consider the function $f(x)$ defined by the equation $f(x) = \int_0^x f(t) dt + x^3$. It is shown that $f(x)$ is a cubic function, and its value is determined by the initial condition $f(0) = 1$.

5. In the fifth part, we consider the function $f(x)$ defined by the equation $f(x) = \int_0^x f(t) dt + x^4$. It is shown that $f(x)$ is a quartic function, and its value is determined by the initial condition $f(0) = 1$.

6. In the sixth part, we consider the function $f(x)$ defined by the equation $f(x) = \int_0^x f(t) dt + x^5$. It is shown that $f(x)$ is a quintic function, and its value is determined by the initial condition $f(0) = 1$.

7. In the seventh part, we consider the function $f(x)$ defined by the equation $f(x) = \int_0^x f(t) dt + x^6$. It is shown that $f(x)$ is a sextic function, and its value is determined by the initial condition $f(0) = 1$.

8. In the eighth part, we consider the function $f(x)$ defined by the equation $f(x) = \int_0^x f(t) dt + x^7$. It is shown that $f(x)$ is a septic function, and its value is determined by the initial condition $f(0) = 1$.

9. In the ninth part, we consider the function $f(x)$ defined by the equation $f(x) = \int_0^x f(t) dt + x^8$. It is shown that $f(x)$ is an octic function, and its value is determined by the initial condition $f(0) = 1$.

$$f(x) = \int_0^x f(t) dt + x^n$$