

NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico

STATE M #2

NOTICE OF INTENTION TO DRILL

Notice must be given to the Oil Conservation Commission or its proper agent and approval obtained before drilling begins. If changes in the proposed plan are considered advisable, a copy of this notice showing such changes will be returned to the sender. Submit this notice in triplicate. One copy will be returned following approval. See additional instructions in Rules and Regulations of the Commission.

Dallas, Texas  
Place

December 3, 1936  
Date

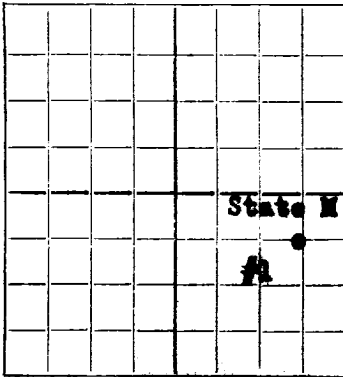
OIL CONSERVATION COMMISSION,  
Santa Fe, New Mexico

Gentlemen:

You are hereby notified that it is our intention to commence the drilling of a well to be known as \_\_\_\_\_

The Atlantic Refining Company State M Well No. 1 in center: 36  
Company or Operator Lease

of Sec. 36, T. 20 S, R. 36 E, N. M. P. M., Bunick Field, Lea County.  
N.



AREA 640 ACRES  
LOCATE WELL CORRECTLY

The well is 1200 feet [N.] ~~xxx~~ of the south line and 660 feet  
~~xxx~~ [W.] of the east line of Sec. 36-20S-36 E, Lea County, N.M.

(Give location from section or other legal subdivision lines. Cross out wrong directions.)

If state land the oil and gas lease is No. E-1674 Assignment No. \_\_\_\_\_

If patented land the owner is \_\_\_\_\_

Address \_\_\_\_\_

If government land the permittee is \_\_\_\_\_

Address \_\_\_\_\_

The lessee is \_\_\_\_\_

Address \_\_\_\_\_

We propose to drill well with drilling equipment as follows: \_\_\_\_\_

Rotary

The status of a bond for this well in conformance with Rule 39 of the General Rules and Regulations of the Commission is as follows: See your files

We propose to use the following strings of casing and to land or cement them as indicated:

Size of Hole	Size of Casing	Weight Per Foot	New or Second Hand	Depth	Landed or Cemented	Sacks Cement
<u>16"</u>	<u>12 1/2"</u>	<u>50#</u>	<u>Lapweld</u>	<u>300'</u>	<u>Cemented</u>	<u>Cmt. to surface</u>
<u>11 1/2"</u>	<u>8 1/2"</u>	<u>32#</u>	<u>New S.S.</u>	<u>1600'</u>	<u>"</u>	<u>800</u>
<u>7-7/8"</u>	<u>5 1/2"</u>	<u>17#</u>	<u>New Seamless</u>	<u>3860'</u>	<u>"</u>	<u>800</u>

If changes in the above plan become advisable we will notify you before cementing or landing casing. We estimate that the first productive oil or gas sand should occur at a depth of about 3800 feet.

Additional information:

Approved \_\_\_\_\_, 19\_\_\_\_  
except as follows:

Sincerely yours,

THE ATLANTIC REFINING COMPANY

Company or Operator

By Hal Crown

Position Well Record Department

Send communication regarding well to

Name Above

Address Box 2819, Dallas, Texas.

OIL CONSERVATION COMMISSION,

By \_\_\_\_\_

Title \_\_\_\_\_

Department of Mathematics  
Chicago, Illinois

PROBLEM SET 1

1. Let  $f: \mathbb{R} \rightarrow \mathbb{R}$  be a function satisfying  $f(x+y) = f(x) + f(y)$  for all  $x, y \in \mathbb{R}$ . Show that  $f(x) = cx$  for some constant  $c \in \mathbb{R}$ .

2. Let  $f: \mathbb{R} \rightarrow \mathbb{R}$  be a function satisfying  $f(x+y) = f(x)f(y)$  for all  $x, y \in \mathbb{R}$ . Show that  $f(x) = e^{cx}$  for some constant  $c \in \mathbb{R}$ .

3. Let  $f: \mathbb{R} \rightarrow \mathbb{R}$  be a function satisfying  $f(x+y) = f(x) + f(y) + f(x)f(y)$  for all  $x, y \in \mathbb{R}$ . Show that  $f(x) = e^{cx} - 1$  for some constant  $c \in \mathbb{R}$ .

4. Let  $f: \mathbb{R} \rightarrow \mathbb{R}$  be a function satisfying  $f(x+y) = f(x) + f(y) + f(x)f(y) + f(x)f(y)f(x)$  for all  $x, y \in \mathbb{R}$ . Show that  $f(x) = e^{cx} - 1$  for some constant  $c \in \mathbb{R}$ .

5. Let  $f: \mathbb{R} \rightarrow \mathbb{R}$  be a function satisfying  $f(x+y) = f(x) + f(y) + f(x)f(y) + f(x)f(y)f(x) + f(x)f(y)f(x)f(y)$  for all  $x, y \in \mathbb{R}$ . Show that  $f(x) = e^{cx} - 1$  for some constant  $c \in \mathbb{R}$ .

6. Let  $f: \mathbb{R} \rightarrow \mathbb{R}$  be a function satisfying  $f(x+y) = f(x) + f(y) + f(x)f(y) + f(x)f(y)f(x) + f(x)f(y)f(x)f(y) + f(x)f(y)f(x)f(y)f(x)$  for all  $x, y \in \mathbb{R}$ . Show that  $f(x) = e^{cx} - 1$  for some constant  $c \in \mathbb{R}$ .