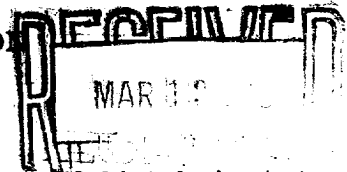


NEW MEXICO OIL CONSERVATION CO. COMMISSION

Santa Fe, New Mexico

MISCELLANEOUS NOTICES



DUPLICATE

Submit this notice in duplicate to the Oil Commission or its proper agent before the work specified is to begin. A copy will be returned to the sender on which will be given the approval, with any modifications considered advisable, or the rejection by the Commissioner or agent, of the plan submitted. The plan as approved should be followed, and work should not begin until approval is obtained. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of notice by checking below:

NOTICE OF INTENTION TO TEST CASING SHUT-OFF	5 1/2"	<input checked="" type="checkbox"/>	NOTICE OF INTENTION TO SHOOT OR CHEMICALLY TREAT WELL	
NOTICE OF INTENTION TO CHANGE PLANS			NOTICE OF INTENTION TO PULL OR OTHERWISE ALTER CASING	
NOTICE OF INTENTION TO REPAIR WELL				
NOTICE OF INTENTION TO DEEPEN WELL			NOTICE OF INTENTION TO PLUG WELL	

Hobbs, New Mexico.

March 11, 1940

Place

Date

OIL CONSERVATION COMMISSION,
Santa Fe, New Mexico.

Gentlemen:

Following is a notice of intention to do certain work as described below at the Gulf Oil Corporation -
Gypsy Prodn. Division Graham State "G" Well No. 5 in C W/2 SE SE
Company or Operator Lease
of Sec. 17, T. 19S, R. 37E, N. M. P. M., Monument Field,
Lea County.

FULL DETAILS OF PROPOSED PLAN OF WORK

FOLLOW INSTRUCTIONS IN THE RULES AND REGULATIONS OF THE COMMISSION

March 10, 1940, the 5 1/2" OD 14# 10-thd. NEW API SS Casing was cemented in Line at 3724'8" with 125 sax 4% Aquagel cement and 50 sax Common by the Halliburton Cementing Process.

Propose to drill plug and test at 12:30 PM March 12, 1940.

MAR 13 1940

Approved _____, 19____
except as follows:

Gulf Oil Corp - Gypsy Prodn. Division
Company or Operator

By C. C. Cummings

Position District Superintendent

Send communications regarding well to

Name C. C. Cummings

Address Hobbs, New Mexico.

OIL CONSERVATION COMMISSION
By Ray Garber
Title OIL & GAS INSPECTOR

4. Mathematical Induction

4.1. Principle of Induction

Let $P(n)$ be a statement involving n .

$P(1)$ is true
 \vdots
 $P(n)$ is true

Then $P(n)$ is true for all $n \in \mathbb{N}$.

Example: $P(n) = 1 + 2 + \dots + n = \frac{n(n+1)}{2}$

$P(1) = 1 = \frac{1(1+1)}{2} = 1$ is true.

Assume $P(k)$ is true for some $k \in \mathbb{N}$.

Then $P(k+1) = 1 + 2 + \dots + k + (k+1) = \frac{k(k+1)}{2} + (k+1) = \frac{(k+1)(k+2)}{2}$ is true.

Therefore $P(n)$ is true for all $n \in \mathbb{N}$.

Example: $P(n) = 1^2 + 2^2 + \dots + n^2 = \frac{n(n+1)(2n+1)}{6}$

$P(1) = 1 = \frac{1(1+1)(2(1)+1)}{6} = 1$ is true.

Assume $P(k)$ is true for some $k \in \mathbb{N}$.

Then $P(k+1) = 1^2 + 2^2 + \dots + k^2 + (k+1)^2 = \frac{k(k+1)(2k+1)}{6} + (k+1)^2 = \frac{(k+1)(k+2)(2k+3)}{6}$ is true.

Therefore $P(n)$ is true for all $n \in \mathbb{N}$.

Example: $P(n) = 1 + 3 + 5 + \dots + (2n-1) = n^2$

$P(1) = 1 = 1^2$ is true.

Assume $P(k)$ is true for some $k \in \mathbb{N}$.

Then $P(k+1) = 1 + 3 + 5 + \dots + (2k-1) + (2k+1) = k^2 + (2k+1) = (k+1)^2$ is true.

Therefore $P(n)$ is true for all $n \in \mathbb{N}$.

Example: $P(n) = 1 + 2 + 3 + \dots + n = \frac{n(n+1)}{2}$