

## OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

## Miscellaneous Reports on Wells

RECEIVED  
NOV 20 1950  
OIL CONSERVATION COMMISSION  
SANTA FE OFFICE

Submit this report in triplicate to the Oil Conservation Commission or its proper agent within ten days after the work specified is completed. It should be signed and sworn to before a notary public for reports on beginning drilling operations, results of shooting well, results of test of casing shut off, result of plugging of well, and other important operations, even though the work was witnessed by an agent of the Commission. Reports on minor operations need not be signed and sworn to before a notary public. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of report by checking below.

REPORT ON BEGINNING DRILLING OPERATIONS		REPORT ON REPAIRING WELL	
REPORT ON RESULT OF SHOOTING OR CHEMICAL TREATMENT OF WELL		REPORT ON PULLING OR OTHERWISE ALTERING CASING	
REPORT ON RESULT OF TEST OF CASING SHUT-OFF	X	REPORT ON DEEPENING WELL	
REPORT ON RESULT OF PLUGGING OF WELL			

November 13, 1950

Date

Midland, Texas

Place

OIL CONSERVATION COMMISSION,  
SANTA FE, NEW MEXICO.  
Gentlemen:

Following is a report on the work done and the results obtained under the heading noted above at the

The Texas Company's State of "NM" Well No. 1 in the  
Company or Operator Lease  
SE/4 SW/4 of Sec. 22, T. 14-S, R. 33-E, N. M. P. M.,  
Wildcat Field, Lea County.

The dates of this work were as follows: See Below

Notice of intention to do the work was (~~was~~) submitted on Form C-102 on 11-9 1950  
and approval of the proposed plan was (~~was~~) obtained. (Cross out incorrect words.)

## DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

TD: 1675' - Anhy

Ran 310' 13-3/8" casing set 326' cemented with 540 sacks.  
Cement circulated. Completed 7:20 PM 11-9-50.

Drilled cement plug 2:00 PM 11-11-50. Tested casing w/1000#  
before & after. Tested OK. Drilling proceeded.

Witnessed by \_\_\_\_\_ Name \_\_\_\_\_ Company \_\_\_\_\_ Title \_\_\_\_\_

Subscribed and sworn before me this \_\_\_\_\_

the \_\_\_\_\_ day of \_\_\_\_\_, 1950

\_\_\_\_\_ Notary Public

I hereby swear or affirm that the information given above is true and correct.

Name HAQUN

Position Dist. Supt.

Representing The Texas Company  
Company or Operator

My commission expires \_\_\_\_\_

Address Box 1720, Ft. Worth 1, Texas

Remarks:

Ray Zuehlke  
Name  
Oil & Gas Inspector  
Title

NOV 21 1950

# Introduction to the Theory of Groups

by J. D. H. Jones

## 1. The Definition of a Group

A group is a set  $G$  with a binary operation  $\cdot$  satisfying the following axioms:

- $(G, \cdot)$  is a semigroup, i.e.  $\cdot$  is associative.
- There exists an identity element  $e \in G$  such that  $eg = ge = g$  for all  $g \in G$ .
- For each  $g \in G$ , there exists an inverse element  $g^{-1} \in G$  such that  $gg^{-1} = g^{-1}g = e$ .

Examples of groups include:

- The set of integers  $\mathbb{Z}$  under addition.
- The set of non-zero real numbers  $\mathbb{R}^*$  under multiplication.
- The set of  $n \times n$  invertible matrices over a field  $F$  under multiplication.
- The symmetric group  $S_n$  on  $n$  letters under composition.

Let  $G$  be a group. The order of  $G$  is denoted by  $|G|$ . If  $|G|$  is finite,  $G$  is called a finite group.

Let  $H$  be a subset of  $G$ .  $H$  is called a subgroup of  $G$  if  $H$  is a group under the operation of  $G$ .

Let  $H$  be a subgroup of  $G$ . The coset of  $H$  containing  $g \in G$  is denoted by  $gH$ . The set of all cosets of  $H$  in  $G$  is denoted by  $G/H$ . The quotient group  $G/H$  is defined as the set  $G/H$  with the operation  $(gH)(hH) = (gh)H$ .

Let  $H$  be a subgroup of  $G$ . The index of  $H$  in  $G$  is denoted by  $[G:H]$ . The index of  $H$  in  $G$  is the number of cosets of  $H$  in  $G$ .

Let  $H$  be a subgroup of  $G$ . The normalizer of  $H$  in  $G$  is denoted by  $N_G(H)$ . The normalizer of  $H$  in  $G$  is the set of all  $g \in G$  such that  $gHg^{-1} = H$ .

Let  $H$  be a subgroup of  $G$ . The centralizer of  $H$  in  $G$  is denoted by  $C_G(H)$ . The centralizer of  $H$  in  $G$  is the set of all  $g \in G$  such that  $gh = hg$  for all  $h \in H$ .

## NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

## MISCELLANEOUS NOTICES

Submit this notice in triplicate to the Oil Conservation 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 Commission 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	<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 PLUG WELL	
NOTICE OF INTENTION TO DEEPEN WELL			

Midland, Texas

November 9, 1950

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

The Texas Company's State of NM "A" Lease

Well No. 1 in SE/4-S4/4

of Sec. 22, T. 14-S, R. 33-E, N. M. P. M., Wildcat

Field.

County.

## FULL DETAILS OF PROPOSED PLAN OF WORK

FOLLOW INSTRUCTIONS IN THE RULES AND REGULATIONS OF THE COMMISSION

TD: 336 - Red beds

Run 310' 13-3/8" casing set 11-9-50. Cemented with 340 sacks. Cement circulated. Completed 7:20 PM 11-9-50.

Anticipate drilling cement plug into casing before & after by pressure method after 36 hrs. or at approximately 7:20 AM 11-11-50.

Approved 11-7-50, 19\_\_\_\_\_  
except at follows:

Company or Operator

By

Position

Dist. Unit.

Send communications regarding well to

Name The Texas Company

Address Box 1270

Midland, Texas

OIL CONSERVATION COMMISSION

By

Title