

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

MISCELLANEOUS REPORTS ON WELL

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-offs, 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	<b>X</b>	REPORT ON DEEPENING WELL	
REPORT ON RESULT OF PLUGGING OF WELL			

Hobbs, New Mexico

Feb. 9, 1938

Place

Date

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

Stanolind Oil & Gas Company

Hill "C"

Well No. 2

in the

Company or Operator

Lease

NW 1/4

of Sec. 5

T. 21S

R. 3E

S. M. P. M.,

Hardy

Field,

Lea

County

The dates of this work were as follows: Feb. 8, 1938

Notice of intention to do the work was (~~was not~~) submitted on Form C-102 on Feb. 7, 1938 and approval of the proposed plan ~~was~~ (was not) obtained. (Cross out incorrect words.)

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

At 8:30 AM February 8, 1938, 48 hours had elapsed, at which time we tested 13" OD new casing set at 284' and cemented with 200 sacks.

We conducted the test in the following manner: Built up 800# pressure, closed valves and held for 30 minutes. Tested okay, drilled plug, built up 800# pressure, closed valves and held for 30 minutes.

DUPLICATE

Witnessed by L. C. Herndon  
Name

Stanolind O & G Co.  
Company

Production Foreman  
Title

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

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

9th day of February, 1938

Name L. C. Herndon

L. C. Herndon  
Notary Public

Position Acting Field Superintendent

Representing Stanolind Oil & Gas Company  
Company or Operator

My Commission expires June 1, 1940

Address Box F, Hobbs, New Mexico

Remarks:

Ernest Shepard  
Name

Oil & Gas Inspector  
Title

FEB 11 1938

# THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

PHYSICS 230: QUANTUM MECHANICS

LECTURE 1: INTRODUCTION TO QUANTUM MECHANICS

LECTURER: JOHN HENNING

DATE: WEDNESDAY, JANUARY 12, 2011

TOPICS: WAVEFUNCTIONS, SCHRÖDINGER EQUATION

1.1. THE WAVEFUNCTION

The wavefunction  $\psi(x, t)$  is a complex-valued function of position  $x$  and time  $t$ .

It is normalized such that  $\int_{-\infty}^{\infty} |\psi(x, t)|^2 dx = 1$ .

The probability density is given by  $|\psi(x, t)|^2$ .

The wavefunction satisfies the Schrödinger equation:

$$i\hbar \frac{\partial \psi}{\partial t} = \hat{H} \psi$$

where  $\hat{H}$  is the Hamiltonian operator.

For a particle in a potential  $V(x)$ , the Hamiltonian is

$$\hat{H} = -\frac{\hbar^2}{2m} \frac{\partial^2}{\partial x^2} + V(x)$$

The stationary wavefunctions are solutions to the time-independent Schrödinger equation:

$$\hat{H} \psi = E \psi$$

where  $E$  is the energy eigenvalue.

The energy eigenvalues are discrete for bound states.

1.2. THE SCHRÖDINGER EQUATION

The Schrödinger equation is a partial differential equation.

It is linear and homogeneous.

The wavefunction is a solution to the Schrödinger equation.

The wavefunction is a function of position and time.

The wavefunction is a complex-valued function.

The wavefunction is a function of position and time.

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