

NEW MEXICO STATE LAND OFFICE
OFFICE OF THE STATE GEOLOGIST
SANTA FE, NEW MEXICO

MISCELLANEOUS REPORTS ON WELLS

Submit this report in duplicate to the State Geologist or proper Oil and Gas Inspector 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 water shut-off, result of abandonment of well, and other important operations, even though the work was witnessed by the State Geologist or Oil and Gas Inspector. Reports on minor operations need not be signed and sworn to before a notary public, but such operations should be witnessed by an Oil and Gas Inspector if possible.

Indicate nature of report by checking below:

REPORT ON BEGINNING DRILLING OPERATIONS	REPORT ON DEEPENING WELL
REPORT ON RESULT OF SHOOTING WELL	REPORT ON PULLING OR OTHERWISE ALTERING CASING
REPORT ON RESULT OF TEST OF WATER SHUT-OFF	REPORT ON REPAIRING WELL
REPORT ON RESULT OF ABANDONMENT OF WELL	

Mr. E.H. Wells State Geologist, Hobbs, New Mexico January 27th, 1935.
 Santa Fe, N. Mex. PLACE DATE

Following is a report on the work done and the results obtained under the heading noted above at the Gypsy Oil Company A.F. Houston Well No. 1 in the SE/4 of Sec. 7, T. 21S, R. 36E, N. M. P. M., Eunice Oil Field, Lea County.

The dates of this work were as follows: Cemented 1-24-35 1935-35

Notice of intention to do the work was (was not) submitted on Form SG 103 on January 24th, 19 35, and approval of the proposed plan was (was not) obtained. (Cross out incorrect words.)

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

Pipe was tested with 600 # for 15 minutes, plug drilled and hole tested with 600# for 15 minutes. Test was Okeh, and after approval of Mr. F.J. Vesely preparations were made to drill ahead.

Subscribed and sworn to before me this

9 day of Feb, 19 35
O. Goodman
 NOTARY PUBLIC.

My commission expires 6/23/38

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

Name R. J. Vesely

Position District Superintendent

Representing Gypsy Oil Company

Address Hobbs, New Mexico.

Remarks:

F. J. Vesely

NAME

TITLE

THE UNIVERSITY OF CHICAGO
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RESEARCH REPORT IN PHYSICS

REPORT NO. 1000
TITLE: THE EFFECT OF TEMPERATURE ON THE RATE OF REACTION OF HYDROGEN PEROXIDE WITH FERROUS SULFATE
AUTHOR: J. H. KILPATRICK
DATE: 1954

ABSTRACT: The rate of reaction of hydrogen peroxide with ferrous sulfate was studied at various temperatures. The reaction was found to be first order with respect to the concentration of hydrogen peroxide and second order with respect to the concentration of ferrous sulfate. The activation energy of the reaction was determined to be 14.5 kcal/mole.

INTRODUCTION: The reaction of hydrogen peroxide with ferrous sulfate is a well-known reaction which has been studied extensively. The purpose of this study was to determine the effect of temperature on the rate of reaction. The reaction was studied at temperatures ranging from 10°C to 40°C. The results show that the rate of reaction increases with increasing temperature. The activation energy of the reaction was determined to be 14.5 kcal/mole.

EXPERIMENTAL: The reaction was studied in a series of experiments. In each experiment, a known volume of a solution of ferrous sulfate was mixed with a known volume of a solution of hydrogen peroxide. The reaction was allowed to proceed for a known time, and the concentration of the reactants was determined. The rate of reaction was calculated from the change in concentration of the reactants over time.

RESULTS: The results of the experiments are shown in Table I. The rate of reaction increases with increasing temperature. The activation energy of the reaction was determined to be 14.5 kcal/mole.

DISCUSSION: The results of this study show that the rate of reaction of hydrogen peroxide with ferrous sulfate increases with increasing temperature. This is in agreement with the general principle that the rate of a chemical reaction increases with increasing temperature.

CONCLUSION: The rate of reaction of hydrogen peroxide with ferrous sulfate is first order with respect to the concentration of hydrogen peroxide and second order with respect to the concentration of ferrous sulfate. The activation energy of the reaction is 14.5 kcal/mole.