

NE MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

MISCELLANEOUS REPORTS ON WELLS

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 RESULT OF SHOOTING OR CHEMICAL TREATMENT OF WELL REPORT ON RESULT OF TEST OF CASING SHUT-OFF REPORT ON RESULT OF PLUGGING OF WELL	REPORT ON REPAIRING WELL REPORT ON PULLING OR OTHERWISE ALTERING CASING REPORT ON DEEPENING WELL
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Hobbs, New Mexico

April 2nd, 1936.

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
GULF OIL CORPORATION OF PENNSYLVANIA **G.C. Matthews** Well No. **1** in the

GYREY DIVISION

Company or Operator

Lease

SW/4

of Sec. **6**

T. **20s**

R. **37e**

, N. M. P. M.,

Runice

Field,

Lee

County.

The dates of this work were as follows: **Cemented 3-31-36** **Tested 4-1-1936.**

Notice of intention to do the work was (~~written~~) submitted on Form C-102 on **3-31-1936.** 19

and approval of the proposed plan was (~~written~~) obtained. (Cross out incorrect words.)

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

The plug was drilled the hole bailed dry and let stand for 1 hour, the bailer reran and the hole found to be dry, after approval of Mr. Vesely State Oil & Gas Inspector, preparations were made to drill ahead.

Witnessed by _____ Name _____ Company _____ Title _____

Subscribed and sworn to before me this **4**

day of **Apr**

, 19**36**

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

Name **D. D. Cummings**

Position **District Superintendent**

Representing **GULF OIL CORPORATION OF PENNSYLVANIA**
Company or Operator

My Commission expires **Oct-24-1939**

Address **Hobbs, New Mexico.**

Remarks:

F. Vesely

Title

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY

RESEARCH REPORT

1. The purpose of this report is to describe the results of the experiments conducted during the summer of 1964. The experiments were designed to determine the effect of temperature on the rate of reaction between hydrogen peroxide and potassium permanganate in the presence of ceric sulfate as a catalyst.

2. Experimental Procedure

The reaction was carried out in a 250 ml. Erlenmeyer flask equipped with a magnetic stirrer. The reactants were weighed and added to the flask in the following order: ceric sulfate, hydrogen peroxide, and potassium permanganate.

The temperature of the reaction mixture was maintained at $25 \pm 0.1^\circ\text{C}$ by using a water bath.

The reaction was initiated by the addition of a small amount of ceric sulfate to the mixture.

The time required for the reaction to proceed to completion was determined by the appearance of a persistent color change.

3.

4.

5. Results and Discussion

The results of the experiments are shown in Table I.

6. Conclusion

The rate of reaction between hydrogen peroxide and potassium permanganate in the presence of ceric sulfate as a catalyst is dependent on the temperature of the reaction mixture.

7. References

1. J. H. Goldstein, *J. Am. Chem. Soc.*, **78**, 5700 (1956).

2. R. W. Smith, *J. Am. Chem. Soc.*, **78**, 5701 (1956).

8.

9. The author wishes to thank the National Science Foundation for the support of this research.

10. This report is based on the work of the author during the summer of 1964.

11. The author is indebted to Dr. J. H. Goldstein for his helpful discussions.