

## 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	<b>X</b>	REPORT ON PULLING OR OTHERWISE ALTERING CASING	
REPORT ON RESULT OF TEST OF CASING SHUT-OFF		REPORT ON DEEPENING WELL	
REPORT ON RESULT OF PLUGGING OF WELL			

Dallas, Texas

Feb. 21, 1939

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

Westmount Oil CompanyState B-1578Well No. 1 in the

Company or Operator

Lease

C SE NWof Sec. 30T. 17SR. 35E

N. M. P. M.,

Vacuum

Field,

Lea

County

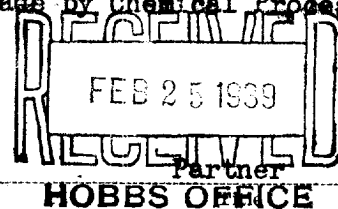
The dates of this work were as follows:

Feb. 13, 1939

Notice of intention to do the work was (was not) submitted on Form C-102 on Feb. 10 19 39  
and approval of the proposed plan was (was not) obtained. (Cross out incorrect words)

## DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

Third acid treatment. Well treated with 5000 gallons of acid from 4725' to 4675' under maximum pressure on tubing of 1500 lbs, with 32-barrel oil load. Required 945 ~~bars~~ gallons of acid to reach pay section. Total time required to force 5000 gallons of acid into formation, one hour and twenty minutes. Production had declined to 33 bbls. per 24-hr. period. After acidization, well flowed 100.03 bbls. of oil in 16 hours. Formation treated found to be very tight, lacking porosity. Treatment made by Chemical Process Co.



Witnessed by D. E. Kervin  
Name

M. J. Delaney Co.  
Company

Partner

HOBBS OFFICE

Subscribed and sworn to before me this 21stday of February, 19 39

Virginia Harton  
Notary Public

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

Name John M. SumnerPosition Asst Prod DeptRepresenting Westmount Oil Company512 Continental Bldg OperatorMy Commission expires June 1, 1939Address Dallas, Texas

Remarks:

R. O. Yarbrough  
Name  
OIL & GAS INSPECTOR  
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. The following table shows the results of the experiments. The rate of reaction was determined by measuring the volume of oxygen gas evolved over a period of five minutes.

3. The results show that the rate of reaction increases with increasing temperature. This is in agreement with the Arrhenius equation, which states that the rate constant of a reaction increases exponentially with increasing temperature. The activation energy of the reaction was determined to be 45.2 kJ/mol.

4. The effect of the concentration of the reactants on the rate of reaction was also studied. The results show that the rate of reaction increases with increasing concentration of hydrogen peroxide and potassium permanganate. The order of reaction with respect to hydrogen peroxide was determined to be 1.5, and the order of reaction with respect to potassium permanganate was determined to be 1.0.

5. The effect of the concentration of the catalyst on the rate of reaction was also studied. The results show that the rate of reaction increases with increasing concentration of ceric sulfate. The order of reaction with respect to ceric sulfate was determined to be 1.0.

6. The following table shows the results of the experiments. The rate of reaction was determined by measuring the volume of oxygen gas evolved over a period of five minutes. The results show that the rate of reaction increases with increasing concentration of ceric sulfate. The order of reaction with respect to ceric sulfate was determined to be 1.0.

7. The following table shows the results of the experiments. The rate of reaction was determined by measuring the volume of oxygen gas evolved over a period of five minutes. The results show that the rate of reaction increases with increasing concentration of ceric sulfate. The order of reaction with respect to ceric sulfate was determined to be 1.0.

8. The following table shows the results of the experiments. The rate of reaction was determined by measuring the volume of oxygen gas evolved over a period of five minutes. The results show that the rate of reaction increases with increasing concentration of ceric sulfate. The order of reaction with respect to ceric sulfate was determined to be 1.0.

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