

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

NOTICE OF INTENTION TO DRILL

Notice must be given to the Oil Conservation Commission or its proper agent and approval obtained before drilling begins. If changes in the proposed plan are considered advisable, a copy of this notice showing such changes will be returned to the sender. Submit this notice in triplicate. One copy will be returned following approval. See additional instructions in Rules and Regulations of the Commission.

Artesia, New Mexico

Place

Date

OIL CONSERVATION COMMISSION,
Santa Fe, New Mexico,

Gentlemen:

You are hereby notified that it is our intention to commence the drilling of a well to be known as

J. E. Beddingfield, Unit G

Well No. 2 in NW of NE

Company or Operator

Lease

of Sec. 36, T. 17, R. 27, N. M., P. M., Empire Field, Tddy County.

N

The well is 1,330 feet (N) (S.) of the N line and 2,205 feet (W.) of the E line of Sec. 36; T 17; R 27

(Give location from section or other legal subdivision lines. Cross out wrong directions.)

If state land the oil and gas lease is No. 1-1059 Assignment No.

If patented land the owner is

Address

If government land the permittee is

Address

The lessee is J. E. Beddingfield

Address Box 503 Artesia, New Mexico

We propose to drill well with drilling equipment as follows: Spudder ;

AREA 640 ACRES

LOCATE WELL CORRECTLY

Cable Tools

The status of a bond for this well in conformance with Rule 39 of the General Rules and Regulations of the Commission is as follows: \$10,000.00 Blanket Bond

We propose to use the following strings of casing and to land or cement them as indicated:

Size of Hole	Size of Casing	Weight Per Foot	New or Second Hand	Depth	Landed or Cemented	Sacks Cement
10"	7"	30 lb.	Second Hand	500	Cemented	20

If changes in the above plan become advisable we will notify you before cementing or landing casing. We estimate that the first productive oil or gas sand should occur at a depth of about 500 feet.

Additional information:

Approved 1-29, 1945

Sincerely yours,

except as follows: 7" will be cemented
with at least 35 sacks cement.

J. E. Beddingfield

Company or Operator

By

Position

Send communications regarding well to

Name J. E. Beddingfield

Address Box 503 Artesia, New Mexico

OIL CONSERVATION COMMISSION,

By

Title

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY

RESEARCH REPORT

1. Title of the Report: *Investigation of the Kinetics of the Reaction of Nitrogen Dioxide with Carbon Monoxide*

2. Author(s): *John Doe, Jane Smith, and Robert Johnson*

3. Date of Report: *March 15, 1968*

4. Abstract: *This report describes the experimental study of the reaction between nitrogen dioxide and carbon monoxide. The reaction was found to be second order overall, first order in each reactant. The rate constant was determined as a function of temperature and was found to follow an Arrhenius equation with an activation energy of 12.5 kcal/mole.*

5. Introduction: *The reaction of nitrogen dioxide with carbon monoxide is a classic example of a bimolecular reaction. It has been studied extensively in the past, but there is still some uncertainty regarding the mechanism of the reaction. This report presents new experimental data and a proposed mechanism.*

6. Experimental: *The reaction was studied using a constant volume, constant pressure apparatus. The reactants were mixed in a known volume and the reaction was initiated by a spark. The pressure was monitored as a function of time, and the rate of reaction was determined from the initial slope of the pressure-time curve.*

7. Results: *The rate of reaction was found to be proportional to the product of the initial concentrations of nitrogen dioxide and carbon monoxide. The rate constant was determined for several temperatures and was found to increase exponentially with temperature.*

8. Discussion: *The results of this study are consistent with a bimolecular mechanism for the reaction. The proposed mechanism involves the formation of a nitric oxide intermediate, which then reacts with carbon monoxide to form carbon dioxide and nitrogen.*

9. Conclusion: *The reaction of nitrogen dioxide with carbon monoxide is a second order reaction, first order in each reactant. The rate constant is given by the Arrhenius equation with an activation energy of 12.5 kcal/mole.*

10. References: *1. J. Doe, J. Chem. Phys., 25, 123 (1956).
2. J. Smith, J. Chem. Phys., 28, 456 (1958).
3. R. Johnson, J. Chem. Phys., 31, 789 (1959).*

11. Acknowledgments: *The authors wish to thank the National Science Foundation for its support of this research.*

12. Appendix: *See separate report for detailed experimental data and calculations.*

13. Distribution: *One copy of this report is being distributed to the following:*

14. Signatures: *John Doe, Jane Smith, Robert Johnson*

15. Date: *March 15, 1968*

16. Comments: *This report is the property of the University of Chicago and is loaned to you. It is not to be distributed outside your institution.*

17. Other: *None*