

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

March 12, 1962

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Texaco, Inc.
P. O. Box 728
Hobbs, New Mexico

Attention: Mr. H. N. Wade

Gentlemen:

Reference is made to your letter of March 8, 1962, requesting temporary administrative approval as a tubingless completion below a depth of 5,000 feet of your K. F. Quail Well No. 1, NW/4 SW/4 of Section 1, Township 20 South, Range 34 East, Lea County, New Mexico.

Inasmuch as the production here is apparently of marginal nature, and a hearing has already been set for March 28th for this well, this office has no objection to a temporary exception pending the outcome of this hearing.

The Hobbs office of the Oil Conservation Commission is, therefore, hereby authorized to assign the subject well an allowable for the Bone Spring formation pending the issuance of an order in Case No. 2510.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/DSN/ir

cc: Mr. Joe D. Ramey
Oil Conservation Commission
Hobbs, New Mexico

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
RESEARCH REPORT NO. 1000

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The following table shows the results of the experiments conducted on the effect of temperature on the rate of reaction of the various compounds. The data are given in terms of the rate constant, k , and the activation energy, E_a , for each reaction. The values of k are given in units of min^{-1} and the values of E_a are given in units of cal/mole .

Compound	k at 25°C	E_a (cal/mole)
1. CH_3COCH_3	1.5×10^{-4}	12,000
2. $\text{CH}_3\text{COCH}_2\text{CH}_3$	2.5×10^{-4}	11,000
3. $\text{CH}_3\text{COCH}_2\text{CH}_2\text{CH}_3$	3.5×10^{-4}	10,000
4. $\text{CH}_3\text{COCH}_2\text{CH}_2\text{CH}_2\text{CH}_3$	4.5×10^{-4}	9,000
5. $\text{CH}_3\text{COCH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_3$	5.5×10^{-4}	8,000

The results of the experiments show that the rate of reaction increases with increasing temperature and with increasing chain length of the compound. The activation energy decreases as the chain length increases, indicating that the reaction becomes easier as the chain length increases. The values of k and E_a are given in the table above.

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