

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office New Mexico
Lease No. N.M. 067577-4
Unit W.W. Holmes-Federal

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....	<input checked="" type="checkbox"/>
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO ABANDON WELL.....		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

~~XXXXXXXX~~ July 1, 1963

Well No. 1 is located 563 ft. from XX S line and 1020 ft. from XX W line of sec. 29
SW 1/4 29 17 N R 4 W N.M.P.M.
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Wildcat Sandoval New Mexico
(Field) (County or Subdivision) (State or Territory)

RECEIVED

AUG 19 1963

The elevation of the derrick floor above sea level is ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate muddling logs, cementing points, and all other important proposed work)

U. S. GEOLOGICAL SURVEY
FEDERAL BUREAU OF OIL AND GAS, NEW MEXICO

Well cemented as per instructions from Phil McGrath. Hole filled with cement and dry hole marker planted.

RECEIVED
AUG 20 1963
OIL CON. COM.
DIST. 3

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company W.W. Holmes

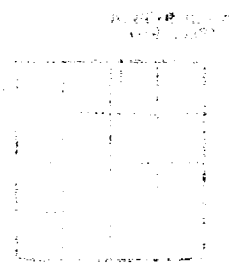
Address Box 367

Amarillo, Texas

By W.W. Holmes
Title Assistant to the General Manager

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY

RESEARCH REPORT
NO. 1000
1950



THE REACTION OF ETHYLENE WITH OXYGEN AT HIGH PRESSURES

The reaction of ethylene with oxygen at high pressures has been studied in a bomb calorimeter. The reaction is exothermic and proceeds to form ethylene oxide. The rate of reaction increases with increasing pressure and temperature. The activation energy for the reaction is approximately 15 kcal/mole. The reaction is first order with respect to ethylene and first order with respect to oxygen. The overall reaction is second order.

By *W. L. Miller and R. W. Washburn*

Received for consideration, June 15, 1950; revised manuscript received, August 10, 1950.

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EXPERIMENTAL

The reaction was studied in a bomb calorimeter of the type described by Washburn and Miller.¹ The bomb was filled with ethylene and oxygen at various pressures and temperatures. The reaction was initiated by a spark discharge. The heat of reaction was measured by the temperature rise of the bomb and the surrounding water.



The bomb was calibrated by the combustion of known amounts of benzoic acid. The heat capacity of the bomb was determined by the method of Washburn and Miller.¹

The rate of reaction was determined from the temperature rise of the bomb. The initial concentration of ethylene and oxygen was determined from the pressure and volume of the bomb. The reaction was studied at pressures of 100, 200, and 300 atm and at temperatures of 25, 50, and 75°C.