

NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico

MISCELLANEOUS REPORTS ON WELLS

Submit this report in TRIPLICATE to the District Office, Oil Conservation Commission, within 10 days after the work specified is completed. It should be signed and filed as a report on Beginning Drilling Operations, Results of test of casing shut-off, result of plugging of well, result of well repair, and other important operations, even though the work was witnessed by an agent of the Commission. 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 TEST OF CASING SHUT-OFF		REPORT ON REPAIRING WELL	
REPORT ON RESULT OF PLUGGING WELL		REPORT ON RECOMPLETION OPERATION		REPORT ON (Other) <b>INSTALLING PUMPING UNIT</b>	<b>XX</b>

February 24, 1953  
(Date)

Hobbs, New Mexico  
(Place)

Following is a report on the work done and the results obtained under the heading noted above at the

Gulf Oil Corporation  
(Company or Operator)

Harry Leonard "C"  
(Lease)

Bateman & Whitsitt  
(Contractor)

Well No. 8 in the SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  of Sec. 36

T. 21-S, R. 36-E, NMPM, Arrowhead Pool, Lee County.

The Dates of this work were as follows: January 15 - February 5, 1953

Notice of intention to do the work (was) ~~XXXXXX~~ submitted on Form C-102 on December 17, 1953, 19\_\_\_\_,  
(Cross out incorrect words)

and approval of the proposed plan (was) ~~XXXXXX~~ obtained.

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

Installed Luffkin T6D-9B Unit w/10 HP electric motor. Ran 123 joints 3762' of 2-3/8" tubing. Tubing set at 3770', seating nipple at 3763', perforations at 3764-3766'. Ran pump and rods.

RESULTS: Pumped on Oil Conservation Commission Test 8 bbls oil, 6 bbls water thru tubing in 24 hours, 14-32" SPH. Formation gas volume TSTM GOR none. Average daily production for January 1953 no oil, no water. Allowable before installing pumping unit no bopd. Allowable after installing pumping unit 8 bopd.

Witnessed by C. C. Brown  
(Name)

Gulf Oil Corporation  
(Company)

Foreman  
(Title)

Approved: OIL CONSERVATION COMMISSION

Roy Garbrough  
(Name)  
(Title)  
(Date)

I hereby certify that the information given above is true and complete to the best of my knowledge.

Name Chas Taylor  
Position Area Prod. Supt.  
Representing Gulf Oil Corporation  
Address Box 2167, Hobbs, New Mexico

1. The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations

$$\begin{aligned} \Delta u &= f(x, y, z, u, v, w), \\ \Delta v &= g(x, y, z, u, v, w), \\ \Delta w &= h(x, y, z, u, v, w), \end{aligned} \quad (1)$$

$$\begin{aligned} u &= 0, \quad v = 0, \quad w = 0, \\ u &= 0, \quad v = 0, \quad w = 0, \\ u &= 0, \quad v = 0, \quad w = 0, \end{aligned} \quad (2)$$

where  $\Delta$  is the Laplace operator,  $f, g, h$  are functions of the coordinates  $x, y, z$  and the unknown functions  $u, v, w$ .

The second part of the paper is devoted to a detailed study of the problem of the existence of solutions of the system of equations (1) for the case when the functions  $f, g, h$  are continuous and have continuous first derivatives.

It is shown that if the functions  $f, g, h$  satisfy certain conditions, then the system of equations (1) has a unique solution.

The author wishes to express his sincere thanks to the members of the Institute of Mathematics of the Academy of Sciences of the USSR for their interest in the work and for the facilities provided for the research.