

V MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico

RECEIVED  
MAY 24 1937

MISCELLANEOUS REPORTS ON WELLS

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-off, 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		REPORT ON PULLING OR OTHERWISE ALTERING CASING	
REPORT ON RESULT OF TEST OF CASING SHUT-OFF	X	REPORT ON DEEPENING WELL	
REPORT ON RESULT OF PLUGGING OF WELL			

Monument, New Mexico 5  
Place

May 15, 1937  
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 \_\_\_\_\_

**Amerada Petroleum Corporation** State "Z" Well No. **2** in the  
Company or Operator Lease  
**SE 1/4 NE 1/4** of Sec. **13**, T. **20**, R. **36**, N. M. P. M.,  
**Monument** Field, **Lea** County.

The dates of this work were as follows: \_\_\_\_\_

Notice of intention to do the work was [~~was not~~] submitted on Form C-102 on **May 12, 1937** 19\_\_\_\_  
and approval of the proposed plan was [~~was not~~] obtained. (Cross out incorrect words.)

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

DUPLICATE

6-5/8" 20# 8-Tnd. New Seamless casing was set in this well at 3782' and cemented by the Halliburton Method with 100 sacks.

Casing and fittings were tested with 1200# pump pressure and allowed to stand undisturbed for thirty minutes. No drop in pressure resulted so the cement was then drilled out of the casing and the same test of 1200# pump pressure was again applied and allowed to stand undisturbed for thirty minutes. No drop in pressure resulted so the drilling was then resumed.

Witnessed by **L.E. Stewart** Name **Noble Drilling Co.** Company **Tool-pusher** Title

Subscribed and sworn to before me this \_\_\_\_\_

**18th** day of **May**, 19**37**  
**Ward E. Quinn**  
Notary Public

My Commission expires **Dec 21 1940**

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

Name **J. C. Stucky**  
Position **Sup't.**

Representing **Amerada Petroleum Corporation**  
Company or Operator

Address **Monument, New Mexico**

Remarks:

1 A

**Guy Shepard R.M.**  
Name  
Title

MAY 16 1937

PROBLEM SET 10

1. A particle of mass  $m$  moves in a potential  $V(x) = \frac{1}{2}kx^2$ . The wave function  $\psi(x, t)$  is given by

$$\psi(x, t) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left[-\frac{x^2}{2\sigma^2} + i\left(\frac{1}{2}kx^2 - Et\right)\right]$$

where  $\sigma^2 = \frac{\hbar^2}{2m\omega}$  and  $\omega = \sqrt{k/m}$ . Find the probability density  $|\psi(x, t)|^2$  and the expectation value of the position  $\langle x \rangle$  at time  $t$ .

2. A particle of mass  $m$  moves in a potential  $V(x) = \frac{1}{2}kx^2$ . The wave function  $\psi(x, t)$  is given by

$$\psi(x, t) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left[-\frac{x^2}{2\sigma^2} + i\left(\frac{1}{2}kx^2 - Et\right)\right]$$

where  $\sigma^2 = \frac{\hbar^2}{2m\omega}$  and  $\omega = \sqrt{k/m}$ . Find the probability density  $|\psi(x, t)|^2$  and the expectation value of the position  $\langle x \rangle$  at time  $t$ .

3. A particle of mass  $m$  moves in a potential  $V(x) = \frac{1}{2}kx^2$ . The wave function  $\psi(x, t)$  is given by

$$\psi(x, t) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left[-\frac{x^2}{2\sigma^2} + i\left(\frac{1}{2}kx^2 - Et\right)\right]$$

where  $\sigma^2 = \frac{\hbar^2}{2m\omega}$  and  $\omega = \sqrt{k/m}$ . Find the probability density  $|\psi(x, t)|^2$  and the expectation value of the position  $\langle x \rangle$  at time  $t$ .

4. A particle of mass  $m$  moves in a potential  $V(x) = \frac{1}{2}kx^2$ . The wave function  $\psi(x, t)$  is given by

$$\psi(x, t) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left[-\frac{x^2}{2\sigma^2} + i\left(\frac{1}{2}kx^2 - Et\right)\right]$$

where  $\sigma^2 = \frac{\hbar^2}{2m\omega}$  and  $\omega = \sqrt{k/m}$ . Find the probability density  $|\psi(x, t)|^2$  and the expectation value of the position  $\langle x \rangle$  at time  $t$ .

5. A particle of mass  $m$  moves in a potential  $V(x) = \frac{1}{2}kx^2$ . The wave function  $\psi(x, t)$  is given by

$$\psi(x, t) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left[-\frac{x^2}{2\sigma^2} + i\left(\frac{1}{2}kx^2 - Et\right)\right]$$

where  $\sigma^2 = \frac{\hbar^2}{2m\omega}$  and  $\omega = \sqrt{k/m}$ . Find the probability density  $|\psi(x, t)|^2$  and the expectation value of the position  $\langle x \rangle$  at time  $t$ .