

NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

REQUEST FOR PERMISSION TO CONNECT WITH PIPE LINE

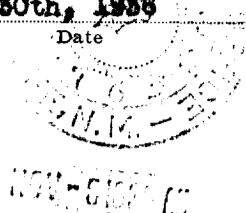
This request should be SUBMITTED IN TRIPLICATE. See instructions in the Rules and Regulations of the Commission.

Tulsa, Oklahoma.

October 30th, 1936

Place

Date



OIL CONSERVATION COMMISSION,
Santa Fe, New Mexico.

Gentlemen:

Permission is requested to connect Gulf Oil Corporation J. R. Phillips
Company or Operator Lease

Wells No. 2 in NE NE of Sec. 31 T. 19S, R. 57E, N. M. P. M.

Monument Field, Lea County, with the pipe line of the

Gulf Refining Company Tulsa, Oklahoma.
Pipe Line Co. Address

Status of land (State, Government or privately owned) _____

Location of tank battery _____ ?

Description of tanks 16 x 10 Wood

Logs of the above wells were filed with the Oil Conservation Commission October 30th, 19 36

All other requirements of the Commission have (~~been~~) been complied with. (Cross out incorrect words.)

Additional information:

Yours truly,

Permission is hereby granted to make pipe line connections requested above.

Gulf Oil Corporation

Owner or Operator

By [Signature]

Position General Superintendent

Address Tulsa, Oklahoma

OIL CONSERVATION COMMISSION,

By [Signature]

Title Sec.

Date Nov 10, 1936

PHYSICS 354: QUANTUM MECHANICS

PROBLEM SET 10

DATE: _____

1. A particle of mass m is confined to a one-dimensional potential well

$$V(x) = \begin{cases} 0 & -a \leq x \leq a \\ \infty & \text{otherwise} \end{cases}$$

where $a > 0$. The wave function $\psi(x)$ is real and satisfies the boundary conditions $\psi(-a) = \psi(a) = 0$.

$$\psi(x) = \cos\left(\frac{n\pi x}{2a}\right)$$

$$\psi(x) = \sin\left(\frac{n\pi x}{2a}\right)$$

1.

2. $n = 1, 2, 3, \dots$

3. The energy eigenvalues are given by $E_n = \frac{\hbar^2 k_n^2}{2m}$, where $k_n = \frac{n\pi}{2a}$.

4. The ground state energy is $E_1 = \frac{\hbar^2 \pi^2}{8ma^2}$.

5. The wave function is $\psi(x) = \cos\left(\frac{\pi x}{2a}\right)$.

6. The energy is $E_1 = \frac{\hbar^2 \pi^2}{8ma^2}$.

7. The wave function is $\psi(x) = \sin\left(\frac{\pi x}{2a}\right)$.

8.