

N V MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

NOTICE OF INTENTION TO DRILL

Notice must be given to the Oil Conservation Commission or its proper agent and approval obtained before drilling begins. If changes in the proposed plan are considered advisable, a copy of this notice showing such changes will be returned to the sender. Submit this notice in triplicate. One copy will be returned following approval. See additional instructions in Rules and Regulations of the Commission.

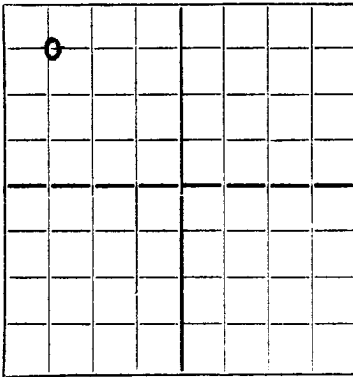
Roswell, New Mexico,

May 18, 1938.

OIL CONSERVATION COMMISSION,
Santa Fe, New Mexico.
Gentlemen:

You are hereby notified that it is our intention to commence the drilling of a well to be known as _____

Gulf-Two States Oil Co. et al, State Lea Well No. 4 in NW¹NW¹
Company or Operator Lease
of Sec. 16, T. 22 S., R. 37 E., N. M. P.M., Penrose Field, Lea County.
N. The well is 660 feet 660 (S.) of the N line and 660 feet
(E.) 660 of the W line of Section 16.



AREA 640 ACRES
LOCATE WELL CORRECTLY

(Give location from section or other legal subdivision lines. Cross out wrong directions.)

If state land the oil and gas lease is No. B-3480, Assignment No. _____

If patented land the owner is _____

Address _____

If government land the permittee is _____

Address _____

The lessee is Gulf Oil Corporation,

Address Tulsa, Oklahoma.

DUPLICATE

We propose to drill well with drilling equipment as follows: _____

Rotary tools 0 - 3720.

The status of a bond for this well in conformance with Rule 39 of the General Rules and Regulations of the Commission is as follows: Filed.

We propose to use the following strings of casing and to land or cement them as indicated:

Size of Hole	Size of Casing	Weight Per Foot	New or Second Hand	Depth	Landed or Cemented	Sacks Cement
	7 5/8	26#	New	300'	Cemented	125 To Surface
	5 1/2	15#	"	3560'	"	250

If changes in the above plan become advisable we will notify you before cementing or landing casing. We estimate that the first productive oil or gas sand should occur at a depth of about 3630

Additional information:

RECEIVED
MAY 19 1938
RECEIVED

HOBBS OFFICE

Approved _____, 19____
except as follows:

Sincerely yours,

TWO STATES OIL COMPANY,

Company or Operator
By Herman Crile,

Position Agent.

Send communication regarding well to

Name H. R. Crile,

Address Roswell, New Mexico.

OIL CONSERVATION COMMISSION,

By Guy Shepard R.M.

Title Oil & Gas Inspector

PHYSICS 551: QUANTUM MECHANICS

Problem Set 10: Scattering Theory

1. Consider a particle of mass m and energy E incident from the left on a potential barrier of height V_0 and width a .

(a) Find the transmission and reflection coefficients T and R for $E > V_0$.

(b) Find the transmission and reflection coefficients T and R for $E < V_0$.

(c) Show that $T + R = 1$ for both cases.

2. Consider a particle of mass m and energy E incident from the left on a potential well of depth V_0 and width a .

(a) Find the transmission and reflection coefficients T and R for $E > V_0$.

(b) Find the transmission and reflection coefficients T and R for $E < V_0$.

(c) Show that $T + R = 1$ for both cases.

3. Consider a particle of mass m and energy E incident from the left on a potential barrier of height V_0 and width a .

(a) Find the transmission and reflection coefficients T and R for $E > V_0$.

(b) Find the transmission and reflection coefficients T and R for $E < V_0$.

(c) Show that $T + R = 1$ for both cases.

4. Consider a particle of mass m and energy E incident from the left on a potential well of depth V_0 and width a .

(a) Find the transmission and reflection coefficients T and R for $E > V_0$.

(b) Find the transmission and reflection coefficients T and R for $E < V_0$.

(c) Show that $T + R = 1$ for both cases.