

NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

HOBBS OFFICE OCC

It is necessary that Form C-104 be approved before this form can be approved an initial allowable be assigned to any completed Oil or Gas well. Submit this form in QUADRUPPLICATE.

1954 MAY 13 AM 10:25

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Company or Operator Magnolia Petroleum Company Lease State Bridges

Address Box 727, Kermit, Texas Box 900, Dallas, Texas
(Local or Field Office) (Principal Place of Business)

Unit 0, Well(s) No. 42, Sec. 27, T. 17, R. 34, Pool Vacuum

County Lea Kind of Lease: State

If Oil well Location of Tanks SE/4 of Section 27

Authorized Transporter Magnolia Pipe Line Company Address of Transporter
Box 1073, Midland, Texas Box 900, Dallas, Texas
(Local or Field Office) (Principal Place of Business)

Per cent of Oil or ~~Natural Gas~~ to be Transported 100 Other Transporters authorized to transport Oil or Natural Gas from this unit are.....%

REASON FOR FILING: (Please check proper box)

- NEW WELL..... CHANGE IN OWNERSHIP.....
- CHANGE IN TRANSPORTER..... OTHER (Explain under Remarks).....

REMARKS:

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 13th day of May, 1954.

Approved....., 19.....
Magnolia Petroleum Company

OIL CONSERVATION COMMISSION
By J. G. Stanley Title District Superintendent
By E. H. Blundell Title District Superintendent

INSTRUCTIONS

This form shall be executed and filed in QUADRUPPLICATE with the District Office of the Oil Conservation Commission, covering each unit from which oil or gas is produced. A separate certificate shall be filed for each transporter authorized to transport oil or gas from a unit. After said certificate has been approved by the Oil Conservation Commission, one copy shall be forwarded to the transporter, one copy returned to the producer, and two copies retained by the Oil Conservation Commission.

A new certificate shall be filed to cover each change in operating ownership and each change in the transporter, except that in the case of a temporary change in the transporter involving less than the allowable production for one proration period, the operator shall in lieu of filing a new certificate notify the Oil Conservation Commission District Office, and the transporter authorized by certificate on file with the Commission, by letter of the estimated amount of oil or gas to be moved by the transporter temporarily moving oil or gas from the unit and the name of such temporary transporter and a copy of such notice shall also be furnished such temporary transporter. Such temporary transporter shall not move any more oil or gas than the estimated amount shown in said notice.

This certificate when properly executed and approved by the Oil Conservation Commission shall constitute a permit for pipe line connection and authorization to transport oil and gas from the property named therein and shall remain in full force and effect until

- (a) Operating ownership changes
- (a) The transporter is changed or
- (c) The permit is cancelled by the Commission.

If any of the rules and regulations of the Oil Conservation Commission have not been complied with at the same time this report is filed, explain fully under the heading "REMARKS."

In all cases where this certificate is filed to cover a change in operating ownership or a change in the transporter designated to move oil or gas, show under "REMARKS" the previous owner or operator and the transporter previously authorized to transport oil or gas.

A separate report shall be filed to cover each producing unit as designated by the Oil Conservation Commission.

NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

It is necessary that Form C-104 be approved before this form can be approved an an *initial* allowable be assigned to any completed Oil or Gas well. Submit this form in QUADRUPPLICATE.

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Company or Operator Magnolia Petroleum Company Lease State Bridges
Address Box 727, Kermit, Texas Box 900, Dallas 1, Texas
(Local or Field Office) (Principal Place of Business)
Unit 0, Well(s) No. 42, Sec. 27, T. 17, R. 34, Pool. Vacuum
County Lea Kind of Lease: State

If Oil well Location of Tanks On Lease

Authorized Transporter Phillips Petroleum Company Address of Transporter
Hobbs, New Mexico Bartlesville, Oklahoma
(Local or Field Office) (Principal Place of Business)

Per cent of ~~Oil~~ Natural Gas to be Transported 100% Other Transporters authorized to transport ~~Oil~~ Natural Gas
from this unit are None

REASON FOR FILING: (Please check proper box)

NEW WELL..... CHANGE IN OWNERSHIP.....
CHANGE IN TRANSPORTER..... OTHER (Explain under Remarks).....

REMARKS:

To complete records

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 2nd day of April 19 53

MAGNOLIA PETROLEUM CO.

Approved 4 - 3 19 53

OIL CONSERVATION COMMISSION
By Roy O. Yunker
Title

By [Signature]
Title District Superintendent

INSTRUCTIONS

This form shall be executed and filed in QUADRUPPLICATE with the District Office of the Oil Conservation Commission, covering each unit from which oil or gas is produced. A separate certificate shall be filed for each transporter authorized to transport oil or gas from a unit. After said certificate has been approved by the Oil Conservation Commission, one copy shall be forwarded to the transporter, one copy returned to the producer, and two copies retained by the Oil Conservation Commission.

A new certificate shall be filed to cover each change in operating ownership and each change in the transporter, except that in the case of a temporary change in the transporter involving less than the allowable production for one proration period, the operator shall in lieu of filing a new certificate notify the Oil Conservation Commission District Office, and the transporter authorized by certificate on file with the Commission, by letter of the estimated amount of oil or gas to be moved by the transporter temporarily moving oil or gas from the unit and the name of such temporary transporter and a copy of such notice shall also be furnished such temporary transporter. Such temporary transporter shall not move any more oil or gas than the estimated amount shown in said notice.

This certificate when properly executed and approved by the Oil Conservation Commission shall constitute a permit for pipe line connection and authorization to transport oil and gas from the property named therein and shall remain in full force and effect until

- (a) Operating ownership changes
- (a) The transporter is changed or
- (c) The permit is cancelled by the Commission.

If any of the rules and regulations of the Oil Conservation Commission have not been complied with at the same time this report is filed, explain fully under the heading "REMARKS."

In all cases where this certificate is filed to cover a change in operating ownership or a change in the transporter designated to move oil or gas, show under "REMARKS" the previous owner or operator and the transporter previously authorized to transport oil or gas.

A separate report shall be filed to cover each producing unit as designated by the Oil Conservation Commission.

DUPLICATE

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

RECEIVED
JAN 4 - 1942 Form O-110
RECEIVED
HOBBS OFFICE

Certificate of Compliance and Authorization to Transport Oil

Company or Operator Magnolia Petroleum Co. Lease State Bridges
 Address Box 68, Lovington, N. Mex. Box 900, Dallas, Texas
 (Local or Field Office) (Principal Place of Business)
 Unit 0 Wells No. 42 Sec. 27 T. 17 R. 34 Field Vacuum County Lea
 Kind of Lease State Location of Tanks On Lease
 Transporter Magnolia Petroleum Co. Address of Transporter Lovington, N. Mex.
Box 900, Dallas, Texas. (Local or Field Office)
 Percent of oil to be transported 100 Other transporters author-
 ized to transport oil from this unit are None %

REMARKS:

The undersigned certifies that the above rules and regulations of the Oil Conservation Commission have been complied with except as noted above and that gathering agent is authorized to transport the percentage of oil produced from the above described property and that this authorization will be valid until further notice to the transporter named herein or until cancelled by the Oil Conservation Commission of New Mexico.

Executed this the 22nd day of December, 1941

Magnolia Petroleum Co.

(Company or Operator)

By [Signature]

Title Supt.

State of New Mexico

County of Lea

ss.

Before me, the undersigned authority, on this day personally appeared O. H. Stout known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath states that he is authorized to make this report and has knowledge of the facts stated herein and that said report is true and correct.

Subscribed and sworn to before me, this the 22nd day of December, 1941

My Com. Expires May 28, 1942

[Signature]

Notary Public in and for Lea County, New Mexico

Approved: JAN 4 - 1942, 1941

OIL CONSERVATION COMMISSION

By [Signature]

OIL & GAS INSPECTOR

(See Instructions on Reverse Side)

INSTRUCTIONS

This form shall be executed and filed in quadruplicate with the Oil Conservation Commission at Santa Fe, New Mexico, covering each unit from which oil is produced. A separate certificate shall be filed for each transporter authorized to transport oil from a unit. After said certificate has been approved by the Oil Conservation Commission, one copy shall be forwarded to the transporter, one copy returned to the producer, and two copies retained by the Oil Conservation Commission.

A new certificate shall be filed to cover each change in operating ownership and each change in the transporter, except that in the case of a temporary change in the transporter involving less than the allowable production for one month the operator shall, in lieu of filing a new certificate, notify the Oil Conservation Commission at Santa Fe, New Mexico, and the transporter authorized by certificate on file with the Commission, by letter of the estimated amount of oil to be moved by the transporter temporarily moving oil from the unit and the name of such temporary transporter and a copy of such notice shall also be furnished such temporary transporter. Such temporary transporter shall not move any more oil than the estimated amount shown in said notice.

This certificate when properly executed and approved by the Oil Conservation Commission shall constitute a permit for pipe line connection and authorization to transport oil from the property named therein and shall remain in full force and effect until

- (a) Operating ownership changes
- (b) The transporter is changed or
- (c) The permit is cancelled by the Commission

If any of the rules and regulations of the Oil Conservation Commission have not been complied with at the time this report is filed, explain fully under the heading "REMARKS."

In all cases where this certificate is filed to cover a change in operating ownership or a change in the transporter designated to move oil, show under "REMARKS" the previous owner or operator and the transporter previously authorized to transport oil.

A separate report shall be filed to cover each producing unit as designated by the Oil Conservation Commission.

MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

REQUEST FOR PERMISSION TO CONNECT WITH PIPE LINE

THIS REQUEST SHOULD BE SUBMITTED IN TRIPPLICATE. See instructions in the Rules and Regulations of the Commission.

Dallas, Texas
Place

November 13, 1939
Date

DUPLICATE

OIL CONSERVATION COMMISSION,
Santa Fe, New Mexico.

Gentlemen:

Permission is requested to connect Magnolia Petroleum Company State Bridges
Company or Operator Lease

Wells No. 42 in SW - SE of Sec. 27, T. 17S, R. 34E, N. M. P. M.,
Vacuum Field, Lee County, with the pipe line of the

Magnolia Petroleum Company Dallas, Texas
Pipe Line Co. Address

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

Location of tank battery

Description of tanks

Logs of the above wells were filed with the Oil Conservation Commission 9-29-39 19

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

Additional information:

RECEIVED
NOV 29 1939
HOBB'S OFFICE

Yours truly,

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

OIL CONSERVATION COMMISSION,
By Roy. Yarbrough
A. ANDREAS
Title State Geologist
Member Oil Conservation C'm's'n
Date

Magnolia Petroleum Company
Owner or Operator
By G. A. Young, Jr.
Position Assistant Treasurer
Address Box 900, Dallas, Texas

NOV 29 1939

Mathematical Analysis of a System

The following analysis is based on the data provided in the table below.

Time (t)	Variable X	Variable Y	Variable Z
0	1.0	0.0	0.0
1	0.8	0.2	0.0
2	0.6	0.4	0.0
3	0.4	0.6	0.0
4	0.2	0.8	0.0
5	0.0	1.0	0.0
6	0.0	0.8	0.2
7	0.0	0.6	0.4
8	0.0	0.4	0.6
9	0.0	0.2	0.8
10	0.0	0.0	1.0

The data shows a clear trend where the sum of variables X and Y remains constant at 1.0, while variable Z increases from 0.0 to 1.0 over the 10 time steps. This suggests a conservation law or a specific physical process where the total quantity is preserved while being redistributed among the variables.

Further analysis of the rates of change shows that the transition from X to Y is most rapid between time steps 1 and 4, while the transition from Y to Z is most rapid between time steps 5 and 10. This indicates a two-stage process where the initial phase involves the conversion of X to Y, and the final phase involves the conversion of Y to Z.

The overall behavior is consistent with a linear transformation of the state vector over time, which can be represented by a matrix equation $\mathbf{x}(t) = \mathbf{A}^t \mathbf{x}(0)$, where $\mathbf{x}(t)$ is the state vector at time t , $\mathbf{x}(0)$ is the initial state vector, and \mathbf{A} is the transition matrix. The eigenvalues of \mathbf{A} are 1, 0, and 0, indicating that the system converges to a steady state where X=0, Y=0, and Z=1.0.