

MAIN OFFICE 000

THOMAS F. MCKENNA, SR.  
JOSEPH A. SOMMER

LAW OFFICES  
MCKENNA & SOMMER  
NASON BUILDING  
302 E. PALACE AVENUE  
SANTA FE, NEW MEXICO

TELEPHONE YUCCA 2-1897  
YUCCA 2-1898

WFX-129  
Due Feb 8

1000 JAN 13 AM 8 14

January 16, 1963

State of New Mexico  
Oil Conservation Commission  
Post Office Box 871  
Santa Fe, New Mexico

Attention: Mr. Dan Nutter

Re: Application of Rock Island Oil & Refining Co., Inc.  
Wills Flood, to convert B-1 well to a water injection  
well

Gentlemen:

Please find enclosed in triplicate the application of Rock Island  
Oil & Refining Co., Inc. to convert its B-1 well to an injection  
well, Wills Flood.

The reason for the request is to increase the area of the flood  
with the proposed injection well. Secondly, the conversion will  
also serve as a means to handle an increasing volume of produced  
salt water.

Please note that we are sending a copy of this application to the  
State Engineer.

We are asking the applicant to advise us as to the location of the  
top of the cement as to the surface and the production string on  
the B-1 well. We are also asking the applicant to submit in  
triplicate forms C-116 as to well B-1 or a direct offset, showing  
response before and after.

Yours very truly,


MCKENNA & SOMMER

  
Thomas F. McKenna

pb

cc: S. E. Reynolds  
State Engineer

cc: Mr. T. D. Ables  
Rock Island Oil & Refining Co., Inc.

By   
T. D. Ables "Applicant"

Wills B-1  
540' FSL 660' FEL  
Sec. 34-26S-37E  
Lea County, New Mexico  
Well Data

Data well completed	8-16-45	
Elevation	2984' DF	2976' GL
Total Depth	3378'	
Casing Point	3174'	
Open hole interval	3174'-3378'	204'
Surface Casing	8 5/8"	
Amt. Set	1248'	
Cmt'd.	300 sx. cmt.	
Production Csg.	5 1/2"	
Amt. Set	3172'	
Cmt'd.	325 sx. cmt.	

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SANTA FE, NEW MEXICO

THOMAS F. MCKENNA, SR.  
JOSEPH A. SOMMER

TELEPHONE YUCCA 2-1897  
YUCCA 2-1898

January 24, 1963

Oil Conservation Commission  
State of New Mexico  
Post Office Box 871  
Santa Fe, New Mexico

Attention: Mr. Dan Nutter

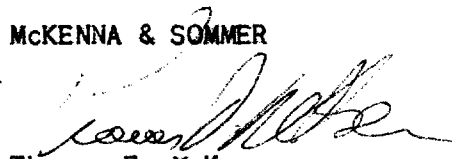
Re: Application of Rock Island Oil & Refining Co.,  
Inc., Wills Flood, to convert B-1 well to a  
water injection well

Gentlemen:

In connection with the above application please find enclosed Form  
C-116 in triplicate.

Yours truly,

McKENNA & SOMMER



Thomas F. McKenna

rt

cc: Mr. T. D. Ables  
Rock Island Oil & Refining Co., Inc.  
321 West Douglas  
Wichita 2, Kansas

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR Rock Island Oil & Refining Co., Inc. POOL Rhodes  
ADDRESS Box 896, Kermit, Texas MONTH OF January, 1963  
SCHEDULED TEST..... COMPLETION TEST..... SPECIAL TEST X..... (Check One)  
(See Instructions on Reverse Side)

Lease	Well No.	Date of Test	Producing Method	Choke Size	Test Hours	Daily Allowable Bbls.	Production During Test			GOR Cu. Ft. Per Bbl.
							Water Bbls.	Oil Bbls.	Gas MCF	
Wills "A"	3	1/16	P	--	24	87	0	45	TSTM	TSTM
Wills "A"	4	1/15	P	--	24	125	0	135	TSTM	TSTM
Wills "B"	1	1/15	P	--	24	3	21	0.12	TSTM	TSTM

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60 degrees F. Specific gravity base will be 0.60.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission. In accordance with Rule 301 and Appropriate Pool Rules.

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

Date January 23, 1963

Rock Island Oil & Refining Co., Inc.  
Company

By [Signature]

District Superintendent  
Title



**MAIN OFFICE OCC**

1963 JAN 25 AM 8:26

January 24, 1963

Mr. Thomas F. McKenna  
Attorney at Law  
302 E. Palace Avenue  
Santa Fe, New Mexico

Dear Mr. McKenna:

Reference is made to the application of Rock Island Oil & Refining Company, Inc., which seeks to convert B-1 well to a water injection well in the Wills Waterflood in southeastern Lea County. This office would appreciate additional information to that submitted in the application, which I will list specifically.

Will injection be through tubing under a packer?

If answer is yes, will the tubing be lined?

If injection through casing is planned, please advise the age and condition of the casing.

What is the top of the cement in the annulus outside the surface casing?

What is the top of the cement in the annulus outside the production casing?

Is the water being produced with the oil to be re-injected?

Please furnish a copy of the analysis of the water being injected.

Very truly yours,

S. E. Reynolds  
State Engineer

FEI/ma  
cc-Mr. A. L. Porter, Jr.  
F. H. Hennighausen

By:  
Frank E. Irby  
Chief  
Water Rights Division

LAW OFFICES  
MCKENNA & SOMMER

NASON BUILDING  
302 E. PALACE AVENUE

SANTA FE, NEW MEXICO

THOMAS F. MCKENNA, SR.  
JOSEPH A. SOMMER

TELEPHONE YUCCA 2-1897  
YUCCA 2-1898

January 23, 1963

Oil Conservation Commission  
State of New Mexico  
Post Office Box 871  
Santa Fe, New Mexico

Attention: Mr. Dan Nutter

Re: Application of Rock Island Oil & Refining Co., Inc.  
Wills Flood, to convert B-1 well to a water injection well

Gentlemen:

In connection with the above application please be advised that the cement tops for the Wills B-1 are as follows:

8 5/8" cement circulated to surface

5 1/2" top of cmt. at 1672'

We are expecting to receive shortly the forms C-116.

Also please find enclosed in triplicate a letter from E. W. Standley, District Engineer of the United States Geological Survey wherein the Geological Survey, so far as it is concerned, has approved the present application of Rock Island. There is attached to each copy of the letter the Federal Sundry Notices and Reports on Wells, Notice of Intention to Change Plans.

Yours truly,

MCKENNA & SOMMER

  
Thomas F. McKenna

rt

cc: Mr. T. D. Ables  
Rock Island Oil & Refining Co., Inc.



704

IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
P. O. Box 1838  
Hobbs, New Mexico

REC'D JAN 16 1963

January 15, 1963

Rock Island Oil & Refining Co., Inc.  
321 West Douglas  
Wichita 2, Kansas

Attention: Mr. T. D. Ables

Gentlemen:

Your letter dated January 9, 1963, requests approval of the attached application to convert the oil producing well No. B-1 Wills Federal to water injection for expansion of your Wills water flood on leases LC 050107-A and LC 050107-B. The subject well is incapable of producing oil at a sustained rate of more than one barrel per day and would be more valuable in flooding the area to increase ultimate oil recovery.

The application is hereby approved.

Very truly yours,

*Elmo G. Hubble*

*for*

E. W. Standley  
District Engineer

APPROVED

Budget Bureau 42-R386.2  
Approval expires 12-31-82.

Form 9-231a  
(Feb. 1951)

JAN 16 1963  
E. W. STANDLEY  
DISTRICT ENGINEER

(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office **LC 050107 (11)**  
Lease No. \_\_\_\_\_  
Unit \_\_\_\_\_

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

January 8, 1963

Mary E. Willis Federal "B"  
Well No. **B-1** is located **540** ft. from **N** line and **660** ft. from **E** line of sec. **34**  
**SE 1/4 SE 1/4 Sec. 34** **26 S** **37 E** **104PM**  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
**Rhodes** **Lee** **New Mexico**  
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is **2984** ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work.)

To convert B-1 well to a water injection well. B-1 is presently classified as an oil producing well. Waterflood operations are approved by Oil Conservation Commission Order H-1352. B-1 was originally completed Aug. 16, 1945 as an oil well producing from the Yates formation. 8 5/8" 24# csg. was set at 1248' and cmt'd w/300 sx. 5 1/2" 14# production csg. was set at 3172' and cmt'd w/325 sx. RTTD was and is 3378'. Injection fluid will be produced saltwater from Willis "A" Lease and Scarborough "D" Lease.

ILLEGIBLE

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company **Rock Island Oil & Refining Co., Inc.**  
Address **321 West Douglas**  
**Wichita 2, Kansas**  
By **A. E. Allen**  
Title **Petroleum Engineer**

LAW OFFICES  
MCKENNA & SOMMER

NASON BUILDING  
302 E. PALACE AVENUE

SANTA FE, NEW MEXICO

THOMAS F. MCKENNA, SR.  
JOSEPH A. SOMMER

TELEPHONE YUCCA 2-1897  
YUCCA 2-1898

MAIN OFFICE OCC

1963 JAN 20 AM 10:23

January 28, 1963

C  
State Engineer Office  
State Capitol Building  
Santa Fe, New Mexico

Attention: Mr. Frank E. Irby

Dear Mr. Irby:

O  
P  
Reference is made to your letter of January 24, 1963, in connection with the application of Rock Island Oil & Refining Company, Inc. to convert its B-1 well to water injection well in the Willis Waterflood in southeastern Lea County. Please find enclosed in triplicate the information that you desired. You have also asked for a copy of the analysis of the water being injected. We will send that to you in the next few days, as soon as it is received. Please be advised, however, that Rock Island states that its experience is that the produced water is not severely corrosive and that corrosive problems are not anticipated.

As soon as the analysis is received, we shall direct it to you.

Yours very truly,

MCKENNA & SOMMER

*Thomas F. McKenna*

Thomas F. McKenna

Y  
Enclosures  
pb

cc: Mr. Dan S. Nutter ✓  
New Mexico Oil Conservation Commission  
Post Office Box 871  
Santa Fe, New Mexico  
(With Enclosure)



MAIN OFFICE OCC

STATE OF NEW MEXICO FEB 9 AM 11 24

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS  
STATE ENGINEER

February 7, 1963

ADDRESS CORRESPONDENCE TO:  
STATE CAPITOL  
SANTA FE, N. M.

Mr. A. L. Porter, Jr.  
Secretary-Director  
Oil Conservation Commission  
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the application of Rock Island Oil & Refining Company, Inc., which seeks to convert their well B-1 of the Wills Flood to a water injection well. Reference is made also to my letter of January 24, 1963 addressed to Mr. McKenna and his reply of January 28, 1963, copies of which have been forwarded to you.

Attached to Mr. McKenna's reply to me was a letter with two carbon copies dated January 25, 1963 pertaining to the questions asked in my letter of January 24th. There is no indication that a copy of this letter was forwarded to you, therefore I am enclosing a copy.

In view of the fact that the surface casing is set at 1248 feet and the cement around this pipe was circulated to the surface and our check of the geology shows that 1248 feet would penetrate into a formation of permian age, we find no objection to the granting of this application.

Yours truly,

S. E. Reynolds  
State Engineer

FEI/ma  
cc-Rock Island Oil & Ref. Co.  
Thomas F. McKenna  
F. H. Hennighausen

By: *Frank E. Irby*  
Frank E. Irby  
Chief  
Water Rights Division

**APPLICATION FOR AMENDMENT TO  
NEW MEXICO CONSERVATION COMMISSION  
CASE No. 1610, ORDER No. R-1352**

To: NEW MEXICO CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

(1) Application for order to: Amend order No. R-1352 to convert B-1 well to an injection well.

(2) Description of leases:

<u>U.S.Serial No.</u>	<u>Legal Description</u>	<u>Date of Lease</u>	<u>Acres</u>
LC 050107(b)	Lot 1, Sec. 34	12-19-38	32.74
LC 050107(a)	NE $\frac{1}{4}$ NE $\frac{1}{4}$ , Sec. 34 Lots 2, 3, 4 N $\frac{1}{2}$ NW $\frac{1}{4}$ , NW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 35. All in T-26S, R-37E Lea County, New Mexico		

(3) Production map attached as Exhibit "B", shows wells and leases in the area being flooded.

(4) It is desired to expand the flood and approval is requested to convert B-1 well, presently an oil producing well, to a water injection well.

(5) Injected water will be into the Seven Rivers zone of the Yates formation.

(6) Injection fluid will be saltwater that is produced on the Wills "A" Lease and Scarborough "O" Lease.

(7) A copy of this Application has been sent to the following:

Name	Address	How Sent
Bureau of Land Management	Santa Fe, New Mexico	Certified Mail
U.S.G.S, Mr.E.W.Standley	P.O.Box 1830,Hobbs,N.W.	Certified Mail
Marathon Oil Co	P.O.Box 552,Midland, Texas	Certified Mail

Yours truly,

ROCK ISLAND OIL & REFINING CO., INC.

By T. D. Ables "Applicant"

# Rock Island Oil & Refining Co., Inc.

MAIN OFFICE OCC WICHITA 2, KANSAS

# COPY

1963 FEB 6 AM 8:24

January 25, 1963

State Engineer  
Santa Fe, New Mexico

Re: Rock Island Oil & Refining Co., Inc.  
Application to Convert Wells B-1 to  
injection well, located unit H, Sec. 34-T26S-R37E  
Lea County, New Mexico

Attention: Mr. S. E. Reynolds

Gentlemen:

Submitted herewith is the additional information you requested regarding the subject Application.

- (1) Will injection be thru tbg. under pkr. No. We plan to inject thru bare steel tubing, without a packer.
- (2) Age and condition of casing. The casing is 17 years old, it is in good condition. It is planned to pressure test the casing to 1500 psi before injection operations are commenced.
- (3) Top of the cement on the 8 5/8" surface pipe is at the surface of the ground.
- (4) Top of the cement on the 5 1/2" production pipe is at 1672' from the surface of the ground.
- (5) Source of injection water. Injection water will be salt water that is produced with the oil, on adjoining leases that have been under flood and are consequently making water.

1963 JAN 29 AM 8:40  
STATE ENGINEER OFFICE  
SANTA FE, N.M.

January 25, 1963

- (6) An analysis of the proposed injection water is being performed as of this letter date and will be forwarded to you under separate cover. Water Analysis will be Treat-Rite Water Laboratories, Inc., Monahans, Texas.

Should you desire any further information regarding the subject Application, it will be our pleasure to supply it.

Yours very truly,

ROCK ISLAND OIL & REFINING CO., INC.



T. D. Ables

TDA:db

MAIN OFFICE 000  
1963 FEB 8 AM 9 124