

North American Producing Division

New Mexico-Arizona Dept.

P.O. Office Box 1978

Roswell, New Mexico 88201

Telephone 505 622 4041

W. P. Tomlinson

Senior Engineer



February 27, 1967

New Mexico Oil Conservation Commission

P. O. Box 2088

Santa Fe, New Mexico

Attention: Mr. D. S. Nutter

Dear Sir:

Reference is made to your letter dated May 5, 1966, concerning the Shugart "A", "B" and "C" Waterflood Projects, all in the Shugart Pool, Eddy County, New Mexico. Atlantic Richfield Company requests an ammendment to that letter to allow for a single packer completion of the Hinkle "A" No. 13 well. This well was completed as a water injection well on May 24, 1966, with one string of tubing and one packer set above the Yates formation as shown on the attached Exhibit. The single packer completion is desirable from the standpoint of being more economical and to afford an opportunity to observe the relative injectivity of the Yates and Queen intervals. This completion is presently operating to our satisfaction and if you approve we plan no changes in the near future. This does not represent a change in the flood interval as presented in our application but is merely a different packer arrangement or separation of water injection over the flood interval.

The perforated interval, 3324-30' in the Hinkle "A" No. 13, is being flooded in this project. This interval was covered on the original application and referred to as Upper Queen. However, this is sometimes interpreted to be Seven Rivers formation.

If any additional information is needed please advise.

Yours very truly,

W. P. Tomlinson

W. P. Tomlinson

JLT:jcb

Attachments

Retrievable Tension Packer set at 2575'.

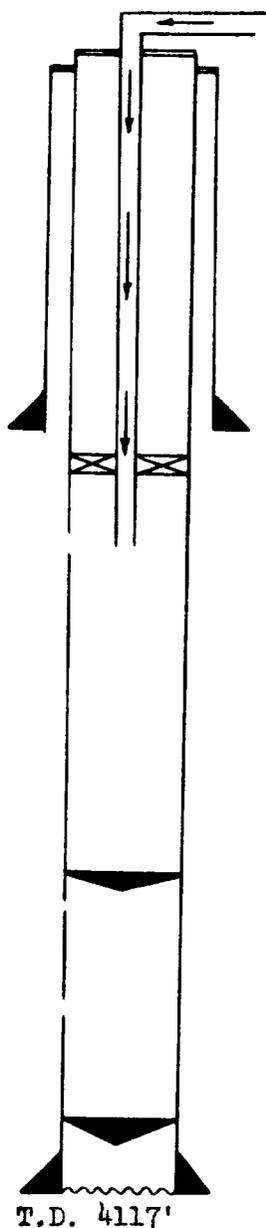
Yates Perforations @ 2632, 2640, 2662, 2670, 2680, 2692, 2699, 2709, 2722, 2726, 2730, 2735, 2804, 2807, 2813 and 2818'.

Upper Queen Perforations @ 3324, 3330 and 3402-40'.

Perforations 3686-96, 3699-3710 and 3716-24.

Perforations 3822-52, 3836-50 and 3880-90.

PBTD 3948'



2-3/8" O.D. Tubing

8-5/8" 24# Surface Casing set at 910'. Cemented with 50 sacks.

Cement Top Behind 7" @ 2067' (Calculated)

7" Squeezed through Perforations @ 2794' with 75 Sacks of Cement Prior to Perforating for Production.

CIBP @ 3480'.

7" O.D., 20#, J-55 Casing set at 4117'. Cement with 200 Sacks.

ATLANTIC RICHFIELD COMPANY
SCHEMATIC DRAWING
HINKLE "A" NO. 13
SHUGART POOL
EDDY COUNTY, NEW MEXICO

EXHIBIT NO. I

OIL CONSERVATION COMMISSION

P. O. [REDACTED] BOX 2089

SANTA FE, NEW MEXICO

July 18, 1966

C
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P
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Mr. W. P. Tomlinson
District Engineer
Atlantic Richfield Company
P. O. Box 1978
Roswell, New Mexico 88201

Dear Mr. Tomlinson:

Reference is made to your letter of May 31, 1966, regarding our letter of May 5, 1966, concerning the maximum allowable to be assigned to your Shugart "A" Waterflood Project authorized by Order No. R-3059.

You are correct in stating that the maximum allowable for said project using an allowable factor of 42 barrels of oil per day should be 434 barrels per day rather than 462 as stated in our letter.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/DSN/esr

cc: Oil Conservation Commission
DRAWER DD
Artesia, New Mexico

Mr. Clarence Hinkle
Hinkle, Bondurant & Christy
Attorneys at Law
P. O. Box 10
Roswell, New Mexico

Mr. J. A. Knauf
United States Geological Survey
DRAWER U
Artesia, New Mexico



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ATLANTIC RICHFIELD COMPANY
FORMERLY

THE ATLANTIC REFINING COMPANY
INCORPORATED - 1870
PETROLEUM PRODUCTS

May 31, 1966

SECURITY NATIONAL BANK BLDG.
MAILING ADDRESS
P. O. BOX 1978
ROSWELL, NEW MEXICO 88201

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NORTH AMERICAN PRODUCING GROUP
NEW MEXICO - ARIZONA DISTRICT
S. L. SMITH, DISTRICT MANAGER
JACK BIARD, DISTRICT LANDMAN
E. R. DOUGLAS, DISTRICT GEOLOGIST
A. D. KLOXIN, DISTRICT DRG. & PROD. SUP'T.
M. D. ROBERTS, DISTRICT GEOPHYSICIST
W. P. TOMLINSON, DISTRICT ENGINEER
B. R. WARE, DISTRICT ADMINISTRATIVE SUP'V.

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.

Re: Atlantic Richfield Company
Hinkle-Shugart Waterflood Project
Order No. R-3059

Dear Sir:

The Atlantic Richfield Company commenced injection into its Hinkle Well Nos. "A" No. 3, "A" No. 12 and "A" No. 13 on May 25, 1966. Injection commenced in the Hinkle "A" No. 8 Well on May 27, 1966. This notice of commencement is in compliance with Statewide Rule 703 (a). When additional wells are placed on injection we will let you know.

Your letter of May 5, 1966 to Mr. Clarence Hinkle of Hinkle, Bondurant & Christy, Attorneys at Law, specified maximum project allowables for the three projects. I believe the maximum allowable assigned for the Shugart "A" Project, 462 BPD to be in error. Although there are eleven wells in the Shugart "A" Project two of the wells, the Hinkle "A" No. 7 and the Hinkle "A" No. 15 are on a common 40-acre tract. Therefore the maximum allowable should be 434 BPD.

Yours very truly,

W. P. Tomlinson

WPT:jcb

cc: U.S.G.S., Mr. J. A. Knauf
N.M.O.C.C., Mr. H. L. Armstrong
Mr. Clarence Hinkle

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission

LAND COMMISSIONER
GUYTON B. HAYS
MEMBER

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

P. O. BOX 2088
SANTA FE

April 18, 1966

Re: Case No. 3391

Mr. Clarence Hinkle
Hinkle, Bondurant & Christy
Attorneys at Law
Post Office Box 10
Roswell, New Mexico

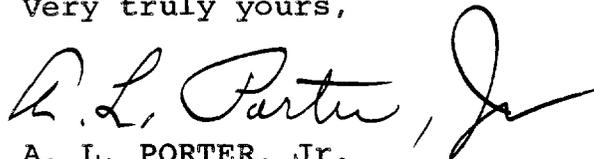
Order No. R-3059
Applicant:

The Atlantic Refining Company

Dear Sir:

Enclosed herewith is a copy of the above-referenced Commission order recently entered in the subject case. Letter pertaining to conditions of approval and maximum allowable to follow.

Very truly yours,



A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Carbon copy of order also sent to:

Hobbs OCC x
Artesia OCC x
Aztec OCC

Other Mr. Frank Irby

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

May 5, 1966

C
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P
Y
Mr. Clarence Hinkle
Hinkle, Bondurant & Christy
Attorneys at Law
Post Office Box 10
Roswell, New Mexico

Dear Sir:

Reference is made to Commission Order No. R-3059, recently entered in Case No. 3391, approving The Atlantic Refining Company's Shugart "A" Waterflood Project, its Shugart "B" Waterflood Project, and its Shugart "C" Waterflood Project, all in the Shugart Pool, Eddy County, New Mexico.

Injection into the Yates and Queen formations of the Hinkle "A" Wells Nos. 8, 12, and 13, and into the Hinkle "B" Well No. 5 shall be through dual strings of tubing, with packers installed both above and below the Yates perforations. Injection into the Hinkle "A" Well No. 3 shall be down the casing-tubing annulus into the Yates formation and through tubing into the Queen. All wells shall be tested for a good cement job after perforating the Yates, and block squeezes shall be placed across the Yates on any well which does not appear to be adequately cemented.

As to allowable, our calculations indicate that when all of the authorized injection wells have been placed on active injection, the maximum allowable which the Shugart "A" project will be eligible to receive under the provisions of Rule 701-E-3 is 462 barrels per day, the maximum allowable for the Shugart "B" project is 126 barrels per day, and the maximum for the Shugart "C" project is 84 barrels per day.

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

-2-

Mr. Clarence Hinkle

May 5, 1966

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Please report any error in these calculated maximum allowables immediately, both to the Santa Fe office of the commission and the appropriate district proration office.

In order that the allowable assigned to the projects may be kept current, and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to promptly notify both of the aforementioned Commission offices by letter of any change in the status of wells in the project areas, i.e., when active injection commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

Your cooperation in keeping the commission so informed as to the status of the projects and the wells therein will be appreciated.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/DSM/ir

cc: Mr. Frank Irby
State Engineer Office
Santa Fe, New Mexico

Oil Conservation Commission
Artesia, New Mexico



100-107-000
APR 13 11 5 14

STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

April 11, 1966

ADDRESS CORRESPONDENCE TO:
STATE CAPITOL
SANTA FE, NEW MEXICO 87501

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

Dear Mr. Porter:

Reference is made to the application of Atlantic Refining Company for approval of waterflood projects, Eddy County, New Mexico which involves 3 separate waterfloods in contiguous areas in the Shugart Pool. After reviewing the application and the exhibits submitted therewith, it appears that the Hinkle "A" No. 3 well, the Hinkle "A" No. 12 well and the Hinkle "B" No. 5 well should adequately protect the fresh waters in the area.

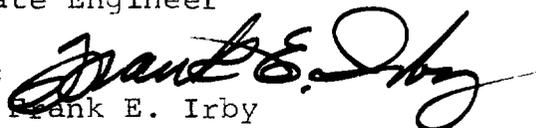
However, the Hinkle "A" No. 3 well has no cement behind the 7" OD casing from 915' to 3183' and because of the injection scheme proposed, it does not appear to provide adequate protection.

The Hinkle "A" No. 13 well gives no top for the 200 sacks of cement placed at 4117' on the 7" OD casing. No top and bottom limits are indicated for the squeeze job on the 7" casing at 2794'. No basis is given for the calculation of top of the cement (2067') behind the 7" casing. The schematic diagram for this well does not appear to provide adequate protection.

FEI/ma
cc-Hinkle, Bondurant & Christy (2)
F. H. Hennighausen

Yours truly,

S. E. Reynolds
State Engineer

By: 
Frank E. Irby
Chief
Water Rights Division

CLARENCE E. HINKLE
W. E. BONDURANT, JR.
S. B. CHRISTY IV
LEWIS G. COX, JR.
PAUL W. EATON, JR.
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
MICHAEL R. WALLER

LAW OFFICES
HINKLE, BONDURANT & CHRISTY

HINKLE BUILDING
ROSWELL, NEW MEXICO

OF COUNSEL: HIRAM M. DOW

TELEPHONE 622-6510
AREA CODE 505
POST OFFICE BOX 10

March 18, 1966

Oil Conservation Commission
Box 2088
Santa Fe, New Mexico

Gentlemen:

We have heretofore given to Mr. Dan Nutter information necessary for publication of notice in connection with the application of The Atlantic Refining Company for approval of 3 separate water flood projects embracing lands in the Shugart pool, Eddy County, New Mexico. You will find enclosed in triplicate formal application.

It is our understanding that this matter will probably be set down for hearing at the regular Oil Conservation Commission hearing in Hobbs on April 13, or at the first examiner's hearing if one is held before that time.

Yours very truly,

HINKLE, BONDURANT & CHRISTY

By 

CEH:cs

Enc.

cc: Dick Tremble

cc: State Engineer

DOCKET MAILED

Date 3-29-66

C O P Y

HINKLE, BONDURANT & CHRISTY
ROSWELL, NEW MEXICO

March 18, 1966

3391

S. E. Reynolds
State Engineer
State Capitol
Santa Fe, New Mexico

Dear Sir:

We enclose herewith copy of application with all exhibits of The Atlantic Refining Company to the New Mexico Oil Conservation Commission for approval of 3 separate water flood projects embracing 3 separate oil and gas leases located in the Shugart pool, Eddy County, New Mexico. You will note that it is proposed to inject water into the Yates and upper portion of the Queen formations and that water will be purchased from the Double Eagle Corporation of New Mexico and that fresh water will be used.

Yours very truly,

HINKLE, BONDURANT & CHRISTY

By 

CEH:cs

Enc.

cc: Oil Conservation Commission