

57 FEB 6 1967

February 3, 1967

State of New Mexico
State Engineer's Office
State Capitol
Santa Fe, New Mexico

Attention: Mr. Frank E. Irby,
Chief Water Rights Division

Gentlemen:

Atlantic Richfield Company is requesting permission to convert Wells Nos. 20, 211 and 236 in the Horseshoe-Gallup Unit, San Juan County, New Mexico from producing to injection status. A copy of our application to the New Mexico Oil Conservation Commission is attached.

Below is information that might be useful to you in reviewing the application and making your determination to the New Mexico Oil Conservation Commission.

As shown on the application, it is planned to inject water down tubing below a packer into the lower zone and down the tubing casing annulus into the upper zone in all three wells. This is the practice in all the dual zone wells in the Unit.

1. On 12-5-58, 5-1/2", 14#, H-40 casing was run in Well No. 20.
On 4-6-58, 5-1/2", 15.5#, J-55 casing was run in Well No. 211.
On 4-26-58, 5-1/2", 15.5#, J-55 casing was run in Well No. 236.
2. The interval above the upper zone in all three wells is primarily shale and is impermeable. If a casing leak should occur, it would be detected by a leak at the braden head. Once a leak is detected, it would be repaired by means of cementing or in an extreme case, running a liner inside the production casing. We conclude that a casing leak is improbable as all injected water is inhibited for corrosion.
3. The project is expected to be in operation until approximately 1978.

We hope this information will be helpful in substantiating your

February 2, 1971

State of New Mexico
State Engineer's Office
State Capitol
Santa Fe, New Mexico

Attention: Mr. Byron E. Frye,
Chief, Water Rights Division

Re: Permit

Atlantic Petroleum Company is requesting permission to construct Well No. 20, 21 and 22 in the Hornscho-Gallup Oil Field, Grant County, New Mexico from producing to injection status. A copy of our application to the New Mexico Oil Conservation Commission is attached.

Below is information that might be useful to you in reviewing the application and making your determination to the New Mexico Oil Conservation Commission.

In answer to the application, it is planned to inject water from tubing below a packer into the lower zone and from the tubing casing annulus into the upper zone in all three wells. This is the practice in all the dual zone wells in the field.

On 12-2-70, 2-1/2", 14-1/2" casing was run in Well No. 20.
On 12-2-70, 2-1/2", 14-1/2" casing was run in Well No. 21.
On 12-2-70, 2-1/2", 14-1/2" casing was run in Well No. 22.

The interval above the upper zone in all three wells is primarily shale and is impermeable. If a casing leak should occur, it would be detected by a leak at the broken head. Once a leak is detected, it would be repaired by means of cementing or in an extreme case, running a liner inside the production casing. We conclude that a casing leak is improbable or will inhibit water the inhibitor for conservation.

The project is expected to be in operation until approximately 1978.

We hope this information will be helpful in substantiating your

State Engineer's Office
February 3, 1967
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waiver of objection to this proposal. Please send us a copy of your determination to the New Mexico Oil Conservation Commission. If you need any additional information please let us know.

Yours very truly,

Original Signed
W. P. Tomlinson
W. P. Tomlinson

WPT:jcb

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

Office of the
Secretary
Page 1

Under the provisions of the
New Mexico Oil Conservation
Act, you are hereby notified that
the following information is being
furnished to you for your information.

Very truly yours,

Secretary

cc: [redacted]

cc: New Mexico Oil Conservation
Act, New Mexico
cc: New Mexico Oil Conservation
Act, New Mexico

North American Producing Division
New Mexico-Arizona District
Post Office Box 1978
Roswell, New Mexico 88201
Telephone 505 622 4041



W. P. Tomlinson
District Engineer

February 8, 1967

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

Attention: Mr. J. E. Kapteina

Re: Horseshoe-Gallup Unit
San Juan County, New Mexico

Gentlemen:

We submit the following information to supplement our application to convert Wells Nos. 20, 211 and 236 to water injection in the Horseshoe-Gallup Unit, San Juan County.

<u>Well</u>	<u>Top of Cement</u>	<u>Remarks</u>
No. 20	780'	Calculated
No. 211	700'	Temperature Survey
No. 236	750'	Temperature Survey

Cement was circulated to the surface around the surface casing of each of the three wells.

I hope this fulfills the request you made in your letter of February 6. If you need additional information let us know.

Yours very truly,

W. P. Tomlinson

WPT:jcb

cc: U.S.G.S.
P. O. Box 959
Farmington, New Mexico
Attention: Mr. Phil McGrath

Commissioner of Public Lands
State Land Office
Santa Fe, New Mexico

State of New Mexico
State Engineer
State Capitol
Santa Fe, New Mexico
Attention: Mr. Frank Irby

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

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

Re: Horseshoe-Gallup Unit
San Juan County, New Mexico

Gentlemen:

This is to advise that the undersigned has reviewed the application of Atlantic Richfield Company to convert Wells Nos. 20, 211 and 236 in the subject Project from producing status to injection. As an offset Operator to Well No. 236, we have no objection to this proposal.

Yours very truly,

Signed

Company

Date

S. B. Rich
For Manager, Atlantic Richfield Co.
2-8-67

cc: Atlantic Richfield Company
P. O. Box 1978
Roswell, New Mexico
Attention: Mr. W. P. Tomlinson



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

March 2, 1967

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 Richfield Company which seeks to convert their wells No. 20, No. 211 and No. 236 in the Horseshoe-Gallup Unit in San Juan County to water injection, in order to more efficiently produce the oil in this project.

At the hearing on March 29, 1962 in Case 2519, which resulted in Order R-2210, Mr. E. F. Herbeck appeared as witness for Atlantic Richfield Company and stated in his testimony that the injection fluid would be chemically treated and coupon surveys would be made in order to determine corrosion which might occur inside the casing and that with these precautions no threat of contamination to the fresh waters which may exist in the area would occur.

Therefore, this office offers no objection to the granting of the application now before the Commission, provided the same protective measures are used in the expansion of this project.

FEI/ma
cc-Atlantic Richfield Co.

Yours truly,

S. E. Reynolds
State Engineer

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