

TEXSTAR PETROLEUM COMPANY
NATIONAL BANK OF COMMERCE BUILDING
SAN ANTONIO 5, TEXAS

GILBERT M. ANDREEN
VICE-PRESIDENT
ENGINEERING AND PRODUCTION

October 6, 1964

MAIN OFFICE 000
*64 OCT 8 AM 9 32

New Mexico Oil Conservation Commission
State Land Office Building
Santa Fe, New Mexico

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2/32

Re: Unitization & Secondary Recovery, Hospah
Field, McKinley County, New Mexico

Gentlemen:

The Hospah Field is one of the oldest fields in the State of New Mexico. It was discovered in 1927 at which time three wells were completed in the Hospah Sand at approximately 1,550 feet below the surface of the ground. The field presently contains approximately 40 producing wells, all of which are completed in the Hospah horizon. During the course of drilling to the Hospah Sand oil saturation was encountered and recorded in the Seven Lakes horizon at a depth of approximately 350 feet. Although core analysis from the Seven Lakes horizon indicated good sand properties, the oil it contained was very viscous, and no completion attempts were ever made.

Production from the Hospah Sand has declined steadily over the years, and many of the wells are now marginal. It is thought that by supplementing the reservoir energy through the injection of water, recovery from the horizon would be increased by approximately one and one-half million barrels of oil. In recent years there has been great progress made in the technique of producing high-viscosity oil. It is thought that the Seven Lakes horizon will be amenable to some of these techniques and that potential recovery from this zone is in the million-barrel range.

On application of Texstar Petroleum Company, the owner and operator of all the wells in the field, it is requested that a hearing be set for the purpose of approving unitization of the Hospah and the Seven Lakes horizons and for granting permission to conduct secondary-recovery operations in each of the two horizons.

Attached is a plat showing the log of the proposed injection wells for the Hospah Sand, the Unit outline and the location of the presently producing wells. Insofar as is known the offset leases are owned by the State of New Mexico and

DOCKET MAILED

A DIVISION OF THE TEXSTAR CORPORATION

Date 10-15-64

October 6, 1964

the Santa Fe Railroad, both of whom are parties to the proposed unitization. You will note from the plat that the majority of the injection wells are to be drilled, and our general plan of completion will be to set and cement casing through the sand and selectively perforate. The initial injection will be into the Hospah Sand, which is found at approximately 1,550 to 1,600 feet below the surface of the ground. The water-supply sand has not yet been determined; however, the old records indicate the presence of water-bearing horizons in the 900 to 1,000-foot range, and should these zones not prove adequate, we could obtain water from the Hospah horizon on the downdip side of the fault indicated on the attached plat. The anticipated maximum injection rate into the Hospah Sand is 6,000 barrels per day, and the maximum rate of oil production is estimated at 1,000 barrels per day.

A considerable amount of laboratory work must be done on cores from the Seven Lakes horizon before any definite plan of injection can be devised. We will, of course, accrue this information as quickly as possible.

We have been in contact with Mr. Irby of the State Engineer's Office concerning the proposed injection programs. Attached for your information is a copy of a letter from Mr. Irby, and we are just now completing cross sections to answer the question he raised in this letter. In addition, Mr. Irby will be supplied with a copy of this application and all the attachments hereto.

If there is any additional information required prior to setting this matter for hearing, please advise.

Very truly yours,

D. M. Andreen

G. M. Andreen

uak

GMA:nbd
Attachment

cc: Mr. Frank E. Irby



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

August 7, 1964

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

MAIN OFFICE - CUBA
84 OCT 8 AM 3

File 332

Texstar Petroleum Company
National Bank of Commerce Building
San Antonio, Texas

Attention: Mr. G. M. Andreen

Dear Sir:

Your letter of August 3, 1964 pertaining to Unitization of the Hospah Field in McKinley County, New Mexico is gratefully acknowledged. I regret that I was not available when you called at the office last week. My greatest concern is containing the injected fluids in the shallow horizon of the Seven Lakes pay at approximately 350 feet.

I would appreciate any data and other information you have which tends to show that this formation is not hydrologically connected with other formations which may be water bearing.

Very truly yours,

S. E. Reynolds
State Engineer

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

FEI:cl

TEXSTAR PETROLEUM COMPANY

NATIONAL BANK OF COMMERCE BUILDING

CAPITOL 7-5031 AREA CODE 512

SAN ANTONIO, TEXAS 78205

GILBERT M. ANDREEN
VICE-PRESIDENT
ENGINEERING AND PRODUCTION

October 6, 1964

MAILED
OCT 8 AM '64

Mr. Frank E. Irby, Chief
Water Rights Division
State Engineer Office
State Capitol
Santa Fe, New Mexico

10/24 3/32

Re: Hospah Field, McKinley
County, New Mexico

Dear Mr. Irby:

Enclosed for your information and file is a copy of our application to conduct secondary-recovery operations in the Hospah and Seven Lakes horizons in the reference field.

We have been in contact with you before on this matter, and I am just now finishing up the East-West and North-South cross section in reply to your letter of August 7, 1964. I expect the cross sections to be in your hands sometime next week.

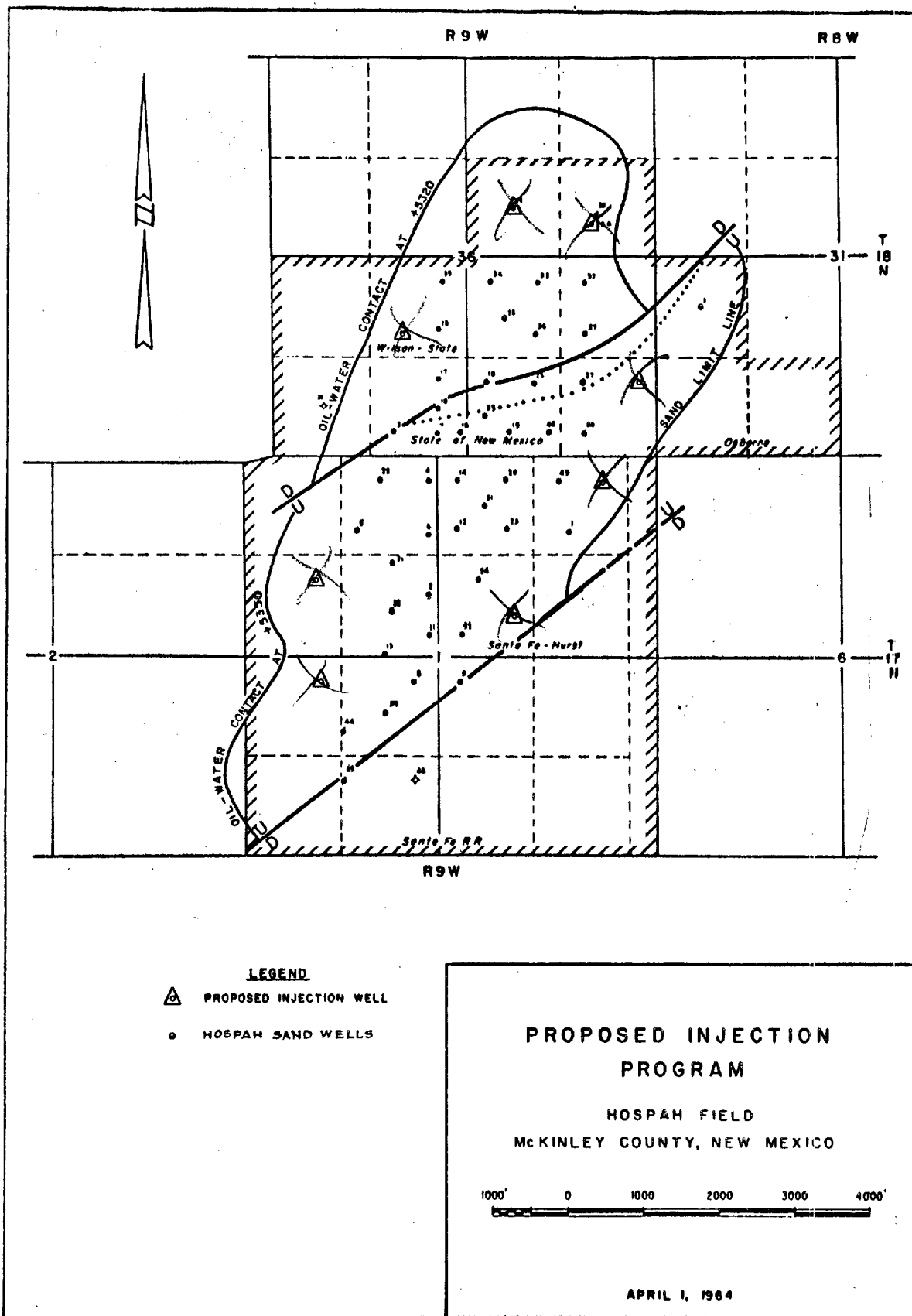
As you might note from our application, our initial injection efforts will be into the Hospah horizon with the program for the shallow Seven Lakes horizon delayed and contingent upon obtaining cores and special laboratory work.

Very truly yours,

G. M. Andreen

GMA:nbd
Attachment

cc: New Mexico Oil Conservation Commission



TEXSTAR PETROLEUM COMPANY

NATIONAL BANK OF COMMERCE BUILDING

CAPITOL 7-5031 AREA CODE 512

SAN ANTONIO, TEXAS 78205

November 5, 1964

GILBERT M. ANDREEN
VICE-PRESIDENT
ENGINEERING AND PRODUCTION

RECEIVED
NOV 16 1964

Mr. Dan Nutter
New Mexico Oil Conservation Commission
State Land Office Building
Santa Fe, New Mexico

Re: Unitization and Secondary-Recovery Hearings,
Cases Nos. 3131 and 3132, Hospah Field,
McKinley County, New Mexico

Dear Dan:

In the reference hearing held October 28, it was requested that we supply your office with a map on which footage measurements were given on the proposed locations for injection wells. This map has been prepared and is attached hereto.

Very truly yours,



G. M. Andreen

GMA:nbd
Attachment

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
E. S. JOHNNY WALKER
MEMBER

P. O. BOX 2088
SANTA FE

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

November 24, 1964

Mr. Richard S. Morris
Seth, Montgomery, Federici & Andrews
Attorneys at Law
Post Office Box 2307
Santa Fe, New Mexico

Re: CASE NO. 3132
ORDER NO. R-2807
APPLICANT TEXSTAR PETROLEUM
COMPANY

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A handwritten signature in cursive script that reads "A. L. Porter, Jr.".

A. L. PORTER, Jr.
Secretary-Director

Letter setting out the maximum allowable for this project will follow.

ir/

Carbon copy of order also sent to:

Hobbs OCC X

Artesia OCC

Aztec OCC X

OTHER Mr. Frank Irby

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

December 1, 1964

**Mr. Richard S. Morris
Seth, Montgomery, Federici & Andrews
Attorneys at Law
Post Office Box 2307
Santa Fe, New Mexico**

Dear Mr. Morris:

Reference is made to Commission Order No. R-2807, recently entered in Case No. 3132, approving the Hoshah Gallup Sand Waterflood Project.

As discussed at the hearing the casing and cementing program for the eight authorized injection wells will be in accordance with a plan to be submitted to the State Engineer Office and the Oil Conservation Commission after determining the source and quality of water to be injected.

As to allowable, our calculations indicate that when all of the authorized injection wells have been placed on active injection, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 is 1938 barrels per day.

Please report any error in this calculated maximum allowable immediately, both to the Santa Fe office of the Commission and the appropriate district proration office.

In order that the allowable assigned to the project 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 area, i.e., when active injection commences, when additional injection or producing wells are

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

-2-

Mr. Richard S. Morris

December 1, 1964

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 project and the wells therein will be appreciated.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/DSN/1r

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

Oil Conservation Commission:
Hobbs and Aztec, New Mexico

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GOVERNOR
EDWIN L. MECHEM
CHAIRMAN

State of New Mexico
Oil Conservation Commission



P. O. BOX 2088
SANTA FE
87501

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

AND COMMISSIONER
S. JOHNNY WALKER
MEMBER

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quality of water
to be
injected.

Mr. Richard S. Morris
Seth, Montgomery, Federici & Andrews, 19____
Attorneys at Law
Post Office Box 2307
Santa Fe, New Mexico

Gentlemen:

Reference is made to

2807

recently

~~Enclosed herewith is~~ Commission Order No. R-3132, entered in Case
No. 3132, approving the *Hospah Gallup Sand Waterflood*
Water Flood Project.

As to allowable, our calculations indicate that
~~According to our calculations,~~ when all of the authorized injection
wells have been placed on active injection, the maximum allowable which this
project will be eligible to receive under the provisions of Rule 701-E-3
is *1938* barrels per day.

Please report any error in this calculated maximum allowable immediately,
both to the Santa Fe office of the Commission and the appropriate District
proration office.

In order that the allowable assigned to the project 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
area, 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 project and the wells therein will be appreciated.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

cc: Mr. Frank Irby &
OCC - Hobbs & Aztec