



STATE OF NEW MEXICO
STATE ENGINEER OFFICE
SANTA FE

S. E. REYNOLDS
STATE ENGINEER

October 7, 1964

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

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 William A. and Edward R. Hudson which seeks approval of injection wells in connection with the operation of their waterflood project in the Maljamar Project.

As I understand the application, the applicants seek to use wells Puckett "A" 26, 27 and 28 as injection wells. Submitted with the application is a diagrammatic sketch of Puckett "A" No. 24 which is labeled as a typical injection well and shows that the well will be equipped with 2 3/8" tubing.

This office offers no objection to the conversion of the three subject wells to water injection provided tubing is used as indicated on the sketch and further provided that a packer is used to seal the annulus between the 2 3/8" tubing and the 5 1/2" casing at a point well below the top of the cement surrounding the 5 1/2" casing.

Yours truly,

FEI/ma

cc-Wr. A & Edward R. Hudson
Jason Kellahin
F. H. Hennighausen

S. E. Reynolds
State Engineer

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

DOCKET MAILED

Date 10/15/64



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

October 15, 1964

ADDRESS CORRESPONDENCE TO:
STATE CAPITOL
SANTA FE, N. M.
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 William A. and Edward R. Hudson which seeks approval of injection wells in connection with the operation of their waterflood project in the Maljamar pool.

On October 7, 1964, I addressed a letter to you concerning this application. On October 9, 1964, Mr. Ralph L. Gray, Consultant at Artesia, who has been retained by Hudson and Hudson, called me with regard to the use of packers at the end of the tubing. Following our conversation, he wrote me a letter clarifying the construction of the wells involved in this application. A copy of his letter and attached data on water injection wells is enclosed. I have made penciled notes on the data sheet which may not be meaningful or important to you.

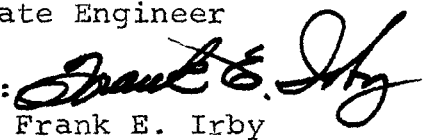
He states that the program on the Puckett "B" No. 2, Puckett "A" No. 29 and Puckett "B" No. 23 will be identical to the programs employed in the injection wells Puckett "A" No. 27 and Puckett "A" No. 28. To me this means that the surface casing will be set below the Santa Rosa formation and sufficient cement used in the casing-bore annulus to bring the cement above the top of the Santa Rosa. With regard to Puckett "A" No. 26, he states that the program was somewhat different from that used on Puckett "A" No. 27 and Puckett "A" No. 28. He objects to being required to use a packer at the end of the tubing. It is clear from the description contained in the data sheet that the Santa Rosa formation will not be protected under his plan. Therefore, this office objects to the granting of the application

insofar as it includes Puckett "A" No. 26, unless it is completed in the manner set forth in my letter of October 7, 1964. However, if anyone can assure me that the Santa Rosa formation is fully protected without the use of a packer, I will be willing to listen to this proof. No objection is made to the granting of the application insofar as it pertains to Puckett "A" No. 22, Puckett "A" No. 29 and Puckett "B" No. 23, provided the Santa Rosa formation is protected in the same manner as Puckett "A" No. 27 and Puckett "A" No. 28.

Very truly yours,

S. E. Reynolds
State Engineer

By:



Frank E. Irby
Chief
Water Rights Div.

FEI/ma

cc-Wm. A. & Edward R. Hudson
Jason Kellahin
Ralph L. Gray
F. H. Hennighausen

THE OFFICE OF THE SECRETARY OF THE
TREASURY
WASHINGTON, D. C.
JANUARY 1, 1900

TO THE SECRETARY OF THE

TREASURY

FROM THE SECRETARY OF THE
TREASURY

RECEIVED
JAN 1 1900
U. S. DEPT. OF TREASURY

1964 OCT 16 AM 10:10

Irby

RALPH L. GRAY
PETROLEUM ENGINEERING - PRODUCTION
CONSULTANT
302 CARPER BUILDING
ARTESIA, NEW MEXICO 88210

October 9, 1964

State Engineer Office
Santa Fe, New Mexico

Attention: Mr. Frank Irby

Dear Sir:

On October 9, 1964, I discussed with you the application of William A. and Edward R. Hudson for authorization to drill additional water injection wells in their Maljamar Flood, and the authorization to inject water into these wells. In accordance with your verbal request, we are attaching the actual data for each individual injection well, although three locations have not yet been drilled and we are unable at this time to give definite points on these wells. However, the general program will be similar to the programs used in the past and specifically used on Puckett "A" #27 and "A" #28. We would like to call your attention to the fact that both the State Engineer Office and the New Mexico Oil Conservation Commission have approved identical programs in this flood on three separate occasions in the past, and this is merely a continuation of the program in effect. We would also like to call your attention to the fact that no surface waters are encountered in this area, neither is water encountered in any formation above the salt. These wells have been drilled with cable tools and the holes were completely dry down to the Rustler Anhydrite.

No one would have more to lose than the operator by the failure of our production casing, which would allow the injection water to enter other horizons than those intended for flooding. We feel that the proposed program is adequate to confine our water injection. However, I assure you that we will keep a continued check on our operating performance and, should at any time it be found that a casing string has failed, we will at that time run a packer on the tubing and continue our water injection.

We request your approval on the programs as outlined, and to inject water down tubing without the use of packers.

Yours very truly,

Ralph L. Gray
REGISTERED PETROLEUM ENGINEER.

RLG:lw

Encls.

cc: Mr. Jason Kellahin
Box 1769, Santa Fe, New Mexico

8

DATA ON WATER INJECTION WELLS

PUCKETT "A" #27 - NW corner Unit K - Sec. 24

Surface Casing - 8-5/8" 24# J-55 new cemented at 604 feet with 100 sacks. Estimated top of cement is at 171 feet from surface. Top of Santa Rosa is at 295 feet. Rustler anhydrite is from 536 to 650 feet. Production string is 5 1/2" O.D. 15.5# J-55 new casing cemented at 3902 feet with 150 sacks 4% gel regular cement plus 150 sacks of neat regular. Estimated top of cement is at 1755 feet. Base of salt is 1715 feet. This string of casing has a minimum yield pressure of 4810 psi. The present plant pressure is approximately 1800 psi.

PUCKETT "A" #28 - NW corner Unit C - Sec. 24

Surface Casing - 8-5/8" O.D. 24# J-55 new cemented at 595' with 100 sacks regular cement. Estimated top of cement is at 162 feet. Top of Santa Rosa is at 285 feet. Rustler anhydrite is from 540 feet to 655 feet. Production string is 5 1/2" O.D. 15.5# J-55 new casing cemented at 3943 feet with 150 sacks 4% gel regular cement plus 150 sacks neat regular cement. Estimated top of cement is at 1796 feet. Base of salt is at 1755 feet.

PUCKETT "B" #22 - NE corner Unit M - Sec. 24

This well has not yet been drilled but the program will be identical to those on Puckett "A" #27 and #28.

PUCKETT "A" #29 - NE corner Unit H - Sec. 24

This well has not yet been drilled but the program will be identical to those on Puckett "A" #27 and #28.

PUCKETT "B" #23 - NE corner Unit P - Sec. 24

This well has not yet been drilled but the program will be identical to those on Puckett "A" #27 and #28.

PUCKETT "A" #26 - SE corner Unit D - Sec. 24

This well was drilled with rotary tools, so the program was somewhat different than used on cable tool holes. Surface casing is 10-3/4" O.D. 32.75# J-55 cemented at 273' with 270 sacks 2% gel regular cement, which circulated to the surface. Top of Santa Rosa is at 250 feet. Production string is 7-5/8" O.D. 26.4# J-55 cemented at 4103 feet with 400 sacks regular cement. Estimated top of cement is at 2055 feet. The open hole from base of 10-3/4" at 273' to the top of cement at approximately 2055 feet is loaded with heavy mud.

We will run 2-3/8" O.D. internally coated tubing and set at approximately 60 feet above the top perforation in each of these wells, but no packer will be used. Injection of water will be down tubing.

JASON W. KELLAHIN
ROBERT E. FOX

RECEIVED
SEP 29 10 17 AM '64
KELLAHIN AND FOX
ATTORNEYS AT LAW
54 1/2 EAST SAN FRANCISCO STREET
POST OFFICE BOX 1769
SANTA FE, NEW MEXICO
Sept. 25, 1964

TELEPHONES
983-9396
982-2991

Case 3136

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

Gentlemen:

Enclosed, in triplicate is the application of William A. and Edward R. Hudson for approval of unorthodox well locations and for the approval of injection wells in connection with the operation of their previously approved water flood project in the Maljamar Pool, Eddy and Lea Counties, New Mexico

We would appreciate having this case set for hearing before the Commission's examiner at the next available examiner hearing.

By copy of this letter, together with a copy of the application and exhibits attached, notice of this matter is today being given to the office of the New Mexico State Engineer.

Yours very truly,

Jason W. Kellahin

Jason W. Kellahin

JWK:ss
Encl.
cc: State Engineer

DOCKET MAILED

Date 10-15-64

CASE 2910 (Reopened):

In the matter of Case No. 2910 being reopened pursuant to the provisions of Order No. R-2589, which order established 80-acre spacing units for the Scharb-Bone Springs Oil Pool, Lea County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 2659 (Reopened):

In the matter of Case No. 2659 being reopened pursuant to the provisions of Order No. R-2347-A, which continued the original order establishing 80-acre proration units for the North Bagley-Wolfcamp Pool, Lea County, New Mexico, for an additional year. All interested parties may appear and show cause why said pool should not be developed on 40-acre proration units.

CASE 2904 (Reopened):

In the matter of Case No. 2904 being reopened pursuant to the provisions of Order No. R-2576, which order established temporary 80-acre spacing units for the Flying "M" Abo Oil Pool, Lea County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 2678 (Reopened):

In the matter of Case No. 2678 being reopened pursuant to the provisions of Order No. R-2359-A, which continued the original order establishing 160-acre proration units for the East Saunders Permo-Pennsylvanian Pool, Lea County, New Mexico, for an additional year. All interested parties may appear and show cause why said pool should not be developed on 40-acre proration units.

CASE 3136:

Application of William A. and Edward R. Hudson for expansion of a waterflood project and for certain unorthodox locations, Eddy County, New Mexico. Applicants, in the above-styled cause, seek authority to expand their Maljamar Grayburg-San Andres Waterflood Project by the drilling of three injection wells at unorthodox locations not more than 100 feet nor closer than 25 feet to the Northeast corner of Units H, M and P of Section 24, Township 17 South, Range 31 East, Eddy County, New Mexico. Applicants further seek authority to convert from oil production to water injection their Puckett "A" Well No. 26 located in the Southeast corner of Unit D and Wells Nos. 27 and 28 located in the Northwest corners of Units K and C, respectively, all in said Section 24.

CASE 3137:

Application of Southern Union Production Company for an unorthodox location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to complete its Navajo Indian Well No. 6 at an unorthodox location in the Blanco Mesaverde Pool 1700 feet from the North line and 910 feet from the West line of Section 6, Township 26 North, Range 8 West, San Juan County, New Mexico.

CASE 2660 (Reopened):

In the matter of Case No. 2660 being reopened pursuant to the provisions of Order No. R-2348-A, which continued the original order establishing 80-acre proration units for the Middle Lane-Pennsylvanian Pool, Lea County, New Mexico, for an additional year. All interested parties may appear and show cause why said pool should not be developed on 40-acre proration units.

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 28, 1964

9 A. M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or Elvis A. Utz, Alternate Examiner:

- CASE 3113: (Continued from the September 30, 1964 Examiner Hearing).
Application of BCO, Inc. for a unit agreement, San Juan and Rio Arriba Counties, New Mexico. Applicant, in the above-styled cause, seeks approval of the Escrito Gallup Pool Unit Area comprising 3123.88 acres, more or less, of State and Federal lands in Township 24 North, Ranges 7 and 8 West, San Juan and Rio Arriba Counties, New Mexico.
- CASE 3114: (Continued from the September 30, 1964 Examiner Hearing).
Application of BCO, Inc. for a waterflood project, San Juan and Rio Arriba Counties, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Escrito Gallup Oil Pool in its Escrito Unit Area by the injection of water into the Gallup formation through three wells located in Sections 17 and 18, Township 24 North, Range 7 West, and Section 12, Township 24 North, Range 8 West, San Juan and Rio Arriba Counties, New Mexico.
- CASE 3131: Application of Texstar Petroleum Company for a unit agreement, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Hospah Unit Area comprising 1160 acres, more or less, of State and Fee lands in Townships 17 and 18 North, Ranges 8 and 9 West, Hospah Pool, McKinley County, New Mexico.
- CASE 3132: Application of Texstar Petroleum Company for a waterflood project, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Hospah Pool in its Hospah Unit Area, by the injection of water into the Hospah Sand through 8 wells located in Section 1, Township 17 North, Range 9 West, and Section 36, Township 18 North, Range 9 West, McKinley County, New Mexico.
- CASE 3133: Application of George W. Strake for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Hackberry Deep Unit Area comprising 3,832.60 acres, more or less, of Federal and State lands in Townships 19 and 20 South, Ranges 30 and 31 East, Eddy County, New Mexico.
- CASE 3134: Application of Lone Star Producing Company for a non-standard location, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to deepen its Federal Well No. 1-D and complete same in the South Prairie-Atoka Gas Pool. Said well is 660 feet from the North and East lines of Section 29, Township 8 South, Range 36 East, Roosevelt County, New Mexico, at a non-standard location for said gas pool.
- CASE 3135: Application of Lone Star Producing Company for a non-standard unit and a non-standard location, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard gas proration unit comprising the SW/4 of Section 21, Township 8 South, Range 36 East, South Prairie Atoka Gas Pool, Roosevelt County, New Mexico. Said unit to be dedicated to applicant's Federal Well No. 1-B at a non-standard location for said pool 660 feet from the South and West lines of said Section 21.

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 28, 1964

9 A. M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

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- CASE 3133: Application of George W. Strake for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Hackberry Deep Unit Area comprising 3,832.60 acres, more or less, of Federal and State lands in Townships 19 and 20 South, Ranges 30 and 31 East, Eddy County, New Mexico.
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- CASE 3135: Application of Lone Star Producing Company for a non-standard unit and a non-standard location, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard gas proration unit comprising the SW/4 of Section 21, Township 8 South, Range 36 East, South Prairie Atoka Gas Pool, Roosevelt County, New Mexico. Said unit to be dedicated to applicant's Federal Well No. 1-B at a non-standard location for said pool 660 feet from the South and West lines of said Section 21.

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. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico

Re: CASE NO. 3136
ORDER NO. R-2815
APPLICANT WILLIAM A. & EDWARD
R. HUDSON

Dear Sir:

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

Very truly yours,

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 X

Aztec OCC

OTHER Mr. Frank Irby

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

December 1, 1964

C
O
P
Y

Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico

Dear Mr. Kellahin:

Reference is made to Commission Order No. A-2815, recently entered in Case No. 3136, approving the expansion of the Hudson & Hudson Maljamar Waterflood Project.

Injection in the six newly authorized injection wells is to be down tubing and without packers, except in the case of Well No. 26, which shall be equipped with tubing and packer. Cement on the 8 5/8-inch surface pipe is to come back to the top of the Santa Rosa formation.

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 1204 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

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

December 1, 1954

Mr. James H. Hester
Hester & Hester
Attorneys at Law
Post Office Box 1789
Santa Fe, New Mexico

Dear Mr. Hester:

Reference is made to Commission Order No. 10, dated October 7, 1954, in Case No. 10,000, approving the expansion of the Santa Fe Waterflood Project.

Inspection of the six newly authorized injection wells is to be made down tubing and without packers, except in the case of well No. 1, which shall be equipped with casing and packer. Generally, the 2 1/2-inch casing pipe is to be used to the top of the Santa Fe formation.

As to allocation, the Commission indicates 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 101-3 is 1000 barrels per day.

Please report any error in this estimated maximum allowable immediately, both to the Santa Fe office of the Commission and the appropriate State or Division office.

In order that the allocation assigned to the project may be kept current, and in order that the operator may fully benefit from the allocation provision of Rule 101, it behooves him to promptly notify both of the aforementioned Commission offices of letter of any change in the status of wells in the project area, i.e., when

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

-2-

Mr. Jason Kellishin
December 1, 1964

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

ALP/DSH/ir

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

Oil Conservation Commission:
Hobbs and Artesia, New Mexico

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OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

-2-

Mr. Dean Hamilton
December 1, 1944

Enclosed for your information are two copies of a report on the results of the investigation of the oil fields in the Santa Fe area. The report contains a list of the wells which have been drilled and the results of the tests. It also contains a list of the wells which have been abandoned and the reasons therefor. The report is being submitted to you for your information and for your use in the future.

Your cooperation in keeping the Commission informed of the results of the investigation of the oil fields in the Santa Fe area is appreciated.

Very truly yours,

E. J. BROWN, JR.
Secretary-Treasurer

ALP:JAN:14

Mr. Dean Hamilton
State Oil Conservation
Santa Fe, New Mexico

Oil Conservation Commission
P. O. Box 871, Santa Fe, New Mexico

State of New Mexico
Oil Conservation Commission



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

December 2, 1964

Re: CASE NO. 3136
ORDER NO. R-2815-A
APPLICANT HUDSON & HUDSON

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

A. L. Porter, Jr.
A. L. PORTER, Jr.
Secretary-Director

OTHER Mr. Frank Irby