CASE 3136: Appli. of WM. A. AND EDWARD R. HUDSON for expansion of waterflood proj. & unorth. loc's.

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APPlication,
Transcripts,
SMAIL Exhibits
ETC.



STATE OF NEW MEXICO

STATE ENGINEER OFFICE SANTA FE

S. E. REYNOLDS STATE ENGINEER

October 7, 1964

OCT

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

87501

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

cc-Wm. A & Edward R. Hudson

Jason Kellahin F. H.Hennighausen

Dear Mr. Porter:

FEI/ma

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 5½" casing at a point well below the top of the cement surrounding the $5\frac{1}{2}$ " casing.

Yours truly,

S. E. Reynolds State Engineer

By: 6 / Www. Trby

Chief

Water Rights Div.

DOCKET MAILED



3136

STATE OF NEW MEXICO

STATE ENGINEER OFFICE SANTA FE

S. E. REYNOLDS

October 15, 1964

ADDRESS CORRESPONDENCE TO: STATE CAPITOL SANTA FE, N. M. 8750].

Mc. A. L. Porter, Jv. 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

Frank E. Irby

Chief

Water Rights Div.

FEI/ma

cc-Wm. A. & Edward R. Hudson Jason Kellahin

Ralph L. Gray

F. H. Hennighausen

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

Frank E. Irby

Chief

Water Rights Div.

FEI/ma

cc-Wm. A. & Edward R. Hudson

Jason Kellahin Ralph L. Gray

F. H. Hennighausen

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RALPH L. GRAY

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PERFORMENT ACTUAL PRINCE PROBUCTION

CONSULTANT

SOR CARPER BUILDING

ARTESIA, NEW MEXICO & \$ 270

October 9, 1964

State Engineer Office Santa Fe, New Mexico

Attention: Mr. Frank Irby

Dear Sir:

On October 9, 1964, 1 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 easing, 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 law 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,

Mach Soa

PECI STEPHE PETPOLETIN ENGLE

RLG: 1w

Encls.

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

DATA ON WATER + NIECTION WOLLS

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

Surface Casing - S-5/8" 247 J-55 new comented at 604 feet with 100 eacks. 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%" 0.0. 15.5% J-55 new casing comented at 3902 feet with 150 sacks 4% get regular coment plus 150 sacks of neat regular. Estimated top of cement is at 1755 feet. Base of salt is 1715 feet. This string of easing has a minimum yield pressure of 4810 psi. The present plant pressure is approximately 1800 pai.

PUCKETT "A" #23 - NW corner Unit G - Sec. 24

Surface Casing - S-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 5½" 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" 0.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" 0.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 leaded with heavy mud.

We will run 2-3/8" 0.0. 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.

 \cong KELLAHIN AND FOX ATTORNEYS AT LAW

54% EAGDSAN FRANCISCO STREET
POST OFFICE BOX 21769

SANTA FE. 100 MEXICO

Sept. 25, 1964

JASON W. KELLAHIN ROBERT E. FOX

983-9396 982-2981

June 3/36

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 Melianer Bool Flagrance land to the Melianer Bool Flagrance land t 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 together with a copy this matter is today being given to the office of the New Mexico State Engineer.

Jason W. Kellahin

JWK:ss Encl. cc: State Engineer

DOCKET MAILED

Date 10-15-69

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico October 28, 1964

HEARING EXAMINER

IN THE MATTER OF: 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) Case No. 3136 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 NW corners XXXXXXX of Units K and C, respectively, all in said Section 24.

BEFORE:

DANIEL S. NUTTER

TRANSCRIPT OF HEARING



MR. NUTTER: Case 3136.

MR. DURRETT: Application of William A. and Edward R. Hudson for expansion of a waterflood project and for certain unorthodox locations, Eddy County, New Mexico.

MR. KELIAHIN: If the Examiner please, Jason Kellahin, Kellahin and Fox, Santa Fe, representing the applicant.

We have one witness I would like to have sworn,

please.

(Witness sworn.)

RALPH I. GRAY

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

(Whereupon, Applicant's Exhibits 1 through 6 Marked for Identification.)

- Would you state your name, please? Q
- Ralph I. Gray. Α
- What business are you engaged in, Mr. Gray?
- Consulting Engineer.
- In connection with your work as a Consulting Engineer, \boldsymbol{A} have you any connection with the application of William A. and Edward R. Hudson in Case 3136?
 - Yes, sir. I look after their operations in New A



Mexico.

- Q Have you testified before the Oil Conservation
 Commission and made your qualifications a matter of record?
 - A Yes, I have.

MR. KELLAHIN: Are the witness's qualifications acceptable?

MR. NUTTER: Yes, sir.

- Q (By Mr. Kellahin) Mr. Gray, what is proposed by William A. and Edward R. Hudson in Case 3136, application of William A. and Edward R. Hudson for expansion of a waterflood project and for certain unorthodox locations?
- A I'll refer you to Exhibit No. 1. This is a map of a part of the Maljamar Pool. This map shows the waterflood project which is now in existence.

The applicant proposes to inject water into their Puckett A No. 26, 27, and 28 wells. These are shown on the map with the red dots.

The applicant also proposes to drill their Puckett B No. 22 well, and also they propose to drill two wells as line injection wells. These are located close to the east line of Section 24, and these are also indicated on the map by the red circles.

The applicant, in addition to proposing the three new unorthodox locations, also proposes to inject water into



EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

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these wells after completion.

In regard to the injection of water into Puckett A No. 27 and 28 wells, we propose to inject down-tubing without a packer which is a continuation of our present program.

In regard to injection into our Puckett A No. 26 well, because of the difficult program used in drilling this well, we propose to inject water down two-inch tubing, but with a packer set at the bottom part of the tubing.

- Q Is that in accordance with the request of the State Engineer?
 - Yes, that's right. Α
- Referring to what has been marked as Exhibit No. 2, Ω would you identify that exhibit and discuss it, please?
- Exhibit No. 2 shows a diagrammatic sketch of what Α we consider a typical injection well program in this flood. Generally, 8 and 5/8 casing is set at about 600 feet or into the top of the rustler anhydrite section and then usually 5-1/2 casing is cemented near the bottom of the hole and completion is made by perforating various zones.
- That completion will be utilized except as modified by your comments on the well No. 26, is that correct?
 - Yes, sir, that's correct.
- Referring to what has been marked as Exhibits 3, 4, and 5, would you identify those exhibits and state what's



shown on them.

A These three exhibits are electric logs of Puckett

A 26, 27, and 28, and these logs show the top of the San Andres

formation and they also show the perforated intervals and

treatments performed on each zone.

These logs just merely indicate the zones that we will flood.

- Q A flood has already been instituted in this area for some time, has it not?
 - A Yes, sir.
 - Q Has it met with any success up to this point?
- A Yes, this is what we consider a slow flood, but the response has been very effective and each month we have been getting a steady small increase.

I would like to refer you to Exhibit 6, which shows the monthly oil production on the Puckett A lease, and this curve shows that after, shortly after the start of flooding operations, that we started getting a gradual increase in our production and this increase is continuing.

Exhibit No. 7 shows the same data for the Puckett B lease, and in this case the production has been arrested whereas normally a decline is experienced.

The Puckett B lease is getting more or less an edge effect with the flood at the present time.



(Whereupon, Applicant's Exhibits 7 and 8 were marked for identification.)

Q Referring to what has been marked as Exhibit No. 8, will you state what is shown on that exhibit?

test for all of the wells which offset an injection well.

This shows the first column there, showing the tests before injection started, oil and water in barrels per day; second column shows the recent test made in October, 1964, and the third table, or third column, indicates the change since the original tests were made.

You'll note from this table that excellent response has been obtained on the wells which are completely surrounded by injection wells. For example, Puckett A No. 5 well originally started out at about 23 barrels of oil and two barrels of water per day, and our last test shows that this well is now producing 53 barrels of oil and 5 barrels of water per day.

The Puckett A No. 7 criginally started out at 11 barrels of oil and 25 barrels of water per day. This well now is producing 74 barrels of oil and 13 barrels of water per day.

Exhibit 8 will also show that we're starting to get small responses now on wells which are outside of the active injection area. For example, Puckett No. 4, that well has



BOX 1092 . PHONE 243-6491 . ALBUQUERQUE

experienced an 8 barrel of oil per day increase, and I might add that actually the response is somewhat greater than this table would indicate because normally these wells would have been declining since the original test was made, so actually, the response will be somewhat more than the figures would indicate.

Puckett A No. 11 has experienced an 11 barrel of oil per day increase. Both of these wells are east of the present line of injection wells, and over on the west side of the flood area, well No. 12 for example, has gotten a 9 barrel of oil per day increase, so we're reaching the point where we're starting to get some response outside of the active injection area.

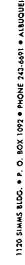
- Q Is it necessary in your opinion to drill the new injection wells in order to adequately develop the waterflood project and protect your lease lines?
 - A Yes, sir.
- Q The wells on the eastern side are within approximately 25 feet of your lease line, is that correct, or proposed to be?
- A We propose these be located within 100 feet and not closer than 25 feet to the corners of the units as indicated.
- Q Have you made any effort to get a line agreement with the offsetting operator?
 - A Yes. Approximately two years ago when this flood was

started, we had a meeting with Continental Oil Company and at that time we proposed a line agreement based on the pattern that we show on Exhibit No. 1. Then our last test contacts with Continental, we had a meeting on August the 31st with their representatives in Hobbs, and then this was followed up by my letter dated September 3rd, 1964, in which we proposed that wells, four wells be drilled along the common lease line as shown on the map, two of which would be drilled by Hudson.

We haven't actually received an answer from Continental so I can't say what their intentions are at this time in regard to the two located on their property.

- Q It's essential though, in your opinion, that Hudson and Hudson go ahead and drill their wells, is that correct?
- A Yes, in order to protect our correlative rights we think it's necessary that these be drilled.
 - Q Is that the reason for the location of the wells?
- A Yes, sir. That's the principal reason for these locations.
- Q In connection with your injection well completions, Mr. Gray, are there any fresh water zones encountered in this area?
 - A No, sir.
- Q But the Santa Rosa formation is present, is that correct?





- A Yes, the formation is present.
- Q Will the completion as proposed by you, with the injection in your No. 26 well under a packer and the other two open holes through the tubing, in your opinion, adequately protect the Santa Rosa formation or any producing formations?
 - A Yes, sir, we think so.
- Q Were Exhibits 1 through 8 inclusive prepared by you or under your supervision?
 - A Yes, they were.

MR. KELLAHIN: At this time I would like to offer in evidence Exhibits 1 through 8.

MR. NUTTER: Applicant's Exhibits 1 through 8 will be admitted in evidence.

(Whereupon, Applicant's Exhibits 1 through 8 were offered and admitted into evidence.)

MR. KELLAHIN: That's all I have on Direct Examination.

MR. NUTTER: Are there any questions of Mr. Gray?

MR. IRBY: I would like to ask Mr. Gray a question.

CROSS EXAMINATION



BY MR. IRBY:

Q I didn't catch anything in your testimony, Mr. Gray, with regard to the construction of these three proposed new wells and the equipment that would be placed in them. Did you discuss that in your testimony?

PHONE 243.6691

8OX 1092



A only in a general way. We do propose to drill these three new locations with cable tools and drill and complete them in a similar manner that is shown on Exhibit 2 as a typical injection pattern. In each case, the 8 and 5/8's casing had been cemented in the top of the anhydrite section and cement will be brought up over the Santa Rosa formation.

- That 8 and 5/8's is the surface casing?
- A Yes, sir.

MR. IRBY: Thank you.

A There is one more point that perhaps I ought to mention. You will note that we are proposing these line wells be drilled close to the line rather than trying to utilize the old wells and using, for instance, a diagonal pattern. We believe that the drilling of these wells close to the line is essential.

We've made adequate study of various floods that are in operation at the present time and we have found that in practically all floods that we have studied, quite often they find that these old holes are not suitable for injection wells and that's principally due to the fact that several hundred feet of open hole are exposed in these old wells, several formations are exposed and it has been found by experience that quite often when water is injected into these old holes, it will go into formations or zones that are not intended to be

flooded.

substantial amount of difficulty is being experienced in trying to utilize these old holes. We feel that in order to offer adequate protection for both parties that it's essential that these wells be drilled close to the line as indicated on our map.

CROSS EXAMINATION

BY MR. NUTTER:

- Q The eight wells colored in blue are on active injection, is that correct?
 - A That is correct.
- Q Which is the well that was recently authorized as an unorthodox location for the Glorieta?
- A That's the No. 26 well and that is shown as the red circle on the map.
- Q It was non-productive in the Glorieta and is going to be used as an injection well now in the San Andres?
 - A Yes.
 - Q The 27 and 28 have also been drilled, is that correct?
- A That's correct. Three wells have actually been drilled and we're just waiting on authorization to use them as injection wells.
 - Q And the request today is also for the authorization



of drilling the unorthodox locations of the other three wells?

- A That's correct.
- Q And these would be not closer than 25 feet to the 40-acre lines?
 - A Yes, sir.
 - O And not more than a hundred feet from those lines?
- A Right. And, of course, we are also asking for authorization to inject water in them.
 - Q And to put them on injection.
 - A Yes.
- Q As I understand it, all of these wells will be equipped with casing, the injection of water will be through the casing without tubing or packers with the exception of the No. 26?
- A No, sir. That's not quite right. We intend to use a packer on the tubing at No. 26. In all of the other wells, we do propose to use tubing, but it will be open ended.
- Q On this 8 and 5/8's inch surface pipe that you cement with a hundred sacks on your typical well here, does that hundred sacks of cement circulate?
- A No, it doesn't circulate. Our best estimate that it comes up to the top of the Santa Rosa. One reason that we don't make too big an attempt to circulate that is that even if we did circulate it, there's a shallow formation that takes



- This is one of the areas where you cannot obtain circulation?
 - Right.
- How high does your cement come on your 5-1/2 inch pipe?
- It comes up into the salt section or approximately the base of the salt.
- Normally, how many feet above the top of the pay in your San Andres is this?
 - Pardon?
- Normally, how many feet above the top of the pay Õ in the San Andres is the top of the cement?
- Oh, well, our pay will probably average about 3700 feet and the base of the salt will be about 1800, so we're talking about roughly 1800.
 - Seventeen to eighteen hundred feet above the pay? Q
 - Two thousand, yes.
- We have a letter dated October 15, 1964, from Mr. Irby of the State Engineers Office in which he objects to the granting of the application insofar as the Puckett A 26 is concerned. This is to satisfy the State Engineers Office as the reason for using the tubing and the packer on this particular well?



1092 . PHONE 243-6691 . ALBUQUERQUE, NEW MEXICO

1120 SIMMS BLDG. . P. O. BOX

A That is correct.

MR. NUTTER: And then the State Engineers Office withdraws this objection, is that correct, Mr. Irby?

MR. IRBY: That's correct, Mr. Examiner.

MR. NUTTER: Any other questions of Mr. Gray?
He may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Kellahin?

MR. KELLAHIN: No.

MR. NUTTER: Does anyone have anything further to offer in Case 3136? We'll take the case under advisement.



dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. . P. O. BOX 1092 . PHONE 243-6691 . ALBUQUERQUE, NEW MEXICO

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EXHIBITS

Number	Marked	<u>Offered</u>
1 through 6	2	9
7 and 8	6	9



H: DEPOSITIONS, HEARINGS. STATE MENTS. EXPERT TESTIMONT, DAILY COPY, CONVENTIONS

. ALBUQUERQUE, NEW MEXICO

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691

STATE OF NEW MEXICO)

SS

COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Witness my Hand and Seal this 5th day of November, 1964.

NOTARY PUBLIC

My Commission Expires:

June 19, 1967.



I do hereby certify that the foregoing is a complete record of the proceedings in the Expense hearing of Case No. 19.69.

New Mexico 011 Conservation Commission

OIL CONSERVATION COMMISSION SANTA FE, NEW LEXICO

		Date
CASE	3130	Hearing Date 9 am 10/28
	My recommendations for an ord	er in the above numbered cases are as follows:
	K Hudson to	drill three ween for water
	injection just	are waliflood Project, said
	nor to be I	located not closer than is fet then than 100 feet of the
	in Section 24 co, n.m:	located not closer than 25 feet there than 100 feet of the the faceowing 40-occupants Township 17 South Range 31 & Elly
	se/4-	suff suff seff seff place
	also the and	harvye applicants meserial
	sescrited pres	risnly drilled wells in see 24
	July July	13" # 26 1295 FNL \$ 1295 FWL "B" # 27 2615 FSL \$ 1345 FWL "B" # 28 25' FNL \$ 1345 FWL

Jandrum

October 28 Examiner Hearing

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 MAN Well No. 26 located in the Southeast corner of Unit D and Welis 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. I-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.

OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE No. 3136 Order No. R-2815

APPLICATION OF WILLIAM A. & EDWARD R. HUDSON FOR EXPANSION OF A WATERFLOOD PROJECT, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on October 28, 1964, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 24th day of November, 1964, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS :

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicants, William A. and Edward R. Hudson, seek permission to expand their Maljamar Grayburg-San Andres Water flood Project in the Maljamar Pool by the injection of water into the Grayburg-San Andres formation through six injection wells in Section 24, Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico.
- (3) That the wells in the proposed expansion of the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.
- (4) That the proposed expansion of the Maljamar Grayburg-San Andres Waterflood Project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

CASE No. 3136 Order No. R-2815

(5) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

- (1) That the applicants, William A. and Edward R. Hudson, are hereby authorized to expand their Maljamar Grayburg-San Andres Waterflood Project in the Maljamar Pool by the injection of water into the Grayburg-San Andres formation through the following-described wells in Township 17 South, Range 31 East, NMPM, Eddy County, New Mexico:
 - A well to be drilled no nearer than 25 feet and no farther than 100 feet from the Northeast corner of the SE/4 NW/4 of Section 24.
 - A well to be drilled no nearer than 25 feet and no farther than 100 feet from the Northeast corner of the SW/4 SW/4 of Section 24.
 - A well to be drilled no nearer than 25 feet and no farther than 100 feet from the Northeast corner of the SE/4 SE/4 of Section 24.
 - Puckett "B" Well No. 26 located 1295 feet from the North line and 1295 feet from the West line of Section 24.
 - Puckett "B" Well No. 27 Located 2615 feet from the South line and 1345 feet from the West line of Section 24.
 - Puckett "B" Well No. 28 located 25 feet from the North line and 1345 feet from the West line of Section 24.
- (2) That the expanded waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.
- (3) That monthly progress reports of the expanded waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1119 of the Commission Rules and Regulations.

-3-CASE No. 3136 Order No. R-2815

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JACK M. CAMPBEIL, Chairman

E. S. WALKER, Member

A. L. PORTER, Jr., Member & Secretary

BOVERNOR JACK M. CAMPBELL CHAIRMAN

Sixte of New Mexico

Bil Conserbation Commission

LAND COMMISSIONER E. S. JOHNNY WALKER MEMBER



P. O. BOX 2088 SANTA FE

BTATE GEGLOGIST A L PORTER, UR. BECRETARY - DIRECTOR

November 24, 1964

Mr. Jason Kellahin	
Kellahin & Fox	
Attorneys at Law	2
Post Office Box 176 Santa Fe, New Mexic	າ ດ

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

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. 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

GOVERNOR EDWIN L. MECHEM CHAIRMAN

State of New Wexico eil Conservation Commission

LAND COMMISSIONER E. S. JOHNNY WALKER MEMBER



P. O. BOX 2088 SANTA FE 87501

A. L. PORTER, JR. SECRETARY - DIRECTOR

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

Gentlemen: Reference is made

No. 3136, approving the expansion of the Hudson & Hudson Mal Water Flood Project.

cording to our calculations, when all of the authorized injection weils 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 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.

cc: artesia (00 a

Jujection in the state which authorized and beginning the state of the down to bing with entire packers, except in the said with entire packers, which Shall be case of with tubing and packer. Use againspeed with tubing and packer. Use againspeed with tubing and packer.

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

December 1, 1964

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

Dear Mr. Kellahin:

Reference is made to Commission Order No. R-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

-2-

Mr. Jason Kellahin December 1, 1964 SANTA FE. NEW MEXICO

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/DSN/ir

State Engineer Office Santa Fe, New Mexico

> Oil Conservation Commission: Hobbs and Artesia, New Mexico

GOVERNOR JACK M. CAMPBELL GHAIRMAN

State of New Mexico

Bil Conserbation Commission

LAND COMMISSIONER
E. S. JOHNNY WALKER
MEMBER



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

December 2, 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-A	
	APPLICANT_	HUDSON & 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.

Secretary-Director

OTHER	Mr. Frank Irby
Aztec OCC _	
Artesia OCC_	×
Hobbs OCC	×
Carbon copy	of order also sent to:
ir/	

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

CASE No. 3136 Order No. R-2815-A

APPLICATION OF WILLIAM A. & EDWARD R. HUDSON FOR EXPANSION OF A WATERFLOOD PROJECT, EDDY COUNTY, NEW MEXICO.

NUNC PRO TUNC ORDER

BY THE COMMISSION:

It appearing to the Commission that due to clerical error, Order No. R-2815, dated November 24, 1964, does not correctly state the intended order of the Commission,

IT IS THEREFORE ORDERED:

(1) That the portion of Paragraph (1) on Page 2 of Order No. R-2815 reading:

"A well to be drilled no nearer than 25 feet and no farther than 100 feet from the Northeast corner of the SE/4 NW/4 of Section 24."

is hereby stricken, and

"A well to be drilled no nearer than 25 feet and no farther than 100 feet from the Northeast corner of the SE/4 NE/4 of Section 24."

is hereby interlineated in lieu thereof.

(2) That the correction set forth above shall be effective nunc pro tunc as of November 24, 1964.

DONE at Santa Fe, New Mexico, on this 2nd day of December, 1964.

STATE OF NEW MEXICO

QIL CONSERVATION COMMISSION

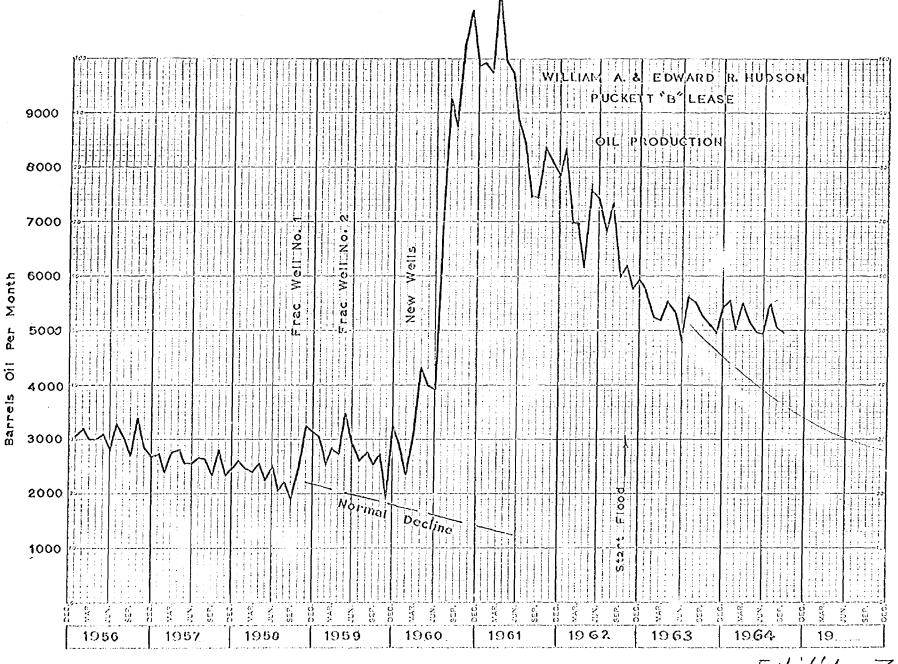
JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

A. L. PORTER, Jr., Member & Secretary

eer





Exhibits 3136



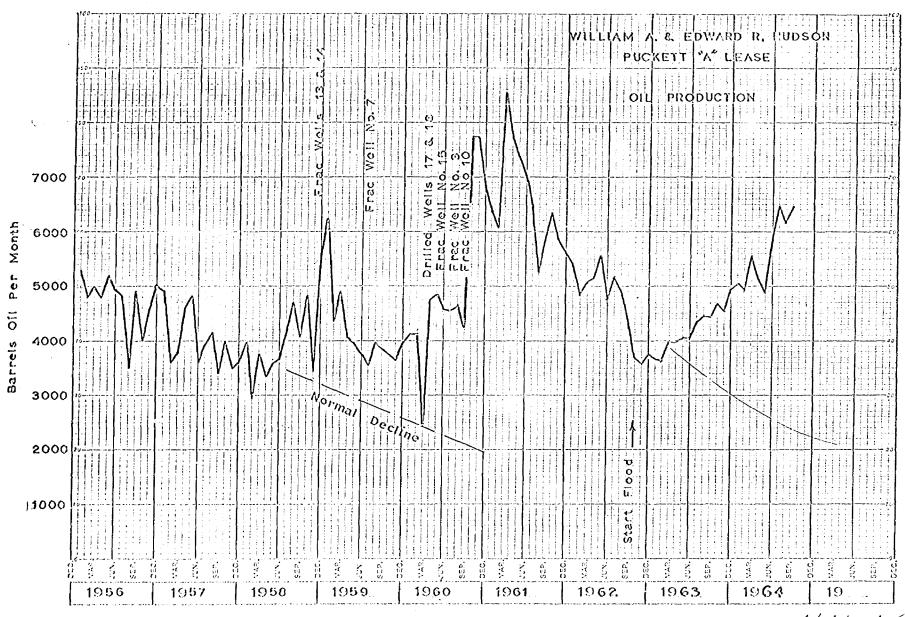


Exhibit 6 C33136

BEFORE THE OIL CONSERVATION COMMISSION OF NEW MEXICO

APPLICATION OF WILLIAM A. & EDWARD R. HUDSON FOR APPROVAL OF THE DRILLING OF THREE UNORTHODOX WELL LOCATIONS FOR WATER INJECTION WELLS AND FOR THE APPROVAL OF WATER INJECTION INTO THE PUCKETT "A" No. 26, No. 27 and No. 28 WELLS, ALL IN THE WILLIAM A. AND EDWARD R. HUDSON WATER FLOOD PROJECT, MALJAMAR POOL, GRAYBURG-SAN ANDRES FORMATION, LEA AND EDDY COUNTIES, NEW MEXICO.

Care 3136

APPLICATION

Come now William A. & Edward R. Hudson and apply to the Oil Conservation Commission of New Mexico for the following:

1. Approval of unorthodox well locations for the following wells, to be located not more than 100 feet and not closer than 25 feet to the following described corners of the following described units as injection wells:

Section 24, Township 17 South, Range 31 East, N.M.P.M.

Unit H - Northeast Corner

Unit P - Northeast Corner

Unit M - Northeast Corner

2. Approval of water injection to utilize the following wells, the location of which was heretofore approved by the Commission by its Order No. R-1693:

Puckett "A" No. 26 - 1295 feet from the North and 1295 feet from the West lines of Section 24, T. 17 S., R. 31 E.

Puckett "A" No. 27-2615 feet from the South and 1345 feet from the West lines of Section 24, T. 17 S., R 31 E.

Puckett "A" No. 28- 25 feet from the North and 1345 feet from the West lines of Section 24, T. 17 S., R 31 E.

There is attached hereto and made a part hereof a plat showing the proposed unorthodox well locations proposed, location of the Puckett "A" No. 26, No. 27 and No. 28 wells. Also

attached hereto and made a part hereof is a diagrammatic sketch of a typical injection well completion, to be utilized in the event of approval of this application.

By copy of this application, notice has been given to the Office of the State Engineer, as required by the rules of the Commission.

Water injection will be made into the Grayburg-San Andres Formations at depths of approximately 3,600 feet to 4,000 feet. Source of water is the Ogallala Formation, the water supplier being the Caprock Water Company. Estimated volume of water to be injected will vary between 200 barrels and 800 barrels of water per day.

Approval of this application is in the interests of conservation, will permit the recovery of a maximum amount of oil, and is essential for the protection of correlative rights of the applicant and will not impair the correlative rights of offset operators.

WHEREFORE, applicant prays that this matter be set for hearing and that after notice and hearing as required by law, the Commission issue its order approving the application of William A. and Edward R. Hudson as applied for.

Respectfully submitted,

WILLIAM A. & EDWARD R. HUDSON

Kellahin & Fox P. O.Box 1769

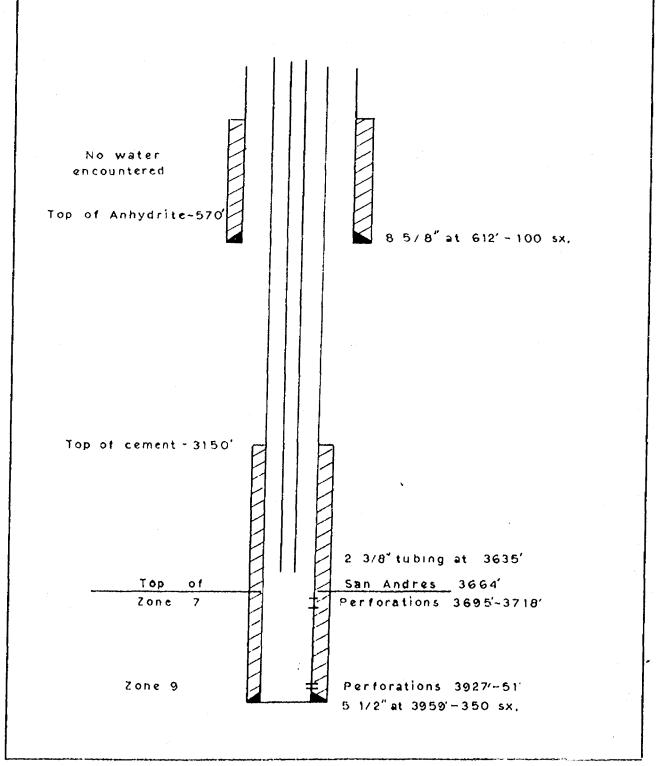
Santa Fe, New Mexico

ATTORNEYS FOR APPLICANTS

Car 3/36

TYPICAL INJECTION WELL

WILLIAM A. & EDWARD R. HUDSON PUCKETT "A" 24



RALPH L. GRAY

TYPICAL INJECTION WELL

WILLIAM A. & EDWARD R. HUDSON

No water encountered 8 5/8" at 612' - 100 sx. Top of Anhydrite-570 Top of cement - 3150' 2 3/8" tubing at 3635" San Andres 3664'
Perforations 3695'-3718' of TOP Zone 7 Pertorations 3927-51 5 1/2" at 3959'-350 sx. zone 9

RALPH L. GRAY

Exhibit, 2

WILLIAM A. & EDWARD R. HUDSON " MALJAMAR PUCKETT FLOOD #1

WELL TESTS - WELLS OFFSET BY INJECTION WELL.

WELL		TEST BEFORE INJ OIL	WATER	OCTOBER,	1964 VATER 1	CHANGE OIL + 10	WATER - 2
Puckett "A"	#2	11	3	h i		- 3	
Kurkoo	#3	7				+ 8	- 2
	#4	7	2	15	5	+ 30	+ 3
	#5 *	23	2	53		+ 4	. + 60
	#6	13	1	17	61	+ 63	-12
	#7 *	11	25	74	13	+ 2	H 3
		б	3	8		+ 11	- 1
	#9	5	1	16			+ 2
	#11	5	2	14	4	+ 9	
	#12			4			
	#15	4		6			and the second
	#17	6		8			
	#18	8		240	84	+134	+45
Total		106	39				
gelige Time in		` e	•	6	1		- 1
Puckett	"B" #2	6	2	7	34	+ 1	+33
-	#3	6	1	14	ì	+ 9	+ 1
	#5	5			36	+ 10	+33
Total		17	3	27			

^{*} Fully enclosed by Injection Wells.

Exhibit 8

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE No. 3/36
Order No. R-28/5

APPLICATION OF <u>Villian</u> A+ Chwan R. FOR A WATERFLOOD PROJECT, CARY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:
This cause came on for hearing at 9 o'clock a.m. on ONTE, 1964, at Santa Fe, New Mexico, before Examiner
NOW, on this day of not, 1964, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,
FINDS:
(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
(2) That the applicants William A. and Clurand R. Nudson Upandthui Malaiman Marking-Dan Artys. seeks permission to institute a Materflood Project in the
The in the Onit Area Pool by the injection of water into the
Pool by the injection of water into the Randway-Dan Cambra formation through 6 injection wells in
Section 7 North, Range_South
3/ West, NMPM, Elly County, New Mexico.
(3) That the wells in the project area are in an advanced
tate of depletion and should properly be classified as "stripper"
ells.

(4) That the proposed thater flood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(5) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the appli	cants William A. and Chur	en R. Halson,
are effant the	n Malaman Grayburg - Ann notitute a Waterflood Proje	Ordres.
Les hereby authorized to 4	nservace a materilioud proje	ec in the
ynaljaman	Pool by the injection of	water into the
		
Kayong - La In dramat	function the following-d	escribed wells
in Township	North, Range 3/ South	West, East
NMPM, Cilder County, 1	New Mexico:	مسيم ر
A well to be drilled no meaner to	than I speet and no flee	the Islan 100 feet
how the northeast corner of the	SE/4 NW/4 of Decison o	~ ~ ~
a well to be drilled no nearer a	ten 25 feet and no fact	illan loogier
from the northeast corner of the	SWA SWA & Della	the the cools
a well to be drilled no means of the	then Is greet and no you	· 24.
facket "B" well no 26 locate	I 129 sh from the north le	ine and 12 95
fucket o" well no 2? location.	2 th. dest	
not fire of Action 24.	el al and the art l'	Dedel to
fullit B" well) a 28 located 25 west line of D(2) trat the outjon	expanded project shall	be governed
Approximately the second secon	3 701, 702, and 703 of the C	
Rules and Regulations.		

- (3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.
- (4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated. 1

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

CASE No. 3136 Order No. R-2815-A

APPLICATION OF WILLIAM A. & EDWARD R. HUDSON FOR EXPANSION OF A WATERFLOOD PROJECT, EDDY COUNTY, NEW MEXICO.

down

NUNC PRO TUNC ORDER

BY THE COMMISSION:

It appearing to the Commission that due to clerical error, Order No. R-2815, dated November 24, 1964, does not correctly state the intended order of the Commission,

IT IS THEREFORE ORDERED:

- (1) That the portion of Paragraph (1) on Page 2 of Order No. R-2815 reading:
 - "A well to be drilled no nearer than 25 feet and no farther than 100 feet from the Northeast corner of the SE/4 NW/4 of Section 24."

is hereby stricken, and

"A well to be drilled no nearer than 25 feet and no farther than 100 feet from the Northeast corner of the SE/4

NE/4 of Section 24."

is hereby interlineated in lieu thereof.

(2) That the correction set forth above shall be effective nunc pro tunc as of November 24, 1964.

DONE at Santa Fe, New Mexico, on this day of And ,