

- CASE 3876: Application of Newmont Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Young (Queen) Unit Area comprising 1320 acres, more or less, of federal and state lands in Township 18 South, Range 32 East, Young (Queen) Pool, Lea County, New Mexico.
- CASE 3877: Application of Newmont Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in its Young (Queen) Unit Area by the injection of water into the Queen formation through 17 wells located in Sections 9, 16, 17, 19, 20, 21, and 29, Township 18 South, Range 32 East, Young (Queen) Pool, Lea County, New Mexico.
- CASE 3878: Application of General American Oil Company of Texas for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Premier sand through two injection wells located in Unit M of Section 8, and Unit G of Section 17, Township 16 South, Range 30 East, West Henshaw-Grayburg Pool, Eddy County, New Mexico.
- CASE 3879: Application of Walter Duncan Oil Properties for an unorthodox oil well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a well at an unorthodox oil well location 1000 feet from the North line and 1242 feet from the East line of Section 36, Township 32 North, Range 18 West, San Juan County, New Mexico. Said well would be projected to the Dakota formation.
- CASE 3880: Application of Anne Burnett Windfohr, dba Windfohr Oil Company, for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Abo formation in the perforated interval from approximately 6970 feet to 7028 feet in the Windfohr Oil Company Jackson "B" Well No. 23 located in Unit J of Section 24, Township 17 South, Range 30 East, Jackson-Abo Pool, Eddy County, New Mexico.
- CASE 3881: Application of J. M. Huber Corporation for the creation of a new oil pool and for special pool rules, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Devonian oil pool for its Lone Star Federal Well No. 1 located in the NE/4 NE/4 of Section 20, Township 8 South, Range 36 East, Roosevelt County, New Mexico, and for the promulgation of special rules therefor including a provision for 80-acre proration units.

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 9, 1968

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

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

- CASE 3872: Application of Union Oil Company of California for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to finally complete its Federal "A" Well No. 1 located in Unit P of Section 12, Township 15 South, Range 34 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Morton-Wolfcamp Pool and the disposal of produced salt water through the intermediate casing-production casing annulus into the San Andres and such other formations as may occur in the open-hole interval from approximately 4620 to 7350 feet.
- CASE 3873: Application of R. G. McPheron for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the open-hole interval from approximately 5250 feet to 5854 feet in his S. P. Johnson Well No. 1 located 990 feet from the West line and 1650 feet from the South line of Section 5, Township 18 South, Range 39 East, South Carter-San Andres Pool, Lea County, New Mexico.
- CASE 3874: Application of Gulf Oil Company - U. S. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Paddock and Blinbry Oil Pools in the well-bore of its C. L. Hardy Well No. 2 located in Unit N of Section 20, Township 21 South, Range 37 East, Lea County, New Mexico, with the provision that no more than one single allowable well be produced from said well.
- CASE 3875: Application of Pan American Petroleum Corporation for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a well in exception to the Fowler-Ellenburger Rules at an unorthodox location 910 feet from the North line and 1980 feet from the West line of Section 13, Township 24 South, Range 37 East, Lea County, New Mexico.

- CASE 3888: Application of Amerada Petroleum Corporation for a dual completion, salt water disposal and tubing exception, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its State E "B" Well No. 1 located in Unit E of Section 27, Township 10 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the North Echols-Devonian Pool and the disposal of produced salt water through the tubing-casing annulus into the San Andres formation through perforations in said casing from approximately 5220 feet to 5250 feet. Applicant also seeks an exception to the tubing requirements of Commission Rule 107 in that said tubing would be set more than 250 feet above the upper most Devonian perforation.
- CASE 3889: Application of BTA Oil Producers for the creation of a new pool and special pool rules, Lea and Roosevelt Counties, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of oil from the Bough C zone of the Pennsylvanian formation for its well located in Section 5, Township 9 South, Range 36 East, Lea County, New Mexico, and for the promulgation of special rules therefor including a provision for 160-acre proration units and for the assignment of an 80-acre allowable factor of 4.77.
- CASE 3890: Application of Pan American Petroleum Corporation for special pool rules and a non-standard gas proration unit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Empire-Pennsylvanian Gas Pool, Eddy County, New Mexico, including a provision for 320-acre spacing units with wells to be located in either the northwest quarter or the southeast quarter of the section. Applicant further seeks approval of a 280-acre non-standard gas proration unit comprising the SE/4, S/2 SW/4, and the NW/4 SW/4 of Section 30, Township 17 South, Range 28 East, Empire-Pennsylvanian Gas Pool, to be dedicated to its State V Com Well No. 1 located 990 feet from the South and East lines of said Section 30.

- CASE 3882: Application of Solar Oil Company for a special gas-oil ratio limitation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 506 of the Commission Rules and Regulations to provide for a limiting gas-oil ratio of 6,000 cubic feet of gas per barrel of oil in the Teague Blinbery Pool, Lea County, New Mexico.
- CASE 3883: Application of Solar Oil Company for a special gas-oil ratio limitation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 506 of the Commission Rules and Regulations to provide for a limiting gas-oil ratio of 6,000 cubic feet of gas per barrel of oil in the Imperial Tubb-Drinkard Pool, Lea County, New Mexico.
- CASE 3884: Application of Marathon Oil Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Miller Ranch Unit Area comprising 5,276 acres, more or less, of State, Federal and Fee lands in Townships 21 and 22 South, Range 25 East, Eddy County, New Mexico.
- CASE 3885: Application of Sinclair Oil & Gas Company for a waterflood expansion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Turner "B" Grayburg-Jackson Waterflood Project, Grayburg-Jackson Pool, by the conversion to water injection of 12 additional injection wells located in Sections 20, 29, and 30, Township 17 South, Range 31 East, Eddy County, New Mexico.
- CASE 3886: Application of Sinclair Oil & Gas Company for the amendment of a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks amendment of its Guadalupe Ridge Unit Agreement, unitizing certain lands in Eddy County, New Mexico, and approved by Order No. R-3471, to conform to certain requirements of the Director of the United States Geological Survey. In the absence of objection, the case will be submitted and an order issued upon the basis of the application and exhibits attached thereto.
- CASE 3887: Application of Kersey & Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Premier sand of the Grayburg formation through two wells to be located in Units E and K of Section 12, Township 18 South, Range 28 East, Artesia Pool, Eddy County, New Mexico. Applicant further proposes to produce oil from the Upper Grayburg through parallel strings of tubing, if said zones are productive in the subject wells.

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

October 9, 1968

EXAMINER HEARING

IN THE MATTER OF:)

Application of Kersey and Company for) Case 3887
a waterflood project, Eddy County,)
New Mexico.)

BEFORE: Elvis Utz, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: Call Case 3887.

MR. HATCH: Continued from the October 9, 1968, Exahimer Hearing, Application of Kersey & Company for a waterflood project, Eddy County, New Mexico.

MR. KERSEY: I'm Harold Kersey of Kersey & Company, and I have appeared before the Commission in the past.

(Witness sworn.)

(Applicant's Exhibits A, B, C, marked for identification.)

* * * * *

HAROLD KERSEY, the Applicant, having been first duly sworn, testified as follows:

* * * * *

MR. KERSEY: I have the exhibits that have been presented to the Commission. Here are some extra copies, there are four exhibits.

MR. PORTER: Were those filed with the Application?

MR. KERSEY: Yes, they were filed with the Application.

My first exhibit is Exhibit A and this shows a plat of the area which is in the Loco Hills Field. The purpose of this Application is to back up and complete the flood project that Depco, Yates and Yates have instituted. We propose to put on injection two new wells, our Dunn No. 3B and No. 4B.

Exhibit B shows the proposed completion procedure. In this particular area, the Premier Formations which is the base of the Grayburg, is being flooded and there are also other productive zones, Loco Hills and the Me-Tex above. If, we are presently drilling the No. 3B well and if it is productive in the Upper Zones, we propose to set casing through all the zones, perforating the Premier, injecting water into it under a packer with cement-lined tubing, and produce the Loco Hills and Me-Tex Zones through the same well. In doing this, if the packer should leak on the injection portion we will immediately determine it by the production of water.

This Exhibit B shows that we propose to run 7 inch casing to approximately 2500 feet, and that the bottom portion of the cased hole will be 4 and 1/2 inch casing. The reason for the 7 inch is so we can run two strings of 2 and 3/8ths tubing and have plenty of room. The reason for the 4 and 1/2 inch casing is we can get a better cement with around 4 and 1/2 inch casing, than if we extended the 7 inch to the bottom of the hole.

Exhibit C is the pertinent information sheet showing that the water is going to be injected into the Grayburg and the injection fluid will be purchased from Depco and the anticipated injection volume will be three to five hundred

barrels per well, and the pressures will range from 1200 to not to exceed 1800 pounds per square inch, and there will be, the injection will be through cement-lined tubing and if production is obtained in the Upper Grayburg, why, we propose with your permission, to complete it dually as a producer and as an injection well. This is a cooperative deal with Depco and Yates. We're injecting into our wells, and they, in turn, are injecting into their lease line wells, which will work out to mutual advantage of both of us, all of us.

EXAMINATION

BY MR. NUTTER:

Q These proposed injection wells of yours, the Dunn 3 and 4 are on the same pattern of injection wells that the other operators are using?

A That's right. You will notice on Exhibit A, that we're following the same pattern that they followed so that it will be a harmonious pattern as far as injection is concerned.

Q Are any of these other wells in this area producing from the zones in the Upper Grayburg?

A Our Dunn No. 1 is producing from the Upper Zones. I understand that Yates's No. 2 is producing also from the Upper Zones, and their engineer indicated that they would

possibly, they were considering producing and injecting at the same time. However, they haven't started anything yet.

Q Now, on your lease, are all four of the wells producing from the Lower Zone at the present time?

A Well, now, at the present time, we only have two wells drilled. Our No. 1 and 2, both of those wells are producing from the Premier.

Q And the No. 1 is also producing from the Upper Zone?

A The Upper and the No. 2 is producing from the Upper Zone. So it's very probable that the No. 3 well could very well be productive in the Upper Zones.

Q Is the Upper Zone being flooded in the area?

A No, they are not. They will be, at some later time, personally, as far as I was concerned, I would have preferred that we flood all zones at this time, rather than wait until a later date, but Depco chose to flood the Premier Zone so we're going along with their proposal and flood the Premier only at this time.

Q But there is a possibility that these upper--

A Yes, all the zones can be flooded, I feel, at some later time.

Q This schematic diagram that you show on your Exhibit

B is for the well, in the event that you would have obtained production in the Upper Zone?

A That is right, and if we don't obtain production in the Upper Zone, the well will be completed with 4 and 1/2 inch casing and packer set above the Premier Zone with a cement-lined tubing.

Q The only difference from this diagram, would be that you would have 4 and 1/2 inch and single string of tubing but you would have the packer?

A That's right. The only difference will be if production is obtained, we will have to run 7 inch casing. If it's not, we will run 4 and 1/2. We are drilling on the well, presently we are at about 2000 feet.

Q The name of the two Upper Zones is the Me-Tex --

A And Loco Hills.

Q -- and Loco Hills Sands. And the zone that is to be flooded is the Premier and the Grayburg?

A Premier and Basal Grayburg.

Q Will the produced water in this area be reinjected?

A Yes, it will, we will run the produced water from our wells back to the injection plant of Dapco and they will put it back in the ground.

Q Now, your injection water is Double Eagle water

from Depco?

A From Depco, right.

Q And your produced water will be returned to Depco and returned with the Double Eagle water?

A Will be reinjected.

MR. NUTTER: Are there any other questions of the witness?

EXAMINATION

BY MR. PORTER:

Q About when was this area developed?

A We drilled the discovery well in this area in 1949.

Q And at that time, it was an extension of the --

A Of the Artesia Field.

Q -- right, and now, you say that Yates and Depco are not injecting yet?

A Depco has started injecting into their No. 1 Dunn A which is in the southeast of the northeast of 12, and so far as I know, that is the only well that is on injection. Perhaps their No. 6 is, but I'm not, No. 6B, but I am not sure about it, but I do know the No. 1 is.

Q Have there been other injection projects into this same sand, the Premier Sand?

A Yes, I have a project on this same plat.

Q What has been your response?

A The Premier is a very good zone to inject into, in my opinion, because we have been successful in other areas, and I feel it will be successful in this area.

Q The Me-Tex and the other zone you referred to, are they in the Grayburg?

A They are in the Grayburg, above.

Q As I understand it, the Grayburg in this area, has a number of zones that are separate producing zones.

A That is right.

MR. PORTER: That's all I have, Mr. Nutter.

MR. NUTTER: Any other questions of the witness?

He may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further?

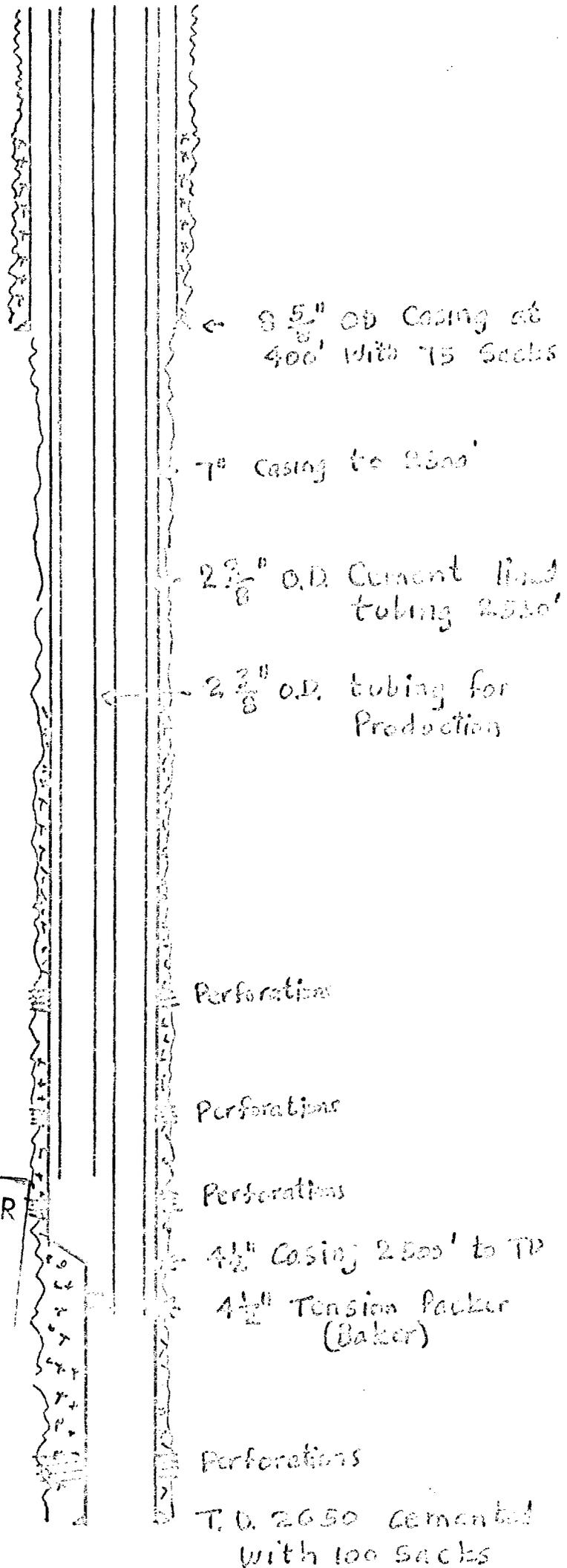
MR. KERSEY: I believe that's all on this particular case.

MR. NUTTER: Applicant's Exhibits A, B, and C are admitted in evidence.

(Whereupon, Applicant's Exhibits A, B, and C admitted in evidence.)

MR. NUTTER: Does anyone have anything to offer in Case 3887? We will take the case under advisement.

Sketch Showing Proposed Water Injection
and Producing Well Donn 3-D & 4-C.



BUREAU EXAMINER NUTTER
Opp. No. B
3887

Kersey & Co.
 Box 316
 Artesia, N. Mex.

Exhibit "B"

PERTINENT INFORMATION SHEET

Dunn B Lease, Well Numbers 3 & 4

As per Rule 701B-4

1. Water injection into the Grayburg at approximately 2600-2630'
2. Injection fluid will be fresh and produced saline water.
3. Anticipated Injection Volumes will be 300 to 500 BOPD per well.
4. Anticipated injection pressures will be 1200 PSI not to exceed 1800 PSI.
5. Source of injection water will be from Double Eagle Corporation after pressurization by Depco, Inc.
6. Water will be injected down internally coated tubing under a tension packer.
7. If production is obtained in the upper Grayburg sections, the wells will be completed dually as producer and injection wells.

KERSEY & COMPANY
September 10, 1968

EXHIBIT "C"

BEFORE EXAMINER NUTTER
CITIZENSHIP PRESERVATION COMMISSION
<i>App.</i> EXHIBIT NO. <u>C</u>
CASE NO. <u>3887</u>