

Case Number
4235

Application

Transcripts

Small Exhibits

ETC.



dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
October 22, 1969

EXAMINER HEARING

IN THE MATTER OF:)

Application of Continental Oil)
Company for a waterflood proj-)
ect, Lea County, New Mexico.)

NO. 4235

BEFORE Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: We'll call next Case Number 4235.

MR. HATCH: Case 4235. Application of Continental Oil Company for a waterflood project, Lea County, New Mexico.

MR. KELLAHIN: If the Examiner please, Jason Kellahin, Kellahin and Fox, Santa Fe, appearing for the Applicant. I have one witness I'd like to have sworn.

(Witness sworn.)

(Whereupon, Applicant's Exhibits 1 through 3 were marked for identification.)

VICTOR T. LYON

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Victor T. Lyon.

Q By whom are you employed and in what position, Mr. Lyon?

A I'm employed by Continental Oil Company as Conservation Coordinator in the Hobbs Production Division, located in Hobbs, New Mexico.

Q Have you testified before the Oil Conservation Commission and made your qualifications a matter of record?

A Yes, I have.

Q Are the witness' qualifications acceptable?

MR. NUTTER: Yes, they are.

Q (By Mr. Kellahin) Mr. Lyon, are you familiar with the application of Continental Oil Company in Case 4235?

A Yes, sir.

Q What is proposed in this application?

A Case Number 4235 is the application of Continental Oil Company for authority to install and operate a waterflood project on the Jack A-29 lease in the Langlie-Mattix pool, located in Section 29, Township 24, south range 37 east, Lea County, New Mexico.

Q And what formation will be flooded in this waterflood project?

A The formation involved here is the Lower Seven Rivers and the Queen Formation.

Q Now, referring to what has been marked as Applicant's Exhibit Number One, would you identify that exhibit?

A Yes, sir. Exhibit Number One is a location and ownership plat showing the Jack A-29 lease and the proposed injection wells and an area two miles in each direction from the two wells. The Jack A-29 lease consists of the west half of the east half, the southeast quarter of the northeast quarter, and the northeast quarter of the southeast quarter of Section 29.

The southeast quarter of the southeast quarter is referred to as our Jack B lease. This lease is

originally under the same prospecting permit, but is a separate lease by virtue of --

Q It was committed to the Langlie Jack unit; is that correct?

A No, not the southeast of the southeast. The northeast of the northeast is a part of this original lease and it is a part of the Langlie Jack unit, which is shown by the dash line north of the Jack A-29. Now, the area which is outlined in red is the Jack A-29 lease, as I have described it, plus the Jack B-29 lease.

I have discussed this situation with the USGS, and they say that a formal unit will not be necessary, but that they suggest that we enter into an agreement with the overriding royalty owners in these two tracts to, you know, arrive at an agreement as to how the revenue from this is to be distributed. And we will do this well before we expect any response from any of the wells in here.

Q As far as the USGS is concerned, it will be treated as one basic lease; is that correct?

A Yes, sir.

Q So, all you have to do is work out an agreement with your overriding royalty owners?

A That is correct.

Q Now, is this proposed waterflood project offset by

a waterflood?

A Yes, sir. To the east, as shown by a dash line, is the Langlie-Mattix Woolworth unit, which is operated by Amerada Hess. This application -- well, let me go ahead and describe the other waterflood units. To the north is our Langlie Jack unit, which is currently under flood and the injection wells are shown by the triangles inscribed around the wells. And the injection wells in the Langley-Mattix Woolworth are also shown by the triangles inscribed around the wells. To the south, there is now in progress negotiations toward what is to be called the Langley Jal unit, which will include Sections 32 and 31. This unit is to be operated by a Union Texas producing division of Allied Chemicals.

The proposed injection wells in this project, the subject of this hearing, are shown by the red triangles. They are wells Number Two, which is located 2,310 feet from the south line and 330 feet from the east line, and well Number Four, which is located 990 feet from the south line, 1,650 feet from the east line of Section 29.

Q What is the present status of those wells?

A Wells Numbers Two and Four have been shut in for a number of years. Jack A-29, Number One, has also been shut in for a number of years. Well Number Three, which is

located in Unit H, has been plugged back and recompleted as a Jalmat gas well. We are currently evaluating whether we can justify the expense of a dual completion in this well, but in either event, the well will be reopened to the Langlie-Mattix pool as a producer, either as a single producer from that formation, after squeezing the gas, the Jalmat gas, or as a dual completion.

MR. NUTTER: Is the Jalmat gas well the Langlie-Mattix oil well?

A Yes, sir.

Q Now, I might mention that this application is the result of negotiations with Amerada Hess for a lease line agreement between this Jack A-29 area and the Langlie-Mattix Woolworth unit. Under this agreement, Amerada is to drill a well 330 feet from the south line and 330 feet from the west line of Section 28, and will inject into that well and will inject into our Number Two, which offsets their lease.

Q Now, concerning what has been marked as Exhibit Number Two, would you identify that?

A Exhibit Number Two is a schematic diagram showing how the injection well Jack A-29, Number Two, is equipped and will be equipped. As shown, surface casing was set at 369 feet with 175 sacks of cement, which was circulated to the surface, and 7-inch casing was set at 3274 with 900 sacks

of cement. Calculated top of cement is at 2000 feet. The present total depth of the well is 3570. It will be deepened under the agreement with Amerada to 3700 feet and we propose to inject in the open hole interval from 3274 to 3700.

Q Now, that will be, then, injection through tubing and under a packer?

A Yes, sir.

Q Will you use internally coated tubing?

A Yes, sir. The tubing will be cement lined. It will be set on a retrievable packer, set at approximately 3,220 feet.

Q Will the annulus be filled with an inner fluid?

A Yes. We will fill the annulus with treated water and will install a pressure gauge at the surface.

Q Now, what volume of water do you anticipate to inject?

A We anticipate a maximum of 600 barrels of water per day per well.

Q And where will this water come from?

A The water is to be furnished by Amerada Hess from their injection station, and this is the same water which they are currently injecting into their Langlie-Mattix Woolworth waterflood project.

Q Now, referring to Exhibit Number Three, would you

identify that exhibit?

A Exhibit Number Three is a schematic diagram for Jack A-29, Number Four, showing essentially the same information as was shown for Number Two, on Exhibit Two. 10 3/4 inch surface casing was set at 369 and cemented with 250 sacks of cement circulated to the surface. Seven-inch casing was set at 3415 with 900 sacks and calculated cement top was 2000 feet. We propose to inject into the open hole interval 3415, to a total depth of 3589, and this well will also be equipped with cement lined tubing set on a retrievable packer at approximately 3360.

The annulus will be loaded with treated water and a pressure gauge installed at the surface.

Q Now, the pay section from the Jack A-29 is primarily producers from the southern areas; is that correct?

A The Langlie-Mattix pool in this area has a westward dip and it seems that at the boundary on the eastern boundary of Sections 20 and 29. The pool and the formation undergo a change. As a structure goes up to the east, the sections which are productive change and this section line is the approximate location of a change in here, so that the zones under fluid to the east are slightly different from those to the west. Our principal pay in Sections 20 and 29 are the Lower Seven Rivers and the Upper Queen. In

Sections 21, 28, and 33, the primary pay is the Penrose. We have agreed with Amerada that we will deepen our Number Two so that we will inject into the Penrose and they will perforate their well to be drilled down here in the southwest of the southwest of 28, in the Lower Seven Rivers, and the upper Queens, so that each of the wells along that boundary will be injecting into the zone of primary interest to the other part.

Q Now, are there any logs available on these injection wells?

A No, sir. We do not have logs on them, but they will be filed if and when they are run.

Q So, you have not prepared any structure map, then, is that correct?

A No, sir. We did not have real good control on this particular area, and, consequently, did not prepare a structure map.

Q Now, I believe you already testified you are going to recomplete the Jack A-29 Well, Number Three, did you not?

A Yes, sir.

Q How much additional oil do you anticipate will be recovered as a result of this waterflood project?

A Let me refer to something here, (indicating).

A preliminary study based on experience factors in the Langlie-Mattix pool indicates that we should recover an additional 116,400 barrels of oil as a result of the water-flooding, and, of course, there is no remaining primary. The oils are all shut in at this time, and have been for a number of years.

Q And unless you do institute this water flood project, would it result in a waste of oil, in your opinion?

A In my opinion, it would.

Q And if the project is instituted, will it result in the recovery of oil that would not otherwise be recovered?

A Yes, sir.

Q Were exhibits 1, 2, and 3 prepared by you or under your supervision?

A They were.

Q At this time, we offer into evidence exhibits 1, 2, and 3.

MR. NUTTER: Continental Exhibits 1, 2, and 3 will be admitted into evidence.

(Whereupon, Continental's Exhibits 1, 2, and 3 were offered and admitted into evidence.)

MR. KELLAHIN: That's all I have, Mr. Examiner.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Lyon, you mentioned that the Jack B lease and

the southeast, southeast of Section 29 is a different lease from the remainder of the lease in the east half of Section 29; correct?

A Yes, sir.

Q And that the United States Geological Survey had said that a formal unit agreement would not be necessary. Do you have overriding royalty owners under each of the two leases?

A Yes, sir. Under the B lease, there is a total of 2 1/2 percent overriding royalty, and under the A lease, there is a total of 7 1/2 percent. And I have not checked these recently, but I'm quite confident that there are some parties who have overriding royalty in one lease that do not own equivalent royalty in the other.

Q And so, you will make some sort of an arrangement with these overriding royalty interests to allocate the production from the producing well on the Jack B lease?

A Yes, sir.

Q And that the overriding royalty interest owners under the Jack A lease will share in the production from the B?

A Right.

Q And, at the present time, then, you are going to have a waterflood project with two injection wells on the

Jack A, and no producing wells; right?

A That's correct.

Q But later on, you will either complete the Number Three, which is the gas well in Unit H, as a dual completion in the Jalmat gas pool and the Langlie-Mattix oil pool, or as a single completion in the Langlie-Mattix oil pool?

A That is correct.

Q At that time, you will have three wells on the lease?

A Right, and one producer. One producer, two injectors.

Q Correct. Now, at the present time, the Commission cannot consider the Jack B to be a part of the project, but upon receipt of evidence that these overriding royalty interests have been taken care of in some manner that is agreeable to them to share in the production, the Commission could consider that lease to be a part of the project area, too.

A Right. This is fine.

MR. NUTTER: Are there any further questions of Mr. Lyon?

MR. KELLAHIN: I don't think so.

MR. HATCH: I believe not.

MR. NUTTER: If not, he may be excused. Do you have anything further, Mr. Kellahin?

MR. KELLAHIN: That's all, Mr. Examiner.

MR. NUTTER: Does anyone have anything they wish to offer in Case 4235? We will take the case under advisement and call Case Number 4236.

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I N D E X

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<u>EXHIBIT</u>	<u>MARKED</u>	<u>OFFERED AND ADMITTED</u>
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STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

I, DAVID BINGHAM, a Court Reporter 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.

David Bingham
 COURT REPORTER

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 4235, heard by me on 10/22 1969.
David Bingham Examiner
 New Mexico Oil Conservation Commission

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

October 29, 1969

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

Dear Sir:

Reference is made to Commission Order No. R-3862, recently entered in Case No. 4235, approving the Continental Langlie Mattix Jack A-29 Waterflood Project.

Initial injection is to be into the two authorized water injection wells, the Jack A-29 Wells Nos. 2 and 4, with injection through 2-inch cement-lined tubing set in a packer located at approximately 3220 feet and 3360 feet respectively. The casing-tubing annulus of each well shall be loaded with an inert fluid and equipped with a pressure gauge at the surface.

As to allowable, our calculations indicate that at the present time there are no producing wells in the project area and consequently no project allowable, but that when Well No. 3 located in Unit E of Section 29 is recompleted to produce from the Langlie Mattix Pool, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 is 126 barrels per day when the Southeast New Mexico normal unit allowable is 42 barrels per day or less. Further, that when the Jack B-29 lease in the SE/4 SE/4 of Section 29 is unitized or otherwise consolidated with the Jack A-29 lease and satisfactory evidence thereof furnished to the Commission this maximum allowable will be increased to 168 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

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

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Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Santa Fe, New Mexico

October 29, 1969

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.

C 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

P cc: Oil Conservation Commission
Hobbs, New Mexico

U. S. Geological Survey
Post Office Box 1838
Hobbs, New Mexico

Y Mr. D. E. Gray
State Engineer Office
Santa Fe, New Mexico

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. 4235
Order No. R-3862

APPLICATION OF CONTINENTAL OIL COMPANY
FOR A WATERFLOOD PROJECT, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 22, 1969, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 28th day of October, 1969, 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 applicant, Continental Oil Company, seeks permission to institute a waterflood project on its Jack A-29 Lease, Langlie-Mattix Pool, by the injection of water into the Seven Rivers-Queen formations through its Jack A-29 Wells Nos. 2 and 4, located, respectively, in Units I and O of Section 29, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico.
- (3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.
- (4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

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CASE No. 4235
Order No. R-3862

(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 applicant, Continental Oil Company, is hereby authorized to institute a waterflood project on its Jack A-29 Lease, Langlie-Mattix Pool, by the injection of water into the Seven Rivers-Queen formations through the following-described wells in Section 29, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico:

Jack A-29 Well No. 2, located in Unit I;
Jack A-29 Well No. 4, located in Unit O.

(2) That the subject waterflood project is hereby designated the Continental Langlie Mattix Jack A-29 Waterflood Project and 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 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.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


DAVID F. CARGO, Chairman


ALEX J. ARMIJO, Member


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


esr

DOCKET NO. 29-69

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 22, 1969

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 4213: (Continued from the September 10, 1969, Examiner Hearing)

Application of Texo Oil Company for pool redelineation, creation of a new gas pool, an unorthodox gas well location, and non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the redelineation of the vertical limits of the South Corbin-Queen Pool to permit the creation of a new basal Penrose gas pool for its Buffalo Unit Well No. 11 located at an unorthodox gas well location 2310 feet from the South line and 330 feet from the West line of Section 35, Township 18 South, Range 33 East, Lea County, New Mexico. Applicant further seeks approval of an 80-acre non-standard gas proration unit comprising the N/2 SW/4 of said Section 35, to be dedicated to the above-described well.

CASE 4230: Application of Dalport Oil Corporation for an exception to Order No. R-3221, as amended, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico. Said exception would be for applicant's AMCO Federal Well No. 2 located in the SW/4 NW/4 of Section 31, Township 14 South, Range 30 East, Double L Field, Chaves County, New Mexico. Applicant seeks authority to dispose of salt water produced by said well in an unlined surface pit located in the vicinity of said well.

CASE 4231: Application of Western States Producing Company for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from 4174 feet to 4388 feet in its State "30" Well No. 3, located in Unit 1 of Section 30, Township 7 South, Range 33 East, Chaves-San Andres Pool, Roosevelt County, New Mexico.

- CASE 4222: Application of Pan American Petroleum Corporation for a pressure maintenance project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pressure maintenance project on its Baskett "D" Lease by the injection of water into the San Andres formation through its Baskett "D" Well No. 4 located in Unit I of Section 11, Township 8 South, Range 30 East, Cato-San Andres Pool, Chaves County, New Mexico.
- CASE 4233: Application of Aztec Oil & Gas Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Yates-Seven Rivers formations in the open-hole interval from 3929 feet to 3990 feet in its State SR Well No. 1 located in Unit G of Section 16, Township 24 South, Range 36 East, Jalmat Field, Lea County, New Mexico.
- CASE 4234: Application of Gulf Oil Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the upper Morrow and lower Morrow formations underlying Section 12, Township 23 South, Range 24 East, Eddy County, New Mexico. Said acreage to be dedicated to a well to be drilled at a standard location 1650 feet from the North and East lines of said Section 12, and within one mile of the Rock Tank-Upper Morrow and Rock Tank-Lower Morrow Gas Pools. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.
- CASE 4235: Application of Continental Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project on its Jack A-29 lease by the injection of water into the Seven Rivers-Queen formations through its Jack A-29 Wells Nos. 2 and 4 located, respectively, in Units J and O of Section 29, Township 24 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico.

CASE 4236: Application of Continental 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 Anderson Ranch Unit Area by the injection of water into the Wolfcamp formation through its Anderson Ranch Unit Wells Nos. 4 and 5, located, respectively, in Units B and J of Section 11, Township 16 South, Range 32 East, Anderson Ranch-Wolfcamp Pool, Lea County, New Mexico.

CASE 4237: Application of Continental Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Monument-Tubb and Weir-Blinbry Pools in the well-bores of the following four wells located in Township 20 South, Range 37 East, Lea County, New Mexico:

Britt "B" Well No. 18 - Unit N - Section 10
Britt "B" Well No. 19 - Unit B - Section 15
Britt "B" Well No. 20 - Unit L - Section 10
Britt "B" Well No. 21 - Unit J - Section 10

CASE 4238: Application of McCasland Disposal System for the amendment of Order No. R-3781, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3781, to permit the disposal of produced salt water in the Yates formation, in addition to the previously authorized Seven Rivers formation, in its Getty Oil Company J. H. Day Well No. 2 located in Unit D of Section 6, Township 22 South, Range 36 East, Jalmat Pool, Lea County, New Mexico. Overall disposal interval would be from 3543 feet to 3939 feet.

CASE 4239: Application of Amini Oil Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Upper Pennsylvanian formation underlying the SE/4 of Section 8, Township 14 South, Range 34 East, Lea County, New Mexico. Said acreage to be dedicated to a well to be drilled at a standard location in said quarter section and within one mile of the Cerco-Upper Pennsylvanian Pool. Also to be considered will be the costs of drilling said

Case 4239 - Continued from Page 3 -

well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4240: Application of Pan American Petroleum Corporation for an exception to Order No. R-3221, as amended, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks exceptions to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico. Said exceptions would be for applicant's Smernoff Federal Well No. 1 located in Unit B of Section 24 and LaRue Federal Well No. 1 located in Unit D of Section 25, both in Township 15 South, Range 29 East, Sulimar-Queen Pool, Chaves County, New Mexico. Applicant seeks authority to dispose of water produced by said wells in two unlined surface pits located in said Units B and D.

CASE 4241: Application of Pennzoil United, Inc., for a non-standard gas proration unit or the creation of a new gas pool, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 320-acre non-standard gas proration unit comprising the E/2 of Section 21, Township 24 South, Range 26 East, White City-Pennsylvanian Gas Pool, Eddy County, New Mexico, said unit to be dedicated to applicant's Allied Federal 21 Well No. 1 located at a standard location in Unit J of said Section 21. In the alternative, applicant seeks the deletion of said Section 21 from the White City-Pennsylvanian Gas Pool and the creation of a new Morrow gas pool for said Allied Federal 21 Well No. 1.

CASE 4242: Application of Pennzoil United, Inc., for a non-standard gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 104 C II, to permit the recompletion of its Mescalero Ridge Well No. 1 at a non-standard location 660 feet from the South and West lines of Section 20, Township 19 South, Range 34 East, and within one mile of the Quail Ridge-Morrow Gas Pool, Lea County, New Mexico.

October 22, 1969 - Examiner Hearing

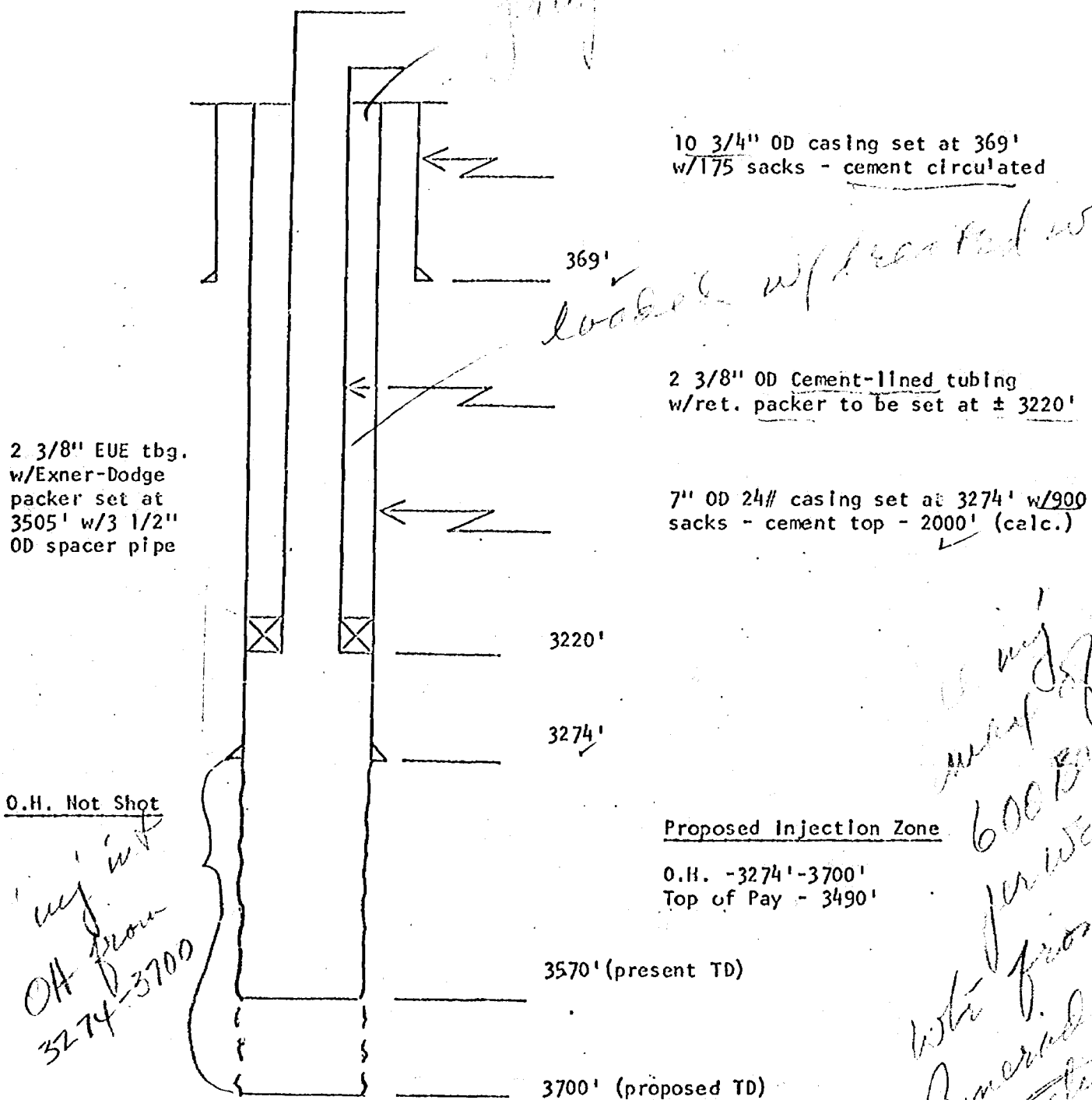
Docket No. 29-69

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(Continued from the October 8, 1969, Examiner Hearing)

CASE 4223: Application of Resler and Sheldon for two waterflood projects, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to institute two waterflood projects by the injection of water into the Grayburg, and possibly other formations in the perforated interval from approximately 3555 feet to 3617 feet in their Kelly Well No. 3 and into the Queen, and possibly other formations in the perforated interval from approximately 3439 feet to 3689 feet in their Steeler Well No. 1, said wells being located, respectively, in Unit M of Section 16, and Unit I of Section 20, Township 23 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico. In the alternative, applicants seek authority to dispose of produced salt water in said wells in the intervals as described above.

JACK A-29 NO. 2
 Unit 1 - 2310' FSL and 330' FEL.
 Section 29, T24S, R34E
 Elev - 3264' G.L.
 - 3274' D.F.



O.H. Not Shot

*inj. into
 OH from
 3274-3700*

Proposed Injection Zone

O.H. - 3274'-3700'
 Top of Pay - 3490'

3570' (present TD)

3700' (proposed TD)

PROPOSED PROCEDURE

1. Pull tubing and packer (fish out packer if required)
2. Clean out to TD and drill out to new TD of 3700'.
3. Run gamma ray-neutron log (2" & 5" scales) from TD to 2700'.
4. Run cement-lined 2 3/8" OD EUE tubing w/ret. packer to be set at \pm 3220'.
5. Hook-up well for injection.

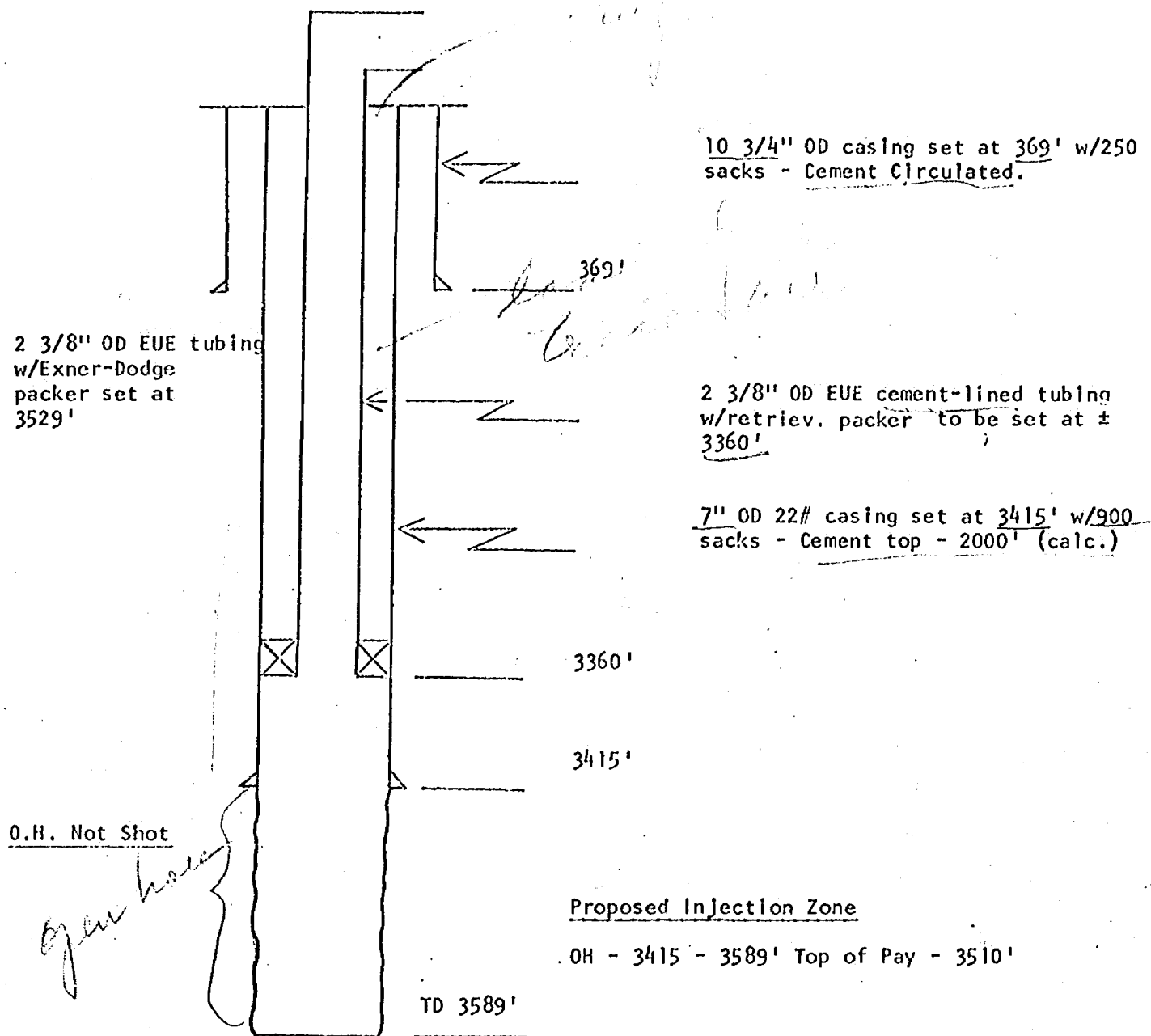
BEFORE EXAMINER NUTTER
 OIL CONSERVATION COMMISSION
 EXHIBIT NO. 2
 CASE NO. 4235

BEFORE EXAMINER NUTTER
 OIL CONSERVATION COMMISSION
 EX
 CASE NO. _____

*inj. into
 OH from
 3274-3700
 600 BOPD
 well
 from
 Amerind
 inj. system*

JACK A-29 NO. 4
Unit 0 - 990' FSL & 1650' FEL
Section 29 - T24S - R37E

Elev - 3268' GL
- 3278' DF



PROPOSED PROCEDURE

1. Pull tubing and packer - fish out packer if required.
2. Clean out to TD of 3589'.
3. Run gamma ray - neutron log (2" & 5" scales) from TD to 2700'.
4. Run cement-lined 2 3/8" OD EUE tubing with ret. packer to be set at ± 3360'.
5. Hook up well for injection.

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 3
CASE NO. 4235



8 27 S 29

CONTINENTAL OIL COMPANY

P. O. Box 460

HOBBS, NEW MEXICO 88240

PRODUCTION DEPARTMENT
HOBBS DIVISION
L. P. THOMPSON
Division Manager
G. C. JAMIESON
Assistant Division Manager

1001 NORTH TURNER
TELEPHONE 393-4141

September 24, 1969

Case 47235

New Mexico Oil Conservation Commission
P. O. Box 2603
Santa Fe, New Mexico

Attention of Mr. A. L. Porter, Jr., Secretary-Director

Re: Applications for October 22, 1969
Examiner Hearing

Gentlemen:

Forwarded herewith are two applications for waterflood projects in the Anderson Ranch Wolfcamp and Langlie Mattix Pool, Lea County, New Mexico. Please place these matters for hearing on the October 22, 1969 Examiner Docket.

Yours very truly, (

VTL-JS

cc: RLA JJB JWK

DO NOT MAIL

DATE 10-2-69

BEFORE THE OIL CONSERVATION COMMISSION

OF THE

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
CONTINENTAL OIL COMPANY FOR AUTHORITY
TO INSTALL AND OPERATE A WATERFLOOD
PROJECT ON ITS JACK A-29 LEASE IN THE
LANGLIE MATTIX POOL LOCATED IN SECTION
29, TOWNSHIP 24 SOUTH, RANGE 37 EAST,
LEA COUNTY, NEW MEXICO

Case 4235

A P P L I C A T I O N

Comes now Applicant, Continental Oil Company, and respectfully requests authority to install and operate a waterflood on its Jack A-29 lease in the Langlie Mattix Pool, located in Section 29, T24S, R37E, Lea County, New Mexico, and in support thereof Applicant would show:

1. That the attached plat, marked Exhibit 1, shows the Jack A-29 lease, the wells thereon, the proposed injection wells and an area two miles in radius surrounding said injection wells.
2. That production from the Langlie Mattix Pool on said lease has ceased, having passed the economic limit.
3. That engineering investigations indicate that waterflooding the Langlie Mattix Pool will be physically and economically feasible.
4. That applicant proposes to inject water into the following wells:

<u>Well</u>	<u>Location</u>
Jack A-29 No. 2	Unit 1 - 29-24S-37E
Jack A-29 No. 4	Unit 0 - 29-24S-37E

5. That the proposed injection wells will be equipped as shown on the schematic diagrams attached hereto and marked Exhibits 2 and 3.

6. That applicant proposes to inject a total of approximately 1200 barrels of fresh and/or produced water per day into the two proposed injection wells on an 80-acre five-spot pattern. Said water will be purchased from an outside supplier.
7. That the said waterflood will be installed and operated in conformance with Rule 701E.
8. That the proposed secondary recovery will result in the recovery of hydrocarbons which would not be recovered by primary methods and is therefore in the interest of conservation and prevention of waste.

WHEREFORE, Applicant respectfully requests that this matter be set for hearing before the Commission's duly appointed Examiner and that upon hearing, an order be entered granting authority to install and operate a waterflood within the Langlie Mattix Pool as described hereinabove.

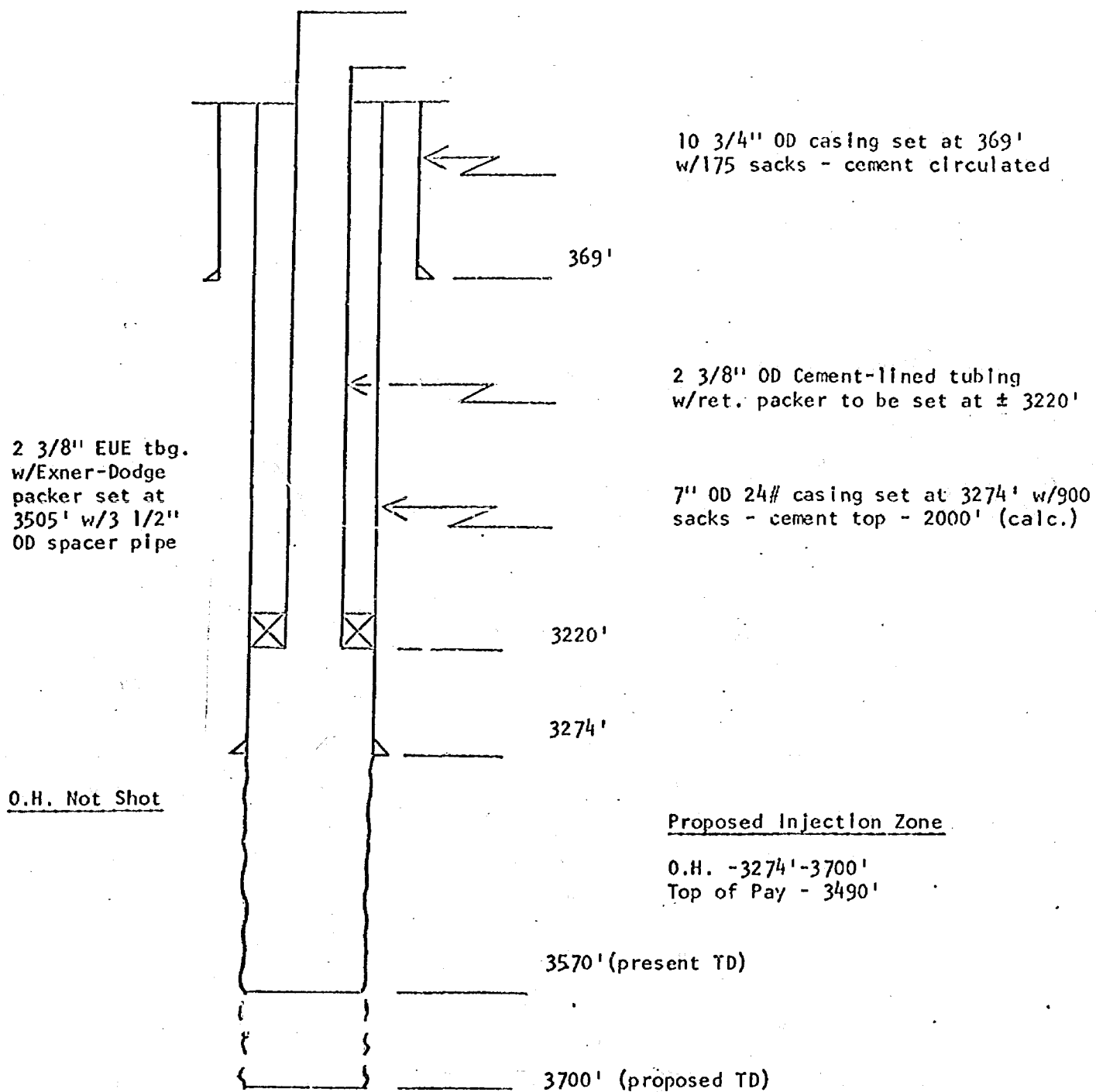
Respectfully submitted,



G. C. JAMIESON
Assistant Division Manager
Hobbs Division

VTL-JS

JACK A-29 NO. 2
 Unit 1 - 2310' FSL and 330' FEL
 Section 29, T24S, R34E
 Elev - 3264' G.L. 37
 - 3274' D.F.



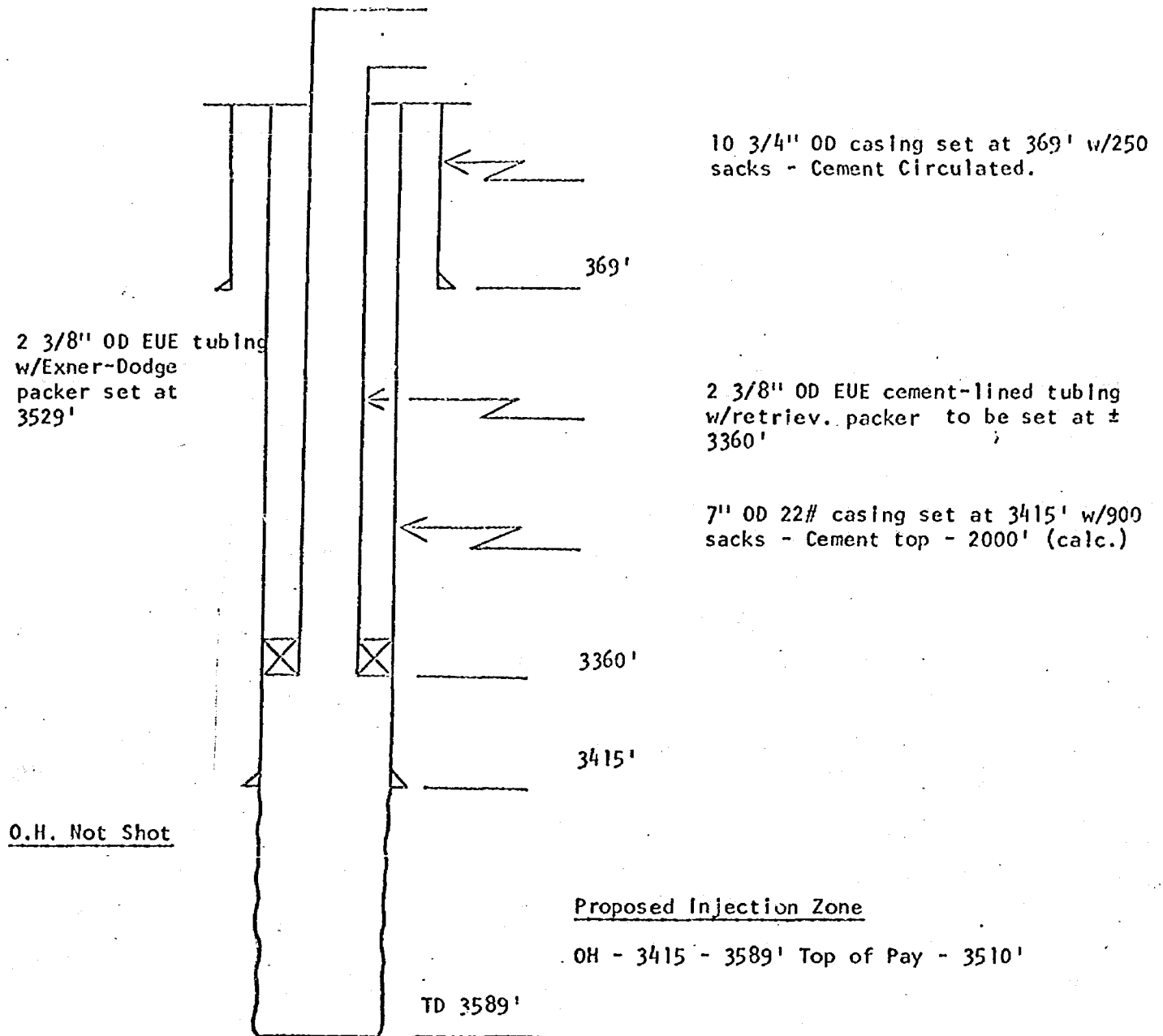
PROPOSED PROCEDURE

1. Pull tubing and packer (fish out packer if required)
2. Clean out to TD and drill out to new TD of 3700'.
3. Run gamma ray-neutron log (2" & 5" scales) from TD to 2700'.
4. Run cement-lined 2 3/8" OD EUE tubing w/ret. packer to be set at ± 3220'.
5. Hook-up well for injection.

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JACK A-29 HO. 4
 Unit 0 - 990' FSL & 1650' FEL
 Section 29 - T24S - R37E

Elev - 3268' GL
 - 3278' DF



PROPOSED PROCEDURE

1. Pull tubing and packer - fish out packer if required.
2. Clean out to TD of 3589'.
3. Run gamma ray - neutron log (2" & 5" scales) from TD to 2700'.
4. Run cement-lined 2 3/8" OD EUE tubing with ret. packer to be set at ± 3360'.
5. Hook up well for injection.

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DRAFT

GMH/esr

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. 4235

Order No. R- 3862

APPLICATION OF CONTINENTAL OIL COMPANY
FOR A WATERFLOOD PROJECT, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 22, 1969,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of October, 1969, 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 applicant, Continental Oil Company,
seeks permission to institute a waterflood project ~~in the~~ on its
Jack A-29 Lease, ~~Unit Area,~~ Langlie-Mattix Pool, by
the injection of water into the Seven Rivers-Queen formations
through its Jack A-29 Wells Nos. 2 and 4, located, respectively,
in Units I and O of Section 29, Township 24 South, Range 37 East,
NMPM, Lea County, New Mexico.

(3) That the wells in the project area are in an advanced
state of depletion and should properly be classified as "stripper"
wells.

(4) That the proposed waterflood 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 applicant, Continental Oil Company, is hereby authorized to institute a waterflood project ~~in the~~ on its Jack A-29 Lease, ~~Unit Area~~ Langlie-Mattix Pool, by the injection of water into the Seven Rivers-Queen formations Section 29, through the following-described wells in/Township 24 ~~North~~ South, Range 37 ~~West~~ East, NMPM, Lea County, New Mexico:

Jack A-29 Well No. 2, located in Unit I;
Jack A-29 Well No. 4, located in Unit O.

(2) That the subject waterflood project is hereby designated the Continental Langlie-Mattix Jack A-29 Waterflood Project and 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 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.

ROUGH DRAFT FOR WATERFLOOD LETTERS

Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law - P. O. Box 1769
Santa Fe, New Mexico

Dear Sir:

Reference is made to Commission Order No. R-3862, ^{recently} entered in Case No. 4235, approving the Continental ^{Laugie Mattie} Jack A-29 Waterflood Project.

Initial injection is to be into the ~~two~~ ^{two} authorized water injection wells, the Jack A-29 Wells Nos. 2 and 4, with injection through 2-inch cement-lined tubing set in a ~~packer~~ ^{packer} at approximately 3220 feet ^{and 3360 feet respectively} in the casing tubing annulus, ^{of each well} shall be loaded with an inert fluid and equipped with a ^{pressure} gauge at the surface.

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 126 barrels per day when the Southeast New Mexico normal unit allowable is 42 barrels per day or less. *Further, that when*

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

In order that the allowable assigned to the project may be kept current, and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to promptly notify both of the aforementioned Commission offices by letter of any change in the status of wells in the project area, i.e., when active injection commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

Your cooperation in keeping the Commission so informed as to the status of the project and the wells therein will be appreciated.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

42
3
126

cc: OCC: Hobbs X
Artesia
Aztec
USGS Hobbs

Mr. Frank-Isby, State Engineer Office, Santa Fe, New Mexico

Mr. D. E. Gray

at the present time there are no producing wells in the project area, and consequently no project allowable, but that when Well No. 3, located in Unit H of Section 29 is resampled to produce from the Laugie Mattie Pool,

The Jack B-29 lease in the SE 1/4 SE 1/4 of Section 29 is unitized or otherwise consolidated with the Jack A-29 lease and satisfactory evidence thereof furnished to the Commission. This maximum allowable will be increased to 168 barrels per day.