CASE 4423; Application of UNION OIL CO. OF CALIFORNIA FOR COMPULSORY POOLING, ROOSEVELT COUNTY.

Case Number

1103

Application Transcripts.

Small Exhibits

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AKINGS, STATEMENTS, EARER TESTIMOST, CALL COTT, C

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO

October 28, 1970

EXAMINER HEARING

IN THE MATTER OF:

4.3252

Application of Union Oil Company) of California for a non-standard oil proration unit, Roosevelt) County, New Mexico.

Case No. 4451

and

Case No. 4423

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING



MR. UTZ: Case No. 4451.

MR. HATCH: This is the application of Union Oil Company of California, for a non-standard oil proration unit, Roosevelt County, New Mexico.

MR. BUELL: We have got a few preliminary matters to take up on this one.

MR. HATCH: Did I understand correctly, you are going to request a change of location of the well?

MR. BUELL: Yes, sir. We are going to ask that the well location in this non-standard unit be located in the northwest of the northeast quarter of Section 20. The reason for this is that we have received assurances from an operator directly to the south of us, Delaware Apache, that they will not object to the granting of this non-standard unit if we will drill in Section 20 as opposed to Section 17 as stated in our application.

MR. HATCH: This case, Mr. Examiner, was advertised for a location in Section 17 and we do have a telegram from Apache agreeing not to oppose if that location is sought by the applicant, but we do have a telegram from John Koch opposing the creation of the non-standard unit and I believe since we do have an objection to it, that the case should be readvertised before it is heard. I think it might save more



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time than hearing it and later getting another objection and rehearing it.

MR. BUELL: If I may say something at this point, the fact of the advertisement of a non-standard unit is without error in the advertising.

MR. HATCH: Right.

MR. BUELL: As I understand it, from what you have mentioned of Mr. Koch's telegram, he does not enter any objection as to well location but as to the non-standard unit. The one potential objection to a well location has been waived by our seeking to amend. Since Mr. Koch does not object to the well location and since all the personnel necessary in this---

MR. HATCH: It is rather difficult to know exactly it is confusing, anyway.

MR. BUELL: You are quite correct. It is confusing, but it doesn't seem that he objects to the well location. He just objects to the non-standard unit that was advertised. He has had his opportunity to be here. We have brought our witnesses and appear here and we feel that the Examiner can hear the non-standard unit part of this. We feel there is no issue as to the well location. In addition, Mr. Examiner, I'd like to add that we have had some indications from Delaware Apache that they would like to have an approval or disapproval



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of this so that based upon our drilling in Section 20, they would like to sink a well before the end of the year, based upon what we come up with.

MR. UTZ: Do you happen to know John Koch, do you happen to know where his interest in this area is?

MR. BUELL: Yes, sir. This is the piece of land involved as the southern part of the proration. This would be the north. Mr. Koch is along this side. Delaware Apache is down here. Incidentally, the well location, as I understand it, was the one preferred by Mr. Koch if there were to be a compulsory pooling, so he had endorsed this well location before, however, not in the context of a non-standard unit.

MR. UTZ: Well, if we heard the case today and then advertised next, when would that be?

MR. HATCH: We will be advertising this week, so that would be re-advertised for the 18th.

MR. UTZ: If this gentleman showed up and you people weren't here with your witnesses and made objection, then we'd have to continue it again, give you people a chance to come, put on some testimony while he was here, right, so that would end up somewhere around the 1st of December, wouldn't it?

MR. HATCH: The second of December would be the next hearing after November 18th.



MR. BUELL: Well, I again would like to repeat that so far as the non-standard unit is concerned, there is no error in the advertising of that. He has had due notice of that and he has had his opportunity to come here as we have come here, put on our case, and he has had the opportunity to object and he choose to object by sending a telegram.

MR. UTZ: Off the record.

(Whereupon, there was a discussion off the record.)

MR. UTZ: Does Case No. 4451 have any bearing with regard to 4423?

MR. BUELL: We are going to dismiss 4423. The only reason it has not been dismissed, we understood Mr. Koch asked for a continuance on it. 4451 is in lieu of 4423.

MR. UTZ: Did he ask for a continuance on this at this time?

MR. HATCH: That is another confusion on it. It says "please permit continuance of Examiner's Hearing."

Did you contact Mr. Koch in relation to a continuance or dismissal of this 4423?

MR. BUELL: He wanted 4423 continued and he would oppose 4451.

MR. HATCH: Was there any indication from him that he would oppose dismissal of that case 4423?



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with 4451.

MR. BUELL: He just said "ask for a continuance." MR. UTZ: I thought this might be the time to take care of 4423, so we can clear the air as to what we want to do

MR. BUELL: All right. If you want to call 4423, I will move to dismiss it.

MR. UTZ: All right. We will call 4423 at this time. MR. HATCH: Case 4423, continued from the September 30, 1970 Examiner Hearing. This is the application of Union Oil Company of California for compulsory pooling, Roosevelt County, New Mexico.

MR. BUELL: Mr. Examiner, I am Sumner Buell of the firm of Montgomery, Federici, Andrews, Hannahs and Morris appearing on behalf of the Union Oil Company of California and at this time I would move to dismiss Case No. 4423 as being unnecessary in light of Case No. 4451 upon the Examiner's docket at this time.

MR. UTZ: Is there any objection to the dismissal of 4423?

I hear no objection.

We have no correspondence that would indicate any opposition of the dismissal, so I will dismiss Case 4423.

Now, back to Case 4451.



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MR. BUELL: Mr. Examiner, my name is Sumner Buell of the firm of Montgomery, Federici, Andrews, Hannahs and Morris, appearing on behalf of the Union Oil Company of California.

At this time, Mr. Examiner, we would move to amend the application in this case. The application that is presently pending before this Examiner asks that an 80-acre non-standard unit be dedicated to a well to be drilled in the southwest quarter of the southeast quarter of Section 17. We would move to amend to have the acreage dedicated to a well to be drilled in a standard location in the northwest quarter of the northeast quarter of Section 20 in Township 8 South, Range 38 East in Roosevelt County, New Mexico.

Mr. Examiner, we have two witnesses and we ask that they be sworn at this time.

MR. UTZ: Are there other appearances?
You may proceed.

DAVID A. DUNN,

a witness, having been first duly sworn according to law, upon his oath, testified as follows:

DIRECT EXAMINATION

BY MR. BUELL:

Would you state your name for the record, by whom you



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are employed, where and in what capacity.

- A My name is David A. Dunn. I am employed by the Union Oil Company of California as an Assistant Manager of Exploration for the central region.
- Q Where is your residence of Mr. Dunn?
- A In Midland, Texas.
- Q Have you testified before the Oil Conservation Commission of New Mexico or one of its examiners before and had your qualifications accepted as a matter of record?
- A I have.

MR. BUELL: Are the witness' qualifications acceptable?

MR. UTZ: Yes, sir. They are.

- Q Mr. Dunn, are you familiar with what the applicant seeks in Case 4451?
- A I am.
- Q Would you briefly state for the Examiner what is asked for in this case?
- Union Oil Company is asking for a non-standard proration unit in the Bluitt Associated San Andres Field consisting of the northwest of the northeast of Section 20 and the southwest of the southeast of Section 17 of Township 8 South, Range 38 East of Roosevelt County, New Mexico,



for the drilling of a well to be located in the northwest of the northeast of Section 20 to the regular oil field pay of the Bluitt Associated Field.

(Whereupon, Applicant's Exhibits 1 through 4 were marked for identification.)

- Q Referring to what has been marked as Applicant's Exhibit
 No. 1, would you explain what is shown on this exhibit?
 - Exhibit No. 1 is a map of a portion of the southeastern Roosevelt County that extends into a small segment of Cochran County, Texas. On this map are the location of all of the wells drilled that we can find of record. It gives the land ownership in the ownership covered by the Bluitt Associated Field. On this map, Union's acreage position in the Bluitt Field and near the Bluitt Field is surrounded by a yellow line. It illustrates that Union has under lease the unorthodox or non-standard locations that have been requested in the application. This exhibit has a type log at the left of the map taken from the Union No. 117 Federal which is located in the southeast of the southwest of Section 17, Township 8 South, Range 38 East. This well is a diagonal offset to the proposed location and a direct offset to a portion of the proposed non-standard unit.



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1120 SIMMS BLDG. • P.O. BOX 1 1203 FIRST NATIONAL BANK EAST The log is a gamma ray sonic log showing the entire San Andres section with the top of the San Andres indicated on the log.

The prominent marker that is frequently used in the

The prominent marker that is frequently used in the Bluitt Field area, the pie marker, which is a sandy zone that is easily identified on all electric logs, the top of the Milne sand zone, which is the upper pay zone of the Bluitt Associated Field and the top of the Todd zone, which is the main producing zone of the Bluitt Associated Field.

on this log, the porosity in most of the Todd zone is shown and porosity cutoff line of four percent is utilized with the extention beyond the porosity line being colored in orange. This color corresponds with the production code that is shown on the producing wells in the Bluitt Associated Field. The same porosity cutoff section in the porosity of the Milne sand zone is shown in purple to correspond with the production code of the wells in the Bluitt Associated Field. There is a small segment of the Todd zone that is below the TD of this map of this log.

The main pay section, the one that is furnishing most of the pay in this field, is represented by the colored



section. The perforations in this particular well are shown in green in the middle of the log.

- What depths or at what depths are those perforations?
- A Those perforations on this log are from 4742 to 4768.

 The top of the Todd zone is the datum that is used to

make the structure map and control the structure contours

that are shown on the map. The datums of the wells where this could be picked or reasonably estimated are shown

under each of the wells on the map.

The segment of the Allison Field where logs were available has all of the points as do the wells shown in Texas and surrounding the Bluitt Associated Field. The color code in the area of the Bluitt Associated Field is orange for the Todd zone producers, purple for the Milne sand producers.

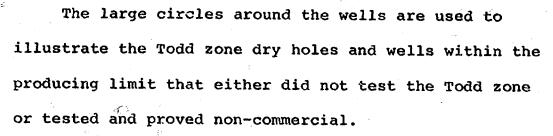
The wells that show both colors have both zones open and are producing from the two zones.

Wells that have cross hatched colors are wells that have been plugged or no longer productive and they designate the zone from which production was obtained while the wells were on production.

The legend on this exhibit is complete and explains each of the well designations and well codes.



BOX 1



In all cases the information on this exhibit is directed principally at the Todd-zone-since it is the principal producer in the area.

Around the Bluitt Associated Field there is a dashed line that represents our opinion of the commercial limits of the Todd zone accumulation of the Bluitt Associated Field. There are some producers outside this line, but they are from the Milne sand zone alone and we do not consider that any Milne sand zone well to date is commercial.

The blue arrows on the map represent wells that produced water in June of 1970. By the production reports from the oil and gas committee, one well, the Tenneco No. 2 Fasken in the northeast of the northwest of Section 20 was not completed in June. It was completed in September and this well was completed, producing water with the oil and therefore the blue dot.

It might be noted that one additional well could have had a blue dot at the present time. That is the



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Union No. 217 located in the northeast of the southwest of Section 17. This well is producing some water with the oil at the present time.

All of the wells that are producing water are near a permeability reduction within the producing area -- are located very near the limits as defined on this map.

You will note that on all of the surrounding wells located south of the producing limits of the Bluitt Associated Field the complete testing and the results of the Todd zone.

The recent well drilled by Delaware Apache, in the northwest of the northwest of Section 21, had good porosity on the electric logs. This well had a drillstem test that indicated practically no permeability. It had extremely low pressures.

Delaware Apache has acidized the zone with three thousand gallons of acid and then followed it on a frac with twenty thousand gallons and never recovered the load. This well is a dry hole in the Todd zone.

The well in Section 19 in the northeast of the southwest by Skelly, Mexico Federal had a DST of the Todd in the lower Todd zones. This is a small amount of porosity that is just below the type log shown on this



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section, and they recovered eighty feet of muddy salt water and seven hundred fifty-three feet of salt water, plugged and abandoned the test.

The well in the northeast of the southeast of
Section 24, a Jack McClellan Atlantic Federal, did not
test the Todd zone. There was no indication of effective
porosity or permeability, in his opinion. He completed
this well as a gas well from the Milne sand zone.

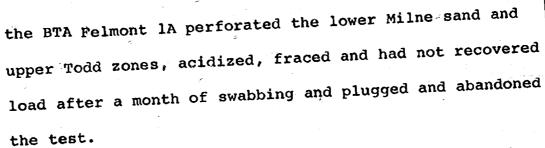
The Ingram well, the well drilled originally by Shell, located in the northwest of the northwest of Section 24, cored the Todd zone and recovered forty-nine feet of Dolomite with no shows. No completion attempt was made in the Todd zone. This is a sub-commercial well from the Milne sand zone.

In the northeast of the southeast of Section 14, the Tom Ingram Kirkpatrick perforated the Todd. The well flowed three hundred MCF gas, thirty-six barrels of formation water in twenty-four hours. The Todd was re-perforated, acidized with eighty-five gallons and swabbed five barrels of formation water per hour with no indication at all of gas or oil production in commercial quantities.

In Section 9, in the northeast of the southeast,



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This control along with the structural control indicates a permeability separation between the producing interval of the field and the locations to the south. It is my opinion that this is a well controlled line that we have drawn our limits, commercial limits of the Todd zone in the optimum position and that we have shown effectively all of the commercial producing area from the Todd zone of the Bluitt Associated San Andres Field.

Milne sand production is extremely erratic. In Union's No. 217 we drillstem tested the Milne sand zone and had extremely low peressures and while we had favorable porosity, we had very very low permeability.

The Baumgartner well located in the northwest of the northeast of Section 19 drillstem tested the Milne sand zone by itself and recovered gas with no oil. This well was completed as an oil well from the Todd zone. It is producing water with the oil at lower rates than other wells in the field, indicating its proximity to a permeability barrier.



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The permeability barrier line shown extending from the northeast of Section 19 through Section 18 to the Austral McGrail located in the northwest of the northeast of Section 18 is based on the performance of the Roden Federal located in the southeast of the northwest of Section 18 which was unable to make a well from the Todd zone.

On the relatively small amount of production from the combined zones of the Milne sand and the Todd in the Austral No. 1 McGrail located in the northwest of the northeast of 18 and the very poor performance of the Union No. 118 located in the southwest of the southeast of Section 18, this line was further verified by Union's finding gas in the Todd zone in its 218 located in the southeast of the southeast of the southeast of 18.

The erratic nature of the zone is well known. The risk involved in drilling to this zone is indicated by the number of relatively low volume wells offset by excellent producers.

The Todd zone itself is a Dolomitized section confined between two impermeable and hydrate formations that extend over the entire area of the field. It can be easily isolated. The porosity is generally well developed



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and in the ranges of four to eight percent; consists of vugular Dolomite with pin point porosity and the porosity is further enhanced by minor fracturing.

The permeability is the most erratic condition existing within this zone and it is definable only from the study of all of the wells in the area. Mr. Dunn, on your map is it correct to state that the southern permeability barrier of the field approximately coincides the south line of the proposed non-standard

That is correct.

unit?

- And it is your opinion that there will not be commercial A quantities of oil to the south of that line, is that Q
 - Not from the Todd zone and not from the Bluitt Associated correct? A San Andres Field.
 - Is there anything you'd like to add about this exhibit? I think that this exhibit illustrates the reason that Q Union is desirous of the non-standard unit. We feel Á that any combination of a standard unit with Union's northwest of the northeast in Section 20 with acreage south of it would be combining non-productive acreage with productive acreage and would result in a drainage



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from Union's lease that the well is located on and from Union's leases to the north that would be dedicated to other wells in the Bluitt Field. We feel that the location of this tract is much more favorable than the Koch tract located on the east half of the northeast quarter of Section 20 which is offset by the dry hole drilled by Delaware Apache. We do feel that there is some possibility of a well being successful on Mr. Koch's acreage. We feel that Union, if pooled with either tract to the east or to the south, would be producing oil principally from the leases it owns one hundred percent in Section 17.

I have recommended to my management that this nonstandard unit location be made in the southwest of the southeast of Section 17 because this location is the one that has the absolute lowest risk on the tract.

I have also recommended to them or stated to them that I can recommend the well in the northwest of the northeast of Section 20 even though it has a much higher risk because it will protect Union's tract from drainage by the Tenneco wells to the west. It will make a better drainage pattern in the Bluitt Associated Field and it will be draining oil that is a hundred percent Union



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and would probably more effectively completely aid in the maximum production from the Bluitt Associated San Andres Field.

- Do you think granting the non-standard unit would pre-Q vent waste in this case?
- I think granting the non-standard unit would prevent waste in this case two-fold. I believe that it would prevent waste in unrecovered oil in the field and that it would prevent waste, economic waste by preventing the drilling of unnecessary wells.

MR. BUELL: I have no other questions of this witness.

MR. UTZ: You just had the one exhibit?

MR. BUELL: He will have the one exhibit. We have another witness.

MR. UTZ: Okay.

CROSS EXAMINATION

BY MR. UTZ:

- Mr. Dunn, do you have any other proposed locations in Section 20 or 17, I am sorry?
- In Section 17, Mr. Examiner, Roden Oil has announced a location in the southeast of the northwest of Section 17. I am not aware whether or not they have started



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drilling this test.

- Q What was that location again?
- In the southeast of the northwest of Section 17. This has been announced as a No. 1 Sands. I believe it is on your exhibit as the small circle. We just picked it up and added it to this exhibit. We feel that this will give us added information as to the profitable area of this field and we have budgeted and contemplated at least three additional wells to be located on Union acreage in 1971.
- What kind of a well is your Federal No. 1 to the north of that non-standard unit?
- À Our 1 to the north is an excellent well. It is a top allowable well. Our 117, which is the type log that was taken, just to the west of our non-standard unit, is an excellent well. It is a top allowable well, an excellent well. Our 217 is a relatively poor well. It is well under top allowable.
- Why have you decided to drill a well in the northwest of the northeast, dedicated across the section, rather than to dedicate the south half of the southeast quarter of 17?
- We realize that we can dedicate the south half of the



1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 1203 FIRST NATIONAL EANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO southeast quarter of Section 17 to a location either in the southeast of the southeast of 17 or the southwest of the southeast of 17. Union has attempted to form a joint operation with Mr. Koch for a standard east-west 80-acre tract composed of the north half of the northeast of Section 20. We have requested Mr. Koch join us in drilling a joint well at the proposed location. Mr. Koch has not accepted our offer. We had on application a forced pooling to keep a standard unit of this nature. After Delaware Apache drilled their test, it became apparent that the risk factor involved in this well was such that we could not stand the economic risk that would be involved in drilling the well and carrying Mr. Koch, paying a hundred percent of the well for the penalty, that maximum penalty that could be allowed and I believe this will be covered more fully by our following witness.

We are attempting to orderly develop the field. As I say, we have a location to the north and we can drill this location. If we do, we leave ourselves open to an undrilled forty which would not necessarily be bad. It would not provide the information for the extension of the field. It is obvious the Delaware Apache has



ing here and they believe that if we drill the well in the northwest of the northeast of Section 20, that it will prove whether our suggested limits of the field are correct and after such a well is drilled and analyzed, they believe that they can drill farther to the south and develop the Bluitt Associated Field to the south. It is my opinion that they will be unsuccessful in doing so. I see no evidence whatsoever to indicate that this field will extend beyond our forty acre tract to the south.

Our request for the non-standard unit is one that is brought on by the untenable situation that we find ourselves in in regard to our relationship with Mr. Koch and the Delaware Apache.

- In other words, the reason you don't want to drill in the south half of the southwest quarter or southeast quarter of 17 is to leave your forty stranded out there?
 - That is right. It would be just as safe after we drilled the well in the south half of Section 17. It might be a safer location after we drill the well in Section 17. It would not give any information to better define the limit of the field to the south. It would not cast any light at this time, in my opinion -- it



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would not cast any light on whether or not there would be a pooling of equitable interest by going east, west or north, south with the lone forty that we had to the south. We do not wish to deprive anyone of the opportunity of drilling. We believe that our non-standard unit that we are proposing here will provide Koch with an offset location. We realize that if he drills a well in the northeast of the northeast of 20, that, in our opinion, if he is successful, he will be draining oil from Union's tract rather than from his own tract to the south.

We would not oppose his eighty acre spacing any more than we would oppose the dedication of Tenneco's north-south tracts just to the west. We feel that most of their oil is coming from our tract, but we feel that we have offset the drainage and we feel that we can further offset it if we are allowed to drill with the non-standard unit that we have proposed.

MR. UTZ: Any further questions of the witness? You may be excused.

HENRY R. WILLIS,

a witness, having been first duly sworn according to law, upon his oath, testified as follows:



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DIRECT EXAMINATION

BY MR. BUELL:

- Q Would you state your name, please?
- A My name is Henry R. Willis.
- Q And by whom are you employed, where and in what capacity?
- A ____ I am employed by the Union Oil Company of California as
 District Engineer, presently residing in Midland, Texas.
- Since you have not testified before the Commission or Examiner, would you please state your educational and employment background?
- A I was graduated from the Missouri School of Mines at Rolla in 1953; Bachelor of Science Degree in mining engineering. Upon completion of my college schooling, I was employed by Shell Oil Company as an Exploration and Reservoir Engineer working primarily in Oklahoma and Texas. I remained employed by Shell from 1953 until 1959 at which time I joined United Producing Company, Incorporated in Liberal, Kansas as District Engineer and was again primarily associated with petroleum reservoir engineering and economic analysis work relating to Kansas, Oklahoma and Texas. In 1963 I joined the Pure Oil Company, resided in Oklahoma City as District Engineer working again in petroleum reservoir



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engineering work primarily and was associated with the area of Oklahoma, Kansas and Texas until 1965 when the Pure Oil Company was merged as the Union Oil Company of California. Since that time I have worked for Union in both Oklahoma City and Midland, Texas and have been associated with Oklahoma, Kansas, Texas and New Mexico operations.

MR. BUELL: Are the witness' qualifications acceptable?

MR. UTZ: Yes, sir. They are.

- Are you familiar with the Bluitt San Andres Associated Pool Field and its characteristics?
- Yes, sir.
- Are you familiar with what is sought in their application 4451?
- A Yes, sir.
- Referring now to what has been marked as Exhibit No. 2, Q would you explain for the Examiner what is involved in that?
- We have developed various economic analyses of drilling and developing in the Bluitt San Andres Pool. Exhibit 2 sets forth some of the economic data that we used in our analysis. You will notice that under Item A we



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have listed out income data which shows the commodity prices we have received for the products we produce. It also shows state taxes, the allowable and the gas-oil ratio used in our work.

Item B relates to the cost data. You will note that the total cost of the completed well with tank battery is approximately sixty-four thousand dollars which we will substantiate in just a minute.

We are experiencing an annual operating cost to produce the property of approximately of twenty-four hundred dollars a year. To defer this cost we have calculated an economic limit which you will see shown as one thousand twenty-two barrels per year. This production rate is necessary so that we can break even pay our direct operating costs to continue production. We also have set forth a reserve calculation as we see it in the Bluitt Field.

In our particular area our average pay, net pay, is approximately twenty-five feet. We have encountered a porosity of six percent and water saturation of thirty percent; these two later values being obtained from core and log examination. We have utilized a formation volume factor of 1.2 in our reserve work and we have also used



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an estimated recovery of fifteen percent of the oil in place. Utilizing these parameters we have calculated the reserves as you see them there to be eighty-one thousand four hundred barrels of oil under eighty acre drainage. Now, this is a recoverable reserve and it does assume that we have a productive horizon under the entire eighty acres dedicated to the well.

- Is it a reasonable assumption that in the proposed nonstandard unit that all eighty acres are going to be a consistent production horizon?
- To our best knowledge at this time, it is, yes, sir.
- I refer you to Exhibit No. 3. Would you briefly go through that and explain what that shows?
- Α Exhibit No. 3 substantiates the completed well cost number I gave you previously of sixty-four thousand four hundred eighty-three dollars. Actually we have set out here our actual experience in the Bluitt San Andres Associated Pool that we encountered in drilling different wells in this area and you will notice that we have set out the well number, location, the completion date, current status and then have gone into the details of the costs that we encountered in drilling these wells and completing them. We have taken a straight average



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of the intangible cost to arrive at this value for typical well to be thirty-nine thousand two hundred eighty-three dollars. On the attachment or the second page of this exhibit you will notice that we have set forth in detail the tangible cost analysis for a typical proposed well to be twenty-five thousand two hundred dollars. We have done this since that would allow for separate tankage for new well to be completed whereas the existing wells have a variety of different battery situations, namely being gas wells, two wells connect to the same battery and then also monitoring or metering across lease lines.

- Mr. Willis, assuming the well cost of sixty-four thousand dollars and assuming that the potential recovery under the non-standard unit of eighty acres that we are asking for is eighty-one thousand four hundred, does this eighty-one thousand four hundred barrels of oil, under the eighty acres, does this make it an economically feasible project to drill this?
- A Yes, sir. If you, of course, do not give any consideration to risk, this is a very good venture.
- Now, going to Exhibit No. 4, would you explain what is shown on this?



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Exhibit 4 sets forth the economic summary that we prepared in evaluating an east-west eighty acre unit to be located in the north half of the northeast quarter of Section 20, Township 8 South, Range 38 East, and the Bluitt San Andres Associated Pool. Now, this venture, if we drilled it there, of course, could be a fifty percent working interest venture with both parties, namely Union and in this particular case, Mr. Koch, paying their own proportionate share of the cost as the well is drilled and also receiving their own proportionate share of the income. Union's actual picture for the forty acres involved indicates it would cost us half the well costs, thirty-two thousand two hundred forty-two dollars and that we should realize an after tax present worth cash flow of thirty-eight thousand six hundred fifty-two dollars on discount. We have also set forth some various numbers below there discounting that ten percent and twenty percent interest rate for your information. The column on the right side entitled "Remaining Forty Acres Forced Pooled" shows what would happen if Union had to carry the other fifty percent interest with the various banking provisions that could be expected. Basically it shows that Union would spend thirty-two

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thousand two hundred forty-one dollars and if they could receive a maximum penalty of one hundred fifty percent, we would only realize an additional ten thousand five hundred ninety-three dollars.

Mr. Willis, does this take into account any risk that may be involved in this well not being an optimum well? No. It does not. If you look at the risk that we have experienced in our operations in the Bluitt San Andres Field, you will find we have drilled five wells out there and two of them right now appear to be in the category that we would call an optimum well and this is a very early stage even to classify them there, but they are producing top allowable and therefore we feel they

are good; that they will fulfill our expectations.

The other three wells we have drilled out there, however, have been rather disappointing and will not, in my opinion, show that we made a very good investment with our money in drilling. These same three wells, if you analyze the number of wells and the number of poor wells that we have come up with, you can easily see a sixty percent poor well risk margin that you have to apply to the drilling that we have already done and at the time we drilled these wells we thought that they



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were in the better portion of the field and could achieve the optimum condition of recovering eighty-one thousand barrels of oil. With the new control we have it is very obvious that the well location in the north portion of Section 20 is going to be very risky and because of this identification at this early stage it is very obvious that the risk is even going to be substantially greater than sixty percent; that we could, in reality, end up with a very marginal well.

- So is it correct to state that even if you were to go on an east-west pool arrangement with one hundred-fifty percent penalty you do not think the economics and the risk would justify such a venture?
- That is correct. A
- You would not recommend it?
- That is correct. We don't mind risking our own money A if the entire gain can be ours, but we hate to risk all the money when we can only make or maybe see half of it.
- And even if this were assuming this well to be a certain Q optimum well, all you could realize, with a one hundred fifty percent penalty, would be approximately ten thousand five hundred dollars on an investment of thirtytwo thousand two hundred something?



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A This is correct, yes, sir.

Q Do you think that granting this application for a nonstandard unit would prevent waste in this case?

Yes, sir. I do. A

Do you believe it would protect correlative rights involved?

Yes, sir. I do that too.

Were Exhibits 2 and 3 and 4 prepared by you or under your supervision?

Yes, sir.

MR. BUELL: I have no other questions of this witness.

CROSS EXAMINATION

BY MR. UTZ:

Your testimony then is that this hundred fifty percent Q penalty is even not enough?

Yes, sir. In this particular case, because of the high risk involved.

MR. UTZ: Any questions of the witness?

CROSS EXAMINATION

BY MR. HATCH:

Q Why does the hundred fifty percent come out with ten thousand rather than sixteen thousand on the well cost



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SIMMS BIDG. • P.O. BOX 1092 • PHONE 243.6691 • A.BUQUERQUE, NEW MEXICO FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALIUQUERQUE, NEW MEXICO of thirty-two thousand?

- This is, of course, the actual profit that we are going to be deprived from and we are going to have to sustain some operating costs which we should recoup on that and by the various expenses that are charges that we are going to have to sustain. It is true this would be reduced, but even if it were sixteen thousand, this still isn't a very good venture with the risk involved.
- The additional money received would be -- from the other forty -- would be sixteen thousand dollars plus rather than ten thousand?
- A Right, and as I was going to say, this is after tax evaluation -- paying federal income tax too. Before taxes this sixteen thousand would be the number.

MR. UTZ: Any other questions?

You may be excused.

MR. BUELL: Mr. Examiner, at this time I would move the introduction of Exhibits 2, 3, and 4 into evidence and I would like to recall Mr. Dunn for some housekeeping purposes.

MR. UTZ: Without objections, Exhibits 1 through 4 will be entered into the record of this case.

MR. BUELL: Mr. Dunn, was Exhibit 1 prepared by you or under your supervision?



MR. DUNN: It was.

MR. BUELL: I move the introduction of Exhibit 1 into evidence.

MR. UTZ: It has already been accepted.

MR. BUELL: Mr. Examiner, I'd like to make a very brief statement on our application here and point out the alternatives which we have considered in light of what we had and in the way of technical information and why we are here asking for this non-standard unit.

I think it is fairly obvious that Union has an isolated forty acre section in a field where eighty acres is the standard proration unit. Forty acres is located on the south extreme edge of the pool. They cannot pool with eighty acres to the west of them because it is already occupied by Tenneco wells. Their information indicates directly south of this eighty acres there is no production and to pool with eighty acres, forty acres south, would mean that the property owner to the south would get a share of the Union Oil without contributing any of the product itself.

To go on an east-west basis, which we seriously considered, as the Examiner knows, because we have had an application filed to that affect, we feel, on closer analysis, the maximum the Commission could provide us in a penalty does



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not justifying drilling here simply because of the risky location of the well.

We feel the only way to make this forty acres productive and to prevent it from standing idle and having the petroleum underneath wasted is to drill that forty acres and pool it with forty acres directly to the north of it. We feel this will result in good and complete drainage of the field. We feel that we have not hurt anybody by doing this. We feel also that some of our surrounding land owners, as the Examiner is aware, because of the telegrams and telephone messages, would like to have a free ride and we would prefer not to turn Union Oil Company into a charitable organization at this time and we would like to produce our oil and make them provide theirs and we feel that in this way correlative rights are protected and waste is prevented.

MR. UTZ: Any other statements?

The case will be taken under advisement.



STATE OF NEW MEXICO 88. COUNTY OF BERNALILLO

I, PETER A. LUMIA, a Court Reporter in and for the County of Bernalillo, State of New Mexico do hereby certify 1120 SIMMS BIDG. P.O. BOX 1092 PHONE 243-6691 ALBUQUERQUE, NEW MEXICO 1203 FIRST NATIONAL BANK EAST PHONE 256-1294 ALBUQUERQUE, NEW MEXICO 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.

Peter A. Lumia, C.S.R.



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SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATE MENTS. EXPERT TESTIMONY, DAILY COPY, CONVENTIONS dearnley-meier reporting service, inc.

1120 SIMMS BLDG. • P.C. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 1203 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO

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ECIALIZING IN DEPOSITIONS, HEARINGS, STATE MENTS. EXPERT TESTIMONY, DAILY COPY, CONVENTION

SEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
September 30, 1970

EXAMINER HEARING

IN THE MATTER OF:

Application of Union Oil Company of California for compulsory pooling, Roosevelt County, New Mexico.

Case No. 4423

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING



1120 SIMMS BLDG, • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101

MR. NUTTER: Case No. 4423.

MR. HATCH: Case No. 4423, Application of Union Oil Company of California for compulsory pooling, Roosevelt County, New Mexico.

The Commission has received a request by the Applicant that the case be continued to October 28th.

MR. NUTTER: Case No. 4423 will be continued to the Examiner Hearing to be held at this same place at 9:00 A.M., October 28, 1970.

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

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

STATE OF NEW MEXICO) COUNTY OF SANTA FE

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

My commission expires April 8, 1971.

I do hereby eartify that the Commencing 18 a camplete record of the processings in the Reserved liceries New Hexico Cil Conservation Complesion

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
State Land Office Building
Santa Fe, New Mexico
September 2, 1970

EXAMINER HEARING

IN THE MATTER OF:

Application of Union Oil Company of California for compulsory pooling, Roosevelt County, New Mexico.

Case No. 4423

BEFORE: ELVIS A. UTZ, Examiner

TRANSCRIPT OF HEARING



MR. HATCH: Case 4423, application of Union Oil Company of California for compulsory pooling, Roosevelt County, New Mexico. The Commission has received a request from the protestant, and agreed to by the applicant, that the case be continued to September 30, 1970.

MR. UTZ: Without objection the case No. 4423 will be continued to September 30, 1970.

STATE OF NEW MEXICO)

COUNTY OF BERNALILLO)

I, Peter A. Lumia, Court Reporter, 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.

Peter A. Lumia, C.S.R.

I do hereby neutry that the formalist is a second of the growing to the property of the proper

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. 4423 Order No. R-4054

APPLICATION OF UNION OIL COMPANY OF CALIFORNIA FOR COMPULSORY POOLING, ROOSEVELT COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 28, 1970, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 6th day of November, 1970, the Commission, a quorum being present, having considered the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

That the applicant's request for dismissal should be granted.

IT IS THEREFORE ORDERED:

That Case No. 4423 is hereby dismissed.

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

eer/

4423 Keud. 10-28-70 Rec. 10-28-70,

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 28, 1970

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 4443: Application of Pan American Petroleum Corporation for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the BS Mesa-Gallup and Basin-Dakota Gas Pools in the wellbores of its Jicarilla Apache 102 Wells Nos. 7, 9, 11, and 12, located respectively in Sections 3, 4, 10, and 9, Township 26 North, Range 4 West, Rio Arriba County, New Mexico. Applicant further seeks a procedure whereby other wells on said Jicarilla Apache 102 lease now dually completed in said pools may be approved administratively for downhole commingling.
- CASE 4444: Application of Tenneco Oil Company for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the rules governing the Allison-Pennsylvanian Pool to permit the completion of an oil well at an unorthodox location 1830 feet from the North line and 660 feet from the West line of Section 10, Township 9 South, Range 36 East, Lea County, New Mexico.
- CASE 4445: Application of Byron McKnight for an exception to Order No. R-111-A, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the potash-oil area casing and cementing rules as set forth in Commission Order No. R-111-A. Applicant proposes to drill two exploratory wells in the NW/4 NW/4 of Section 35 and the NE/4 NE/4 of Section 34, both in Township 19 South, Range 33 East, Lea County, New Mexico, in such a manner as to eliminate the necessity of running the salt protection string required by said Order No. R-111-A, provided the production string would be cemented to the surface.
- CASE 4446: Application of Ford Chapman for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Delaware formation in the open-hole interval from 2899 feet to 2905 feet in his Gulf Pipkin Federal Well No. 1 located 330 feet from the South line and 605 feet from the East line of Section 34, Township 26 South, Range 29 East, Pecos-Delaware Pool, Eddy County, New Mexico.

be reinjected.

- CASE 4447: Application of Morris R. Antweil for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of his Allen Well No. 1 located in Unit J of Section 31, Township 22 South, Range 27 East, Eddy County, New Mexico, in such a manner as to permit the production of gas from the South Carlsbad-Strawn and South Carlsbad-Morrow Gas Pools through parallel strings of tubing.
- CASE 4173: Reopened (Continued from the September 30, 1970 Examiner Hearing)

 In the matter of Case 4173 being reopened pursuant to the provisions of Order No. R-3811-A, which order extended 80-acre spacing units and a limiting gas-oil ratio of 4000 cubic feet of gas per barrel of oil for the Hobbs-Drinkard Pool, Lea County, New Mexico, for a period of 90 days. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing, why the limiting gas-oil ratio should not revert to 2000 to one, and/or why all casinghead gas produced by wells in the pool should not
- CASE 4448: Application of MWJ Producing Company for pool redelineation and the creation of a new pool and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the redelineation of the Mescalero Permo-Pennsylvanian Pool by the deletion of all lands in Sections 28 and 33, Township 10 South, Range 32 East, Lea County, New Mexico, from said pool. Applicant further seeks the creation of a new pool for the production of oil from the Permo-Pennsylvanian formation for its Huber State Well No. 1 located in Unit K of said Section 33, and for the promulgation of special rules therefor including a provision for 160-acre spacing units and the assignment of 80-acre allowables.
- CASE 4449: Application of Petro-Thermo Corporation for authority to operate an oil treating plant, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to install and operate a water-bath and heat-treatment type oil treating plant in the SW/4 NW/4 of Section 31, Township 18 South, Range 37 East, Lea County, New Mexico, for the reclamation of sediment oil.
- CASE 4450: Application of Anderson Oil and Gas Company for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete the New Mexico State B. T. (Q) Well No. 1 located 660 feet from the South and East lines of Section 33, Township 11 South, Range 33 East, Lea County, New Mexico, in such a manner as to permit the production of oil through tubing from the Bagley-Pennsylvanian Pool and the disposal of produced salt water through tubing into the Devonian formation, Bagley-Siluxo-Devonian Pool at a depth of approximately 11,075 feet.

Examiner Hearing - October 28, 1970

Docket No. 24-70

CASE 4451: Application of Union Oil Company of California for a non-standard oil proration unit, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval for an 80-acre non-standard oil proration unit comprising the SW/4 SE/4 of Section 17 and the NW/4 NE/4 of Section 20, Township 8 South, Range 38 East, Bluitt-San Andres Associated Pool, Roosevelt County, New Mexico, to be dedicated to a well to be drilled at a standard location in the SW/4 SE/4 of said Section 17.

CASE 4423: Continued from the September 30, 1970 Examiner Hearing

Application of Union Oil Company of California for compulsory pooling, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests down to and including the San Andres formation underlying the N/2 NE/4 of Section 20, Township 8 South, Range 38 East, Bluitt-San Andres Associated Pool, Roosevelt County, New Mexico. Said acreage to be dedicated to a well to be drilled at an orthodox location in the NW/4 NE/4 of said Section 20. Also to be considered will be the cost 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 4434: (Continued from the September 30, 1970, Examiner Hearing)

 Application of Union Oil Company of California for the creation of a new gas pool and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new gas pool for its Pipeline Federal Well No. 1 located in Section 4, Township 19 South, Range 34 East, Lea County, New Mexico. Applicant further seeks the promulgation of special rules therefor, including a provision for 640-acre spacing and proration units and fixed well location requirements.
- CASE 4452: Application of David C. Collier for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by injection into the Queen formation through 4 wells located in Sections 1 and 12 of Township 19 South, Range 29 East, and Section 6 of Township 19 South, Range 30 East, East Turkey Track-Queen Pool, Eddy, County, New Mexico.

Memo No. 4-70

OIL CONSERVATION COMMISSION Post Office Box 2088 Santa Fe, New Mexico 87501

MEMORANDUM

TO:

ALL OPERATORS

FROM:

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

SUBJECT: 1971 Hearing Dates

Publication of the 1971 regular hearing dates will be made between January 1, 1971 and January 10, 1971. For your information, the dates selected by the Commission are set out below. Following each date of the oil allowable hearing is the name of the crude oil purchasing company that will be expected to present testimony or statement pertaining to the crude oil market outlook at that particular hearing.

January 13	Wednesday	Gas	
February 17	Wednesday	Oil and Gas	Permian
March 17	Wednesday	Gas	
April 14	Wednesday	Oil and Gas	Famariss
May 19	Wednesday	Gas	
June 16	Wednesday	Oil and Gas	Pan American
July 14	Wednesday	Gas ⁻	
August 18	Wednesday	Oil and Gas	Shell
September 15	Wednesday	Gas	
October 13	Wednesday	Oil and Gas	Cities Service
November 17	Wednesday	Gas	
December 15	Wednesday	Oil and Gas	Navajo

Unless otherwise advertised and announced, all regular hearings will be held in MORGAN HALL, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO, at the usual time of 9 a.m.

The Commission has no objection to the exchanging of appearance dates by the companies as long as the Commission is notified in writing prior to the hearing date.

November 1, 1970

western union

Telegram

KA083 NSA205

13251.

NS MDA070 PB PDF=MIDLAND TEX 28 310P CDT= GEORGE M HATCH=

CARE OIL CONSERVATION COMM= BOX 2088 SANTAFE NMEX=

RE CASE #4423 UNION OIL CO. OF CALIFORNIA. PURSUANT TO REQUEST BY UNION OIL COMPANY APPLICANT DELAWARE-APACHE CORP. AND JOHN KOCH HAVE NO OBJECTION TO A CONTINUANCE OF THE CASE TO OCTOBER 28, 1970=

MARTIN L ALLDAY, ATTORNEYE

DOCKET MAILED

=#4423 28 1970= Date 10-14-70

western union

Tele (802).

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1970 SEP 28 PM 7 42

DE PNA164 PG NL PDF=ORCHARD LAKE MICH 28=

NEW MEXICO OIL CONSERVATION COMMISSION=

STATE LAND OFFICE BUILDING SANTA FE NMEX=

NO OBJECTION TO UNION OIL CO CONTINUANCE POSTPONEMENT OR WITHDRAWEL CASE 4423 PRESENTLY SET SEPT 30 TO OCT 28=

JOHN R KOCH 3281 W SHORE DR ORCHARD LAKE MICH

170 SEP 25 AH 8

DOCKET MAILED

Date 10-14-20

MONTGOMERY, FEDERICI, ANDREWS. HANNAHS & MORRIS

J. O. SETH (1883-1963)

A.K.MONTGOMERY WM.FEDERICI FRANK ANDREWS FRED C. HANNAHS RICHARD S. MORRIS SUMNER G. BUELL SETH D. MONTGOMERY

FRANK ANDREWS III OWEN M. LOPEZ

ATTORNEYS AND COUNSELORS AT LAW [7]

350 EAST PALACE AVENUE

SANTA FE, NEW MEXICO 87501

90 ထ

> POST OFFICE BOX 2307 AREA CODE 505 TELEPHONE 982-3876

August 31, 1970

Mr. George Hatch Oil Conservation Commission P.O. Box 2088 Santa Fe, New Mexico 87501

> Case No. 4423, Application of Union Oil Company of California

Dear George:

As attorney for Union Oil Company of California in the above styled case, this letter will confirm our previous understanding that the above case, set for September 2, 1970, may be continued to September 30, 1970.

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Very truly yours, Jum June

SGB:F

cc: Mr. Martin L. Allday Lynch, Chappell, Allday & Culp 201 Wall Towers East Midland, Texas 79701

> Mr. William M. Petmecky Union Oil Company 300 North Carrizo St. Midland, Texas 79701

DOCKET MALEED

10-14-70

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DOCKET MAILED

DOCKET: EXAMINER HEARING - WEDNESDAY - SEPTEMBER 30, 1970

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 4416: (Continued from the September 16, 1970, Examiner Hearing)

Application of Robert L. Parker Trust for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a cooperative waterflood project in the Langlie Mattix Pool on its George L. Erwin Lease by the injection of water through its Erwin Well No. 2 located in Unit L of Section 35, Township 24 South, Range 37 East, Lea County, New Mexico.

CASE 4422: (Continued from the September 2, 1970, Examiner Hearing)

Application of Atlantic Richfield Company for amendment of Order No. R-3588, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3588, which order authorized the disposal of produced salt water into the Yates and Seven Rivers formation in the perforated and open-hole interval from 3110 feet to 3300 feet in the Sinclair ARC Federal Well No. 1 located in Unit O of Section 9, Township 20 South, Range 33 East, West Teas Pool, Lea County, New Mexico. Applicant now seeks authority to dispose into said zones in the interval from 3010 feet to 3300 feet.

CASE 4222: (Reopened)

In the matter of Case 4222 being reopened pursuant to the provisions of Order No. R-3850, which order established 80-acre spacing units for the West Sawyer-San Andres 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 and present evidence as to whether or not the subject pool is in fact an associated reservoir.

- CASE 4429: Application of Union Texas Petroleum Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Langlie-Jal Unit Area comprising 3,748 acres, more or less, of federal, state, and fee lands in Townships 24 and 25 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico.
- CASE 4430: Application of Union Texas Petroleum Corporation of a waterflood project,
 Lea County, New Mexico. Applicant, in the above-styled cause, seeks
 authority to institute a waterflood project in its Langlie-Jal Unit
 by the injection of water into the Seven Rivers and Queen formations
 through 46 wells in Townships 24 and 25 South, Range 37 East, LanglieMattix Pool, Lea County, New Mexico.

Examiner Hearing - September 30, 1970

Docket No. 22-70

CASE 4173:

(Reopened)
In the matter of Case 4173 being reopened pursuant to the provisions of Order No. R-3811-A, which order extended 80-acre spacing units and a limiting gas-oil ratio of 4000 cubic feet of gas per barrel of oil for the Hobbs-Drinkard Pool, Lea County, New Mexico, for a period of 90 days. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing, why the limiting gas-oil ratio should not revert to 2000 to one, and/or why all casinghead gas produced by wells in the pool should not be reinjected.

CASE 4420: (Continued and Readvertised)

Application of Xplor Company for the creation of a new gas pool and special rules therefor, a dual completion, and authority to commingle, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Pennsylvanian gas pool for its Cleveland Well No. 1 located in Unit G of Section 23, Township 12 South, Range 32 East, Lea County, New Mexico, and for the promulgation of special rules therefor, including a provision for 160-acre spacing units. In the alternative, applicant seeks approval of a non-standard 160-acre gas proration unit comprising the NE/4 of said Section 23 to be dedicated to said well. Applicant also seeks authority to dually complete said well in such a manner as to produce oil from the East Caprock-Devonian Pool and gas from said Pennsylvanian formation and to commingle on the surface the liquids from said zones.

- CASE 4431: Application of William A. and Edward R. Hudson for unorthodox well locations and a dual completion, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to drill a well at an unorthodox location (off pattern) 660 feet from the South line and 1980 feet from the West line of Section 15, Township 17 South, Range 32 East, Lea County, New Mexico, for the production of oil from the Baish-Wolfcamp and Maljamar-Abo Pools and to dually complete said well in the subject pools.
- CASE 4432: Application of MWJ production Company for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the rules governing the Baum-Upper Pennsylvanian Pool to permit the drilling of an oil well at an unorthodox location 2310 feet from the South line and 990 feet from the West line of Section 5, Township 14 South, Range 33 East, Lea County, New Mexico.
- CASE 4433: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to permit Allied Chemical Corporation to appear and show cause why said corporation should be permitted to institute its proposed waterflood project in its Milnesand (San Andres) Unit Area, Milnesand-San Andres Pool, Roosevelt County, New Mexico, by the injection of fresh water; said corporation testified in the hearing that authorized said waterflood project that produced salt water be used for waterflooding purposes.

Examiner Hearing - September 30, 1970

Docket No. 22-70

CASE 4423:

(Continued from the September 2, 1970, Examiner Hearing)

Application of Union Oil Company of California for compulsory pooling, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests down to and including the San Andres formation underlying the N/2 NE/4 of Section 20, Township 8 South, Range 38 East, Bluitt-San Andres Associated Pool, Roosevelt County, New Mexico. Said acreage to be dedicated to a well to be drilled at an orthodox location in the NW/4 NE/4 of said Section 20. Also to be considered will be the cost 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

- CASE 4434: Application of Union Oil Company of California for the creation of a new gas pool and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new gas pool for its Pipeline Federal Well No. 1 located in Section 4, Township 19 South, Range 34 East, Lea County, New Mexico. Applicant further seeks the promulgation of special rules therefor, including a provision for 640-acre spacing and proration units and fixed well location requirements.
- CASE 4435: Application of Blackrock Oil Company for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Mobil Atlantic Well No. located in Unit D of Section 10, Township 9 South, Range 36 East, Lea Pennsylvanian formation through tubing and to dispose of produced salt possibly other formations between the 8 5/8-inch casing shoe at 4153

LAW OFFICES

HH S

LYNCH, CHAPPELL, ALLDAY & CULP

201 WALL TOWERS EAST MIDLAND, TEXAS 79701 70 Aug 31

AREA CODE 915 683-3351

August 28, 1970

Oil Conservation Commission P. O. Rox 2088 Santa Fe, New Mexico 87501

Attention: George Hatch

Re: Case No. 4423

Union Oil Co. of California,

Applicant

Gentlemen:

CLOVIS G.CHAPPELL, JR. MARTIN L.ALLDAY

CHARLES C. ALDRIDGE RANDALL LUNDY

KENNETH W. NORDEMAN GARY G. WISENER

JAMES M. ALSUP J. D. OGLESBY

ROBERT A.SPEARS

VANN CULP

The undersigned represents Delaware-Apache Corporation and John Koch, each of whom were served with a copy of the application in the above case. We understand that the case had been set for hearing September 2, 1970.

We have contacted Mr. Sumner Buell, attorney for Applicant, who has agreed to a continuance of the case to September 30, 1970, and we respectfully request that such be granted. The reason for such request is due to the fact that Mr. Koch lives in Michigan and had a previous engagement on September 2, and the undersigned was also committed at the only other date available (September 16) prior to September 30.

An apporpriate Entry of Appearance on the undersigned's behalf will be entered shortly by a New Mexico attorney.

Yours truly,

Martin L. Allday

MLA/meb

cc: Mr. Sumner Buell cc: Mr. John Koch

cc: Delaware-Apache Corporation

DOCKET MAILED - 14-70

Date

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Aug

LAW OFFICES

A. J. LOSEE

CARPER BUILDING - P. O. DRAWER 239 ARTESIA, NEW MEXICO 88210

28 August 1970

AREA CODE 505

Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

Application of Union Oil Company of California for Compulsory Pooling in Roosevelt County, Case No. 4423

Gentlemen:

JOEL M. CARSON

Enclosed for filing in the captioned case, please find Entry of Appearance of the writer.

Mr. Martin L. Allday, Esquire, of Lynch, Chappell, Allday & Culp of Midland, Texas, will plead the case before the Commission. Please advise if it is necessary that we also appear before the Commission at that time.

Joel M. Carson

JMC: jw Enclosure

cc: Mr. Martin L. Allday, Esquire w/enclosure

BEFORE THE OIL CONSERVATION COMMISSION

OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF)
UNION OIL COMPANY OF CALIFORNIA FOR)
COMPULSORY POOLING IN ROOSEVELT)
COUNTY, NEW MEXICO.

No. 4423

ENTRY OF APPEARANCE

The undersigned, JOEL M. CARSON, hereby enters his appearance herein for JOHN KOCH and DELAWARE APACHE CORPORATION, with MARTIN L. ALLDAY, Midland, Texas.

Joel M. Carson

P. O. Drawer 239 Artesia, New Mexico 88210

Martin L. Allday Lynch, Chappell, Allday & Culp 201 Wall Towers East Midland, Texas 79701

ECONOMIC DATA BLUITT-SAN ANDRES ASSOCIATED POOL ROOSEVELT COUNTY, NEW MEXICO

A. INCOME DATA 1. Gross Oil Price : \$2.86/Bbl 2. Gross Gas Price : \$0.06/Mcf 3. Royalty : 12.5% 4. State Tax : 6.16% of value 5. Allowable : 70 BOPD

Proportional lactors
40 Acre : 1.0

40 Acre : 1.0 80 Acre : 2.0

7. GOR : 500 Scf/Bbl

B. COST DATA

1. Total Cost of Completed Well with Tank Battery: \$64,483
2. Annual Operating Cost
3. Economic Limit : \$2,400

E.I. =
$$\frac{\$2,400}{(\$2.86)(.875)(.9384)}$$
 = 1022 Bb1/Y₁:

Assume no gas sales at abandonment

RESERVE CALCULATION

Pay, h 25 feet Porosity, \emptyset 6% Water Saturation, Sw 30% FVF 1.2 Recovery 15%

Reserves = $\frac{(7758)(\cancel{p})(1-8\nu)(R.\Gamma.)}{\Gamma V!}$ = 40.7 BO/Ac-Ft

= 1017.5 BO/Ac

= 40,700 BO/40 Acs.

= 81,400 BO/80 Acs.

#2

DOCKET: EXAMINER HEARING - WEDNESDAY - SEPTEMBER 2, 1970

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 4415: Application of Depco, Inc. for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by injection into the Grayburg and San Andres formations through 6 wells located in Sections 27, 33 and 34, Township 18 South, Range 28 East, Artesia Pool, Eddy County, New Mexico.
- CASE 4416: Application of Robert L. Parker Trust for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a cooperative waterflood project in the Langlie-Mattix Pool on its George L. Erwin Lease by the injection of water through its Erwin Well No. 2 located in Unit L of Section 35, Township 24 South, Range 37 East, Lea County, New Mexico.
- CASE 4417: Application of J. Cleo Thompson for an exception to Order No. R-3221, as amended, Eddy 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 the applicant's Evans Wells Nos. 9 and 12 located, respectively, in Units Gaand B of Section 33, Township 16 South, Range 30 East, Square Lake Pool, Eddy County, New Mexico. Applicant seeks authority to dispose of water produced by said wells in unlined surface pits located in the vicinity of said wells.
- CASE 4418: Application of Texas Pacific Oil Company for amendment of Order No. R-3200, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3200, which order authorized the applicant to institute a waterflood project in the South Eurice Pool, Lea County, New Mexico, by the injection of water through six wells located in Sections 5, 8, and 9 of Township 22 South, Range 36 East. Applicant seeks authority to delete the six wells authorized in said Order R-3200 and substitute therefor six other wells located in said Sections 8 and 9.

- CASE 4419: Application of Billings, Keyser and Kennedy for a non-standard gas proration unit. Eddy County, New Mexico.

 Applicant in the above-styled cause, seeks, in exception to Rule 104 B I, approval of a 320-acre non-standard gas proration unit comprising the NW/4 of Section 2 and Lots 1, 2 and 3 and the SE/4 NE/4 of Section 3, Township 22 South, Range 26 East, Eddy County, New Mexico, said unit to be dedicated to a wildcat gas well to be drilled in the NE/4 NE/4 of said Section 3.
- CASE 4420: Application of Xplor Company for a dual completion, authority to gas-lift oil production, and to flare gas, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Cleveland Well No. 1 located in Unit G of Section 23, Township 12 South, Range 32 East, Lea County, New Mexico, in such a manner as to produce oil from the East Caprock-Devonian Pool through 2 3/8-inch tubing and gas from the Pennsylvanian formation within one mile of the East Caprock-Pennsylvanian Pool. Applicant further seeks authority to use a portion of said gas to gas-lift said oil production and to subsequently flare said gas in exception to Rule 404 of the Commission Rules and Regulations.
- CASE 4421: Application of Phillips Petroleum Company for creation of a new oil pool, special pool rules therefor, and redesignation of the vertical limits of the Ranger Lake-Pennsylvanian Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of oil from the Bough section of the Pennsylvanian formation for its Phillips West Ranger Lake Unit Well No. 1 located in Unit C of Section 26, Township 12 South, Range 34 East, Lea County, New Mexico, and for the promulgation of special rules therefor including a provision for 80-acre spacing and proration units, with vertical limits of said pool to be the interval from sub-sea datum -5671 feet to -6016 feet as found in said Well No. 1. Applicant further seeks the contraction of the vertical limits of the Ranger Lake-Pennsylvanian Pool to that interval from sub-sea datum -6080 feet to -6230 feet as found in its West Ranger Lake Unit Tract 2 Well No. 1 located in Unit P of Section 23, said township and range.
- CASE 4422: Application of Atlantic Richfield Company for amendment of Order No. R-3588, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3588, which order authorized the disposal of produced salt water into the Yates and Seven Rivers formation in the perforated

Case 4422 continued

and open-hole interval from 3110 feet to 3300 feet in the Sinclair ARC Federal Well No. 1 located in Unit O of Section 9, Township 20 South, Range 33 East, West Teas Pool. Lea County, New Mexico. Applicant now seeks authority to dispose into said zones in the interval from 3010 feet to 3300 feet.

CASE 4423:

Application of Union Oil Company of California for compulsory pooling, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests down to and including the San Andres formation underlying the N/2NE/4 of Section 20, Township 8 South, Range 38 East, Bluitt-San Andres Associated Pool, Roosevelt County, New Mexico. Said acreage to be dedicated to a well to be drilled at an orthodox location in the NW/4 NE/4 of said Section 20. Also to be considered will be the cost 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 4410:

(Continued from the August 19, 1970 Examiner Hearing) Application of Major, Giebel & Forster for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests underlying the SE/4 of Section 28, Township 25 South, Range 37 East, Crosby-Devonian Pool, Lea County, New Mexico, said acreage to be dedicated to a well to be drilled in said quarter section. Also, to be considered will be the cost 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.

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BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

APPLICATION OF UNION OIL COMPANY OF CALIFORNIA FOR COMPULSORY POOLING IN ROOSEVELT COUNTY, NEW MEXICO

Case No. 4423

APPLICATION

Comes now the Applicant, UNION OIL COMPANY OF CALIFORNIA by and through its attorneys, Montgomery, Federici, Andrews, Hannahs & Morris, and respectfully states:

- 1. The Applicant is the owner of the $NW^{\frac{1}{4}}$ of the $NE^{\frac{1}{4}}$ of Section 20, T. 8 S., R. 38 E., N.M.P.M., Roosevelt County, New Mexico.
- 2. Applicant's land is located within one mile of the Bluitt-San Andres Associated Pool, Roosevelt County, New Mexico, and is governed by the rules thereof which provide for 80-acre well location units.
- 3. Applicant proposes to drill a San Andres test well to 4,900 feet at an orthodox location in the $NW_{\overline{4}}^{1}$ of the $NE_{\overline{4}}^{1}$ of Section 20, T. 8 S., R. 38 E., and to dedicate to it the $NW_{\overline{4}}^{1}$ of the $NE_{\overline{4}}^{1}$ and the $NE_{\overline{4}}^{1}$ of the $NE_{\overline{4}}^{1}$ of Section 20, T. 8 S., R. 38 E.
- 4. The owners of the separately owned tract within the proposed spacing unit have not agreed to pool their interests with the Applicant although attempts have been made to negotiate an acceptable agreement.
- 5. Applicant submits that it should be designated operator of the proposed well and spacing units.

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Date 8-21-70

6. Applicant is prepared to advance the costs of development and operation and requests that the Commission make provision for any owner who elects not to pay their proportionate share in advance, including a reasonable charge for supervision and the risk involved in drilling the well.

WHEREFORE, Applicant respectfully requests the Commission to:

- l. Enter a compulsory pooling order pooling the $NW_{\frac{1}{4}}^{\frac{1}{4}}$ of the $NE_{\frac{1}{4}}^{\frac{1}{4}}$ of Section 20, T. 8 S., R. 38 E., Roosevelt County, New Mexico, into a drilling and spacing unit for all formations down to and including the San Andres zone, and
- 2. Designate the Applicant as the operator of the well and make provision for any owner who elects not to pay their proportionate share in advance, including a reasonable charge for supervision and risk involved in drilling the well.

Respectfully submitted,

MONTGOMERY, FEDERICI, ANDREWS, HANNAHS & MORRIS

Pest Office Box/2807 Santa Fe, N.M. 87501

Attorneys for Applicant

Certificate of Mailing

I certify that I caused to be mailed a true and correct copy of the foregoing APPLICATION to the following, this 14th day of August, 1970, by Certified Mail, Return Receipt Requested:

Martin allday attorney Wall Toward East, Milland
Tohn Koch

John Koch 3281 W. Shores Drive Orchard Lake, Michigan 48033

Delaware Apache 1720 Wilco Building Texas 79701 Delaware Apache Corporation DOCKET MAILED

DRAFT

GMH/esr

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

(9)

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

CASE No. 4423

Order No. R-405-4

APPLICATION OF UNION OIL COMPANY OF CALIFORNIA FOR COMPULSORY POOLING, ROOSEVELT COUNTY, NEW MEXICO.

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ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 28, 1970, at Santa Fe, New Mexico, before Examiner Elvis A. Utz

NOW, on this _____ day of ____ November ___, 1970, the Commission, a quorum being present, having considered the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

That the applicant's request for dismissal should be granted.

IT IS THEREFORE ORDERED:

That Case No. 4423 is hereby dismissed.

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