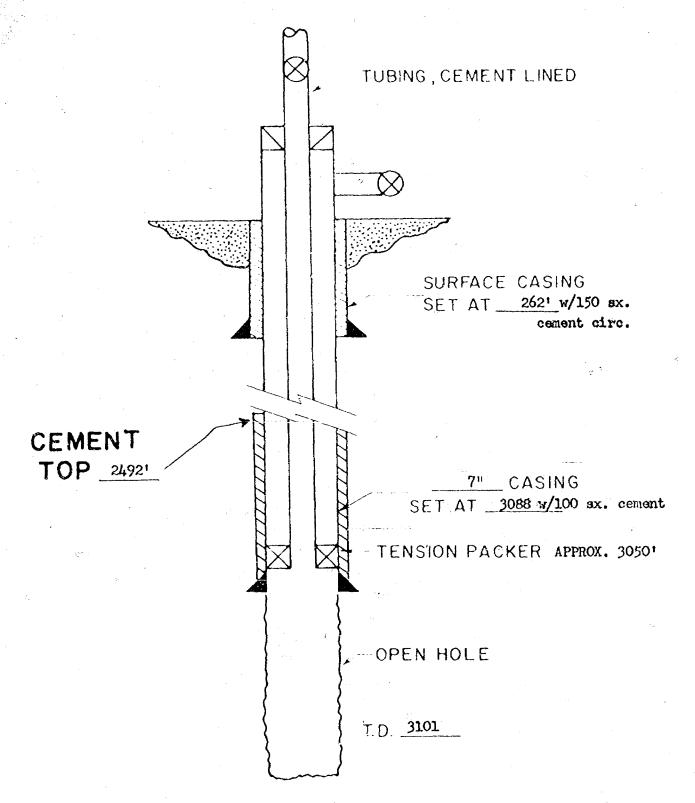
CASE 3101: Application of JOHN L.

COX for directional drilling,

Lea County, N. Mex.

(ASE 3101

APPlication, TYANSCY: PTS, SMAIL Exhibits ETC.



WATER INJECTION WELL SCHEMATIC

DRICKEY QUEEN SAND UNIT

DEARNLEY-MEIER REPORTING SERVICE, Inc.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
September 9, 1964

EXAMINER HEARING

IN THE MATTER OF:

Application of John L. Cox for Directional Drilling, Lea County, New Mexico.

Case No. 3101

BEFORE:

Mr.

NUTTER

Mr.

DURRETT

TRANSCRIPT OF HEARING

MR. NUTTER: We will now call Case No. 3101.

MR. DURRETT: Application of John L. Cox for

Directional Drilling, Lea County, New Mexico.

MR. RUSSELL: John F. Russell, Roswell, New Mexico,

appearing on behalf of the Applicant.

I have one witness.



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MR. RUSSELL: That's right.

Would you mark that Exhibit One?

(Whereupon, Exhibit One marked for identification.)

DIRECT EXAMINATION

BY MR. RUSSELL:

- Q Are you familiar with the application which is a matter of this Hearing?
 - A Yes, sir.
- Q Will you please state your name, address, occupation, and by whom you are employed?
- A My name is John Yuronka, I am a consultant Petroleum Engineer and I live in Dallas, Texas, and I am representing Mr. Cox.
- Q Mr. Yuronka, you have previously qualified to testify before this Commission, have you not?
 - A Yes, sir.
- Q I will hand you what has been marked as Exhibit Number One and ask you to merely identify what that exhibit is.
- A Exhibit Number One is the State of New Mexico Oil
 Conservation Commission Order "R" 2629 concerning the
 Application of Texas Pacific Oil Company for a non-orthodox
 location, Lea County, New Mexico. This concerns TP Drilling
 Well, 1980 feet from the west line and 2310 feet from the South



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line of Section 10, Township 10, Range 36 Mast, South Cross Roads, Devonian Pool, Lea County, New Mexico.

- Q I just have the one copy of this.

 MR. DURRETT: That will be sufficient.
- (By Mr. Russell) Mr. Yuronka, what does the Applicant seek to do under his Application?
- A The Applicant wishes to intentionally deviate the well.
 - Q What well?
- A Texas Pacific South Cross Roads Unit Well Number 1 at approximately 9350 and the bottom of the hole 1980 feet from the south line and 2310 from the west line of Section 10, Township 10 South, Range 36 East, Lea County, New Mexico.
- Q Will you give the location of the well which you propose to enter and deviate?
- A The location of the well is 1980 feet from the south and west line of the same section.
- Q Now, Mr. Yuronka, will you briefly advise the Commission as to the procedure that was followed in plugging the TP Well which you propose to re-enter?
- A The hole, TP South Cross Roads Unit Well Number 1. The hole was leaded with mud and a twenty-five sack plug spudded at the bottom of seven inch at 12,254 feet. The seven inch easing was shot off at 9435 feet. A fifteen sack



BOX 1092 . PHONE

plug was spotted from 9420 to 9440. A fifty sack plug at 7,000 feet. A thirty-five sack plug at the bottom of the 9 and 5/8ths inch casing at 4178. One bridge "G" plug was set at 3600, another at 200 feet, and a twenty-one sack plug was set. The well was plugged and abandoned on November 14th, 1955.

- Was a deviation test made on that well?
- Yes, sir, I have a list here.

MR. RUSSELL: May I have it marked as Exhibit Number Two?

> (Whereupon, Applicant's Exhibit Number Two marked for identification.)

(By Mr. Russell) Referring to what has been marked as Exhibit Two, would you explain what that is?

Exhibit Two are the deviation tests taken on the Texas Pacific South Cross Roads Unit Well Number 1. As can be seen, the greatest deviation was one degree, and that occurred at 3150 at 7515, 10,030, and then in the last two on the list. This is relatively straight hole country as far as drilling. TP has drilled approximately six or seven fields and I don't believe there is one well that has deviated any or that any of the deviation tests show anything more than about, oh, in the neighborhood of two and a half degrees at the most.

Mr. Yuronka, has Whipstock, Inc. been contacted in



and under the total deflection point of 330 feet and 100 feet to each side. We feel we could hit such a target and still maintain normal penetration rates."

This letter is signed by Mr. H. C. Harris, Jr., Whipstock, Incorporated.

In the table here showing angle buildup and deflection schedule at TD, it is estimated total deflection will be 321.63 feet.

- Q Mr. Yuronka, they have in effect asked for a deviation tolerance, or in the recommendation; have they not?
 - A Yes.
- Q And you ask that the Examiner grant sufficient deviation tolerance as in his opinion may be reasonable under the circumstances?
 - A Yes.
- Q All right. Now, Mr. Yuronka, will you explain to the Examiner the reason why you want to re-enter this old TP well rather than to drill a new well at the approved location?
- A In the previous hearing, I believe I testified it would cost \$277,000.00 to complete a well into the tank. This includes, as I mentioned a tank battery also possible artificial lift. By going this route and Whipstocking, John L. Cox can complete the well. All of the tanks in the same conditions approximately \$175,000.00.



BOX 1092 . PHONE 243-6691 . ALBUQUERQUE, NEW MEXICO

- Q This is approximately half of the cost of the new well?
 - A Yes, sir.
- Q And the granting of this application then in your opinion, would prevent economic waste?
 - A Yes, sir.
- Q In the prior Order the Commission found that the granting of the unorthodox location would prevent waste and protect correlative rights; would the same method of drilling at that location as proposed by your Application also accomplish the same purposes?
 - A Yes, sir.
- Q Now, in the event that this Application is approved by the Commission you will make sufficient tests and render sufficient records as are required by Rule 111 "B" of the Commission; will you not?
 - A Yes, sir.
- Q Do you have any further comment or statement to make in connection with this Application?
 - A No, sir.

MR. RUSSELL: I have no further testimony.

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

MR. KELLAHIN: If the Examiner please, I am Jason Kellahin representing Hill & Meeker who are the offset owners



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to the north. I would like to ask the witness a few questions, if I may.

All right, sir. MR. NUTTER:

CROSS EXAMINATION

BY MR. KELLAHIN:

Mr. Yuronka, what is the date of the order of 2629; do you recall?

The Hearing was held in December, I don't know the exact -- December of '63, I don't know the exact date of the Hearing.

MR. NUTTER: Mr. Kellahin, it was December 27, 1963.

(By Mr. Kellahin) And who procured that order; was that TP or John L. Cox?

TP. A

Now, as I understand you asked for a fifty foot tolerance, or Whipstock recommended a fifty foot tolerance for the bottom of the hole after this directional drilling; is that correct?

- That is what Whipstock asked for.
- That is what you asked for, isn't it? Q.
- No, I believe we asked for a reasonable tolerance. A
- That could then put the bottom of the hole within 280 feet of Hill & Meeker's lease line, if this tolerance is approved, and it should bottom at that point; is that right?



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- A West, there is party agains that errors for that they were superposely that they were superposely that they were superposely that
- Q Definite an it has the toler volerance in the superior wouldn't iv?
 - A Yes, wir.
 - o There are two westig on the north, and Fig. Back that are
 - A Yes, sir.
 - g years which compacts
 - A Yes, sir.
 - C Tabiling the well on the week, is then, I welly vo. a

Capeen?

- A Cabenni
- G Cabeen. Well, what is the circustion so to these well?
- A The well, I don't know the exact date it was drilled, Wr. Kellahin, they ran pipe on it and they got off, and the well produced 2540 berrels of oil before it was plugged and abandoned.
 - Q Twenty-five hundred?
 - A And forty barrels of cib.
 - q And do you know why is was plugged and abancomedy
 - this line of questioning in that he is going into mothers which were brought out at the prior hearing and not covered by direct examination here.

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position that the application for directional arilling is a new Application and certainly opens up any questions as to productivity of the acreage involved as to the production history of any wells located on the Unit that is proposed to be dedicated to the well, and certainly it is competent for us to show by cross examination and by direct evidence that the acreage they are proposing to dedicate is not productive of oil.

MR. NUTTER: The well you are questioning him about; is that the Cabeen well or is it the Texas?

MR. KELLAHIN: This is the Cabeen well which is in the eighty acres proposed to be dedicated to the Whipstock, well.

MR. NUTTER: It's in the forty acres directly west that is included here?

MR. KELLAHIN: Yes, sir, directly to the west.

MR. RUSSELL: The prior Order of the Commission based upon the testimony entered found that the eighty acres in question was reasonably productive of oil, and that this well would drain that eighty acres.

MR. NUTTER: Had the Cabben we'l been drilled at that time?

MR. RUSSELL: Yes, sir.

MR. YURONKA: Yes, sir.

MR. RUSSELL: And testimony was offered and Exhibits in connection with that well.

MR. YURONKA: The Cabeen well was completed in 7-7-61.

MR. NUTTER: I believe it would be pertinent to have this information regarding this acreage in the record here. I think it would be done in one or two records, either incorporated into the record of this one, the previous case, or proceed with the cross examination regarding this acreage.

MR. RUSSELL: I would like -- I will wait until either when I introduce any Exhibits or request now that the testimony, Exhibits in the prior case, Number 2959 be incorporated into the record of this case.

MR. KELLAHIN: We object to the incorporation of the prior records in this case for the reason Hill & Meeker is not a party in this case, and this is a new Application for a new well in effect, not the same well. They can't take the position of having approved a surface location automatically approved -- proved a deviation to the bottom at the same location; that is on the Application in this case, to show that first the acreage is productive. There is a valid reason for such a deviation, and that it will not impair correlative rights.

MR. RUSSELL: The protestant here was notified of the prior hearing and had an opportunity to appear. No appearance



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was made, no appeal has been taken, and what they are trying to do is make a collateral attack on the prior order of the Commission.

MR. NUTTER: Mr. Russell, your Application states that this subject well was abandoned due to mechanical difficulties in the completion of the well.

MR. RUSSELL: That is the TP.

MR. NUTTER: That is the well that is going to be deviated?

MR. RUSSELL: Yes, sir.

MR. NUTTER: Would you get some testimony in your record from your witness as to what the conditions there were?

MR. RUSSELL: As to that well?

MR. NUTTER: As to this well itself.

MR. RUSSELL: All right, I will be glad to.

Do you wish to finish or do you want me to put that in first?

MR. KELLAHIN: If you are going to put it in --

MR. NUTTER: I have an idea he might be asking you about it.

MR. KELLAHIN: I would.

FURTHER DIRECT EXAMINATION

BY MR. RUSSELL:





Mr. Yuronka, referring to the Texas Pacific South Cross Roads Unit Well Number 1; will you explain and give the data in connection with the attempted completion of that well and the reason for the abandonment?

This particular well was completed on January 8th, 1955. Seven inch casing was set at TD, which is 12,433 feet. The well was perforated at 12,254 to 12,292 feet. This is a minus 8230 to 8268. If I may deviate a moment here, the oil-water contact in this particular pool is approximately minus 9290, the well was treated with 500 gallons of acid and swabbed dry, then it was treated with 2,000 gallons of acid and it flowed 300 barrels of oil a day with tubing pressure of 150 pounds on December 5, 1954, with 80 barrels of oil in the last hour. The well was then shut-in seventy-two hours for bottom hole pressure, then the well flowed 163 barrels of oil in twentythree hours on 18-64ths inch choke, tubing pressure over 82 pounds. The well was treated with 5,000 gallons of acid and it swabbed 10 barrels of oil and 180 barrels of water on December 11th, 1954. The well was squeezed with an oil-cement slurry, and swabbed 272 barrels of oil in sixty-six hours. The well was then treated with 500 gallons of acid and swabbed 177 barrels of oil and 1288 barrels of water in one hundred fifty-two hours. Perforations were squeezed then and the well was perforated 12,252 to 12,264, and swabbed 20 barrels of oil



and 11 barrels of water in twenty-one hours. The well was treated with 500 gallons of acid and swabbed 113 barrels of oil and 878 barrels of water in one hundred and eight hours.

The total production from the well before abandonment was 1123 barrels of oil.

I would like to point out that this well, after the 5,000 gallon acid treatment, turned the 5,000 acid treatment, brought in the water, and despite what could be -- despite all of the attempts to get of it, to get rid of the water, it was impossible to do so. I would dike to point out that all the wells, the Cabeen well, the TP well, this particular well, the South Crossroads Well, and the AG well, TPSAG well, are the only three wells in the field in which completions were attempted to flow perforations. All of the other wells in the field are open hole. It is virtually an impossibility to squeeze off water in this type of formation once you bring it in with acid.

Now, there have been recent completions in the field by Ralph Lowe on the southern part of the field in which one other well does have perforations, but other than that recent completion, all the good wells in the field are open hole completions, as in the Hill & Meeker Well.

And my client intends to set the pipe on top of the Devonian and complete open hole.



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MR. NUTTER: What is your conclusion and your opinion of your well that you have, the TPDA productive well; that in treating it they treated into the water and were never able to shut the water off?

A It set on the completion of the thing.

MR. NUTTER: But that it was a productive well except for treating into the water?

A Well, I feel very sincerely that at this point where it flowed just 163 barrels of oil in twenty-three hours, I recommended at the time that we put it on artificial lift.

MR. NUTTER: And the original water-oil contact in the pool was a minus 8290?

A Yes, sir.

MR. NUTTER: And your lowest perforation was 8268?

A Yes, sir.

MR. NUTTER: So you are 22 feet off of the water?

A Yes, sir.

MR. NUTTER: Do you have any more direct at this point, Mr. Russell?

MR. RUSSELL: I think I better close my case again, and I would like to offer into evidence Applicant's Exhibit Number One and Number Two and request that the transcript and Exhibits in Case Number 2629 be incorporated in this Hearing.

MR. KELLAHIN: We object to the incorporation of the



record and Exhibits in Case 2629 for the reason that Hill & Meeker were not parties in this Hearing and this is a new Application.

MR. NUTTER: Applicant's Exhibits Numbers One and Two will be admitted into this Case; and we feel that the previous case is relevant to this case as well. We will take administrative notice of the record and of the previous case, and you may proceed with your cross examination.

(Applicant's Exhibits Numbers One and Two admitted into evidence.)

MR. RUSSELL: In this connection there is just one thing I want to bring out, that is: We can introduce the information on the attempted completion on the TP well as an Exhibit. It is exactly the same as is already in the other one, but if you prefer we will reintroduce it into this one, too.

MR. NUTTER: I don't believe we need it.

MR. RUSSELL: I have no further questions.

CROSS EXAMINATION

BY MR. KELLAHIN:

- Q Mr. Yuronka, to sum up your testimony in connection with the TP Unit Number 1 Well, it is your position that you did have a well there?
 - A Yes, sir.
 - Ω And on the completion you ruined the well?
 - A I have always felt that, sir.



BOX 1092 + PHONE 243-6691 + ALBUQUERQUE, NEW

Q Now, getting back to this Cabeen Well, what is the status of that well; is it plugged and abandoned?

A Yes, sir, it's approximately the same situation as this particular well, except that it, as I mentioned previously, with all of the water contacted at approximately 8290, they made notch perforations at 12,207 feet which was a minus 8280 feet.

and of course, they had water from the very beginning and squeezed and went up the hole and what have you, and never could get a completion of the well. Now, in this particular well, a DST was taken from 12,225 feet to 12,310 feet which is a minus 8198 to 8283, and recovered 1365 feet of oil and 1350 feet of heavy oil and gas cut water blanket and 390 feet of heavy cil and gas cut mud. Another DST was taken with the TBD being just eight feet lower, a minus of 8291. And this DST had in addition to oil, free oil, and oil and gas cut water blanket and oil and gas cut mud and 3590 feet of salt water.

- Q They never have been able to shut off the salt water; is that right?
 - A No, sir.
- Q And were either one of these wells ever a commercial well?
 - A I don't believe you could classify them as commercial



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wells.

MR. NUTTER: What was that answer?

I said, no, I don't believe you could ever classify them as commercial wells.

(By Mr. Kellahin) The Hill & Meeker is a commercial well, isn't it?

Α Yes, sir.

MR. KELLAHIN: That is all I have. Thank you, Mr. Yuronka.

MR. RUSSELL: I have no further questions.

FURTHER CROSS EXAMINATION

BY MR. NUTTER:

- This was the South Crossroads Devonian?
- Α Yes, sir.
- Mr. Yuronka, the pool rules for the South Crossroads Devonian Pool require that a well be located within one hundred fifty feet of the center of either quarter; so even the TP location being three thirty was an unorthodox location by the pool rules.
 - Yes, sir.
- Now, do I understand it that Whipstock, Inc., in their letter to Mr. Cox stated that they would like to have a tolerance from the target point of a plus or minus 50 feet north and south?



- A That is what --
- Q And they would want a tolerance east and west 100 feet of the target area?

A This is what they requested, because of the possibility that you cannot, of course, necessarily bottom the hole at exactly 330 feet. The way they would figure this out, they hope to bottom the hole 321.36 feet north of the present location which is actually less than was authorized in the previous order.

Q Did I understand the letter correctly; that they would try to hold an angle and hold the direction to 11,000 feet and just allow the well to straighten itself up, and they would not be controlling the hole then from 11,000 feet on to TD?

A This is what I read. May I read it to you again, would you like me to have it read again?

MR. NUTTER: I imagine it is in the record. So, in effect, what they are asking for to be a target area from 80 feet to 28 feet; 80 from the west line?

- A Yes, sir.
- Q And from 22 -- (
- A 2260.
- Q --60, to 2360 from the south line?
- A Yes, sir.
- Q Were there any other questions of Mr. Yuronka?



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You may be excused.

Do you have anything further, Mr. Russell?

MR. RUSSELL: No.

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

MR. KELLAHIN: Yes. I would like to have this witness

sworn.

RALPH GRAY, having been first duly sworn, was examined and testified as follows:

MR. KELLAHIN: I would like to have these two Exhibits marked for identification. Exhibit Number One and Number Two.

(Whereupon, Opponents Exhibits Numbers One and Two marked for identication.)

DIRECT EXAMINATION

BY MR. KELLAHIN:

- Q Would you state your name, please?
- A Ralph L. Gray.
- Q What business are you engaged in, Mr. Gray?
- A Consultant Engineer.
- Q And in connection with your business as a Consulting Engineer have you been hired by Hill & Meeker in connection with Case Number 3101?
 - A Yes, sir.
 - Q Have you testified before the Oil Conservation



Commission and made your qualifications a matter of record?

A Yes, I have.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. NUTTER: Yes, sir.

- Q (By Mr. Kellahin) Mr. Gray, are you familiar with the area involved in the Application of John L. Cox for the directional drilling?
 - A Yes, sir.
- Q Have you had anything to do with the Hill & Meeker well which is located to the north of Mr. Cox's proposed location?
- A Nothing in connection with the drilling of the well;
 I am familiar with the well records.
 - Q You have examined those records?
 - A Yes, sir.
- Q Have you examined the records on any other wells in this area?
 - A Yes, sir.
- Q Now, referring to what has been marked as Exhibit Number One, Mr. Gray; would you state what that is?
- A Exhibit Number One is a map of the South Crossroads

 Devonian Pool and this map has contours drawn on top of the

 Devonian formation. This map also shows the subject well with



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an arrow and the top of the Devonian formation is indicated at each of the wells on the minus sub-sea data.

What is the situation as to the T and P well that is proposed to be deviated, Mr. Gray?

The TP well encountered the top of the Devonian at minus 8235 which is approximately 55 feet above the recognized oil and water contact.

Do you agree with Mr. Yuronka as the location of this water-oil contact at minus 8290, approximately?

Yes, it is an approximate figure. I don't think you can pin it down within a few feet. Usually, these things are degradational things and that is an approximate figure.

- Do you have the completion data on the TP well?
- Yes, sir. A
- Referring to Exhibit Number Two will you discuss the completion of that well, please?

Exhibit Number Two shows tests that were performed on the TP well and this well was perforated on November 29th, and was treated and started producing; and Exhibit Number Two shows that from November 29th to December 7th the well was flowing at various test rates. During this period the well flowed clean oil and no evidence of any appreciable amount of water. On December the 8th the well was acidized with 5,000 gallons and during the period from the 8th to the 11th, the



well was swabbed and tests indicates that during this period apparently the acid went down into the water, and during this period the operator swabbed a substantial amount of salt water and only a very small amount of oil.

An attempt was made to repair the well on December the 20th, and was squeezed, and then later acidized and re-squeezed on the 27th, and then acidized. The operator was only able to recover large amounts of salt water and small amounts of oil after that time.

- Q Now, on the basis of the information you have on the well would you consider that T and P had an oil well completed as Mr. Yuronka said?
- A Yes, sir, it seems to me that prior to the last acidizing job that they did have a commercial well.
- Q Now, in your opinion, is it necessary for John L. Cox to deviate the bottom of that well to 8330 feet from the Hill & Meeker lease line in order to complete a producing oil well?
 - A No, sir, I don't think he is justified in doing that.
- Q Could he deviate in some other direction other than north?
- A Yes, I think the well could be -- if it was necessary to deviate that, certainly it wouldn't necessarily have to go directly north, or certainly it wouldn't have to go that far in order to cure this bad completion technique.



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Now, do you have any information on the Cabeen well Mr. Gray?

I have the completion records and the amount of oil A that the well recovered before abandonment.

Based upon that information was it possible to complete Q that well as an oil well?

Not as a commercial well; no, sir. The operator tried to complete it and the well made large amounts of water, small amounts of oil, and finally the operator abandoned the well because of being a non-commercial well.

In your opinion, would the acreage under that well contribute any production to the proposed completion of the John L. Cox Well?

It doesn't appear that it would contribute any substantial amount; no, sir.

Now, the spacing in this pool is eighty acres for an oil well; is it not?

Yes, sir.

In your opinion would the well completed in the Cross-Q roads of the Devonian Pool drain eighty acres?

Yes, sir. Α

Would a well located 330 feet from Hill & Meeker's Q lease line cause any drainage to occur?

Yes, sir, I think it would drain oil from the Hill & Α



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Meeker lease.

- In the event the Commission sees fit to approve this; would you want to see a directional survey made of the well?
 - Yes, sir, I think that would be essential.
 - Have you any other recommendations, Mr. Gray?

Well, I don't think that the operator is justified in having all of this excess room to play on in the event that the Commission should be justified in granting the approval. I think that certainly he should maintain a minimum distance of 330 from the lease line and I am not justifying that footage, because I think it will drain oil from the Hill & Meeker lease; but in the event that the Commission should grant this thing, I don't think he should be permitted to come closer than 330 to the lease line.

- You wouldn't recommend that the Commission approve this 50 foot tolerance north and south proposed by the Whipstock Corporation?
 - No, sir.
 - Were Exhibits One and Two prepared by you or under your supervision?
 - Yes, sir.

MR. KELLAHIN: At this time I move that Opponent's A Exhibits One and Two be admitted into evidence.

Opponent's Exhibits Numbers One and Two MR. NUTTER:



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(Whereupon, Opponent's Exhibits One and Two admitted into evidence.)

MR. KELLAHIN: That's all I have on direct.

MR. NUTTER: Does anyone have any questions of Mr.

Gray?

MR. RUSSELL: Yes, Mr. Examiner.

CROSS EXAMINATION

BY MR. RUSSELL:

Q Mr. Gray, is the Hill & Meeker well at a standard location?

A The Hill & Meeker well is located in accordance with the field rules; I am sure you are aware that the field rules permit a well to be located within 150 feet of the center of a Unit. The Hill & Meeker well is located 515 feet from the lease which amounts to 150 feet.

- Q They took full advantage of the 150 foot tolerance; did they not, and they took it in the direction of the approved location for TP to drill their unorthodox well?
 - A Yes, sir.
- Q Now, your Exhibit Number One shows two separate structures; does it not?
 - A Yes, sir.
- Q And how many producing wells are there in that northern structure at this time?



- At this time there is one producing well.
- And that is the Hill & Meeker well?
- Yes, sir.
- And if this Application is denied and the well is not drilled, the Hill & Meeker well will drain oil from the north half of the southwest quarter of Section 10; will it not?

MR. KELLAHIN: If the Examiner please, I object to the wording of the question. It infers that the denial of the Application will result in no well being drilled, which is certainly no basis of that.

MR. RUSSELL: I will re-word the question.

- (By Mr. Russell) Mr. Gray, under the present circumstances, the Hill & Meeker well will drain oil from the north half of the southwest quarter; will it not?
- We generally think in terms of wells draining eighty acres. Now, sometimes it is not always possible to know exactly what configuration that thing is going to be, but in the event the original TP well, say, is not produced any at all, it is conceivable that this well could drain a portion of that rather than, say, draining this full eighty acre Unit that might be assigned to it. Here, those things are kind of give and take.
- Well, as I recall your testimony; that if the proposed directional drilling was granted to the extent of the tolerance



we will say, it would still be completed within TP's eighty acres; would it not?

A If it were granted 330 feet from the line, well, then certainly it would drain Hill & Meeker's acres.

Q Then the reverse has to be true also if the TP is going to drain your acreage, your acreage is going to be drained out?

A If the operator elects not to go back into this hole and get the oil out. What we are saying, they did have oil originally and that, by faulty completion techniques, they were unable to complete the well commercially.

In other words, by going back in there and by proper remedial work get actual results in a commercial well there.

- Q Well, to get back to my question and get a simplified answer, it could drain that acreage, your well; could it not, or a portion thereof?
 - A If there is no attempt made to complete it, yes, sir.
- Q Now, I believe you stated you saw no justification for the proposed operation of Mr. Cox; is that a correct statement?

A I don't think that he is justified in wanting to go 330 feet from the lease line.

- Q That is your only objection. That is what you are saying, it is not justified; is that correct?
 - A Well, we also say we don't think he is justified in



asking for a full eighty acre allowable because of the noncommercial status of the Cabeen well.

But from an economic point of view you certainly will agree that it will prevent economic waste to permit the directional drilling as opposed to drilling a new well based upon the figures that Mr. Yuronka brought out; you would make such a recommendation to someone seeking your advice; would you not?

Well, of course, we thought we were coming up here on a Hearing to consider the deviation of this hole; that was the purpose that I was retained; and that is the purpose that I am up here for. And I am stating that I don't think that the operator is justified in going as close as 330 feet.

- That is the point you are trying to bring out?
- Yes, sir.

MR. RUSSELL: That's all.

MR. NUTTER: Are there any other questions of Mr. Gray? You may be excused."

(Witness excused.)

MR. NUTTER: Does anyone have anything further they wish to offer in this case?

MR. KELLAHIN: I would like to make a brief statement if I may.

MR. RUSSELL: I have no further statements.



MR. KELLAHIN: If the Examiner please, it is the position of Hill & Meeker that the deviation of this well at the bottom of 330 feet of this lease line is not justified on the basis of the engineering testimony that has been offered both by the Applicant and by the Protestant. Obviously, a commercial well, I mean a well that has commercial possibility, was completed by T and P at an unorthodox location and perhaps from an economic point of view. The deviation of that well is justified for an attempt to recomplete it, but a mere one hundred feet deviation from a proven area is certainly not justified on the record.

In addition, the Cabeen Well is shown to have been watered out and it is our position this acreage is not now productive and should not be dedicated to any well completed in the other 40 acre tract. The deviation of the Cox well will clearly result in drainage of the Hill & Meeker acreage, except one well will drain in excess of 80 acres and the location of the Hill & Meeker well will not abort adequate counter drainage to prevent the effect of the Cox well on its production. We also take the position that the tolerance requested cannot be authorized by the Commission if for no other reason than that advertising is not adequate to cover the deviation.

Conceivably it could put the bottom of the Cox well

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATE MENTS, EXPERT TESTIMONY, DAILY COPY, CONVEI 1120 SIMMS BIDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 280 feet rather than 330 as advertised in the Case Number 3101, and the Commission should not approve any such deviation. If the deviation is required, then the bottom of the hold should be moved back a sufficient distance to put it within the scope of the advertising, at least.

We don't think it should be permitted to bottom at such a distance from the surface location as is proposed. For that reason, we oppose the Application.

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

MR. RUSSELL: I have nothing further.

MR. NUTTER: We will take Case Number 3101 under advisement and call Case Number 3102.



120 SIMMS BIDG. • P. O. BOX 1092 • PHONE 243-669! • AIBUQUERQUE, NEW MEXICO

STATE OF NEW MEXICO) ss COUNTY OF BERNALILLO)

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

Witness my Hand and Seal this \mathcal{I}^{Th} day of $\mathcal{O}(h)$ 1964.

Charles Hoyd Walker NOTARY PUBLIC

My Commission Expires: March 25, 1968.



Moderaby certify that the foregoing is mecanite record of the proceedings in the Example of Case No. 1969.

Mar Mexico 011 Conservation Commission.

DRAFT

JMD/esr September 18, 1964

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

	•	CF Subj.	
IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION	ON	<u> </u>	
COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:			
	COMPO	CASE No.	3101
	A.	Order No	. R-2774
APPLICATION OF JOHN L. COX FOR DIRECTIONAL DRILLING,	· N		2773

ORDER OF THE COMMISSION

BY THE COMMISSION:

LEA COUNTY, NEW MEXICO.

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

NOW, on this <u>day of September</u>, 1964, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, John L. Cox, is the owner and operator of the Texas Pacific South Crossroads Unit Well No. 1 which has a surface location 1980 feet from the South line and 1980 feet from the West line of Section 10, Township 10 South, Range 36 East, NMPM, Lea County, New Mexico.
- (3) That Order No. R-2629 authorized the applicant's predecessor in interest to drill in the South Crossroads-Devonian Pool at an unorthodox location 2310 feet from the South line and 1980 feet from the West line of said Section 10, provided the N/2 SW/4 of Section 10 was dedicated to the well.

- (4) That the Texas Pacific South Crossroads Unit Well No.

 production

 1 was abandoned due to completion difficulties and that the well

 authorized by Order No. R-2629 has not been drilled.
- Pacific South Crossroads Unit Well No. 1, set a whipstock at and to approximately 9350 feet, directionally drill in a Northerly bottom said wellin direction to ensounter the Devonian formation at a true vertical depth of approximately 12,250 feet, and bottom said well within a 100 foot tolerance to the East and West and a 50 foot tolerance to the North and South of a point 2310 feet from the South line and 1980 feet from the West line of said Section 10.
- (6) That approval of the subject application will prevent the drilling of unnecessary wells, prevent waste, and protect correlative rights, provided the N/2 SW/4 cf Section 10 is dedicated to the well, and provided that the well is bottomed no nearer than 2310 feet from the South line of said 1 tion 10.

IT IS THEREFORE ORDERED:

- (1) That the applicant, John L. Cox, is hereby authorized to re-enter the Texas Pacific South Crossroads Unit Well No. 1, and to set a whipstock at approximately 9350 feet, directionally drill bottom said wellin in a Northerly direction to encounter the Devonian formation at a true vertical depth of approximately 12,250 feet, and bottom at a point seid well within a 100 foot tolerance to the South, East, and West of a point 2310 feet from the South line and 1980 feet from the West line of Section 10, Township 10 South, Range 36 East, NMPM, Lea County, New Mexico.
- (2) That the subject well shall be bottomed no nearer than 2310 feet from the South line of said Section 10.
- (3) That the N/2 SW/4 of said Section 10 shall be dedicated to the subject well.

- (4) That a continuous multi-shot directional survey shall be made of the well bore with shot points not more than 100 feet apart; that the operator shall cause the surveying company to forward a copy of the survey report directly to the Santa Fe Office of the Commission, Box 2088, Santa Fe, New Mexico; and that the operator shall notify the Commission's Hobbs District Office of the date and time said survey is to be commenced.
- (5) That Form C-105 shall be filed in accordance with Commission Rule 1108 and the operator shall indicate thereon true vertical depths in addition to measured depths.
- (6) 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 herein-above designated.

Texas Pacific & Union South Crossroads Unit Well #1

Deviation Tests

400' - 1/20

1,0001 - 1/40

1,3501 - 1/40

2,250' - 1/4°

2,6091 - 3/4°

3,1501 - 10

3,4101 - 1/20

4,100! - 3/40

4,5501 - 3/40

5,2271 - 1/4°

5,648! - 3/40

6,1141 - 1/40

6,615' - 1/20

7,0821 - 1/2

7,5151 - 10

8,1601 - 3/40

8,5201 - 3/49

9,0701 - 3/40

9,512' - 1/20

10,0301 - 10

10,5601 - 3/40

11,015' - 3/4°

11,540' - 10

12,0501 - 10

7^h @ TD 12,420^t

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

 \mathcal{P} exhibit NO. 2

CASE NO. 3 10 /

Cata 3/0/

LAW OFFICES OF

JOHN F. RUSSELL
SUITE IOIO SECURITY NATIONAL BANK BUILDING
P.O. DRAWER 640

ROSWELL, NEW MEXICO 88201

HANN OFFICE OCC

1034 AUG 13 PAREA CODE 675

August 11, 1964

Oil Conservation Commission Box 2088 Santa Fe, New Mexico 87501

Gentlemen:

HASONS NO.

I transmit herewith intriplicate the application of John L. Cox. I understand this will be set for hearing before an examiner on September 9, 1964.

Very truly yours,

John F. Russell

JFR:np

Enclosure

DOCKET MAILED

Date-

#

67

T.P.COAL & OIL CO. & UNION OIL CO OF CALIFORNIA - South Crossroads Unit #1, Lea County, New Mexico.

- 11-29 Perf. 12,254-92, swabbed dry, washed w/500 gal mud acid 6wabbed dry. Acid/2000 gal. Treating Press. 2500-1600# Swabbed 50 bbls load and 56 bbls new oil, 4 hrs. Flowed 22 bbls oil/hr for 3 hrs, 3/4" choke, TP 50#. Flowed 21 bbls oil/hr, plus 1% acid water, 42.2 gravity, 20/64" choke for 2 hrs. TP 100#
- 11-30 Flowed 99 bbls oil/5 hrs, 1/4" choke, TP 90#. Shut in 9 hrs. TP 650#, Flowed 97 BBLS oil/6 hrs, 1/4" choke, TP 150#, 16 bbls oil last hour, clean oil.
- Flowed 300 bbls oil/24 hrs, 1/4" choke, TP 150-50# 12-1 Flowed 8 bbls oil last hour. S.I. 6 hours, TP 450# GOR 16/1.
- Flowed 90 bbls oil/21 hrs, 1/4" choke, TP 480#, Choke plugging. Opened to 18/64 choke and flowed 11 bbls oil/ 12-6 per hr.
- Flowed 163 BO/23 hrs, 18/64" choke. TP 80# 12-7

()

- Acid/5000 gal. Treating Press. 3300-2650#. Swab 237 BO in 13 hrs(187 bbls new oil). No acid water recovered. 12-8 Pluid 1500* from top.
- 1.2-9 Swab. 267 Bbls salt water + 99 Bbls oil/13 hours.
- 12-10 Swab. 317 Bbls salt water + 23 bbls oil/17 hours.
- 12-11 Swab. 108 bbls salt water + 10 bbls oil/8 hours.
- 12-20 Squeezed perf. with 82 sx diesel slurry. Swab 77 BO/24 hrs
- 12-22 Acid/500 gal. Swab $8\frac{1}{2}$ BO + 254 BW / 24 hours.
- Squeezed peri. Re-perf. 12254-64 Swab 12 80/hr plus 12-27 5% salt water. Acid/500 gal. Swab. 244 bbis salt water + 10 BBLS 0il/24 hours.

Temporarily Abandoned.

BEFORE EXAMINER NUTTER OIL CONSERVATION COMMISSION

MERER EXHIBIT NO. 2

CASE NO. 3/ 0

DOCKET: EXAMINER HEARING - WEDNESDAY - SEPTEMBER 9, 1964

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

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

- CASE 3099: Application of Leonard Nichols for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the approval of the West Maljamar Unit Area comprising 440 acres more or less, of Federal and fee lands in Sections 4 and 9, Township 17 South, Range 32 East, Lea County, New Mexico.
- CASE 3100: Application of Leonard Nichols for a waterflood extension, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the extension of the waterflood project which he operates in Sections 2, 3, 10, and 11, Township 17 South, Range 32 East, Maljamar Pool, Lea County, New Mexico, by the addition of 6 water injection wells in Sections 4 and 9, same township. The original flood was authorized as the Boller-Nichols Water-flood Project, Roberts Pool, by Order No. R-1538.
- Application of John L. Cox for directional drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to whipstock and directionally drill the Texas Pacific South Crossroads Unit Well No. 1, the surface location of which is 1980 feet from the South and West lines of Section 10, Township 10 South, Range 36 East, Lea County, New Mexico, in such a manner as to bottom said well in the South Crossroads Devonian Feel at a point 2310 feet from the South line and 1980 feet from the West line of said Section 10.
- CASE 3102: Application of Sunset International Petroleum Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Mal-Gra Unit Area comprising 600 acres, more or less, of State land in Township 17 South, Range 33 East, Lea County, New Mexico.
- CASE 3103: Application of Sunset International Petroleum Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Maljamar Pool in its Mal-Gra Unit Area by the injection of water into the Grayburg formation through 8 wells in Sections 20 and 21, Township 17 South, Range 33 East, Lea County, New Mexico.

PAGE -2-Docket No. 24-64 Examiner Hearing - September 9, 1964

CASE 3104:

Application of Sunset International Petroleum Corporation for directional drilling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to whipstock and directionally drill the Humble State Well No. 1, the surface location of which is 1980 feet from the South line and 660 feet from the West line of Section 16, Township 8 South, Range 33 East, Chaves County, New Mexico, in such a manner as to bottom said well in the Tobac-Pennsylvanian Pool at a point within 150 feet of the center of the SW/4 SW/4 of said Section 16.

nundl & meerker

oil producers
710 VAUGHN BLDG.
MIDLAND. TEXAS 79704
Sept. 10, 1964

MAIN OFFER

Oil Conservation Commission Box 2088 Santa Fe, New Mexico.

Attention - Mr. A. L. Porter, Jr.

Dear Mr. Porter:

Re: John L. Cox Application South Crossroads Field Lea County, N. M.

Mr. Ralph Gray has informed us of the proceedings had before the Commission on September 9th to consider the application of John L. Cox to intentionally deviate the former Texas Pacific Oil Company's South Crossroads Unit Well #1 in Section 10, Township 10 South, Range 36 East, Lea County, New Mexico.

We were informed by Mr. Gray that Texas Pacific previously had a hearing before the Commission in the latter part of 1963, asking for approval of a location 330' from the North and 1980' from the West lines of the SW/4 of said Section 10, which said location was approved at that time. As I understand it, this was approved by Order No. 2629. When we talked with Mr. Gray it was the first that we had heard of this order. We received no notice of the hearing and had no knowledge of this order. We were relying on the field rules that had been set by the Commission and supposed that before any change were to be made in the Field Rules that all offset operators would be personally notified of any hearing that might change the field rules.

In fact, it was only due to the waiver sent out by Mr. John Yuronka for Mr. Cox that we were notified of the proposed hearing, at which we were represented by Mr. Gray. If we had been notified of the hearing called by Texas Pacific we certainly would have attended and made the same objections that we have placed before the Commission for consideration in this last hearing.

We will certainly appreciate your consideration of our objections before you make any final decision.

Yours very truly,

HILL & MEEKER

JSH/el

BEFORE THE OIL COMMENVATION CONCESSION OF THE STATE OF HEW MEXICO

IM THE MATTER OF THE HAARING CALLED BY THE OIL COMBENVATION COMMISSION OF MEN MEXICO FOR THE PURPOSE OF COMMIDERING:

2959 CARS So. 1939 Order No. R-1639

APPLICATION OF TEXAS PACIFIC OIL COMPANY FOR AN UNDETHODOX LOCATION, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

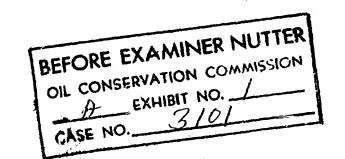
MY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on December 16, 1963, at santa Fe, New Mexico, before Bivis A. Wha, Meanines duly appointed by the Oil Conservation Commission of Mean Mexico, hereinafter referred to as the "Commission," in asserdance with Rule 1314 of the Commission Rules and Regulations.

NOW, on this 2 day of December, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Manufact, Elvis A. Utz, and being fully advised in the premises,

FIELDS:

- (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, Texas Pacific Gil Company, seeks an exception to the Special Rules and Regulations for the South Grossroads-Devonian Pool to drill its State AB Well %. I at an unorthodox location 2310 feet from the South line and 1980 feet from the West line of Section 10, Township 10 outh, Range 36 East, NNPM, Lea County, New Mexico.
- (3) That due to the reservoir characteristics of the Devomian formation at the proposed location the subject well should drain the M/2 SW/4 of said Section 10.
- (4) That approval of the subject application will prevent waste and protect correlative rights, provided the applicant dedicates the H/2 SW/4 of Section 10, Township 10 South, Range 16 Hest, MMPM, Les County, New Mexice, to the subject well.



-2-CASE No. 2959 Order No. R-2629

IT IS THEREFORE OFDERED:

- (1) That the applicant, Taxes Pecific Oil Company, is hereby granted an exception to the Special Rules and impalations for the South Crossroads-Devomina Pool and is hereby authorized to drill its state AK Well No. 1 at an unorthoden location 1920 feet from the South line and 1980 feet from the West line of section 10. Township 10 South, Range 36 Rust, MEPA, Les County, New Mexico; provided, however, that the N/2 SN/4 of said Section 10 shall be dedicated to said well.
- (2) That jurisdiction of this cause is retained for the entry of such further orders as the Countssies may deem necessary.

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

> STATE OF NEW MEXICO OIL COMSERVATION CONSTISSION

JACK M. CAMPBELL, Chairman

R. S. WALKER, Member

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

SEAL

Date Aspt 9, 1964 gan 9/9/64 Hearing Date____ 3101 CASE

My recommendations for an order in the above numbered cases are as follows:

Enter am order permitting John L. Car to perenter Texas Pacific Oil Company South Crossroads Unix Well 201, located 1780 Just From the Santh line & 1880 feet from the west line of Seek 10 Township 10 Santh, Range 36 East La Co, u men and set a whip stock at approxumately 9350 and directionally dried said will in a northerly direction, bollowing said wed in the Devocion formation of the South Crosswoods Devocion Pool ate are approprimate true vertical septh of 12,250 feet. Movided however that said well shall be battamed not at a point 2310 fact from the South fine of said fine and 1980 fact from the Worthine of said section 10. Provided further that a tolerance Secreon 10. Thomas garmen man a for the start shall be permitted in a fortherly, Easterly ar Westerly direction from the aforesaid ballowing direction for in event shall be well be point but now event shall be well be leadoned more than 2310 feet from the South line of the section Duelude Order les (2) & Order les R-265/ also require that the operator, in filing Form C+05 shall give true vertical depths as well an necessared services in ase intenses. Asterna Stamilar

BEFORE THE OIL CONSERVATION COMMISSION AUG 13 FM 1 07 STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF

JOHN L. COX FOR PERMISSION TO DRILL

DIRECTIONALLY HIS TEXAS PACIFIC SOUTH

CROSSROADS UNIT WELL NO. 1 FROM AN

APPROXIMATE DEPTH OF 9,000 TO 9,400

FEET IN AN ATTEMPT TO BOTTOM SAID WELL

AT AN APPROXIMATE DEPTH OF 12,250 FEET

IN THE DEVONIAN FORMATION AT A POINT

2310 FEET FROM THE SOUTH LINE AND 1980

FEET FROM THE WEST LINE OF SECTION 10,

TOWNSHIP 10 SOUTH, RANGE 36 EAST, N.M.P.M.)

LEA COUNTY, NEW MEXICO, IN THE SOUTH

CROSSROADS-DEVONIAN POOL.

No. 3/0/

APPLICATION

COMES NOW the Applicant, John L. Cox, by his attorney,
John F. Russell, and requests permission under Rule 111(b) of the
Oil Conservation Commission to deviate the Texas Pacific South
Crossroads Unit Well No. 1, located 1980 feet from the West line
and 1980 feet from the South line of Section 10, Township 10 South,
Range 36 East, and in support thereof, states:

- 1. Applicant is the successor in interest to Texas Pacific Oil Company as to the above described well and to State of New Mexico Oil and Gas Lease No. K-2943 insofar as said lease covers the $N_2^1SW_4^1$ of Section 10, Township 10 South, Range 36 East.
- 2. The above described well was abandoned due to mechanical difficulties in completion.
- 3. This Commission, by Order No. R-2629 entered in Case No. 2959 authorized Texas Pacific Oil Company to drill an oil well at an unorthodox location 2310 feet from the South line and 1980

feet from the West line of said Section 10, which Order also required that the $N_2^1SW_4^1$ of said Section 10 be dedicated to this well. Texas Pacific Oil Company has not drilled the well authorized by said Order and has abandoned its intention to drill said well.

- 4. Applicant proposes to enter the above described well to a depth of approximately 9,000 feet to 9,400 feet, at which approximate depth it will be whipstocked and thereafter will be directionally drilled to bottom at an approximate depth of 12,250 feet in the Devonian Formation at a point 2310 feet from the South line and 1980 feet from the West line of said Section 10, Township 10 South, Range 36 East (being the same location approved by Order No. R-2629 entered by the Commission in Case No. 2959).
- 5. Applicant proposes to dedicate the $N_2^1SN_4^1$ of Section 10, Township 10 South, Range 36 East to the aforesaid well when completed.
- 6. The granting of this application will prevent waste and will not impair the correlative rights of any other operator in the South Crossroads-Devonian Pool.

WHEREFORE, Applicant requests that this matter be set down for hearing at an early date before an Examiner for the purpose of granting Applicant permission to drill directionally his Texas Pacific South Crossroads Unit Well No. 1 from an approximate depth of 9,000 to 9,400 feet in an attempt to bottom said well at an approximate depth of 12,250 feet in the Devonian Formation at a point 2310 feet from the South line and 1980 feet from the West line of Section 10, Township 10 South, Range 36 East, N.M.P.M., Lea County,

New Mexico, in the South Crossroads-Devonian Pool.

Respectfully submitted,

JOHN L. COX

Artorney for Applicant

P. O. Drawer 640 Roswell, New Mexico

DATED: August 11, 1964

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

October 7, 1964

Mr. John F. Russell Attorney at Law Post Office Drawer 640 Roswell, New Mexico

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

> Re: Case No. 3101 Order R-2773

Gentlemen:

This letter will confirm my recent conversation with you concerning the well location approved by the above order. It was the Commission's intention to grant a 100 foot to the South, East, and West and to grant no tolerance to the North of the described footage location. As each of you have advised me that you have informed your respective clients of the Commission's intention, we will not issue a nunc pro tunc order in the above case.

Very truly yours,

J. M. DURRETT, Jr. Attorney

JMD/ir

cc: Mr. Joe D. Ramey
Oil Conservation Commission
Hobbs, 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. 3101 Order No. R-2773

APPLICATION OF JOHN L. COX FOR DIRECTIONAL DRILLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

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

NOW, on this 25th day of September, 1964, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, John L. Cox, is the owner and operator of the Texas Pacific South Crossroads Unit Well No. 1 which has a surface location 1980 feet from the South line and 1980 feet from the West line of Section 10, Township 10 South, Range 36 East, NMPM, Lea County, New Mexico.
- (3) That Order No. R-2629 authorized the applicant's predecessor in interest to drill in the South Crossroads-Devonian Pool at an unorthodox location 2310 feet from the South line and 1980 feet from the West line of said Section 10, provided the N/2 SW/4 of Section 10 was dedicated to the well.
- (4) That the Texas Pacific South Crossroads Unit Well No. 1 was abandoned due to production difficulties and that the well authorized by Order No. R-2629 has not been drilled.
- (5) That the applicant proposes to re-enter the Texas Pacific South Crossroads Unit Well No. 1, set a whipstock at

-2-CASE No. 3101 Order No. R-2773

approximately 9350 feet, and to directionally drill in a northerly direction to bottom said well in the Devonian formation at a true vertical depth of approximately 12,250 feet within a 100 foot tolerance to the East and West and a 50 foot tolerance to the North and South of a point 2310 feet from the South line and 1980 feet from the West line of said Section 10.

(6) That approval of the subject application will prevent the drilling of unnecessary wells, prevent waste, and protect correlative rights, provided the N/2 SW/4 of Section 10 is dedicated to the well, and provided that the well is bottomed no nearer than 2310 feet from the South line of said Section 10.

IT IS THEREFORE ORDERED:

- (1) That the applicant, John L. Cox, is hereby authorized to re-enter the Texas Pacific South Crossroads Unit Well No. 1, set a whipstock at approximately 9350 feet, and to directionally drill in a northerly direction to bottom said well in the Devonian formation at a true vertical depth of approximately 12,250 feet at a point within a 100 foot tolerance to the South, East, and West of a point 2310 feet from the South line and 1980 feet from the West line of Section 10, Township 10 South, Range 36 East, NMPM, Lea County, New Mexico.
- (2) That the subject well shall be bottomed no nearer than 2310 feet from the South line of said Section 10.
- (3) That the N/2 SW/4 of said Section 10 shall be dedicated to the subject well.
- (4) That a continuous multi-shot directional survey shall be made of the well bore with shot points not more than 100 feet apart; that the operator shall cause the surveying company to forward a copy of the survey report directly to the Santa Fe Office of the Commission, Box 2088, Santa Fe, New Mexico, and that the operator shall notify the Commission's Hobbs District Office of the date and time said survey is to be commenced.
- (5) That Form C-105 shall be filed in accordance with Commission Rule 1108 and the operator shall indicate thereon true vertical depths in addition to measured depths.
- (6) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

-3-CASE No. 3101 Order No. R-2773

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

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

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

GDVERNOR JACK M. CAMPBELL GHAIRMAN

State of New Mexico

Bil Conserbation Commission

LAND COMMISSIONER
E. S. JOHNNY WALKER
MEMBER



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

P. O. 80X 2088 BANTA FE

September 29, 1964

Mr. John F. Russell Attorney at Law Post Office Drawer 640 Roswell, New Mexico	Re: CASE NO. 3101 ORDER NO. R-2773 APPLICANT John L. Cox
Dear Sir:	
Enclosed herewith are two order recently entered in t	copies of the above-referenced Commission the subject case.
en e	Very truly yours,
	A. L. PORTER, Jr. Secretary-Director
ir/	
Carbon copy of order also	sent to:
Hobbs OCC X	
Artesia OCC	
Aztec OCC	
OTHER Mr. Jason Ke	llahin