STATE OF NEW MEXICO

ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED
BY THE OIL CONSERVATION DIVISION FOR
THE PURPOSE OF CONSIDERING:

CASE NOS: 21219, 21220

APPLICATION OF COG OPERATING LLC
FOR COMPULSORY POOLING,
EDDY COUNTY, NEW MEXICO.

REPORTER'S TRANSCRIPT OF VIRTUAL PROCEEDINGS

EXAMINER HEARING

June 26, 2020

SANTA FE, NEW MEXICO

This matter came on for virtual hearing before the New Mexico Oil Conservation Division, EXAMINERS FELICIA ORTH, SCOTT COX and KURT SIMMONS, on Thursday, June 26, 2020, through the New Mexico Energy, Minerals, and Natural Resources Department Webex platform, Wendell Chino Building, 1220 South St. Francis Drive, Porter Hall, Room 102, Santa Fe, New Mexico.

Reported by: Irene Delgado, NMCCR 253
PAUL BACA PROFESSIONAL COURT REPORTERS
500 Fourth Street, NW, Suite 105
Albuquerque, NM 87102
505-843-9241

A P P E A R A N C E S

FOR The APPLICANT:

OCEAN MUNDS-DRY
MICHAEL RODRIGUEZ
1048 Paseo de Peralta
Santa Fe, NM 87501-3034

FOR MEWBOURNE OIL CO.

JAMES BRUCE
P.O. Box 1056
Santa Fe, NM 87504-1056
505-982-2151

I N D E X

W I T N E S S E S

E X H I B I T I N D E X

HEARING EXAMINER ORTH: It is 8:30. Good morning.

PARTICIPANTS: (Collectively.) Good morning.

HEARING EXAMINER ORTH: My name is Felicia Orth. I'm the Hearing Examiner appointed by the director of the Oil Conservation Division to conduct the hearing. This is a special hearing, today, our first, actually, in the application of COG Operating LLC for compulsory pooling in Lea County, New Mexico. The consolidated cases are 21219 and 21220. We also have Mewbourne Oil Company, which is the opponent in this matter.

May I have appearances, please?

MS. MUNDS-DRY: Good morning, Madam Hearing Examiner. Can you hear me okay?

HEARING EXAMINER ORTH: Terrific.

MS. MUNDS-DRY: Thank you. My name is Ocean Munds-Dry. I'm counsel for COG Operating LLC. Appearing with me today is my co-counsel, Michael Rodriguez. And we don't mean to look like we are double-teaming, anyway, we just split up the workload. So he will be taking witnesses and I will be.

HEARING EXAMINER ORTH: Terrific, thank you.

MS. MUNDS-DRY: And we have five witnesses.

HEARING EXAMINER ORTH: All right, yes, thank you. I read the testimony and looked at the exhibits; I will talk about that in a second.

Who else do we have here for Mewbourne, Mr. Bruce?

MR. BRUCE: Jim Bruce entering an appearance for Mewbourne Oil Company, and as you saw in the testimony that was submitted, we have three witnesses.

HEARING EXAMINER ORTH: Thank you. Who else do we have on the line? Let's see, I see a Mitch Robb.

MR. ROBB: Mitch Robb a Mewbourne witness.

HEARING EXAMINER ORTH: All right. Thank you.

And then let's see, Chesney Gilliland?

MR. GILLILAND: Yes, I'm Chesney Gilliland. I'm a geologist. I'm just observing today.

HEARING EXAMINER ORTH: All right. Let's see, is there anyone else? A Mr. Snidow, I think you are a witness, the first one, maybe.

(Overtalk.)

HEARING EXAMINER ORTH: Sorry, let me hear from Mr. Snidow first.

MR. SNIDOW: Steve Snidow, the assigned supervisor for Concho Resources.

HEARING EXAMINER ORTH: All right. And then Ms. Rausch?

MS. RAUSCH: Ashley Rausch, land supervisor at Concho. I'm also observing.

HEARING EXAMINER ORTH: All right. Thank you.

MR. CARTER: Mark Carter, land manager, Concho, observing.

HEARING EXAMINER ORTH: Okay.

MR. HURD: David Hurd, reservoir engineer at Concho.

HEARING EXAMINER ORTH: All right, thank you.

MR. MACHA: I'm Travis Macha, landman at Concho.

HEARING EXAMINER ORTH: All right. And then we have two Technical Examiners this morning who I trust are on. One is Kurt Simmons. Mr. Simmons?

TECHNICAL EXAMINER SIMMONS: Good morning. Glad to be here this morning.

HEARING EXAMINER ORTH: Hello. And Mr. Cox?

TECHNICAL EXAMINER COX: Good morning, everyone. Glad to be here this morning as well.

HEARING EXAMINER ORTH: Great, thank you. Is there anyone else who would like to identify themselves? I know we also have Irene Delgado, the court reporter.

(No audible response.)

HEARING EXAMINER ORTH: Okay. So let me tell you what I --

MS. MUNDS-DRY: Madam Examiner, I'm sorry to

interrupt. We have two more witnesses. I didn't know if you wanted to -- before you get started.

HEARING EXAMINER ORTH: Oh, certainly.

MR. SIMMONS: Let me introduce myself. Parker Simmons with COG. I'm a drilling engineer.

HEARING EXAMINER ORTH: Hello.

MR. ROHWER: I'm Craig Rohwer, completions manager with COG also.

HEARING EXAMINER ORTH: Great, thank you.

MR. BRUCE: Mewbourne has two additional witnesses besides Mitch Robb, plus Cory Mitchell, the exploration manager in Mewbourne's Midland office, is also on the line.

HEARING EXAMINER ORTH: Oh, thank you.

All right. So the documents that I have include the prehearing documents that were submitted jointly by COG and Mewbourne discussing the material facts in dispute, prehearing statements from each company, the packet showing the testimony, the direct testimony of each set of witnesses, and then I also have about, I think, five rebuttal pages from COG received yesterday afternoon, and two pages, I believe, this morning from Mr. Bruce.

Is there anything else that anyone believes was submitted and that we should have in front of us as we proceed?

MR. BRUCE: I have nothing further.

HEARING EXAMINER ORTH: All right, thank you.

Let me just say, because we are in a somewhat awkward platform, you will hear me pausing for a moment in case someone needs to speak up, and we will take as many breaks as we need to, so please just reach out if a break is appropriate.

All right. In that case, then let me just mention that this hearing is being recorded and transcribed by Irene Delgado. I believe Cisco also records this matter as an audio recording.

The hearing will be conducted under the OCC adjudicatory procedures, 19-15.4 of the New Mexico Administrative Code. We will proceed today as long as necessary to make an evidentiary record, but no formal decision will be given today. At the end of the matter we will either close the record or leave the record open in the event that that's appropriate, and the matter will be all taken into consideration at the Division and an order issued later.

Yesterday afternoon, Mr. Bruce, you filed a motion to continue the hearing, and we had a brief e-mail exchange. Would you like to say anything more about that motion this morning while we're on the transcript?

MR. BRUCE: I mean, it's very brief. It's short

and sweet. One of the rebuttal witnesses that addresses 660 feet versus 880 feet spacing, and Mewbourne hasn't had a chance to understand what data was used by COG in that data and would like time to review that.

And as I said, also, COG's own exhibits say they are not drilling the well for quite some -- the wells, their proposed wells for quite some time, so we didn't see the rush to go to hearing, but that's the point of it.

HEARING EXAMINER ORTH: All right. Thank you. Ms. Munds-Dry and Mr. Rodriguez, would you like to address that point?

MS. MUNDS-DRY: Thank you, Madam Hearing Examiner.

Well, we were trying to do our best in a virtual environment. As you mentioned, normally we wouldn't share rebuttal exhibits at all before a hearing; we use them if and when we felt like we needed them.

But because we knew we couldn't just spring them on everybody during the hearing (unclear) to share them ahead of time, so we had a chance to look at them and then we shared them with OCD later in the afternoon.

So I would just say, his comment on the one exhibit, he is of course welcome to question our witness as to the veracity of the exhibit, and -- and again -- but then normally he wouldn't get any sort of heads-up. I know that

Mr. Bruce submitted a rebuttal exhibit this morning that I haven't had a chance to look at. So I would say that's the nature of the hearing. We're trying to do our best to accommodate this sort of weird environment.

So we are ready to go forward and they can test out the exhibit during.

HEARING EXAMINER ORTH: All right. Thank you. So as I indicated in the e-mail yesterday afternoon, the motion to continue will be denied. Having said that, if after cross-examination of the COG witnesses about the basis for the distinction between 600 feet and 880 feet, if you believe there is a compelling reason to leave the record open at the end of our event today, let's take that up at the end of today and talk about that. Because as we go on there may or may not be -- you may or may not feel a compelling need to do that.

All right. So let's -- I should also mention testimony is taken under oath and is subject to cross-examination. So -- and I'm happy to do the swearing in of whatever witnesses you have on the line at this time. So if COG has an opening statement, you can certainly make that, or you can call your first witness.

MS. MUNDS-DRY: We do have an opening statement. Thank you.

MR. RODRIGUEZ: Good morning. I wanted to start

off today by establishing the content of today's hearing. Those two applications under review in this matter, both of which are filed by Concho, Mewbourne did not file a competing application, it merely opposes the applications today. This is not a hearing on competing applications. It's a hearing on two compulsory pooling applications filed by Concho.

As such, the New Mexico Oil & Gas Act is very clear what the Division's obligations are in compulsory pooling applications. The Oil and Gas Act, the Division shall pool all matrix of the proposed spacing units when the applicant has the right to drill on the subject land, the applicant has established a case development plan to avoid the drilling of unnecessary wells, protective correlative rights and prevents waste.

The evidence submitted today in case 21219 and 21220 will establish that COG Operating has met all statutory pre-conditions to pool the interested parties within both spacing units. Specifically the evidence will demonstrate that Concho has the right to drill the subject acreage (unclear) has made good-faith efforts to reach voluntary joinder of the parties that are the subject of pooling in the spacing units, including Mewbourne, and the evidence will further demonstrate that, unlike Mewbourne's development plan which focuses on ownership boundaries,

Concho's development plan is an efficient and economic way to develop underlying reserves, avoid the drilling of unnecessary wells, prevent waste, protect correlative rights (unclear).

Concho is meeting the statutory conditions of compulsory pooling, Concho respectfully requests the Division grant its application to compulsory pool uncommitted interests in the cases of the subject today. Thank you.

HEARING EXAMINER ORTH: Thank you. Mr. Bruce, would you like to make your opening statement now or reserve?

MR. BRUCE: I will just be very brief right now, but as Mr. Rodriguez pointed out, Mewbourne has not filed any applications, and the reason it hasn't is it owns 100 percent of the S/2 of Section 6 where it has plans to drill its wells, therefore it has absolutely no need to file forced pooling applications.

Furthermore, the testimony will show that Mewbourne can drill economic 1-mile laterals under current circumstances. COG is free to go ahead and drill 2-mile laterals to the south, which it's able to do. It might have to force pool some of the 2-mile laterals, but such is life, therefore its correlative rights are unharmed and waste is prevented.

I think it's best the parties have -- are at odds. I think it would be best to let them each go their own ways and develop their acreage as they see fit. Thank you.

HEARING EXAMINER ORTH: Thank you, Mr. Bruce. All right. We'll go then to the presentation of COG's witnesses.

MS. MUNDS-DRY: Madam Hearing Examiner, as I mentioned, we have five witnesses. Do you want to swear them all in now or how -- how do you --

HEARING EXAMINER ORTH: Yes, if they are all five on the line at this moment, I would be happy to swear them all in. All right. If you would please, five witnesses, raise your right hands. Do you and each of you swear or affirm that the testimony you are about to give will be the truth, whole truth and nothing but the truth?

WITNESSES: (Collectively.) I do.

HEARING EXAMINER ORTH: That was all five of you. Thank you very much. Please go ahead.

MR. RODRIGUEZ: I would like to call my first witness, Mr. Travis Macha. Travis Macha is a landman with COG Operating LLC. He has been with Concho since January 2017. He has previously testified before the Division. His credentials were accepted as a petroleum landman. He is familiar with the application and subject application today.

And with that I would like to -- I would like to tender Mr. Macha as an expert on petroleum land matters.

HEARING EXAMINER ORTH: And, Mr. Bruce, any objection?

MR. BRUCE: No.

HEARING EXAMINER ORTH: All right. He is so recognized.

TRAVIS MACHA

(Sworn, testified as follows:)

DIRECT EXAMINATION

BY MR. RODRIGUEZ:

Q. Mr. Macha, are the statements that you provided in your prefiled testimony true and accurate?

A. Yes.

Q. And do you plan to adopt these statements as your direct testimony today?

A. Yes.

Q. In regards to your testimony that you filed, Paragraph 24 asks, "Are there any unleased mineral interests in the subject acreage." Do you have something to add to that?

A. Yes. There is a correction there. It says, no, there are not any unleased mineral interests. There are indeed unleased mineral interests. Those minerals are owned by Devon who is listed as being pooled in this case. Those

tracts in which they own those unleased minerals are unleased in part. The other portion of the minerals are leased, and they are subject to mutually executed joint operating agreements.

MR. RODRIGUEZ: That's it.

Q. Okay. Thank you. And we got those -- do you adopt all of those statements, including the one you just gave, as your direct testimony today?

A. Yes.

Q. And you have one more additional exhibit that was submitted to the Division yesterday, correct, a letter of intent --

A. Yes.

Q. -- is that right, Mr. Macha? Okay. Would you mind walking us through that, please?

A. Yes. So the letter of intent is basically a document whereas Devon and COG have agreed to negotiate further on this acreage, whereas Devon intends to trade out of this acreage being the Scout unit into other acreage outside of this hearing. And that's it.

Q. And when was this letter executed?

A. This letter was executed yesterday, June 25.

Q. And can you explain how the interests within that unit changed?

A. So there are two pooling applications here in the

W/2. Concho's interest, if we acquired Devon, would increase by 19 percent across the entire roughly 960 acres, and in the E/2 it would increase by roughly 3 percent across the roughly 960 acres.

MR. RODRIGUEZ: I would like to identify that exhibit, that letter of intent as Exhibit A-5.

(Exhibit A-5 identified.)

Q. And Mr. Macha, were COG -- you have the four exhibits attached to your testimony. Were these exhibits, A-1 through A-5 -- A-4 plus the one you added yesterday, A-5 -- prepared by you or compiled under your direction and supervision?

A. Yes.

MR. RODRIGUEZ: Madam Examiner, I would like to move the admission of the exhibits, please.

HEARING EXAMINER ORTH: Thank you. Mr. Bruce?

MR. BRUCE: No objections.

HEARING EXAMINER ORTH: Exhibits A-1 through A-5 are admitted.

(Exhibits A-1 through A-5 admitted.)

MR. RODRIGUEZ: Thank you. We pass the witness.

HEARING EXAMINER ORTH: Mr. Bruce, do you have questions?

MR. BRUCE: Yes.

CROSS-EXAMINATION

BY MR. BRUCE:

Q. Mr. Macha, first let's go to your rebuttal Exhibit Number 1, that letter agreement.

A. Okay.

Q. Does Devon actually own in the N/2 of Section 6?

A. They own mineral interests, and we would be acquiring revenue interest on the N/2 of Section 6.

Q. Okay. They don't own the working interest?

A. The working interest in the N/2 of Section 6 is split between Mewbourne, Occidental and COG.

Q. Okay. I just wanted to clarify that. And that is the acreage you said is subject to a JOA, or are you talking about the acreage further south?

A. Both acreage. So N/2 of Section 6 where Devon has those minerals is subject to a 2005 JOA, and they also have some minerals in Section 18 and 7 that are both subject to mutually exclusive joint operating agreements whereas COG operates.

Q. Okay. Did you say 7 and 8 or 7 and 18?

A. 18.

Q. Okay. You cut out briefly, that's all. Okay. Now, under Question 11, you state that APDs for COG's proposed wells have been approved. Is that correct?

A. Yes, sir. That's correct.

Q. You agree that COG owns no interest in the S/2 of

Section 6?

A. That's correct.

Q. I will cite you a regulation, but I will tell you what it says. It's one of the Division's regulations or rules, 19.15.16.15, which, summarizing, states that an operator shall not file for an APD for a horizontal well unless it either owns an interest in every tract within the well unit or another working interest owner has committed to the well.

A. I'm unfamiliar with that statute. I will point, however, to Mewbourne's Power Riders in Sections 5 and 8 of the W/2 adjacent to the Scout unit, it's an identical scenario. They do not own in all four, but they have approved permits.

Q. Okay. But we're not here on that today, are we?

A. That's correct.

Q. But there is a JOA in effect on its acreage next door, isn't there?

A. No, sir. Not on the Section 5, unleased minerals, as they spell out in the JOA.

Q. If you haven't complied with the regulations, is COG willing to withdraw its APDs?

A. I would defer that to our counsel.

MR. BRUCE: Madam Examiner, I don't know what the correct procedure is, but if COG does not voluntarily agree,

I may file an appropriate motion or other pleading to have their APDs revoked.

HEARING EXAMINER ORTH: All right. Thank you, Mr. Bruce. I -- we can talk about the best mechanism to set -- I think probably at the end of the hearing because we may be asking for closing arguments, for example.

MR. BRUCE: Sure.

HEARING EXAMINER ORTH: All right.

BY MR. BRUCE:

Q. Now, looking at your exhibits, have any of the working interest owners committed to COG's proposed wells at this point?

A. At this point, no, ma'am -- no, sir.

Q. Now, it's my understanding that Mewbourne and COG have been in touch since late summer, early fall 2018 trying to come to terms on this acreage; is that correct?

A. Yes, sir, that's correct.

Q. How many -- do you know how many offers Mewbourne has made in order to come to terms with COG so that we wouldn't have to go to a hearing?

A. I don't know off the top of my head, but I think both companies have probably made over five offers to each other pertaining to this acreage.

Q. Okay. And in your testimony it said, "COG continues to negotiate in good faith."

A. That's correct.

Q. Now, just a few days ago COG sent another offer to Mewbourne; is that correct?

A. Yes, sir, that's correct.

Q. And was it in the form of a letter agreement?

A. Yes, sir.

Q. And did this letter agreement -- it's unsigned; is that correct?

A. Yes, sir, it's unsigned.

Q. But part of the agreement was to continue further negotiations.

A. So if Mewbourne would agree to certain stipulations, such as continuing trade talks in good faith, yes, this hearing would have been continued. However, we didn't see eye to eye on all aspects of that agreement.

Q. Well, in fact, didn't the letter agreement that was drafted by COG said there was no obligation of any party to negotiate in good faith?

A. So that language could -- was offered to be clarified. The intent of the letter agreement was to further negotiate that trade. However, for, you know, liability purposes, we can't tie ourselves into committing acreage to a trade without the necessary approvals. That's just not how our company works. We can't just sign away acreage on a letter agreement, so that was the purpose of

that sentence, but the intent of the agreement was to continue negotiating.

Q. Are you aware that in any agreement there is always an implied obligation to treat -- for each party to treat each other with good faith?

A. Yes, sir.

Q. Now, the letter was, with that language in it, was signed by you and your superior; is that correct?

A. Yes, sir, that's correct.

Q. But not signed by Mewbourne?

A. That's correct.

Q. Okay. Just a second. And I just wanted to verify, the AFEs prepared by COG are dated in January 2020. Are the costs still more or less the same, the proposed costs?

A. I would defer to David Hurd on that, but it should be.

Q. Okay. And the original proposed cost was a little over 13 and a half million per well?

A. Yes, sir, that's correct.

Q. Okay. Thank you very much, Mr. Macha.

HEARING EXAMINER ORTH: Thank you, Mr. Bruce. Mr. Cox, do you have questions of Mr. Macha?

TECHNICAL EXAMINER COX: No, ma'am, I don't think I have any questions.

HEARING EXAMINER ORTH: All right. Mr. Simmons?

TECHNICAL EXAMINER SIMMONS: Excuse me, I'm trying to get my cell phone muted there because I think I'm going to have a couple of questions. So as I understand the way this is developed is that originally Devon owned the N/2 of Section 6, and then that was acquired by Mewbourne; is that correct?

THE WITNESS: So, yeah, there's been multiple transactions on the N/2 of Section 6. Last summer in June -- June, July and August of 2019, initially a trade had closed in August of 2019 or July 2019 whereas Mewbourne acquired Devon's working interest associated with the N/2 of Section 6. Then a couple of weeks later Mewbourne and COG closed a trade whereas we intended on acquiring all of Mewbourne's interest in the N/2 of Section 6. We were unaware they had acquired Devon's interest at that time.

TECHNICAL EXAMINER SIMMONS: Okay. Because the pleadings and the pretrial statements seem to indicate that COG acquired all of Mewbourne's interest, but that needs to be clarified then for the record that is not --

THE WITNESS: Right.

TECHNICAL EXAMINER SIMMONS: Mewbourne is retaining some interest in the N/2 of Section 6; is that right?

THE WITNESS: Yes. It is the intent we acquire

it all, but like I said, at the time we were unaware, but yes, that's correct.

TECHNICAL EXAMINER SIMMONS: Was that, was Mewbourne's acquisition of Devon and some additional interest in good faith? Is it COG's opinion that was in good faith, or was that clandestinely, as it were.

THE WITNESS: I won't speak to the intentions. I think, you know, acquiring interest anywhere in good acreage is always economically a good move whether you are the operator or not. However, there was the intent made during 2019 in that trade where COG would be the operator of Section 6 and 7, and acquire -- Mewbourne acquiring Devon's additional interest without letting us know, it was kind of behind the back.

TECHNICAL EXAMINER SIMMONS: Okay. And did the interest that COG acquired in the N/2, did that entitle it to drill wells there?

THE WITNESS: Yes. Mewbourne, before they transferred their ownership to COG, was operator of the JOA in the N/2 of Section 6. Mewbourne then -- I mean, COG then acquired that interest subject to being operator of that JOA in the N/2 half of Section 6, so now COG is operator of the JOA there.

TECHNICAL EXAMINER SIMMONS: So when Mewbourne transferred voluntarily its interest to COG, it could

foresee that it might be force pooled at some point should COG propose a well that Mewbourne did not want to participate in voluntarily?

THE WITNESS: That's correct.

TECHNICAL EXAMINER SIMMONS: And am I correct in understanding that Mewbourne has since proposed wells that include the N/2 of Section 6?

THE WITNESS: Yes, sir. On, I think, June 17, they proposed their Devon 6 wells in the N/2 of Section 6. Those proposals would be under that JOA where COG is operator, so they would be proposed as non-operator for COG to drill.

TECHNICAL EXAMINER SIMMONS: And Mewbourne has the right to seek to compulsory pool COG, just as COG is attempting to compulsory pool Mewbourne; is that correct?

THE WITNESS: So in the N/2 of Section 6 alone, if you can find the wells there alone where it's subject to that JOA, there is no compulsory pooling or pooling necessary as all owners of that JOA have executed that JOA.

Since the Scout wells are drilling outside of that JOA, we do have to compulsory pool. So there is no compulsory pooling necessary for 1-mile laterals in the N/2.

TECHNICAL EXAMINER SIMMONS: So the wells that Mewbourne has proposed are only 1-mile laterals and do not require compulsory pooling?

THE WITNESS: That's correct.

TECHNICAL EXAMINER SIMMONS: Okay. Does this JOA that attaches to the N/2 of Section 6, does it have stipulations regarding the division of proceeds from production of oil and gas in that half section.

THE WITNESS: I believe so.

TECHNICAL EXAMINER SIMMONS: I believe it does in fact divide have a direct -- how the proceeds and production will be divided between the parties within the -- just within the N/2, or --

THE WITNESS: So, yeah, within the N/2 of that JOA since, you know, different interests have evolved different ways, I think it's in these exhibits as well as Mewbourne's, Mewbourne owns 40 percent of the N/2 of Section 6, so would be entitled to 40 percent of the production there, and then Occidental owns roughly over 12 percent, and COG roughly owns right over 47 percent.

TECHNICAL EXAMINER SIMMONS: But that JOA applies only to wells developed within the N/2 if a well exceeded -- if it was a 2-mile wellbore, mile-and-a-half wellbore, the JOA would then no longer be dispositive of how the wells are -- proceeds are divided.

THE WITNESS: That's correct. And that's why we entered the (unclear) superseding JOAs for our Scout development.

TECHNICAL EXAMINER SIMMONS: Okay. You submitted -- have they been consented to by other parties.

THE WITNESS: It's been sent to all parties. Nobody has signed yet because nobody has participated in the Scout unit.

TECHNICAL EXAMINER SIMMONS: Okay. I think that's all the questions I have for the moment. Thank you.

HEARING EXAMINER ORTH: Thank you, Mr. Simmons. Mr. Rodriguez, do you have any redirect to follow up with Mr. Macha?

MR. RODRIGUEZ: No, we do not.

HEARING EXAMINER ORTH: Thank you. If you would then please call your next witness.

MR. RODRIGUEZ: I would like to call Dean Snidow as my next witness.

Mr. Snidow is a geoscience supervisor with COG Operating, and he's been with Concho since 2014. He has previously testified before the Division. His credentials as petroleum geologist have been accepted and made a matter of record. He is familiar with the applications filed today and conducted the geologic study of the subject land and application, and at this time I would like to tender Mr. Snidow to you as an expert in petroleum geology matters.

HEARING EXAMINER ORTH: Mr. Bruce, do you object?

MR. BRUCE: (No audible response.)

HEARING EXAMINER ORTH: You might be on mute, Mr. Bruce.

MR. BRUCE: Yes, I was. No, I have no objection.

HEARING EXAMINER ORTH: All right. Thank you. He is so recognized, Mr. Rodriguez.

DEAN SNIDOW

(Sworn, testified as follows:)

DIRECT EXAMINATION

BY MR. RODRIGUEZ:

Q. Mr. Snidow, are the statements you provided in your prefiled direct testimony true and accurate?

A. They are.

Q. And at this time do you adopt those statements as your direct testimony today?

A. I do.

Q. There are four exhibits exhibits, B-1 through B-4 that are attached to your direct testimony. Were those exhibits prepared by you or compiled under your direction or supervision?

A. They were.

MR. RODRIGUEZ: Thank you. Madam Examiner, at this time I would like to move the admission of Exhibits B-1 through B4.

HEARING EXAMINER ORTH: B-1 through B4, Mr. Bruce, any objection?

MR. BRUCE: Nope.

HEARING EXAMINER ORTH: Thank you, B-1 through B4 are admitted.

(Exhibits B-1 through B-4 admitted.)

MR. RODRIGUEZ: I'm sorry, I would also like to admit Exhibit B, which is the direct testimony of Dean into the record.

HEARING EXAMINER ORTH: Yes. Actually, I was going to say this earlier, yes, certainly his written testimony is admitted. And the language that we typically use with prefiled written testimony is, "Do you adopt your written testimony under oath," not that it's a matter of it being an exhibit.

MR. RODRIGUEZ: Sure. Sure. Thank you.

BY MR. RODRIGUEZ:

Q. So with that, Mr. Snidow, do you adopt this testimony under oath?

A. I do.

MR. RODRIGUEZ: Thank you. And with that we pass the witness.

HEARING EXAMINER ORTH: Oh, thank you. Mr. Bruce, do you have questions of Mr. Snidow?

MR. BRUCE: Yeah, a couple of questions.

CROSS-EXAMINATION

BY MR. BRUCE:

Q. Under Question 12 in your testimony, you -- you say stand-up orientation is preferred in this area. Is that correct?

A. That is correct in this situation and this project area, stand-up orientation is preferred as the most efficient methodology to develop the acreage.

Q. Now, COG is the operator and, I presume, the primary owner, if not the sole owner of the working interest in the Tomahawk unit which abuts this acreage directly to the north; is that correct?

A. That is correct.

Q. Did you have a proceeding before the Oil Conservation Division to approve that unit?

A. I believe we did, yes.

Q. And isn't it a fact that in that testimony COG's witnesses stated a preferred orientation was east-west?

A. I believe their testimony indicated that the current development plan was east-west, not the preferred orientation of development.

Q. So you are doing something that's not beneficial to your interest?

A. In this local area, we believe the immediate project area, that wellbore orientation is not the primary driver of development.

Q. Now, the chart I'm looking at, which I

was presented -- which is presented by one of my witnesses doesn't look like you drilled any wells in that unit yet?

A. In the Tomahawk unit?

Q. In the Tomahawk unit.

A. That's correct, we have not.

Q. Have any wells been proposed -- let me -- I don't know -- I don't know the land ownership situation. Have any wells been proposed to anyone in that unit?

A. I will have to defer to land or legal on the exact timing of the proposal for those wells.

Q. Okay. That's fine. If you don't know, you don't know. There is one thing about that unit, and I presume you are familiar with it, it covers eight sections of land, but the W/2 of Section 19 is not in the unit. So that means if you are going to drill stand-ups you are going to drill in the W/2 of 18 you are going to have to drill 1-mile laterals; is that correct?

A. The way the lands are laid out now, if you were to drill stand-ups in that particular section, I believe -- I don't have the map from the Tomahawk unit in front of me -- there would be a potential for some 1-mile laterals.

Q. Okay. Are you mainly looking at 2-mile laterals in that unit?

A. Yes.

Q. All of the six wells you proposed in these cases are Wolfcamp A Sand wells; is that correct?

A. That's correct.

Q. Why isn't COG targeting the Wolfcamp A Shale?

A. Well, based on our analysis of the immediate vicinity for this project area, we believe the Wolfcamp A Sand to be the primary objective and the primary target.

Q. All right. But you have drilled Wolfcamp Shale before, right, in your Myox 21 wells?

A. That is correct.

Q. And that's, say, to the east-southeast of your proposed Scout State wells?

A. Correct.

Q. About a section away? Section and a half?

A. Correct.

Q. Okay. Has COG drilled a 3-mile well lateral in New Mexico?

A. In New Mexico, no, we have not.

Q. And I don't know if you are the correct one to ask on this one, it might be a subsequent witness, but one of the documents I saw said COG was proposing (unclear) do you have any idea what month?

A. What month? We are currently planning for those to be in the first half of 2021.

Q. Thank you, Mr. Snidow. That's it.

HEARING EXAMINER ORTH: Thank you, Mr. Bruce. Mr. Cox, do you have questions of Mr. Snidow?

TECHNICAL EXAMINER COX: No, ma'am, I don't have any questions at this moment.

HEARING EXAMINER ORTH: Thank you. Mr. Simmons, do you have questions of Mr. Snidow?

TECHNICAL EXAMINER SIMMONS: I think I can come up with one or two that might be relative. Relative to the 3-mile laterals, that seems to be a point of contention between the parties, whether they are -- which is the most beneficial and will produce better and the risk and (unclear) you testified that COG has not drilled any in New Mexico. Have they drilled in other states?

THE WITNESS: In Texas, yes.

TECHNICAL EXAMINER SIMMONS: Texas. How did those wells produce for COG? Were they satisfied with the production?

THE WITNESS: I'm not familiar with that particular asset or the specific well performance of those wells.

TECHNICAL EXAMINER SIMMONS: Okay. Can you tell us how many -- do you know how many miles there were?

THE WITNESS: No, I cannot.

TECHNICAL EXAMINER SIMMONS: Okay. What is your knowledge of 3-mile laterals in New Mexico? Are there

others that have been drilled by companies that drill here?

THE WITNESS: Yes, I believe a few other operators have drilled 3-mile laterals.

TECHNICAL EXAMINER SIMMONS: Is COG's decision to drill 3-mile laterals based on the production of the success of those laterals, or you can you tell us?

THE WITNESS: I'm sorry, can you repeat that question?

TECHNICAL EXAMINER SIMMONS: I want to know how -- what was the basis of COG's decision to drill 3-mile laterals in this case. Was it affected by the production of others who drilled 3-mile laterals in New Mexico?

THE WITNESS: We believe, based on the layout here, that the 3-mile lateral would be the most efficient and effective way to develop this project area.

MS. MUNDS-DRY: Mr. Examiner, we do have a witness coming up who is familiar with what we have done in Texas and could absolutely answer your question.

TECHNICAL EXAMINER SIMMONS: Okay. That might be better off reserved for him then. I appreciate that. As far as the north-south, standup-laydown orientation, what -- what difference is there in this type of production that can be expected in wells north-south versus east-west?

THE WITNESS: I believe we have exhibits and a witness that can better speak to that, but based on our

initial findings, we don't believe that the north-south, east-west orientation in this particular project area is a noticeable difference.

TECHNICAL EXAMINER SIMMONS: So it's basically, the decision in this case to go north-south is because you are involving the three different sections that run in a north-south or direction, 6, 17 and 18; is that correct?

THE WITNESS: That's correct.

TECHNICAL EXAMINER SIMMONS: Okay. Either way north-south, east-west, you see them as producing comparably.

THE WITNESS: In this particular area.

TECHNICAL EXAMINER SIMMONS: Okay. All right. That's useful. Thank you. I have no more questions.

HEARING EXAMINER ORTH: Thank you, Mr. Simmons. Mr. Rodriguez, do you have any follow up with Mr. Snidow?

MR. RODRIGUEZ: No, Madam Examiner, I do not.

HEARING EXAMINER ORTH: Thank you. If you would call your next witness.

MS. MUNDS-DRY: Thank you, Madam Hearing Examiner. He is going to pass the baton to me now. Can we, if I -- is everybody okay? Do we need a break before we go on? I'm okay. I just thought I would check with everybody. We are ready to go on? Thank you.

MR. BRUCE: It's fine with me for a few minutes.

MS. MUNDS-DRY: Okay, sounds good. With that, I would like to call our next witness, David Hurd.

Mr. Hurd's direct testimony is listed in Exhibit Number C, and as he notes in his direct testimony, he has been a reservoir engineer with COG since 2018 -- since 2015. He previously testified before the Division, and he has been accepted as an expert. He is familiar with the application and has conducted an economic evaluation of the subject piece of it. And with that, we would ask that Mr. Hurd be tendered as an expert in reservoir engineering.

HEARING EXAMINER ORTH: Mr. Bruce, do you have any objection?

MR. BRUCE: No objection.

HEARING EXAMINER ORTH: All right. He is so recognized.

MS. MUNDS-DRY: Thank you.

DAVID HURD

(Sworn, testified as follows:)

DIRECT EXAMINATION

BY MS. MUNDS-DRY:

Q. Mr. Hurd, look at -- looking at the Exhibits C-1 through C-5, were these exhibits created by you or under your direct supervision?

A. Yes, they were.

Q. And is the direct testimony that we prefiled with

the Division, is it a true and accurate statement of your direct testimony here today?

A. Yes, it is.

Q. And do you adopt your written testimony under oath today?

A. I do.

MS. MUNDS-DRY: With that, Madam Hearing Examiner, we would first ask that his written testimony be accepted by the Division.

HEARING EXAMINER ORTH: Yes.

MR. BRUCE: No objection.

HEARING EXAMINER ORTH: Thank you, Mr. Bruce. Yes, his testimony is accepted.

MS. MUNDS-DRY: And we would ask that exhibits -- that's marked as Exhibit C, and we would also ask that Exhibits C-1 through C-5 be admitted into the record as well.

HEARING EXAMINER ORTH: Objections, Mr. Bruce?

MR. BRUCE: No objection.

HEARING EXAMINER ORTH: All right. Exhibits C-1 to C-5 are admitted.

(Exhibits C-1 through C-5 admitted.)

MS. MUNDS-DRY: And we pass the witness.

HEARING EXAMINER ORTH: Thank you. Mr. Bruce, do you have questions of Mr. Hurd?

MR. BRUCE: Yes. Just a second here.

CROSS-EXAMINATION

BY MR. BRUCE:

Q. Mr. Hurd, you talked about surface facilities, et cetera, in your testimony. What existing infrastructure does COG have along the north line of Section 6?

A. I'm not aware of what we have or do not have. My analysis of the surface use was more generic. You have to put surface somewhere, so I spotted it somewhere reasonable.

Q. Do you have any approved or access to salt water disposal up along that line?

A. I'm not aware.

Q. Now, if you, if you go down to Section 18, which is part of the acreage you are seeking to force pool, does COG have some Myox 30 wells permitted along the south line of 18 or the north line of adjoining Section 19?

A. I believe that's right. I'm not sure if it's in Section 18 or the section to the south, but there should be surface hole locations planned out around that area.

Q. So if you drill north to south or there would be additional facilities, but drilling south to north, there really wouldn't be much in the way of additional facilities, would there?

A. I'm not sure. I'm not sure if we can commingle two different COG's -- it's not my wheelhouse.

Q. Okay. Let me ask a question on a couple of your

exhibits, I think. Okay. Exhibits C-2 and C-3, look at those. They are Pages 48 and 49 of COG's exhibit package.

A. Okay. What are the titles of those ones?

Q. Exhibit C-2 is the Comparison of Possible Development Patterns, and Exhibit 3, C-3, is Economic Comparison.

A. Okay, got it, thank you.

MS. MUNDS-DRY: Lines 3 and 4, Mr. Hurd.

THE WITNESS: Thank you.

Q. When you are talking about your preferred development, whether it's in your testimony or the exhibit, you said your preferred development will allow for a little over 15,000 feet of total lateral, that's per well, correct, 15,180 feet, thereabouts?

A. Yes, sir. That's our estimate.

Q. Okay. Now -- but looking at your Exhibit C-2, regardless of the well orientation and the different types of wells drilled, that would -- if you multiply that by six, the six wells you propose, that's about 91,000 feet of total lateral. I used to be an engineer, so I can calculate this stuff, but if you want to confirm that, go ahead.

A. Okay. 15,180 times 6 is 90,000 .

Q. Yeah, 91, roughly, maybe a little over?

A. Yeah.

Q. But then if you look at what you stated about the

ultimate development pattern, if you took three, you got two 4600 foot laterals, and then six 9800 foot laterals, if you do the multiplication on that, it comes out to about the same total lateral development, doesn't it?

A. Assuming the eight well per section density in the S/2 of Section 6?

Q. Assuming four wells in the S/2 of 6, three in the N/2 of Section 6 and then six 2-mile laterals.

A. Yes. I believe that that is correct.

Q. Now, next on the following exhibit, the economic comparison, I think your written testimony says there is a difference of about $22 million when you are looking at the number CAPEX millions of dollars?

A. Yes.

Q. But the difference, there is more like 16.5 million or $16 million, not $22 million like in your testimony; is that correct?

A. Yes. I'm sorry, that is a typo.

Q. And then the APDs are about 13 3-mile laterals, so about 13.35 million, so again the total capital is just over $81 million.

A. When were our proposals for the Scout 3-mile proposals sent out?

Q. Well, I asked -- I think in the landman's package it looked like they were dated late January.

A. Okay. So with the significant oil price change over that time period, our capital costs have come down, so the capital numbers represented here are much different than the proposals sent in January.

Q. Have you drafted new APDs -- not APDs, but new AFEs?

A. Internally, yes. I will defer to land to proposed or reproposing our AFE estimates to our partners.

Q. Okay. But also on your your Exhibit C-2 you make the -- this is -- your exhibit is based on sub $30 per barrel oil. It's not sub $30 right now, is it?

A. True.

Q. It's closer to 40?

A. Yes. And my economic evaluation on C-3 is representative of the $40 price environment.

Q. So what, if I may ask, what does the 73.5 -- I don't have a calculator in front of me right now -- what would that come out to a cost per well for a 3-mile lateral?

A. I believe our template costs are -- which should be $10.5 million per well for a 3-mile development.

Q. 10.5?

A. That's our -- yes, that is our most recent capital number, even more recent than when this slide was made, so it's an ever-evolving number, unfortunately.

I'm sorry, I will restate. 10.6 is the more

rounded number. Sorry.

Q. Let's go to your Exhibit -- see which one this is -- C-5, which is your reduced surface usage.

A. Yes. Okay.

Q. Are you aware that Mewbourne already has surface facilities plus access to salt water disposal in Section 6?

A. I -- I know y'all operate a well in the N/2 of Section 6, so I would assume you have resources there, assets.

Q. Okay. And again, looking at this, you're saying -- looking at the plots you say are plots of surface use, if you drilled from the S/2 of 18 where you already have stuff or are planning stuff for your Myox 30 wells, that kind of minimizes what you are showing out there and it wouldn't need the surface use on the N/2 of Section 6. Is that correct?

A. I am not sure of the tank battery commingling situation, that we may be able to get it approved if that that were the development pattern, but I do know additional surface hole wellbore locations are just additional wellbore locations, and I know (unclear) development sections.

Q. Well, you can minimize surface use for well pads, et cetera, can you not?

A. If you are developing -- if you are not developing at the same time, the surface locations for

wellbores would likely be on different pads.

Q. Is there any diminishing return in production from extended laterals that might offset the, quote-unquote, non-stimulated reservoir that's highlighted between Sections 6 and 7?

A. We currently do not believe that the ultimate recovery on a per-foot basis of a 3-mile well should be any different than a 2-mile or 1-mile well, although initial rates on a per-foot basis may be reduced. We think over the long term you ought to make up all of the -- you should -- I'll defer to completions, but we believe we can effectively stimulate the end of a 3-mile lateral.

Q. And you might want to defer to the engineer again, but doesn't the extension of the laterals, would it possibly result in drilling difficulties?

A. I will defer to the --

Q. You might not get to the end of the lateral for purposes --

A. Our drilling engineer will discuss the risks associated with drilling.

Q. Okay. Thank you, Mr. Hurd. That's all I have.

HEARING EXAMINER ORTH: Thank you, Mr. Bruce. Mr. Cox, do you have questions of Mr. Hurd?

TECHNICAL EXAMINER COX: Yes, just a couple. Mr. Hurd, can you characterize the target formation for me in

terms of what is the dip, what direction is it going, how is that going to affect your development?

THE WITNESS: In terms of dip, I'm not a geologist, but I can tell you the structure of the Wolfcamp A, which is what we are targeting, specifically the Wolfcamp A Sand is deepening to the east and shallowing to the west. I'm not sure surfacing in the north or surfacing in the south as far as whether it would be up-dip or down, I would need to defer to geology on that.

TECHNICAL EXAMINER COX: Do you know relatively how thick the target formation is?

THE WITNESS: In the hundreds of feet of thickness. I will say generally 500 feet. I will defer to geology on that again.

TECHNICAL EXAMINER COX: Sounds good. Thank you. That's all.

HEARING EXAMINER ORTH: Thank you, Mr. Cox. Mr. Simmons, do you have questions of Mr. Hurd?

TECHNICAL EXAMINER SIMMONS: Yes. Hi, Mr. Hurd. So is there any cost savings in drilling six 3-mile laterals versus six 2-mile laterals, plus six 1-mile east-west laterals? And I'm referring here to the alternative development pattern that was discussed earlier.

THE WITNESS: Yes. Yes. The 3-mile proposals are more capital efficient on a per-foot basis. Just

comparing the preferred development pattern to the alternate development pattern, but even on a 3-mile basis per foot capital, versus 2-mile basis per foot capital, the 3-mile is more economic and more efficient on a per-foot capital basis.

TECHNICAL EXAMINER SIMMONS: Can you explain to us some of the reasons that make it more efficient? Is that the fact that you have to take down and set up drilling rigs multiple times, or what are the factors affecting those?

THE WITNESS: Yes, there are some fixed costs associated with drilling wells. You are going to need an artificial lift, ESP or pump or something, that's independent of the lateral length.

The vertical section of the wellbore, so I would need to defer to drilling on how much exactly the vertical section of each wellbore cost us, but it's something in the range of millions of dollars, maybe one million.

So whether the well is 1 mile, 2 mile, 3 miles, you are going to have to that vertical section drilling cost associated.

Tank batteries is another one. No matter the lateral length, you will need to build a tank battery, so there is a lot of fixed costs. And then so by extending from 1 mile to 2 mile to 3 mile, you are only incrementally adding variable costs to your capital.

So the only variable costs associated with longer laterals are increased drilling time, more casing that you need to buy to reach the end of that lateral, and more completion costs, and more materials that you need to buy to fully complete a 3-mile well versus a 2-mile well. So you do see diminishing capital per foot as you increase your lateral.

Does that answer your question?

TECHNICAL EXAMINER SIMMONS: I think we are getting there, yes. So if you have six wellbores, it would take six wellheads and six well pads devoted to that, but in the alternate you would still have six well pads and wellheads for the 2-mile laterals, plus you would have six more for the east-west 1-mile laterals and well development; is that correct?

THE WITNESS: That's true. I will caveat the four wells that Mewbourne would like to develop in the S/2 of 6. That would just be an additional well, but it's more of a spacing design question, not really relevant to the surface use or the lateral length.

TECHNICAL EXAMINER SIMMONS: In terms of mitigating impacts to the surface, there's going to be twice as many well pads under the alternate development as to the so-called preferred. You are going to have 12 well pads versus six. Am I understanding that correctly?

THE WITNESS: Certainly, yes.

TECHNICAL EXAMINER SIMMONS: Is there any depth severance involved in leases underlying this, or does the owners, Oxy, Mewbourne and COG own all of the minerals all the way from surface to bottom?

THE WITNESS: I'm not sure. I would need to defer to land on all the different tracts that are in there, but in terms of just depth severances in and around the Wolfcamp A, I don't believe there are any near the Wolfcamp A target.

TECHNICAL EXAMINER SIMMONS: Just it had come up earlier, Wolfcamp A Sands versus Wolfcamp A Shale, and I just want to know whether there is any legal obstacle to -- to drilling deeper if they so chose or came back to recomplete to a deeper depth later if they wanted.

THE WITNESS: Yes. Our choice to develop the Wolfcamp A Sand is not based on depth severance at all. It's based on preferred geology.

TECHNICAL EXAMINER SIMMONS: Okay. Okay. I don't have any more questions for you. Thank you, sir.

THE WITNESS: Thank you.

HEARING EXAMINER ORTH: Thank you, Mr. Simmons. Ms. Munds-Dry, do you have any redirect with Mr. Hurd?

MS. MUNDS-DRY: Yes. Thank you, Madam Hearing Examiner, just a few questions.

REDIRECT EXAMINATION

BY MS. MUNDS-DRY:

Q. Mr. Hurd, if you could turn back to Exhibit C-3, which is your Slide 3.

A. Okay, Slide 3.

Q. Slide 4 -- I'm sorry -- so that's Exhibit C-3.

A. Okay, gotcha.

Q. Mr. Hurd, I want to make sure this is clear for the record. At the bottom of your exhibit you list two items that I believe you noted were, were some -- how you built your numbers. What pricing did you use for your map?

A. $40 per barrel oil and $2 per MCF of gas. I assumed the working interest as 100 percent and net revenue interest as 80 percent, just a generic ownership.

Q. Thank you. And earlier Mr. Bruce asked you about the differences in AFE prices. Are you aware that if the OCD grants Concho a compulsory pooling order, that Concho is required to issue updated costs to all of the interest owners?

A. I was not aware, but I have sent out many updated AFEs in the past, so it doesn't surprise me.

Q. Thank you.

MS. MUNDS-DRY: That's all the questions I have, Madam Hearing Examiner.

HEARING EXAMINER ORTH: All right, thank you. Is

there anything from anyone else?

(No audible response.)

HEARING EXAMINER ORTH: No? Thank you very much. Shall we take -- we have been going now about an hour and 15 minutes. Should we take a break?

MS. MUNDS-DRY: That's fine with us.

MR. BRUCE: That will be fine.

HEARING EXAMINER ORTH: Is ten minutes enough?

MR. BRUCE: For me it is, yes.

HEARING EXAMINER ORTH: All right. As the host, I will leave the call running, but please sign out or just leave yourself on the call as you choose.

MS. MUNDS-DRY: Thank you.

HEARING EXAMINER ORTH: Okay.

(Recess taken.)

HEARING EXAMINER ORTH: All right. It's been about ten minutes. Are we all back on?

MR. BRUCE: Yes.

HEARING EXAMINER ORTH: Great, thank you. If you would, Ms. Munds, call your next witness.

MS. MUNDS-DRY: Thank you, Madam Hearing Examiner. I would like to next call Parker Simmons. Mr. Simmons is a drilling engineer with COG and -- since 2016. He has not previously testified before the Division, so, Madam Hearing Examiner, do you want me to go through the

qualifications with him? Otherwise he's listed it in his direct testimony. What's your preference?

HEARING EXAMINER ORTH: Let me ask if Mr. Bruce has any questions about the qualifications that are described in Mr. Simmons' testimony.

MR. BRUCE: Hold on a minute, let me -- let me look at that briefly.

MS. MUNDS-DRY: It's listed in the Exhibit D under Page 52.

MR. BRUCE: Yes. No, it's perfectly fine with me to qualify him as an expert.

HEARING EXAMINER ORTH: All right. Thank you very much, Mr. Bruce. He will be so recognized. If you would just proceed then, Ms. Munds-Dry.

MS. MUNDS-DRY: Thank you, Madam Hearing Examiner.

PARKER SIMMONS

(Sworn, testified as follows:)

DIRECT EXAMINATION

BY MS. MUNDS-DRY:

Q. Mr. Simmons, do you have a copy of your direct testimony in front of you?

A. I do.

Q. Thank you. Is the testimony you provided in Exhibit Number D a true and accurate statement of your

testimony for today's hearing?

A. Yes, it is.

Q. And do you adopt your written testimony under oath today?

A. Yes.

MS. MUNDS-DRY: With that, Madam Hearing Examiner, we ask that Mr. Simmons' direct testimony in Exhibit D be admitted into the record.

HEARING EXAMINER ORTH: Mr. Bruce?

MR. BRUCE: No objection.

HEARING EXAMINER ORTH: Thank you. It's submitted.

MS. MUNDS-DRY: Thank you.

BY MS. MUNDS-DRY:

Q. And Mr. Simmons, you also prepared an exhibit that you also prefiled for the hearing today; is that correct?

A. Yes.

Q. Were Exhibits D-1 through D-10 -- D-9 -- D-10 -- sorry -- either created by you or under your direct supervision?

A. They are.

MS. MUNDS-DRY: Madam Hearing Examiner, we would ask that Exhibits D-1 through D-10 be admitted into the record.

HEARING EXAMINER ORTH: Mr. Bruce?

MR. BRUCE: No objection. No objection.

HEARING EXAMINER ORTH: Thank you. Exhibits D-1 through D-10 are admitted.

(Exhibits D-1 through D-10 admitted.)

MS. MUNDS-DRY: Thank you. With that we pass the witness.

HEARING EXAMINER ORTH: Thank you. Mr. Bruce, do you have questions of Mr. Simmons?

CROSS-EXAMINATION

BY MR. BRUCE:

Q. Yeah. Mr. Simmons, I see you have been an engineer for about five years now. How long have you been drilling wells in the Delaware Basin?

A. All five years.

Q. Okay. Do you have an approximate idea how many 1-mile versus, say, 1.5, versus 2-mile wells?

A. That have been drilled in the Delaware Basin.

Q. No, not drilled. COG, how many 1-mile wells has COG drilled, how many 1.5, how many 2-mile wells?

A. The only number I have in front of me and we prepared is over 300 2-mile wells since 2015 in the Delaware.

Q. By COG, or by all operators?

A. By COG.

Q. As to 3 mile -- how about 2.5? You don't have that number, 2.5-mile?

A. The Delaware Basin, including Texas Delaware, it's about 21 that would -- we would call 2.5-mile laterals, somewhere around that 12,000 foot vertical section mark.

Q. Okay. And it's already been established that you haven't drilled any 3-mile wells in New Mexico. And how many in Texas?

A. Right around 20 3-mile wells in the Midland Basin.

Q. In the Midland Basin. Is there a difference between the Midland Basin and the Delaware Basin so far as drilling wells?

A. Yeah, there's differences.

Q. And your nearest 3-mile well, how far away is it from the proposed Scout State wells?

A. I don't know. I would be speculating if I gave a number.

Q. It's probably somewhere around 50, 60 miles to the Texas state line, isn't it, from the Scout State wells?

A. I -- I don't know. I would have to look it up to give you a good number.

Q. Okay. Now, in the progression of drilling wells, people originally started out -- actually people started out

drilling half-mile laterals, did they not?

A. I believe they started drilling vertical wells.

Q. What's that -- excuse me. I mean, some of the original lateral wells in New Mexico were half-mile wells, were they not?

A. Yeah, I'm sure the progression started with very short laterals.

Q. Okay. So it's a progression, and then 1-mile wells were pretty established for a while, and then people started drilling a little longer. And was there a learning curve in going from 1 mile to 1.5 to 2 miles?

A. Yeah, I would say there is a learning curve. There is also a progression in technology that aided in advances.

Q. So would there be a learning curve in going up to 2.5 and 3-mile wells also?

A. In our experience, going from 2 to 2.5, there wasn't much of a learning curve. And with our experience in Midland Basin going from 2.5 to 3 miles, we haven't reached any technical limits. It's still manageable drilling.

Q. There's -- you don't see a problem -- originally when things started getting longer, longer laterals, there was no difference between, say, drilling a 2.5-mile lateral as opposed to a 1-mile lateral?

A. Sure, there's differences. There's differences

in casing design. There's differences in your approach, but there is also differences in the economics of those two, which is what drives us to longer laterals.

Q. On your exhibits -- I'm going to refer to the exhibit numbers, but I will tell you what they are. Exhibits D-2 and D-4, which are Pages 56 and 58 in the exhibit packages, there are a considerable number of points that don't fit into the highlighted ranges. What's going on there?

A. I will start out with D-2. So the points are real data from a drilling rig, so we are capturing ten-second data. We actually capture one-second data, but it doesn't translate well into the modeling software. So the point of those ranges, they can be any number of things. They could be bad data points, but what we look at in the models is for the general trend to fit, the trend of the actual data points to fit within the model, and we are using a range of friction factors to account for the majority of those data points.

Q. Can it take just one of these bad data points to cause a problem in drilling a well?

A. No. They can be anything from instrumentation not recording, you know, that particular second correctly. I think if you saw a trend of data points that fell outside the model, then you would be seeing something that would

say, "Hey, we are not looking at this correctly."

Q. Now, in drilling a 3-mile lateral, have you estimated the likelihood of having any drilling problems along the full 3-mile lateral?

A. We think of adding lateral length as incremental gains in terms of the length of that lateral, so the challenges or the risk you see in drilling a 2-mile lateral don't change with the 3-mile lateral. I think we have addressed in the exhibit that we are not approaching any of the technical limits. So the same challenge and risk with a 2-mile lateral would be the same as the 3-mile lateral.

Q. Now, in your -- in your exhibits on the Honey Graham, you are not showing any analogue data for the drilling torque or pump pressure, the drilling ECD at total depth. Were there any problems there?

A. Let's see, which exhibit, sir, are those again? I'm flipping through them. So ECD, the reason you don't have any actuals on there is it's not measured. We don't actually measure ECDs; it's a calculation, so there's the reason there is no actual data points on there.

And then data for drilling torques can be pretty erratic. You are not going to see a good trend. There is several reasons for that, you know, plotting and rotating while you drill, you know, your torque range, you know, without having it limited to only rotating torque and things

like that would fall outside of those.

I did spot check these with the actuals from the Honey Graham and they fall within the model for drilling torque. Like I said, it's not a measure. You can measure it, but we don't measure it.

MS. MUNDS-DRY: Madam Hearing Examiner, for the record, Mr. Simmons is referring to D-6, D-7 and D-8.

HEARING EXAMINER ORTH: All right. Thank you. I have them all here.

Q. Just one final question. You stated you see no additional risk from drilling a 2-mile well to going to drilling a 3-mile well. How about drilling a 1-mile well to drilling a 3-mile well?

A. So we look at risk in terms of drilling in two different pieces. One is HSD and a well control risk. We don't think adding lateral length increases either that HSE or well control going 1 mile, 2 mile, 3 miles.

The other way we look at drilling risks is in terms of cost, value, money spent. And like I said earlier, we look at lateral length as incremental. So in the unlikely event you were to have something happen while drilling that caused you to lose an entire lateral, say you finished an entire 1-mile lateral, 2-mile lateral and 3-mile lateral and you have something happen to where you lose a lateral, the difference there is the cost to reach those

extra lateral lengths, so that's -- that's the risk of longer laterals.

Q. So has COG ever drilled, say, a 2-mile or 2.5-mile or a 1.5-mile lateral where they wanted to get within whatever the spacing unit rules were in effect, within 330 feet of the end line of the well unit, or a 100 feet and they weren't able to make it, they might have fallen 500 feet short or a quarter mile short because of drilling difficulties?

A. I can't recall one off the top of my head that we quit because of drilling difficulties. I think we have stopped short of, you know, bottom hole locations and just due to the economics, it made sense to call it TD there than make the trip, drill less 200, 300 feet, whatever it was and call TD there.

So those are decisions are based on economics, and I can't say for certain whether we have had laterals that we were unable to reach TD, I can't recall off the top of my head.

Q. Okay. What about completion problems?

A. I will defer to the completions engineer.

Q. Okay. Thank you, Mr. Simmons. That's all I have.

HEARING EXAMINER ORTH: Thank you, Mr. Bruce. Mr. Cox, do you have questions of Mr. Simmons?

TECHNICAL EXAMINER COX: Mr. Simmons, a couple of quick questions. When you're drilling these longer laterals, do you take any different steps to ensure, ensure your well pad in order to help completion?

THE WITNESS: Yes. So we, you know, do curve -- you only get one chance at it and only get to drill one of them, so we think of the curve a little differently. You know, the longer laterals it's harder to deal with difficulties in a curve. So we'll plan our curve on a lower dogleg and we'll approach it as a dedicated curve to be sure to get the curve landed and it's, you know, usable for completion.

The other thing that we look at is, like you said, straightness in the lateral. If we are finding problems there, we'll address it sooner than say drilling a 1-mile lateral or 2-mile lateral where we know we can get away with a lot. We also leave our options for rotary steer in 3-mile laterals as a contingency.

Like Mr. Bruce said, if you run into an issue where you're, you know, you're having trouble getting weight transfer out at the end of the lateral, we always have the option to go rotary steerable which doesn't require you to slide, it allows you to continuously rotate.

So there is still contingencies that we have on the back side of drilling the longer laterals that I haven't

included in my exhibits. The exhibits are more the base case of how we approach the wells.

TECHNICAL EXAMINER COX: Absolutely. Absolutely. And then kind of just (unclear) have you found that you have an easier time running casings down these 3-mile laterals than, let's say, certainly a 1, 2-mile well?

THE WITNESS: Yeah, I think I'll use our 2.5-mile wells that we've recently drilled in New Mexico as an example. Casing, you know, we do several things to make sure (unclear) One thing we started years ago, we call it floating the casing, but it's running the casing that will be in the lateral, evacuate the fluid, it's full of air, so you are reducing the weight of that casing from ten pounds per foot, but it reduces your friction.

Other things we have done recently is all of the are centralizers that give you the standoff, also gives you a friction factor because the contact is, instead of steel to rock, it's polymer centralizer to rock, which has a lower friction factor. We have seen wells that we have struggled to run casing on in years past go straight to bottom with no issues those two packers.

TECHNICAL EXAMINER COX: Great, thank you. That's all for me.

HEARING EXAMINER ORTH: Thank you. Mr. Cox, Mr. Simmons, do you have questions of the other Mr. Simmons?

TECHNICAL EXAMINER SIMMONS: Yes, maybe one or two. Mr. Simmons, has, has COG had any 3-mile laterals that it has failed to complete and it's --

THE WITNESS: Not that I know of.

TECHNICAL EXAMINER SIMMONS: Okay. And it's your testimony that you have experienced no technical limits in 3-mile laterals versus a 1-, 2-, 2.5-mile laterals?

THE WITNESS: Correct. Through my model I do not expect us to reach any technical limits drilling 3-mile wells on this Scout project.

TECHNICAL EXAMINER SIMMONS: Are 3-mile laterals, do you -- there seems to be some perceived cost advantages to the longer laterals you. Do you see that as a coming trend that we can expect to see more and more of these in the future?

THE WITNESS: It's my opinion that we will. I think, you know, our ability to work the land and the acreage in that direction is limited for the past year, so I think that's why we see more of them in Texas right now is just the ability to line up that amount of acreage, but my opinion is we will see more of them in the future.

TECHNICAL EXAMINER SIMMONS: So the ability to compulsory pool, people will facilitate the longer laterals?

THE WITNESS: Yes, sir.

TECHNICAL EXAMINER SIMMONS: Okay. And

technologically, otherwise there are no limits or no disadvantages that COG is aware of?

THE WITNESS: No, sir, not that I'm aware of.

TECHNICAL EXAMINER SIMMONS: They wouldn't attempt to drill a well that they thought would be unsuccessful, they expect this to be an economically viable and comparable enterprise?

THE WITNESS: Yes, sir, the way I put together my exhibit is exactly how I pitched this to management on whether we could successfully drill 3-mile wells in Eddy County.

TECHNICAL EXAMINER SIMMONS: Okay. All right. I don't think I have any more questions. I appreciate it. Thank you.

THE WITNESS: Yes, sir.

HEARING EXAMINER ORTH: Thank you, Mr. Simmons. Ms. Munds-Dry, do you have any follow-up?

MS. MUNDS-DRY: I do not.

HEARING EXAMINER ORTH: All right. Thank you very much. If you would then call your next witness.

MS. MUNDS-DRY: Thank you, Madam Hearing Examiner. Our last, but not least, witness, I would like to call Craig Rohwer.

Mr. Rohwer's direct testimony is marked as Exhibit Number E, and Mr. Rohwer has been a completions

engineer since 2012. He has also not previously testified before the Division, so I would ask again, his qualifications are listed in his direct testimony, and I ask if you -- if you would like us to go into anything further of Mr. Rohwer as a completions engineer.

HEARING EXAMINER ORTH: Mr. Bruce, if you would please take a moment to --

MR. BRUCE: I see no need to repeat the testimony, which would probably just be pretty much him reading Page 1 of his testimony, so I see no need. He's qualified.

HEARING EXAMINER ORTH: All right. Thank you. He will be recognized then, Ms. Munds-Dry, as an expert completions engineer.

MS. MUNDS-DRY: Thank you.

CRAIG ROHWER

(Sworn, testified as follows:)

DIRECT EXAMINATION

BY MS. MUNDS-DRY:

Q. Is Exhibit E a true and accurate of your testimony for the hearing today?

A. Yes.

Q. Do you adopt the direct testimony under, under oath today?

A. Yes.

MS. MUNDS-DRY: Madam Hearing Examiner, we ask that his direct testimony be admitted into the record.

HEARING EXAMINER ORTH: Mr. Bruce?

MR. BRUCE: No objection.

HEARING EXAMINER ORTH: All right. His direct testimony is accepted, thank you.

BY MS. MUNDS-DRY:

Q. Thank you. Mr. Rohwer, were Exhibits Number E-1 through E-10 either created by you or under your direct supervision?

A. Yes.

Q. Madam Hearing Examiner, we would ask that Exhibits E-1 through E-10 be admitted into the record.

MR. BRUCE: No objection.

HEARING EXAMINER ORTH: Thank you, Mr. Bruce. E-1 through E-10 are admitted.

(Exhibits E-1 through E-10 admitted.)

MS. MUNDS-DRY: Thank you. We pass the witness.

HEARING EXAMINER ORTH: Mr. Bruce, do you have questions of Mr. Rohwer?

MR. BRUCE: Yeah, just a few.

CROSS-EXAMINATION

BY MR. BRUCE:

Q. What you are proposing is dissolvable plugs in the toe mile of the lateral?

A. We used dissolvable plugs on the first 3-mile well that we drilled in the Midland Basin and in (unclear) the toe mile.

Q. There is some background noise -- excuse me for a minute. There is some background noise or echo going on there. Could you start over again? I couldn't quite understand you.

A. Yes, sir. Is this better now?

HEARING EXAMINER ORTH: There seems to be -- if everyone else would mute themselves, please, I can hear a voice coming through some digital device. Go ahead, Mr. Rohwer.

A. Yes, sir. We used dissolvable plugs on some of the 3-mile wells in the Midland Basin.

Q. In where now?

A. In the Midland Basin.

Q. Oh, okay. Okay. Do you have problems getting down to drill those out?

A. No, sir. We are on six Midland Basin wells that we completed. We didn't have any issues getting all the way to the bottom and --

(Audio interference.)

A. We run the dissolvable plugs in the event that we would have issues in it, but we didn't (unclear) the bottom hole.

Q. Have you ever had any problems with plugs not dissolving?

A. We tested over the past three or four years dissolvable plugs, and the technology has improved over time. Now, on these particular wells, we didn't have any issue. There were (unclear).

Q. Okay. Let's go to your final exhibit, E-10, which is the 3-mile lateral completions, Exhibit Page 77.

A. Yes, sir.

Q. What, first of all, what is on the -- what is represented on the X axis of this plot?

A. The X axis you will see a space number for each, each segment of your wellbore, 3-mile wellbore that was traced with tracer. And down at the end on the right-hand side, that's a 6 to 81, and then each consecutive stage going all the way back to the end 6 to 78.

And that's -- here -- and the sample recoveries that indicate the tracer that was -- the unique tracer that was pumped at any one of those stages, how it was reviewed a little over time showing that you were recovering friction that was pumped into stage one down there over time and all the other traces that show up there as well.

It took -- we ran the tracers to verify, and we did get to toe, and (unclear) recovery and so that toe half mile that we had never been, being it was a 3-mile lateral,

we want to make sure there was no time we were recovering fluid.

Q. Okay. So you said the X axis is the stage number, and what is the Y axis then? What is that?

A. Y axis is the tracer concentration in parts per million. Each one of these tracers is a unique chemical that stays inside, it will flow back through and it's measured in parts per million.

Q. Okay. Just a couple more. Go to your written testimony, under Questions 12 and 13, which is at Page 67. Your answer to the question is, "Longer laterals create more friction and drag line," under Question 12, and then you kind of state the same under Question 13, but you said, "It could be difficult to rotate and push the pipe out to the end of the lateral when drilling out the plugs."

So there is some more risk, is there not?

A. There are technical challenges, I guess you would say. Just, just the nature of the acreage and the lateral length increases, the amount of friction and drag would be (unclear) would be in general operations be applicable to the wire line. There are -- there is more of a challenge, technically, but they are manageable, and that's what the exhibits there are trying to say, that we evaluate the technical challenge, half mile for the 3-mile lateral and the plan to ensure that we (unclear).

Q. That's all I have, Mr. Rohwer.

HEARING EXAMINER ORTH: Thank you, Mr. Bruce. Mr. Cox, do you have questions of Mr. Rohwer?

TECHNICAL EXAMINER COX: Sure. Kind of following along with what Mr. Bruce was just asking about in Question 12 there, in the event that, you know, worst case scenario, you lost your plug downhole while running wire lines, do you have the means and the coil tubing units to get them out or retrieve them or braided line or have you done this before?

THE WITNESS: Yes. We, we have -- we haven't used coil on it, but we have (unclear) with braided lines on the 2.5 mile wells --

TECHNICAL EXAMINER COX: Have you ever lost any lateral length as a result of losing your wire lines?

THE WITNESS: Yes, we have. This was not in particular on 3-mile wells, but we have lost downhole --

TECHNICAL EXAMINER COX: But that risk is posed in pretty much any lateral, is it fair to say?

THE WITNESS: That's fair to say.

TECHNICAL EXAMINER COX: Okay. Are you fairly confident in COG's ability to operate at that 3-mile length with wire line and coil and other equipment?

THE WITNESS: Yes. I mean, having completed six wells we had in the Midland Basin, yes, I feel confident that the wells on the Scout are very similar in these six,

so I don't see any -- anything much different for any subsequent wells.

TECHNICAL EXAMINER COX: Thank you. That's all the questions for me.

HEARING EXAMINER ORTH: Thank you, Mr. Cox. Mr. Simmons, do you have questions of Mr. Rohwer?

TECHNICAL EXAMINER SIMMONS: Just one or two. Mr. Rohwer, there was a question earlier that came up, I think, with the drilling engineer, a concern about his ability to get good stimulation at the end of the 3-mile lateral and that there was some diminished economic potential that is the result of the added length. What is your experience? Is that a correct presentation?

THE WITNESS: Actually, I wouldn't really anticipate any issues as far as the -- as far as the things are going in the past, increasing lateral length from 1 mile, to 1.5, to 2.5, we haven't seen any issue or inability to stimulate that any lateral like that, it also proved the same on the 3 mile lateral. So we didn't have any effect stimulating those.

TECHNICAL EXAMINER SIMMONS: So your testimony is that you can frac the end of a 3-mile lateral as a 2-mile lateral? That's your experience?

THE WITNESS: Yes, sir.

TECHNICAL EXAMINER SIMMONS: Okay. I have no

more questions.

HEARING EXAMINER ORTH: Thank you, Mr. Simmons. Ms. Munds-Dry, do you have any follow up with Mr. Rohwer?

MS. MUNDS-DRY: (No audible response.)

HEARING EXAMINER SIMMONS: You may be on mute.

MS. MUNDS-DRY: Sorry. Sorry. I do not have anything further, Mr. Rohwer.

Mr. Simmons had asked our reservoir engineer about depth severances, and I wondered if you or he would like us to recall our land witness to answer that question or not. I'm just typing up that loose end.

HEARING EXAMINER ORTH: Mr. Simmons, how do you feel about that?

TECHNICAL EXAMINER SIMMONS: I think the testimony was that there was no one he was aware of and that the target formation, the Wolfcamp A Sand, was chosen because it was the best prospect and that there was no (unclear), so unless you need to correct that testimony, I don't think we need to recall him.

HEARING EXAMINER ORTH: That's how I remember it as well.

MS. MUNDS-DRY: Great. I just wanted to make sure we address that. With that, that concludes our direct case. We, of course, would like to reserve the right to call any witnesses on rebuttal if needed.

HEARING EXAMINER ORTH: All right. Thank you very much. Mr. Bruce?

MR. BRUCE: Yes, I have three witnesses. Mitch Robb, Nate Cless and Travis Cude. They have not been sworn in yet, I don't think.

HEARING EXAMINER ORTH: No, they have not. So gentleman, if you would, please, raise your right hands. Do you swear or affirm that the testimony you're about to give will be the truth, the whole truth, and nothing but the truth?

WITNESSES: (Collectively.) I do.

HEARING EXAMINER ORTH: That was all three witnesses affirmative. Back to you, Mr. Bruce.

MITCH ROBB

(Sworn, testified as follows:)

DIRECT EXAMINATION

BY MR. BRUCE:

Q. Mr. Robb, you are a landman for Mewbourne Oil Company; is that correct?

A. Yes, that's correct.

Q. And you have been qualified by the Division as an expert.

A. Yes.

Q. And you submitted a verified statement including your testimony and containing several exhibits; is that

correct?

A. Yes, that is.

Q. And is your testimony true and correct and do you adopt it here on the record?

A. Yes, I do.

MR. BRUCE: Let's go into just a couple of things so that we don't have to -- I'll put out everything I'm going to put out, Madam Examiner, so I don't think we have to do any rebuttal.

HEARING EXAMINER ORTH: All right. Thank you.

BY MR. BRUCE:

Q. Mr. Robb, you saw that letter agreement that COG sent to Mewbourne; is that correct?

A. Yes, I did.

Q. Yeah. And Mewbourne had objections to what was in that letter agreement?

A. Yes, we do.

Q. In particular?

A. Mostly that there was a binding section and a non-binding section, as well as it says, "Unless and until definitive written agreement are negotiated, executed and delivered by all requisite parties, no party will have any obligation of any kind whatsoever with respect to any such business arrangement including without limitation not with --

MR. RODRIGUEZ: -- testifying to this testimony --

(Overtalk.)

HEARING EXAMINER ORTH: I'm sorry, I had a moment where I didn't know who was talking. Go ahead, Mr. Rodriguez.

MR. RODRIGUEZ: We would object to this line of testimony. We believe it's confidential negotiations between the parties. They weren't -- they also weren't executed and we agreed to have it admitted into the record.

MR. BRUCE: Well, Mr. Macha already testified about it, so why can't I ask my witness about it?

HEARING EXAMINER ORTH: Right. So certainly, understand an objection as to what? The nature of a confidential settlement agreement, what have you, is that correct, Mr. Rodriguez? Mr. Macha did testify about it. What in particular is objectionable about Mr. Robb testifying?

MR. RODRIGUEZ: The specific language in the document itself, as I said, it's a confidential document that pertained to a settlement agreement and has not been submitted into evidence. It was by the parties --

(Audio interference.)

HEARING EXAMINER ORTH: Can I ask, whoever has the ambient noise -- it sounds like a body being dragged

across the floor -- to mute themselves. I just hear a lot of dragging. Okay.

So, Mr. Bruce, again --

MR. BRUCE: Well, I can always hear noise in the background, too, but as I said, Mr. Macha testified about it. I can rephrase the question and --

HEARING EXAMINER ORTH: Yeah, rephrase for a moment. Is it maybe someone heavily breathing? Please mute yourself if you're not Mr. -- Mr. Robb or Mr. Bruce, please mute yourself.

Yeah, please rephrase.

BY MR. BRUCE:

Q. Mr. Robb, as part of that proposed agreement, did it specifically negate the obligation to negotiate in good faith?

A. Yes, it did.

Q. Okay. Does Mewbourne believe it has negotiated in good faith?

A. Yes, we do.

Q. Were these exhibits -- let me see what I have -- Exhibit 1-A through 1-F, were they prepared by you or under your supervision or compiled from business records?

A. Yes, they were.

MR. BRUCE: Madam Examiner, I submit Mr. Robb's verified statement and Exhibits 1-A through 1-F as evidence

in the record.

HEARING EXAMINER ORTH: All right, thank you. Mr. Rodriguez, do you have objections?

MR. RODRIGUEZ: No objection.

HEARING EXAMINER ORTH: All right. The exhibits will be accepted, 1-A through 1-F.

(Exhibits 1-A through 1-F admitted.)

MR. BRUCE: Pass the witness.

HEARING EXAMINER ORTH: Thank you. Mr. Rodriguez, do you have questions of Mr. Robb?

MR. RODRIGUEZ: Yes, Madam Examiner, I do.

CROSS-EXAMINATION

BY MR. RODRIGUEZ:

Q. Good morning, Mr. Robb, or afternoon.

A. Good afternoon.

Q. I want to start by asking, are your Pothole wells on Mewbourne's drill schedule?

A. I'll defer to my engineer for that one.

Q. Do you anticipate that you are going to drill these wells this year or next?

A. Yes, I do.

Q. Do you have an idea of when?

A. I do not.

Q. Do you have any funds allocated for this project?

A. Yes, we do. I'm not in charge of those, but we

are planning on drilling at the proposed time.

Q. Okay. Do you know if you have any projects?

A. Yes, we do.

Q. How many?

A. I'm not sure. (unclear)

Q. Are you currently drilling any amount of projects in the Wolfcamp?

A. Yes, we are.

Q. Where are these projects being drilled at?

A. I will defer to my geologist.

Q. I'm sorry?

A. I will defer to my geologist. I don't work those exact prospects, but he oversees them.

Q. Mr. Robb, are all the projects primarily land driven projects or (unclear) projects. Is your Pothole project primarily a land-driven project or a geology-driven project?

A. I mean, I guess both. We own the top half (unclear) so and we do like the geology, definitely drill these wells.

Q. When did you receive Concho's counter-proposal?

A. Early January, 23, I believe.

Q. Yeah, I think on the 24th.

A. Yeah -- so, yeah, we received them on the 24th.

Q. Okay. And when did you file the APDs for the

Pothole wells?

A. On the 27th, I believe, is when we proposed them. No, sorry, that's when we filed the --

Q. So you acknowledged Concho's project prior to filing the Pothole wells?

A. While we were negotiating the trade, we received the Scout proposals, and we honestly were taken aback a little by those because we thought we were negotiating in good faith. We were coming close, and then they sent us those proposals, so then we proposed our Pothole wells in the top half because we really didn't think they could get those approved for their Scout wells since they are not 100 percent in the top half.

Q. So is it fair to say that the Potholes were a response to Concho's proposals?

A. (Unclear) because at that point it seemed like (unclear) was kind of going off.

Q. All right. And the operator of the operating agreement (unclear) proposed your Devon 6 wells; correct?

A. Yes, it is.

Q. Are there any other working interest owners you have to propose those wells too?

A. Yes, Oxy.

Q. Have they (unclear) the proposals?

A. They are currently evaluating them.

Q. But they have not?

A. Yes.

Q. They are?

A. Right.

Q. Mr. Robb, in general, do you believe you have (unclear)

A. That's a question for one of the engineers, for a geologist.

Q. Okay. Thank you. Those are all the questions.

A. That's all.

MR. RODRIGUEZ: Madam Examiner, no further questions.

HEARING EXAMINER ORTH: All right, thank you very much. Mr. Cox, do you have questions of Mr. Robb?

TECHNICAL EXAMINER COX: No, not at this time. Thank you.

HEARING EXAMINER ORTH: Mr. Simmons?

TECHNICAL EXAMINER SIMMONS: I have a couple, actually. So I'm trying to understand the dynamics of this JOA that was attached to the N/2 of Section 6, and I'm understanding you to say that, so Mewbourne has proposed the Devon 6 wells, and it's had to publish or submit AFEs to Oxy and the other interest owners of the N/2 to get their approval. Do I understand you correctly?

THE WITNESS: Yes, we proposed the JOA, and they

have 30 days after receipt to participate or not.

TECHNICAL EXAMINER SIMMONS: So what happens if they choose not to participate? I was under the impression that they were contractually bound or had to participate. Am I not correct in that?

THE WITNESS: So you can go non-consent in wells (unclear) wellbores, I mean Concho as operator of those wells.

TECHNICAL EXAMINER SIMMONS: What does that mean to go non-consent, that MOC would just drill anyhow, whether Oxy or COG approved of the AFE?

THE WITNESS: So they have to elect non-consent or not respond within 30 days, and if that does happen, then that -- since both (unclear) other participating parties, then they could take their proportionate share of that interest.

TECHNICAL EXAMINER SIMMONS: So the interest, the percentage owned by COG and Oxy would then become the property of somebody else in that particular wellbore? Is what you are saying?

THE WITNESS: If they went non-consent, then, yes, it would go to the other consenting parties under the JOA.

TECHNICAL EXAMINER SIMMONS: All right. I think that will do it for me. Appreciate it. Thank you.

HEARING EXAMINER ORTH: Thank you, Mr. Simmons. Mr. Bruce, do you have any follow-up with Mr. Robb?

MR. BRUCE: Yes.

REDIRECT EXAMINATION

BY MR. BRUCE:

Q. Just one point of clarification, Mr. Robb. We did submit the portion of that 2005 JOA which now covers the N/2 of Section 6. It originally covered a lot more acreage; correct?

A. Yes.

Q. But that other acreage dropped out of the JOA due to lack of development of that acreage; correct?

A. Parts of it, yes, including the S/2 of Section 6.

Q. So at this time it pretty much covers just the N/2 of Section 6?

A. Yes, as to Section 6 it only covers half.

Q. Okay. Thank you.

MR. BRUCE: That's all I have.

HEARING EXAMINER ORTH: Thank you very much, Mr. Bruce and Mr. Robb.

TECHNICAL EXAMINER SIMMONS: I would like to have a follow-up question if I could.

HEARING EXAMINER ORTH: All right, Mr. Simmons.

TECHNICAL EXAMINER SIMMONS: If that's permitted.

I have a question regarding, while Mewbourne was

in negotiations with COG for COG acquiring its interest in the N/2 of Section 6, Mewbourne went ahead, and without notice to COG, acquired further Devon. Am I correct in my understanding of that?

THE WITNESS: So Mewbourne and COG agreed back in 2018 that we had (unclear) acres, and we were going to trade that just for 22.6. We traded that, and we only owned in the N/2 of Section 6. We traded that to them effective June 1.

And then on July 1 we picked up Devon's interest in the N/2. So it was never part of the trade. We never discussed it. It was never meant to be part of it. We sold them our interest that we owned as of June 1.

TECHNICAL EXAMINER SIMMONS: But June 1 was only the effective date. The actual transfer did not happen until sometime in July. Am I mistaken?

THE WITNESS: When the property transferred, it was June 1, that was our effective date.

TECHNICAL EXAMINER SIMMONS: With COG?

THE WITNESS: Correct.

TECHNICAL EXAMINER SIMMONS: But the actual calendar date was in July?

THE WITNESS: Which date?

TECHNICAL EXAMINER SIMMONS: So you made it retro -- in other words, it was made retro, retroactive.

The actual decision or agreement was concluded in July, but it's effective date was pushed back to June 1. At least that's what the prehearing statements indicate.

THE WITNESS: When?

TECHNICAL EXAMINER SIMMONS: Well, the ones that were submitted by counsel.

THE WITNESS: It was effective June 1. That was the interest in the N/2.

TECHNICAL EXAMINER SIMMONS: It says, reading from the prehearing statement, it says that Mitch Robb -- actually it's yours -- it says under Paragraph 3-A it says that in July 1, 2019, the N/2 of Section 6, and then continues on in B of that same paragraph between August, sometime in August, between August 1 and 5, COG and Mewbourne concluded a trade, the effective date was -- was made June 1, so it's -- it was actually August that you concluded the agreement with COG, but the effective date was made retroactive to June 1.

THE WITNESS: Yes. So August is when it was executed, but we had agreed to this months prior to this. And since we agreed this specific amount of acres being traded in the N/2, the Devon one was made after July 1 since we did agree that the 22 acres to Concho, not the 122 plus 129 that we received.

TECHNICAL EXAMINER SIMMONS: Okay. I appreciate.

Thank you. No further questions.

MR. BRUCE: Could I follow up on that?

HEARING EXAMINER ORTH: Yes, Mr. Bruce.

FURTHER REDIRECT EXAMINATION

BY MR. BRUCE:

Q. I just want to clarify, in situations like this, Mr. Robb, aren't there generally letter agreements entered into between the parties, in this case Mewbourne and COG?

A. Yes, we had exchanged agreements stating the (unclear)

Q. The assignments might not get executed for a month or maybe sometimes even more; is that correct?

A. Yes. There are a few approval processes that Concho had to go through.

Q. So there is always --

A. There's always a lapse in time.

Q. -- execute dates versus effective dates almost always on these things?

A. Correct.

Q. Okay. Thank you.

MR. BRUCE: That's all I have, Madam Chair.

HEARING EXAMINER ORTH: Is there anyone else who had a follow-up question based on all of that?

MR. RODRIGUEZ: Madam Examiner, if I may, I have one follow-up question.

RECROSS-EXAMINATION

BY MR. RODRIGUEZ:

Q. Mr. Roberts --

MR. RODRIGUEZ: I'm sorry, Michael Rodriguez here.

HEARING EXAMINER ORTH: Thank you.

BY MR. RODRIGUEZ:

Q. Mr. Robb, can you tell us when Mewbourne started negotiating trades with Devon?

A. I don't know the dates of that trade, but it included a bunch of lands. It wasn't just the Section 6, it was a much larger trade.

Q. You are not aware of approximately when the negotiations started?

A. I -- I didn't do the trade. I am working Section 6, so we can look it up.

MR. RODRIGUEZ: All right. Thank you.

HEARING EXAMINER ORTH: All right. Thank you, Mr. Rodriguez. Anything further before we excuse Mr. Robb?

MR. BRUCE: Not from me.

HEARING EXAMINER ORTH: All right. Thank you, Mr. Bruce and Mr. Robb.

MR. BRUCE: Next I will call Mr. Cless.

NATHAN CLESS

(Sworn, testified as follows:)

DIRECT EXAMINATION

BY MR. BRUCE:

Q. And, Mr. Cless, what's your profession?

A. Hi. I'm Nate Cless. I'm a the district geologist in our Midland office.

Q. And you have previously been qualified before the Division as an expert petroleum geologist; is that correct?

A. That is correct.

Q. And for this exhibit for this hearing, did you -- was a verified statement prepared and which you signed and had notarized, and did you prepare exhibits for attachment to that verified statement?

A. Yes.

Q. And do you adopt on the record what you stated and set forth in your verified statement and exhibits?

A. I do.

MR. BRUCE: Madam Chair, I would move the admission of Exhibit 2, along with the attachments which are 2-A through 2-D, as in dog.

HEARING EXAMINER ORTH: All right. Any objection, Mr. Rodriguez?

MR. RODRIGUEZ: No objection.

HEARING EXAMINER ORTH: Okay. They are admitted.

(Exhibits 2-A through 2-D admitted.)

MR. BRUCE: Mr. Cless -- Madam Chair, if I could ask questions rather than -- you know, kind of in the way of a rebuttal or since things came up in the testimony of, of COG's witness that would help to clarify things.

HEARING EXAMINER ORTH: Yes, go ahead. And if you can, I would ask to mute everyone who is not Mr. Bruce, Mr. Rodriguez or this witness. Please just be aware of the ambient noise here which makes it hard to hear.

BY MR. BRUCE:

Q. Mr. Cless, could you turn to your Exhibit 2-A which is the Wolfcamp horizontal activity map. It's Page 30 of Mewbourne's exhibit package.

A. Yes, sir.

Q. What does this reflect?

A. So this is all the Wolfcamp horizontal camp activities in this area. We are located in basically southern Eddy, southern Eddy County. And on here you can see the colored wellbores that are reflected on here. All the different colors represent the different intervals of the Wolfcamp that have been drilled horizontally.

Just walk you through a couple. All the pink ones represent the Wolfcamp Sand, the upper part of the Wolfcamp. The light blue wells are going to be the Wolfcamp A. And basically all the different colors represent the

Wolfcamp, what we call the Wolfcamp C and D. Our proposals here, and Concho's, basically are concerned with the Upper Wolfcamp of the Wolfcamp Sand, Wolfcamp A, so it's going to be the pink and light blue colors.

Q. Okay. First off, when Mewbourne is drilling wells, you know, you look at the land situation. Does Mewbourne drill wells if you don't see what the quality of the geology is, as well as the engineering factors?

A. Right. We take, we take all of that into account, the land, the geology, the engineer, we look at all of those factors in determining whether we should drill a well or not.

Q. Okay. And since a table isn't included on all of these wells, approximately, number one, how many wells are on this chart? How many of them are stand-ups, how many are lay-downs and how many are 1 miles, approximate?

A. They are -- so this again is going to encompass all of the Wolfcamp formation. On this map it's -- I don't have the exact number, but it's going to be well over 100, well over 100 wells have been drilled in the Wolfcamp formation.

Just looking at all the data there is, on average, there is probably a few more north-south than east-west, but there is still a significant number of east-west wells that have been drilled in this area.

The red line box is Concho's proposed Scout unit. And so by looking to the west, you have both north-south and east-west horizontals. If you look north you have both north-south and east-west and also to the east and southeast.

And so the Wolfcamp formation is drilled up in either direction, and we would agree with Concho's geologist that in this particular area, I don't think the orientation of the lateral, whether it's north-south or east-west, is going to make any difference in the production of the well.

Q. And does our next witness have some testimony on that also?

A. He does.

Q. Let me ask you one question. In your study as geology in this area, do you see any significant geologic differences in the Upper Wolfcamp between COG's Tomahawk Unit in Section 6?

A. No.

Q. Okay. And just to point out your Exhibit 2-D, Page 33 of the exhibit packet, besides showing production, that also shows the lateral length of the wells on this plat, does it not?

A. That's correct.

Q. And Mewbourne is continuing to drill 1-mile laterals?

A. That is correct. On this particular map, we have recently (unclear) northern part of the map and 23 South, 28 East, Section 16, that's our sixth prospect. We currently drilled three in the E/2 of Section 17. We are waiting on completion on those, but those are 1-mile laterals.

We can run through -- I guess, if we were to flip over to Exhibit 2-B, that's kind of just a more zoomed-in version of this map, but on that map, the yellow acreage is where Mewbourne has drilled Upper Wolfcamp horizontals.

So on here you can see, there is number of 1-mile sections in here where we have drilled or are actively drilling and have future plans to drill 1-mile laterals. So, for example, in Section 23 we recently, within the last year, recently completed our wells in the S/2 of Section 7. Those are our Zeplin wells.

We have wells in Section 27 of 28 East that are 1-mile laterals, but we still have plans to develop, to finish up the development on 1-mile laterals. So there -- this is not an anomaly, I would say. We still view 1-mile laterals a very economic prospect in the Upper Wolfcamp in this area.

Q. And just, you know, geology factors in, engineering factors in, but land does fit in in certain instances where, say, due to existing wells that have been drilled, parties are constrained to 1 and 1.5 mile wells; is

that correct?

A. Yes, that's correct. You know, we, like I said earlier, we look at all aspects from the geology and the engineering and the land to determine -- to determine what we're going to drill. Plus like other offers we are moving towards where we have the -- we will drill longer laterals whether it be 1.5 miles, 2-mile laterals, but like I said, we still believe 1-mile laterals are still very economic in this part of the world.

MR. BRUCE: Okay. I have no further questions and pass the witness.

HEARING EXAMINER ORTH: All right. Thank you, Mr. Bruce. Mr. Rodriguez, do you have questions of Mr. Cless?

MR. RODRIGUEZ: Yes, ma'am.

CROSS-EXAMINATION

BY MR. RODRIGUEZ:

Q. Good afternoon, Mr. Cless.

A. Good afternoon.

Q. So I'm looking at your attachment 2-A. You mentioned that a (unclear) in this map, but you believe that the geology is, is that it varies, that it doesn't vary where all this is (unclear)?

A. In this particular area, I think that, yes, the geology is consistent. You know, I've got -- I think if we

were to look at my attachment 2-C, that's my cross-section that I put together showing that it has six vertical wellbores on here. So you can look at that. On that particular part I highlighted where we plan horizontal, and Concho plans on going horizontal, that's something else we can get into is the different development plans that we have, versus what Concho is proposing, but yes, to answer your question, across the area the geology is consistent.

Q. So you refer to the cross-section map on your attachment 2-C; correct?

A. Yes.

Q. What is the shaping between each one of those? I see shading mainly on the Wolfcamp Sand in between each one of those well logs. It's kind of hard to make out, but if you could explain what that is.

A. It's just shading showing basically on the left-hand side of that attachment, Wolfcamp A, Wolfcamp B, Wolfcamp C and Wolfcamp D, and that particular shading involves what we call -- it breaks down what we call the Wolfcamp Sand, the X Sand, the Y Sand, so the upper shading is the Wolfcamp X Sand. And the shape of that one is -- again the color version of it has pink on it, that's the Wolfcamp Y, that's the Upper -- that is one of our proposed -- it's -- I believe that's what Concho is call calling the Wolfcamp A Sand.

Q. So let me make sure I've got this correct. You are saying that those shaded spaces in between each one of those is where that interval breaks out to -- is (unclear)?

A. The shading is so you can easily see the correlation between wellbores. That's all that it is.

Q. Could you please turn to Attachment 2-B?

A. Sure.

Q. So when I take kind of a rough estimate of this cross-section on this map here, it looks like across about 11 miles vertically and maybe about five miles laterally. Are there any other data points closer in to this, to your proposed Pothole wells?

A. So, yes. There are additional data points throughout this area. There is a number of vertical wells in this area. The well I showed on the cross-section comes out of Section 7. So look at 7-16, that's right in the middle of -- it's right in the middle of Concho's proposed unit, direct off the S/2 location representation of what the geology looks like in this area.

Q. Do you believe that the thickness of the Sand in this area between Oxbow (unclear) your cross-section line and the Howitzer changes?

A. Yes. You can see on the -- you can see on the cross-section it changes a little bit, especially as you move further up towards the Myox wells, in this particular

area, you know, we are -- we are, based upon that in our spacing of our Creedence and Kansas wells, which are about 2 miles east of -- east of our Scout, and so if you were just to compare the thickness of the Wolfcamp Sand up there as well as the Wolfcamp Shale up there, it's very comparable and the log quality is similar.

Q. So the thicknesses of the sand changes, but you are saying it's similar?

A. I'm saying, in this -- in this -- maybe I should rephrase what I'm saying. In this Scout area the thickness of the sand is consistent, which is as seen on my cross-section. On the very last well on the cross-section, 5-B, it's going to be about 3 miles to the south of the proposed Scout area. And so across the Scout area and the Pothole area, the thickness of the Wolfcamp Sand is relatively consistent.

Q. Do you believe that this cross-section behind -- across 11 miles is most representative of the cross-section of the geology in this area?

A. This is a regional cross-section. Put together a cross-section that are different wells that had quite a few additional wells, but this cross-section was put together to show a regional view of the Wolfcamp activity in this area, the Wolfcamp activity in this area. So I do believe it's very representative of this particular area, so --

Q. I'm looking at Attachment 2-D now. You testified that you see no significant difference in production quality in well orientation; correct?

A. That's correct.

Q. Using this chart here?

A. This chart is just one of the -- but this is just -- this chart -- and I can talk about had a lot north-south wells on it, and there are a number of south wells drilled in the immediate vicinity of this project area.

However, in going back to my first exhibit, 2-A, you can see that there are a number of east-west wells all throughout Southern Eddy.

Q. So you did say that there is a number of stand-up wells in the south (unclear) this table here, right? Do you recall how many -- how many east-west wells are in A?

A. So this table consists of -- this is roughly five miles from around Section 7, so the center of the Scout unit. So the top two, both east-west wells, the Mad River located in Section 13, and then I have another well listed in here, Rustler Breaks, that's an east-west well.

Q. So of roughly 32 wells in the production table, there are three going laterally, and two of those wells are actually in the same project?

A. Within, yes, five miles of the stand-up, yes.

Q. And you also have a series of standard wells for the -- over half of this chart; right?

A. Yes.

Q. And those are missing more than -- the first four are missing two months of production, and the last four are missing a month production?

A. That's correct.

Q. They also show to be lateral length?

A. Correct.

Q. All right. Mr. Cless, you testified, to drill longer laterals in this area, in particular the (unclear) and Oxbow wells, why are these wells (unclear)?

A. We had the eight across the area, so we were able to put -- we were able to get, form longer drilling units. We are not going to -- we didn't drill longer laterals whenever -- whenever the geology and engineering all came together they were able to do it. So a lot of those were because we had opportunity available to do it.

Q. If your Pothole well situation was different, do you propose instead lateral, just as you did in your Kansas --

A. Yeah, we certainly look at it.

Q. So is this primarily a land-driven project or a geology-driven project?

A. It's a little bit of both. I think it's the

correlative rights to, to go 100 percent of the S/2 of Section 6, and we believe we have a better development plan than the proposed wells from Concho. So it's, it's a bit of both.

Q. But what you could have done, you could have pooled, you could have come to the Division to get a pooling order to drill 2-mile wells, correct, in your Pothole project?

If we were to propose that -- are you asking me to propose down in Section 7 or -- I don't understand the question.

Q. You did -- if I understand you correctly, you did say you would have proposed 2-mile laterals in your Pothole project had you had the land. So that's in your favor; right?

A. Had we had standing in Section 7, we (unclear) 2-mile laterals.

Q. So you didn't do that in that situation, but you could have; correct? You could have actually proposed 2-mile laterals?

A. We don't have standing in Section 7.

Q. You proposed wells offsetting development in Section 7? The laterals, how long are the laterals in that project?

A. Those are 2-mile laterals.

Q. What's the orientation of those?

A. North-south.

Q. You testified that Mewbourne, in Paragraph 6 of your testimony, that Mewbourne will drill 1-mile wells; is that right, to protect correlative rights? So is Mewbourne's Pothole project a response to the potential impairment of its correlative rights?

A. Yes, I would say that it's Mewbourne saying we believe we have a better development plan than Concho does in this particular area, and we still have 1-mile laterals being economic in this area.

Q. Even though there is a (unclear)?

A. Yes.

Q. Do you believe that Mewbourne is moving away from the well development?

A. We drilled some lateral lengths. Like I said, when everything comes together where we have the land where we can go drill extensive laterals, we will look into it. But as I previously stated, we currently are drilling. We literally have a rig on location drilling a 1-mile lateral, so we still drill 1-mile laterals when necessary.

MR. RODRIGUEZ: Thank you. No further questions.

HEARING EXAMINER ORTH: Thank you, Mr. Rodriguez. Mr. Cox, do you have questions of Mr. Cless?

TECHNICAL EXAMINER COX: In Mewbourne's opinion,

drilling longer -- does drilling longer laterals in this formation diminish ultimate recovery?

THE WITNESS: I will defer that to our engineer. He has some thoughts on that.

TECHNICAL EXAMINER COX: That's probably it for me.

HEARING EXAMINER ORTH: All right, thank you. Mr. Simmons, do you have questions of Mr. Cless?

TECHNICAL EXAMINER SIMMONS: Yes. Mr. Cless, something that I (unclear) does Mewbourne -- or is it your experience that Mewbourne obtains interest in property in present it intends to develop?

THE WITNESS: We typically pick up interest -- we will still try to pick up interest where we can operate, where we can operate. In this particular case, kind of touching on the Devon trade a little bit, like a lot -- like Mr. Robb testified, that was part of a -- Section 6 was part of a bigger trade and Section 6 didn't get thrown in until the very end. Another property had fallen out, so Section 6 was substituted for the property that had fallen out. And we have used Section 6 as just an invaluable piece of property.

I mean, Concho's landman even testified that they are picking up -- you know, it didn't make (unclear) pick up acreage, whether operated or not, in a good area. And then,

you know, I'm not sure if our landman testified to this or not, but right when we picked this acreage up we immediately started talking -- we immediately contacted Concho and started trade negotiations. So I believe we certainly did not pick up Section 6 or this Section 6 in bad faith. We were wanting to work with Concho to work out a trade on it.

TECHNICAL EXAMINER SIMMONS: So it was actually Mewbourne that approached Concho initially to make the trade?

THE WITNESS: That's correct.

TECHNICAL EXAMINER SIMMONS: And Mewbourne knew or should have known at the time that COG acquired an interest that COG would attempt to develop that acreage; is that correct?

THE WITNESS: Yes, that's correct. Again, we've -- we have done trades in the past with Concho and where we knew it, we literally just finished a trade with them. We knew it was acreage that they wanted, and we thought that we would work out another trade to give them this acreage, and that is -- that has not the yet happened.

TECHNICAL EXAMINER SIMMONS: So knowing that COG would seek to develop this property, Mewbourne knew or should have known that they might be force pooled by Concho to develop the land?

THE WITNESS: I'm not -- I'm not sure on that.

That was the land conversations.

TECHNICAL EXAMINER SIMMONS: Well, Mewbourne has not been in this -- is not new to this business. They force pool others. Yes?

THE WITNESS: We have, and -- yes, we have.

TECHNICAL EXAMINER SIMMONS: Then they would know that giving an interest in land to COG, they would then be subject, potentially, to being force pooled themselves?

THE WITNESS: I believe so.

TECHNICAL EXAMINER SIMMONS: I think so. I think we can all agree to that. So I'm trying to understand then how Mewbourne has an issue to contact with COG imposing this trade now wants to frustrate COG's development for its interest.

THE WITNESS: I don't think we are necessarily trying to frustrate COG. We are trying to trade for the benefit of both companies, and I think the pooling situation came up as a last result, and then we have (unclear) trade.

TECHNICAL EXAMINER SIMMONS: So -- but it's a foreseeable result, maybe was not inevitable where separate parties can't come to an agreement, that pooling may in fact result as both parties knew and concluded in the agreement. Correct?

THE WITNESS: I guess, when we also acquired this acreage from Devon, if, you know, it was for 100 percent of

the S/2 of Section 6, so part of our thinking was that, you know, if we couldn't work out a trade on the S/2 of Section 6, we still own that 100 percent and we would be able to develop that on our own. We were not necessarily aware of Concho's desire to do 3-mile laterals at the time of this trade.

TECHNICAL EXAMINER SIMMONS: Okay. I have no more questions. Thank you.

HEARING EXAMINER ORTH: Thank you, Mr. Simmons. Mr. Bruce, do you have any follow-up with Mr. Cless?

MR. BRUCE: Yeah, just a couple.

REDIRECT EXAMINATION

BY MR. BRUCE:

Q. Regarding the 3-mile stuff, again the 3-mile proposals didn't come from COG until this January; correct?

A. I believe that's correct.

Q. And the trade was completed a half year earlier?

A. That's correct.

Q. So you didn't know COG was going to propose 3-mile laterals?

A. That's correct. In the N/2, under the JOA, you know, we were aware of the N/2 JOA, but we were not aware that they had intentions of 3-mile laterals.

Q. Let's get into -- and insofar as developing the S/2 of Section 6, you have surface facilities that you can

use in Section 6, can't you?

A. Yes, that's correct. So as previously stated, Mewbourne operates a well in the N/2 N/2 of Section 6. It's a Wolfcamp well, the Lower Wolfcamp B well in the N/2 N/2. I believe it's -- I believe some of the previous testimony which Concho's engineer testified to was just the additional surface facility that would be in place. Being our wells in S/2 of Section 6, we intended a single pad, so there would be only one additional pad needed for -- to develop the wells in the S/2 of Section 6.

And then if Mewbourne were to become the operator in the N/2 of Section 6, we have that current pad that has our current well on it. We would extend that pad out a little bit, so the additional wells would come under the current pad in the N/2 of Section 6.

Also, we have an extensive SWD, Devonian SWDs all across Southern Eddy. So we have, we have a tap line for SWD and gas takeaway in the immediate area for Section 6, and we are also able to use our dish water to pack our wells open, so we have the ability to use that recycled water to frac our (unclear).

Q. So the facilities and other costs that have been emphasized by COG aren't really -- don't adversely affect Mewbourne's development?

A. That's correct.

Q. And from what you've seen out there, could they develop Sections 7 and 18, would surface locations be available there for them?

A. Yes, as far as I know.

MR. BRUCE: That's all I have.

HEARING EXAMINER ORTH: Thank you, Mr. Bruce. Questions from anyone else as a result of that follow up?

(No audible response.)

HEARING EXAMINER ORTH: No? All right. Thank you very much, Mr. Cless. You are excused.

THE WITNESS: Thank you.

HEARING EXAMINER ORTH: Mr. Bruce, can we take a ten-minute break before you get to your third witness?

MR. BRUCE:

HEARING EXAMINER ORTH: We will be back in ten minutes.

(Recess taken.)

HEARING EXAMINER ORTH: Okay. We have taken a 10-minute break. Are we all back on?

MR. BRUCE: I am.

HEARING EXAMINER ORTH: Thank you. I see, Mr. -- the technical examiners, and if you would, please, Mr. Bruce.

MR. BRUCE: Okay. Our final witness is Travis Cude who is a petroleum engineer for Mewbourne Oil Company.

TRAVIS CUDE

(Sworn, testified as follows:)

DIRECT EXAMINATION

BY MR. BRUCE:

Q. And, Mr. Cude, have you previously testified before the Division as a petroleum engineer and been qualified as an expert?

A. Yes, sir, I have.

Q. And we submitted your verified statement and your exhibits as Exhibit 3. Were all of those prepared by you or under your supervision?

A. They were.

Q. And do you adopt those, your verified statement and the exhibits, on the record today?

A. I do.

Q. Let's go through a couple of things again so that we don't have to do any -- and recite what COG testified about. What about the surface facilities out here that you have in place?

A. Yes, sir. We operate a Wolfcamp well in the N/2 of Section 6, and so as Mr. Cless testified to earlier, we already have salt water disposal infrastructure ran to this section, and kind of with that we also have the ability already in place to treat produced water to complete our proposed wells with, you know. From that standpoint we

really don't see a significant amount of additional surface disturbance necessary, just a little bit more -- we'll drill the wells in the N/2 and (unclear) for the wells in the S/2.

Q. And does that come into play with well economics?

A. Yes, sir, it does. The ability to use recyclable water, you know, greatly reduces the cost of completion, and, you know, on the operating side, having the SWD infrastructure will certainly lower our (unclear) you don't have in place.

Q. Let's start off with one other thing. Are 1-mile lateral wells, Upper Wolfcamp wells, economic for Mewbourne under today's conditions?

A. Yes, sir, they are.

Q. And if you look at what's been marked as Exhibit 3-A, looking at this data, is there really any substantial difference between north-south or east-west well orientation?

A. No, sir. We look at the wells in the whole township area, you know, the production so that the lateral length didn't affect, you know, the data here, and you know, we wanted to make sure we had six months of reported production. And so, yeah, as you can see, there are 35 east-west wells and 57 north-south wells included in these averages, and they, you know, perform very similarly.

Q. Okay. And that's based on production up to the

current date you could get, the most current date you could get it?

A. Yes, sir.

Q. Now, there has also been talk about, going to your Exhibit 3-D, kind of relaying opinions about the 880 foot spacing versus 660 foot spacing. Could you discuss that more than just what's on that exhibit?

A. Yes, sir. You know, I think when we have looked at the different projects that have been performed in this area, and the results from those, you know, I think that generally, you know, wells at 660 spacing that also then target the Wolfcamp A Sand and the Wolfcamp Shale perform similarly to wells drilled in 880 spacing that only target the Wolfcamp Sand.

So that's a difference of, you know, let's call it a half section, or I guess that's a full section, you know, Mewbourne will be drilling eight wells as opposed to Concho would be drilling six wells.

So, you know, this is a -- it's a rate (unclear) so the producing rate is on the Y axis, and the cumulative production is on the X axis, and the averages here are essentially on a per-well basis. So, you know, the fact that we see that 660 spacing on average performs similar to 880 spacing on average per well, you know, we don't see -- we don't see any degradation in drilling additional wells in

this section and therefore should get some additional recovery drilling those additional wells.

Q. And what is reflected on Exhibit 3-C?

A. Again, with the 660 spacing or the 880 spacing, we are showing the relative performance of the wells that target the different intervals. And so again, as you can see, you know, we are taking from a couple of different projects here that are very proximal to this acreage, Mewbourne's Kansas Creedence development, we have four wells there going north -- excuse me -- two wells going north, two wells going south that have been completed, targeting both the Y Sand and the A Shale, and those perform pretty well relative to one another.

And then again Concho, they actually drilled wells at a significantly tighter spacing, about 50 percent, and we are proposing just a mile east of the proposed Scout Unit in Sections 21 and 16. And again there, from the public data off the OCD that we have, it appears that the Wolfcamp A Shale wells are performing, you know, as well, if not marginally better, than the Wolfcamp A Sand wells.

So in our opinion, you know, if us or Concho, you know, in the N/2 of Section 6 were to develop this section on this spacing, you know, I have a type curve there, 715 MBOE per 1-mile lateral, you know, Mewbourne would be able to recover 5.7 million barrels of oil equivalent, but on the

contrary, you know, only six wells per section, the recovery is going to be 4.3 million barrels of oil equivalent. You know, Mewbourne is recovering about 33 percent reserves with their development plan as compared to Concho's.

Q. And that's developing the Wolfcamp B Sand and the Wolfcamp B Shale together?

A. Yes, sir. That's correct.

Q. Okay. Now, this morning we submitted a rebuttal exhibit on 1-mile lateral economics. Was that prepared by you?

A. Yes, sir.

Q. What does that show?

A. Again, this has, you know, from, from my Exhibits 3-B and 3-C, that's the same type curve on there, so, you know, very reason for Pothole for a 1-mile lateral, you know, in this area.

So we have the oil and gas production broken out from, you know, years one through ten. And then using the same assumptions that Concho had at $40 per barrel of oil and $2 per MCF with an 80 percent net revenue, you know, using our well costs, $5.435 million which were, you know, from the AFEs proposed in the N/2 of the Devon wells, so this is just a flow table that, you know, at the current market and with our current costs, we are able to pay out in in three years.

So that's pretty typical for wells that, you know, most industry partners drill, I mean, achieving payout, you know, in even less than five years, that is generally accepted.

Q. So 1-mile wells are still economic; correct?

A. Yes, sir. I think the oil and gas commodities are down, but then so are the costs.

Q. And Mewbourne is a low-cost operator?

A. Yes, sir.

Q. And it has been for quite some time?

A. Yes. We generally have a number of partners that participate in wells voluntarily.

Q. Do you have anything else to add to your testimony?

A. No, sir.

MR. BRUCE: With that, I will pass the witness.

HEARING EXAMINER ORTH: All right. Would you like to offer Exhibits 3 --

MR. BRUCE: Oh, yes. I would like to offer Exhibits 1, 2 and 3 and then the rebuttal exhibit into evidence.

HEARING EXAMINER ORTH: And how are we marking the rebuttal exhibit?

MR. BRUCE: And also the attached -- the exhibits attached to the verified statements, yes.

HEARING EXAMINER ORTH: Right. So how are you marking the rebuttal exhibit? What --

MR. BRUCE: In order to get it to you in color, I was not able to mark it. I would just say -- I would just mark it Rebuttal Exhibit 1, Mewbourne Rebuttal Exhibit 1.

(Exhibit Mewbourne Rebuttal 1 marked.)

HEARING EXAMINER ORTH: All right. Thank you. That was really my only question.

All right. Are there objections, Mr. Rodriguez?

MS. MUNDS-DRY: No objection, Madam Examiner.

HEARING EXAMINER ORTH: Thank you, Ms. Munds-Dry. They are admitted.

(Exhibits Mewbourne 1 through 3 and Rebuttal Exhibit 1 admitted.)

HEARING EXAMINER ORTH: Do you have questions of Mr. Cude?

MS. MUNDS-DRY: Yes, I do. Thank you.

CROSS-EXAMINATION

BY MS. MUNDS-DRY:

Q. Good afternoon, Mr. Cude.

A. Good afternoon.

Q. How did Mewbourne decide to name Pothole, Pothole wells?

A. We came up with a name for the prospect.

Q. Was it named after a rancher?

A. No, ma'am.

Q. Okay. Are the Pothole wells on the drill schedule, Mewbourne's drill schedule?

A. We are prepared to drill the wells, yes, ma'am.

Q. When are they scheduled on your drill schedule?

A. Our drill schedule doesn't reflect -- wells move on and off all the time, you know. I think we have been trying to work it out in good faith, an agreement with Concho here, but you know, if we are not able to do that, we can put them on the schedule really at any point.

Q. Okay. Do you have your verified statement in front of you?

A. I do.

Q. In Paragraph 3-A, your testimony is that COG testified in the Tomahawk case that east-west was a preferable orientation in that area. Can you point to where in the testimony that a witness from Concho said that?

A. I do not have it in front of me. I believe it was --

Q. It looks like it was Mr. Hurd that testified, would it surprise you to learn that we said our current plan was east-west?

A. I believe there is some rebuttal there. I mean, again, I don't know that we are necessarily arguing the fact that north-south wells, you know, are a viable option for

drilling. It's also arguing that some are east-west laterals, and that's also evidenced by the fact that Concho had those plans.

Q. Are you aware --

A. As recently as a year ago.

Q. All right. Sorry.

A. As recently as a year ago.

Q. Are you aware that Concho has actually proposed north-south wells in the Tomahawk unit?

A. I'm not aware.

Q. Thank you. If you could go to what's been marked as Exhibit 3-A.

A. Okay.

Q. Okay. Mr. Cude, what wells did you use to show this data? I don't see a well set on here?

A. Yeah. These were the Upper Wolfcamp wells in Townships 24 South and 25 South, Ranges 27 East and 28 East. All of these have at least six months of reported production and were completed after January of 2017. Fitting that bill, there are 92 wells in that --

Q. You said 92 wells?

A. Yes, ma'am.

Q. Okay. Thank you. And you testified that it looks like there is a negligible difference with orientation from east to west; correct?

A. Based on this dataset, the 35 wells that are east-west, you know, perform slightly better, but, you know, really, it's kind of negligible if the wells are drilled north-south.

Q. Turn to Exhibit 3-B, please.

A. Okay.

Q. I want to make sure I understand the little box on the top of the graphing that says 660 and 880 have similar performance/well.

(Audio interference)

A. Again, these were developments within this, this four township box that we thought kind of accurately represented development at both of these sites.

Q. Are these wells both east-west and north-south?

A. Yes, I believe they are. The Kansas Creedence wells that Mewbourne drilled, those are the wells that are the highest on the graph there for about a mile and a half east of the proposed unit of the (unclear) south, Concho's Howitzer, both in Sections 12 and 11 of 24-28, are east-west. EOG's Golden Graham wells in Sections 1 and 36 there at the very far 25-28, also drilled north-south. And MOC's Oxbow wells in 20 and 25 are drilled east-west.

As far as the 880 spacing goes, I believe both of those developments are drilled north-south, and then the 575 spacing, the same process, the 21-26 wells, those are

drilled north-south as well.

Q. Thank you. Your Kansas -- Mewbourne drilled and operated Kansas Creedence wells; correct?

A. Yes, ma'am.

Q. And would you agree that these wells are located in the part of the reservoir in big production rock?

A. I would defer that to the geologist, but they are about a mile and a half from the proposed development areas.

Q. And the Howitzer wells, those are ten miles away from the proposed Scout wells; correct?

A. Yes, I believe so.

Q. The geographic conditions is within ten miles; correct?

A. I would defer that to the geologist.

Q. Well, let me ask you then about the reservoir quality as an engineer. Can the reservoir quality change within ten miles?

A. It is possible that the reservoir quality can change within ten miles. I think that's why our geologist put together a cross-section that he thought was representative of the differences that we identified in these exhibits. And from that, you know, for the most part, going from Howitzer to Kansas to Quien Sabe to the Scout to the Myox 21, your Wolfcamp Sand is pretty consistent, and so is the Wolfcamp A Shale.

Q. Let me ask you about those Golden Graham and the Oxbow wells, those are below the type curve. Why is that?

A. Well, they are both drilled a little bit further to the southeast, you know, one is north-south and one is in the east-west, but they perform, you know, very relative, and relative to one another that they essentially are performing the same.

Q. But that doesn't tend to agree with the preferred spacing that Mewbourne is advocating for, does it?

A. Well, again, this is an average, you know, they are about as equal in the Howitzer wells, which again are our own model. So, you know, like I said, this is a -- we are just looking at an average for the year here. And, you know, really, some of the closest are our Kansas Creedence wells, and those are the best wells. So, you know, we are trying not to cherry-pick developments here. We are just looking at an average.

Q. The Marathon, the Deckard wells are nearby as well. Why didn't you use those?

A. I think, as Mr. Cless testified to in his, his testimony, you know, the table of levels was just to show that the Wolfcamp, the second (unclear) and productive in the area are again hard to put those into an average when they are missing production from the early time.

And so because they are missing multiple months

of production data, we did not want to use those wells, you know, in our averages because they would negatively -- or not negatively, but they would erroneously impact it.

Q. Now, I understand your answer, but the Quien Sabe and the Myox only have three or four months of production. Wouldn't your answer be the same then for those wells, not enough production to make an assumption?

A. Well, we have the initial production, and the --

Q. So you don't have the original --

A. We have Marathon report the initial months of production in the Deckard wells, so those are not included in the averages because there is missing data. That is not the case for Concho's wells, and the data is (unclear) and so --

Q. But is three or four months of production enough to use it in your data accurately?

A. Well, I think for most of these we're using a pretty similar amount of production data. The Kansas Creedence wells, again, there is only a few months there. The Howitzer wells, there is only a few months there. The Howitzers are Concho's wells. If we were just to look at Concho's Howitzer wells that are drilled at 660 spacing and the Quien Sabe and Myox that are drilled at 880 spacing, you know, they look pretty similar.

Q. Let's turn to Exhibit 3-B. The upper right-hand

corner, under -- underneath normalized 4500 feet laterals there, you do some calculations there. Is the math based on the wells referenced below in the graph?

A. So the math, as I testified to, there is -- it's based on the type curve that is shown on the graph, and so that's where the 715 MBOE reserves are coming from.

And so again, Mewbourne, you know, is planning to drill eight wells on that type curve that would recover approximately 5.7 million barrels of oil. Our AFE cost then was 4 million and some change, and so if you divided that 5.7 million barrels of oil equivalent by, you know, eight times our cost, we come up with $7.60 per BOE finding costs.

And, really, again with Concho, the same type curve, it is no different curve. We were establishing that the spacing doesn't change the performance of the wells, and so at six wells drilled on that type curve for Section 6, recovery in Section 6, you know, we are looking at 4.3 million barrels of oil equivalent, so that's about 25 percent less reserves than our development.

Q. You list Concho's finding costs at $6.31 per BOE?

A. Yes. I took Concho's Scout AFEs that were proposed to us, and I divided those by three for the cost, you know, for the lateral six, the portion of the lateral in Section 6.

Q. That's lower than Mewbourne's finding cost you

listed, $7.60?

A. It's marginally lower, yes, you know, it's $1.30 per BOE. That's at the $40, that's not much difference. And again, I kind of pointed out that that assumes no risk in the drilling costs, you know, associated with Concho's proposals, and it assumes no degradation along the lateral that as you drill, you know, longer distances.

Q. But it shows more Concho --

(Overtalk.)

Q. Sorry. Go ahead.

A. I was going to say, if any of those things were to happen, that also (unclear) --

Q. So it shows more capitalization than Mewbourne. Do you agree?

A. It shows that the -- I'm sure you have a lower finding cost per BOE, but you are stranding reserves in the ground that otherwise can be recovered.

Q. You testified just now that Concho -- that Mewbourne is a low-cost operator; correct?

A. That's correct.

Q. Would you agree that Concho is also a low-cost operator based on your own costs?

A. A lot of the data that we have for 1-mile laterals is based on our experience operating 1-mile laterals, you know, even Concho's -- Concho's numbers are

based on estimates and models, and so, you know, sure, it's is a low number, but there is no -- there is no basis for it.

Q. So you do not agree that Concho is a low-cost operator?

A. I believe that in general Mewbourne is a lower-cost operator than Concho is.

Q. Let's go to one of the slides and the box in the lower middle. Why did you pick these wells, the Kansas Creedence and the Myox wells?

A. Again, just because, you know, these fairly on either side, you know, north and south of the proposed development area, both about a mile east, and so, you know, it's a pretty holistic view of the performance of the -- the relative targets.

Q. Now, I believe you indicated in your previous AFE that these wells are on different spacing; correct? The Kansas Creedence is on 660 spacing?

A. Yes.

Q. And the Myox is on 575 spacing?

A. Yes.

Q. Wouldn't that make a difference?

A. I don't know that it would make a difference as to the relative production of the targets which is what we are comparing here. We are just comparing the relative

performance of one target to the other showing that they are -- they are both, both productive.

Q. On your X axis you use a BOE of 10. Is that the industry standard?

A. You know, that's Mewbourne's internal standards, public company, it's -- so, you know, this is what we use. I think this is, you know, this is kind of the standard that was used before companies started stripping out NGL and other things.

Q. Isn't BOE 6 the industry standard currently?

A. I know that public companies report BOE 6 as one basis, but I don't know that all throughout the industry uses that metric.

Q. So you're not aware of the industry standard?

A. I guess you would have to define industry standard, but, no, I guess I'm not.

Q. Are you aware that BOE's 20 to 1 is used for relative pricing?

A. I mean, again, is this for reporting things to Wall Street? That's not what we are using here.

Q. Okay. Looking at the data on the graph, the previously capped standard wells are above the type curve; correct?

A. That's correct.

Q. And I believe you told me on our discussions

earlier about the table that (unclear).

A. That is correct.

Q. Are there other factors that usually contribute to the performance of a well?

A. There are --

Q. For example, completion designs, well designs, those type of factors.

A. Yes, those could be.

Q. And does reservoir pressure contribute to the performance of a well?

A. Absolutely.

Q. Let's turn to Exhibit 3-D. You note here that these are wells that are less than 14,000 feet in lateral length. Are you aware of any operators that have drilled wells longer than 14,000?

A. I don't think that I said that these are wells that are less than 14,000 feet. I said that in the dataset 99.9 percent of these completed laterals since 2015 are less than 14,000 feet.

Q. Okay. Thank you for that clarification. I still have the same question, though. Are you aware of operators drilling wells less than 14,000 lateral feet?

A. I am.

Q. Do you know what the lateral length trend in general has been over time?

A. It has increased.

Q. Let's go to Exhibit 3-E. You testified earlier with Mr. Bruce that 1-mile wells are economic right now under this pricing; correct?

A. I did. Yes, ma'am.

Q. Is this table you used again if you (unclear) 10 to 1? Is that correct? On your X axis?

A. Yes.

Q. And in your upper right-hand corner in the box --

A. Excuse me, are you -- I'm sorry, I might be confused. I thought you said 3-E.

Q. Yes, 3-E, is the productivity the lateral length, is that what you are saying?

A. So the X axis would be the lateral length in my --

Q. Oh, okay, thank you. Going to the upper right-hand corner, you note Upper Wolfcamp wells in Eddy County after January of 2017. Is this -- I am trying to understand the area. Is this all of Eddy County, all the Upper Wolfcamp wells in Eddy County?

A. Yes, ma'am.

Q. Did you use any 2.5 mile wells in your, in your graph?

A. I don't believe that we -- any 2.5 mile laterals that had at least 12 months of production data to, you know,

to make a comparison, so, no, there aren't any on here, but I believe that's because none of those wells have 12 months of production.

Q. And why did you stop at 12 months of production?

A. Well, again, I'm just, you know, trying to get a consistent dataset, you know, to compare it with. If, you know, if you start to, you know, if you have wells that come off, you know, your average is, it starts to distort that, so we are just trying to use a consistent --

Q. Do you think this trend would fall after 12 months?

A. I do.

Q. Do you believe, in your expert opinion, that the ultimate well recovery of longer laterals is significantly less on a per-foot basis?

A. You know, again, I think it's -- you know, as you mentioned, the (unclear) laterals have been longer and longer, so the amount of data that we have, you know, is going to make those observations less and less.

Q. All right. I'm turning to your rebuttal slide, so Rebuttal Exhibit 1. And have you done an evaluation of comparison -- comparing Concho's 3 mile Scout wells to Mewbourne's 1 mile Pothole wells?

A. I don't know that I have done the -- I mean, we certainly looked at, you know, Concho's proposals and we've

looked at our own possible development.

Q. But you didn't do an economic evaluation to prepare those proposals?

A. I have not done an economic evaluation on those proposals, I mean, outside of here. But I mean, I guess that's not -- that's not Concho's 3-mile laterals.

Q. On your exhibit, do you know all the revenue and expense parameters that are needed in order to duplicate Concho's economic 3-mile wells?

A. You know, again, I just -- these are the parameters that we needed to serve the economics in the table as far as Mewbourne -- Mewbourne's economics for drilling a 1-mile lateral, I'm not necessarily testifying as to Concho's economics with this table. That's a variability (unclear) but I did note, I think, you know, in Concho's exhibits, you know, for their 1-mile laterals in the N/2 of Section 6, they -- they estimated 5.6 million well costs. And you know, I think as Mr. Hurd referred to as generally, you know, their general expenses of $8.68 per BOE that was reported on the June 2020 investor presentation, you know, we are able to determine that they would be able to pay out in under four years.

Q. Does one year equivalent production correlate to an EUR?

A. I mean, it's certainly (unclear).

Q. You were a little garbled. Could you repeat that?

A. I think our belief -- you mean, yeah, looking at the one-year production, you know, is a good trend for determining EUR, at least relative to one another.

Q. And why did you evaluate 1-mile wells.

A. Can you repeat the question?

Q. Why did you only evaluate 1-mile wells?

A. Because our proposals are for drilling 1-mile laterals.

Q. Okay. Thank you very much, Mr. Cude.

HEARING EXAMINER ORTH: Thank you, Ms. Munds-Dry. Mr. Cox, do you have questions of Mr. Cude?

TECHNICAL EXAMINER COX: Probably a couple. I guess, in terms of ultimate recovery, you have on this slide or 3-D, that exhibit, the first year production and average out the length. But is it fair to say that if you have a 2-mile lateral compared to a 1-mile lateral, based on these averages it would have produced a lot more oil for a single well during that time period; correct?

THE WITNESS: Yes, sir.

TECHNICAL EXAMINER COX: The long term economic capability of operating that well then it would go longer. I mean, it costs the same, surface facilities, pumper, all of that for a single 3-mile well as it would for a 1-mile

well, I mean, relatively. Is that not fair to say?

THE WITNESS: I mean, on a dollar per barrel basis, you are asking did it cost less to operate a 3-mile well versus a 1-mile well?

TECHNICAL EXAMINER COX: In your listing costs, it's roughly the same. Is that fair to say?

THE WITNESS: Yes.

TECHNICAL EXAMINER COX: So you could potentially, and it would be economically feasible to run a longer well for longer, a longer time duration before the overall production of it would be economically not feasible to operate that well?

THE WITNESS: I suppose that's correct. I guess, you know, with that, there is also the potential, you know, that if there were casing integrity problems, the horizontal wells out here haven't been on line for more than 10, 15 years, I mean, you also, if you have problems in that well that, you know, you think more reserves.

And I think, I guess, you know, I think Mewbourne is not necessarily testifying, you know, against drilling longer laterals, you know, be it 1.5, 2-mile laterals, we do that as well, but we haven't drilled any 3-mile laterals, and you know, we're very proficient at drilling 1-mile laterals, for completing and drilling 1-mile laterals, and Concho is not a proven operator of 3-mile wells.

TECHNICAL EXAMINER COX: Okay, I appreciate that. I guess my questions are geared more at how drilling the 1-mile wells will ultimately achieve that 25 percent greater ultimate recovery from the reservoir than drilling these longer laterals?

THE WITNESS: So I think on that slide, you know, we were referencing just the recovery in Section 6. And so it really didn't have anything to do with lateral length, it had more to do with the fact that because Mewbourne's development plan has two additional wells relative to Concho's development plan which only has six, you know, we are both drilling a 1-mile lateral across Section 6, you know, ours doesn't extend outside of Section 6, Concho's does, but, you know, the recovery in Section 6 for Mewbourne under the Mewbourne development plan would be 25 percent greater.

I think that the same thing would hold true with Concho's development plan, Sections 7 and 18 look the same as ours. Right now they -- their argument is they are potentially stranding 5 percent reserves.

TECHNICAL EXAMINER COX: I guess without looking at the completion plans and knowing more about the area, it's difficult for me to say, but is it fair to estimate that you could tailor the cluster spacing injection volumes and rates and the profit loading and things like that to

accommodate 880 feet versus 660 and try to optimize one versus the other?

THE WITNESS: I think it's probably more tailored to where the well is actually targeting and the fact that, you know, we are spacing our completions to efficiently drain the part of the Wolfcamp Shale by actually targeting it where Concho is not. So, yeah, I think that they would be leaving (unclear) no matter what they did.

TECHNICAL EXAMINER COX: Okay. All right. That's it for me. Thank you.

HEARING EXAMINER ORTH: Thank you, Mr. Cox. Mr. Simmons, do you have questions of Mr. Cude?

TECHNICAL EXAMINER SIMMONS: Yes. Good afternoon, Mr. Cude, and I hope we can get you to lunch here pretty soon. I do have a couple questions. What I'm hearing is that the north-south east-west is not determined -- it's a negligible difference; is that correct?

THE WITNESS: Yes, sir. That's our testimony.

TECHNICAL EXAMINER SIMMONS: I think I'm also understanding that the 660 versus 880 is also negligible and that they perform on average equally. Is that correct?

THE WITNESS: I think -- yeah, we are referring -- we are not necessarily referring to the spacing pattern where it has be negligible, but we are saying that on an individual well performance in this area, whether it's

drilled on a 660 spacing pattern as we have proposed, or the 8 spacing pattern that Concho has proposed, the well performance per well is the same.

TECHNICAL EXAMINER SIMMONS: Okay, great. So the big issue, as I'm understanding from your testimony, is that potentially the reserves being stranded is because Concho is targeting the Wolfcamp A Sand, whereas Mewbourne would be targeting the B Sand and B Shale together; is that correct?

THE WITNESS: We have similar targets in the Sand, so I -- let's just call it the Wolfcamp A Sand. Mewbourne has two wells targeting the Wolfcamp A Sand, Concho has three three wells targeting the Wolfcamp A Sand, but Mewbourne also has two wells targeting the Wolfcamp B Shale, where Concho has no wells targeting the Wolfcamp A Shale.

TECHNICAL EXAMINER SIMMONS: Let me ask you this: If Mewbourne was drilling these proposed wells, six wells, and one or more of them didn't pay out like they thought, could you -- would Mewbourne then adjust its drilling plan to change the target formation so that the wells would become more economically viable?

THE WITNESS: You know, I think as presented to us, you know, Concho's plan is, you know, full development --

TECHNICAL EXAMINER SIMMONS: That's not my

question. Would Mewbourne change its drilling plan as it was developing -- the first well they drilled, the second well didn't pay out like they thought, would Mewbourne then adjust its drilling plan accordingly?

THE WITNESS: So I guess I'm -- to answer your question, I think that we probably need to drill and complete all four wells in the S/2 simultaneously.

And so, you know, from that standpoint in the S/2, none of the wells -- none of the well densities would be changed. I guess we wouldn't have results until after we completed it, but then certainly at the N/2, you know, depending on the timing of the wells, we would be able to do that.

TECHNICAL EXAMINER SIMMONS: Sure. So is that a normal, a normal practice amongst the oil industry, that as they are developing properties, they adjust their drilling plans adding new wells, changing formations as they (unclear) to drilling and producing wells in a particular project?

THE WITNESS: Yeah, no, I believe so. I think that's evidenced by the fact that, you know, Concho, in the W/2 of Section 21 and 16 drilled wells at 575 foot spacing, and you know, decided over here to drill wells at 660.

You know, we have also drilled wells at 880 spacing historically, you know, in this area. And, you

know, our newer completions, if I refer to my geologist's map would be our Kansas and Creedence wells evolved. We are targeting, as you mentioned, the difference horizons, so W/2 of Section 3 and 10, 25-28, so just 2 miles east of this development, same thing where we have the 660 spacing targeting both. So it is --

TECHNICAL EXAMINER SIMMONS: So change is, is built into the system -- built into the drilling plans. My point being is that your model that predicts the 25 percent stranding of reserves does not allow for the fact that COG may change its drilling plan as it's developing.

(Interruption in proceeding.)

THE WITNESS: -- you know, in the event that they would not be able to make any changes.

TECHNICAL EXAMINER SIMMONS: Yes, that's true, once they drill, they can't change. But we don't know they are going to drill them simultaneously either --

HEARING EXAMINER ORTH: Mr. Simmons, I'm sorry, the court reporter had difficulty hearing the last two answers. So, I'm sorry about that, but it's a function of this platform. Would you just back track twice, please?

TECHNICAL EXAMINER SIMMONS: I can try. I think I'm just trying to establish, Mr. Cude --

REPORTER: Excuse me, this is the court reporter -- this is the court reporter. Maybe I can give

you an idea --

TECHNICAL EXAMINER SIMMONS: -- your projection of 25 percent of reserve will be stranded based on COG's present drilling plan or it assumes that it's static and that it will be drilled simultaneously; is that correct?

THE WITNESS: Yes, sir. That's how they were presented to us. I can't testify as to whether their plans have changed or not.

TECHNICAL EXAMINER SIMMONS: I have not heard any testimony yet this -- today that these wells were going to be drilled, six -- all of them simultaneously. I may be mistaken, so I'm just going to -- so assuming that they are not drilled simultaneously, this model of yours that predicts 25 percent stranding, would that not be -- it would not be true. It could change the setting; is that correct?

THE WITNESS: Yes, sir, if they changed their plan, then -- then they wouldn't be stranding (unclear).

TECHNICAL EXAMINER SIMMONS: All right. I think that answers my questions. Thank you. Appreciate your patience.

HEARING EXAMINER ORTH: Thank you. Irene, did you get what you needed there?

REPORTER: I did, thank you.

HEARING EXAMINER ORTH: Thank you. All right, Mr. Bruce, do you have any follow-up with Mr. Cude?

MR. BRUCE: Just one question to clarify.

REDIRECT EXAMINATION

BY MR. BRUCE:

Q. Mr. Cude, Ms. Munds-Dry asked you a question about industry standard, and you answered it referring to something about public companies. Mewbourne Oil Company is privately owned, isn't it?

A. Yes, sir.

Q. And so, you know, there are certain reporting standards and functions that a public company has to use that private companies don't need to do; is that correct?

A. Yes, sir. Yeah, it doesn't necessarily change the interpretation of the data, it's just a different way of (unclear).

Q. Okay. That's all I have.

HEARING EXAMINER ORTH: All right. Thank you. Is there anything from anyone else before we excuse Mr. Cude?

MS. MUNDS-DRY: One more question. Promise, just one.

HEARING EXAMINER ORTH: All right.

RECROSS-EXAMINATION

BY MS. MUNDS-DRY:

Q. Mr. Cude, during your discussion with Mr. Cox about your calculations in Exhibit 3-C, do your calculations

include the fact that Concho's well would be subjected to setback? Did that factor into the recovery of reserves?

A. That does not factor into the numbers. I believe that that would change these numbers by about 12 percent, I think.

MS. MUNDS-DRY: Thank you. That's all I have, Madam Examiner.

HEARING EXAMINER ORTH: Thank you, Ms. Munds-Dry. Anything further before we excuse Mr. Cude?

MR. BRUCE: Not from me, Madam Examiner.

HEARING EXAMINER ORTH: All right. Thanks very much, Mr. Cude and Mr. Bruce.

Let me ask if there will be any other witnesses presented. First let me ask COG.

MS. MUNDS-DRY: Yes, I have one rebuttal witness.

HEARING EXAMINER ORTH: And, Mr. Bruce, would you anticipate a rebuttal witness?

MR. BRUCE: No.

HEARING EXAMINER ORTH: All right. Shall we take another short break or press on, Ms. Munds-Dry?

MR. BRUCE: I would appreciate a short break, but before we go, and I have not raised this with, with other counsel, but at the end of this, you know, you mentioned closing arguments. I was wondering if it might be better to, to make it more coherent, if written, short written

closing arguments -- you can even put a page limit on it -- be submitted and if you wanted any findings, proposed findings from the parties.

HEARING EXAMINER ORTH: Yes.

MR. BRUCE: So I will, you know, let's take a break and then Ocean and Michael can weigh in on that after.

MS. MUNDS-DRY: We will give you the thumbs up right now.

HEARING EXAMINER ORTH: This is what I prefer as well to the extent possible. This way the counsel can -- closing arguments before an opportunity to reflect on the record we actually made here today.

So let's take ten minutes. We'll be back with the rebuttal witness for COG and its discussion of the post hearing process. Thank you.

MS. MUNDS-DRY: Thank you.

(Recess taken.)

HEARING EXAMINER ORTH: We are back after approximately ten minutes on break. Do we have everyone we need with us?

MR. BRUCE: Mewbourne is here.

REPORTER: I'm here.

HEARING EXAMINER ORTH: Ms. Munds-Dry, who will your rebuttal witness be?

MS. MUNDS-DRY: We would like to recall David

Hurd.

HEARING EXAMINER ORTH: Thank you. Mr. Hurd, you are still under oath.

THE WITNESS: Okay.

DAVID HURD

(Recalled, testified as follows:)

DIRECT REBUTTAL EXAMINATION

BY MS. MUNDS-DRY:

Q. Mr. Hurd, just ask you a couple of questions before we return to your exhibit. During the previous testimony there was some questions about Concho's plan for drilling these wells, and can you tell us, for the record, how are we planning to drill the proposed Scout wells?

A. We do intend to co-develop the Scout.

Q. Does that mean we are going to drill simultaneously and then (unclear) simultaneously?

A. Yes, ma'am.

Q. Do you have Mewbourne's Exhibit 3-E?

A. Let me pull it up. Okay. Yes, I have that available.

Q. Thank you. What is the -- if I can ask you to do some quick math, because I have seen you do some quick math before, what is the EUR reduction between 1 mile and 1.5 miles shown on the map there?

A. So what he is showing is the 12 month cumulative

volume per normalized footage, and the reduction is 2.7 percent per foot.

Q. And what about -- sorry, go ahead.

A. Oh, that's it.

Q. And what about between the 1.5 and 2-mile wells?

A. That is 2.8 percent, so about the same.

Q. In your expert opinion, is one year enough to show (unclear)?

A. No. Not at the eight wells per section and six wells per section that we are talking about.

Q. If you could turn to -- I'm going to -- I'm going to give you the title of it because it doesn't have an exhibit number yet, and I'm going to give everybody a chance to get it in front of them. It is a slide that we sent around last evening titled Upper Wolfcamp Offset Within Ten Miles.

A. Okay.

MS. MUNDS-DRY: Give everybody a moment.

Q. Can you identify this exhibit and explain it to the Examiners?

A. Yes. So this is a map of all of the Upper Wolfcamp developments within ten miles of the proposed Scout. I would like to clarify, when I say Wolfcamp A, I mean it interchangeably with Upper Wolfcamp, which is Mewbourne's nomenclature.

We specify the land, the sub landing zone within the Upper Wolfcamp slash Wolfcamp A to be the Wolfcamp A Shale and Wolfcamp A Sand directly above it. So pictured here we have the red laterals would be the A Sand landed wells, and blue laterals would be the A Shale landed wells. There are 220 wells within ten miles of the Scout and about 75 percent of them are A Sand landed wells.

Q. And just to clarify -- I think you said this, or maybe you didn't -- but are the yellow boxes the proposed Scout projects?

A. Yes, ma'am. And it's worth noting, the following exhibit uses the well selection shown here. There is 220 wells, and showing the (unclear) under 20 wells, I chose to just show the maps.

Q. Thank you. Anything else on here before we turn to the next exhibit?

A. No.

Q. Okay. So let's turn to your next exhibit which is titled Spacing Impact on Selected Laterals. Do you have that in front of you?

A. Yes, okay.

Q. Okay. What is this exhibit showing us?

A. So of the 220 wells selected in the last slide, defining a specific development density for each well and then putting it into a prospective den as shown by the

colored lines gives us a correlation of impact, spacing impact.

So green would be wells that are developed alone or pretty close to being alone, maybe two wells in a section, or really three wells in a section. When I say WPSE, I mean wells per section equivalent. The blue would be the five to seven wells per section would be equivalent to Mewbourne's nomenclature of 880 foot spacing. And the orange line represents the seven to nine well per section, which roughly should correlate to Mewbourne's 660 foot wellbore spacing.

And then the red line represents any development density greater than nine wells per section. So it's worth noting, the first 12 months there is really not a discernable difference that can be measured between the six and eight well per section. Those -- the spacing degradation taking its toll later in life as can be seen by the negative 13 percent off of the green line or the lone well line on the 880 foot basis, and the negative 23 percent off of the green line on the 660 foot basis. And inlaid in the bottom right is a well count plot just to show a relative count of the data density that we have here.

Q. And for your negative 23 percent, that happens at what point in time?

A. I think that 37 months, so three years.

Q. And negative -- so for three years, and then the negative 13 percent is --

A. I will say four years.

Q. Four years?

A. Yeah.

Q. Okay. Anything else on this graph before we move along?

A. No.

Q. Okay.

A. Or -- sorry. Sorry.

Q. Oh, yeah -- go ahead.

A. One more. The production here is normalized on a per-foot basis.

Q. Thank you for clarifying that. Let's turn to your next slide and next exhibit which is titled NPV10 Acre -- per Acre Value Created Versus Spacing.

A. Okay. So given the previous slide and that there is a noticeable spacing impact on six well per section versus eight wells per section development density, and just following that trend out across a wider array of development densities, you can come up with a, a pilot of value created at various densities.

So the red represents various development densities per section of 1-mile wells, while blue represents 3 mile developments. Optimal development density at all

lateral lengths happens at six wells per section. While we believe there is some degradation to be had at eight wells per section, you still have to spend the full capital cost per well while giving a degrading result per well.

So that's what causes the 8, 10 and 12 well per section project to have decreasing value on a per-acre basis. I think it's important to note that of all of the possible development options here, Concho's six well per section, 3-mile development does optimize the value per acre for all interests involved.

And it can be seen that 1-mile wells are economic under certain conditions, the 2, 3, 6 wells per section well developments, but although they are economic relative to the opportunities that exist, they are still value distractive to all the parties involved in Sections 6, 7 and 18.

Q. And just to make sure I understand what's being shown here, this is a net plus value for this area; correct?

A. Yes, ma'am.

Q. Is it also based on current market conditions?

A. Yes.

Q. And this is based on Concho's most current thinking about development of, of project areas?

A. Yes. Yes.

MS. MUNDS-DRY: That's all the question I have, Madam Examiner. I just ask to move these into the record,

but I can wait until -- I can do it now or wait until Mr. Bruce has a chance to question.

MR. BRUCE: I do not object to the admit -- I have some questions on them, but I do not object to the admission of the exhibits.

HEARING EXAMINER ORTH: All right. Thank you, Mr. Bruce. Ms. Munds-Dry, how would you like to mark them or identify them other than the first lettering was A-5.

MS. MUNDS-DRY: Yes. So we would like to mark these as Concho or COG Exhibits C-6, C-7 and C-8. So they will be continuing from Mr. Hurd's original exhibits.

HEARING EXAMINER ORTH: All right. Thank you.

Without objection from Mr. Bruce then, C-6, C-7 and C-8 are admitted to follow on to the other exhibits introduced during Mr. Hurd's testimony.

(Exhibits C-6, C-7 and C-8 marked/admitted.)

HEARING EXAMINER ORTH: Mr. Bruce, your questions, please, of Mr. Hurd.

CROSS-EXAMINATION

BY MR. BRUCE:

Q. Okay, Mr. Hurd, looking at your -- what has been marked C-7, which is the Spacing Impact on Selected Wells --

A. Okay.

Q. -- what -- are these only Wolfcamp, Upper Wolfcamp wells?

A. Yes, sir.

Q. You don't list -- you say selected wells, so you are you not using all the wells on the prior exhibit, C-6?

A. I am.

Q. Okay.

A. By selected wells, yeah, I'm referring --

Q. To those 170 some wells or whatever it is?

A. Yeah, the 220.

Q. 220, okay. And then on your C-8, the -- the value created map --

A. Yes.

Q. -- on what do you base the 3 mile charts?

A. Which parameter specifically in the economic evaluation?

Q. Well, you say colored by lateral length, how can you -- how can you compare 3 mile to 2 mile or 1 mile when you have no 3 mile evidence?

A. The 3-mile wells are based on our capital estimate.

Q. Are based on your what now? Excuse me?

A. Our capital estimate of 10.5 million per well.

Q. Okay. But again, there are no such wells --

A. Correct.

Q. -- present in New Mexico?

A. Correct.

MR. BRUCE: Madam Examiner, I don't have any further questions, but I would like to reconsider and bring Mr. Cude back on very briefly to, to address these exhibits and what Mr. Hurd has said.

HEARING EXAMINER ORTH: All righty. Let me finish with the questioning of Mr. Hurd, and then we will return to Mr. Cude.

MR. BRUCE: Okay. Thank you.

HEARING EXAMINER ORTH: Mr. Cox, do you have questions of Mr. Hurd?

TECHNICAL EXAMINER COX: No, I don't think I have anything. It looks like he pretty well answered the questions I would have.

HEARING EXAMINER ORTH: All right, thank you. Mr. Simmons, do you have questions of Mr. Hurd?

TECHNICAL EXAMINER SIMMONS: No questions. Thank you.

HEARING EXAMINER ORTH: All right. Ms. Munds-Dry, do you have any follow-up based on the questions that were asked?

MS. MUNDS-DRY: No, we don't. Thank you.

HEARING EXAMINER ORTH: All right. Thank you. Thank you very much, Mr. Hurd.

Let's return to Mr. Cude.

TRAVIS CUDE

(Recalled, testified as follows:)

DIRECT REBUTTAL EXAMINATION

BY MR. BRUCE:

Q. Mr. Cude, you have listened to Mr. Hurd's rebuttal testimony?

A. Yes, sir.

Q. Do you have any comments regarding the testimony and the exhibits?

A. You know, I think on the Spacing Impact on Selected Wells, Exhibit -- let's -- I believe it's the Rebuttal Exhibit Number 4 --

Q. Yeah. I think it was renumbered Exhibit Number C-7.

A. C-7. Yeah, you know, the one thing I notice on here, if I reevaluated it differently, when you look at the well counts that are going into these averages, you know, again, in the first 12 months, the number of wells that go into the 880 performance relative to the six per -- you know, 880 performance, prior to 12 months, physical months decreased significantly.

And so, you know, the clarity of the data here, I mean, you don't have the same wells factoring into the averages the longer we go. And so, you know, the fact that early on with the -- with the best amount of well count here

that the greatest number of well count, that they're performing similarly, and even really it appears, you know, months zero through eight that the wells, you know, drilled on 660 spacing may even be possibly outperforming the wells drilled on 880 spacing. And until the count starts deteriorating, you know, I think it again speaks to the fact that we have all that, you know, there are (unclear) through time, and you know, the newer wells aren't looking better drilled at 660 relative to 880.

Q. Do you have anything further?

A. Nothing.

Q. Okay.

MR. BRUCE: I'm sorry, Madam Examiner, my associates, my two dogs, started barking in the middle of his testimony. With that -- with that, Mewbourne rests its case.

HEARING EXAMINER ORTH: All right. I need to pursue some questioning of Mr. Cude on his testimony just now. Ms. Munds-Dry or Mr. Rodriguez, do you have questions of Mr. Cude?

MS. MUNDS-DRY: No questions, thank you.

HEARING EXAMINER ORTH: Thank you. Mr. Cox?

TECHNICAL EXAMINER COX: I have no questions, thank you.

HEARING EXAMINER ORTH: Mr. Simmons?

TECHNICAL EXAMINER SIMMONS: No questions. Thank you.

HEARING EXAMINER ORTH: All right. Well, thank you all, and thank you, Mr. Cude, for returning. Mr. Bruce has finished. Ms. Munds-Dry, Mr. Rodriguez, are you finished as well?

MS. MUNDS-DRY: Yes.

HEARING EXAMINER ORTH: All right, thank you.

Let's talk then about post-hearing submittals, which would ideally include written arguments and some proposed findings or conclusions, the ones who you might find the most significant on some of the most significant issues. Would someone like to throw out a date?

MS. MUNDS-DRY: Well, Madam Examiner, for me I would prefer to have the hearing transcript.

HEARING EXAMINER ORTH: Yeah.

MS. MUNDS-DRY: So I guess it would be dependent on when that might be available.

HEARING EXAMINER ORTH: Let's ask Irene.

(Discussion with reporter.)

MR. BRUCE: So maybe then within two weeks of whenever the parties get the transcripts?

HEARING EXAMINER ORTH: Is that okay with you, Ms. Munds-Dry.

MS. MUNDS-DRY: That would be just fine.

HEARING EXAMINER ORTH: All right. So that's approximately 28 days from now. In any event, we will make sure there is a date certain after we receive the transcript, we will send an e-mail confirming the exact date, but we expect the transcript about 14 days, and then you will have about 14 days for your post hearing submittals. And if you please send those to the OCD Hearings Bureau and a courtesy copy to me if you would.

MR. BRUCE: Thank you very much.

HEARING EXAMINER ORTH: Thank you. I just want to thank everyone involved here today for their professionalism and for making our first virtual contested hearing such a smooth one. Thank you all very much.

MS. MUNDS-DRY: Thank you. Thank you all.

MR. BRUCE: Thank you. Bye.

(Hearing concluded.)

STATE OF NEW MEXICO)
)SS
COUNTY OF SANTA FE)

I, IRENE DELGADO, certify that I reported the virtual proceedings in the above-transcribed pages, that pages numbered 1 through 47 are a true and correct transcript of my stenographic notes and were reduced to typewritten transcript through Computer-Aided Transcription, and that on the date I reported these proceedings I was a New Mexico Certified Court Reporter.

Dated at Albuquerque, New Mexico, this 26th day of June 2019.

/s/ Irene Delgado

_____

Irene Delgado, NMCCR 253
Expires: 12-31-20