

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

5 APPLICATION OF COG OPERATING, LLC
6 FOR TWO NONSTANDARD PROJECT AREAS,
7 TWO NONSTANDARD OIL SPACING AND
8 PRORATION UNITS, AND APPROVAL OF
9 NONSTANDARD LOCATIONS FOR TWO WELLS
10 IN LEA COUNTY, NEW MEXICO.

CASE NO. 15035

8 APPLICATION OF COG OPERATING, LLC
9 FOR A NONSTANDARD SPACING AND
10 PRORATION UNIT AND COMPULSORY POOLING,
11 LEA COUNTY, NEW MEXICO.

CASE NO. 15044

12 REPORTER'S TRANSCRIPT OF PROCEEDINGS

13 EXAMINER HEARING

14 September 19, 2013

15 Santa Fe, New Mexico

16
17 BEFORE: RICHARD EZEANYIM, CHIEF EXAMINER
18 DAVID K. BROOKS, LEGAL EXAMINER

19 This matter came on for hearing before the
20 New Mexico Oil Conservation Division, Richard Ezeanyim,
21 Chief Examiner, and David K. Brooks, Legal Examiner, on
22 Thursday, September 19, 2013, at the New Mexico Energy,
23 Minerals and Natural Resources Department, 1220 South
24 St. Francis Drive, Porter Hall, Room 102, Santa Fe,
25 New Mexico.

23 REPORTED BY: Mary C. Hankins, CCR, RPR
24 New Mexico CCR #20
25 Paul Baca Professional Court Reporters
500 4th Street, Northwest, Suite 105
Albuquerque, New Mexico 87102

1 APPEARANCES

2 FOR APPLICANT COG OPERATING, LLC:

3 MICHAEL H. FELDEWERT, ESQ.
4 HOLLAND & HART
5 110 North Guadalupe, Suite 1
6 Santa Fe, New Mexico 87501
7 (505) 988-4421
8 mfeldewert@hollandhart.com

9 FOR OPPONENTS YATES BROTHERS, YATES HOLDINGS, LLC,
10 SUGARBERRY OIL & GAS CORPORATION AND KATY PIPELINE AND
11 PRODUCTION CORPORATION:

12 JAMES G. BRUCE, ESQ.
13 Post Office Box 1056
14 Santa Fe, New Mexico 87504
15 (505) 982-2043
16 jamesbruc@aol.com

17 FOR OPPONENT EOG RESOURCES, INC.

18 ERNEST L. PADILLA, ESQ.
19 PADILLA LAW FIRM, P.A.
20 1512 South St. Francis Drive
21 Post Office Box 2523
22 Santa Fe, New Mexico 87504
23 (505) 988-7577
24 epadillaplf@qwestoffice.net

25 FOR OPPONENT INLAND TITLE:

GERMAINE R. CHAPPELLE, ESQ.
GALLAGHER & KENNEDY, P.A.
1233 Paseo de Peralta
Santa Fe, New Mexico 87501-2758
(505) 982-9523
germaine.chappelle@gknet.com

1	INDEX	
2		PAGE
3	Case Numbers 15035 and 15044 Called	5
4	Opening Statement by Mr. Feldewert	7
5	Opening Statement by Mr. Bruce	11
6	COG Operating, LLC's Case-in-Chief:	
7	Witnesses:	
8	David Michael Wallace:	
9	Direct Examination by Mr. Feldewert	14
	Cross-Examination by Mr. Bruce	39
10	Redirect Examination by Mr. Feldewert	51
	Cross-Examination by Examiner Brooks	54
11	Cross-Examination by Examiner Ezeanyim	56
	Redirect Examination by Mr. Feldewert	64
12	Recross Examination by Mr. Bruce	67
13	Andrew McCarthy:	
14	Direct Examination by Mr. Feldewert	69
	Cross-Examination by Mr. Bruce	87
15	Cross-Examination by Examiner Ezeanyim	90
16	Yates Brothers, Yates Holdings, LLC, Sugarberry	
	Oil & Gas Corporation and Katy Pipeline And	
17	Production Company's Case-in-Chief:	
18	Witnesses:	
19	W.J. "Jim" Ball, Jr.:	
20	Direct Examination by Mr. Bruce	93
	Cross-Examination by Mr. Feldewert	99
21	Redirect Examination by Mr. Bruce	109
	Cross-Examination by Ms. Chappelle	110
22	Cross-Examination by Examiner Ezeanyim	111
	Redirect Examination by Mr. Bruce	115
23	George L. Scott III:	
24	Direct Examination by Mr. Bruce	116
25	Cross-Examination by Mr. Feldewert	128

INDEX (Cont'd.)

2		PAGE
3	Yates Brothers, Yates Holdings, LLC, Sugarberry	
4	Oil & Gas Corporation and Katy Pipeline And	
5	Production Company's Case-in-Chief (Cont'd.):	
6	Witnesses:	
7	John Maxey:	
8	Direct Examination by Mr. Bruce	151
9	Cross-Examination by Mr. Feldewert	163
10	Cross-Examination by Examiner Ezeanyim	166
11	COG Operating, LLC's Case-in-Chief (Cont'd.):	
12	Jason Miller:	
13	Direct Examination by Mr. Feldewert	179
14	Cross-Examination by Mr. Bruce	185
15	Cross-Examination by Examiner Ezeanyim	186
16	Closing Argument by Mr. Feldewert	190
17	Closing Argument by Mr. Bruce	191
18	Proceedings Conclude	192
19	Certificate of Court Reporter	193
20		
21		
22	EXHIBITS OFFERED AND ADMITTED	
23	COG Operating, LLC Exhibit Numbers 1 through 12	39
24	COG Operating, LLC Exhibit Numbers 13 through 16	86
25	Yates Brothers, et al. Exhibit Letter Z	69
26	Yates Brother, et al. Exhibit Letters A, B, C and D	128
27	Yates Brothers, et al. Exhibit Numbers 1, 2 and 3	163
28	Yates Brothers, et al. Exhibit Numbers 5, 6 and 7	99

1 (8:25 a.m.)

2 EXAMINER EZEANYIM: The first case I'm
3 going to call -- I'm going to call two cases -- 15035,
4 and this is the application of COG Operating, LLC for
5 two nonstandard project areas, two nonstandard oil
6 spacing and proration units, and the approval of
7 nonstandard locations for two wells in Lea County,
8 New Mexico.

9 The other case we're going to consolidate
10 with this case is on page 2, Case Number 15044,
11 application of COG Operating, LLC for a nonstandard
12 spacing and proration unit and compulsory pooling, Lea
13 County, New Mexico.

14 At this time, call for appearances.

15 MR. FELDEWERT: May it please the Examiner,
16 Michael Feldewert, with the Santa Fe office of Holland &
17 Hart, appearing on behalf of the Applicant, COG
18 Operating, LLC. I have two witnesses to present.

19 EXAMINER EZEANYIM: Any other appearances?

20 MR. BRUCE: Mr. Examiner, Jim Bruce of
21 Santa Fe. I represent Yates Brothers, Yates Holdings,
22 LLC, Sugarberry Oil & Gas Corporation and Katy Pipeline
23 and Production Corporation. I have three witnesses who
24 will be here momentarily, but they're not here yet.

25 EXAMINER EZEANYIM: Any other appearances?

1 MR. PADILLA: Mr. Examiner, Ernest L.

2 Padilla for EOG Resources, Inc. We have no witnesses,
3 and we will not put on any case.

4 EXAMINER EZEANYIM: Very good.

5 Any other appearances?

6 MS. CHAPPELLE: Good morning, Mr. Examiner.

7 Germaine Chappelle here for Inland Title.

8 EXAMINER EZEANYIM: Any witnesses?

9 MS. CHAPPELLE: Not today. We're sharing
10 Mr. Bruce's.

11 EXAMINER EZEANYIM: Okay. I understand
12 that witnesses are not available.

13 And the Applicant has their witnesses
14 available. So we can start with your witnesses?

15 MR. FELDEWERT: Yes, sir.

16 EXAMINER EZEANYIM: May those witnesses
17 stand up to be sworn. State your names first.
18 Witnesses state your names.

19 MR. MCCARTHY: My name is Andrew McCarthy.

20 MR. WALLACE: David Michael Wallace.

21 MR. BALL: My name is Jim Ball. I'm with
22 Yates Holdings.

23 (Mr. McCarthy, Mr. Wallace and Mr. Ball
24 sworn.)

25 MR. FELDEWERT: Mr. Examiner, I have a

1 brief statement that I think might help organize things
2 before I call my first witness.

3 EXAMINER EZEANYIM: Of course, yeah. You
4 are entitled to opening statements.

5 OPENING STATEMENT

6 MR. FELDEWERT: If you would turn -- I've
7 handed you an exhibit packet. If you'll turn to what's
8 been marked as Exhibit Number 2, and what is depicted,
9 Mr. Examiner, on Exhibit Number 2 is COG's development
10 plan in Sections 5 and 8 which is Township 26 South, 34
11 East, down in Lea County.

12 The yellow acreage is a single federal
13 lease. The entire north half-north half of Section 5
14 are all fee leases. I believe the pre-hearing statement
15 incorrectly indicated that there may be some federal
16 lands involved in the north half-north half, but it's
17 all fee leases. OK

18 EXAMINER EZEANYIM: The north half-north
19 half of 5?

20 MR. FELDEWERT: The north half-north half
21 of Section 5 is all fee leases, so what is depicted in
22 here is a single federal lease.

23 The 8H well was drilled in October of 2011
24 in the Upper Avalon Shale of the Bone Spring Formation.
25 It was drilled, completed and tested before the

1 Horizontal Well Rules went into effect, and it
2 essentially started and set the pattern for the
3 development of this federal lease by the leaseholder, *IMP*
4 Concho, COG.

5 These consolidated cases try to do two
6 things. One, they seek to continue the development of
7 this single federal lease in the Upper Avalon, and to do
8 so, we need approval of two additional 280-acre what are
9 now nonstandard project areas under the new Horizontal
10 Well Rule.

11 The west half of the east half of this
12 federal lease would be dedicated the 5H well. The east
13 half of the west half of this federal lease would be
14 dedicated the 6H well. That's going to allow them for
15 an efficient five-well pattern to fully develop the
16 Avalon Shale under this single federal lease.

17 Now, the second case, Case 15044, seeks to
18 create a 160-acre spacing unit for the fee lands in the
19 north half-north half of Section 5. Because we have not
20 been able to obtain agreement from all the parties, we
21 seek to pool the Bone Spring Formation under that north
22 half-north half area to allow the drilling of the Gunner
23 1H well, to fully develop the entire north half-north
24 half in those fee minerals.

25 Now, we're here on the initial case, 15035,

1 because certain interest owners in the fee lands in the
2 north half-north half object to this development plan.

3 They have no interest in the federal lease, but they *imp*
4 object to this particular development plan. But they
5 have not offered to the Division or to the working
6 interest owners any development plan of their own.

7 They filed objection letters forcing this
8 hearing, and when I look at the objection letter, the
9 first thing they claim is that the 8H -- and I quote
10 now -- "is at a nonstandard location." That's not true.
11 I don't know where that comes from. The well complies
12 with the 330 setbacks, so I don't know where that claim
13 originates.

14 They suggest that the drilling of these
15 additional lease wells on this federal lease without the
16 inclusion of their north half-north half fee acreage is
17 going to cause what they call "additional waste," but
18 they don't explain what they mean by that. They contend,
19 that it's going to, as they say, "prevent them from
20 properly developing their minerals." Well, I'm not sure
21 what that means because they haven't sought to develop
22 their minerals under any scenario.

23 They appear to be suggesting, to me, that
24 the Division should force COG, the leaseholder in that
25 large federal lease, to commingle the fee minerals with

1 the federal minerals. Now, I'm not sure the BLM would
2 agree with the proposition that this Division should
3 force a leaseholder to commingle the federal minerals
4 with the fee minerals, but that appears to be their
5 position.

6 Now, I don't have a lot to go on. I just
7 have their objection letter. I have a prehearing
8 statement that vaguely suggests that our development
9 plan is going to impair their correlative rights, but it
10 doesn't explain how.

11 So here's what I know today; here's what we
12 know: They have not set forth any competing development
13 proposal. They haven't proffered anything to the
14 working interest owners. They have no competing
15 development proposal with this Division.

16 The second thing I know is that COG has the
17 right and the obligation to continue to develop this
18 large federal lease.

19 The third thing I know is that it can and
20 it should be done to the extent possible without
21 commingling fee minerals with federal minerals, because
22 of all of the issues that arise out of that and because
23 the BLM really doesn't like to see that.

24 And the fourth thing I know, as evident
25 from our application, is that COG has proposed a

1 lay-down horizontal well in the north half-north half
2 for the very purpose of developing all of the fee
3 minerals in that north half-north half. Not some of
4 them, but all of them.

5 So I'm not sure what they intend to
6 present. I'm not sure what they claim. But initially
7 what we're going to do today, Mr. Examiner, is, I'm
8 going to call two witnesses, and they're going to
9 explain the development plan for this federal lease.
10 They're going to explain why the 280-acre proposed
11 nonstandard project areas are necessary and will allow
12 the efficient development of this single federal lease,
13 and they're going to substantiate the grounds to pooling
14 the north half-north half so that these federal leases
15 can be developed -- I'm sorry -- these fee leases can be
16 developed by the Gunner 1H.

17 With that said, I will call our first
18 witness.

19 MR. BRUCE: Mr. Examiner, I'd like to make
20 an opening statement.

21 EXAMINER EZEANYIM: Very good. Go ahead.

22 OPENING STATEMENT

23 MR. BRUCE: Look at COG's Exhibit 2. They
24 leave out a couple of things in their opening argument.
25 First of all, if you look at that 4H well, that well is

1 currently permitted to be a 320-acre stand-up unit
2 extending from the southeast-southeast of Section 8 to
3 the northeast-northeast of Section 4. They conveniently
4 leave that off of there.

5 The fact of the matter is, COG, in doing
6 this prospect, has sought to intentionally -- take a
7 step back.

8 The north half-north half is fee. My
9 clients own 120 acres in the north half-northwest and
10 the northwest-northeast, 120 acres. So if you hand draw
11 a little 120 acres on there, you'll see -- and extend
12 that 4H well up into the northeast-northeast, what you
13 see is that COG was going to intentionally exclude the
14 mineral owners of that 120 acres from their wells.
15 That's not proper. OK

16 Second of all, Mr. Feldewert says my
17 clients haven't proposed a development plan. The fact
18 of the matter is, my clients are mineral interest
19 owners. They're not working interest owners. They're
20 not operators. So that's kind of a false flag.

21 The next thing is that this commingling is
22 a false issue. This isn't commingling. Well units in
23 New Mexico every day have federal, state and/or fee
24 acreage on them. Commingling isn't an issue.
25 Obviously, it wasn't an issue when COG proposed to drill

1 a 320-acre well unit, that 4H well up into the fee
2 acreage. Again, that's a false issue. Federal acreage
3 is included in well units with fee acreage all the time.

4 And one of the big issues, Mr. Examiner, of
5 why my clients don't want a north half-north half
6 Section 5 well unit is that the fracture orientation of
7 the Bone Spring in this area is east-west, and,
8 therefore, the only reasonable way, the only technically
9 sound way to develop this acreage is with stand-up
10 units. We don't think a lay-down unit is worthwhile.
11 And you will see from our plats that virtually every
12 well drilled in this area is a stand-up well unit.

13 What they're basically doing by their
14 development proposal is condemning my clients' acreage,
15 120 acres, in the northwest-northeast of 5 and the north
16 half-northwest of 5, and as a result, we do not want a
17 lay-down well unit. And we don't think COG should be
18 allowed to continue along this development course
19 because it will adversely affect the correlative rights
20 of my clients.

21 Thank you.

22 EXAMINER EZEANYIM: Any other opening
23 statement?

24 MS. CHAPPELLE: Inland Title supports
25 Yates.

1 EXAMINER EZEANYIM: Who is your company?

2 MS. CHAPPELLE: Inland Title.

3 EXAMINER EZEANYIM: Do you have any opening
4 statement?

5 MS. CHAPPELLE: None, just to say that we
6 support what Mr. Bruce just said.

7 EXAMINER EZEANYIM: There being no more
8 opening statements, you may call your first witness.

9 MR. FELDEWERT: Thank you.

10 DAVID MICHAEL WALLACE,
11 after having been previously sworn under oath, was
12 questioned and testified as follows:

13 DIRECT EXAMINATION

14 BY MR. FELDEWERT:

15 Q. Would you please state your name, by whom you
16 are employed and in what capacity?

17 A. My name is David Michael Wallace. I'm a senior
18 landman for COG Operating, LLC.

19 Q. How long have you been a senior landman with
20 COG Operating?

21 A. Approximately a year and a half.

22 Q. Have you previously testified before this
23 Division as an expert in petroleum land matters?

24 A. I have.

25 Q. And have your credentials been accepted and

1 made a matter of public record?

2 A. Yes.

3 Q. Are you familiar with the applications that
4 have been consolidated for hearing today?

5 A. I am.

6 Q. And are you familiar with the status of the
7 lands that are the subject of the area?

8 A. I am.

9 MR. FELDEWERT: I'd tender Mr. Wallace as
10 an expert witness in petroleum land matters.

11 EXAMINER EZEANYIM: He is so qualified.

12 Q. (BY MR. FELDEWERT) Mr. Wallace, would you turn
13 to what's been marked as COG Exhibit Number 1?

14 A. Yes.

15 Q. What does this map depict?

16 A. This map depicts the Avalon Shale well
17 development at our Gunner lease area. It also depicts
18 the -- our development plan for our Gunner lease.

19 Q. Does it show the federal lease that COG holds
20 in yellow in Sections 5 and 8?

21 A. That is correct.

22 Q. And you mention that it shows the Upper Avalon
23 Shale wells. Is that because the target area for your
24 wells is the Upper Avalon Shale well in the Bone Spring
25 Formation?

1 A. That is correct.

2 Q. Now, it also shows your development plan; does
3 it not?

4 A. It does.

5 Q. Is this an accurate depiction of your
6 development plan?

7 A. Yes, it is.

8 Q. The question is that 4H, if it accurately
9 depicts your development plan¹ that you are proceeding
10 with in this -- on your federal lease in Sections 5 and
11 8, correct?

12 A. That's correct.

13 Q. It also shows, then, the -- only in green, it
14 shows the wells that are actually drilled and completed
15 in the Avalon Shale; does it not?

16 A. It does.

17 Q. If you turn to what's been marked as COG
18 Exhibit Number 2, is this a close-up view of your -- an
19 accurate close-up view of your development plan for the
20 federal lease in Sections 5 and 8?

21 A. That's correct.

22 Q. And it also depicts your proposed horizontal
23 well in the north half-north half of Section 5?

24 A. That is correct.

25 Q. What does the company then seek under these

1 consolidated cases, Mr. Wallace?

2 A. They seek to obtain an ~~additional~~ 280-acre
3 nonstandard project area for the 5 and 6H wells. We
4 also seek to get a 160-acre nonstandard project area
5 spacing unit for the Gunner 5 Fee #1H well in the north
6 half-north half of Section 5.

7 Q. And what formation do you seek to pool for your
8 Gunner 1H well in the north half-north half of Section
9 5?

10 A. The Bone Spring Formation.

11 Q. Now, this map also shows a proposed 7H well.
12 What spacing unit will be dedicated to that 7H well?

13 A. It will share the 280-acre spacing for the 6H
14 well.

15 Q. So your plan is to create the nonstandard
16 spacing unit and then initially dedicate it to the 6H
17 well?

18 A. Correct.

19 Q. And then add the 7H well?

20 A. That's correct.

21 Q. Will that then give you, with your 4H well, a
22 five-well spacing pattern for your federal lease in
23 Sections 5 and 8?

24 A. That's correct.

25 Q. Let me have you turn to what's been marked as

1 COG Exhibit Number 3. Is this an approved APD for your
2 proposed north half-north half well?

3 A. That is correct.

4 Q. It identifies the API number for that
5 particular well, the Gunner 1H?

6 A. It does.

7 Q. It also identifies the pool that's involved?

8 A. That's correct.

9 Q. And the pool code; does it not?

10 A. It does.

11 Q. The pool that's been assigned to this well, is
12 it the same pool that has been assigned to the 8H well?

13 A. That is correct.

14 Q. If I look at COG Exhibit Number 4, is that the
15 C-104 and then the as-drilled C-102 that is filed for
16 the 8H well?

17 A. That is correct.

18 Q. And it reflects on the first page, does it not,
19 that the well was drilled in October of 2011?

20 A. That is correct.

21 Q. And then it was completed sometime around
22 February 3rd of 2012?

23 A. Correct.

24 Q. And actually tested on February 12th, 2012?

25 A. Correct.

1 Q. And if I look at the second page of the -- of
2 this filing, this is the as-drilled C-102?

3 A. Correct.

4 Q. Now, does this reflect that the -- first off,
5 there are some handwritten changes on here. Was that
6 done by the OCD?

7 A. Yes.

8 Q. They changed the pool; did they not?

9 A. Yes, they did.

10 Q. And they changed the corresponding -- the pool
11 code?

12 A. (Indicating.)

13 Q. And then they also wrote in the footage
14 location in this well; is that correct?

15 A. That is correct.

16 Q. Does this well comply with the 330-foot
17 setbacks required by the Division's rules?

18 A. It does.

19 Q. And at the time that this well was drilled and
20 completed, were the Horizontal Well Rules in effect?

21 A. The Horizontal Well Rules were in effect
22 February 15th, 2012, so this was drilled prior to.

23 Q. Drilled and completed prior to?

24 A. Drilled and completed prior to.

25 Q. So at the time that you drilled and completed

1 this well, there was no such thing as a nonstandard
2 project area; there was no definition of that, correct?

3 A. Correct.

4 Q. And, therefore, no corresponding notice
5 requirements?

6 A. Correct.

7 Q. Does that apply to your initial development,
8 then, of this single federal lease?

9 A. Correct.

10 Q. Now, does the spacing unit for this lease well,
11 the 8H, conform with the 40-acre tracts that were
12 penetrated by this well?

13 A. That is correct.

14 Q. And has this well been producing since February
15 of 2012?

16 A. Yes.

17 Q. And have the proceeds, accordingly, been
18 distributed to the leaseholder and then the federal
19 government?

20 A. That's correct.

21 Q. Now, if I turn back to your development plan,
22 Exhibit Number 2, since we now have the Horizontal Well
23 Rules in effect, before you can proceed with drilling
24 additional lease wells, you must obtain -- or provide
25 notice of a nonstandard project area, correct?

1 A. Correct.

2 Q. And did the company provide notice of their
3 nonstandard project areas to the interest owners in the
4 north half-north half of Section 5?

5 A. Correct

6 Q. If we turn to what's been marked as COG Exhibit
7 Number 5, is that your letter that went to the interest
8 owners in the north half-north half of Section 5?

9 A. That is correct.

10 Q. If I go through here, it provides the plat for
11 the 5H well, correct?

12 A. Correct.

13 Q. Showing the pool code and the proposed location
14 of the well?

15 A. Correct.

16 Q. And it also provides the plat for the 6H well?

17 A. Correct.

18 Q. But upon receipt of this letter, there were
19 certain interest owners in the north half of the north
20 half that objected, and that's why we're at hearing here
21 today?

22 A. That's correct. ✓

23 Q. All right. Now, do you also -- in order to
24 effectuate your five-well drilling pattern for your
25 federal lease, was it also necessary to obtain approval

*Notice
Reys*

1 of the nonstandard locations for the 5H and the 6H
2 wells?

3 A. ~~Correct.~~

4 Q. Okay. And if I look at the plat, for example,
5 of the 5H well, which is in Exhibit 5, second page from
6 the end, where does that well encroach?

7 A. It encroaches to the east and west.

8 Q. Does it encroach at all to the north and south?

9 A. It does not.

10 Q. And if I look at the next page, if I look at
11 the 6H well, where does that well encroach?

12 A. To the east and west.

13 Q. Does it encroach at all to the north or the
14 south?

15 A. No, it does not.

16 Q. So the encroachment -- the NSL required for
17 this is a nonstandard location as it relates, then, to
18 the federal lease itself; does it not?

19 A. That is correct.

20 Q. So are there any affected parties by the
21 nonstandard locations that are necessary to put together
22 your five-well spacing pattern?

23 A. No.

24 Q. And are the NSL applications currently pending
25 before the Division?

1 A. Yes ✓

2 Q. Now, your development plan also shows -- and I
3 think we talked about this previously -- the 7H well;
4 does it not?

5 A. It does, yes.

6 Q. And have you also sought approval of the
7 nonstandard location for the 7H well?

8 A. Yes.

9 Q. Turn to what's been marked as COG Exhibit
10 Number 6. Is that the nonstandard location request
11 letter that's been submitted to the Division by the
12 7H well?

13 A. That's correct.

14 Q. And if I look at the plat for that well, which
15 is the last page of that exhibit, will it eventually
16 share the same nonstandard spacing unit and project area
17 that you seek for the 6H well?

18 A. Yes.

19 Q. And, again, will that 7H well encroach only
20 towards the federal lease?

21 A. Yes.

22 Q. It's not going to encroach to the north or to
23 the south?

24 A. It will not.

25 Q. So there are no affected parties for that 7H

1 well?

2 A. Correct.

3 Q. If we go back, Mr. Wallace, to Exhibit Number
4 2, who owns the acreage in the northeast quarter of the
5 northeast quarter of Section 5?

6 A. It's 50 percent by EOG and 50 percent by COG,
7 Concho. 50/50

8 Q. Has EOG indicated any objection to developing
9 the federal acreage separate and apart from the fee,
10 acreage?

11 A. No.

12 Q. Now, the objecting parties, where are their
13 acreage holdings?

14 A. In the northwest of the northeast quarter, as
15 well as the north half of the northwest quarter. NW 1/4 NE 1/4
N 1/2 NW 1/4

16 Q. Do you recall, Mr. Wallace, when you filed for
17 approval of your nonstandard location -- or, do you
18 recall when you filed for approval of your nonstandard
19 location for the 5H well?

20 A. May 2012.

21 Q. At the time -- I think it was May of 2013.

22 A. '13. Sorry. May 2013.

23 Q. At the time that you filed for approval of a
24 nonstandard location for your 5H well, were the
25 regulatory folks at COG aware that they were required to

1 provide -- to now provide notice of the nonstandard
2 project area?

3 A. No.

4 Q. And the 5H was going to be, then, the second
5 well on this -- the second lease well for this federal
6 lease; was it not?

7 A. That is correct.

8 Q. And it follows the same pattern as the 8H?

9 A. That's correct.

10 Q. And the company had not gone out and obtained a
11 communitization agreement from the BLM to drill the
12 well?

13 A. That is correct.

14 Q. And you hadn't initiated any pooling
15 proceedings?

16 A. No.

17 Q. And had the BLM actually approved the APD for
18 the 5H well?

19 A. Yes.

20 Q. And did the company have a rate schedule for
21 the 5H well?

22 A. Yes.

23 Q. And did the Division at some point inform the
24 company of the notice requirements under the Horizontal
25 Well Rules?

1 A. Yes.

2 Q. And that's when -- did the company immediately
3 then send out its notice letter?

4 A. That's correct.

5 Q. And after fulfilling the drilling obligations
6 under the APD for that well, did the company stop at
7 that point?

8 A. No, we did not.

9 Q. Did they complete the well; did the company
10 complete the 5H well?

11 A. We did not complete the well.

12 Q. So you sent out your notice and got the
13 objection and completed the drilling but then stopped
14 right there?

15 A. That's correct.

16 Q. You haven't gone any further?

17 A. No, we have not.

18 Q. Pending this hearing today?

19 A. That's correct.

20 Q. Now, did you have discussions, then, with the
21 objecting parties?

22 A. I did.

23 Q. Did they express concerns about the development
24 of their acreage?

25 A. They did.

1 Q. And as a result, then, what did the company do
2 in response to their concerns?

3 A. We proposed a lay-down north half-north half
4 well, the Gunner 5 Fee #1H, in order to develop those
5 ~~minerals, acreage.~~

6 Q. And if I turn to what's been marked as COG
7 Exhibit Number 7 --

8 I think your notice letter went out,
9 according to Exhibit 5, in June of 2013, correct? I'm
10 just trying to put a timeline. Sorry.

11 A. Yes, sir.

12 Q. Threw you off a little bit.

13 Exhibit 5 reflects that your notice letter
14 to those parties went out in June of 2013, correct?

15 A. Correct.

16 Q. And then a couple of weeks thereafter you got
17 their objection letters?

18 A. Correct.

19 Q. And then you had your discussions?

20 A. Yes.

21 Q. And then you proposed, then, on July of 2013, a
22 well in the north half-north half of Section 5?

23 A. That's correct.

24 Q. And that's reflected on COG Exhibit Number 7;
25 is that correct?

1 A. That is correct.

2 Q. Was this letter sent to all the mineral owners
3 in the north half-north half of Section 5?

4 A. Yes.

5 Q. And did your well proposal at that time include
6 an AFE?

7 A. It did.

8 Q. And are the costs reflected on this AFE
9 consistent with what the company has incurred in
10 drilling similar horizontal wells in the area?

11 A. That's correct.

12 Q. Will the completed interval for this proposed
13 well comply with all the Division setback requirements?

14 A. Yes.

15 Q. If I look at COG Exhibit Number 8, is that a
16 well diagram showing compliance with the Division
17 setback requirements?

18 A. That's correct.

19 Q. Now, if I then turn to Exhibit Number 9, is
20 this a map that identifies all the working interest
21 owners in the proposed spacing units in the north half
22 of the north half of Section 5?

23 A. That is correct.

24 Q. And it identifies the first by tract, correct?

25 A. Yes, it does.

1 Q. And then does the last page of this exhibit
2 identify the interests in the north half of the north
3 half of Section 5 by percentage as a whole?

4 A. That's correct.

5 Q. Now, if I look at this last page, first off,
6 have any of these mineral owners agreed to participate
7 in the north half of the north half -- to participate in
8 the north half-north half well at this point?

9 A. Yes. Chevron has

10 Q. Chevron has?

11 A. Chevron U.S.A. ✓

12 Q. And if I keep my thumb here and turn over to
13 Exhibit Number 10, is that the AFE that you sent out in
14 July that has been signed and approved by Chevron?

15 A. That is correct.

16 Q. If I then go back to the last page of Exhibit
17 Number 9, are there interest owners here, Mr. Wallace,
18 that the company has been unable to locate or interest
19 owners that may have issues associated with their title?

20 A. Yes, the estate of Warren J. Bates. Warren J.
21 Bates is deceased. There has not been -- no ancillary
22 probate done in New Mexico as of yet, but we have put a
23 publication in the paper for notice. Since then, we've
24 contacted the representative of the estate.

25 And then Marc T. Wray Trust 2008, Marc T.

1 Wray, they had a United Kingdom address, and our
2 proposals were returned and our offer letters. But they
3 are represented by Argent Properties, and we've had
4 conversations with them. We're getting ready to talk to
5 them about that interest.

6 Q. It's on my copy; I think it's on all copies.
7 You've actually put a star -- you put a star by those
8 two entries, correct?

9 A. That's correct.

10 Q. If I turn to what's been marked as COG Exhibit
11 Number 11, is that an Affidavit of Publication in the
12 newspaper circulation in Lea County directed
13 specifically to the heirs and devisees of the estate of
14 Warren J. Bates and the beneficiaries of that Marc T.
15 Wray Trust?

16 A. It is.

17 Q. Has the company made an estimate of the
18 overhead and administrative costs while drilling this
19 well and producing, if you are successful?

20 A. Yes. \$7,000 a month for drilling and \$700 a
21 month producing.

22 Q. Does the company -- so that was 7,000 while
23 drilling, 700 while producing?

24 A. Correct.

25 Q. Does the company request that these figures be

1 incorporated into the order for this hearing and provide
2 for adjustment in accordance with the COPAS accounting
3 procedures?

4 A. Yes.

5 Q. Has the company brought a geologist to provide
6 technical testimony in support of this nonstandard
7 spacing unit in the north half-north half of Section 5?

8 A. We have.

9 Q. In the course of proposing this well and then
10 in filing your pooling application, did the company
11 identify the known lease mineral owners in the 40-acre
12 tract surrounding your north half-north half of the
13 proposed spacing unit?

14 A. Yes.

15 Q. And did the company include these known lease
16 mineral interest owners in the notice of this hearing?

17 A. We did.

18 Q. If I turn to what's been marked as COG Exhibit
19 Number 12, is this an affidavit prepared by my office
20 with attached letters providing notice of this hearing
21 to the affected parties?

22 A. It is.

23 Q. Now, I want to step away from the pooling for a
24 minute now, Mr. Wallace, and go back to Exhibit Number
25 2, because there were a couple of questions raised in

1 Mr. Bruce's opening statement.

2 Exhibit Number 2, you testified accurately,
3 reflects the development plan for the federal lease;
4 does it not?

5 A. It does.

6 Q. Does that include the 4H well in the east
7 half-east half of this federal lease?

8 A. It does.

9 Q. Did the company initially consider drilling
10 that well into the northeast quarter of the northeast
11 quarter where you have an interest?

12 A. That's correct.

13 Q. First off, do you have an interest in more than
14 just the northeast quarter of the northeast quarter?

15 A. We do.

16 Q. It extends across the north half-north half --

17 A. We have an interest in every [sic] 40.

18 Q. And did you actually propose that well to EOG,
19 extending into the northeast quarter of the --

20 A. We did.

21 Q. Has the company now changed its plans --

22 A. Yes, it has.

23 Q. -- for the 4H well?

24 A. Yes.

25 Q. To what's reflected on this exhibit?

1 A. That's correct.

2 Q. And have you submitted a revised APD to the
3 BLM?

4 A. Yes.

5 Q. Depicting that you will be drilling the 4H in
6 the east half of the east half of the federal lease?

7 A. Yes, as a mile-and-three-quarter lateral.

8 Q. Why did the company change --

9 A. Well, one, because if we had drilled into the
10 northeast-northeast, there would be -- we would have to
11 seek approval from the BLM. We would have to get a
12 communitization agreement, and that would mean
13 commingling fee and federal minerals. And, thirdly, it
14 would mean there would be overlapping project areas for
15 the Gunner 5 Fee #1H and the Gunner 5 Fed 4H.

16 Q. What are the advantages of completing the
17 development of Section 5 with a lay-down on the fee
18 acreage in the north half-north half?

19 A. Well, we wouldn't have to get communitization
20 agreements, seek approval for those. We would not have
21 to seek approval from the BLM to commingle, as well as
22 the measurement surface facilities cost, such as tank
23 batteries. If we had any variation in ownership, we
24 would have to have additional surface facilities.

25 Q. With this particular development plan set forth

1 in Exhibit Number 2, particularly for your proposed 1H
2 well for the north half-north half, will that well
3 develop the entire north half-north half?

4 A. It will.

5 Q. And will it be able to develop the entire north
6 half-north half without commingling federal minerals
7 with fee minerals?

8 A. That's correct.

9 Q. Why is that important? I mean, why is it
10 important where possible to avoid commingling federal
11 minerals with fee minerals?

12 A. Well, as I mentioned earlier, any variation in
13 the royalties, we would have to seek approval to do so.
14 The BLM has regulations, and they like us to avoid
15 commingling royalties, and also the cost of the
16 facilities and measurement of the production.

17 Q. So let's talk about those commingling
18 regulations. Do they require the installation of
19 specific facilities when you are commingling federal
20 royalties with fee royalties --

21 A. Correct.

22 Q. -- I'm sorry -- federal minerals with fee
23 minerals?

24 A. Correct.

25 Q. What facilities do they require?

1 A. We would have to put an additional tank battery
2 on every well that has any variation in ownership and
3 separate measurement facilities, and possibly different
4 surface facilities depending on whether -- is my
5 understanding.

6 Q. So if I look at Exhibit Number 2, if you
7 extended that 4H well up into the northeast quarter of
8 the northeast quarter, you'd have to put a stand-alone
9 tank battery in for that well --

10 A. Correct.

11 Q. -- with separate metering facilities for the
12 federal minerals there, too?

13 A. Correct.

14 Q. If, for example, you extended the 7H well into
15 the north half of the north half of Section 5, you'd
16 have to put a stand-alone tank battery on that 7H well
17 with separate metering?

18 A. Correct.

19 Q. If you extended the 6H well into the north half
20 of the north half, you'd have to put a stand-alone tank
21 battery with separate metering on that well?

22 A. That is my understanding, yes.

23 Q. The wells remaining within the federal lease --

24 A. Okay.

25 Q. -- are you required by the BLM regulations to

1 have more than one tank battery?

2 A. No.

3 Q. What are the costs associated with each
4 required tank battery and metering?

5 A. Approximately \$600,000 for each tank battery.

6 Q. So each time you would extend the well into the
7 north half-north half, you would be adding \$600,000 to
8 the cost of that well, potentially?

9 A. Correct. Correct.

10 Q. If I look at Exhibit Number 2, the 8H is
11 already drilled and only completed, correct?

12 A. Correct.

13 Q. The 5H has been drilled, correct?

14 A. Correct.

15 Q. It has not been completed, but it has been
16 drilled?

17 A. That is correct.

18 Q. If you were to extend the 6H or the 7H into the
19 north half-north half of this section, will that well
20 develop the entire north half-north half of Section 5?

21 A. No, it will not.

22 Q. Will it develop, for example, the northwest --
23 if I extended the 7H or the 6H up into the north
24 half-north half, is it going to develop the northwest
25 quarter of the northwest quarter?

1 A. No.

2 Q. Would that well develop the northwest quarter
3 of the northeast quarter?

4 A. No.

5 Q. It would just develop that northeast quarter of
6 the northwest quarter?

7 A. Yes, that's correct.

8 Q. And you would be required by the BLM
9 regulations to put a tank battery and separate metering
10 on that well at a cost of around \$600,000? ✓

11 A. Correct.

12 Q. In your opinion, Mr. Wallace, as a landman,
13 would it be prudent to drill a full-section lateral, for
14 example, in the east half of the west half of Section 5
15 where you're proposing your 7H and 6H wells?

16 A. No.

17 Q. Given the existing well considerations in
18 Section 5, what do you believe is the best option for
19 COG to develop the north half-north half of Section 5?

20 A. To drill the Gunner 5 Fee #1H as a lay-down
21 160-acre spacing unit.

22 Q. Is there any communitization agreement required
23 for that well?

24 A. No.

25 Q. Would there be any commingling of federal or

1 fee minerals?

2 A. No.

3 Q. Would it develop all of the minerals in the
4 north half-north half of Section 5?

5 A. It would.

6 Q. In your opinion as an expert in petroleum land
7 matters, is it more efficient where possible to
8 develop -- let me step back.

9 In your opinion, is it more efficient for
10 COG to develop its single federal lease in this area
11 separately from the fee acreage in the north half of the
12 north half of Section 5?

13 A. Yes.

14 Q. And will it be more cost effective for
15 developing the single federal lease in this area?

16 A. Yes.

17 Q. Were Exhibits 1 through 11 prepared by you or
18 compiled under your direction and supervision?

19 A. Yes.

20 MR. FELDEWERT: Mr. Examiner, at this time,
21 I would move the admission into evidence of COG Exhibits
22 1 through 12, which includes my affidavit.

23 EXAMINER EZEANYIM: Any objection?

24 MR. BRUCE: No objection.

25 EXAMINER EZEANYIM: Exhibits 1 through 12

1 will be admitted.

2 (COG Exhibit Numbers 1 through 12 were
3 offered and admitted into evidence.)

4 MR. FELDEWERT: That concludes my
5 examination of this witness.

6 CROSS-EXAMINATION

7 BY MR. BRUCE:

8 Q. Mr. Wallace, let's go into a few timelines
9 here. Looking at the 8H well, was that always permitted
10 as a 280-acre well unit, mile-and-three-quarter lateral?

11 A. It was.

12 Q. And you said that well was -- it's on federal
13 acreage, correct?

14 A. Correct.

15 Q. And what was the approximate date it was
16 commenced?

17 A. October 2011.

18 Q. Now, you talked about when the revised or
19 amended horizontal drilling rules went into effect.
20 What is the date you gave, again?

21 A. February 15th, 2012.

22 Q. When that rule was amended, was there an
23 Industry Committee that reviewed or worked with the OCD
24 regarding amending the horizontal drilling rule?

25 A. There may have been.

1 Q. Do you know when the hearings were held on
2 amending that horizontal drilling rule?

3 A. I do not.

4 MR. BRUCE: Mr. Examiner, for the record,
5 the amendments were a result of Order Number R-14399,
6 and the hearings on that amendment were commenced on
7 October 20 [sic] in 2011.

8 EXAMINER BROOKS: October 20?

9 MR. BRUCE: 2011.

10 EXAMINER BROOKS: Oh, 2011. Oh, in October
11 2011. I'm pretty sure it wasn't October 20th, but
12 that's not what you said.

13 Q. (BY MR. BRUCE) COG pays attention to Division
14 rules; do they not?

15 A. They do.

16 Q. And so October 20th, before you commenced the
17 well, when these rules are being established, COG just
18 decided to go out and drill a mile-and-three-quarter
19 lateral even though they knew the rules would be
20 amended?

21 MR. FELDEWERT: Mr. Examiner, I'm going to
22 object to the question because Mr. Bruce makes an
23 assumption that COG is supposed to know that the rules
24 are going to be amended. It's also premised on some, I
25 guess, theory that they're required to comply with the

not relevant
Rules not in effect yet

1 requirements of rules that are under consideration by
2 the Commission before they go into effect. That doesn't
3 make a whole lot of sense to me.

4 EXAMINER BROOKS: Well, the question
5 certainly -- I would advise the Examiner to sustain it.

6 MR. BRUCE: I'll withdraw the question,
7 Mr. Examiner.

8 EXAMINER EZEANYIM: Okay. Objection
9 sustained.

10 You may rephrase your question.

11 MR. BRUCE: I'll withdraw it. *OK good*

12 EXAMINER EZEANYIM: I know the rule went
13 into effect on February 15th, 2012, so if we use that as
14 a benchmark, then we might all go back to, you know,
15 talk about what happened before February 12th --
16 February 15th, 2012. So let's use that as a benchmark.
17 That's when the rule went into effect.

18 Rephrase your question, Counselor.

19 MR. BRUCE: I'll move on to another
20 question, Mr. Examiner.

21 Q. (BY MR. BRUCE) Mr. Wallace, I hand you Exhibit
22 Letter Z, since I'm unsure of the numbers I have yet.

23 MR. FELDEWERT: Did you say Z?

24 MR. BRUCE: Z, as in zebra.

25 Q. (BY MR. BRUCE) And I'll represent to you,

1 Mr. Wallace, that was taken off the OCD's Web site.

2 What size well does that show for the 8H well?

3 A. It says a 320-acre spacing unit.

4 Q. Okay. Including the west half-west half of
5 Section 8 and the west half-west half of Section 5,
6 correct?

7 A. That's what it says here in the dedicated
8 acreage, yes.

9 Q. So although your -- I think it's your Exhibit 4
10 which shows your as-drilled 8H well unit containing 280
11 acres. The original approved permitted APD and C-102
12 was for 320 acres, correct?

13 A. That is correct. It says the dedicated acreage
14 is 320.

15 Q. Did you or anyone at COG, to the best of your
16 knowledge, contact the interest owners in the northwest
17 quarter-northwest quarter of Section 5 regarding
18 proposing that well?

19 A. No. Not that I'm aware of, no.

20 Q. So after the well was drilled, COG amended
21 this -- amended its C-102 to show a 280-acre well unit?

22 A. Correct.

23 Q. And that was done after the new horizontal
24 rules went into effect, correct?

25 A. That is correct.

1 Q. Now, let's move to your Exhibit -- and I'm
2 getting my well units kind of confused, Mr. Wallace, but
3 what well has been drilled and not completed? The 6H?

4 A. The Gunner 5H.

5 Q. 5H.

6 A. Gunner 5H.

7 Q. Now, your Exhibit -- excuse me. Your Exhibit
8 5, that is the notice to the offsets of your -- for the
9 Gunner 5 and 6, correct?

10 A. That is correct.

11 Q. Dated June 10th.

12 When did COG commence the Gunner 5H well?

13 A. In October -- sorry. The 5H well?

14 Q. The 5H well.

15 A. I'm drawing a blank here. I'm sorry. We -- it
16 was June 10th. I'm sorry.

17 Q. Was it commenced on or about June 10th?

18 A. It was June 10th, 2013, yes.

19 Q. So you didn't wait to see if anybody was going
20 to object. You just decided to go ahead and drill the
21 well? You meaning COG.

22 A. We commenced drilling on June 10th.

23 Q. Now, keep on Exhibit 5, because I wasn't going
24 to get into the unorthodox locations, but just to
25 shorten things up here a little bit, a standard location

1 for a well like this to have the entire producing
2 interval within -- no closer than 330 feet from the
3 boundary of the quarter-quarter section line; is that
4 correct, Mr. Wallace?

5 A. Correct.

6 Q. Looking at the 6H well, a standard location
7 would be 2,310 feet from the west line; would it not?

8 A. Sure. Yes.

9 Q. So you're 1,650 feet from the north line, but
10 since you're 2,625 feet from the west line, you are
11 actually encroaching on the northwest quarter-northeast
12 of Section 5; are you not? NW 1/4 NE 1/4

13 A. I'm not sure how many feet are between -- what
14 that is in the northwest quarter.

15 Q. Are you aware that the Division, in determining
16 whether or not your well is encroaching on an offset
17 well unit, uses the Pythagoras theorem? So if your --

18 MR. FELDEWERT: You have to spell that.

19 MR. BRUCE: I can if you want.

20 Q. (BY MR. BRUCE) So you should be 330 feet off of
21 the quarter-quarter section line in each direction,
22 north, south, east, west. So, really, you are -- in
23 essence, you should be -- and I've done the math,
24 Mr. Wallace, and you've seen me testify before on behalf
25 of your former employer. The well should be 467 feet

1 from the northwest quarter-northeast quarter in order to
2 be orthodox.

3 A. Okay.

4 Q. So this well is unorthodox toward the northwest
5 quarter-northeast quarter and encroaches on that
6 acreage; does it not?

7 A. I guess it does.

8 Q. And when you get up to the -- even though there
9 is not a plat of it from somewhere in here, the 7H well
10 will encroach on the northwest quarter-northwest
11 quarter; will it not?

12 A. Yes. Yes, it will.

13 Q. So you didn't give notice to anybody in the
14 northwest quarter-northeast quarter or the northwest
15 quarter-northwest quarter of the unorthodox location for
16 those wells, did you?

17 A. (No response.)

18 Q. I'm looking at your Exhibit 6 for the Gunner
19 7H, and you gave no notice to anyone. Have you received
20 unorthodox location approval for that well?

21 A. We have not.

22 Q. But you didn't get -- looking at your letter,
23 there is no notice to anyone given?

24 A. Not for the -- I guess not.

25 Q. Now, if I'm asking the wrong person this,

1 Mr. Wallace, that's fine, but from a technological
2 standpoint, there is no impediment to drilling any of
3 your wells another 40 acres north and having 320-acre
4 well units, correct?

5 MR. FELDEWERT: You're asking him a
6 geologic question?

7 MR. BRUCE: Not geologically. I'm saying
8 technically drilling a well 320 acres.

9 MR. FELDEWERT: You're asking a technical
10 question? Okay.

11 MR. BRUCE: (Indicating.)

12 Q. Do you know of any technical -- can your
13 drilling -- can COG's drilling entities drill a 320-acre
14 well?

15 EXAMINER EZEANYIM: Counselor, can we leave
16 that for the engineer?

17 Do you have an engineer to testify?

18 MR. FELDEWERT: I hadn't anticipated
19 calling an engineer.

20 EXAMINER EZEANYIM: What?

21 MR. FELDEWERT: I had not anticipated the
22 need to call an engineer.

23 EXAMINER EZEANYIM: Do you have a
24 geologist?

25 MR. FELDEWERT: Certainly we have an

1 engineer available.

2 EXAMINER EZEANYIM: You have an engineer
3 available?

4 MR. FELDEWERT: I do have a geologist.

5 Yes, I have an engineer.

6 Mr. Examiner, I think the question is
7 whether COG is capable of drilling a full-section
8 lateral. I think COG is capable of drilling a
9 full-section lateral.

10 MR. BRUCE: Not a full section. Two
11 sections.

12 EXAMINER EZEANYIM: Two sections.

13 MR. FELDEWERT: Two sections.

14 MR. BRUCE: Okay. That answers the
15 question.

16 EXAMINER EZEANYIM: Okay. So that's
17 settled. Okay. I'm glad that you said that. I wanted
18 to get --

19 MR. FELDEWERT: Which I think is a
20 different question from what Mr. Bruce asked.

21 EXAMINER EZEANYIM: Okay. Go ahead,
22 Counselor. Go ahead, Mr. Bruce.

23 Q. (BY MR. BRUCE) Just a couple more, Mr. Wallace.

24 Exhibit 7, your well proposal regarding the
25 Gunner 5 #1, just one question. The proposal letter

1 went out to Devon Energy. Are you aware Devon's lease
2 is expired in that acre?

3 A. I am.

4 Q. Do you know who the mineral owner is of Devon's
5 acreage?

6 A. Sugarberry Oil & Gas.

7 Q. Now, you said one of the objections to having
8 320-acre laterals is because you'd have to do a
9 communitization agreement. You prepare those all the
10 time; do you not, Mr. Wallace?

11 A. We do.

12 Q. Covering various types of land?

13 A. Correct.

14 Q. You only do it if you have various types of
15 land? In other words, federal, state fee?

16 A. We do it in all situations where there are
17 multiple leases.

18 Q. But even if you got approval for the north
19 half-north half Section 5 well, you would have to do the
20 equivalent; you'd have to file a pooling designation in
21 the county records; would you not?

22 A. Correct.

23 Q. And then you talked about commingling. Are you
24 aware of not only the BLM's rules but the Oil
25 Conservation Division's rules on surface commingling?

1 A. Somewhat, yes.

2 Q. Are you aware there are exceptions that can be
3 granted to allow surface commingling?

4 A. Sure.

5 Q. But COG doesn't want to apply for that?

6 A. I'm not saying we wouldn't want to.

7 Q. You wouldn't want to do that to save \$600,000
8 per well?

9 A. I'm not certain I'm qualified --

10 MR. FELDEWERT: Let me step back.

11 Mr. Bruce, you're talking about an
12 exception to the Division's rules as opposed to the BLM
13 rules?

14 MR. BRUCE: Both.

15 MR. FELDEWERT: Your question is about
16 both?

17 Q. (BY MR. BRUCE) Are you aware that exceptions
18 can be obtained to the commingling rules of the Division
19 and the BLM?

20 A. I didn't know.

21 EXAMINER EZEANYIM: Could somebody explain
22 to me what the BLM rules are, because I don't know their
23 rules, so I'm lost here. I'm grasping what's going on
24 now, but if you want me to look at the BLM land, I have
25 no idea; I don't know their rules.

1 MR. FELDEWERT: I think the witness
2 testified that the BLM rules in this case would require
3 the installation of a stand-alone battery for the well
4 and separate metering whenever you commingle federal and
5 fee minerals. That's the BLM rules.

6 EXAMINER EZEANYIM: Okay.

7 Q. (BY MR. BRUCE) But even under your scenario,
8 Mr. Wallace, under the original well proposal for the 4H
9 well, you would have had to have had a separate tank
10 battery for that well as opposed to the other wells you
11 were drilling on your federal lease?

12 A. Can you repeat that? Which wells? I'm sorry.

13 Q. Looking at your Exhibit 2, you originally
14 proposed that well -- COG originally proposed that well
15 as a 320-acre well unit. So you would have had to have
16 had a separate tank battery, under your testimony,
17 separate from your remaining wells?

18 A. Originally, yes.

19 Q. Mr. Wallace, who is Jan Spradling?

20 A. She is my manager.

21 Q. Are you aware she was on a committee looking at
22 the amendment of the Division's Horizontal Well Rules?

23 A. I'm aware of that.

24 MR. BRUCE: That's all I have. I pass the
25 witness.

1 EXAMINER EZEANYIM: Thank you very much.

2 Mr. Padilla, any questions?

3 MR. PADILLA: I don't have any questions.

4 EXAMINER EZEANYIM: Do you have any
5 questions?

6 MS. CHAPPELLE: I don't.

7 EXAMINER EZEANYIM: Do you have any
8 redirect?

9 MR. FELDEWERT: Not at this point. I think
10 usually you ask your questions and then --

11 EXAMINER EZEANYIM: Yeah. Well, because of
12 Mr. Bruce's questions, do you want to redirect?

13 MR. FELDEWERT: Sure. I just have one
14 about this exhibit (indicating), Exhibit 6.

15 EXAMINER EZEANYIM: Go ahead, before we ask
16 him our questions.

17 REDIRECT EXAMINATION

18 BY MR. FELDEWERT:

19 Q. Mr. Wallace, do you have Exhibit Z in front of
20 you that was handed to you by Mr. Bruce?

21 A. I do.

22 Q. And then do you have in front of you COG
23 Exhibit Number 4?

24 A. I do.

25 Q. If we look at Exhibit Z, it has the same -- it

1 has some handwritten changes on there. Do you see that?

2 A. I do.

3 Q. And they seem to correspond, in terms of
4 writing, to the same handwritten changes on Exhibit
5 Number 4 that you testified were done by the Oil
6 Conservation Division?

7 A. Correct.

8 Q. And if I look at the second page of Exhibit Z,
9 the 320-acre entry that Mr. Bruce referred to has the
10 same type of handwriting, being the OCD handwriting,
11 correct?

12 A. Correct.

13 Q. And if I look at the box two lines over, the
14 Consolation Code -- do you see that on Exhibit Z?

15 A. Okay. Exhibit Z, Consolation Code.

16 Q. There is a box for Consolation Code on the
17 second page of Exhibit Z right next to where the OCD
18 handwrote "320 acres."

19 A. Okay. I see it.

20 Q. Do you know the purpose for that box?

21 A. No.

22 Q. If you had a communitization agreement, for
23 example, with the federal government, isn't that where
24 you would put the code for the communitization agreement
25 if one was available?

1 A. Yes.

2 Q. And in order to permit -- in order to finally
3 permit a 320-acre spacing unit for this particular well,
4 wouldn't you have to have a comm agreement with the
5 federal government?

6 A. Yes.

7 Q. If I then go to your COG Exhibit Number 2,
8 which is the as-drilled C-102, on the second page, that
9 C-102 now is amended to reflect the portions of the
10 40-acre tracts that were actually penetrated by the
11 wellbore, correct?

12 A. Correct.

13 Q. The wellbore did not penetrate the northwest
14 quarter of the northwest quarter?

15 A. That's correct.

16 Q. And it does not contain a consolation code
17 because the company does not have a comm agreement with
18 the federal government; is that correct?

19 A. That is correct.

20 Q. You also do not have, on the 8H well, any
21 facilities that would allow for the commingling of
22 federal leases with fee leases, correct?

23 A. Correct.

24 Q. Is that why, then, the company permitted the
25 well as drilled as reflected on COG Exhibit Number 4?

1 A. That is correct.

2 Q. Because that's the spacing unit the well's
3 penetrating and because it did not have a
4 communitization agreement with the federal government or
5 approval for commingling of federal or fee minerals --

6 A. Correct.

7 Q. -- or facilities to commingle federal or fee
8 minerals?

9 A. Correct.

10 Q. And this well, as reflected on the second page
11 of COG Exhibit Number 4, remained entirely on your
12 single federal lease?

13 A. Correct.

14 MR. FELDEWERT: That's all the questions I
15 have.

16 EXAMINER EZEANYIM: Okay. Thank you very
17 much.

18 Mr. Brooks?

19 CROSS-EXAMINATION

20 BY EXAMINER BROOKS:

21 Q. Just one matter. I would like to clarify this
22 commingling business, because I also am not familiar
23 with the BLM rules and practices. If I understood you
24 correctly, the BLM would require a separate -- if -- if
25 each of these wells -- if you drilled each of these

1 wells into the north half-north half, into the private
2 leases, the BLM would then require a separate
3 communitization agreement for each well; is that
4 correct?

5 A. If there is differing ownership, that is my
6 understanding.

7 Q. Yeah. And then they would require each of
8 those communitized units to be separately measured. Is
9 that the way it is?

10 A. That's my understanding.

11 Q. Now, it is not the case, is it, that the BLM
12 requires separation of production within a well that's
13 in a communitized unit? In other words, if you have
14 seven 40-acre units in a communitized unit and you
15 have -- that are federal, and you have one that is fee
16 or private in that same communitized unit, the BLM does
17 not require separation of the oil produced from the
18 seven federal units -- seven federal 40-acre spacing
19 units versus the one private if they're all in the same
20 communitized unit; is that not correct?

21 A. I think that they like to avoid it, but if it's
22 pooled and it's approved, you can.

23 Q. Okay. If it's pooled and communitized?

24 A. Yes.

25 Q. But you're saying that they would not allow --

1 because the north half-north half is not a common
2 ownership, they would not allow communitization of these
3 wells -- each well would have to be communitized
4 separately?

5 A. Right.

6 Q. Very good. I was trying to understand that.
7 Thank you.

8 EXAMINER EZEANYIM: Are you done?

9 EXAMINER BROOKS: I'm done.

10 EXAMINER EZEANYIM: Okay. Very good.

11 CROSS-EXAMINATION

12 BY EXAMINER EZEANYIM:

13 Q. Okay. Mr. Wallace, let's go to Exhibit Number
14 1, and we'll start with that. Who drilled that well?
15 Is that COG?

16 A. That's a Devon well.

17 Q. It's a Devon well. That is a 160, right, it
18 looks like?

19 A. Yes.

20 Q. Okay. Now, who -- do you have an idea of the
21 ownership interest in Section 32, above Gunner 5?

22 A. Section 32?

23 Q. Yeah, of the other township.

24 A. Yes. That is owned by EOG 100 percent, is my
25 understanding.

1 Q. By EOG?

2 A. Yes.

3 Q. Is EOG here today?

4 A. They have a representative.

5 Q. Okay. Maybe I will find more information
6 there.

7 When your counselor was asking you
8 questions, I didn't want to interrupt to get something,
9 but when you said you wanted 280 additional acre wells,
10 what do you mean? You have drilled some, but you
11 wanted -- what do you mean when you are using the word
12 "additional"? Is that what you mean when you say two
13 more additional wells?

14 A. No. An additional 280 acres.

15 Q. Okay. Now, let's go to Exhibit Number 2.
16 Other than -- what color is that? Is that green?

17 MR. FELDEWERT: It's yellow, Mr. Ezeanyim.

18 EXAMINER EZEANYIM: Yellow.

19 MR. FELDEWERT: Everything yellow
20 appears on all of Section 8.

21 EXAMINER EZEANYIM: And it's all federal
22 land?

23 MR. FELDEWERT: It's all one single federal
24 lease.

25 EXAMINER EZEANYIM: Lease.

1 Q. (BY EXAMINER EZEANYIM) And then COG owns it
2 outright? There are no other working interests in that
3 yellow outline?

4 A. Not on this -- not on this exhibit, no. This
5 yellow is 100 percent.

6 Q. And that's why you were able to drill 8H
7 without seeking the consent of anybody, because there
8 are no other operators in a lease from the federal,
9 right?

10 A. It is a single federal lease well.

11 Q. So all you had to do to drill your 8H is get an
12 APD and API, and you went ahead and drilled it?

13 A. That is correct.

14 Q. I just wanted to, you know, make sure that I
15 know there is no operator in that yellow outline.

16 A. There is not.

17 Q. And then to see what you did, because if there
18 is another operator, you couldn't have drilled that 8H
19 without getting their consent.

20 A. I'm sorry?

21 Q. If there are any other operators --

22 A. Oh. That is correct, yes.

23 Q. I want to start with that before I continue.

24 A. Okay.

25 Q. If I go to Exhibit Number 3, is that for the

1 Gunner #1H?

2 A. Yes, it is.

3 Q. You've got an APD already?

4 A. Yes.

5 Q. 7H; what is happening with 7H? Go back to

6 Exhibit Number 2. Your 7H, is it planned to be drilled,

7 or what is going on with it?

8 A. The 7H? It's planned to be drilled.

9 Q. Okay. 6H is planned to be drilled, too?

10 A. That is correct.

11 Q. But 7H is not part of this cause today? The

12 7H, you mentioned quite a bit of it, but it's not part

13 of the proceedings today?

14 A. Well, we were seeking the north project area
15 for the 5 and the 6H, and for the north [sic] location
16 for the 7H within the 6H.

17 Q. Is it part of the proceedings today, for the
18 7H?

19 MR. FELDEWERT: If I can interrupt,

20 Mr. Examiner, the proceedings today, Case 15035 is for

21 the approval of two nonstandard oil spacing proration

22 units in the project area, which would be for the --

23 initially for the 6H and initially for the 5H, and 7H

24 would share in that project area once it's approved. So

25 for that reason, it's not involved in the case. The

1 case also includes the request for nonstandard locations
2 for the 6H and the 5H but not the 7H. That's been
3 applied -- there is an application pending for the 7H.

4 EXAMINER EZEANYIM: Okay. I just want to
5 make sure.

6 MR. FELDEWERT: Yeah. It was a little
7 confusing.

8 EXAMINER EZEANYIM: Yeah.

9 Q. (BY EXAMINER EZEANYIM) So your 5H has been
10 drilled, right?

11 A. It has been drilled.

12 Q. And you just haven't completed it?

13 A. We have not completed it.

14 Q. When did you drill that well?

15 A. June 10th.

16 Q. Of this year?

17 A. (Indicating.)

18 Q. Let's go to Exhibit Number 9, and that's the
19 plat of that section. Okay. If I look at the north
20 half-north half of Section 5, I have Tract 1, Tract 2
21 and Tract 3. I found the page. Are those working
22 ownership interests in those tracts?

23 A. That is correct.

24 Q. Did you get any, from others -- turn to the
25 second page. When you proposed that north half-north

1 half, did you get any support from other interest owners
2 when you proposed that well to them?

3 A. We have support from Chevron U.S.A., Inc.

4 Q. Chevron U.S.A.

5 Any others?

6 A. Not at this time.

7 Q. Okay. Now, I wanted to find out -- do you
8 have -- you have a percent of ownership interest in that
9 north half-north half?

10 A. That is correct, at this point.

11 Q. Very good.

12 Let's go back. I know this was brought out
13 during testimony. You said if we -- if we -- first of
14 all -- I mean, there is no question. You've done this
15 before, right?

16 A. Yes.

17 Q. So you can drill.

18 But because of different royalty interests,
19 fee against federal, if you drill the two miles, you
20 testified that it will cost you 600,000 additional to be
21 able to commingle the minerals?

22 A. Well, for the additional battery costs,
23 approximately \$600,000 as far as facilities.

24 Q. For each of those wells?

25 A. For each of the wells, yes.

1 Q. If you were to go into each of those north
2 half-north half of Section 5?

3 A. (Indicating.)

4 Q. I'm just trying to consider what you told me.

5 A. Sure.

6 Q. What would be the cost of drilling
7 one-and-three-quarter mile as opposed to two-mile
8 horizontals? What do you think would the additional
9 costs to drill two miles?

10 A. If we were to drill from a fed lease into a fee
11 lease, it's my understanding that the minimum we would
12 add for an additional battery cost -- tank battery costs
13 is \$600,000. In addition to that, maybe other surface
14 facilities, but I'm not sure.

15 Q. Of course, the two miles don't do the -- is
16 more costly than the one-and-three-quarter? Of course
17 it would be?

18 A. Yes, it would be.

19 Q. Now, I wanted to -- I just want to make --
20 because I think when I listen to you talk, what -- what
21 I need to do here is to find out what orientation we're
22 going to drill these wells, where we are going to
23 prevent waste and protect correlative rights. So when I
24 say something, I'm not for or against you. I'm trying
25 to collect facts.

1 A. Okay.

2 Q. That's what I'm trying to do. If I ask you a
3 hard question, it doesn't necessarily mean I'm going
4 that direction. Maybe the opposite.

5 A. Okay.

6 Q. But because I don't know -- really, I don't
7 know until I get all the facts. But what we're trying
8 to do here is -- I think the point of contention is
9 which orientation is better to produce those minerals
10 from the ground and whether that orientation will also
11 protect correlative rights. That's why we're here
12 today. Okay. Good. And I know you took a lot of
13 consideration when you were developing this, but we have
14 to examine what it is. So when you come in here, that's
15 what I want to hear so we can understand.

16 4H. What is happening with 4H?

17 A. The 4H is currently a mile-and-three-quarter
18 lateral.

19 Q. Yeah? 4H, is it going to be drilled?

20 A. It's going to be drilled, yes.

21 Q. So 4H and 7H and 6H are going to be drilled?

22 A. Eventually.

23 Q. Okay. Eventually.

24 But 5H has been drilled; and 8H is
25 producing, and it was drilled in -- in October 2011;

1 started producing in February. Okay.

2 I think the other question would be -- do
3 you have an engineer here today?

4 A. We do have an engineer here today.

5 Q. Maybe I will ask the engineer some of the
6 questions on that, because that will be very -- you
7 know, determine what we do.

8 Okay. Now, for all those four wells and
9 that one-and-three-quarter well, have you got an APD for
10 all of them?

11 A. Yes.

12 Q. All of them?

13 A. We have APDs -- yes, we do. We have filed --
14 yes.

15 MR. FELDEWERT: Mr. Examiner, yeah, I think
16 one clarification.

17 REDIRECT EXAMINATION

18 BY MR. FELDEWERT:

19 Q. Mr. Wallace, you testified that the company
20 changed its plan for the 4H well, correct?

21 A. Yes, that is correct.

22 Q. And have you recently filed the APD for the 4H
23 well with the BLM?

24 A. Yes. I think we --

25 Q. For the revised?

1 A. Yes, for the revision.

2 Q. Has that been approved yet, to your knowledge?

3 A. I don't recall. It's a sundry, is my
4 understanding.

5 Q. So then it would be approved?

6 A. Not as of yet.

7 EXAMINER EZEANYIM: Are you done?

8 MR. FELDEWERT: I just wanted to -- I
9 didn't want -- I wanted to make sure to clarify.

10 EXAMINER EZEANYIM: Okay. With that point,
11 we need to ask more questions.

12 Q. (BY EXAMINER EZEANYIM) The 8H you are
13 proposing -- going to 8H, right?

14 A. It was not. It was always --

15 Q. It was initially proposed according to this,
16 right?

17 A. Well, it's always been a mile-and-three-quarter
18 lateral.

19 Q. Well, I know, but was this initially proposed
20 at the 320?

21 A. Not that I'm aware of, no.

22 Q. I thought it was brought up in testimony that
23 it was initially proposed at 320. Of course, you can
24 propose anything, but during the planning stages, you
25 can change it to anything. I'm not saying that was it

1 proposed at 320, it must be 320. I've done that before.
2 I can say 480 and then go to 120. It depends on what
3 the circumstances are. I'm not saying because you
4 proposed 320, therefore, you are stuck with it. No, you
5 are not stuck with it. You can do whatever you want to.
6 I mean, you have the right to do anything you want to
7 do.

8 Even if I know you proposed it for a 320,
9 COG changed their mind, that the best way to do it is
10 one-and-three-quarter, which is 280, I mean, that's
11 okay. I mean, I don't see anything wrong with that if
12 you change your mind, but you have to change your mind
13 the right way. And if you want to change your mind, be
14 careful; you have to prevent waste. If you induce
15 waste, I won't agree with you. But if you are going to
16 help develop the acreage, I agree with you. You don't
17 have to do 320 if you do 320 and you lose money. If the
18 280 is going to make more money, fine.

19 So when I use the word "320" or brought up
20 that you proposed 320, you are not stuck with 320. You
21 can do something, and then during the planning stages,
22 you can say, Okay, we want to do 280, or I want to do
23 240, or I want to do 160, whatever it is.

24 When I ask you a question, I'm not trying
25 to trick you or anything.

1 Of course, the point that we have the 480
2 or 320, all we're trying to do is what is the
3 orientation that we can use to -- you know, what is the
4 plan we have to prevent waste? That's all we're doing.

5 EXAMINER EZEANYIM: Do you have anything,
6 Mr. Bruce?

7 MR. BRUCE: Mr. Examiner, if I could ask
8 Mr. Wallace two questions.

9 RE CROSS EXAMINATION

10 BY MR. BRUCE:

11 Q. You brought up costs. Mr. Wallace, obviously
12 it's the 5H well that was started or drilled but not
13 completed, right?

14 A. Correct.

15 Q. Do you remember what the AFE costs were for
16 that well?

17 A. I don't recall off the top of my head. I'd
18 have to look at the AFE, but it should have been similar
19 to the 8H.

20 Q. Well, do you recall what the AFE -- what I'm
21 going to ask you is: What is the normal AFE for a
22 mile-and-three-quarter well port, roughly? I don't need
23 it to the dollar, obviously.

24 A. It was approximately \$6 million, if I recall,
25 or a little over, between 6 and 7.

1 Q. Was there an AFE prepared for the 4H well when
2 it was proposed as a 320-acre well?

3 A. There should have been.

4 Q. Do you recall what the cost was of that?

5 A. I do not.

6 Q. Could you find that out at and let us know?

7 A. I will.

8 Q. Thank you, Mr. Wallace. That's all.

9 EXAMINER EZEANYIM: Thank you, Mr. Bruce.
10 Mr. Feldewert, anything further?

11 MR. FELDEWERT: No.

12 EXAMINER EZEANYIM: Anything further?

13 EXAMINER BROOKS: No.

14 EXAMINER EZEANYIM: You may step down.

15 At this point, let's take about a
16 ten-minute break. We'll come back here at 10:00.

17 (Break taken, 9:49 a.m. to 10:03 a.m.)

18 EXAMINER EZEANYIM: Let's go back on the
19 record. We've taken two hours for one witness. I want
20 you guys to streamline your questions, so we can finish
21 today. I didn't know we were going to be this
22 contentious. Otherwise, I would have scheduled a
23 pre-hearing conference to discuss the issues. So we're
24 going to narrow it down here now, so we can hear other
25 cases. And we are not available in the afternoon, so we

1 need to get this going.

2 Okay. With that said --

3 MR. BRUCE: Could I do one thing,

4 Mr. Examiner?

5 EXAMINER EZEANYIM: Yes.

6 MR. BRUCE: I'd move the admission of Yates

7 Exhibit Z, as in zebra.

8 EXAMINER EZEANYIM: Any objections?

9 MR. FELDEWERT: No objections.

10 EXAMINER EZEANYIM: Exhibit Z, as in zebra,

11 will be admitted.

12 (Yates Brothers, et al. Exhibit Letter Z

13 was offered and admitted into evidence.)

14 EXAMINER EZEANYIM: Call your next witness.

15 MR. FELDEWERT: I will.

16 ANDREW McCARTHY,

17 after having been previously sworn under oath, was

18 questioned and testified as follows:

19 DIRECT EXAMINATION

20 BY MR. FELDEWERT:

21 Q. Would you please state your name, by whom you
22 are employed and in what capacity?

23 A. Yes. My name is Andrew McCarthy. I'm employed
24 by COG Operating, LLC, also known as Concho, and my
25 title is senior geologist.

1 Q. And how long have you been with COG?

2 A. I've been there two-and-a-half years.

3 Q. Have you previously testified before this
4 Division?

5 A. Yes.

6 Q. And were your credentials as a petroleum
7 geologist accepted and made a matter of record?

8 A. Yes, they were.

9 Q. Are you familiar with the applications filed in
10 these consolidated cases?

11 A. I am.

12 Q. Have you conducted a study of the lands that
13 are the subject of these consolidated cases?

14 A. Yes, I have.

15 MR. FELDEWERT: I'd tender Mr. McCarthy as
16 an expert witness in petroleum geology.

17 EXAMINER EZEANYIM: He's so qualified.

18 Q. (BY MR. FELDEWERT) Mr. McCarthy, what is the
19 target of the proposed Gunner wells?

20 A. The target is the Upper Avalon Shale.

21 Q. And that's within the Bone Spring Formation?

22 A. That's correct.

23 Q. Do you have a structure map of the Upper Avalon
24 Shale?

25 A. I do.

1 Q. If I turn to what's been marked as COG Exhibit
2 Number 13, is that a structure map for the Upper Avalon
3 Shale?

4 A. This is a structure map on top of the Bone
5 Spring, which is just above the Upper Avalon Shale.

6 Q. In the center, it shows COG's development plans
7 and identifies the well numbers by each of the
8 wellbores, correct?

9 A. That's correct.

10 Q. What do you observe about the structure in this
11 particular area?

12 A. The structure across the two Gunner sections
13 generally dips to the southeast.

14 Q. Do you see any faulting or pinch-outs or other
15 geologic impediment to the development of this area by
16 horizontal wells?

17 A. No faulting, pinch-outs or geologic impediments
18 were observed in any of the well logs for this area.

19 Q. Now, do you have a cross section for this area?

20 A. I do.

21 Q. If I turn to what's been marked as COG Exhibit
22 Number 14, does this identify the wells that you have
23 utilized in your cross section?

24 A. It does.

25 Q. Did you have a lot of bullet [sic] points to go

1 on?

2 A. Well, I selected deep wells with good log
3 suites, so, no. The area is moderately well covered
4 with deep wells. There are relatively few wells in the
5 area that qualify.

6 Q. Now, I notice that you were able to find five
7 wells in the area. Are all of these wells
8 representative of the area where the Gunner well is
9 located?

10 A. No. The first three wells, that is the three
11 wells on the left side of the exhibit, are
12 representative of the Gunner area, and the last two
13 wells show what I would argue is the degradation of the
14 quality of the Upper Avalon east of the Gunner sections.

15 Q. So you're observing a degradation in the Upper
16 Avalon as you move to the east?

17 A. Correct. Yes, a thinning of the Avalon and a
18 degradation of the density porosity.

19 Q. And this is evident in the wells that are
20 almost five miles away?

21 A. That's right. Primarily in those wells, yes.

22 Q. If I then turn to your cross section, which has
23 been marked as COG Exhibit Number 15 -- first off, do we
24 have larger versions of the cross section available if
25 the Examiner would like to see it?

1 A. Yes, we do. We have full scale.

2 MR. FELDEWERT: So, Mr. Examiner, I have
3 three copies of the cross section if you need to open
4 that up and examine it.

5 Q. (BY MR. FELDEWERT) But, Mr. McCarthy, can you
6 discuss your cross section off of what has been marked
7 as COG Exhibit Number 16, which is a smaller version of
8 that?

9 A. Yes. Again, the first three wells on the left
10 represent what I would argue is the pay in the Gunner
11 area. This is the Upper Avalon Shale. I've marked what
12 I consider pay with these color bands, which are
13 supposed to be gray. They look kind of pinkish.

14 EXAMINER EZEANYIM: Can we see this line on
15 the map, because it's difficult to read?

16 MR. FELDEWERT: The larger version?

17 EXAMINER EZEANYIM: Yes, please. I know
18 you don't have one for everybody, but I need to see
19 those cross sections.

20 MR. FELDEWERT: Sure.

21 EXAMINER EZEANYIM: Okay. You are talking
22 about the three wells by the left of the Gunner wells?
23 8H?

24 THE WITNESS: That's right. They're not
25 all Gunner wells. The one in the middle, the second

1 well, is the Gunner 8H, if you flip back to Exhibit 14.

2 The other two wells, wells 1 and 3, I think are

3 representative of the Gunner area.

4 EXAMINER EZEANYIM: Okay. Let me see if I

5 can read this one. Okay. Okay. Go ahead. I don't

6 want to take all the time.

7 A. Okay. As I was explaining what I've marked on

8 here what I consider pay, we use scoping of greater than

9 85 gamma ray counts API and greater than eight percent
10 of porosity. So these are manually drawn pay markers.

11 And what I observed is, as you move from
12 the Gunner area to the east, there is a general decrease
13 in the pay quality, both the thinning of the Upper
14 Avalon Shale pay and also a decrease in the density
15 porosity response to some extent, and also a breaking up
16 of the shale into multiple horizons that may be
17 difficult to decipher if it's in the lateral.

18 EXAMINER EZEANYIM: Now, when you say that,
19 let me ask the question. Sorry. When you looked at
20 this, first of all, if you noticed degradation in the
21 east, you should have developed from -- you should have
22 developed a net isopach map so I can look at it. Do you
23 have anything like that, a net isopach map? You have a
24 structure map that shows me to east, but I need to
25 have -- because you told me now it's degrading as you go

1 east.

2 THE WITNESS: Right.

3 EXAMINER EZEANYIM: You should have
4 developed a net isopach map to --

5 THE WITNESS: Yes, yes. Yes, we do have a
6 net pay map. Yes.

7 EXAMINER EZEANYIM: You do?

8 THE WITNESS: Yes.

9 EXAMINER EZEANYIM: Is it here now?

10 THE WITNESS: It's available. It's not
11 part of this exhibit package.

12 EXAMINER EZEANYIM: I don't know -- I know
13 it's really confidential information, but I need to look
14 at that. If you want it to be confidential, make it --
15 because I think it's necessary for this hearing.

16 MR. FELDEWERT: Mr. Examiner, I can
17 accommodate your request.

18 EXAMINER EZEANYIM: What did you say?

19 MR. FELDEWERT: I can accommodate your
20 request.

21 EXAMINER EZEANYIM: You can?

22 MR. FELDEWERT: Yes.

23 EXAMINER EZEANYIM: Very good. Where is it
24 at?

25 MR. FELDEWERT: Shall I present it now, or

1 shall I continue with --

2 EXAMINER EZEANYIM: I want to get it now if
3 I can.

4 MR. FELDEWERT: Okay. Give me one minute.
5 If I may approach.

6 EXAMINER EZEANYIM: Yes.

7 MR. FELDEWERT: Mr. Examiner, I'll forward
8 to you what has been crudely marked as Exhibit 16.

9 So if I may continue.

10 EXAMINER EZEANYIM: Yeah, go ahead, please.

11 Let me clarify this. Why was this not
12 included before? Is it because it's confidential,
13 because I don't want to --

14 EXAMINER BROOKS: They've not raised the
15 issue of confidentiality. They've presented the
16 evidence and not raised the confidentiality -- waived
17 even if it were.

18 EXAMINER EZEANYIM: Very good, Mr. Brooks.

19 But what happens if -- you guys know why
20 I'm sort of getting this. I was trying to find out why
21 it wasn't even included in the original exhibit
22 compilation. So why was that?

23 MR. FELDEWERT: Well, first off,
24 Mr. Examiner, this particular map is drawn from public
25 data, so it does not contain confidential information.

1 That's why. And, secondly, I was trying to streamline
2 the presentation, and I thought it was rather repetitive
3 of the testimony that he's showing and going to present
4 with the cross section. But it certainly is available,
5 and we can go through it.

6 EXAMINER EZEANYIM: Okay. Very good. Go
7 ahead.

8 Q. (BY MR. FELDEWERT) Now, before we get to that
9 exhibit, Mr. McCarthy, I just want to ask a couple of
10 things. First off, this cross section is for the Upper
11 Avalon Shale, correct?

12 A. That's right.

13 Q. And is there a difference between the Upper
14 Avalon Shale and the Lower Avalon Shale?

15 A. Yes. In this area, they tend to be separated
16 by a significant thickness of nonpay, nonshale rock.

17 Q. The target of the Gunner wells is the Upper
18 Avalon Shale?

19 A. That's correct.

20 Q. And where would the target be on this
21 particular exhibit?

22 A. The Gunner 8H --

23 Q. I'm sorry. On this particular, Exhibit Number
24 15.

25 A. Right. Right. All the Gunner wells are

1 targeted in the -- the Gunner 8H is targeted in the
2 lower portion of the pay zone, and, again, that's the
3 second well in the cross section. The Gunner 5H, at
4 this time I don't remember where it was targeted in the
5 Upper Avalon Shale, but it was in the Upper Avalon
6 Shale. I don't know the exact footage.

7 Q. Now, first off, do you show any concerns about
8 continuity and thickness and porosity on Sections 5 and
9 8 with respect to the Upper Avalon Shale?

10 A. No. I see no indications of that.

11 Q. Now, you mentioned that you did observe, using
12 wells that were five miles away, degradation of the
13 Upper Avalon Shale as in the eastern portion of the
14 area?

15 A. Yes, that's correct.

16 Q. If I turn -- I'll have you turn to what's been
17 marked as COG Exhibit Number 16. Is this -- what is
18 Exhibit Number 16?

19 A. This is a net pay map on the Upper Avalon Shale
20 only, and it uses the same cutoffs I previously
21 described, which are greater than eight-percent density
22 porosity and greater than 85-percent gamma ray. 7828

23 Q. That's reflected in the lower right-hand --
24 left-hand corner of this exhibit?

25 A. That's correct.

1 Q. Was the data from this exhibit taken from
2 public records?

3 A. Yes, it was.

4 Q. This map also shows, does it not, the existing
5 Avalon Shale wells that have been drilled in this area?

6 A. It does.

7 Q. And does this confirm what you saw on the cross
8 section about a degradation of the Upper Avalon Shale as
9 you move sections to the east?

10 A. The map does represent that also, yes.

11 Q. Is there anything else about this particular
12 map?

13 A. I don't have any further comments on this map.

14 Q. Does it show some consistency of the pay across
15 the -- does it show consistency of pay across Sections 5
16 and 8, which are the subject of this hearing?

17 A. Yes. Generally, Sections 5 and 8 appear to
18 have consistent thick, good Upper Avalon pay.

19 Q. Based on your study, do you see any geologic
20 impediment to developing the area in question using
21 horizontal wells?

22 A. I have not seen any geologic impediments to
23 horizontal well development.

24 Q. Do you believe that this is an area that can be
25 efficiently and economically developed by horizontal

1 wells?

2 A. Yes, I do.

3 Q. And with respect to the proposed well in the
4 north half-north half of Section 5, do you anticipate
5 that that -- that that acreage will contribute, on
6 average, more or less equally to production from the
7 well?

8 A. Yes, I do.

9 Q. In your expert opinion as a petroleum geologist
10 having conducted your studies, do you have any concerns
11 that waste will occur if the north half of the north
12 half of Section 5 is developed using a lay-down
13 horizontal well rather than a series of stand-up wells?

14 A. No, I do not.

15 Q. And why do you reach that conclusion?

16 A. There are a number of reasons I reach that
17 conclusion. One is that there is not a significant
18 amount of Avalon horizontal development in this area.
19 The wells that are here are mostly stand-ups, except for
20 one Yates well off to the east. But in my opinion,
21 there is not enough information to make a determination
22 on whether north-south or east-west is a preferred
23 orientation in this area.

24 EXAMINER EZEANYIM: Okay. Well, good
25 point, but if you look at the map, I mean, I don't see

1 any reason you can't go east-west. I mean, when I look
2 at that, I could go east-west. It depends on, you know,
3 where I want to go. You know, that's why I wanted an
4 engineer to see. I wanted to see what the fracture
5 orientation was.

6 Can you tell me about any fractures? Who
7 designed the fracture, and is it perpendicular to the
8 strikes or parallel to the strikes? You know, those are
9 the things we're going to be looking at.

10 Now, if you determine that north-south and
11 east-west doesn't really make a difference, if I look at
12 the map -- does it? I can go, you know, east-west. And
13 that's why the north-south/north-south might be a viable
14 option, too. Why you are going to drill that
15 north-south. I don't see why it could not be drilled
16 well cannot be drills but the point fracture orientation
17 where you drill these horizontal wells.

18 THE WITNESS: Okay.

19 EXAMINER EZEANYIM: To avoid
20 communication -- you know, there are a lot of
21 horizontals there. You need to go perpendicular to the
22 strikes so that you don't have the wells communicate
23 when they are going parallel to the strikes. That might
24 be a problem. You have to do as much as possible to
25 present that. It's really interesting that you didn't

1 bring your engineer today. But I think you can answer
2 the question.

3 MR. FELDEWERT: Mr. Examiner, we do have an
4 engineer.

5 EXAMINER EZEANYIM: Oh, really?

6 MR. FELDEWERT: Yes. I hadn't planned on
7 calling him as a witness. I didn't think it would be
8 necessary.

9 EXAMINER EZEANYIM: If we can get all the
10 information from the geologist, we can cut it short,
11 once I get what I want. We don't -- we don't even know.
12 We may not be able to call him unless I need to. Go
13 ahead.

14 Q. (BY MR. FELDEWERT) Mr. McCarthy, I think you
15 were testifying why you reached your conclusions. Do
16 you see any conclusive evidence one way or the other as
17 to whether a lay-down or a north-south lateral will
18 result in waste?

19 A. In this area, I'm not aware of any conclusive
20 evidence that the east-west well or north-south well
21 would be a preferred orientation.

22 Q. What you do know, though, the quality of the
23 shale and the porosity deteriorates as you move in an
24 area five sections to the east?

25 A. That's correct.

1 Q. Do you have any information from the 8H well to
2 determine a fracture orientation?

3 A. No, we do not.

4 Q. There are two wells shown here on the map, one
5 in the area to -- far to the east as a lay-down well.
6 Do you see that?

7 A. In Section 18? Yes.

8 Q. Yes. That is almost, I guess, five sections
9 away?

10 A. That's correct.

11 Q. Roughly?

12 A. Roughly.

13 Q. So it's on the right-hand side of Exhibit
14 Number 16?

15 A. Correct.

16 Q. Are you familiar with whether that lay-down
17 well has been successful?

18 A. According to our engineering department, that
19 is an uneconomical well.

20 EXAMINER EZEANYIM: Which well is that.

21 THE WITNESS: I believe it's called the
22 Renegade, in Section 18, on the far right-hand side of
23 the pay map.

24 MR. FELDEWERT: So, Mr. Examiner, I think
25 you want to lay it the other way, and it's on the far

1 right side of the map in Section 18.

2 EXAMINER EZEANYIM: Okay. Who drilled that
3 well?

4 THE WITNESS: Yates. I believe that's a
5 Yates well.

6 EXAMINER EZEANYIM: Yates well. Okay.
7 Did you look at the performance history of
8 that well?

9 THE WITNESS: Our Engineering Department
10 reviewed the performance history. I did not personally.

11 EXAMINER EZEANYIM: So you can't say what
12 it's doing?

13 THE WITNESS: That's correct. I'm not
14 aware of the present production.

15 MR. FELDEWERT: Mr. Examiner, if you like,
16 I can call the engineer to testify.

17 EXAMINER EZEANYIM: No, not necessary.

18 Q. (BY MR. FELDEWERT) Mr. McCarthy, there is also,
19 then -- as we look to the east, two sections away, there
20 is actually a stand-up well in Section 3. Do you see
21 that?

22 A. Yes.

23 Q. Do you know who drilled that well?

24 A. I believe that's also a Yates well.

25 Q. And have you had discussions with the

1 Engineering Department about whether that well is a
2 commercially successful well?

3 A. Yes. Again, according to our Engineering
4 Department, that is an uneconomical well.

5 Q. So as we move to the east, we have an
6 uneconomic well that's a lay-down?

7 A. Correct.

8 Q. And we have an uneconomical well that's a
9 stand-up?

10 A. That's right.

11 Q. And with respect to the area in question, we
12 don't have any information at this point as to
13 whether -- to indicate that a lay-down well is going to
14 cause any waste, correct

15 A. That's correct.

16 Q. And based on the evidence that you have and the
17 geologic study that you have, do you believe that a
18 lay-down well in the north half-north half of Section 5
19 is going to cause waste?

20 A. No, I do not believe it will cause waste.

21 Q. Secondly, based on your study of the area, do
22 you believe that a well in the north half-north half of
23 Section 5 will effectively and efficiently develop all
24 of the mineral interests in the Upper Avalon Shale under
25 those fee leases?

1 A. Yes, I do.

2 Q. In your opinion, will the granting of COG's
3 application be in the best interest of conservation and
4 the prevention of waste and the protection of
5 correlative rights?

6 A. Yes, I think it will. ??

7 Q. Were COG Exhibits 13 through 16 prepared by you
8 or compiled under your direction and supervision?

9 A. Yes, they were.

10 MR. FELDEWERT: Mr. Examiner, I'd move into
11 evidence COG Exhibits 13 through 16.

12 EXAMINER EZEANYIM: Any objection?

13 MR. BRUCE: No objection.

14 EXAMINER EZEANYIM: Exhibits 13 through 16
15 will be admitted.

16 (COG Exhibit Numbers 13 through 16 were
17 offered and admitted into evidence.)

18 MR. FELDEWERT: And note that I've been
19 able to streamline the presentation.

20 EXAMINER EZEANYIM: Thank you very much.
21 Mr. Bruce?

22 MR. BRUCE: And I'll streamline my
23 presentation.

24 EXAMINER EZEANYIM: Thank you.

25

CROSS-EXAMINATION

1

2 BY MR. BRUCE:

3 Q. Mr. McCarthy, has COG run dipole sonic logs in
4 this area?

5 A. No, we have not.

6 Q. Have you run FMI logs?

7 A. In this immediate area, no, we have not.

8 Q. You've got the full exhibit booklet there,
9 haven't you, Mr. McCarthy?

10 A. I believe I do.

11 Q. Could you turn to Exhibit 5? And I think it's
12 three or four pages; turn to the final page, which is
13 the log for the 6H well. Not the log. Excuse me. The
14 acreage dedication plat. I know drainage is more of an
15 engineering question, but if this well was -- it's
16 almost on the quarter-quarter section line, correct, the
17 north-south quarter-quarter section line?

18 A. Yes, it appears to be.

19 Q. If this well was drilled up into to the north
20 another quarter mile, from a geologic perspective, would
21 it produce reserves from both the northwest
22 quarter-northeast quarter and northeast
23 quarter-northwest quarter of Section 5?

24 A. It appears that would be the case, yes.

25 Q. And the #7 well, which is almost -- it's almost

1 a quarter-quarter [sic]. It's not depicted on here, but
2 it's to the west of this well, correct?

3 A. That's correct, yes.

4 Q. If that well was drilled up another quarter
5 mile, from a geologic perspective, would it produce
6 reserves from both -- from the entire north
7 half-northwest quarter of Section 5?

8 A. Because the well is not particularly --
9 illustrated on this plat, I can't say that for certain.
10 I'm not sure of the exact location of the well.

11 Q. But it was, say, ten feet of the
12 quarter-quarter section line?

13 A. That's a reasonable assumption, yes, if it
14 were.

15 Q. And then just one final question: When COG
16 drills these wells from the surface location -- in this
17 case, all of the surface locations are not [sic] in
18 Section 8, correct, and you're drilling to the north?

19 A. Sorry. All the surface locations are in
20 Section 8?

21 Q. Are in Section 8.

22 A. That's correct, yes.

23 Q. When you drill these wells and you make the
24 curve to go horizontal, about how long -- from the
25 surface location to the beginning of the productive

1 interval, approximately how far is that?

2 A. It varies from 5- to 600 feet, although I'm not
3 a drilling engineer.

4 Q. So I'm looking at the 8H well. And you might
5 not have the exhibit, but its surface location is 990
6 feet from the south line; is that correct?

7 A. I don't have a plat, so I can't say for
8 certain, but I believe that's correct.

9 Q. And if you would look at Exhibit 4, the acreage
10 dedication plat, page 2 --

11 A. Yes.

12 Q. --(that's 990 feet from the south line,
13 correct?

14 A. That's correct.

15 Q. So this well is not producing from the
16 southwest quarter-southwest quarter of Section 8?

17 A. I can't say that for certain.

18 Q. It's not perforated in the southwest
19 quarter-southwest quarter of Section 8, is it?

20 A. I don't have a diagram of the perforations, so
21 I can't say for certain.

22 Q. But at the end of -- the end of your curve is
23 approximately 500 feet. That would put it a couple
24 hundred feet outside of the southwest quarter-southwest
25 quarter?

1 A. It's our practice to perforate up into the
2 curve, and because I don't have a diagram of these
3 perforations, I cannot say for certain.

4 Q. That's all I have.

5 A. Okay.

6 EXAMINER EZEANYIM: Any --

7 MR. PADILLA: I don't have any questions.

8 MS. CHAPPELLE: No.

9 EXAMINER EZEANYIM: Any redirect?

10 MR. FELDEWERT: No, Mr. Examiner.

11 EXAMINER EZEANYIM: Mr. Brooks?

12 EXAMINER BROOKS: Nothing.

13 CROSS-EXAMINATION

14 BY EXAMINER EZEANYIM:

15 Q. Mr. McCarthy, this is Bone Spring, but it's
16 mainly shale? The formation is mainly shale?

17 A. That is correct.

18 Q. And your cutoff porosity is eight percent?

19 A. We use that as a scoping, yes.

20 Q. You say the gamma ray is 85?

21 A. That's correct.

22 Q. Now, I don't want to -- I think I will get the
23 information I need from you. With the Gunner being
24 drilled, can you give me the production history on the
25 Gunner 8, producing history since this -- since a year

1 and a half now?

2 A. I actually don't have the production history on
3 that well.

4 Q. ~~But, I mean, COG is happy with that well?~~

5 A. Yes. It's considered an economic well
6 according to our Engineering Department.

7 Q. You sure?

8 A. Yes.

9 Q. Okay. And the engineer you have here, is he a
10 production engineer? The engineer you have here today,
11 is he a production engineer?

12 A. I believe his title is actually reservoir
13 engineer.

14 Q. He should know what's going on.

15 A. Yeah, he does.

16 Q. I don't need an assessment.

17 You are happy with that well, right --

18 A. Yes. Uh-huh.

19 Q. -- because I have the information?

20 Okay. Good.

21 Now, we're going to run for these -- all
22 these horizontals here -- I mean, I think you can answer
23 this question. You need to really -- I think COG would
24 be wise enough to conduct -- I'm not telling you to do
25 it, conduct a seismic survey. I know the other counsel

1 asked you that question. That's one thing you need to
2 know to see -- you don't know what your intention is.
3 When are those -- when those are lined out, you want to
4 make sure there is no complication between them. In
5 that case, you have to know where -- by conducting the
6 seismic survey. But I'm not going to tell you what to
7 do.

8 I won't need the engineer. I think I've
9 got all the information.

10 MR. FELDEWERT: Okay.

11 EXAMINER EZEANYIM: So you may be excused.
12 Nothing further of this witness.

13 MR. FELDEWERT: I have nothing further.

14 EXAMINER EZEANYIM: Now, I think we can
15 talk to Mr. Bruce. Call your next witness.

16 All your witnesses are here now?

17 MR. BRUCE: Yes.

18 EXAMINER EZEANYIM: And the two of them
19 that came in late, please stand up, state your name to
20 be sworn. We have sworn one already. We need two,
21 right?

22 MR. BRUCE: State your name and be sworn
23 in.

24 MR. SCOTT: George Scott.

25 MR. MAXEY: John Maxey.

1 (Mr. Scott and Mr. Maxey sworn.)

2 EXAMINER EZEANYIM: Call your first
3 witness.

4 W.J. "JIM" BALL, JR.,
5 after having been previously sworn under oath, was
6 questioned and testified as follows:

7 DIRECT EXAMINATION

8 BY MR. BRUCE:

9 Q. Would you please state your name and city of
10 residence?

11 A. My name is Jim Ball. I reside in Roswell, New
12 Mexico.

13 Q. Who do you work for and in what capacity?

14 A. Yates Holding, LLP, as a landman, and Yates,
15 LLP, as the managing arm of Yates Brothers and other
16 entities.

17 Q. Have you previously testified before the
18 Division?

19 A. Yes, I have.

20 Q. And were your credentials as an expert
21 petroleum landman accepted as a matter of record?

22 A. Yes, they were.

23 Q. And are you familiar with the land matters
24 involved in these cases?

25 A. Yes.

1 MR. BRUCE: Mr. Examiner, I tender Mr. Ball
2 as an expert petroleum landman.

3 EXAMINER EZEANYIM: So qualified.

4 Q. (BY MR. BRUCE) Mr. Ball, could you identify
5 Exhibit 1 and just briefly describe its contents for the
6 Examiner?

7 A. The contents is basically the wells shown in
8 red.

9 MR. FELDEWERT: Mr. Bruce, can I interrupt
10 a minute?

11 MR. BRUCE: Oh, excuse me. Exhibit 5.

12 MR. FELDEWERT: Thank you. Okay.

13 MR. BRUCE: Yeah. We're going out of turn
14 here on the exhibits.

15 Exhibit 5, Mr. Examiner.

16 EXAMINER EZEANYIM: Okay. Very good.

17 Q. (BY MR. BRUCE) Go ahead, Mr. Ball.

18 A. It's a plat. The wells -- horizontal wells in
19 Sections 5 and 8 show wells that are permitted and/or
20 proposed in this case by COG. The yellow land is the
21 120-acre tract of the mineral interests of most of the
22 opposing parties, and I'm here to testify on behalf of
23 about 65 percent of that tract. The other percentages I
24 either don't have or was not able to make contact with
25 them.

1 Q. So Yates, Sugarberry, Katy and Inland own about
2 65 percent of the minerals?

3 A. Roughly 65 percent.

4 Q. Now, you show in red the five wells initially
5 proposed by COG. Were these taken from Division
6 records?

7 A. Yes.

8 Q. And as of today, the 4H well is still permitted
9 as a 320-acre horizontal well, correct?

10 A. As far as I know, it is.

11 Q. Just in looking at this plat, Mr. Ball, the
12 development or proposed development seems to be
13 primarily by stand-up north-south wells. Is that a fair
14 statement?

15 A. Yes, sir. I think -- the one time I counted
16 them, I think there are about 60 north-south orientated
17 wells on this plat.

18 Q. So based on the -- at least the operators in
19 this area on the whole are developing it in stand-up --
20 as stand-up wells?

21 A. Yes, and that's various operators.

22 Q. There was a question for COG's landman about
23 why didn't -- or to the effect that the interest owners
24 in this 120 acres or at least Yates Brothers haven't
25 proposed a plan or development. Is Yates Brothers an

1 operator?

2 A. They are not an operator.

3 Q. Is their normal course of development to lease
4 out there to interested operators?

5 A. Yes, it is.

6 EXAMINER EZEANYIM: What is the difference
7 between Yates Brothers and Yates Corporation? I'm
8 getting confused when you use because I don't want to
9 continue -

10 MR. BRUCE: Yates Petroleum Corporation is
11 a separate entity. I just know from examining title
12 that Yates Brothers is a partnership that goes back
13 about 50 years that was formed to buy mineral interests,
14 and Mr. Ball can confirm that. But it's a total
15 separate legal entity from Yates Petroleum.

16 EXAMINER EZEANYIM: So Yates is a different
17 company? They have no relation?

18 MR. BRUCE: Well, I mean, obviously,
19 Mr. Ball can explain

20 THE WITNESS: The Yates Brothers entity
21 will have a different ratio of ownership and a different
22 mix of owners than Yates Petroleum, and we definitely
23 operate separate -- I mean, we're in a separate building
24 not owned by Yates Petroleum. We rent from a third
25 party.

1 EXAMINER EZEANYIM: Very good. So in that
2 case, in this 120 acres you mentioned, does Yates
3 Corporation have any interest in this 120 acres that is
4 highlighted in yellow?

5 THE WITNESS: If I'm hearing you right,
6 Yates Petroleum does not own anything -- Yates Petroleum
7 Corporation does not own any asset at all of any type in
8 the yellow lands.

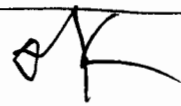
9 EXAMINER EZEANYIM: Just Yates Brothers.

10 THE WITNESS: Yates Brothers does, about --
11 yeah, some minerals.

12 Q. (BY MR. BRUCE) And, Mr. Ball, does Yates
13 Brothers and the other people we are here on behalf of
14 today, do they oppose these nonstandard 280-acre well
15 units as proposed by COG?

16 A. Yes, sir.

17 Q. And do any of their unorthodox locations
18 adversely affect Yates Brothers' interest with the
19 proposed unorthodox locations?

20 A. Yes. 

21 Q. And we have a geologist and an engineer to go
22 into technical testimony regarding this application?

23 A. Yes, we do.

24 Q. The only other question, Mr. Ball -- let me
25 hand you Exhibits 6 and 7. Could you identify those for

1 the Examiner?

2 A. The first one is from Katy Pipeline and
3 Production -- oh, I'm sorry. Number 6 is Argent. And
4 basically their representative states the parties that
5 they represent are in support of the testimony today and
6 Yates' objection -- Yates', et al. objections. They're
7 on the same page with us, including -- I may have missed
8 part of this, but I think that a mention of a Marc T.
9 Wray estate or interest was involved, and this covers
10 it.

11 Exhibit Number 7 is from Katy Pipeline and
12 Production, and they're also a mineral owner as well,
13 and they support the same thing as what I just said
14 Argent did. In their letter, they also add that Katy
15 was not shown on the Exhibit A listings of the owners in
16 any of the COG Operating, LLC applications and,
17 therefore, was not given proper notice. That's just the
18 statement that's different than this other type of
19 letter that was stated as Exhibit 6.

20 Q. And was Exhibit 5 prepared by you?

21 A. Yes, sir, it was.

22 Q. And were Exhibits 6 and 7 compiled from company
23 business records?

24 A. That's correct.

25 Q. And does Yates Brothers request that COG's

1 applications be denied?

2 A. That's correct.

3 MR. BRUCE: Mr. Examiner, I move the
4 admission of Exhibits 5, 6 and 7.

5 EXAMINER EZEANYIM: Any objection?

6 MR. FELDEWERT: No objection, Your Honor --
7 Mr. Examiner.

8 EXAMINER EZEANYIM: Exhibits 5, 6 and 7
9 will be admitted.

10 (Yates Brothers, et al. Exhibit Numbers 5,
11 6 and 7 were offered and admitted into
12 evidence.)

13 MR. BRUCE: Pass the witness.

14 EXAMINER EZEANYIM: Mr. Feldewert.

15 CROSS-EXAMINATION

16 BY MR. FELDEWERT:

17 Q. Mr. Ball, I'm looking at what you've marked as
18 Exhibits 6 and 7.

19 A. Yes, sir.

20 Q. And there is a statement in each of these
21 letters that the authors -- it says "supports the
22 testimony entered by the following expert witnesses."
23 Do you see that?

24 A. Yes, sir.

25 Q. Did they -- were they present to hear the

1 testimony that was going to be offered by the three
2 witnesses listed?

3 A. They are not in this room.

4 Q. Prior to drafting these letters, did you sit
5 down with them and run through the testimony verbatim
6 that was going to be entered into evidence here today?

7 A. I did not prepare these letters. Katy Pipeline
8 did theirs first, I believe. I got theirs first. And
9 when I got a phone call from Matt Barham from Argent, it
10 was after I got an e-mail from him telling me on his own
11 will basically the same thing.

12 Q. But my question to you is: Did you-all -- did
13 you-all visit -- meet with them and discuss with them
14 the testimony that was going to be entered here today as
15 opposed to what your position was going to be?

16 A. They know parts of it, enough to --

17 Q. So they just know parts of it?

18 A. Yes, sir. They know our objective is that
19 we're isolated and we're hurt.

20 Q. But you didn't sit down with them and talk to
21 them about the exact testimony that was going to be
22 presented by what you call your experts here today?

23 A. At least one of these parties -- well, say that
24 again.

25 MR. FELDEWERT: Can you repeat the

1 question?

2 (The record was read as requested.)

3 A. I would say it's not exactly.

4 Q. (BY MR. FELDEWERT) Is Katy Pipeline, which is
5 Exhibit Number 7, aren't they part of Sugarberry?

6 A. I don't know exactly what their -- they're
7 somehow affiliated, but I've never asked exactly why.
8 She just has said all along and I think she's let
9 Concho, COG know that they never got notice.

10 Q. So they had verbal conversations with COG?

11 A. Yes, they did.

12 Q. ~~So they were aware of the applications?~~

13 A. Verbal or written, yes.

14 Yes.

15 Q. And they did so because they're a part of
16 Sugarberry?

17 A. I don't know if they're part of Sugarberry, but
18 they have the same landman representative of maybe
19 others. I've never really asked how they're connected.

20 Q. Your Exhibit Number 7 -- Exhibit Number 5 --

21 A. Yes.

22 Q. -- when did you draft this exhibit? I don't
23 see a date. Or when did you pull it?

24 A. This is a three-month-old plat, and when I got
25 the new one probably less than -- it's probably less

1 than a month ago, there were some errors and omissions,
2 and they didn't get it updated in time for this. So I
3 drew in the ones that were on the new one as of
4 yesterday.

5 Q. When you drew in your -- so you drew in the red
6 lines?

7 A. I drew in three of those red lines. I believe
8 the #4H was drawn in by the New Mexico Energy Library.

9 Q. Are you aware, Mr. Ball, and did you check to
10 determine whether there had been a change in the plat
11 for the 4H reflected in the sundry?

12 A. I pulled so many, I don't know if I could
13 answer that accurately.

14 Q. Do you know of any reason to disagree with the
15 testimony that the company has changed its plans with
16 respect to the 4H and has filed sundry notice with the
17 BLM to reflect that change?

18 A. I understand through today's testimony that
19 that's what they have done, and I believe --

20 Q. You didn't check that?

21 A. I may have printed it off, and I may not have.
22 I don't know.

23 Q. But your map does not reflect that change with
24 respect to the 4H?

25 A. No, it does not.

1 Q. This depiction on here, does it -- I think you
2 testified it doesn't show all -- it doesn't show the
3 drilled wells. It apparently shows the permitted wells.
4 Is that your testimony?

5 A. It shows the drilled wells. Now, I'm focusing
6 in on 5 and 8 with this question. I know that the 8 is
7 drilled and the 5 is drilled. I know that the 4H is
8 permitted and/or adjusted however, as he testified
9 earlier.

10 Q. Let me ask you this. Let me have you turn to
11 what's been marked as COG Exhibit Number 1. This was
12 testified to as showing the actual Upper Avalon Shale
13 wells that have been drilled in this area. Do you
14 recall that testimony?

15 A. Yes, sir.

16 Q. You don't have any reason to disagree with this
17 map, do you?

18 A. I do not see anything on a short notice, other
19 than mine shows more wells.

20 Q. Yeah. Is that because you included permitted
21 wells, not just drilled wells?

22 A. New Mexico Energy Library posts their maps and
23 keeps them updated off of the NMOCD records, and I have
24 not found in any instance any well drilled here that I
25 didn't find on the Internet.

1 Q. So is it your testimony that every single well
2 shown on here with a line has actually been drilled,
3 including the wells up in 32? Is that your testimony?

4 A. Say that again.

5 Q. For this exhibit, Exhibit Number 5 --

6 A. Oh, yeah. Sorry.

7 Q. -- Section 32, just to the north of Section
8 5 --

9 A. Yes, sir.

10 Q. -- is it your testimony that those wells that
11 you show with lines there have been drilled in the Upper
12 Avalon Shale?

13 A. No, they haven't been drilled to my knowledge,
14 and I've talked with EOG.

15 Q. So your map does not reflect wells that have
16 been drilled in the Upper Avalon Shale?

17 A. It does in some cases, and I've said that
18 they're permitted in other cases.

19 Q. Does it also include, Mr. Ball, wells that have
20 been permitted or drilled in the Bone Spring sands?

21 A. This should be of any zone.

22 Q. Any zone. Okay. All right. Thank you.

23 A. But I believe --

24 Q. And you mentioned that you were -- that you're
25 just a mineral owner?

1 A. That's correct. We have very few working
2 interests.

3 Q. And that you, therefore, in your testimony, you
4 don't have the ability to propose or drill a well? Is
5 that your testimony?

6 A. I guess any mineral owner would.

7 Q. That's what I thought.

8 A. You know, you have to be bonded if you're going
9 to be an operator, et cetera, et cetera.

10 Q. You mention your business is that -- to just go
11 out and lease your acreage to other operators. Is that
12 what you generally try to do?

13 A. That's what this entity does.

14 Q. Has COG attempted to lease your acreage in the
15 north half-north half?

16 A. Yes, they have.

17 Q. And did you lease to them?

18 A. No, we did not.

19 Q. Do you have any -- so I take it, then, that
20 Yates Brothers does not have any development plans for
21 the Upper Shale -- Avalon Shale in the north half-north
22 half of Section 5 that they have proposed to any of the
23 working interest owners in that area?

24 A. We have made suggestions.

25 Q. But you haven't proposed anything formally?

1 A. No, sir.

2 Q. Is there any reason, Mr. Ball, that Yates
3 Brothers could not -- if they really felt that a
4 stand-up well had to be drilled up there, is there any
5 reason why you could not propose to EOG, who owns the
6 acreage in Section 32, to drill a stand-up well from
7 your acreage in the north half of the north half of
8 Section 5 up into Section 32?

9 A. I have talked with EOG about the possibility,
10 would they be interested, since they're an operator, of
11 extending down into the section.

12 Q. Let me stop you right there. That's different.
13 Have you, Yates Brothers -- I should say
14 Yates Brothers, not you.

15 A. Yes, sir.

16 Q. Has Yates Brothers proposed to EOG drilling a
17 stand-up well into Section 32 from your acreage?

18 A. Worded exactly like that, no.

19 Q. Did you have discussions with EOG about
20 extending wellbores from their acreage in Section 32
21 into the north half-north half of Section 5?

22 A. Yes, sir.

23 And can I add something else that I put in
24 my opportunity of discussion. Anything that would work,
25 is what I said --

1 Q. Okay. All right.

2 A. -- and resolve issues. I've tried.

3 Q. Have they told you that they would not?

4 A. They said they could not commit and that these
5 wells -- they could not even commit that these wells
6 would be drilled; they got pushed back to 2014 and
7 probably maybe pushed back to 2015.

8 Q. So they didn't tell you that they would not
9 consider adding your acreage to any well drilled in
10 Section 32. They just said that's not in their future
11 plans?

12 A. They just said it's not on the front burner
13 right now.

14 Q. And having heard that, you, as Yates Brothers,
15 have not proposed to any of the interest owners in the
16 north half-north half of Section 5 either a lay-down
17 well in the north half-north half of Section 5 or a
18 stand-up well that would extend from your acreage in the
19 north half-north half of 5 up into 32? You haven't done
20 any of that?

21 A. No. It was discussed.

22 Q. Were Yates Brothers involved in drilling the
23 well shown in COG Exhibit 1 over in Section 18?
24 Mr. Ball, I'll have you look at COG Exhibit Number 1.
25 I'm going to have you look at the bottom, right-hand

1 side of that exhibit. Okay? There is a well called the
2 Renegade well. Do you see that over in Section 18?

3 A. Yes, sir.

4 Q. Was Yates Brothers involved in that well?

5 A. I have no idea.

6 Q. Aren't you here representing Yates Brothers?

7 A. Yes, sir, but I didn't think that far away.

8 It's not even on mine. That wouldn't even enter -- I
9 mean, I've got to stop somewhere.

10 Q. So you would agree with me that a well that far
11 away really wouldn't have any impact on what we're
12 considering here today?

13 A. No, I'm not agreeing with that. I'm just
14 saying I don't know the ownership, if Yates Brothers has
15 anything in there. I wouldn't testify to that without
16 having proof.

17 Q. So you don't know?

18 A. I don't know.

19 Q. Okay. What about the well in Section 3 to the
20 east of Section 5?

21 A. Once again, I don't know if Yates Brothers has
22 an interest in that well.

23 Q. Now, also, your Exhibit Number 5, your yellow
24 acreage that you show in the north half-north half of
25 Section 5 -- Section 5 --

1 A. Yes, sir.

2 Q. -- does Yates Brothers also own acreage in the
3 north half of the northeast quarter of Section 6?

4 A. Yes, they do.

5 Q. So that should be colored yellow as well,
6 correct?

7 A. Well, I didn't think Section 6 was in here, but
8 I have no problem saying it. Yeah, we do.

9 Q. Have you proposed any development plans for
10 your acreage in the north half-north half of Section 6?

11 A. As a royalty owner, no, we have not.

12 Q. What about as a mineral owner?

13 A. Mineral owner. Sorry.

14 Q. You have not?

15 A. Right.

16 Q. That's all the questions I have.

17 EXAMINER EZEANYIM: Thank you very much.

18 Any redirect?

19 MR. BRUCE: Just one.

20 REDIRECT EXAMINATION

21 BY MR. BRUCE:

22 Q. Mr. Ball, when did COG offer to lease Yates
23 Brothers' acreage in Section 5?

24 A. When they proposed their well -- I think it was
25 probably officially in their letter when they proposed

1 the 5 -- the east-west well in the north half-north

2 half. They had terms in there.

3 Q. Later in July of this year?

4 A. Yes, that's it. Yes, sir.

5 Q. Thank you.

6 MR. BRUCE: That's all I have,

7 Mr. Examiner.

8 EXAMINER EZEANYIM: July of this year,

9 right? Okay.

10 Anything further, Ms. Chappelle?

11 MS. CHAPPELLE: Yes.

12 CROSS-EXAMINATION

13 BY MS. CHAPPELLE:

14 Q. Mr. Ball, are you aware that Inland Title also
15 supports your testimony?

16 A. Yes.

17 Q. Thank you.

18 MR. PADILLA: I don't have any.

19 EXAMINER EZEANYIM: Nothing, Mr. Padilla?

20 Do you have anything for this witness?

21 EXAMINER BROOKS: No.

22 CROSS-EXAMINATION

23 BY EXAMINER EZEANYIM:

24 Q. Go to Exhibit Number 5. Now, the yellow -- the
25 yellow outline is 120 acres, right?

1 A. We have one percent of that, yes, sir.

2 Q. Do you put anything in the northeast-northeast
3 quarter of Section 5?

4 A. We do not own any mineral interests in the
5 northeast-northeast of 5.

6 Q. You don't?

7 A. That's correct.

8 Q. And you are a mineral interest owner, right?

9 A. That's right.

10 Q. You are not a working interest owner, right?

11 A. That's correct. We have some working
12 interests, but it's not our normal thing to have that.

13 Q. As an examiner, you know I can ask any
14 question. I mean, whether you are permitted or not, I
15 can ask that because I want to get information.

16 Let's go to Section 32. This is owned by
17 EOG, right? Section 32, on top of Section 5, is --

18 A. Yes, sir.

19 Q. -- EOG, right?

20 Then most of Sections 5 and 8 in this
21 township is owned by COG, right?

22 A. That's correct.

23 Q. COG wanted to lease those acreage from Yates
24 and whoever you represent, and you said no. Is there
25 any reason that you want to, you know, lease that

1 acreage to EOG? Because you could do whatever you want.
2 That's why I said I can ask you any question. If I want
3 to -- if I don't want to use my right to COG, then I
4 release EOG [sic], because I'm not a working interest.
5 Or do you have plans to develop that acreage? If you
6 are not a working interest, do you have plans to develop
7 that acreage in that 120 acreage there, or do you plan
8 to visit with whoever gives you the favorable, you know,
9 lease options? I just want to know because I know that
10 they approached you to -- you know? You said no. You
11 didn't lease to them. Then are you intending to lease
12 to EOG?

13 A. If I heard you right, sir, it would be our wish
14 to lease this interest to EOG, COG, Yates Pet, Inland.
15 It's unlimited. We're just not set up. We're just nine
16 people in the office.


17 Q. Okay. I understand.

18 A. Okay.

19 Q. So is it because of the terms of the lease
20 proposed by COG that you didn't lease to them? I don't
21 want to know the terms. ~~But because you didn't like the~~
22 ~~terms, that's why you didn't lease to them, right?~~

23 A. We were not in agreement on the terms. That's
24 right, sir.

25 Q. That's what I thought.



1 A. Yes, sir.

2 Q. And then maybe you get an offer by any other
3 operator, because we need to develop that 120 acres,
4 right?

5 A. Yes, sir.

6 Q. Since you are not an operator to propose wells.
7 So I'm trying to find out: Do you have any plan for
8 that 120 acres that you own there? The interest you
9 own, how do you plan to develop that 120 acres? I know
10 you want to stop me, but I can ask you this question.
11 Do you have any plan to develop that? Do you intend to
12 visit, or do you -- you say you are a limited working
13 interest. Are you going to develop that acreage?

14 A. We have plans to lease it to somebody.

15 Q. No. The question I'm asking you -- don't think
16 I'm trying to -- I know why I'm asking that question.
17 How do we develop 120? If you're not a working
18 interest, are you going to lease it out, or are you
19 going to develop it yourself? What are you going to do
20 with that? What do you think you are going to do?

21 A. My gut feeling is that we will lease to
22 somebody.

23 Q. Okay. That's really all I'm trying to -- you
24 don't know who, though?

25 A. Right. Right.

1 Q. But you will lease to somebody?

2 A. There's been discussions with several companies
3 and, you know --

4 Q. Because usually a working interest, you will
5 tell me, yeah, I'm going to develop it. Then I can
6 understand. But I want to know if you are going to
7 lease it, because it has to be developed, and we're
8 going to develop it.

9 Okay. That being said, if COG has proposed
10 two-mile horizontals, would it be the north half-north
11 half? If they propose those two miles, would Yates and
12 et al., the people who you are supporting, would they
13 participate in drilling that well if they propose it to
14 you, the 320 acres, you know, going to go two sections?
15 That's if they propose it to give you everything. Would
16 Yates Brothers and others participate in drilling of
17 that well or not?

18 A. I'm sorry, I'm not hearing you right.

19 EXAMINER EZEANYIM: Could you ask the
20 question? If the 320 acre is going north-south, going
21 to that north half-north half like the 8 -- that
22 well number #8 that's going a half mile east, if you
23 went in through there and you were proposed by any
24 operator, not really COG, anybody, would you have
25 participated in drilling of that well?

1 REDIRECT EXAMINATION

2 BY MR. BRUCE:

3 Q. If wells had been -- looking at your Exhibit 5,
4 Mr. Ball --

5 A. Yes, sir.

6 Q. -- if any of these wells had been proposed as
7 320-acre wells to you --

8 EXAMINER EZEANYIM: Two miles.

9 Q. (BY MR. BRUCE) -- two-mile laterals, would
10 Yates Brothers have leased to another party?

11 A. Oh, absolutely. We wouldn't be here today.

12 EXAMINER EZEANYIM: I have no further
13 questions for you.

14 MR. BRUCE: Thank you.

15 EXAMINER EZEANYIM: I will have other
16 questions for the technical people.

17 MR. BRUCE: Could I ask one follow-up
18 question?

19 EXAMINER EZEANYIM: Yeah, you may.

20 REDIRECT EXAMINATION

21 BY MR. BRUCE:

22 Q. Is Yates Brothers' objection to leasing at this
23 point because you don't want a lay-down well?

24 A. That is correct. We don't believe in the
25 lay-down well at all.

1 Q. That's all I have.

2 EXAMINER EZEANYIM: Well, we'll examine
3 that with the technical witnesses.

4 Okay. At this point, we'll take a
5 five-minute break. We can then conclude with the other
6 two witnesses. This will be a five-minute break.

7 (Break taken, 11:01 a.m. to 11:10 a.m.)

8 EXAMINER EZEANYIM: Let's go back on the
9 record and continue the case.

10 Call your next witness.

11 GEORGE L. SCOTT III,

12 after having been previously sworn under oath, was
13 questioned and testified as follows:

14 DIRECT EXAMINATION

15 BY MR. BRUCE:

16 Q. Would you please state your full name and city
17 of residence for the record?

18 A. George L. Scott III, and Cedar Crest,
19 New Mexico is where I reside.

20 Q. And what is your occupation?

21 A. Geologist.

22 Q. What is your relationship to Yates Brothers and
23 the other objecting parties in these cases?

24 A. I'm working for Yates Brothers as a consultant.

25 Q. And the other companies, Katy or Sugarberry?

1 A. Yes, yes. I'm consulting to Yates, et al.,
2 yes.

3 Q. Have you previously testified before the
4 Division?

5 A. Yes.

6 Q. And were your credentials as an expert
7 petroleum geologist accepted as a matter of record?

8 A. Yes.

9 Q. And have you made a study of this area, the
10 Bone Spring geology, in the area of these two
11 applications?

12 A. Yes.

13 Q. Are you familiar with the geology in these two
14 cases?

15 A. Yes.

16 MR. BRUCE: Mr. Examiner, I tender
17 Mr. Scott as an expert petroleum engineer --
18 geologist -- geologist.

19 EXAMINER EZEANYIM: Okay. So qualified.
20 They made you an engineer already.

21 THE WITNESS: I can do a minor in
22 engineering, but geology is my main --

23 EXAMINER EZEANYIM: Go ahead.

24 Q. (BY MR. BRUCE) Mr. Scott, could you identify
25 your Exhibit A --

1 MR. BRUCE: These are going to be lettered
2 exhibits, Mr. Examiner.

3 EXAMINER EZEANYIM: Okay.

4 Q. (BY MR. BRUCE) -- Exhibit A and discuss it for
5 the Examiner?

6 A. Yes, sir. Exhibit A is the well log type
7 section for this area. It's approximately six miles to
8 the east of the Section 5 and 8 areas that we're here to
9 discuss today. I picked it because I had some
10 additional information for that well, including a dipole
11 sonic, and I wanted an example of a lay-down.

12 But when you look at the log, it shows the
13 Avalon section of the Bone Spring Formation. You get,
14 of course, your gamma ray curve on the left, and you
15 have your porosity logs on the right. But it
16 essentially shows the stratigraphic development of
17 porosity, which, for purposes of mapping on subsequent
18 exhibits, I used a cutoff of ten percent. But the
19 porosities typically range from very low to apparent log
20 porosities as high as 21 percent.

21 EXAMINER EZEANYIM: Did you say it is six
22 miles away?

23 THE WITNESS: About six miles away, yes,
24 sir.

25 EXAMINER EZEANYIM: One township away?

1 THE WITNESS: Yes, sir. This is the
2 Renegade well that was earlier mentioned in testimony.

3 EXAMINER EZEANYIM: Is this an Upper Shale
4 Bone Spring? Is this log run in the Upper Shale Bone
5 Spring?

6 THE WITNESS: It was run in -- was the
7 question being was it run --

8 EXAMINER EZEANYIM: Where was this run?

9 THE WITNESS: Oh. In Section 18 of --

10 EXAMINER EZEANYIM: Yeah, I know. What
11 pool? Was it run on that shale we're talking about?
12 You know, we're talking about the Upper Shale of the
13 Bone Spring. Is that what this log was run on that pool
14 that we're talking about?

15 Q. (BY MR. BRUCE) Was it in the Avalon Shale?

16 A. Yes. Yes. Yes.

17 Q. Do you have anything further on this exhibit at
18 this time, Mr. Scott?

19 A. Well, I'm just going to mention that this being
20 a shale formation and you do have some silt stones in
21 there, and the area stratographically changes. But in
22 this particular area, it's a relatively low porosity,
23 very low permeability reservoir, and so fractures are
24 essential for commercial drainage. Both hydraulically
25 induced fracturing is important, as well as the

1 occurrence of natural fractures. And we had a dipole
2 sonic for this log that showed a strong east-west
3 fracture component.

4 Q. Just based on that -- and we'll probably get
5 into a little more detail -- if there is an east-west --
6 Strawn east-west fracture, what does that tell you about
7 how you -- if you were recommending a well to a client,
8 what orientation would you recommend for the well unit?

9 A. Well, you have to ~~drill north-south wells~~ to
10 intersect the maximum number of naturally occurring
11 fractures that are trending east-west. If you drill an
12 east-west location, your east-west horizontal well is
13 going to parallel actual fractures. At most, you might
14 get lucky and get one set of fractures. It would not be
15 unusual to drill an east-west horizontal and not
16 encounter any natural fractures.

17 Q. And so from a geological perspective, that
18 would be technologically unsound, to drill east-west?

19 A. In this area, yes. And based on my review of
20 the well log data in this area, including the dipole
21 sonic in this particular well, as well as several dipole
22 sonic log data from several wells to the west, they all
23 trend east-west. All the fractures trend east-west.

24 Q. Now, you were listening to COG's geologist;
25 were you not?

1 A. Yes.

2 Q. And did you hear him state that the Renegade
3 well, which this log was taken from, was noncommercial?

4 A. Yes.

5 Q. Why, in your opinion, is that well
6 noncommercial?

7 A. Well, in my opinion, it's noncommercial because
8 you have adequate reservoir here if you encounter
9 natural fractures. And to drill this well east-west,
10 you're going to parallel those natural fractures. So in
11 my opinion, it was noncommercial because they didn't
12 drill the right orientation.

13 Q. What is Exhibit B?

14 A. Exhibit B is net isopach map of the Avalon
15 Shale, and we used a ten-percent cutoff. It's of the
16 gross Avalon section. It illustrates through Sections 5
17 and 8 that you have a fairly homogeneous thickness of
18 reservoir-quality rock.

19 There towards Section 3 -- moving east from
20 Sections 5 and 8, into Section 3, you get a little bit
21 of a thickening -- a localized thickening. But,
22 generally speaking, it's pretty much a homogeneous
23 thickness through Sections 5 and 8.

24 Q. But just looking at that, there is no -- based
25 on this plat, there is no technological impediment

1 drilling up into the north half-north half of Section 5?

2 A. No. Correct.

3 Q. What is Exhibit C?

4 A. Exhibit C is a structure map on the top of the
5 Bone Spring Lime, which is right above the Avalon Shale.
6 It has a contour interval of 50 feet, and it shows
7 regional dip in Sections 5 and 8 to a southeast
8 direction.

9 Q. Is structure important to drilling these wells
10 in this area?

11 A. Structure orientation of fracture is important,
12 but otherwise no, structure is not a factor.

13 Q. And, again, does your exhibit include proposed,
14 as well as drilled and completed wells?

15 A. Yes.

16 And I'd like to point out that I had -- the
17 4H well was drawn in as a proposed well, but then the 6H
18 and 7H were left off. I just would defer to the lease
19 map exhibit that Mr. Ball earlier provided.

20 Q. And finally, what is Exhibit D?

21 A. Exhibit D is a dipole sonic log for the Dean
22 well in Section 3.

23 Q. Just to the east?

24 A. Just to the east of Sections 5 and 8. So it's
25 about two miles or about a mile and a half east of

1 Sections 5 and 8. So it's Section 3 of 26 South, 34
2 East. ~~And this log shows a very pronounced east-west~~
3 ~~fracture -- natural fracture orientation.~~

4 Q. Go ahead.

5 A. I was going to say, you know, fractures are
6 important in the Avalon Shale, both the occurrence of
7 natural fractures, you know, both in terms of drilling a
8 north-south well so that you can intersect the maximum
9 amount of fractures. But then also your induced
10 fractures -- hydraulically induced fractures from
11 fracture stimulating, that's also very important, the
12 stimulation part of it.

13 What I was going to mention was, from a
14 review of the Yates microseismic data, it shows that the
15 hydraulically induced fractures parallel the natural
16 fractures here, which means the stress date has not
17 changed from when the natural fractures occurred until
18 now.

19 Q. And in your opinion, is that the reason that
20 COG and the other operators in this area are drilling
21 stand-up wells versus lay-down wells?

22 MR. FELDEWERT: Object to the form of the
23 question. I don't know how he can make an assumption on
24 why COG is drilling certain wells.

25 A. In my opinion, from talking --

1 EXAMINER EZEANYIM: Is that an objection?

2 MR. FELDEWERT: That's an objection, yeah.

3 MR. BRUCE: Let me rephrase the question.

4 EXAMINER BROOKS: That's what I was going
5 to suggest.

6 Q. (BY MR. BRUCE) Mr. Scott, if you were advising
7 a client, which orientation would you advise them to
8 drill wells in this area of the Bone Spring Avalon
9 wells?

10 A. I would be very adamant that you have to drill
11 north-south locations.

12 If you're faced with the option of drilling
13 an east-west location, my advice to any client would be
14 that there is a good probability that they're going to
15 drill a noncommercial well, and for several reasons.

16 One reason is, you're not going to
17 intersect the maximum number of natural fractures that
18 you would drilling a north-south location. Also, if you
19 drill an east-west location, when you pump your
20 hydraulic fracture treatments, which, you know, are
21 millions of pounds of sand and very capital intensive to
22 do as well, your purpose is to stimulate the reservoir.
23 Your frack treatments are going to parallel the natural
24 fractures. And this, again, is based on review of
25 microseismic data conducted by Yates Petroleum.

1 So if you drill an east-west location, you
2 are going to encounter at most maybe one natural
3 fracture or one set of natural fractures. And then when
4 you pump your frack treatment, it's going to parallel
5 and go into and alongside that natural fracture; as
6 opposed to a north-south well where you're going to hit
7 numerous fractures, and your multistage fractures are
8 going to go out perpendicular from the wellbore and
9 propagate into both naturally fractured reservoir and
10 unfractured reservoir that needs to be sand-frack
11 treated.

12 But if you do it in an east-west wellbore,
13 you're pretty much putting all your sand in the same
14 parallel fracture plane alongside the wellbore, parallel
15 to the wellbore.

16 Q. So you're not -- when the well starts
17 producing, you're not reaching the same amount of
18 reservoir, correct?

19 A. Yes. You're reaching a -- you would only reach
20 a fraction of the reservoir in terms of drainage that
21 you would be able to drain with a north-south location.

22 Q. And would it be your recommendation to Yates
23 Brothers and the other objecting parties here to drill a
24 lay-down in the north half-north half of Section 5?

25 A. You mean an east-west location?

1 Q. East-west.

2 A. I would adamantly advice them not to drill an
3 east-west location. They have to drill a north-south
4 location to prudently develop the reservoir.

5 Q. And just to emphasize this a little bit more,
6 do you have experience in frack systems?

7 A. Yes. At one point about 15 years ago, I
8 developed and patented a process for hydraulic
9 fracturing that I subsequently licensed to Halliburton
10 Energy Services while it was still patent pending. And
11 I have pumped hundreds of frack treatments in the
12 Permian Basin.

13 Q. So you have significant experience with
14 fracture treatments?

15 A. Yes.

16 Q. Were Exhibits A, B and C prepared by you?

17 A. Yes.

18 Q. And was Exhibit D compiled from Yates company
19 records?

20 A. Yes.

21 Q. In your opinion, is the denial of COG's
22 applications in the interest of conservation and the
23 prevention of waste?

24 A. The denial of their application? Could you be
25 more --

1 Q. Is the denial of their 280-acre units, plus the
2 lay-down Section 5 well, is the denial of those
3 applications in the interest of -- would that serve the
4 interest and protection of correlative rights of Yates
5 Brothers?

6 A. Yes, in my opinion. I believe that the acreage
7 represented there in the north half-north half -- I
8 guess excluding the northeast quarter. We're not
9 talking about that. But that acreage with only -- you
10 know, with only the option of an east-west location
11 would not be adequately drained. There would be
12 economic waste due to reserves that would not be
13 drained.

14 Q. And that would affect all mineral interest
15 owners?

16 A. Yes.

17 Q. Adversely affect?

18 A. Yes.

19 MR. BRUCE: Mr. Examiner, I'd move the
20 admission of Exhibits A, B, C and D.

21 EXAMINER EZEANYIM: Any objection?

22 MR. FELDEWERT: No, Mr. Examiner.

23 MR. BRUCE: And I pass the witness.

24 EXAMINER EZEANYIM: Exhibits A, B, C and D
25 will be admitted.

1 (Yates Brothers, et al. Exhibit Letters A,
2 B, C and D were offered and admitted into
3 evidence.)

4 EXAMINER EZEANYIM: Mr. Feldewert?

5 CROSS-EXAMINATION

6 BY MR. FELDEWERT:

7 Q. Mr. Scott, now, to my knowledge and I believe
8 to your knowledge, your clients aren't proposing any
9 development plan out here, correct?

10 A. I'm just here to represent the geologic end. I
11 would have to defer that to someone else.

12 Q. So they hired you to consider COG's development
13 plan in this area?

14 A. They hired me to evaluate the Avalon Shale as
15 it pertains to their acreage here.

16 Q. And make a recommendation to them about COG's
17 development plan?

18 A. They asked me to give them a geologic opinion
19 of whether or not an east-west location would be
20 prudent.

21 Q. If I understand your testimony, your
22 recommendation would be to them that they should not
23 participate in an east-west well? That would be your
24 recommendation?

25 A. That's correct.

1 Q. And they would have the option not to
2 participate in that well, correct?

3 A. I'm sorry?

4 Q. They would have the option not to participate
5 in COG's east-to-west well based on your recommendation?

6 A. I'm sorry, could you restate that question? I
7 don't really understand.

8 Q. That's all right.

9 You said you were concerned about waste.
10 Did you conduct a study to support -- did you conduct a
11 study that would determine the amount of waste that you
12 would consider would occur if they drilled an
13 east-to-west well versus a series of north-south wells?

14 A. I didn't do a study of that nature. I just
15 looked at the dipole sonic data that I had. I had that
16 information from three wells, one of which is provided.
17 And I compared that to -- well, from looking at the
18 east-west locations, it was kind of a no-brainer that an
19 east-west well is going to, at best, intersect one
20 natural fracture or one set of natural fractures,
21 possibly none.

22 Q. You mentioned that you had three dipole sonic
23 from three wells?

24 A. Yes.

25 Q. Okay. Where?

1 A. One was the Renegade well in Section 18.

2 Q. Okay.

3 A. One was the Dean well in Section 3. Another
4 one was a well further to the west, and it escapes my
5 memory what that well was.

6 Q. Do you remember how far west?

7 A. Approximately five, six miles to the west.

8 Q. And did you consider that, a dipole sonic from
9 that distance, to be relevant to your opinions?

10 A. Yes, because all three wells showed virtually
11 the same thing, a very strong east-west fracture trend
12 for clarity [sic].

13 Q. And you've only presented one of those dipole
14 sonic studies here today, correct?

15 A. Yes, and that's because it's proprietary data,
16 and getting Yates Petroleum to let me release that was
17 not easy. I actually have another one for the Dean
18 well -- I'm sorry -- for the Renegade well, but their
19 preference was that I give testimony based on my
20 observations and not put that data out to the public
21 domain.

22 Q. So you don't have any of that data available
23 for review today?

24 A. I actually have the -- I mean, it would be up
25 to Mr. Ball to give me authorization, but I actually

1 have the dipole sonic for the Renegade well as well.

2 But I don't know that I have authorization to show that.

3 Q. And you said that one of them was for a well to
4 the west?

5 A. Yes.

6 Q. You said five or six miles from what location?

7 A. From the Sections 5 and 8 acreage.

8 Q. You would consider that irrelevant?

9 A. Yes, because the Renegade well is six or eight
10 miles to the east. Of course, the Dean well is just a
11 mile or two to the east. And looking at it from --
12 regionally, just going from east-west, cutting across
13 the basin, it's all the same fracture. The trend is the
14 same.

15 Q. Across the basin?

16 A. From -- from the Renegade well west, covering
17 approximately an area of maybe 12 to 2 [sic] miles. I
18 see the exact same fracture trend. There is a little
19 variation of about 12 or 14 degrees.

20 Q. So would you consider a dipole sonic 20 miles
21 away to be relevant?

22 A. Depends on which direction.

23 Q. West.

24 A. I probably wouldn't go that far away.

25 I mean, I'm looking in the context of this

1 area that I've mapped and looking with respect to the
2 Avalon Shale being a homogeneous body. If we got out of
3 this particular stratigraphy, I would look at that
4 differently. Another factor is, if you have localized
5 structures that can change your stress dates, I mean,
6 you could have changes due to localized structure.

7 Q. So if you stayed within the Upper Avalon Shale
8 stratigraphy, you would consider a dipole sonic in that
9 area to be relevant?

10 A. For this area.

11 Q. Yeah. And that would include a well ten miles
12 away?

13 A. You know, within -- within the total length of
14 these -- of the dipole sonic wells is probably not in
15 excess of 15, 18 miles.

16 Q. And you would consider anything within that to
17 be relevant?

18 A. Yes, unless -- unless there is a localized
19 structure, an uplift or a fault, that alters that.

20 Q. I understand.

21 Now let's look at the only dipole sonic
22 that you brought here today, which is Exhibit D,
23 correct?

24 A. Yes.

25 Q. Now, this was in the well -- if I look at -- do

1 you have COG Exhibit Number 2 in front of you?

2 A. Is that in here (indicating)?

3 Q. That's right there (indicating).

4 I'm sorry. I messed up. Exhibit Number 1.

5 A. Yes.

6 Q. This particular -- this is the only dipole
7 sonic you brought here today. Which well does it relate
8 to on this?

9 A. The Dean well in Section 3.

10 Q. Do you know the depth of the Upper Avalon Shale
11 in this area?

12 A. Well, approximate. I don't know exactly
13 without looking at some log data. If I looked at your
14 cross section, I could tell you.

15 Q. What's that?

16 A. If I looked at your cross section, I could tell
17 you.

18 Q. Where the Avalon Shale is in Section 3?

19 A. Yes. I don't have the well log for Section 3.

20 Q. Why don't you take a look at Exhibit Number
21 14 -- no -- 15? I think it would be the third well from
22 the right -- from the left.

23 A. I cannot read this. It's not legible.

24 Q. Let me hand you a large map.

25 Mr. Scott, based on Exhibit Number 14, the

1 third well from the left --

2 A. Yes.

3 Q. -- of this cross section should be a well in
4 the same Section 3 as your dipole sonic. Okay?

5 A. Yes.

6 Q. Can you identify the depth of the Upper Avalon
7 Shale at this particular location?

8 A. Well, approximately 9,450.

9 Q. What's that?

10 A. 9,450, approximately.

11 Q. 9,450 to what?

12 A. Is your approximate depth of your Upper Avalon
13 Shale. I'm looking at your cross section.

14 Q. And it extends to what?

15 A. Well, approximately 9,800.

16 Q. 9,450 to what?

17 A. 9,800.

18 Q. That would be the Upper Avalon Shale in the
19 section where you have your dipole sonic?

20 A. Yeah. It's in the same well, yes.

21 Q. Same well?

22 A. Yes.

23 Q. As your dipole sonic?

24 A. Yes.

25 Q. Now, if I look at Exhibit Number 3 -- or

1 Exhibit D --

2 A. Uh-huh.

3 Q. -- what is the start depth according to the
4 bottom of that exhibit?

5 A. It is at 9,267.

6 Q. And what's the topping depth?

7 A. Up to 5,317.

8 Q. Does this appear to be logged in the Avalon
9 Shale based on your testimony?

10 A. Well, in this well, it's only a portion.
11 However --

12 Q. So most of that would be the Delaware; would it
13 not?

14 A. Yes, but in the -- I'll use the example of the
15 Renegade. It went from the Delaware all the way down
16 into the Pennsylvanian, and the fractures were all the
17 same. And, you know, this basin -- and this basin has
18 been subjected to stresses. Those stresses are the same
19 from greater depths up to shallower depths.

20 Q. But this dipole sonic that you present is not
21 for the Upper Avalon Shale. It would be for the
22 Delaware according to the depth?

23 A. Well, you're going to get into the -- you're
24 going to be up into the Upper Bone Spring.

25 Q. I'm talking about the Upper Avalon Shale, which

1 you testified would be at 9,450 to 9,800. This only
2 covers -- this dipole sonic only covers a depth from
3 5,317 to 9,267, correct?

4 A. That's correct.

5 Q. Now, when were you hired by your clients to do
6 your study?

7 A. Approximately seven or eight weeks ago.

8 Q. Seven or eight weeks ago?

9 A. I believe that's right. Approximately.

10 Q. And are you aware of whether there were
11 discussions and conversations to try to resolve this
12 matter with COG after you were hired?

13 A. Vaguely. I mainly focused on the technical. I
14 did not get involved in the land.

15 Q. I understand, but there were discussions after
16 you were hired, correct, to try to resolve this matter?

17 A. I had heard about a meeting, but that's -- I
18 have no knowledge.

19 Q. Can you explain why your clients did not
20 disclose any of this information that you've presented
21 today during the meetings that were conducted in a
22 good-faith effort to try to reach an agreement?

23 A. Because I didn't have it ready until yesterday.

24 Q. Were you here for the testimony on -- that was
25 presented by COG's geologist?

1 A. Yes, sir.

2 Q. And that started with Exhibit Number 13 in our
3 book. I'm sorry. Let me get that.

4 I'd like you to turn to Exhibit 13, please.

5 A. Yes, sir.

6 Q. It should be under tab 13.

7 A. Oh. Oh, yes, sir.

8 Q. Do you have any disagreement with this
9 structure map?

10 A. No.

11 Q. Okay. Turn to Exhibit Number 14 -- I'm
12 sorry -- Exhibit Number 15. Do you have any
13 disagreement with the cross-section analysis?

14 A. Well, I would use parameters that are a little
15 bit different. I wouldn't lean so much on gamma ray as
16 a parameter. There are a lot of different aspects that
17 can affect the gamma-ray radiation. I would tend to
18 lean more on the spinel density or the neutron porosity.

19 Q. But you don't have any disagreement with the
20 study as presented?

21 A. Well, I would use some different cutoffs. I
22 would definitely -- the study as presented doesn't
23 include any fracture orientation or, you know, dipole
24 log analysis or FMIs. I didn't hear any discussion of
25 microseismic. So, to me, that would make a more

1 comprehensive study. So I would disagree with it in
2 terms of what you didn't provide, but other than that,
3 no disagreement.

4 Q. Now, you mentioned at some point some
5 microseismic data?

6 A. Yes, sir.

7 Q. Where is that data?

8 A. It's proprietary information that Yates
9 Petroleum had. I was allowed to review it, but I was
10 not allowed to divulge it.

11 Q. Were you hired by Yates Petroleum?

12 A. No, sir. I was hired by Yates Holdings.

13 Q. Why would someone who is hired by Yates
14 Holdings be able to review proprietary information from
15 Yates Petroleum?

16 A. Because I called them up and begged them to let
17 me look at their information.

18 Q. And they let you look at it?

19 A. Yes.

20 Q. So if COG called them up and begged them to
21 look at that information, would they let COG look at it?

22 A. I don't know. If you had information to trade,
23 I'm sure -- I'm sure it works that way.

24 Q. But you're not an employee of Yates Petroleum?

25 A. No, sir.

1 Q. You were not hired by Yates Petroleum?

2 A. No, sir.

3 Q. And did you bring that microseismic data with
4 you here today?

5 A. No, sir. I did not have --

6 Q. Did you have to sign -- did you have to sign a
7 confidentiality agreement in order to review the
8 information from Yates Petroleum?

9 A. I promised to keep everything confidential. I
10 didn't sign an agreement.

11 Q. You promised verbally?

12 A. Yes, sir.

13 Q. And I'm sorry, did you identify where that
14 microseis- -- what area -- let me step back.

15 If I look at COG Exhibit Number 1, what
16 area is that microseismic data that you had access to
17 that no one else has access to?

18 A. I can tell you it was a Yates well, and I
19 don't -- I can't specifically say from this map.

20 Q. You can't tell us where it's located?

21 A. Not on this map.

22 Q. Can you tell us a section of township range?

23 A. I would -- I just -- I promised to keep that
24 confidential and not to discuss it.

25 Q. I understand you can't -- that you verbally

1 promised to keep the information confidential. My

2 question is where is the information?

3 A. It was in the Avalon Shale field area.

4 Q. Where in the Avalon Shale field area?

5 A. I looked at the data at the time. I saw that

6 it was proximal. I was not taking notes. I was not

7 writing anything down. I was just reviewing it, you

8 know, visually, so I can't tell you exactly where.

9 Q. So you don't know how far away it is from the
10 area that we're looking?

11 A. It was proximal. It satisfied me that it was
12 very proximal at the time I was looking at it.

13 Q. What do you consider proximal?

14 A. Within a ten-mile radius.

15 Q. If we were to request the data, how would we
16 describe it?

17 A. I'm sorry?

18 Q. If we were to request the data from Yates as
19 you did, how would we describe it?

20 A. Well, it's microseismic -- realtime
21 microseismic completion data.

22 Q. Of the Upper Avalon Shale?

23 A. It was the Avalon Shale. I'm not going to
24 distinguish whether it was upper or lower.

25 Q. You don't know whether it was upper or lower?

1 A. I don't know.

2 Q. That's all the questions I have.

3 EXAMINER EZEANYIM: Any recross?

4 MR. BRUCE: Nothing.

5 MS. CHAPPELLE: Nothing to add to that.

6 Inland Title also supports and has contributed to pay
7 for Mr. Scott.

8 EXAMINER EZEANYIM: Mr. Padilla?

9 MR. PADILLA: I don't have any questions.

10 EXAMINER BROOKS: No questions.

11 EXAMINER EZEANYIM: Thank you.

12 CROSS-EXAMINATION

13 BY EXAMINER EZEANYIM:

14 Q. I think I qualified you, but I forgot your
15 name. What is your name?

16 A. George Scott.

17 Q. George Scott?

18 A. Yes, sir.

19 Q. First of all, where did you get this
20 (indicating)? Can't you get the whole -- I mean, why
21 did you have to do it this way? Can't you get the
22 whole --

23 A. The whole log? Well, yes, sir. I actually had
24 this -- I had it faxed to me, from the Permian log
25 library in Roswell to my office in Cedar Crest, which is

1 near Albuquerque, and the place I went to print out,
2 their machine was broken, and so I improvised and just
3 put the prints together.

4 Q. If you needed to get the whole log, you would
5 have had to travel to Roswell or wherever and get that
6 log?

7 A. Yes, sir.

8 Q. Because these bits and pieces is not giving me
9 a lot of information, because there is that dichotomy
10 between that Upper Avalon Shale and porosity. So I need
11 to compare it with the logs that I have.

12 A. Yes, sir.

13 MR. BRUCE: If you would like a full copy,
14 Mr. Examiner --

15 EXAMINER EZEANYIM: What did you say?

16 MR. BRUCE: If you would like a complete
17 copy of the log --

18 EXAMINER EZEANYIM: Oh, yeah, a full copy
19 of this. Okay.

20 Q. (BY EXAMINER EZEANYIM) Let's go back to that
21 DSI. Did you run this DSI?

22 A. I'm sorry?

23 Q. Did you run this?

24 A. Yates -- Yates Petroleum ran it.

25 Q. They ran it?

1 A. Yes, sir.

2 Q. You're not the person who ran it, right?

3 A. I'm sorry?

4 Q. You are not the person who ran this micro sonic
5 [sic]?

6 A. No, sir. That's one of my things that I do a
7 lot of, but not on that well, sir.

8 Q. Not on this. Okay.

9 Now, would you agree with me, since you run
10 a lot of them, that the response in the shale is the
11 same response in the sand, right, when you run a DSI?

12 A. Well, if the hole -- if the hole is not rugose
13 or enlarged, you know, it reads well in either. The
14 shales tend to wash out more readily, so you get a worse
15 response in shales sometimes. But it really is a
16 function of how -- how nonrugose your hole diameter is.

17 Q. Are you saying that there is a difference -- is
18 that what you're saying?

19 A. I'm sorry?

20 Q. You say how rugose the hole is.

21 A. Well, that --

22 Q. I understand what you're saying.

23 A. Yeah. That affects your sonic reading, yes,
24 sir.

25 Q. But you expect the reading in sand -- clean

1 sand for DSI to be different in shale regardless of --

2 A. Yes, sir.

3 Q. -- whether -- whether the way your hole is
4 worked [sic] out or not.

5 A. Yes, sir.

6 Q. Because, you know, this is sand. You know how
7 the response comes out.

8 A. Uh-huh.

9 Q. Now, if we run the DSI in a different zone,
10 running in clean sand, but if you run it in a different
11 zone that contains shale, maybe the -- will be
12 different. And that's why I'm very, very suspicious of
13 when you get an offset differential all the time is not
14 direct. That's why engineers, we use inferential [sic]
15 data to be able to do something.

16 A. Yes, sir.

17 Q. And that's what we're doing here. This one was
18 done six miles away, right?

19 A. Yes, sir. Yes, sir. Oh, no. Sir, that one
20 was done in Section 3, which is a mile and a half away.

21 Q. A mile and a half away?

22 A. Yes, sir.

23 Q. Okay. Regardless, it may have been done in
24 sand because of the depth of the responses from 5,300 to
25 9,200, but I don't know the depths of 9,500. I don't

1 know.

2 A. It's slightly deeper, sir. Yes, sir, in that
3 well. But in other wells, I had it for the whole
4 section.

5 Q. Yeah. I'm trying to -- you didn't run this,
6 and then we got this -- anyway, you ran it on Section 3?

7 A. Yes, sir.

8 Q. Is that where you have -- what is that?

9 A. Yes, sir. That's the net isopach thickness.

10 Q. Okay. Very good.

11 Now, one of the questions I wanted to ask
12 is -- I know we have the DSI. But normally when you
13 want to get the facts or the residual, you need to run a
14 microseismic of it.

15 A. Yes, sir.

16 Q. And it is my understanding it was run, but it
17 is confidential information?

18 A. Yes, sir.

19 Q. Well, is it confidential? The Examiner would
20 like to see the microseismic.

21 A. Yes, sir.

22 Q. But we may have to, if it's really
23 confidential, go through the process. I think the Legal
24 Examiner knows how to go through the legal process of
25 getting it, because I want to really see --

1 A. Yes, sir.

2 Q. -- especially if it's run on the Upper Shale --
3 if it's run on the Upper Shale to see where the, you
4 know -- so where you have your fracture or fracture
5 orientations.

6 A. Uh-huh.

7 Q. And see how you can propagate your -- your
8 fracturing.

9 A. Yes, sir.

10 Q. You mentioned in your testimony your patent of
11 hydraulic fracturing.

12 A. Yes, sir.

13 Q. Can you tell me more about that?

14 A. It had to do with downhole mixing the
15 fracturing, that we pumped some of the fluid down
16 tubing, some of the fluid down casing, and then you
17 would viscosify [sic] your fluid downhole right above
18 the perforated reservoir. When we first did it, we did
19 a 12,000-foot Morrow well, and we pumped 50,000 pounds
20 of sand in. The pressure -- the treating pressures
21 never got above 4,000 psi, when typically you would be
22 at 8,000 psi. So we knocked about 4,000 pounds of
23 treating pressure off the expected pressure, which
24 shocked everybody, myself included.

25 So then we proceeded to do downhole mix

1 jobs. We downhole mixed oil and CO2. We downhole mixed
2 borate gel and CO2, which you can't do at the surface
3 because the CO2 cuts the borate gel, but mixing it
4 downhole, it worked. And we did a number of jobs. We
5 saw very small frack heights. You know, we were able to
6 contain the frack in very small zones and had really
7 successful results. Some of the downhole-mixed
8 processes that are done now evolved from that work we
9 did about 15 years ago.

10 It also gave us realtime control of sand
11 concentrations in the reservoir. You could immediately
12 cut your sand concentration -- if you started to have a
13 premature screen-out, for instance, you could cut your
14 sand concentration right at the reservoir by increasing
15 your clean fluid to your slurry and sand. So it had a
16 lot of realtime advantages.

17 Q. That was done with gel, not nitrogen, right?

18 A. I'm sorry?

19 Q. It was done with gel, not nitrogen?

20 A. We did nitrogen, CO2, gel. We mixed -- we
21 tried it all, and it all worked well.

22 Q. And you patented it to Halliburton?

23 A. Yes, sir. I patented and licensed to
24 Halliburton about 15 years ago.

25 Q. Are you a registered geologist?

1 A. I'm not registered in the state of New Mexico,
2 sir. I just always considered myself grandfathered in.
3 I've been doing it for 35 years.

4 Q. Are you telling me you registered yourself?

5 A. Well, no. I'm not -- I'm not a New Mexico
6 registered --

7 Q. What did you say?

8 A. I'm not a New Mexico registered --

9 Q. Okay. I'm sorry.

10 So let's go back to that microseismic. I
11 know your client, you know, says it's confidential. I
12 don't know how it works here.

13 EXAMINER EZEANYIM: Mr. Brooks, if we want
14 to see that, how do we do it?

15 EXAMINER BROOKS: We're going to have to
16 issue a subpoena to the party who has custody of that
17 data. The director has the authority to issue
18 subpoenas, so if you want to get that, we will have to
19 request the director to issue a subpoena.

20 EXAMINER EZEANYIM: First of all, let's
21 determine -- is it really confidential? Does anybody
22 here -- anybody here to answer that? Is that
23 information really confidential?

24 EXAMINER BROOKS: Well, it's not in the
25 possession of any of the parties.

1 MR. BRUCE: I don't represent Yates
2 Petroleum. I can't comment.

3 THE WITNESS: I mean, Yates Petroleum has
4 the data. Of course, I work for Yates Holdings.

5 That information, you know, you spend
6 significant -- I mean, it's way more expensive than
7 running logs, as you know, so it tends to be very
8 tightly held proprietary information. They rarely
9 publish. They don't like to disclose it. You spend a
10 small fortune to acquire that information.

11 EXAMINER EZEANYIM: Yes. Okay. I'm dying
12 to see that information, but since it's not -- the owner
13 of that information is not even a part of this.

14 THE WITNESS: Correct.

15 EXAMINER EZEANYIM: Okay. If they're not a
16 part of this, then I don't want to go there.

17 EXAMINER BROOKS: Yeah. Well, of course,
18 the OCC and the director of the OCD have statutory
19 authority to subpoena information from anyone.

20 EXAMINER EZEANYIM: From anyone? Even if
21 they're not a party?

22 EXAMINER BROOKS: Yes, even if they're not
23 a party to the case. Then, of course, that person can
24 request the data be held in confidence. And probably if
25 they can demonstrate that it's a trade secret, they

1 presumably have a statutory -- have a right to have it
2 held in confidential, but they would have to produce it.

3 EXAMINER EZEANYIM: Under the
4 circumstances, I think I've -- I've heard enough, and if
5 there is an engineer, I don't really want to go through
6 the headache of getting that information because it's
7 going to be a long process, especially if the party is
8 not part of these proceedings. If they are not a part
9 of these proceedings, even though we have the authority
10 to do it, I would hate to do it.

11 So to cut everybody's relief [sic], I'm not
12 going to go there. I think I have enough information to
13 make a determination here. It could have been very good
14 information to look at, but since, you know, you didn't
15 do that -- I thought you did it with Yates Brothers.
16 I'm still confused with Yates Brothers. And when I hear
17 Yates, I think of Yates Corporation.

18 Let me see if I have more questions for
19 you, Mr. Scott.

20 THE WITNESS: Yes, sir.

21 EXAMINER EZEANYIM: You may step down.

22 THE WITNESS: Thank you.

23 MR. BRUCE: Call Mr. Maxey to the stand.

24 JOHN MAXEY,

25 after having been previously sworn under oath, was

1 questioned and testified as follows:

2 DIRECT EXAMINATION

3 BY MR. BRUCE:

4 Q. Would you please state your name and city of
5 residence for the Examiner?

6 A. John Maxey, Roswell, New Mexico.

7 Q. What is your occupation?

8 A. I'm a petroleum engineer.

9 Q. What is your relationship to Yates Brothers and
10 the other opponents in these cases?

11 A. I'm a consulting petroleum engineer. I am
12 registered in New Mexico, and I was retained by them
13 about the same time as Mr. Scott, approximately six or
14 seven weeks ago.

15 Q. And have you reviewed the engineering matters
16 related to these applications?

17 A. Yes, I have.

18 Q. And were you previously accepted by the
19 Division as an expert petroleum engineer?

20 A. Yes, I have been.

21 MR. BRUCE: Mr. Examiner, I tender
22 Mr. Maxey as an expert petroleum engineer.

23 EXAMINER EZEANYIM: So qualified.

24 Q. (BY MR. BRUCE) Let's be pretty brief on all of
25 this, Mr. Maxey. But first of all, have you been in

1 charge of operating wells yourself?

2 A. Yes, I have.

3 Q. The issue came up about surface commingling.
4 Have you handed, as an operator, surface commingling
5 exceptions?

6 A. Yes, for the specific reason of not having to
7 build \$600,000 tank batteries per location.

8 Q. And can you obtain exceptions from the Oil
9 Conservation Division and the BLM with respect to
10 surface commingling?

11 A. Yes. And I wouldn't characterize it as an
12 exception, but there is a form you fill out. It's for
13 surface commingling, and you have to obtain your partner
14 approval and the people that are in the well and specify
15 what you're doing. And then what you do after you
16 obtain the surface commingling is, you meter -- go
17 through a testing process with the well to allocate.

18 Q. Or separate meter?

19 A. Or separate meter on gas. You can't -- you can
20 meter oil. A lot of times it's testing.

21 EXAMINER EZEANYIM: I want to correct that.
22 I want to correct what you just said, because our rules
23 say that, you know, depending on how -- the additional
24 part of this hearing. And I want to correct that so you
25 guys will understand. You just said oil depends on

1 testing. No. Our rules say depending on how much the
2 oil well is making, you're required to meter. It's not
3 only gas. You don't give the impression that it's only
4 gas you can meter. What I'm saying now does not have
5 any relation to the case.

6 THE WITNESS: So you're saying you cannot
7 perform a testing program?

8 EXAMINER EZEANYIM: No, no. You can do a
9 testing program for your IPs or anything, but if you are
10 planning for surface commingling, if that well is a
11 single well making 2,000 barrels a day, it won't allow
12 you to do the test to allocate production. You need to
13 meter it if it's oil. You mentioned, if I heard you
14 right, that we only meter the gas. No. We also meter
15 the oil, depending on how much the oil well is paying.

16 THE WITNESS: Okay. I'm sorry this came
17 up, but we may have a disagree- --

18 EXAMINER EZEANYIM: I wanted to correct
19 that impression because we get that all the time.

20 THE WITNESS: Well, are you correcting me
21 or --

22 EXAMINER EZEANYIM: No. I'm correcting
23 everybody.

24 THE WITNESS: Okay. Because I want to make
25 sure that I'm not -- you're implying that I'm wrong.

1 EXAMINER EZEANYIM: No, no. I'm not
2 implying that you're wrong.

3 THE WITNESS: Okay. Thank you. Thank you.
4 I appreciate that.

5 EXAMINER EZEANYIM: I said there is no
6 relation with the case at all, but I want to make --

7 THE WITNESS: I wanted to hear that.

8 EXAMINER EZEANYIM: If you are going to
9 apply for surface commingling and then if you have that
10 and you commingle -- that's why I wanted to correct it.
11 It's not that what you said is wrong, no.

12 THE WITNESS: Okay. Thank you for that.

13 Q. (BY MR. BRUCE) Mr. Maxey, would separately
14 metering oil and gas production and putting it into one
15 tank battery be vastly cheaper than having separate
16 production facilities for each well?

17 A. Yes. Yes.

18 Q. Second of all, regarding the well -- the first
19 well drilled out here -- I believe it's the 8H well,
20 correct?

21 A. That's correct.

22 Q. In the west half-west half of these sections?

23 A. Yes.

24 Q. The surface location is 990 feet from the south
25 line. Have you reviewed the drilling plan for that

1 well?

2 A. I reviewed both the drilling plan and the
3 actual survey after the drilling.

4 Q. Where is the first productive interval of that
5 well north of the surface location?

6 A. And this information all came from the OCD Web
7 site. The first productive location, the way it's
8 determined from their survey, is on the second proration
9 unit in from the surface location.

10 Q. So the southwest quarter-southwest quarter is
11 not producing?

12 A. Does not appear to be producing based on the
13 survey.

14 Q. So the first productive quarter-quarter section
15 would be the northwest quarter of the southwest quarter
16 of Section 8?

17 A. Northwest-south -- I've very bad with that.

18 Q. It would be the 40 acres north --

19 A. 40 acres north of the surface location is the
20 first producing interval.

21 (The court reporter requested the parties
22 speak one at a time.)

23 MR. FELDEWERT: Mr. Examiner, may I lodge
24 an objection? They're talking about the acreage in
25 Section 8, which is subject to a single federal lease.

1 I don't see how this has any bearing on the well
2 proposals that COG has before the Division with respect
3 to this north half-north half well, nor do I see how
4 this has any bearing with the request for the
5 nonstandard project areas for the 5H and the 6H wells.

6 MR. BRUCE: Let me ask the questions.

7 MR. FELDEWERT: What is the relevance?

8 MR. BRUCE: Well, then I can ask --

9 EXAMINER BROOKS: Yeah. You're asking a
10 question to --

11 MR. BRUCE: I can follow up.

12 EXAMINER BROOKS: -- establish relevance,
13 right?

14 MR. BRUCE: Yes, I am, sir.

15 EXAMINER BROOKS: Okay. I think that's
16 appropriate.

17 Q. (BY MR. BRUCE) So, Mr. Maxey, COG did not
18 include that final 40, that Yates Brothers, et al. 40 in
19 the northwest quarter of the northwest quarter of
20 Section 5, because there is no producing interval in
21 that wellbore, correct?

22 A. I'm not sure why they didn't do it, but I do
23 know that it wasn't included. It was amended with the
24 C-102 that was sent in after the horizontal rules
25 were --

1 Q. But COG has no objection to including the
2 southwest quarter of the southwest quarter of Section 8
3 which has no productive interval in it?

4 A. That was not amended. It's on the original
5 C-102.

6 EXAMINER EZEANYIM: Okay. Now, let me
7 clear something up, because I don't want it to die, and
8 I will forget it.

9 How do we know that the southwest quarter
10 of Section 8 is not productive? How do we know that?

11 THE WITNESS: I can address that. Their
12 survey -- Mr. Examiner, their top perf is 10,059 feet of
13 measured depth. Okay?

14 EXAMINER EZEANYIM: Where are you looking?

15 THE WITNESS: I'm looking at the survey
16 that's online, on the OCD Web site.

17 MR. BRUCE: It's not an exhibit.

18 THE WITNESS: It's not an exhibit. This
19 came up -- we heard this in their testimony today.

20 Their top perf is 10,059 measured depth.
21 They happen to have a survey point at 10,059 on their
22 actual survey. That point is at 75 degrees of
23 inclination. It is at a vertical section of 424 feet.
24 So you add 424 plus 990 from the south line, and you're
25 into the second 40-acre unit.

1 EXAMINER EZEANYIM: Oh.

2 THE WITNESS: Okay?

3 EXAMINER EZEANYIM: Okay. Is that how we
4 determine that that southwest-southwest is not
5 productive?

6 THE WITNESS: It's not productive, but it's
7 being held.

8 MR. FELDEWERT: Of Section 8?

9 THE WITNESS: I'm sorry?

10 MR. BRUCE: Of Section 8?

11 THE WITNESS: Yes, Section 8, that's right,
12 because it's the heel.

13 Q. (BY MR. BRUCE) Let's briefly run through your
14 exhibits, Mr. Maxey. What is Exhibit 1?

15 A. Exhibit 1 is a tabulation of the wells that
16 have been drilled in Sections 5 and 8, plus -- well, and
17 the wells permitted. Also, the east-west location, the
18 Gunner 5 Fee 1H. So those are just tabulated there.
19 I've given the permit date. I sorted on the approval
20 date of the permit. I've given the surface bottom-hole
21 location. I've given some information on the permit
22 plan with the permit and the plan that was submitted
23 with the permit.

24 The surface location is the bottom-hole
25 location, so distancewise it matched the vertical

1 section of the plans. That's good.

2 Then the actuals are over there for the
3 wells that have been drilled, the #8 and the #5. The #5
4 was drilled, completed in July. There was no survey
5 data yet -- excuse me -- not completed, but
6 five-and-a-half cases set. It's June or July. And
7 there was no survey yet on the OCD site, so I don't have
8 that data.

9 Q. This is just for informational purposes?

10 A. Yes, it's pretty much for informational
11 purposes.

12 Q. What is Exhibit 2?

13 A. Exhibit 2 is the actual production from the
14 Gunner Federal 8H updated through -- it's either June or
15 July. I think it may be June. This is the Gunner 8H
16 with projections that I made on actual production for
17 the purpose of running some economics.

18 Q. And what is Exhibit 3?

19 A. Exhibit 3 is a case that I built -- economic
20 case that I built based on the projections that are
21 given on the Clineburg [sic; phonetic]. This is a
22 case --

23 And, Mr. Examiner, if you want to follow me
24 on this. If they would have moved their surface
25 location 40 acres north and actually drilled the Yates

1 lease, this economic projection reflects what Yates --
2 Yates, et al., their cash flow would have been.

3 EXAMINER EZEANYIM: Where north?

4 THE WITNESS: Northwest-northwest of
5 Section 5.

6 EXAMINER EZEANYIM: If they had done what?

7 THE WITNESS: If Concho -- excuse me -- if
8 COG had actually drilled the same length of well,
9 treated it the same and done everything, but moved it 40
10 acres north so that they would have bottom-holed on the
11 Yates acreage, same exact well, but Yates would have
12 been included, these are the economics that reflect what
13 their cash flow would have been.

14 Q. (BY MR. BRUCE) And what does it show?

15 MR. FELDEWERT: Mr. Examiner, I'll object.
16 What is the relevance of this exhibit? I mean, we're
17 talking about the 8H well that's already been drilled
18 and permitted on a federal lease. As I understand it,
19 this is some hypothetical related to the 8H well. If it
20 had been drilled 40 acres to the north, what does that
21 have to do with this case?

22 MR. BRUCE: Well, Mr. Examiner, I think
23 we've already demonstrated that the proposed 7H well is
24 unorthodox to Yates' acreage, as is, I think, the 6H
25 well. And at the very least, this is showing what type

1 of reserves are out there and the effect of these
2 unorthodox locations.

3 EXAMINER BROOKS: Well, and I think that it
4 is -- has possible relevance, so I would advise the
5 Examiner to overrule the objection.

6 EXAMINER EZEANYIM: Go ahead.

7 A. The relevance of this is that we have presented
8 testimony that we do not believe an east-west
9 orientation is the way to develop the reservoir.
10 Concho-COG, all they said was, they don't have any
11 problem drilling east-west or north-south. However, I
12 wanted to bring up the fact that I performed a study
13 last year for a different client. Part of this acreage
14 was in the study area I reviewed, about 150 square
15 miles. Of 42 wells that were producing or permitted in
16 the Bone Spring on that study, two were east-west wells.
17 40 were north-south, so added to the relevance and
18 corroborated the study that Mr. Scott's done.

19 Q. (BY MR. BRUCE) And based on your study and
20 Mr. Scott's testimony, would you recommend to Yates
21 Brothers, et al. a lay-down unit in the north half-north
22 half of Section 5?

23 A. No.

24 Q. And getting back to the Exhibit 3, what type of
25 revenue loss are these interest owners suffering by not

1 being in a well unit?

2 A. With lease bonus -- the net cash -- the
3 undiscounted cash flow in this run is about 1.8 million;
4 with lease bonus, probably around \$2 million for 100
5 percent of the mineral owners in the northwest-
6 northwest.

7 Q. In your opinion, if an east-west well was
8 drilled in the north half-north half of Section 5, will
9 the same type of recovery be obtained?

10 A. No.

11 Q. Were Exhibits 1 through 3 prepared by you?

12 A. Yes.

13 Q. In your opinion, is the denial of COG's
14 applications necessary to protect the correlative rights
15 of Yates Brothers, et al.?

16 A. Yes.

17 MR. BRUCE: Mr. Examiner, I move the
18 admission of Exhibits 1 through 3.

19 EXAMINER EZEANYIM: Any objection?

20 MR. FELDEWERT: I think I lodged my
21 objection to really all three of these exhibits.

22 EXAMINER EZEANYIM: What?

23 MR. FELDEWERT: I had already objected to
24 this testimony which relates to all three of the
25 exhibits.

1 EXAMINER EZEANYIM: Are you objecting to
2 the admission of --

3 MR. FELDEWERT: Based on my prior
4 objection.

5 EXAMINER BROOKS: You overruled the prior
6 objection, though, so you can overrule this one, too.

7 EXAMINER EZEANYIM: Objection overruled.
8 Exhibits 1, 2 and 3 will be admitted.

9 Right? 1, 2 and 3?

10 MR. BRUCE: Yes, sir.

11 (Yates Brothers, et al. Exhibit Numbers 1,
12 2 and 3 were offered and admitted into
13 evidence.)

14 MR. BRUCE: And I pass the witness.

15 EXAMINER EZEANYIM: Mr. Feldewert?

16 CROSS-EXAMINATION

17 BY MR. FELDEWERT:

18 Q. Mr. Maxey, did you do a study of the estimated
19 reserves that will be recovered from COG's proposed well
20 in the north half-north half of Section 5?

21 A. No.

22 Q. You did not?

23 A. No.

24 Q. Do you have any study that you've done that you
25 can present here today to demonstrate that an

1 east-to-west well in this area will cause waste? .

2 A. As I stated, I was involved in a study that
3 corroborates Mr. Scott's evidence, and of the 42 wells
4 in the 150 approximate square miles that we evaluated
5 that were either producing or permitted, two of those
6 were east-west. And so it's very difficult --

7 Q. Let me ask you this.

8 MR. BRUCE: I object. Let him --

9 THE WITNESS: I'd like to answer the
10 question.

11 MR. BRUCE: Let the witness answer the
12 question.

13 (BY MR. FELDEWERT) Okay. And my question is: Do you
14 have the study here today?

15 A. So it's very difficult to put together a study
16 that will have east-west data in it. Even if you
17 attempt to normalize data -- to try to bring the data
18 into normalization, you're still -- you're looking at --
19 in my particular study, only five percent of the wells
20 were east-west. Ninety-five percent were north-south.

21 Q. So we just don't have the data?

22 A. You guys obviously don't have the data. I have
23 data. Unlike George, I signed a confidentially
24 agreement. I can discuss public data, but I can't
25 present that study.

1 Q. Okay. So you can't present anything here today
2 that would demonstrate that there is going to be waste
3 that would occur from a north half-north half well in
4 Section 5?

5 A. Other than my testimony.

6 Q. And you don't have your -- the study that you
7 did, you said, was of the Bone Spring?

8 A. Yes, Bone Spring --

9 Q. Bone Spring Formation?

10 A. It was of the Avalon.

11 Q. Was it of the Upper Avalon?

12 A. Both, Upper and Lower Avalon, yes.

13 Q. And we don't have either of those studies here
14 today?

15 A. No. But I'm under oath, so I thought I would
16 bring those up.

17 Q. Mr. Maxey, can you guarantee that the BLM would
18 provide an exception to their commingling rules for any
19 of these wells if they were extended into the north
20 half-north half of Section 5?

21 A. There is nothing that the OCD or BLM does that
22 I can guarantee.

23 MR. FELDEWERT: That's all the questions I
24 have.

25 EXAMINER EZEANYIM: You don't trust us,

1 right?

2 (Laughter.)

3 THE WITNESS: (Laughter.)

4 EXAMINER EZEANYIM: Okay. I'll keep that
5 in mind.

6 Any more questions?

7 EXAMINER BROOKS: No questions from me.

8 MR. BRUCE: I have no follow-up questions.

9 EXAMINER EZEANYIM: Very good. I'm glad I
10 have all that. I have sufficient answers. The most
11 important question is that you don't trust the OCD.

12 CROSS-EXAMINATION

13 BY EXAMINER EZEANYIM:

14 Q. Let me ask you this question, Mr. Maxey. This
15 is just for information only, right?

16 A. Pretty much. I gleaned that from OCD records.

17 Q. Okay. Now, this is the economic evaluation
18 from these projections? That's where you got that?

19 A. Yes. It was a performance projection, yes,
20 sir.

21 Q. And you used -- yeah?

22 A. (Indicating.)

23 Q. Okay. And this is drilling north-south wells,
24 right? This is drilling north-south wells?

25 A. This is the #8, which is a north-south well,

1 yes.

2 Q. And that's where you got this (indicating).

3 A. Yes. It's the Gunner #8.

4 Q. Yeah. Okay.

5 Now, so in this economic analysis, tell me
6 what you are trying to demonstrate.

7 A. I was trying to establish what would have
8 happened if a north-south well was drilled on the Yates
9 acreage. The well was permitted on that acreage. And
10 then all of a sudden, after the new rules came into
11 effect, there was -- after that point, there was a C-102
12 that was -- another one that was submitted by Concho
13 that -- that proration unit was gone, that 40-acre
14 northwest-northwest. So just from the standpoint of
15 that, I was trying to see what would happen if that
16 northwest-northwest was drilled.

17 I could have done it two ways,
18 Mr. Examiner. I could have left the surface location
19 where it was and looked at a two-mile lateral. But
20 Yates, et al. would have been reduced in their interest.
21 So I just left -- I just moved -- I said, Let's take a
22 model of the exact well and say, Okay, what if they
23 drilled from the northwest of the southwest and moved 40
24 acres? So that put the bottom of the location into
25 their acreage. That's what these economics are, is what

1 would their cash flow have been.

2 Q. If?

3 A. If this type of well would have been drilled --
4 the same exact well would have been drilled and it would
5 have been under their acreage.

6 Q. Okay. Now, you did this analysis on the 280
7 acres, right? 280, right? It's not on --

8 A. Yes.

9 Q. -- the 320?

10 A. No.

11 Q. So is there a reason why you want to do it on
12 320 to demonstrate that that's more economical than 280?
13 Why did you do that? If I were you, as a consultant, I
14 would like to demonstrate that.

15 A. Well, I don't have a problem with your point.
16 It's just that if I would have added another 40-acre
17 unit, I would have had incremental reserves upward, the
18 production upward.

19 Q. Oh, yeah.

20 A. Their proportionate interest would have been
21 reduced.

22 Q. Well, it doesn't really matter.

23 A. No. No, it does matter, because if you have to
24 up the reserves and reduce their interest, it's kind of
25 a wash.

1 Q. But I needed to see that data. They may not
2 want to do that, but I want to see if you have done it
3 on a two-mile horizontal.

4 A. Oh, you --

5 Q. Yeah. I wanted you to do it for a two-mile
6 horizontal. Then I compare it with the three-quarter-
7 mile horizontal. And I would have loved if you had done
8 something, an offset, that would have shown me the
9 economics on that north half-north half.

10 A. Well, the economics of the north half-north
11 half, what would you like me to base that on? Because
12 as I stated, in that six township study that I had done
13 last year, five percent of the wells were east-west.
14 And those may have been -- I didn't differentiate
15 between producing and permitted. There are very, very,
16 very few wells drilled east-west. So where is your data
17 going to come from?

18 We have presented testimony about fracture
19 orientation, dipole sonic, anisotropy in the formation,
20 and that study that I did last year now dovetails and
21 confirms that something is going on. All the operators
22 are drilling north-south, including COG. But now they
23 want to, as this situation developed -- I'm not
24 intimately involved. Now all of a sudden, they're
25 permitted an east-west well.

1 Q. Yes, I understand, Mr. Maxey. If I look at
2 this plat, there are some, few. Of course, you're
3 right. None of them are north-south.

4 A. Right.

5 Q. There are a few of them that are east-west.
6 And somebody told me they have confidential information
7 ten miles away from Sections 8 and 5. So if I have to
8 consider data, I can also consider data on a horizontal
9 that is east-west and then do some economic analysis on
10 it. I mean, that's both sides of maybe your argument.

11 A. I do not have access to the data that would
12 help; namely, the microseismic.

13 Q. Okay. That's --

14 A. I don't have that kind of access.

15 Q. But in most of this data -- I can see an
16 east-west well there. I can see one there, some of them
17 here on this map. So if I were you, I would have
18 used that one ten miles away and used it to do -- get
19 the production and do what you did here.

20 A. Those wells --

21 Q. And demonstrate that if we go there, we are
22 going to induce waste. But now I don't have that
23 information. I don't have the information on the
24 seismic orientation. I don't have information on the
25 economic analysis of the east-west wells. I have one on

1 the north-south, you know but, I don't have anything to
2 compare it with, you know, to the east-west.

3 Granted -- granted, you're right.

4 A. I don't have any -- there is no east --

5 Q. There are not a lot of east-west wells. I
6 agree.

7 A. There are virtually no east-west wells that are
8 very close at all proximal to this area, and I think
9 some of your questions about the testimony prior was,
10 Hey, where is the -- where is the sonic data coming
11 from? It's way out here; it's way over here. I
12 can't -- you know, I would have been grilled on, Well,
13 how does the reservoir change over -- you know, if you
14 have to go five miles to find one or two east-west
15 wells?

16 I think, suffice it to say, what we tried
17 to represent is, you definitely have an east-west
18 fracture orientation pattern here, and your economics
19 for an east-west well are going to be reduced from what
20 this case shows you. And in my opinion -- I don't have
21 technical details to back it up -- but they'll be
22 substantially reduced.

23 Q. That's my point.

24 A. Well, I understand your point, yes, sir.

25 Q. That's exactly my point. My point is what I'm

1 going to ask you now. Tell me why drilling east-west is
2 going to induce waste. I mean, even if you didn't do
3 it, why would it induce waste? As an engineer, how
4 would that induce waste?

5 A. Okay. East-west is a natural fracture
6 orientation. East-west is also, having been confirmed
7 with microseismic, the orientation of the stress pattern
8 right now if you induce a fracture.

9 So when you drill north-south, when you
10 propagate and induce frack, it's going to be at 90
11 degrees or roughly perpendicular to the wellbore. Okay?
12 You're also -- if the stress field is still the same,
13 you have the opportunity to open natural fracks and
14 propagate -- or prop them with sand. If the stress
15 field had changed, you may induce a fracture counter to
16 the orientation of the natural fractures, but that is
17 not the case here.

18 So if you drill east-west, you are going to
19 initiate a fracture that is longitudinal down the pipe,
20 and you're going to build a fracture that's
21 longitudinal. And if you don't want to intersect [sic]
22 any natural fractures that are also running east-west,
23 you've got a noncommercial well. Maybe you intersect
24 one or two. Then you've got a marginal well. But
25 that's why we're seeing north-south orientation of all

1 these wells.

2 And now -- I know the statutory -- what the
3 OCD needs to look out for is the protection of
4 correlative rights and to prevent waste. Right now, the
5 way the north-south wells are set up with COG and the
6 north-south wells with the wells to the north, that
7 leaves only an east-west orientation. There will be
8 waste, and there will be -- the correlative rights of
9 Yates will be impaired. I mean, it's just -- that's the
10 way our case -- we've presented our case. And the data
11 supports that.

12 All I heard from COG was, Oh, yeah, we can
13 drill east-west. They never permitted an east-west well
14 until they got into negotiations with Yates.

15 Q. So what you are saying is that there is a
16 driving factor which I'm not supposed to know. You said
17 it. What you just implied is that there is some
18 negotiation going on at the back door that I don't know
19 which may be driving this. You know, you just --

20 A. I'm sorry, I'm missing your point.

21 Q. The way you put it, my understanding is that
22 there is something going on between Yates Brothers --

23 A. That's correct.

24 Q. -- and COG that I don't know in their
25 negotiation. You know, I'm not supposed to know, but I

1 don't know what they are, right?

2 A. I don't know if I'm supposed to know. I just
3 know they've met with them. It's been provided in
4 testimony here that they've had these discussions, so
5 it's not a secret. But I do know -- all I know is, the
6 east-west well orientation popped up after those
7 negotiations.

8 I don't know what the implication is, but I
9 do know that COG has testified to the fact here today
10 that east-west is absolutely no different than
11 north-south, and that flies in the face of the data we
12 have presented and gone to lengths to obtain. And if
13 you look at orientation of wells in a six-township area
14 that are around there, the vast majority will be
15 north-south. We've gone to great lengths to get as much
16 data as we can. You know, George and I are consultants,
17 and we've worked very hard to get data that supports
18 this case, and we believe it does. And so we've got a
19 correlative rights and waste issue, and our clients have
20 been impaired.

21 Q. So you will agree that the well -- is it the
22 well #8H, right?

23 A. Yes.

24 Q. That's why you got all this (indicating),
25 right?

1 A. Yes.

2 Q. It's a good well, right?

3 A. Yes. COG presented testimony that it's
4 economic. I had economics to present to say the same
5 thing, but I threw those out because they agree. It's
6 an economic well. It's very economic.

7 Q. Yeah, it's economic, even if you don't drill a
8 two-mile well, right?

9 A. I'm sorry?

10 Q. It's economic even if it doesn't go two miles
11 in lateral length?

12 A. Yes. It's an economic well at a mile-and-
13 three-quarters.

14 Q. Okay. That's what I wanted to hear.

15 A. Actually, it's a mile and a half because the
16 first proration isn't producing.

17 Q. Oh, yeah. Those are just estimates?

18 A. No. It's in the survey.

19 Q. Oh, really?

20 A. Yes. It's in the survey that's on your Web
21 site. That is the actual measured depth, and that well
22 is not producing from the first proration unit, and it's
23 not producing from the last one either.

24 Q. From what? The last one?

25 A. It's not producing from the first one, and it's

1 not producing from the last one that was actually
2 permitted. The last proration unit was the
3 northwest-northwest of Section 5. That was permitted.

4 Q. I mean, we established it's not producing from
5 the unit that was the -- the parties. Are you saying
6 it's not producing from that last unit?

7 A. Well, what I'm saying is, how do you permit a
8 well in the northwest-northwest, and then after you
9 complete the well, you just change the proration unit?
10 Because if I own minerals and you permit a well on me
11 and I don't know anything about it, if I lease to
12 someone else and they try to drill a well, their permit
13 will be denied because those minerals are tied up in a
14 proration unit.

15 That's why I didn't understand your comment
16 earlier about, yeah, you can plan stuff and change it.
17 You can't. If you propose a well and you -- that permit
18 is approved with a certain proration unit, then that
19 proration unit is tied up if some other operator comes
20 in and tries to permit a well.

21 Q. I'm not saying change it. If you have an
22 interest there, you can do whatever you want. Are you
23 not allowed to do anything? Let's say an operator has
24 an interest in those 320 and the proposed 320, right?

25 A. Right.

1 Q. And then after a while, for some reason they
2 want to decrease it to 280. Why can't they do that in
3 the other 40 acres?

4 EXAMINER BROOKS: Excuse me a minute,
5 Mr. Ezeanyim. It seems to me that you and the witness
6 are going -- I mean, I'm not the presiding officer, but
7 you wanted to expedite this, and it seems to me you're
8 arguing about something theoretical that doesn't really
9 have anything to do with --

10 EXAMINER EZEANYIM: No, it doesn't. It
11 don't have any --

12 EXAMINER BROOKS: It's not an issue that
13 affects the case. Maybe it would be better if --

14 MR. FELDEWERT: I would have lodged an
15 objection, but it's the Examiner's question.

16 EXAMINER BROOKS: Well, you know --

17 EXAMINER EZEANYIM: Can you -- I'm not an
18 attorney. You can't say objection to me because I need
19 to ask questions.

20 MR. FELDEWERT: I'm not going to object to
21 your questions.

22 EXAMINER BROOKS: There is no rule of court
23 that I know of that says that a lawyer can't object to a
24 judge's question, but I very seldom heard a lawyer do
25 it.

1 (Laughter.)

2 Q. (BY EXAMINER EZEANYIM) Mr. Maxey, I don't have
3 any more questions for you.

4 A. Okay. Thank you.

5 EXAMINER EZEANYIM: We need to go on lunch
6 break here.

7 At this point, do we have any more
8 witnesses?

9 MR. BRUCE: I have no more witnesses.

10 EXAMINER EZEANYIM: Any more comments on
11 this case?

12 MR. FELDEWERT: Mr. Examiner, if you have
13 time, we could present an engineer. It will probably
14 take five minutes. We can offer some testimony.

15 EXAMINER BROOKS: It's up to you.

16 EXAMINER EZEANYIM: Yeah, I would need to.
17 Yeah, I would need to do that, but I'm going to limit it
18 to about ten minutes.

19 MR. FELDEWERT: That's fine.

20 EXAMINER EZEANYIM: Yeah, let's hear the
21 engineer. I mean, it's not fair to you if you want to
22 present something and I say no. So hold on. Ten
23 minutes you are done, and we get out of here.

24 Okay. You may step down.

25 MR. FELDEWERT: I think the witness needs

1 to be sworn.

2 EXAMINER BROOKS: Will you state your name,
3 please?

4 MR. MILLER: Jason Miller.

5 JASON MILLER,

6 after having been first duly sworn under oath, was
7 questioned and testified as follows:

8 DIRECT EXAMINATION

9 BY MR. FELDEWERT:

10 Q. Would you please state your full name, by whom
11 you are employed and in what capacity?

12 A. My name is Jason Miller. I'm employed with COG
13 Operating in Midland, Texas. I'm a reservoir engineer.

14 Q. Mr. Miller, have you had the opportunity to
15 previously testify before this Division?

16 A. No.

17 Q. Would you give us a review of your educational
18 background?

19 A. I have a bachelor's degree in geology from
20 Muskingum, M-U-S-K-I-N-G-U-M, University in Ohio. I
21 also have a bachelor's degree in petroleum engineering
22 from Missouri University of Science and Technology.

23 Q. And when did you receive your degree in
24 geology?

25 A. 2003.

1 Q. And when did you receive your degree in
2 petroleum engineering?

3 A. 2005.

4 Q. And what has been your work history since
5 receiving your degree in petroleum engineering?

6 A. In January of 2006, I worked with Kinder
7 Morgan. I worked with the Sack Rock Unit [sic;
8 phonetic] in Snyder, Texas. And I worked there for over
9 five-and-a-half years.

10 For the past year -- past two years, I've
11 worked with COG Operating as a reservoir engineer.

12 Q. And have your responsibilities with COG for the
13 last two years included the Permian Basin?

14 A. Yes.

15 Q. Are you a member of any professional
16 organizations?

17 A. I'm a member of the Society of Petroleum
18 Engineers.

19 Q. And how long have you been a member of that
20 organization?

21 A. Since 2003.

22 Q. Are you familiar with the applications
23 consolidated for hearing?

24 A. Yes.

25 Q. And are you familiar with the Upper Avalon

1 Shale which is at issue in these cases?

2 A. Yes, I am.

3 MR. FELDEWERT: Mr. Examiner, I would
4 tender Mr. Miller as an expert witness in petroleum
5 engineering matters.

6 EXAMINER EZEANYIM: So accepted.

7 Q. (BY MR. FELDEWERT) Would you turn to COG
8 Exhibit Number 1? Mr. Miller, are you familiar with the
9 Yates Renegade well down in Section 18, which is five
10 miles away from the area in question?

11 A. Yes, I am.

12 Q. Did you review the records on that well?

13 A. Yes. I reviewed the completion.

14 Q. And what did you observe?

15 A. I observed that that well uses considerably
16 less proppant than what COG uses. Typically, it was
17 about a quarter less than -- or it was only -- COG uses
18 considerably more proppant, almost four times more
19 proppant, in their hydraulic fracture stimulation.

20 Q. What else did you observe? Anything about the
21 fracture stages?

22 A. It was also considerably less. They used four
23 frack stages. COG uses, typically, 10 to 11 in their
24 Upper Avalon.

25 Q. So almost two-and-a-half times the frack --

1 A. Yes.

2 Q. And what you just talked about, COG using four
3 times more -- how do you say it?

4 A. Proppant.

5 Q. Proppant.

6 A. It's sand.

7 Q. Right.

8 -- and two-and-a-half times more fracture
9 stages, is that the drilling plan for the 1H well? Is
10 that what you utilized for the 1H?

11 A. The 1H uses a typical Upper Avalon stimulation,
12 which would usually be 4 million pounds. The Renegade
13 used 1 million pounds of proppant. So that's why I kind
14 of say that. It's four times more.

15 Q. What about your frack stages?

16 A. It would be 10 or 11.

17 Q. As opposed to what they did in the Renegade
18 well?

19 A. Which is four frack stages.

20 Q. All right. Now, that's a lay-down well.

21 Did you examine the well over in Section 3?

22 A. Yes, the Dean 2H.

23 Q. And now that's a stand-up well; is it not?

24 A. That is correct.

25 Q. And there's been suggestion here that -- the

1 opponents believe that somehow that well would intersect
2 with what they suggest was the natural frack orientation
3 in this area. Were you here for that testimony?

4 A. Yes, I was.

5 Q. I won't comment on the evidence that they
6 presented in support, but what was your observation
7 about the Dean well that is oriented as recommended by
8 the objecting parties? Is that a commercial well?

9 A. It is not. The Renegade is also not a
10 commercial well. As far as the stress orientation of
11 the Dean well, the TVD, the depth of the well tends to
12 be -- they ran -- it appears they ran the dipole sonic
13 in the Delaware section, not the Upper Avalon Shale.

14 Q. So we really don't know the frack orientation?

15 A. No, we do not, not in the Upper Avalon Shale.

16 Q. And what we do know is that both the lay-down
17 and the stand-up well drilled in this area was not
18 successful for whatever reason?

19 A. That's correct.

20 Q. Now, let me ask you something, Mr. Miller. Do
21 you believe that the company can drill a successful
22 lay-down horizontal well in the north half-north half of
23 Section 5?

24 A. Yes, I do.

25 Q. Do you have any reason to believe that waste

1 will occur in the north half-north half of Section 5 if
2 developed with a lay-down horizontal well?

3 A. No.

4 Q. Why is that?

5 A. I have run economics on the Gunner 8H, and that
6 is a commercial well. I believe if we use COG's
7 stimulation treatment, we will -- the 1H will be a
8 commercial well.

9 Q. And do you have any -- have you seen any
10 information today that was presented that indicates that
11 the fracture orientation in this area is east to west?

12 A. Not in the Upper Avalon Shale.

13 Q. Do you believe that a lay-down horizontal well
14 in the north half-north half of this section can
15 efficiently and effectively develop the reserves?

16 A. Yes, I do.

17 Q. In your opinion, will the granting of these
18 applications prevent waste and protect correlative
19 rights?

20 A. Yes.

21 MR. FELDEWERT: That concludes my
22 examination of this witness.

23 EXAMINER EZEANYIM: Mr. Bruce?

24 CROSS-EXAMINATION

25 BY MR. BRUCE:

1 Q. Mr. Miller, do you consider Yates Petroleum
2 Corporation a prudent operator?

3 MR. FELDEWERT: I'm going to object. I
4 don't think that has any bearing on this particular
5 matter.

6 EXAMINER BROOKS: Well, I guess -- I would
7 advise you to overrule the objection. It's marginal,
8 but -- if he has an opinion, he can state it. If he
9 doesn't, he can say so.

10 A. I have no opinion.

11 EXAMINER EZEANYIM: Okay. Rephrase your
12 question.

13 Q. (BY MR. BRUCE) Much to do about nothing,
14 Mr. Miller.

15 In the Dean well, did Yates use less sand
16 and water in its frack than COG used?

17 A. Yes.

18 Q. Do you know what a highway frack is,
19 Mr. Miller?

20 A. No, I'm not familiar with that.

21 MR. BRUCE: That's all I have.

22 EXAMINER EZEANYIM: Any more comments?

23 MR. FELDEWERT: No, Mr. Examiner.

24 EXAMINER BROOKS: No questions.

25 CROSS-EXAMINATION

1 BY EXAMINER EZEANYIM:

2 Q. Let's go back to your 8H that you used to
3 determined -- develop the -- how did you do that? You
4 said 8H, which is -- which is here.

5 A. Yes.

6 Q. How did you develop to determine where the 8H
7 would be?

8 A. I ratioed down the reserves to --

9 Q. What did you do?

10 A. I ratioed down the reserves so that it would be
11 a one-mile lateral. The Gunner 8H is a one-and-three-
12 quarter mile lateral. And you also have to ratio
13 down --

14 Q. Oh, you ratioed it down to one mile?

15 A. Yes.

16 Q. To determine what -- but they are different
17 orientations?

18 A. You don't know that.

19 Q. I mean, the other one is on the east-west. The
20 8H is north-south, right? We know that.

21 A. The Gunner 8H is a stand-up. The 1H is a
22 lay-down.

23 Q. You said stand-up?

24 A. Yes.

25 Q. You used it to determine the economic viability

1 of 1H?

2 A. Yes.

3 Q. That's what I'm asking you. How did you do
4 that? You ratioed it down?

5 A. Of the Gunner 8H.

6 Q. Yeah. How did you ratio it down? One mile to
7 one mile? Is that what you did? What did you do?

8 A. Yes. It would be a BOE per lateral foot.
9 Okay? So it's 85 -- the reserves I get from the Gunner
10 8H is 85 BOE per foot. So I applied that -- 1H would be
11 roughly 4,000 lateral foot. So I applied that number,
12 85 BOE per foot, to calculate my reserves.

13 Q. For the 1H?

14 A. Yes. And the drilling and completion costs
15 will be for a one-mile lateral. It's roughly 6.4
16 million. So it would be less than the 8H.

17 EXAMINER EZEANYIM: Anything further for
18 this witness?

19 MR. BRUCE: No, sir.

20 MR. FELDEWERT: No, Mr. Examiner.

21 EXAMINER BROOKS: Nothing.

22 EXAMINER EZEANYIM: At this point, let me
23 conclude this case. I can't get the seismic. That's
24 okay for me. It's almost 1:00.

25 MR. BRUCE: Mr. Examiner, I haven't

1 mentioned -- broached this to Mr. Feldewert, but, in
2 other words, to shorten the time here, I was wondering
3 if the parties could just submit proposed orders in a
4 few weeks' time rather than doing closing arguments.

5 EXAMINER EZEANYIM: Is that okay with you?

6 MR. FELDEWERT: We're at the will of
7 whatever the Division feels is more efficient.

8 EXAMINER EZEANYIM: Yes, I would like to
9 have that proposal. So if it's okay with you, if you
10 can submit it.

11 When is it convenient for you,
12 Mr. Feldewert?

13 Today is what?

14 EXAMINER BROOKS: September 19th.

15 EXAMINER EZEANYIM: 19th. Is three weeks
16 going to be okay?

17 MR. BRUCE: You will be out two weeks from
18 now, I believe.

19 EXAMINER EZEANYIM: Who?

20 MR. BRUCE: You will be out two weeks from
21 the office.

22 EXAMINER EZEANYIM: I will be.

23 MR. BRUCE: Three weeks is fine with me.

24 EXAMINER EZEANYIM: What is three weeks? I
25 don't have the calendar.

1 MR. BRUCE: October 10th.

2 EXAMINER BROOKS: 10th, I believe. Yeah.

3 I'm supposed to make a speech at a seminar on Friday
4 that week, which is October the 11th, so it's easy for
5 me to remember.

6 MR. BRUCE: If we could -- that's also a
7 Commission hearing date, if we could make it October
8 11th, the following day.

9 EXAMINER EZEANYIM: We can make it Monday,
10 October 12th -- 14th.

11 EXAMINER BROOKS: I believe that would be a
12 holiday.

13 EXAMINER EZEANYIM: Okay. October 15th.

14 EXAMINER BROOKS: Tuesday, October 15th.

15 EXAMINER EZEANYIM: October 15th.

16 Do you want to present some closing
17 statements? If not, give me a draft order.

18 MR. BRUCE: I would prefer just doing a
19 draft order.

20 EXAMINER EZEANYIM: Mr. Feldewert, do you
21 want a closing statement? I was just trying -- if you
22 want to do that, then -- I can't force you to do it.

23

24 CLOSING ARGUMENT

25 MR. FELDEWERT: Mr. Examiner, I think

1 the -- briefly, I think the question is -- you know, we
2 have -- there are no competing development proposals
3 here.

4 EXAMINER EZEANYIM: What?

5 MR. FELDEWERT: There are no competing
6 development proposals. We've submitted the proposals
7 which develop the federal acreage and the fee leases in
8 the north half-north half. That's the only thing before
9 you.

10 The question I think before you is whether
11 there is any evidence to indicate to the Division that
12 there is going to be waste such that you would force the
13 federal minerals to be commingled with the fee minerals.

14 EXAMINER EZEANYIM: That is the question?

15 MR. FELDEWERT: For wells that we submit,
16 we are really not going to develop the north half-north
17 half.

18 They haven't presented evidence of waste.
19 They keep saying -- they sit on the stand and say, Well,
20 the fracture orientation is east-west. They present no
21 evidence of that. Zero. Nothing. Okay?

22 We don't know the fracture orientation.
23 They admit it. There is not a lot of -- there is very
24 little data out there on lay-down wells. We're going to
25 get data from this well. This is going to give us a

1 pretty good indication. This is an area that is not
 2 well developed in the Avalon Shale. This presents an
 3 opportunity to see how a lay-down well will be. They
 4 have an option not to participate if they don't want to.
 5 But there is really no evidence here that there is going
 6 to be waste, and there is no evidence to support the
 7 idea that you have to force the federal lease to be
 8 commingled with the fee. So I think that's where you're
 9 at. That's where you're at.

10 EXAMINER EZEANYIM: Okay. Okay. Do you
 11 have anything to say?

12 CLOSING ARGUMENT

13 MR. BRUCE: Just one sentence. The only
 14 evidence is that it's an east-west fracture orientation,
 15 and, therefore, you need stand-up wells. Period.

16 EXAMINER EZEANYIM: Okay. Submit your
 17 draft orders on the 15th of October. Thank you very
 18 much.

19 At this point, Case Numbers 15035 and 15044
 20 will be taken under advisement, for the record.

21 (Case Numbers 15035 and 15044 conclude,
 22 12:39 p.m.)

23
 24 STATE OF NEW MEXICO
 25 COUNTY OF BERNALILLO

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the hearing of Case No. _____
 held by me on _____

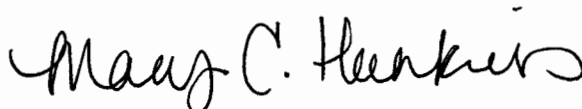
_____, Examiner
 Oil Conservation Division

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I, MARY C. HANKINS, New Mexico Certified Court Reporter No. 20, and Registered Professional Reporter, do hereby certify that I reported the foregoing proceedings in stenographic shorthand and that the foregoing pages are a true and correct transcript of those proceedings that were reduced to printed form by me to the best of my ability.

I FURTHER CERTIFY that the Reporter's Record of the proceedings truly and accurately reflects the exhibits, if any, offered by the respective parties.

I FURTHER CERTIFY that I am neither employed by nor related to any of the parties or attorneys in this case and that I have no interest in the final disposition of this case.



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