Page 1 STATE OF NEW MEXICO 1 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT 2 OIL CONSERVATION DIVISION 3 ORIGINAL IN THE MATTER OF THE HEARING CALLED 4 BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING: 5 CASE NOS: 14698 6 14703 14704 7 14705 8 APPLICATIONS OF CIMAREX ENERGY COMPANY FOR COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO, 9 AND 10 CASE NOS: 14725 11 14726 APPLICATIONS OF COG OPERATING LLC FOR A NON-STANDARD SPACING 12 AND PRORATION UNIT, A NON-STANDARD LOCATION AND $\overline{\gamma}$ COMPULSORY 13 POOLING, EDDY COUNTY, NEW MEXICO. N N) 14 REPORTER'S TRANSCRIPT OF PROCEEDINGS 15 EXAMINER HEARING 16 BEFORE: TERRY WARNELL, Technical Examiner 17 DAVID K. BROOKS, Legal Examiner 18 September 1, 2011 Santa Fe, New Mexico 19 This matter came on for hearing before the New Mexico Oil Conservation Division, TERRY WARNELL, Technical 20 Examiner, and DAVID K. BROOKS, Legal Examiner, on September 1, 2011, at the New Mexico Energy, Minerals and Natural 21 Resources Department, 1220 South St. Francis, Drive, Room 22 102, Santa Fe, New Mexico. 23 REPORTED BY: Irene Delgado, NM CCR 253. 24 Paul Baca Professional Court Reporters. 500 Fourth Street, NW, Suite 105. 25 Albuquerque, New Mexico 87102.

Page 2 1 APPEARANCES FOR CIMAREX ENERGY COMPANY: 2 JIM BRUCE 3 JAMES GARRETT BRUCE ATTORNEY AT LAW P.O. Box 1056 4 Santa Fe, NM 87504-1056 5 FOR COG OPERATING LLC: 6 MICHAEL FELDEWERT HOLLAND & HART LLPO 7 P.O. Box 2208 Santa Fe, NM 87504-2208 8 9 INDEX 10 CLOSING BY MR. BRUCE 170 11 CLOSING BY MR. FELDEWERT 175 12 13 EXHIBITS 14 CIMAREX EXHIBITS 1 THROUGH 6 ADMITTED 16 15 CIMAREX EXHIBITS 7 THROUGH 8 ADMITTED 53 16 CIMAREX EXHIBITS 9 THROUGH 17 ADMITTED 74 17 COG EXHIBITS 1 THROUGH 9 ADMITTED 105 18 COG EXHIBITS 10 THROUGH 14 ADMITTED 125 19 COG EXHIBITS 15 THROUGH 27 ADMITTED 154 20 21 22 23 24 25

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Page 5 EXAMINER WARNELL: With that, then, we've got --1 2 that leaves us six cases on the docket. We're going to hear 3 all six of the cases together. So those cases are Case 4 Number -- well, let's see here -- Case Number 14703, 704, 5 705, and 14698, are all four applications of Cimarex Energy Company for compulsory pooling, Eddy County, New Mexico. 6 7 And the other two cases, Case Number 14725 and 8 14726, those are two applications of COG Operating LLC for non-standard oil spacing and proration unit and non-standard 9 10 location and compulsory pooling, Eddy County, New Mexico. 11 Call for appearances. 12 MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe 13 representing Cimarex Energy Company, and I have three 14 witnesses. 15 EXAMINER WARNELL: Three witnesses, okay. 16 MR. FELDEWERT: Mr. Examiner, Michael Feldewert appearing on behalf of COG Operating LLC, and, in addition, 17 18 I'm appearing on behalf of Yates Petroleum Corporation, Myco Industries and Abo Petroleum Corporation. We have three 19 20 witnesses on behalf of COG Operating. Yates Petroleum, Myco 21 Industries, and Abo do not have witnesses here today, but 22 they have authorized me to state that they are in support of 23 the horizontal well program that COG is presenting here today. 24 25 EXAMINER WARNELL: Thank you. Would the witnesses

Page 6 please stand, state your names for the court reporter and 1 then she'll swear all of you. 2 MR. MIDKIFF: T.J. Midkiff. 3 4 MR. DIRKS: Stuart Dirks. 5 MR. REYES: Ramon Reyes. 6 MR. HAMMOND: Floyd Hammond. 7 MR. TRESNER: Hayden Tresner. 8 MS. RAMOUTAR: Meera Ramoutar. 9 (Witnesses collectively sworn.) 10 MR. BRUCE: I don't know if you want to do opening 11 statements or not. MR. FELDEWERT: I don't. I'm assuming -- I quess 12 13 there is one thing I do need to say. I noticed last night, in going through the record, that we had filed a prehearing 14 statement indicating that we thought they were asking for 15 unorthodox well locations. When I went back and read their 16 application, they are asking for orthodox well locations, I 17 believe, so I don't want there to be any confusion from my 18 19 prehearing statement. I had misread their application, so 20 they are not asking for unorthodox well locations. 21 EXAMINER WARNELL: When did you send a prehearing 22 statement? MR. FELDEWERT: Last week or this week. 23 Hold on a 24 second. 25 EXAMINER WARNELL: I'm sure it's --

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1		MR. FELDEWERT: It was sent August 25.
2		EXAMINER WARNELL: Okay. So no opening statements?
3		MR. BRUCE: I would maybe mention a few things in
4	closing,	but
5		EXAMINER WARNELL: Okay. Maybe you can call your
6	first wi	tness.
7		HAYDEN TRESNER
8		(Having been sworn, testified as follows:)
9		DIRECT EXAMINATION
10	BY MR. B	RUCE:
11	Q.	Please state your name and city of residence.
12	A.	Hayden Tresner, and I reside in Midland, Texas.
13	Q.	Who do you work for and in what capacity?
14	Α.	I work as a landman for Cimarex Energy Company.
15	Q.	Have you previously testified before the Division?
16	Α.	I have.
17	Q.	And were your credentials as an expert petroleum
18	landman	accepted as a matter of record?
19	Α.	Yes, they were.
20	Q.	Does your area of responsibility at Cimarex include
21	this por	tion of Eddy County?
22	A	Yes.
23	Q.	Are you familiar with the land matters involved in
24	these ca	ses?
25	Α.	I am.

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MR. BRUCE: Mr. Examiner, I tender Mr. Tresner as an
 expert petroleum landman.

3 EXAMINER WARNELL: Mr. Tresner is so recognized. 4 Q. Mr. Tresner, could you identify Exhibit 1 for the 5 Examiner and describe the lands involved in these cases?

A. Exhibit 1 is a land map with the southeast quarter of Section 6, Township 19 South, Range 26 East. Highlighted, that is where our two leases are. The Colorado lease covers the north half of the southeast quarter of the southwest of the southeast quarter. The Kansas lease covers the southeast quarter of the southeast quarter of that section.

We have the ownership set forth for each lease, which Cimarex Energy Co owns 50 percent. And then the other parties involved who have not signed their operating agreements are doing some sort of deal with us, with the exception of Oxy. They own five percent working interest for mineral interest in the Colorado lease, and they have signed their operating agreement.

19 Q. Okay. So in the Colorado lease it's 55 percent of 20 the interest is committed to the proposal?

21 A. That's correct.

Q. And in the Kansas lease, the 40-acre tract is half and half?

24 A. That's correct.

25

Q. Let's move on to Exhibit 2 A. Could you just

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identify the exhibit and describe the -- the wells involved
 in these cases.

A. The first Exhibit 2 A is a copy of our approved permit for the Colorado 6 Fee Number 1 Well, and it's located 2310 from the south line, 1650 from the east line, Section 6 19/26.

Exhibit 2 B is approved permit for the Colorado 6
Fee Number 2 Well, located 2310 from the south line, 330 from
the east line, Section 6, same township and range.

Exhibit 2 C is an approved permit for the Colorado 6 Fee Number 5 Well, 990 from the south line, 1650 from the east line, Section 6, the same township and range.

And finally Exhibit 2 D is the approved permit, the Kansas 6 Fee Number 2 Well. It says two on the permit; that should actually be one. That is located 330 from the south line, 990 from the east line of Section 6. So there's three wells permitted on the Colorado lease, 1, 2 and 5, and one well permitted on the Kansas lease.

Q. And in each of those do you seek to pool all depthsfrom the surface to the basin of the Yeso formation?

A. Yes, we do.

25

Q. Let's discuss your efforts to obtain the joinder of the parties, and could you run through Exhibits 3 A through D.

A. 3 A is a copy of the well proposal and the AFE that

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Page 10 1 we sent to the other mineral owners or working interest owners for the Colorado 6 Number 1 Well. It sets forth the 2 location, the spacing unit, some other well information, and 3 4 we also had included in this package a copy of the operating 5 agreement. So 3 A is for the Colorado 6 Number 1. 3 B 6 contains the same information for the Colorado 6 Fee Number 3 C, same information for the Colorado 6 Fee Number 5 7 2. well. 8 9 Ο. Hold on there just a minute. With respect to the 10 Colorado wells, what -- what interest owners, other than

11 Cimarex and Oxy, which is joined in those wells, which 12 interest owners are these letters addressed to?

A. We sent proposals to Yates Petroleum Corporation,Abo Petroleum Corporation, Myco and Oxy.

15 Q. Okay. And then finally Exhibit 3 D?

A. 3 D is the proposal for the Kansas 6 Fee Number 1 Well. It was proposed to David H. -- David Arrington Oil and Gas. Same information, the well information and the joint operating agreement was forwarded, along with a copy of the AFE that sets forth the estimated well costs.

Q. Now, this was in April that you sent to Arrington?A. That's correct.

Q. Later on did you send letters to certain other
parties with respect to the Kansas --

25

A. Yes. We learned that COG had picked up a couple of

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Page 11 the fee leases, so we sent them a well proposal as well. 1 Q. There is a letter in here to the estate of Don 2 3 Bradshaw. Is it your understanding that Concho has obtained leases from the interest owners of that estate? 4 5 Α. That's my understanding. The estate, we were 6 showing them as a mineral owner that had not signed an oil 7 and gas lease, so we sent them a well proposal as well. So at the time you sent your original proposals, COG 8 Q. did not own interest in these well units? 9 That is correct. 10 Α. What is your understanding as to when they acquired 11 Q. the interest in these well units? 12 Α. I don't have the actual dates of the leases that 13 14 Concho acquired, but, I mean, it was -- it was sometime after the original --15 16 0. Is it your understanding that Concho entered into 17 some type of agreement with Yates Petroleum --Α. Yes. 18 19 -- regarding development --0. 20 Α. Yes. 21 Q. -- of this acreage? 22 Α. Yes. And to the best of your recollection, was that 23 Q. 24 sometime in June? 25 Section 6 is covered under the development Α. Yes.

Page 12 agreement that Concho and Yates have entered into. 1 There's 2 been a memorandum filed of record. 3 0. Okay. When did Cimarex first start looking at this particular area in this -- this township and the adjoining 4 5 section? Toward the end of the summer of 2010. 6 Α. 7 Q. 2010. And what type of work was done? Did you have 8 landmen go out, independent landmen go out and --9 Α. Yeah. They did lease checks for us and ownership 10 reports and so forth. And did you also start negotiating with these --11 Q. 12 this is all fee land, correct? Α. 13 Yes. Did you start negotiating with the surface owner on 14 Q. 15 a surface lease agreement? 16 Yes, we did. Α. 17 Q. And is Exhibit 4 the surface lease agreement between 18 Cimarex -- a copy of the surface lease agreement between 19 Cimarex and this surface owner? 20 The surface agreement that we have entered Α. Yeah. 21 into with Caroline and Charles Russell, and that covers the 22 southeast quarter of Section 6, 19/26. 23 Q. In your opinion, have you made a good-faith effort to obtain the voluntary joinder of interest owners in these 24 four wells? 25

Page 13 Α. Yes, we have. 1 Looking back at your proposal letters or AFEs 2 Ο. 3 contained in those -- contained in those proposals letters -and the AFEs are pretty similar -- would you go to 3 A and 4 5 turn to that AFE for the Colorado Number 1 and describe the 6 general well costs for the wells in this area, in this 7 prospect. 8 Α. Yeah. The dry hole cost we have estimated at 9 \$443,600; completion cost, 933,500; for a total completed well cost of \$1,377,100. 10 And it looks like all of the well costs --11 Q. 12 Α. They are identical. 13 ο. -- all the AFEs are more or less the same for these four wells? 14 15 Α. That's correct. And are these well costs fair and reasonable and 16 0. 17 comparable to the cost of other vertical Yeso wells drilled in this area of Eddy County? 18 19 Α. Yes. 20 Q. Do you have a recommendation as to overhead rates to charge for these wells? 21 22 Fixed rates to be established at \$4500 for Α. Yes. 23 drilling and \$450 for producing. Okay. And do you request that Cimarex be appointed 24 Q. operators of these wells? 25

A. Yes.

1

6

Q. In the event Cimarex's applications are granted and an interest owner goes non-consent in the wells, do you request the maximum cost plus 200 percent penalty?

5 A. Yes, we would.

Q. Finally, what is Exhibit 5?

Exhibit 5 are the well proposals that we received 7 Α. from Concho, dated July 29 of this year. And it's for the 8 9 Arabian 6 Fee Number 8H. The spacing unit for this proposed well would -- would be the east half of the east half of 10 Section 6, 19/26. And there is also a well proposal for the 11 12 Arabian 6 Fee 7H. The spacing unit dedicated to this 13 proposed well would be the west half of the east half of Section 6, 19/26. 14

Q. So COG has proposed horizontal wells which include
the southeast quarter acreage that you are here for today?
A. Yes. Half of each of these proposed well units

18 include the southeast quarter.

19 Q. And again, your wells are vertical wells?20 A. That's correct.

Q. Will subsequent witnesses discuss why Cimarex desires to drill vertical wells rather than horizontal wells in this area?

24 A. Yes.

25

EXAMINER BROOKS: Excuse me. I think you said

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Page 15 Cimarex prefers. Did you mean COG? 1 2 MR. BRUCE: Right. Cimarex prefers to drill vertical wells in this area. 3 4 EXAMINER BROOKS: Okay. MR. BRUCE: Mr. Examiner, I'm handing you the notice 5 of affidavit prepared by me. The parties did receive actual 6 7 notice. Mr. Examiner, one thing, I believe, on the Colorado 8 wells, Myco, Yates and Oxy Y1 Company were notified, and on 9 the Kansas well, David H. Arrington was notified. They all received actual notice. 10 11 We did not notify, in writing, COG. When this matter was continued, I believe there was an agreement that 12 13 we discussed, Mr. Feldewert and I, that since they already had notice of the application and had entered appearances, 14 that we did not need to follow up with a written notice 15 letter to COG. 16 17 MR. FELDEWERT: But we still had the issue of the 18 fact that we did not receive notice at the time that they 19 filed the pooling application. 20 EXAMINER BROOKS: Okay. But they have entered an 21 appearance in the case? 22 MR. FELDEWERT: They have entered an appearance, but 23 they obviously were aware of COG's interest, but they didn't provide a notice, that we have. 24 25 EXAMINER BROOKS: Well, generally in any

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Page 16 proceedings, entry of appearance constitutes a waiver of lack 1 2 of notice of a proceeding. (By Mr. Bruce) Anyway, Mr. Tresner, were Exhibits 1 3 0. 4 through 6 prepared by you or under your supervision or 5 compiled from company records? 6 Α. Yes. 7 And, in your opinion, is the granting of Cimarex's Ο. 8 applications in the interest of conservation and the prevention of waste? 9 Α. Yes, it is. 10 11 MR. BRUCE: Mr. Examiner, I move the admission of 12 Exhibits 1 through 6. EXAMINER WARNELL: Mr. Feldewert? 13 14 MR. FELDEWERT: No objection. 15 EXAMINER WARNELL: Exhibits 1 through 6 admitted. 16 (Exhibits 1 through 6 admitted.) 17 MR. BRUCE: Pass the witness. 18 CROSS-EXAMINATION 19 BY MR. FELDEWERT: 20 Mr. Tresner, I note from Exhibit -- one of your Q. Exhibits 3, at some point you gave notice to COG of your well 21 22 proposal? 23 Α. We did. 24 Q. Do you recall when that was? 25 Α. We did propose the Kansas 6 Fee Number 1 Well to

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Page 17 Concho once we learned they acquired leases in that quarter 1 2 quarter section. Your Kansas well? 3 Q. Or, excuse me, the Kansas well. 4 Α. Did you provide them any notice of -- or any well 5 Ο. proposals for your Colorado? 6 7 Α. No, we did not. 8 Ο. Now, when did you provide them notice of your Kansas 9 well? On the 20th of -- or 4-20-2011. 10 Α. 4-20-2011? 11 Q. 12 Α. Yes. 13 Q. Okay. Is that at the same time that you provided notice to other parties for the Kansas well -- or well 14 proposals to the other parties for the Kansas well? Which 15 16 exhibit are you looking at? Wait, wait, wait. No, excuse me, we did not propose 17 Α. 18 the Kansas well to COG until August 11 --19 Q. August 11? 20 Α. -- 2011. That's the -- that's the date of the 21 letter, the well proposal letter. 22 0. Okay. And then with respect to the Colorado wells, you did not provide a well proposal? 23 24 Α. No. No. 25 Q. And you filed your pooling application for all four

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Page 18 1 wells in July? 2 Α. I believe that's correct. So prior to filing your pooling applications, you 3 ο. had not proposed any wells to COG. Correct? 4 That's correct. 5 Α. And at the time of the filing of your pooling 6 Ο. 7 applications, you failed to give notice of your pooling 8 applications to COG? No, I don't believe that's correct. 9 Α. Q. They were -- they are not included on your notice of 10 affidavit. Correct? 11 At the time that we filed the applications to force Α. 12 13 pool, Concho was not a record title owner on either lease. Q. So it's your testimony that when you filed your 14 pooling applications, Concho's interest was not of record? 15 16 Α. I believe the leases that Concho has acquired on our Kansas lease were done here in the past few weeks, possibly a 17 18 month. And then the -- the memorandum of the agreement they reached with Yates was filed of record June 6. 19 So a month before you filed your pooling 20 Q. 21 application? You filed your pooling applications in July? That's correct. That's correct. 22 Α. 23 So Concho's interest was of record at least a month Q. at that point? 24 25 Α. That's correct. And we were instructed by the OCD

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Page 19 1 that we did not need to notify or send well proposals to COG on the Colorado wells. 2 3 Ο. Who told you that at the OCD? 4 MR. BRUCE: Mr. Examiner, this gets back to what I 5 just mentioned. We were on the telephone with Mr. Feldewert, 6 he asked for a continuance, we objected, and the continuance 7 was granted. And I said, "If that's the case, then do we need to 8 send -- do we need to send written notice of the hearing to 9 COG or send them well proposals?" 10 And Mr. Feldewert agreed that we didn't need to do 11 12 so. I object to this line of questioning. They are not -they were fully aware of what was going on. 13 14 MR. FELDEWERT: We certainly were by the time we filed a motion for continuance. I'm talking about the period 15 of time when you filed your pooling applications. That's my 16 focus. 17 18 MR. BRUCE: For the record, the pooling application 19 was filed by me on July 5. 20 MR. FELDEWERT: Which one? 21 MR. BRUCE: The Colorado. 22 I have July 13. MR. FELDEWERT: 23 MR. BRUCE: Is that the date of the notice letter? 24 MR. FELDEWERT: I have -- well, when was the notice letter? 25

Page 20 The Kansas letter -- the Kansas pooling 1 MR. BRUCE: application was filed June 21, 2011. That's in the 2 Division's records. And that was before COG owned an 3 interest in the Kansas well. I can show the letter. 4 MR. FELDEWERT: That's fine. I'm talking about the 5 Colorado wells. 6 7 MR. BRUCE: Then the Colorado wells, again, it's in the Division's records, each application was filed July 5. 8 Ο. (By Mr. Feldewert) Okay. So at the time you filed 9 10 your pooling application, Mr. Tresner, on July 5, 2011, COG's interest was of record. Correct? 11 12 Α. The memorandum of development agreement was recorded prior to that. 13 And then if I look at Exhibit A, at the time that 14 Q. you filed your notice of the pooling applications or provided 15 notice of the pooling applications to various parties on July 16 13, COG's interest was of record for over a month. Correct? 17 That's correct. Α. 18 Okay. 19 Ο. We don't have the records checked on a daily 20 Α. 21 basis. But you didn't check your records prior to filing 22 Q. the pooling applications or prior to sending notice of the 23 pooling applications, did you? 24 25 Α. No.

1	Q.	Page 21 Secondly, did you you sent out your well proposal
2		as I understand, correct?
3	A.	Yes.
4	Q.	In April?
5	Α.	April 20, yes, for the Colorado wells.
6	Q.	Okay. Other than sending out your well proposal
7	letters :	in April, did you do any did you undertake any
8	efforts (to contact any of the interest owners?
9	A.	I believe so, yes.
10	Q.	You believe so?
11	Α.	Yes, I believe so.
12	Q.	Okay.
13	A.	In fact, I have had multiple conversations with
14	Chuck Mo:	ran at Yates Petroleum.
15	Q.	Multiple conversations?
16	Α.	Yes.
17	Q.	When did those occur?
18	Α.	I don't have the specific dates, but since these
19	wells	since these wells were proposed, since Yates
20	received	the proposals, I have had multiple phone
21	conversat	tions with Chuck Moran.
22	Q.	At Yates?
23	Α.	At Yates Petroleum.
24	Q.	But you can't tell us when?
25	Α.	No.

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	Q. Okay. Anyone else?	
	A. I believe that's it.	
	Q. Now, did but you	can't when those
4	conversations took place, was	it before or after you filed
	your pooling applications?	
6	A. I don't recall. It	was sometime after April 20,
	2011.	
8	Q. But you can't tell u	s if it was before you filed
9	your pooling applications?	
10	A. No.	
1:	Q. Or you can't tell us	
12	A. I didn't document it	•
13	Q. So you can't articul	ate when those conversations
14	took place?	
15	A. No. It was very cle	ar that Yates was going to
16	support Concho's horizontal d	rilling program in this area.
17	They had no intention of part	icipating in our proposal.
18	Q. Did he tell you abou	t Concho owning an interest?
19	A. I believe at some po	int in time he did.
20	Q. Okay. So since you	provided them notice of your
21	pooling applications, you mus	t have had those conversations
22	after you provided that notic	e. Correct?
23	A. We were instructed t	hat it was not required that we
24	forward the proposal that we	originally sent to Yates to COG,
25	so we didn't do it.	
1		

Page 23 Q. 1 Now, did you review Cimarex's response to the 2 opposition to the motion to continue that was filed on July 3 31 prior to the filing of that motion -- or prior to the 4 filing of that response? 5 Α. I don't recall. Q. You don't recall? 6 I don't recall. 7 Α. 8 MR. FELDEWERT: May I approach the witness? 9 EXAMINER BROOKS: You may. MR. FELDEWERT: This is of record. 10 11 Q. Mr. Tresner, I'm going to hand you a copy of the 12 response that was filed in opposition to Concho's motion to 13 continue. It was filed on July 31. Jim, do you have a copy? MR. BRUCE: 14 Yes. 15 EXAMINER WARNELL: May I approach? 16 EXAMINER BROOKS: I should let the presiding Examiner respond. 17 18 EXAMINER WARNELL: You are doing fine, David. You 19 are hitting on all 12 cylinders. 20 Q. (By Mr. Feldewert) Do you recall, Mr. Tresner, 21 whether you looked at this prior to the filing of this response? 22 23 Α. I don't recall. 24 Do you recall whether anyone from your company Q. 25 examined these statements made in here prior to the filing of

Page 24

1 this response?

2

9

A. I don't recall.

Q. Okay. Would you turn to Paragraph 5 for me, please.
A. Yes.

Q. It says, "After receiving no response on the well proposals for two months, Cimarex filed the pooling applications and timely notified the pertinent working interest owners of the application." Do you see that?

A. Yes.

Q. According to this statement you sent out your well proposals, and then you waited for people to contact you. Correct?

MR. BRUCE: I would object to the characterization.After all, I'm the one that put that language in there.

EXAMINER BROOKS: Well, the witness can testify to what he did. If the characterization is incorrect, he can correct it. I will overrule.

A. I did have a conversation with Chuck Moran about the Colorado and possibly the Kansas well proposals, as I did with Oxy.

Q. Okay. That would have been after you filed your pooling application because you weren't aware of COG's interest, correct?

A. I don't recall if it was before or after.Q. If it was before and you found out about COG's

Page 25 1 interest, you would have notified them of your pooling application, wouldn't you? 2 3 Α. Not necessarily, no. 4 Q. Okay. Did you contact, once you learned of COG's 5 interest, did you contact them? Stuart Dirks contacted me and sent me an e-mail that 6 Α. 7 said -- letting me know that they -- they had made a deal 8 with Yates and that they had an interest, and the -- the 9 leases were Yates owned an interest. 10 . Q. He contacted you? Α. Yes. 11 12 Ο. Did you contact them to try to reach any kind of voluntary agreement? 13 14 Α. No. 15 MR. FELDEWERT: Mr. Examiner, I would move to 16 dismiss their pooling applications on a couple of grounds. One, they clearly failed to notify all the parties of record 17 of their pooling applications prior to the filing of their --18 19 of their application. And, secondly, they failed to undertake reasonable efforts to reach an agreement. 20 You 21 can't just send out your letter and then sit back and wait 22 for parties to contact you. I mean, there is an obligation 23 to attempt to reach an agreement. They knew Concho's interest was of record at the time they filed their pooling 24 application, yet they did not provide them notice of the 25

Page 26 pooling application. But if they had talked to Yates prior 1 to filing the pooling application, they would have known of 2 3 COG's interest and should have notified them. So it appears they did not contact Yates, based on his testimony, or anyone 4 5 else prior to the filing of the pooling application. So I 6 don't think they have met the requirements, Mr. Examiner, for 7 having the pooling application hear by the Division today.

8 EXAMINER BROOKS: Well, I would advise the Examiner to overrule that motion, the motion to dismiss, insofar as it 9 addresses the failure to notice, because it's not shown that 10 any party -- I don't think COG has standing to raise that 11 12 motion. They have not -- they have appeared in the case, and not as a special appearance, but as a general appearance, and 13 14 I would suggest -- I would advise the Examiner to carry the motion to dismiss based on the failure to make a good-faith 15 16 effort to defer it until we have heard all the evidence.

17 EXAMINER WARNELL: I agree with Mr. Brooks.

18 MR. FELDEWERT: I understand.

19 Q. (By Mr. Feldewert) Mr. Tresner, would you take a 20 look at your Exhibit Number 1 for me, please. This is your 21 land map?

22 A. Yes.

25

Q. You represent, do you not, that Cimarex Energy holds50 percent of the 120-acre tract?

A. The Colorado lease, yes, that's correct.

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Page 27 Q. Do you have a copy of the leases with you here today 1 2 under which you suggest you own that 50 percent interest? I do not think we do. 3 Α. Ο. You do not think you own the interest, or you do not 4 think --5 6 Α. I do not think I brought a copy of the leases. 7 Do you have any title opinions to support your Q. exhibit here? 8 Title opinions on both leases have been ordered 9 Α. 10 weeks ago, approximately two weeks ago. 11 Q. What are you basing your suggestion on that you own 12 50 percent of -- a 50 percent interest in this 120-acre tract if you don't have a title opinion? 13 14 Α. Detailed ownership reports, the reports titled to 15 the mineral interests that we have traced out, and we feel quite confident that the lessor that granted a lease to us 16 17 owns the 50 percent. 18 ο. Do you -- was it a single lessor? 19 Α. I believe it was. 20 Q. Do you recall who it was? 21 Robert Steven Gray as trustee of the Robert M. Gray Α. 22 and Mary A. Gray Irrevocable Trust. 23 Q. Is that the only lease? 24 Α. As far as I know, yes. Do you have a copy of the lease from Mr. Gray to 25 Ο.

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1	Cimarex? Page
2	A. No, I just told you we didn't.
3	Q. So you don't have anything to substantiate that
4	Mr. Gray had actually leased to you?
5	A. The lease wouldn't set forth the lessor's mineral
6	interest, so it wouldn't do any good if we had it. The titl
7	opinion has been ordered.
8	Q. What do you have that supports your statement here
9	in Exhibit Number 1 that Cimarex Energy owns 50 percent a
10	50 percent interest in a 120-acre tract, what do you have?
11	A. We have a lease from a mineral interest owner that
12	we have run title on and feel quite confident that he owns
13	the 50 percent minerals that we think he does.
14	Q. And your statement is that's Robert Steven Gray?
15	A. I believe so, yes.
16	Q. Do you know, or are you guessing?
17	A. I know.
18	Q. That's the only lease you're
19	A. That will be confirmed when we get our title
20	opinion.
21	Q. Yeah, but you can't confirm that now?
22	A. No. That's why we have a title opinion ordered.
23	Q. Have you on any take-offs.
24	A. We have.
25	Q. Do you have take-offs to support your suggestion

Page 29 1 that you have a 50 percent interest in the 120-acre tract? 2 No, I don't. I have the information pulled off the Α. 3 take-off that's here on this middle map. Is this a map that you created? You created the 4 Ο. 5 boxes in here, correct? 6 Α. It was created under my supervision. 7 And you represent these boxes that you have 50 0. 8 percent interest? Α. Yes. 9 But don't have anything today to substantiate 10 Ο. that? 11 12 Α. No. 13 Q. Okay. Do you still have that motion in front of 14 you, Mr. Tresner, or response to the motion? Α. Yes. 15 16 Q. Okay. I had another question. 17 EXAMINER WARNELL: You want to borrow one of these? MR. FELDEWERT: I misplaced -- you know what, I've 18 19 got it right here. 20 Q. Again, you don't -- did you have -- do you recall 21 having any discussions with your attorney, or anyone within 22 your company with your attorney about the factual statements 23 in that response before it was filed? I believe I discussed this with Jim Bruce, our 24 Α. 25 attorney.

Page 30 1 Ο. So you would have discussed with him the factual statements in your response to the opposition to the motion 2 to continue? 3 4 Α. Yes. 5 Q. Then those representations, those factual 6 representations would have come from you? 7 Α. I suppose so. 8 Q. Would they have come from anybody else? 9 Α. No. 10 Okay. Would you take a look at Paragraph 8 for me, ο. Now I'm particularly focused on the last sentence. 11 please. 12 It says, "In addition, these wells." Which wells are we 13 talking about? Kansas and the three Colorado wells? 14 Α. Kansas Number 1, Colorado 1 and 2 and 5 wells. 15 Q. Okay. You say here, "These wells were scheduled for 16 drilling in early September." Α. Uh-huh. 17 And then you say, "One location is already built." 18 Q. Do you see that? 19 20 Α. Uh-huh. Are you testifying today that there is a location 21 Q. that's built out there for one of those four wells? 22 23 Α. I believe that our plans to construct the first 24 locations were postponed because of the hearing issues. 25 Q. Yeah, but there is no location built out there,

Page 31 1 correct, Mr. Tresner? 2 Not to my knowledge, not at this time. Α. And there wasn't a location built out there at the 3 Ο. time this was filed July 31, 2011? 4 5 No. Α. 6 Okay. So that statement is not true, correct? Ο. 7 Α. Do what? There is no location built out there? 8 Q. 9 Α. No. Q. 10 Have you contacted the other working interest owners in the southeast quarter section to ascertain whether they 11 12 would rather see a horizontal development plan or a vertical 13 development plan? I believe, like I previously said, Chuck Moran at 14 Α. Yates, Chuck indicated that they were in support of Concho's 15 horizontal program. 16 17 Q. Okay. Did you talk to any of the other working interest owners? 18 I discussed the development with Oxy, two people at 19 Α. 20 Oxy, and they obviously have signed their operating agreement 21 in support of the way we want to do it, vertical. 22 When did they sign that joint operating agreement? Q. 23 Α. Probably a month or so ago. A couple of months 24 ago. 25 Q. Do you have that joint operating agreement with

Page 32 1 you? 2 Α. I believe I do. It's in my briefcase. Can you give us a date? 3 Q. Do we need to get it? 4 Α. Can you find it? 5 0. 6 Α. Yeah. 7 Ο. Okay. Thank you. 8 Α. One of the attorneys for the company signed it on 9 June 16 of this year, 2011. June 16, 2011? 10 Ο. · A. 11 Yes. 12 Ο. Okay. You can come back up to the stand. So, Mr. 13 Tresner, that was before there was a horizontal well development proposal in place for this southeast quarter, 14 correct? 15 16 Yeah, Concho's proposals for their two horizontal Α. 17 wells that cut across these leases dated July 29 of this 18 year. 19 Q. Since -- since there is now two development proposals out there, did you contact Oxy to see what their 20 21 preference was for development of the southeast quarter? 22 Α. Oxy is aware of the COG well proposals. 23 Q. Do you know what their position is on the competing 24 development plans? 25 I think they are committed to a vertical plan and Α.

Page 33 1 development. Did you ask them if they were in favor of a vertical 2 Q. plan or horizontal plan? 3 No. I didn't need to. Α. 4 5 0. You didn't ask them? Α. No. 6 7 Did you ask David Arrington whether they were in Q. 8 favor of a vertical development plan or horizontal development plan? 9 10 Α. No. Okay. So you didn't, other than just having some 11 Q. discussion at some point with Yates, you did not visit with 12 any of the other working interest owners out there about 13 which development plan they prefer? 14 15 Α. No. We prefer vertical development, and that's what we proposed. 16 Ο. Okay. 17 18 MR. FELDEWERT: That's all the questions I have. 19 Thank you. REDIRECT EXAMINATION 20 BY MR. BRUCE: 21 22 Ο. Do you, Mr. Tresner, you were not aware of COG's interest in the Yates leases until after the applications 23 were filed and notice was given, is that correct, in the 24 Colorado wells? 25

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		Page 34
1	Α.	Yes, that's correct.
2	Q.	Mr. Feldewert brought up something did you have
3	any cont	act with Arrington?
4	Α.	Yes. I have had multiple telephone conversations
5	with the	landman over at David Arrington's office.
6	Q.	And that concerns the Kansas well?
7	A.	That's correct.
8	Q.	And you never got a response from them, right
9	Α.	We really.
10	Q.	on the proposal?
11	Α.	We really just couldn't get anything finalized.
12	Q.	Now, when you get a proposal from someone, do you
13	just let	it sit on your desk for a few months until someone
14	calls, o	r do you respond to a well proposal?
15	Α.	We typically respond to well proposals.
16	Q.	When COG signed its agreement with Yates, did COG
17	contact	Cimarex immediately regarding that agreement?
18	Α.	No.
19	Q.	And its first formal contact was approximately a
20	month ag	o pursuant to Exhibit 5, the proposal letters, is
21	that cor	rect?
22	Α.	Would you repeat that question?
23	Q.	The first formal contact from COG to Cimarex was
24	pursuant	to Exhibit 5, the well proposal from COG?
25	Α.	Yes.

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1	Q.	Page 35 And if the Examiner so desires, would you be willing
2	to provi	de copies of your title take-off and your oil and gas
3	lease?	
4	Α.	Yes.
5	Q.	Has COG followed up on its well proposals with
6	Cimarex?	
7	A.	No.
8	Q.	So they sent them out a month ago, and they have
9	never cc	ontacted you since then?
10	A.	No.
11		MR. BRUCE: That's all I have, Mr. Examiner.
12		MR. FELDEWERT: I have one follow-up question.
13		RECROSS-EXAMINATION
14	BY MR. F	FELDEWERT:
15	Q.	Mr. Tresner, that's not true, is it? COG did
16	contact	you?
17	Α.	They have contacted me, but not in regard to their
18	well pro	posal.
19	Q.	Didn't they request a meeting with you all?
20	Α.	They did.
21	Q.	They did?
22	A.	Yes.
23	Q.	So they contacted you and requested a meeting?
24	A.	Yes. They didn't contact me in regard to their well
25	proposal	.s.

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Page 36 1 Q. They contacted you in regard to the competing 2 development plan, did they not, Mr. Tresner? 3 They did not -- they attempted to contact me Α. 4 directly, but they contacted someone else at Cimarex. 5 But you didn't return their call? Q. I was out of town. 6 Α. 7 Q. And then they actually met with someone from your company --8 9 Α. That's correct. -- to discuss the competing development proposal? 10 Q. That's correct. 11 Α. 12 Q. Okay. That was initiated by COG, not by Cimarex. Correct? 13 Α. That's correct. 14 15 Q. All right. They -- they wanted us to come over for a meeting so 16 Α. 17 they could show us the horizontal development plan and how 18 much better -- or why they wanted to do that, versus vertical 19 development. And it's my understanding that when the representatives from Cimarex got there, there was just a 20 21 landman in the room and they had no intention of showing 22 anything. 23 So you are saying there was just one person there 0. from COG. 24 25 Α. One or two people.

	Page 37		
1	Q. You have no idea, do you?		
2	A. I wasn't there.		
3	Q. You weren't there?		
4	A. No.		
5	Q. So you don't know?		
6	A. No.		
7	Q. All right.		
8	MR. FELDEWERT: That's all the questions I have.		
9	Thank you.		
10	EXAMINER WARNELL: Mr. Brooks?		
11	EXAMINER BROOKS: I haven't I'm not sure who all		
12	was involved here; there seems to be quite a number of		
13	players. You're pooling you are asking to pool COG and		
14	the Yates group. Now, who else is going who else would be		
15	pooled?		
16	THE WITNESS: In the Colorado wells, it would be		
17	Yates Petroleum Corporation, Abo Petroleum Corporation and		
18	Myco Industries Inc.		
19	EXAMINER BROOKS: And that's all?		
20	THE WITNESS: Those are the record title owners		
21	under that lease. Now, Yates does have the development		
22	agreement with COG, and I'm assuming it's some sort of drill		
23	to earn deal for COG.		
24	EXAMINER BROOKS: Correct.		
25	THE WITNESS: I don't know what their interest is in		

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Page 38 1 the Yates leases or Yates tracts. 2 EXAMINER BROOKS: Okay. You've got four wells 3 you're proposing? 4 THE WITNESS: Yes, sir. 5 EXAMINER BROOKS: And are there other parties 6 involved, or some of these other parties that have been 7 talked about, are they involved in other wells that you are 8 proposing today? 9 THE WITNESS: Yes. COG is a mineral interest owner 10 under two leases we have approximately a mile to the northeast of this tract, and we have force pooled them under 11 12 the Texas lease in the four wells. 13 MR. BRUCE: Mr. Tresner, I don't think you're 14 understanding the question. If you could go to Exhibit 1 and 15 tell the Examiner who you are seeking to force pool. 16 THE WITNESS: We are seeking to force pool, in the Colorado lease, Yates, Abo and Myco. 17 18 MR. BRUCE: And COG? 19 THE WITNESS: And COG. And then in the Kansas lease 20 the southeast southeast quarter of Section 6, we are seeking 21 to pool COG and David Arrington, DHA. 22 EXAMINER BROOKS: Okay, DHA is --23 THE WITNESS: Is David H. Arrington. 24 EXAMINER BROOKS: David H. Arrington, okay. What 25 about the estate of Don L. Bradshaw? You just have COG

	and
_ 2	THE WITNESS: It's my understanding
3	EXAMINER BROOKS: and is that assigned to COG?
4	THE WITNESS: Yes, sir. It's my understanding that
5	COG has taken leases from the estate or the heirs to the
6	estate.
7	EXAMINER BROOKS: Okay. And there was a meeting
8	between COG and Cimarex, but you can't testify as to what
9	went on there because you weren't there.
10	THE WITNESS: I was not present.
11	EXAMINER BROOKS: Okay. Now, you said that you did
12	not you don't have the title check the day you filed a
13	compulsory pooling application. And, in this case, I gather
14	that the assignment to COG or a memorandum thereof was filed
15	between the time that you prepared the pooling application
16	and the day it was filed. Is that the facts?
17	THE WITNESS: Yeah. The memorandum was filed of
18	record mid June, I believe, and we filed our application in
19	mid July, I think.
20	EXAMINER BROOKS: Mid July, so it was after you
21	filed this pooling application?
22	MR. FELDEWERT: I think the memorandum was
23	THE WITNESS: Was filed of record June 16, 2011.
24	EXAMINER BROOKS: Mid June, okay. And when did you
25	file the pooling application?

Page 40 THE WITNESS: I believe we originally filed the 1 2 pooling applications at a date prior to --3 MR. BRUCE: July 5, Mr. Examiner. It should be in the case file. 4 5 EXAMINER BROOKS: Okay. So you filed the pooling applications on July 5. 6 7 MR. BRUCE: Uh-huh. EXAMINER BROOKS: So COG's interest was already of 8 9 record at the time you filed the pooling applications? THE WITNESS: 10 Yes. EXAMINER BROOKS: As I said in my advice to the 11 12 Examiner before, I think that, other than their having an opportunity for a continuance, which has already been 13 14 granted, that that's permis in this case. However, given the way our rule is written, it rather behooves the applicant to 15 take advantage of the time between the date of filing and the 16 17 time of the notice provision to have someone check the records, because if there has been transfers occurred prior 18 19 to the time that the -- that the application was filed --20 this is just a note for future reference because of my 21 previous ruling -- but if there has been a transfer after the 22 application -- before the application was filed, the way our rule is written, and the -- the transferee does not get 23 actual notice of the proceeding, then I think that the 24 transferee is probably going to have a right to come in and 25

Page 41 1 reopen the proceedings, which may be after there has been a 2 change of position on the part of the applicant. So I think 3 it does behoove you to have the title checked as of the date 4 that you file the application. You don't have to do it 5 before you file the application, but you better do it before 6 you proceed in order to be prepared. Thank you. That's all 7 I have to say.

8 EXAMINER WARNELL: Mr. Tresner, I would ask that you 9 provide title of take-off in the oil and gas leases and send 10 them in to OCD, or give them to Mr. Bruce and he can get them 11 to us and copy to Mr. Feldewert.

12 THE WITNESS: Yes, sir.

EXAMINER WARNELL: Now, I'm interested in this meeting where COG came over to Cimarex, and but then you were not there for that meeting, and you have no knowledge of who was in that meeting?

17 THE WITNESS: That meeting took place this past 18 Monday at COG's offices. COG had requested that we let them 19 present their horizontal development idea and the concept for 20 horizontal drilling and why they believe that was superior to 21 vertical development.

EXAMINER WARNELL: And did they give you notice as to when that meeting was going to be? Did you know like a week in advance?

THE WITNESS: They called us, I believe, the

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Page 42 1 Thursday or Friday prior to that to set something up. And 2 then on Monday we agreed that we would send people to go 3 listen to their presentation, and it was Jeff Gotcher the land manager at Cimarex, and Chad Johnson, the engineering 4 5 manager at Cimarex, they attended the hearing at Concho's office -- or the meeting at Concho's office. 6 7 EXAMINER WARNELL: All right. 8 THE WITNESS: But it's my understanding it wasn't 9 much of a meeting. MR. FELDEWERT: Mr. Examiner, we have a witness who 10 will be testifying here today that actually participated in 11 this meeting. 12 13 EXAMINER WARNELL: Very well. Thank you. You can call your next witness. 14 15 MEERA RAMOUTAR 16 (Having been sworn, testified as follows:) 17 DIRECT EXAMINATION BY MR. BRUCE: 18 19 Q. Would you please state your name and city of residence for the record? 20 21 Α. Meera Ramoutar, and I live in Midland. 22 Who do you work for and in what capacity? Q. 23 I work for Cimarex Energy as a geologist. Α. Have you previously testified before the Division? 24 Ο. 25 Α. No.

	Page 43		
1	Q. Would you please summarize your educational and		
2	employment background for the Examiner?		
3	A. I did a master's at UT Austin, and graduated there		
4	from the program in Energy Resources with a major in geology.		
5	I was subsequently hired by Cimarex Energy, and I have been		
6	working with them since 2009.		
7	Q. You mentioned a master's. Did you what about a		
8	oachelor's?		
9	A. I'm sorry. I did my bachelor's at the University of		
10	the West Indies with a major in geology.		
11	Q. Okay. And you were hired by Cimarex in 2009?		
12	A. Yes.		
13	Q. Does your area of responsibility at Cimarex include		
14	this portion of southeast New Mexico?		
15	A. Yes, sir.		
16	Q. And are you familiar with the geology involved in		
17	these cases?		
18	A. Yes, sir.		
19	MR. BRUCE: Mr. Examiner, I tender Ms. Ramoutar as		
20	an expert petroleum geologist.		
21	MR. FELDEWERT: Just a couple of questions.		
22	VOIR DIRE EXAMINATION		
23	BY MR. FELDEWERT:		
24	Q. Is it Moojar?		
25	A. Ramoutar.		

		Page 44
1	Q.	Ramoutar?
2		EXAMINER WARNELL: Could you spell that?
3		THE WITNESS: Sure. It's R-a-m-o-u-t-a-r.
4	Q.	Ram-a-tar?
5	A.	Yes, sir.
6	Q.	Do you say the R?
7	A.	Yes. You said it perfectly.
8	Q.	I did? Okay. Thank you. With a last name of
9	Feldewer	rt, it's difficult. Have you, Ms. Ramoutar, have you
10	previous	sly worked in the Permian of New Mexico?
11 -	Α.	Previous to serving with Cimarex Energy?
12	Q.	Yes.
13	Α.	No.
14	Q.	So you don't have any experience with the geology in
15	the Perm	nian Basin of New Mexico, no first-hand experience?
16	Α.	Previous to Cimarex?
17	Q.	Yes.
18	Α.	No, sir.
19	Q.	How long have you been with Cimarex?
20	A.	I have been with them since 2009, and I have been
21	working	exclusively on this trend since 2009.
22	Q.	So your experience in the Permian Basin started with
23	Cimarex	in 2009?
24	A.	Yes, sir.
25	Q.	And have you examined in your work with Cimarex,

Page 45 1 has it included the Yeso Formation in south -- in the Permian Basin? 2 Like I said, I have been working exclusively with 3 Α. the Yeso in Southeast New Mexico, and also the trend in 4 Texas, so I have been working the Permian since then. 5 6 MR. FELDEWERT: Got it. I have no objection. 7 EXAMINER WARNELL: Witness is so recognized as an 8 expert. CONTINUED DIRECT EXAMINATION 9 BY MR. BRUCE: 10 Could you identify Exhibit 7 for the examiner and 11 Q. 12 discuss what is reflected on this exhibit? Exhibit 7 is Yeso PhiH Isopach that I have 13 Α. 14 constructed in my work working on this trend, and it is for a portion of the shelf edge that is specific to this area that 15 we are interested in today. It goes from 17/30 to the 16 17 northeast down to 20/25 to the southwest. Okay. This is just a general overview? 18 Q. 19 Α. It is. And my main idea behind this map is simply as an index map, and it's going to help you locate yourself 20 21 as we go forward, myself and other witnesses, talking about different areas that Cimarex Energy has been developing in 22 this trend. 23 24 Okay. Let's move on to your Exhibit 8, which is a Q. 25 number of plats put together. And the pages aren't numbered,

Page 46 1 so be careful as you move through this exhibit. But again, 2 if you could start with maybe the first plat, again, and kind 3 of go through these exhibits and discuss their significance 4 for development in this particular area.

The first plat that we are looking at, it's 5 Α. Sure. 6 just a smaller version of the index map that you have in 7 front of you, Exhibit 7. And I have, on this, identified to the west of this plat the location, the approximate 8 location -- the actual location, actually, of our Colorado 9 10 Kansas leases that we are talking about today. And it is, again, a PhiH Isopach of the Glorieta Yeso, which is the 11 12 targeted interval.

13 Q. Okay.

14 A. Moving on --

15 Q. The structure map?

Yes. Moving on to the next slide, it is just simply 16 Α. 17 the same -- the previous map. And I superimposed the structure, showing you that we are talking today about a 18 19 shelf edge trend. The structure, you increase, you know, your structure develops as you move to the northwest. 20 And, 21 again, I superimposed the location of the Colorado Kansas leases just showing they are continuous with the development 22 of the Yeso trend from the northeast down to the southwest. 23 Next is a cross-section, and I know it's kind of 24 Q. hard to look at down in the lower left-hand corner, but there 25

Page 47 1 is a line of cross section on that plat? 2 Α. Yes. On this cross section, again, it's a 3 regional -- it's a subregional cross section, and I'm trying to show with this cross section the continuity of our 4 5 reservoirs. So if you look at it as you move from the west, 6 and it goes from the west, your first well here is the Grave 7 Digger State Com 2H, which is a horizontal well that was drilled south of our -- the leases that we are talking about 8 9 today in 20/25. And the one that is further to the northeast 10 is a Hydrus 10 Fed Number 2, which is operated by Cimarex and that is to the northeast of the trend. 11 12 EXAMINER WARNELL: That's a vertical well? 13 THE WITNESS: Yes, sir. In this cross section I have highlighted here the 14 Α. 15 top of the Glorieta, the top of the Yeso, which are the intervals that we are interested in developing. And the 16 colors here simply -- they are used internally for 17 18 differentiating different areas. But the green area is our southeastern area that we are talking about today, and as you 19 20 move to the northeast, the pink and the green are the 21 equivalent stratigraphic intervals to the northeast. Internally it is a lot easier to break it up in the 22 northeastern section, and so we use different colors to 23 24 delineate the Paddock and the Blinebry to the northeast as 25 compared to the entire Yeso to the southwest.

	· ·
1	Page 48 Q. Okay. So if you are looking at the Hydrus Well,
2	what you have there is would I be correct in saying that
3	the pink would be the what people normally call the
4	Paddock, and the green the Blinebry?
5	A. That is correct.
6	Q. And so you don't have quite the differentiation in
7	the area you are talking about today?
8	A. No. It is a lot different it is a lot more
9	difficult to differentiate based on the geology as you move
10	to the southwest where the actual top of the Blinebry is.
11	And most of the development that has been within this
12	interval has targeted the Glorieta and what would be the
13	equivalent Paddock Formation in that area.
14	Q. Okay.
15	EXAMINER BROOKS: What area are you focusing on now?
16	Is this you are talking about the area where the Colorado
17	Kansas leases are located?
18	THE WITNESS: Can you repeat the question, sir?
19	EXAMINER BROOKS: What area specifically are you
20	talking about?
21	THE WITNESS: With regards the targeted interval?
22	EXAMINER BROOKS: Yeah.
23	THE WITNESS: So it's the Colorado Kansas, and the
24	star that is on this cross section gives you the approximate
25	location of the leases that we are talking about today on

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1 that cross section.

2 EXAMINER BROOKS: Okay. I see your log. Now where 3 is your cross section shown on the -- drawn on the map. 4 THE WITNESS: There is an index map on the cross 5 section slide. 6 EXAMINER BROOKS: Oh, okay. 7 THE WITNESS: It goes from the northeast to southwest. 8 The line is a little difficult to see, but it's a 9 blue line. 10 EXAMINER BROOKS: It's pretty darn difficult for me 11 to see, but I don't have very good eyes. 12 EXAMINER WARNELL: No, it's not your eyes, David. 13 Ο. (By Mr. Bruce) And the star at the top of the cross section between the Grave Digger and the next well over is 14 15 the approximate location of the Kansas and Colorado lease? 16 Yes, sir. It's -- to me, it's -- I'm trying to Α. highlight where, from this regional point of view, where our 17 leases would be, you know, the two -- two end members, if you 18 will. 19 20 EXAMINER BROOKS: Oh, okay. 21 Α. Where the leases would be.

Q. Now, there's a -- the next couple of plats are a more localized area. What is the intent of these two leases showing the Electra and Miranda and some of these other leases?

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Page 49

Page 50 1 Α. These plats that we are going to take a look at 2 briefly, these are -- they are going to serve as an 3 introduction into subsequent testimony. And what I'm trying 4 to show here, the Miranda Fed lease and Electra Fed lease, 5 these are leases that are operated by COG. The yellow leases 6 that are highlighted on this map are leases that are operated 7 by Cimarex. And so my map is basically showing you that we 8 have looked at all of this together, and we do know where, 9 you know, the operator is located. We operate adjacent to So we're aware of the geology of the area. 10 them. Okay. And in the upper right, there is a red box 11 Ο. 12 around a certain area. That's where these leases are located? 13 14 Α. Yes, sir. And it's used again just to give you an idea of where it is. And the bigger map that was Exhibit 7, 15 16 I believe, you would be able to see it a little bit better. 17 Q. Okay. And then the next page is a similar --Yes, sir, it's similar purposes. Again, COG's 18 Α. interest -- COG'S leases are outlined, the McCoy State Lease 19 20 the Hatfield State Lease, and the yellow acreage is Cimarex 21 operated acreage adjacent to that. And then the next plat shows the area we are 22 Okay. Ο. 23 here for today, correct? Yes. And it's -- the Colorado Kansas lease in that 24 Α. 25 southwest quarter is highlighted on that PhiH Isopach.

1 Q. And the final slide, if you will, what does this 2 show?

A. The final slide, again, it is the cross section, as you can see, but it is hung, as compared to the other that we just looked at that was structural, this one is hung stratigraphically at the top of the Glorieta.

Q. Again, this is the northeast southwest cross8 section?

Yes, sir. I'm sorry, it is. And it takes into 9 Α. consideration some of the wells that we saw in the previous 10 cross section. So the Grave Digger State Number 2H is on 11 that cross section, as it was on the previous cross section, 12 13 as is Hydrus 10 Fed Number 2. And one of COG's wells is on that as well, the McCoy State, that's going to be discussed a 14 15 little bit further, subsequent with another witness. And basically this cross section, like I said, is hung on the top 16 of the Glorieta. And what I'm trying to -- to show in this 17 18 cross section is the variability in the reservoir.

And, as you can see, as we move from the northeast to southwest, there is quite a variation in terms of your reservoir rock as highlighted by the pink pay picks as well as the green pay picks. And, again, we have put in the yellow star that gives you the approximate location of where our leases would be. And so to the southwest, you can see the Grave Digger, there is significant pay pick in there. It

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Page 52 1 is a pretty nice pay back. It is a good reservoir. But as you move from to the north -- as you move from the southwest 2 3 to the northeast, the reservoir gets a lot more stratified and it becomes highly variable, and I'm just showing the 4 5 difference in that. And that's going to lead up into 6 subsequent discussion. 7 Q. Okay. On the Arnquist Estate Well, is that a Cimarex well? 8 9 No, sir. That is - some acreage just to the Α. 10 northeast, just to the north of some acreage that we do have. It is on some Legacy Land, I believe. 11 And again, the Grave Digger Well, that was a --12 Ο. 13 that's a horizontal well that was originally drilled by Marabel? 14 15 Α. Yes, sir. 16 From a geologic standpoint, in your opinion, should Q. this acreage be developed as vertical wells? 17 18 Α. Yes, sir. And were Exhibits 7 and 8 prepared by you or under 19 Q. 20 your supervision? 21 Α. Yes. MR. BRUCE: Mr. Examiner, I move the admission of 22 23 Exhibits 7 and 8. 24 MR. FELDEWERT: No objection. 25 EXAMINER WARNELL: Exhibits 7 and 8 are admitted.

	Page 53
1	(Exhibits 7 and 8 admitted.)
2	EXAMINER WARNELL: Are you ready to pass the
3	witness?
4	MR. BRUCE: Yes.
5	CROSS-EXAMINATION
6	BY MR. FELDEWERT:
7	Q. Ms. Ramoutar, would you agree with me that have
8	you examined Concho's well proposal the for horizontal
9	wells?
10	A. I have.
11	Q. Okay. And would you agree with me that both parties
12	are targeting essentially the same reserves?
13	A. Yes, sir.
14	Q. And would you also agree with me that the I don't
15	know which map is best to look at, but as I look at your maps
16	here, it would appear that the formation that we are
17	examining here extends from the northeast down to the
18	southwest. Correct?
19	A. Yes.
20	Q. And are you familiar with the Dagger Draw and the
21	Cemetery areas?
22	A. Yes.
23	Q. Would you agree with me that the reservoir extends
24	down to those areas as well?
25	A. Yes.

Г

Page 54 And it is fairly continuous? 1 Q. 2 Α. It is. Do you see any distinction between the Dagger Draw 3 Ο. Cemetery area and area at issue? 4 5 Α. Yes. There is difference, as you move -- broad 6 base, the trend does continue from the northeast to southwest 7 because it is a shelf edge trend and it follows the shelf 8 quite nicely. However, there is significant variability 9 localized as you move through those trends. And so there is 10 quite a bit of a difference in that Cemetery Dagger Draw area, which is to the south of where we are looking, as 11 12 compared to where we are looking, even to the northeast. 13 Q. There is going to be differences? There is differences. 14 Α. 15 Ο. So we have differences from the northeast all the way down to the southwest, but basically the same formation? 16 17 Α. It's the same formation, but the rock variability 18 happens quite significantly, even with localized 40, 80 acre interval. 19 20 Ο. Fair enough. Fair enough. All right. So since we 21 are both targeting the same reserves then, would you agree 22 with me then that the real question before the Division is whether vertical drilling or horizontal drilling is better 23 24 for the working interest owners in the southeast quarter? 25 Α. Yes.

Page 55 MR. FELDEWERT: That's all the questions I have. 1 2 EXAMINER BROOKS: I'm a lawyer, not a geologist, and 3 I'm also not very smart. So taking those factors into consideration, could you give me a brief explanation of why 4 5 horizontal wells -- why vertical wells are more appropriate 6 than horizontal wells in this area? 7 THE WITNESS: Can I refer back to Exhibit 8? 8 EXAMINER BROOKS: Yes, you may. Tell me which page 9 you are on. 10 THE WITNESS: Just the last one. EXAMINER BROOKS: The last one? 11 12 THE WITNESS: Yes. 13 EXAMINER BROOKS: The one with the logs on it? 14 THE WITNESS: Yes. And the one that's on the top of the Glorieta. 15 16 EXAMINER BROOKS: Right. 17 THE WITNESS: So from a geological standpoint, for -- we believe -- I believe quite strongly that this 18 19 reservoir should be -- should be developed vertically, like I 20 said, because of the variability of the reservoir as you move 21 throughout the trend. There is no cut and dried method of 22 developing this reservoir. Historically it has been 23 developed vertically, but, you know, the industry goes horizontal quite a bit these days. Cimarex itself is a big 24 horizontal player. 25

Page 56 1 But if you look at the variability of the reservoir, 2 based on what we are going to do is we are going to go in 3 there and we're going to be able to target specific rock with specific reservoir properties that we think would be more 4 5 prolific. In going in and doing a horizontal well, you have 6 this huge gross interval, as you can see in the Grave Digger, 7 you are going to put a horizontal well, in there, and yes, it 8 is quite thick and variable -- quite thick and prolific in 9 that area, but as you move to other areas where it's thinner, as in the Arnquist, which is second log, so just looking at 10 those two logs, in that thicker area you can say, yes, I can 11 12 put a horizontal in there and it will be pretty good. But if 13 you look at a pay package that looks like the Arnquist, how exactly -- where are you going to land your lateral? 14 What 15 rock are you going to target.

And so in putting a vertical well in there, and being able to select -- selectively go in and pick those specific porosities that you think would be the best reservoirs, you would get better -- you would be able to develop it more efficiently and get more oil.

EXAMINER BROOKS: So what you are saying kind of is, if you went in where the Grave Digger is, and you planted a horizontal in one of these yellow bands --

24 THE WITNESS: Yeah.

25

EXAMINER BROOKS: -- you might run out of it, and

Page 57 you might miss what's in some of these other bands that are 1 2 shown on these other --THE WITNESS: Yes, sir. 3 EXAMINER BROOKS: -- cross sections, on those other 4 logs. Okay. I think I sort of understand that. You said 5 6 something about the Cemetery Dagger Draw area. That's kind 7 of down in 20/26. 8 THE WITNESS: It's in 20/25, and on the big index map, you can see just the beginning of that particular area. 9 EXAMINER BROOKS: Okay. Do you know -- are you 10 familiar with where an operator called Echo has brought in 11 some wells recently? 12 13 THE WITNESS: Yes, sir, the Stilleto Wells. 14 EXAMINER BROOKS: Where exactly is that? 15 THE WITNESS: They are located in 20/25, I believe, 16 Section 16, I think, or 22. I'm not -- I know it's in 20/25, and it could be one of those sections. 17 EXAMINER BROOKS: Okay. And those are horizontal 18 wells? 19 20 Yes, sir, they are. THE WITNESS: Yes. 21 EXAMINER BROOKS: They are also highly successful, 22 right? 23 THE WITNESS: They are, yes. EXAMINER BROOKS: Okay. Thank you. That's all I 24 25 have.

Page 58 EXAMINER WARNELL: Thank you. Let's go back up to 1 2 the northwest guarter of 19/26. 3 THE WITNESS: Yes, sir. EXAMINER WARNELL: That's the area that we are 4 5 looking at, right? THE WITNESS: Yes. 6 7 EXAMINER WARNELL: Can you point out there for me, 8 or is it here, the horizontal wells that are existing? 9 THE WITNESS: The wells that -- there are some wells that are on this map that have been permitted horizontally. 10 The ones that -- they have not been drilled in this 11 particular area. Most of the highly successful horizontal 12 wells that the Examiner was alluding to earlier have been 13 drilled in 20/25, so south of that, and they are very similar 14 15 to the log that we saw in the exhibit with the Grave Digger where it's a very thick package. 16 17 EXAMINER WARNELL: So they have drilled those out 18 laterally or horizontally --19 THE WITNESS: Yes. 20 EXAMINER WARNELL: -- and been quite successful? 21 And on your Grave Digger Well, if that was yours and you were 22 going to complete that vertically, would you perforate pretty much that entire interval? 23 24 THE WITNESS: Yes, sir. I would not do it as one giant perf stage, however, I would still go in -- and Cimarex 25

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Page 59 has our recent changes in how we complete our wells. 1 We do 2 like to go in and target the individual packages, whether or not they are thick or thin, we just target the ones that are 3 4 best. 5 EXAMINER WARNELL: Okay. Thank you. Usually when I 6 ask a geologist a question like that, they don't like to talk 7 about completing, but I appreciate that. And, welcome to OCD. 8 9 THE WITNESS: Thank you. 10 EXAMINER WARNELL: Mr. Brooks forgot to tell you that he has a fondness for University of Texas. We have all 11 12 heard that before. MR. BRUCE: Could I ask a couple of follow-up 13 questions? 14 15 EXAMINER WARNELL: Yes. Mr. Bruce. 16 REDIRECT EXAMINATION 17 BY MR. BRUCE: Just based on what the Examiner has asked you, in 18 Ο. looking at your final slide, the Grave Digger and the wells 19 you are talking about, good wells in 20/25, those are, what, 20 about ten miles away from where the Kansas and Colorado 21 22 leases are? 23 Probably, yes. Α. 24 Q. The Arnquist Estate Well where you have the log, that's only a couple of miles? 25

	Page 60
1	A. Yes, sir. That is about two miles away.
2	MR. BRUCE: That's all I have.
3	EXAMINER BROOKS: What about the Grave Digger?
4	THE WITNESS: It's about ten.
5	EXAMINER BROOKS: Ten miles away?
6	THE WITNESS: So the Arnquist is closest to our
7	lease.
8	EXAMINER BROOKS: The Grave Digger is in 20/26?
9	THE WITNESS: Yes, sir 20/25, Section
10	EXAMINER BROOKS: Looks like 20/26. Oh, that's
11	because I didn't have my glasses on.
12	EXAMINER WARNELL: Is that it, Mr. Bruce?
13	MR. BRUCE: Yes.
14	EXAMINER WARNELL: I think, before we call your
15	third witness, let's take a 15-minute break.
16	EXAMINER BROOKS: Sounds like a good idea.
17	(Recess taken.)
18	EXAMINER WARNELL: Let's go back on the record. Mr.
19	Bruce, you can call your third witness.
20	MR. BRUCE: Mr. Examiner, I handed you the
21	engineering exhibits there to your upper right.
22	FLOYD HAMMOND
23	(Having been sworn, testified as follows:)
24	DIRECT EXAMINATION
25	BY MR. BRUCE:

		Page 61
1	Q.	Would you please state your name for the record?
2	Α.	Floyd Hammond.
3	Q.	Have you previous where do you reside?
4	Α.	Midland, Texas.
5	Q.	Who do you work for?
6	Α.	Cimarex Energy.
7	Q.	And what's your job at Cimarex?
8	Α.	I'm a reservoir engineer.
9	Q.	Have you previously testified before the Division?
10	Α.	I have not.
11	Q.	Would you summarize your educational and employment
12	backgro	und, please?
13	Α.	I have bachelor of science degrees in mathematics
14	and in j	petroleum engineering from the University of Tulsa.
15	Q.	And when were those obtained?
16	Α.	May of 2003.
17	Q.	And what is do you have any other degrees?
18	А.	I have an associate of science from a community
19	college	•
20	Q.	Okay. And where have you worked since 2003?
21	Α.	I was self-employed for about five years, and I
22	started	with Cimarex on April 14, 2008.
23	Q.	Okay. And as a reservoir engineer with Cimarex?
24	A.	Yes, sir.
25	Q.	And are you familiar with the engineering matters

		Page 62	2
1	related t	o these applications?	
2	Α.	I am.	
3	Q.	And this is this area of southeast New Mexico is	
4	a part of	your area of responsibility as a reservoir	
5	engineer?		
6	А.	Yes, sir.	
7		MR. BRUCE: Mr. Examiner, I tender Mr. Hammond as an	
8	expert in	petroleum reservoir engineer.	
9		EXAMINER WARNELL: Mr. Feldewert?	
10		MR. FELDEWERT: I just have one question.	
11		VOIR DIRE EXAMINATION	
12	BY MR. FE	LDEWERT:	
13	Q.	Mr. Hammond, how long has the southeastern part of	
14	New Mexic	o been your area of responsibility?	
15	Α.	About three and a half months.	
16	Q.	Three and a half months?	
17	Α.	Yes, sir.	
18	Q.	Prior to that time, did you have any experience with	
19	the Permian Basin?		
20	Α.	Yes. I worked as an operations engineer for	
21	approximately one year.		
22	Q.	With Cimarex?	
23	Α.	Yes, sir.	
24	Q.	Okay.	
25	Α.	I did the Yeso wells were part of my area at that	

Page 63 1 time. 2 Q. As an operations engineer? 3 Α. As a production engineer, yes. But in terms of as a reservoir engineer, your 4 Ο. 5 responsibility for this area has only been about three and a half months? 6 7 Α. Yes, sir. EXAMINER WARNELL: Mr. Hammond, you said after 8 9 graduating you were self employed for five years? 10 THE WITNESS: Yes. I worked with my family's general contracting and development company due to some 11 12 extenuating circumstances. 13 EXAMINER WARNELL: Okay. Mr. Bruce, you are offering Mr. Hammond up as a --14 15 MR. BRUCE: Expert reservoir engineer. EXAMINER WARNELL: -- expert reservoir engineer. 16 So 17 recognized. CONTINUED DIRECT EXAMINATION 18 19 BY MR. BRUCE: Mr. Hammond, could you identify Exhibit 9 and 20 Ο. 21 discuss generally what you are going to testify about today? Exhibit 9 is an overview of the engineering 22 Α. information that we will be presenting this afternoon or this 23 morning. We are going to look at some comparisons between 24 existing horizontal and vertical wells where Cimarex and COG 25

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have done tests. We are going to look at the Cimarex Hydrus
 horizontal vertical comparison, and COG's Miranda and
 Hatfield horizontal and vertical comparisons.

In addition, we will take a brief look at COG's Grave Digger and Noose area from the aspect of recovery efficiency, and then look at a comparison between the results of completion techniques by Cimarex and COG with their direct offsets of the Darner and COG's GJ Coop wells.

9 Q. Let's move on to the first comparison in your 10 Exhibit 10, which is the Hydrus lease. And would you --11 again, the pages are not numbered, so as you go through this 12 exhibit, be sure to let the Examiner know when you are moving 13 from one page to the other.

A. Sure. Starting on the second page of Exhibit 10, we have a comparison between three vertical wells on the northern part of this map, one horizontal well in the middle, and then three vertical wells to the south. You will notice one does have a -- a curve to it. It was a directional well to the south. It is vertical.

The recovery factors for the wells to the north were about 12 percent. Recovery factors for the horizontal in the middle calculate about 5 percent. The wells to the south recovery factor calculates about 11 percent. This is one of Cimarex's first tests of vertical versus horizontal. And, you know, we, at that time, decided that it was better to

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Page 65 pursue vertical development in this plight based on our data. 1 2 Q. So at least in that Loco Hills area, Cimarex is now 3 concentrating its efforts on vertical wells? 4 Α. Yes, sir. The subsequent pages, we have the 5 consolidation of those three northern wells, showing the 6 production and forecast. The next page is a showing the 7 horizontal, and the next page is showing the southern three wells. 8 9 Ο. Let's move on to Exhibit 11, which is COG's Miranda 10 lease. And the township and range are given on those exhibits, correct? 11 12 Α. Yes. Yes. The Miranda is in 17/30. Okay. Let's go through that first page showing the 13 Q. well -- showing all the wells on it. 14 On the -- on the Miranda lease, COG drilled two 15 Α. horizontal wells. The one to the south was the Miranda 16 17 Federal Number 13. The one to the north is the Miranda Federal 19. Now, subsequent to drilling that, they have spud 18 19 all the wells with the orange -- shown in the orange dots. Ι did note on here a few of the -- of the permit and spud 20 21 dates, just showing that these permits were filed at 22 approximately the same time as -- as the first well, horizontal well was actually spud. If you continue to the 23 next page --24 25 Q. Just a minute. But what it's showing is that, even

after COG -- after COG drilled its two horizontal wells, it
then started permitting and drilling vertical wells?
A. Yes. After they had production from the second
well -- I'm noting their report of first production dates -they did spud these wells shown in the orange dots.

Q. Proceeding --

6

Proceeding to the next page, the recovery efficiency 7 Α. 8 based on the two horizontal wells appears to be about 7 9 percent. Based on their offset wells shown in the map on the 10 right, the lower right hand of this page, all of these well spots are the vertical wells used for offset comparison. 11 COG 12 is achieving about 20 percent recovery factor from those wells, indicating that it was probably a good engineering 13 14 decision to revert to the vertical development in the 15 field.

Let's move on to Exhibit 12 in the Hatfield lease. 16 Ο. 17 Α. The Hatfield evaluation is basically the same thing 18 as the Miranda. The results are very similar. They 19 completed the Hatfield State Number 9 horizontally. Since that time, they have spud six vertical wells, and in 20 21 addition, they have permitted six wells in the same section. 22 Proceeding to the next page looking at the recovery 23 efficiencies from the horizontal to the vertical, the

24 horizontal achieved about a 6 percent recovery factor while 25 the vertical achieved about a 10 percent recovery factor,

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Page 67 indicating, again, that vertical development was the method 1 of choice. 2 And again, this is a situation where after they 3 Ο. drilled the horizontal well, they reverted to drilling 4 vertical wells? 5 6 Α. Exactly. Just a brief look at the Grave Digger and 7 Noose leases, if you --8 Q. Exhibit 13? Yes, Exhibit Number 13. 9 Α. 10 Ο. What is this intended to show? The purpose of this exhibit is just to show we don't 11 Α. 12 have a vertical well in the area of the Grave Digger and Noose wells that has a modern stimulation. We really haven't 13 14 gone in here and tested one of these side by side where you 15 can really tell, you know, what is the best method of development. Obviously, these are phenomenal wells. On a 16 17 well-by-well basis, you know, you couldn't ask for anything better. 18 I'd just like to point out that, you know, we are 19 20 talking up 720 acres, and even though we are looking at approximately 2 million barrels forecasted from these six 21 22 wells, these are based on my forecast, that only calculates about two and a half percent recovery. Granted, you might 23 24 could infill these to, you know, tighter spacing, you might 25 could get to five percent, if you infill them. But to be in,

Page 68 you know, the best part of the reservoir, that doesn't seem 1 that phenomenal. 2 A two and a half percent recovery? 3 Ο. At two and a half percent recovery, or even a five 4 Α. 5 percent recovery. Well, let's go a little bit out of order here, and 6 Q. 7 Exhibit 17, which is the log, could you comment on this log and why you are showing it at this point? 8 Α. 9 Sure. 10 MR. FELDEWERT: Which one are you on? Exhibit Number 17. This is a temperature log and a 11 Α. geiger counter, a gamma ray log, showing the stimulated zone 12 in a tag fracture in the Yeso in the Pier Marquette, 18 13 Number 8. This is in 17/29, Section 18. If you look at the 14 15 last page, you can see our perforated zone. You can see how far that we are growing above our top perforation. We are 16 getting about 55 feet of height growth above the top 17 perforation. If you also notice, the gaps, what you are 18 seeing is that this is a very tight limestone that's creating 19 a barrier. 20 Cimarex is going in and select perf in each of these 21 porosity lenses to try to stimulate the entire interval. But 22 what I would like to point out from this is that, you know, 23 24 with a horizontal, you have no way of doing that. So the first barrier that you hit is likely going to be the limit of 25

Page 69 1 that stimulation. And I believe that that is the reason that 2 these recovery factors are not higher than they are. And 3 that is -- that is my reason for proposing vertical wells in 4 this area.

Q. Let's move on to a couple of more comparisons or one more comparison, which is Cimarex's Darner Wells and COG's GJ Coop Wells, Exhibit 14. What are you showing on this exhibit?

9 A. Cimarex is putting a lot larger fractures on these 10 vertical completions than COG is, and we feel like that it is 11 a good cause. We feel like where we have, you know, a 12 similar geologic setting, that we are achieving superior 13 results based on our stimulation design.

14 I'm just showing that we have -- we have three 15 Darner Wells. There are eight COG wells directly to the south. Based on the PhiH map, the COG wells appear to be in 16 a better position. They have -- you know, any indication, 17 based on geology, will tell you that these wells should be 18 19 better than Cimarex's wells. However, with Cimarex's wells, we are seeing nearly 200,000 barrels of oil per well on the 20 EUR basis. Out of the eight GJ Coop wells combined, I'm 21 getting about 257,000 barrels. 22

We are seeing about six times the recovery on an EUR basis out of these wells as what we are seeing out of the COG wells.

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Q. And again, it looks like Cimarex's reservoirs would
 be inferior to COG's reservoir in this area.

A. That is correct. And I might also point out that, from these production plots, we are making about 250 barrels a day out of those three wells. COG is making about 100 barrels a day out of their eight wells combined.

Q. Let's move on to your summary, Exhibit 15, and
summarize what you see as the situation comparing the Cimarex
and COG wells.

10 Δ We've tested our stimulation of horizontal versus vertical wells. We feel like that the vertical wells are 11 superior. COG has tested their stimulation of vertical wells 12 next to horizontal wells. It appears that vertical wells are 13 better. COG has completed some great wells to the southwest 14 15 as horizontals. They have not completed a modern stimulation of vertical well in that area. We believe that in this case 16 vertical wells would have been better. 17

We complete our wells differently than COG, so it is our position that the completion practices of Cimarex vertical wells have a better recovery than Concho's vertical wells. The only purpose of this is, the question at hand is horizontal wells operated by COG, or vertical wells operated by Cimarex.

Q. Now, you mentioned a modern completion. What would you consider a more modern completion technique?

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Page 71 Α. You know, we're pumping a single stage of about 1 2 600,000 pounds of sand at this time. 3 ο. Very high volumes? Α. Yes. 4 And are the fluid volumes about the same in each of 5 Ο. 6 Cimarex's completion versus COG's completion? 7 Α. They are not. We are pumping from a million to a million and a half gallons of water. 8 9 Ο. How much is COG doing? You know, I would have to look back. I want to say 10 Α. 11 that's about 150,000 to 200,000 gallons of water. 12 What conclusion do you draw from these comparisons 0. and your study of the reservoirs in these areas? 13 14 We feel, as a prudent operator, the best and most Α. efficient use of the reservoir is to use Cimarex vertical 15 completion techniques and generate high recoveries and 16 strongly economic completions and the maximum value for the 17 interest owners. 18 19 This is Exhibit 15 we are looking EXAMINER WARNELL: 20 at? 21 MR. BRUCE: Exhibit 16, yes, Mr. Examiner. 22 0. There is an appendix attached to this. What is that, the purpose of that? 23 24 Α. Well, the only thing that I would like to pull from 25 the appendix is, you know, based on the Q1-2011 conference

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Page 72 call, Timothy Leach stated that --1 2 Q. Who is Timothy Leach? The CEO of COG. 3 Α. 4 ο. Okay. 5 -- that they are experimenting with horizontals in Α. the Yeso. 6 7 Q. Do you want to be subject of an experiment? 8 Α. No, sir. Would it be better to use the proven techniques that 9 Q. Cimarex has developed in the drilling and completion of 10 vertical wells? 11 Yes, sir. 12 Α. Including selected perforations, and as you say, a 13 0. 14 more modern stimulation technique? Yes, sir. 15 Α. And in Exhibit 16 does Concho -- does Mr. Leach 16 Ο. 17 still assert that COG is going to drill a large number of vertical Yeso wells? 18 19 Α. Yes, sir, he does. 20 Q. Is there an approximate number given? 21 Α. Yes. 2113. 22 Were Exhibits 9 through 17 prepared by you or under Q. your supervision? 23 24 Yes, sir, they were. Α. In your opinion, is the granting of Cimarex's 25 Q.

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applications and the denial of COG's applications in the
 interest of conservation and the prevention of waste?
 A. Yes, sir.

4 MR. BRUCE: Mr. Examiner, I would move the admission 5 of Cimarex Exhibits 9 through 17.

6 EXAMINER WARNELL: Mr. Feldewert, do you have any7 problems with Exhibits 9 through 17?

8 MR. FELDEWERT: I do have a problem with Exhibit 16, 9 not the first few pages, but I don't know what this investor 10 representation is. It hasn't been authenticated or provided 11 no supporting testimony or documents for whatever statements 12 this purports to represent.

MR. BRUCE: Well, we can support that if necessary, but it was a conference call on -- from -- this was taken from a write-up of a conference call between stock analysts and principals of COG. And if the Hearing Examiner desires, we can certainly provide a copy of the statements made in that conference call.

MR. FELDEWERT: Certainly this witness can't authenticate any of those statements in the conference call. I doubt they can authenticate the document. I know we have loose rules of evidence, but I really don't see what this adds to the equation, first. And, secondly, this witness can't sponsor these statements that purport to be set forth here in the last two pages of this exhibit. I have no

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Page 74 objection to the first two pages, it's just the last two 1 2 pages. EXAMINER WARNELL: I'm going to overrule that. We 3 will go ahead and admit all the Exhibits 9 through 17 and 4 5 take them for what they are. MR. FELDEWERT: Yes, sir. 6 7 (Exhibits 9 through 17 admitted.) 8 EXAMINER WARNELL: Mr. Bruce, are you ready to pass your witness? 9 10 MR. BRUCE: Yes, sir. MR. FELDEWERT: May I approach? I'm going to use an 11 exhibit out of our notebooks, so I may as well give you our 12 notebooks. If I may approach. 13 EXAMINER WARNELL: Okay. 14 EXAMINER BROOKS: You are going to use these 15 16 exhibits in cross-examining? MR. FELDEWERT: I'm going to use actually just one 17 of them. 18 19 CROSS-EXAMINATION BY MR. FELDEWERT: 20 Mr. Hammond, I'm looking at your Exhibit 16. 21 Ο. 22 Α. Yes, sir. The first page. 23 Q. 24 Yes, sir. Α. 25 Ο. It says, "As a prudent operator we feel." Do you

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1 see that?

2 A. Yes, sir.

Q. Let me ask you, as a prudent operator, wouldn't you want input from the other working interest owners in the southeast quarter to ascertain whether they would prefer vertical well development or horizontal well development? A. Yes, sir.

8 Q. And, to your knowledge, has your company sought 9 input from the other working interest owners in the southeast 10 quarter as to whether they prefer horizontal development or 11 vertical development?

A. As I said, I have had this for about three and a half months. This has been somewhat of a transition. I'm not familiar with everything that has transpired, but to my knowledge, no.

Q. And would you agree, then, with the -- that the Division should be looking at what is best for the working interest owners in the southeast quarter of the hole, right?

20 A. Yes, sir.

21 Q. And that they should decide which drilling method 22 gives all of the working interest owner's the best chance of 23 success?

24 A. Yes, sir.

25

Q. Reduces he risk of an uneconomic well?

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Page 76 Yes, sir. 1 Α. 2 Q. Provides the best chance of an economic return? Yes. 3 Α. To take it into account, right? 4 Ο. 5 The only caveat with that is that, you know, Α. Sure. 6 just because you make an economic well doesn't mean that you 7 provided the best possible method of development. One 8 economic well, you know, obviously I could go to the shale 9 wells in some areas and make marginally economic wells and do it every time with no risk. 10 But, overall, they should examine what would give 11 Q. 12 the working interest owners in the southeast guarter of the 13 hole the best chance of recovery? 14 Α. Yes, in general, yes. 15 Q. Would you agree that they should also take into 16 account that, you know, we should examine to see -- ascertain which method will produce the most oil in that quarter 17 section so that we avoid waste, right? 18 19 Α. Yes, sir. 20 And then, would you agree that they should also take Ο. 21 into account which methodology provides the least surface disturbance? 22 23 Α. Yes, sir. That is a consideration. 24 Q. Okay. Now, I want you to turn to COG Exhibit Number 25 10 for me, please. It's in the notebook under Tab 10. Do

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Page 77 you have that out in front of you? 1 2 Α. Yes, sir. Now, I want you to turn to your Exhibit 15. 3 Q. Α. Just a moment. 4 5 It's your summary sheet. Q. 6 Yes, sir. Α. 7 Ο. Let me -- I can do it this way, Mr. Hammond. Your 8 third bullet point on it points out COG has completed wells in the southwest as horizontals? 9 Yes, sir. 10 Α. Okay. Do you know where on Exhibit 10 COG has 11 ο. 12 completed wells in the southwest as horizontals? Because I'm 13 trying to figure out what you are talking about. EXAMINER WARNELL: A single page that has "Summary" 14 15 at the top. Do you have Exhibit 7? 16 EXAMINER BROOKS: Is it Cimarex's Exhibit 7? 17 Α. Never mind. In the area near the -- in the area of the Cemetery Field, Sections 2 and 35 were specifically what 18 19 I was referring to. 20 Okay. So if I'm looking at COG Exhibit 10 down Q. there near the Cemetery blue box, to the right of that are 21 Sections 2 and 35, and we see a number of full section 22 horizontals, correct? 23 24 Α. Yes, sir. And you agree that's those have been successful 25 Ο.

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1 wells?

2

A. They have.

Q. Okay. Now, I want you to keep this out for me, please, okay? And I just want to walk through your exhibits here today. The first one I'm going to ask you about is Exhibit Number 10, which is the Cimarex's Hydrus lease Analysis.

8 A. Yes, sir.

9 Q. And does that particular analysis, does that involve 10 any of the wells that we see here on Exhibit Number -- or 11 does it involve the area that we see here on COG Exhibit 12 Number 10?

13 A. It does not.

14 Q. How far away is this Hydrus lease area from the area 15 that we see on Exhibit Number 10?

16 A. Four townships.

EXAMINER BROOKS: Okay, I'm a little confused here.
Hydrus is what Exhibit Number 10 is about. Did you say how
far away is it from what?

20 MR. FELDEWERT: Good clarification for the record.
21 I think we have two Exhibit Number 10s going on.

22 EXAMINER BROOKS: I thought you might.

23 MR. FELDEWERT: Let me rephrase it.

24 Q. I want you to turn to Cimarex Exhibit Number 10,

25 okay? And I think you have testified it does not involve any

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Page 79 1 of the area shown on COG Exhibit Number 10, correct? 2 Α. That is correct. 3 ο. My question to you was, how far away is this Hydrus area from the area that we see on COG's Exhibit Number 10? 4 You said four townships. 5 6 Approximately 25 miles. Α. 7 Ο. So is that 25 miles from the area of your Colorado 8 fee wells, or is it actually more than that? 9 Α. Well, I would have to --Would you say 25 to 30, somewhere in there? 10 Q. 11 Α. Sure. Is that fair? 12 Ο. That's fair. 13 Α. 14 EXAMINER BROOKS: Okay. The Hydrus wells are in 17/30, you said, right? 15 THE WITNESS: Yes. They are in 17/30, Section 10. 16 17 EXAMINER BROOKS: Thank you. 18 Ο. So that would be to the northwest approximately 25 to 30 miles? 19 That is correct. 20 Α. Okay. Your examination of COG's Miranda Federal 21 Ο. 22 Lease, which is Cimarex Exhibit Number 11, does that involve 23 any of the areas shown on COG Exhibit Number 10? No, sir. They are about a mile from the Hydrus 24 Α. 25 lease.

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1	Q.	So they are further to the northwest?
2	Α.	No, they are actually a mile closer.
3	Q.	Okay. So somewhere 25 to 30 miles away?
4	Α.	Yes, sir.
5	Q.	Then Exhibit Number 12, your COG analysis of
6	COG's Ha	atfield lease, is that shown does that involve any
7	areas sh	nown on COG Exhibit Number 10?
8	Α.	No, sir. That is about 20 miles away.
9	Q.	Twenty miles to the northwest?
10	Α.	Yes, sir. The reason that these were chosen, these
11	are area	as where we do have horizontal and vertical Yeso
12	completi	ons directly offset.
13	Q.	Now, your Exhibit Number 17, this cross section
14	I'm sorr	ry the gamma ray log?
15	А.	Yes, sir.
16	Q.	Does that involve a well in the area shown on COG
17	Exhibit (Number 10?
18	A.	No, sir.
19	Q.	How far away is this? How far away is the well that
20	is the s	subject of Cimarex Exhibit 17 the well that is the
21	subject	of Exhibit 17, how far away is it from the area at
22	issue he	ere today?
23	Α.	It would be about 15 miles.
24	Q.	To the northwest?
25	Α.	Yes to the northeast.

Page 81 1 Q. Good point. I think I have been saying "northwest." 2 We should be saying "northeast," correct? 3 Α. Yes. ο. If I look at COG Exhibit Number 10, in the middle 4 5 you will see a yellow box. 6 Α. Yes, sir. 7 ο. That is the area that is the subject of -- of the 8 competing development proposals before the Division here 9 today. Correct? 10 Α. Yes, sir. Okay. All right. Have you done any analysis of the 11 0. 12 vertical Paddock well completions in this area? Α. I have. 13 14 Do you have any of that information here today? Q. 15 Α. I do not. Those wells are poor. They have really poor stimulations. I don't think that there is really a --16 well, in my opinion, based on what Cimarex is doing, they 17 have very substandard stimulations. A lot of these are older 18 19 wells. 20 EXAMINER BROOKS: What wells are these you are talking about? 21 There are a number of wells that are 22 THE WITNESS: 23 completed in the Paddock. Some of them are commingled with 24 the San Andres in this area. 25 EXAMINER BROOKS: This is on the area depicted on

1 COG Exhibit 10?

2

THE WITNESS: Yes, sir.

3 Q. And you would agree with me those have been poor 4 wells?

5 A. Yes, sir.

Q. Focusing particularly on the nine-section area
around Section 6, do you see what I'm talking about here?
A. Yes, sir.

9 Q. And you see a number of Paddock producers in there, 10 would you agree with me that those have not been successful 11 as vertical wells?

A. That is correct. I might also add that in areas where we just discussed, most of the older vertical wells in that area would have also not been considered successes.

Q. And you are aware, then, are you not, of successful Paddock horizontal wells down in the Dagger Draw and Cemetery area, correct?

18 A. Yes, sir.

Q. All right. Has Cimarex drilled any vertical wellsin the area that we see here in Exhibit 10?

A. We have drilled the -- yes. We have drilled twowells.

Q. In this area depicted on Exhibit Number 10?

24 A. Yes.

23

25 Q. COG Exhibit Number 10?

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Page 83 Yes, sir. 1 Α. 2 Q. And those were drilled by Cimarex? Yes, sir. 3 Α. Can you locate those for me, please? 4 Ο. 5 They are just to the north of this. I believe it's Α. 6 Section 20. 7 Q. Okay. So let me step back here. My question was, has Cimarex drilled any vertical Paddock wells in the area 8 9 that has been depicted on COG Exhibit Number 10? Do you mean the yellow box shown. 10 Α. Ο. I mean this entire area that's shown on Exhibit 11 No. Number 10? 12 Yes, sir. We have drilled two wells in this area. Α. 13 14 Q. Okay. I'm sorry, maybe I interrupted you. It sounded like you were going off this map, that's why I was 15 wondering. Are you on this map? 16 Α. The location of the Texas and Oklahoma is the 17 I apologize. I'm pretty sure it's in Section 20, section. 18 but I'm not certain. 19 Section 20 of what? 20 Q. 21 Α. Just directly north of the yellow box shown. EXAMINER BROOKS: 18/26. 22 23 THE WITNESS: Yes, sir. 24 EXAMINER BROOKS: Okay. They are not shown on this 25 map.

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	1		THE WITNESS: Right.
	2	Q.	Are you saying that those have been drilled and they
	3	are prod	lucing?
	4	Α.	They are not producing at this time.
	5	Q.	Have they been drilled?
	6	A.	Yes, sir.
	7	Q.	To completion?
	8	Α.	Yes, sir.
	9	Q.	Why are they not producing?
	10	Α.	They are being stimulated today.
	11	Q.	So you have not had any successful production out of
	12	those we	lls yet?
	13	A.	No, sir. I don't have any hard data.
	14	Q.	Okay. So you don't have any data to indicate
	15	whether	those vertical wells have been successful?
	16	A.	That's correct.
	17		MR. FELDEWERT: I think that's all the questions I
	18	have. T!	'hank you.
	19		EXAMINER WARNELL: All right. Any follow-up, Mr.
	20	Bruce?	
	21		EXAMINER BROOKS: I don't believe so, no. Oh, you
	22	were you	were talking to Mr. Bruce, not me.
	23		MR. BRUCE: I do have a couple of follow-ups.
	24		REDIRECT EXAMINATION
	25	BY MR. BI	RUCE :
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Page 85 1 Q. Mr. Feldewert asked you a question about drilling 2 the well so it's best for the working interest owner. 3 Obviously you want to do well for the working interest owner. 4 Wouldn't you also want to do well for the royalty and 5 overriding interest owner? Yes, sir. 6 Α. And, in your opinion, is the best chances of success 7 Q. 8 having more than just a, quote unquote, economic well in this area, in your opinion, would be drilling vertically? 9 Yes, sir. 10 Α. Mr. Feldewert brought up about surface use, but you 11 Q. 12 were here to listen to Mr. Tresner testify, did you not? 13 Α. Yes, sir. 14 0. And Cimarex has -- Cimarex has a surface use 15 agreement with the owner? Yes, sir. 16 Α. 17 Ο. And again, when you are going into comparisons for 18 the Hydrus and Miranda and Hatfield, what you are trying to show is the difference between vertical and horizontal wells 19 in a small area. Correct? 20 21 Α. Yes, sir. Regardless of where the reservoir is located? 22 Q. 23 Α. Yes, sir. Don't you think that comparing wells close at hand 24 Q. wherever they are in an area would give you an idea as to the 25

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Page 86 1 propriety of drilling vertically or horizontally? 2 Α. Yes, sir. Now, in that Dagger Draw Cemetery area, there have 3 Ο. been a number of successful vertical Yeso wells drilled, have 4 5 there not? They have been successful. They are not stellar 6 Α. 7 producers. Q. But some parties continue to drill vertically 8 Okay. 9 down in that area, Mewbourne Oil Company and others? 10 Α. They do. And then again, just to reiterate the one point, 11 Q. there are a number of old vertical wells throughout this 12 13 whole trend that were not very good wells? Α. That is correct. 14 As a matter of fact, say in Dagger Draw area, there 15 Ο. 16 were a number -- that area was originally developed for the Cisco Canyon, was it not? 17 18 Α. Yes, sir. And it was somewhat of a --But the people passed by the Yeso whenever that area 19 Q. 20 was drilled up ten or 15 years ago? That is correct. 21 Α. And they didn't even think about doing it back then, 22 Ο. so it's the newer technology that has enabled --23 24 MR. FELDEWERT: Let me object. I think Mr. Bruce is 25 getting to the point where he is testifying rather than the

Page 87 1 witness. 2 EXAMINER BROOKS: Well, he is entitled to ask cross-examination -- leading cross on -- well, no, this is 3 his witness. 4 5 MR. FELDEWERT: This is direct. 6 EXAMINER BROOKS: He is not entitled to leading 7 questions. Perhaps you should rephrase your question. MR. BRUCE: That's fine, Mr. Examiner. 8 9 Q. I'm just getting at the point that, you have testified that it's only because of the recent completion 10 technologies that these zones are productive or economic. 11 12 Α. Yes, sir. We believe completion is key. 13 MR. BRUCE: Thank you. That's all I have. 14 EXAMINER BROOKS: Mewbourne is drilling some horizontals in this area, too, are they not? 15 THE WITNESS: They have. 16 17 EXAMINER BROOKS: That's what I thought. 18 EXAMINER WARNELL: Did you know anything about their 19 success or production? 20 It appears that they are going back to THE WITNESS: 21 vertical. I really couldn't say at this point. 22 EXAMINER WARNELL: I have no further questions. 23 MR. BRUCE: That's all I have, Mr. Examiner. 24 EXAMINER WARNELL: No further witnesses? Shall we 25 move on to Mr. Feldewert's witnesses?

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Page 88 MR. FELDEWERT: Yes. And we would like to call our 1 2 first witness. 3 EXAMINER WARNELL: Okay. MR. FELDEWERT: We will call Mr. Stuart Dirks. 4 You 5 keep those in order? 6 EXAMINER WARNELL: Yeah. 7 EXAMINER BROOKS: I'm not going to take the time to get them in order. I'm just going to get them out of the 8 9 way, unless you are going to be using them. MR. FELDEWERT: I don't think so. 10 EXAMINER BROOKS: Okay. Then I won't waste the 11 12 time. 13 STUART ALLEN DIRKS 14 (Having been sworn, testified as follows:) 15 DIRECT EXAMINATION BY MR. FELDEWERT: 16 17 Q. Mr. Dirks, would you please state your full name for the record? 18 19 My name is Stuart Allen Dirks. Α. 20 By whom are you employed and in what capacity? Q. 21 I'm employed by COG Operating as a landman. Α. Have you previously testified before this 22 Q. 23 Division? 24 Α. Yes, I have. 25 And were your credentials as a petroleum landman 0.

Page 89 accepted and made a matter of record? 1 2 Yes, they were. Α. 3 Ο. Are you familiar with the application that's been filed by COG in this case? 4 5 Α. Yes, I am. 6 ο. Are you familiar with the status of lands and the 7 subject therein? Yes, I am. 8 Α. Would you just briefly identify what COG seeks with 9 0. 10 this, its two applications? We are seeking approval of our proposed horizontal 11 Α. 12 development for the east half of Section 6 in 19/26. 13 Q. And what's the objective of your development? What formation are you talking about? 14 15 Α. Our objective is the Paddock and the Yeso Formation. 16 If you turn to what's been marked as COG Exhibit 0. Number 1, does that map depict towards the middle of the page 17 18 in red your proposed horizontal well development plan? Α. Yes, it does. 19 And does it likewise then depict Cimarex's competing 20 ο. vertical well development plan? 21 22 Α. Yes, it does. Would you just briefly explain the remaining colors? 23 Q. Looks like there's some red dots and some blue dots on here. 24 The red lines show our proposed horizontal 25 Α. Sure.

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1 wells. The red squares are the proposed surface locations.
2 The red circles are the bottom hole locations. The diamonds
3 are the competing Cimarex proposals. The red dots indicate
4 Paddock producing wells. The blue dots depict Blinebry
5 producing wells. And the half and half, half red half blue,
6 depict wells that have produced from both.

Q. Now, the both competing plans here involve the8 Paddock, correct?

9 A. Correct.

Q. What does, in terms of approval from the Division,
what does COG's development plan require from the Division?
A. It would require three things. One, it would
require approval of 160 acre non-standard proration spacing
unit for each well, one in the east half east half of Section
6, and the other in the west half east half of Section 6.

16 Q. The second thing?

A. Secondly it would require approval of non-standardsurface location for both wells.

19 Q. Where do you propose to have your surface location20 for your horizontal well?

21 A. 150 feet off Section 1.

Q. When it comes to the pool penetration point and the producing interval and the bottom hole locations, will those all be standard?

25 A. Yes, they will.

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Page 91 1 Q. So it's just the surface location that is non-standard? 2 Yes, that's correct. 3 Α. 4 Q. And I'm assuming the third thing is that you would 5 need the pooling of all the mineral interests in the Yeso 6 Formation underlying those two 160-acre tracts? Yes, that's correct. 7 Α. I should say 160-acre project areas. 8 Ο. I want to 9 address that pooling issue first. 10 Α. Okay. Q. Okay? Does COG's Exhibits 2 A and 2 B, are they the 11 12 well proposal letters that were sent to all the non-working interest owners in the proposed spacing units for the east 13 half of Section 6? 14 15 Α. That's correct. And did the same letter -- I know in this case we 16 Ο. have as an example the Cimarex -- letter sent to Cimarex 17 18 Energy -- did the same letter go to all of the interest owners of record? 19 20 Α. Yes, that's correct. 21 Ο. And the well identifies -- or these particular letters identify the footage location, do they not? 22 23 Α. Yes, they do. 24 Q. They also provide an AFE? 25 Α. Yes, they did.

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	1	Q. And did you also send a proposed JOE?
	2	A. Yes, we did.
	3	Q. I want to turn briefly to the AFE that went with
	4	these proposal letters. Just for the record, one is for the
	5	Arabian 7H and the other is for the Arabian 8H?
	6	A. Yes.
	7	Q. Are the costs that are identified on these AFEs, are
	8	they in line with the costs that the company has incurred to
	9	drill similar horizontal wells in the Paddock?
	10	A. Yes.
	11	Q. And have you then estimated the overhead and
	12	administrative costs while drilling these wells and also
	13	while producing?
	14	A. Yes. We have estimated \$6,000 per month drilling,
	15	\$600 per month producing.
	16	Q. And are those the figures that you would recommend
	17	be incorporated into the order that results from this
	18	hearing?
	19	A. Yes, they are.
	20	Q. Okay. And do you also request that these overhead
	21	administrative costs be adjusted in accordance with COPAS
	22	accounting procedures?
	23	A. Yes.
	24	Q. Does Concho then also request a 200 percent risk
	25	penalty be imposed to all working interest owners that do not
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Page 93 1 voluntarily commit to this well? 2 Α. Yes. All right. Now, is Exhibit Number 3, COG's Exhibit 3 Ο. Number 3, is that a list of the interest owners in this 4 5 spacing unit? Yes, it is. 6 Α. 7 0. Okay. Are there interest owners here that you have been unable to locate? 8 9 Yes, there are, three of them. Α. Could you identify them please? 10 Ο. Ruby Liggett, Dianne Shigetani, and Gustav 11 Α. 12 Johnson. ο. And Ms. Liggett and Ms. Shigetani are in the 13 proposed spacing unit for both the 7H and 8H, correct? 14 15 Α. Correct. And then Mr. Johnson is in the proposed spacing unit 16 Q. 17 for the 8H? That's correct. 18 Α. 19 With respect to the remaining partners, they have Q. either been leased or you have been able to locate them? 20 That's correct. 21 Α. 22 Q. Remaining interest owners? 23 That's correct, yes. Α. 24 Q. With respect to the parties you have been unable to locate, what efforts have you undertaken to find them? 25

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Page 94 1 Α. We hire our brokers in the field. We task them with locating these people. They do various record checks. 2 They 3 have involved People Search software that they use. 4 With respect to -- and I think this has been Q. 5 testified to already by Mr. Tresner -- with respect to Don 6 Bradshaw down in the spacing unit 8H, you actually have a 7 lease with Mr. Bradshaw, correct? We have leases from his heirs. 8 Α. And did you provide copies of those to Mr. Tresner? 9 Q. 10 Yes, we did. Α. The -- we also see companies like Abo Petroleum 11 Q. Corporation, Myco Industries, Yates -- I guess Yates is not 12 13 on here -- but David Arrington and Oxy on here as well, do we not? 14 15 Α. Yes. 16 Have you been in contact with them about your Q. horizontal development plan? 17 18 Α. Yes. And have you undertaken efforts to reach agreements 19 Q. 20 with them about this development plan? 21 Α. Yes. And do you hope to have those agreements shortly? 22 Q. Yes. 23 Α. 24 Have they expressed support for your horizontal · Q. 25 drilling plan?

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Page 95 1 Α. Yes, they have. 2 ο. I want to then turn to the non-standard spacing unit portion of your application. Okay? Now, you said it 3 4 involves two non-standard, 160-acre spacing and proration 5 units, one comprised of the west half of the east half, and 6 the other comprised of the east half of east half of Section 6. Correct? 7 That's correct. 8 Α. Did you identify and provide notice to all of the 9 0. interest owners of record in the 40-acre areas surrounding 10 your proposed non-standard spacing unit? 11 12 Α. Yes, we did. And if I turn to COG Exhibit Number 4, is that an 13 Ο. 14 Affidavit of Notice for these -- this hearing here today for 15 these non-standard spacing units? 16 Α. Yes, it is. And we have an affidavit in there both for the case 17 ο. involving the 7H and the case involving the 8H, correct? 18 Α. 19 Correct. 20 And mine has a yellow page dividing them. Ο. I hope 21 that's the way it is in all the books. Now, there are number of parties, interest owners, listed on here, correct? 22 23 Α. Correct. All right. First off, you said that they involve 24 Q. 25 the interest in the surrounding 40 acres. Does this list

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Page 96 1 also include the parties subject to any pooling order? Α. Yes. 2 There are also individuals on here for whom Okav. 3 0. 4 you have been unable to find an address, correct? That's correct. 5 Α. 6 What efforts have you undertaken to locate those Ο. individuals? 7 We went through the same process as trying to locate 8 Α. 9 the missing owners within the proposed project area. Hired brokers? 10 Q. Yes, the same brokers. Α. 11 12 ο. And they use various internet searches in trying to locate individuals? 13 Yes, that's correct. 14 Α. 15 Ο. In addition to providing this notice letter to the parties that you did locate, did COG also publish in the 16 Artesia Daily Press notice of this hearing? 17 18 Α. Yes. 19 0. And has that been marked as COG Exhibit Number 5? 20 Α. Yes. 21 Q. And for purposes of the record, Page 1 of Exhibit 5 Well 7H, and Page 2 involves Well 8H. Correct? 22 23 Α. Correct. 24 Q. Now I want to turn, Mr. Dirks, if I can, to the 25 competing development proposals. Do you have information on

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Page 97 1 the ownership breakdown in the southeast quarter of 2 Section 6? 3 Α. Yes, I do. 0. Is your information marked as COG Exhibit 4 Number 6? 5 Yes, it is. 6 Α. Now, first off at the bottom, do you identify what 7 Q. your records show as the ownership in the entire southeast 8 quarter breakdown? 9 10 Yes, correct. Α. 11 And then in the yellow portion of the exhibit, you Q. 12 identify the breakdown based on your records by tract, 13 correct? Yes, that's correct. 14 Α. 15 Okay. Why is the COG and YPC interest shown Ο. 16 together here? COG and Yates Petroleum entered into a development 17 Α. 18 agreement effective June 1 of this year. 19 Ο. And is COG Exhibit Number 7 a copy of that 20 memorandum of development agreement that was filed in the 21 Eddy County records on June 16, 2011. 22 Α. Yes, it is. And I think that's already been the subject of some 23 Q. 24 testimony from Mr. Tresner. 25 Α. Yes.

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Page 98 And just to be, for the record, that particular 1 ο. 2 memorandum of development agreement, if you look on the last page of Exhibit A, it covers all of Section 6, correct? 3 Yes, that's correct. 4 Α. 5 Q. All right. Now, we looked at your title information 6 on COG Exhibit Number 6. Do you have any kind of a title 7 opinion take-off supporting this ownership breakdown? We have take-offs. 8 Α. Has that been marked as COG Exhibit Number 8? 9 Ο. Yes, it has. 10 Α. And does the first page of Exhibit Number 8 deal 11 Q. 12 with the 120-acre tract? Α. Yes, it does. 13 And then the second page -- I guess the second and 14 0. 15 third page deals with the 40-acre tract, correct? Yes, that's correct. 16 Α. 17 Q. Now, you're -- what was the date of -- I'm sorry. Who prepared this take-off? 18 19 Α. Prime Title and Leasing. 20 And the date on here is the middle of July? 0. 21 That's the date on here. Α. Q. Okay. Do you routinely rely on these -- on these 22 23 type of entities in conducting your business? Yes, we do. 24 Α. 25 Now, I look on here, first page, for example, and I Ο.

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Page 99 see an interest breakdown in the 120-acre tract that I see 1 2 references Yates Petroleum, Oxy, Abo and Myco. Do you see 3 that? Α. Yes. 4 5 Is the Yates Petroleum interest on here, is that Q. 6 the -- what is subject to your memorandum of development? 7 Α. Yes, it is. 8 Now, Cimarex is not shown on this 120-acre tract. Q. 9 Correct? 10 Α. Correct. What did your additional research find out in your 11 Q. 12 examination about Cimarex's interest in this particular 13 120-acre tract? 14 Α. That that mineral interest has been leased by Cimarex. 15 16 Q. Okay. And I think Mr. Tresner has identified 17 Mr. Gray as the lessee. Α. Yes. 18 19 0. Do you know, in addition to that, you show here that Ruby Liggett has a 33 percent interest in this 120-acre 20 21 tract. Do you see that? 22 Α. Yes. Your record shows that that interest is still 23 Q. 24 open? 25 Yes, that's correct. Α.

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1	Q. Okay. Now, if I go to the next page, this
2	particular take-off does not shown an interest held by
3	Concho, correct?
4	A. That's correct.
5	Q. Can you identify the interest that you acquired on
6	this take-off?
7	A. The interest is listed under Don L. Bradshaw. We
8	obtained leases from his heirs.
9	Q. Okay. So he is deceased?
10	A. Yes.
11	Q. And you obtained leases from his heirs?
12	A. Yes.
13	Q. And it's a 15.14 percent interest in this 40-acre
14	tract?
15	A. That's correct.
16	Q. And if I go back to your Exhibit Number 6, you then
17	show COG as having a 15.14 percent interest in that
18	particular 40-acre tract?
19	A. That's correct.
20	Q. All right. Now, if I go back to your Exhibit Number
21 '	6, and outside of the acreage that or the interest that
22	you see is open on here and unleased, would you did COG
23	discuss its horizontal development plans with the working
24	interest owners in the southeast quarter that is shown on
25	Exhibit Number 6?

Page 101 Yes, we did. 1 Α. Did you, for example, meet with -- just have 2 Ο. 3 discussions with Myco, Abo and Yates? That's correct, and also Arrington. 4 Α. Okay. Does COG Exhibit Number 9, does it contain 5 Ο. 6 letters of support for your horizontal development plan from 7 both -- or from Yates Petroleum, Abo Petroleum, Myco Industries and David H. Arrington? 8 Yes, it does. 9 Α. And, in fact, the first page of that exhibit 10 Ο. authorizes me to enter an appearance on behalf of Yates 11 12 Petroleum, Abo, and Myco in support of your application 13 today? Α. That's correct. 14 15 Okay. Has COG also had discussions with Oxy about Ο. 16 its horizontal development plan? 17 Α. Yes, it has. 18 0. And what has been the nature of those discussions 19 and what has transpired? 20 Oxy has indicated that they signed the operating Α. 21 agreement for Cimarex's vertical proposals before they 22 received our competing proposals for horizontals. And they stated that they support our horizontal program over the 23 vertical, and we --24 I'm sorry, I interrupted. 25 Q.

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Page 102 I was going to say, we hope to get letters of 1 Α. support from them soon. 2 So to your knowledge, based on your discussions with 3 Ο. these other working interest owners, it appears, does it not, 4 5 if I go back to Exhibit Number 6, that all of the leased working interest owners, all of the leased working interest 6 7 owners in southeast quarter support your horizontal drilling plan except for Cimarex? 8 9 Α. That's correct. And based on your records, Cimarex holds 25 -- a 25 10 Ο. percent interest in the southeast guarter? 11 Α. That's correct. 12 So then it would appear, would it not, that the 13 Q. remaining working interest owners or the majority of the main 14 15 working interest owners support a horizontal development plan? 16 17 Yes, that's correct. Α. Did at some -- did you also have, in meeting with 18 0. all of these working interest owners, did you attempt to set 19 20 up a meeting with Cimarex? Yes, I did. 21 Α. 22 Ο. Okay. And what was the purpose of that meeting? Well, we hoped to arrive at some kind of a 23 Α. compromise to avoid having to fight over this section and 24 25 come to hearing.

Page 103 1 Q. And let me step back. Did you actually attend the 2 meeting? Yes, I did. 3 Α. 4 Ο. So you have first-hand knowledge? Yes, I do. 5 Α. When did you first -- when did you contact Cimarex 6 Q. about trying to get together and see if you could reach some 7 kind of development agreement? 8 I believe it was last Thursday when I called. 9 Α. Okay. And then was there -- did they respond 10 Q. immediately and say that they would meet? 11 12 Α. Yes, they did. When did you finally have a meeting? 13 Q. 14 It was Monday afternoon this week. Α. And what was the -- what was the results of that 15 Ο. 16 meeting? What did they say about, for example, your proposal to drill horizontal wells? 17 They were strictly against it. They favor vertical 18 Α. over horizontal. 19 20 Did they express a willingness to consider a ο. 21 horizontal well proposal? They absolutely did not unless we could present to 22 Α. 23 them information -- the word they used was to be educated as 24 to horizontals. 25 Ο. They wanted you to educate them about the success of

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1	horizontal development? Page 104
2	A. The superiority of horizontal over vertical, yes.
3	Q. Did that surprise you given that Cimarex itself has
4	drilled horizontal wells?
5	A. Well, yes.
6	Q. Did you also discuss with them ownership
 7	information? Did you try to understand what the ownership
8	breakdown was and the basis for any differences?
9	A. I did ask for their ownership information, yes.
10	Q. Did they provide that information?
11	A. No, they did not.
12	Q. Okay. Did you so they wouldn't provide you the
13	ownership information that they had?
14	A. They just well, they didn't respond.
15	Q. Okay. All right. Is COG prepared at this hearing
16	through its remaining witnesses to educate Cimarex as to
17	why and the Division as to why you think horizontal
 18	development is better for the south for the working
19	interest owners in the southeast quarter?
20	A. Yes, absolutely.
21	Q. In your opinion, will the granting of COG's
22	application be in the best interest of conservation and
23	prevention of waste and protection of correlative rights?
24	A. Yes.
25	Q. And is that and is part of that based on your

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Page 105 discussion with the other working interest owners and their 1 2 desire to see horizontal development in this area? Yes, it is. 3 Α. Were COG Exhibits 1 through 9 prepared by you or 4 Ο. 5 compiled under your direction and supervision? 6 Α. Yes. 7 MR. FELDEWERT: Mr. Examiner, at this time I move the admission of COG Exhibits 1 through 9. 8 9 MR. BRUCE: No objection. 10 EXAMINER WARNELL: Exhibits 1 through 9 are admitted. 11 12 (Exhibits COG 1 through 9 admitted.) 13 MR. FELDEWERT: And that concludes my examination of this witness. 14 15 CROSS-EXAMINATION BY MR. BRUCE: 16 Mr. Dirks, when did -- looking at your Exhibit 8, 17 Q. when did you acquire the Bradshaw interest? 18 19 Α. It was recently. As Mr. Tresner said, it was, like he said, this past couple of weeks to a month. I don't 20 21 remember specifically. You don't remember specifically? 22 Ο. 23 Α. No. Times are busy in the business and dates and times 24 Q. kind of fly away from you, don't they? 25

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Page 106 1 Α. Unfortunately. 2 ο. When did COG begin negotiating with Yates on the 3 development? Α. In March of last year. 4 March of 2010? 5 ο. 6 Α. Correct. 7 Q. The original Colorado well proposals went to Yates in April of this year. Did Yates inform you of those well 8 proposals? 9 10 Α. Yes, they did. When was the first time you contacted Cimarex to let 11 Q. them know that you had an interest in the Colorado wells? 12 13 Α. It was about the time that I sent Mr. Tresner the leases from the heirs to the Bradshaws, and I asked for the 14 Kansas proposal. 15 16 ο. A few weeks ago? 17 Α. A month. That time frame. This is all fee -- fee surface and fee minerals in 18 Q. 19 the area water we are talking about to east half of Section 6. 20 21 Α. Yes, I believe so. Does -- I don't know who the surface owners are in 22 Q. the northeast quarter, but does COG have a surface use 23 agreement? 24 25 Α. Our surface landman has a verbal commitment, but it

Page 107 1 has not been papered. 2 Ο. There have been some questions about land use out here, but Cimarex does have a surface use agreement with 3 surface owners in southeast quarter, correct? 4 5 Α. I saw that this morning. 6 Ο. And of course the surface owners are capable of 7 protecting their own interests, are they not? Α. 8 Yes. Do you have a title opinion prepared yet on this 9 Ο. 10 acreage? Α. We have one ordered. It's not completed. 11 12 Q. Attorneys are pretty slow with those, aren't they? 13 Α. They are pretty overloaded, yes. 14 I speak from personal experience. Q. Turn to your Exhibit 4. You notified a bundle of people, and I just have 15 a couple of questions. Was this list prepared by, you know, 16 the same land company or another independent landman that you 17 18 had do the take-off? It was by that same Prime Title. 19 Α. 20 Q. Okay. Now, and maybe you don't know, but when they 21 are doing this, I would presume they would conduct a miscellaneous search rather than just going through the --22 23 the tract indexes of the title company. Would you think? Well, I would hope so. 24 Α. 25 Q. The reason I ask is on the very first notice letter,

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1	Page 108 the address list, it has Terra Resources. That company
2	hasn't been around for 20 years, I believe. Are you familiar
3	with that company
4	A. No, I'm not.
5	Q Mr. Dirks?
6	A. No, I'm not.
7	Q. There are several I will represent to you there
8	are several merger documents of record regarding that
9	company, so I was just curious.
10	MR. FELDEWERT: Should we scratch them off the list.
11	MR. BRUCE: Somebody owns that interest. It's been
12	merged in and out several times.
13	Q. How many contacts have you had with the DHA
14	interest, the Arrington interest?
15	A. Personally, three, maybe, three or four.
16	Q. And what portion of Yates Petroleum the
17	development agreement of Yates, it's strictly with Yates, not
18	with the Abo and Myco entities. Is that correct?
19	A. That's correct.
20	Q. Okay. What portion of Yates' interest can you earn,
21	or are you at liberty to say.
22	A. I don't believe I am at liberty to say.
23	Q. Is it a drill to earn agreement?
24	A. That that agreement is confidential.
25	Q. Can you tell us COG's working interest in each of

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Page 109 your proposed spacing units? 1 I have that prepared. I didn't bring it for this 2 Α. hearing, but it's for the -- well, I might have these 3 backwards, but for one them it's just about above 70 percent, 4 and for the other it's just below 70 percent. I can't 5 remember if it's the 7H or 8H, which is which. 6 7 Ο. And that includes the Yates interest? Α. That's correct. 8 Under the development agreement, do they get a 9 Q. portion of whatever COG might acquire in this area? 10 MR. FELDEWERT: Let me object. I think it's been 11 12 testified that's a confidential agreement. EXAMINER BROOKS: The witness can decline to answer, 13 14 since he's probably been told. MR. BRUCE: We seem to have a lot of confidential 15 agreements lately, Mr. Examiner. 16 17 EXAMINER BROOKS: Well, that's true. And as you know, I have held that, if they're relevant, that we can get 18 19 into those agreements, but if they're not relevant, we don't need to. 20 MR. BRUCE: Well, I won't make a big issue of it in 21 this case, Mr. Examiner, but if --22 Mr. Dirks, if you could give us a breakout. 23 Q. You said you had a listing of the well by well working interest 24 for the horizontals, if you could provide that to us. 25

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Page 110 That's -- once I get back to Midland -- I mean, I Α. 1 have it prepared, but we didn't bring it for the hearing. 2 Now, this meeting on Monday, again, who was present 3 0. 4 for COG? Myself, and Sean Johnson, initially. 5 Α. And who is Mr. Johnson? 6 Ο. 7 Α. He is a landman on the shelf team with myself. And who attended from Cimarex? Ο. 8 Jeff Gotcher and Chad Johnson. Α. 9 10 Ο. Mr. Johnson is an engineer. Do you know that? 11 Α. Yes. Q. So really this meeting to discuss the horizontal 12 development, but COG's only representatives were landmen? 13 Excuse me, I said initially. It was just Sean and 14 Α. 15 myself. ο. And there was, I believe, in a response -- and I 16 don't mean to put words in your mouth -- but I believe in 17 response to a question by Mr. Feldewert, you said that 18 Cimarex asked you to explain or provide information about the 19 20 superiority of horizontal versus vertical development, and you said you were surprised at that. 21 Well, a little bit. I know they drilled some 22 Α. horizontals, but --23 Of course, that would have taken some geologic and 24 Ο. engineering backup, rather than just land backup to convince 25

Page 111 them of that? 1 2 Α. That's correct. 3 0. Now, I guess part of COG's complaint is that -- is that Cimarex never called them or met with them about --4 about their plan of development on the vertical end. But did 5 COG ever have any intent of signing an AFE and a JOA 6 regarding vertical development? 7 8 Α. Probably not. 9 Ο. So it would have been a useless meeting? 10 Α. Well --MR. FELDEWERT: Objection. That calls for 11 speculation. 12 13 EXAMINER BROOKS: I would advise that be overruled. 14 EXAMINER WARNELL: I'm taking your advice. Q. I would like the question answered. 15 16 Α. Would you repeat it, please? MR. BRUCE: Could you read that back? 17 18 (Question read back). 19 Α. Thank you. We went in and we honestly wanted to try 20 to work out a compromise instead of fighting over this 21 section. We went in initially with a proposal that Cimarex 22 take one of the 160 non-standard -- one of the 160 project areas and we take the other 160, and we each drill our 23 horizontals and hopefully reach a compromise that way. 24 Ιt 25 became clear that Cimarex very strongly believes in vertical

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1	Page 112 over horizontal, so that was not acceptable to them.		
2	Q. But your compromise would have required horizontal		
3	wells?		
4	A. Yes.		
5	Q. Now, does COG own interest in the remainder of		
6	Section 6? In other words, in acreage outside of the		
7			
	southeast quarter of Section 6?		
8	A. Outside the southeast we do own interest.		
9	Q. And has COG ever contemplated laydown horizontal		
10	wells?		
11	A. That's probably more a question for the geologist		
12	and engineer, but I know they don't like the		
13	Q. Of course, you could still drill a horizontal well		
14	with an 80-acre unit, could you not?		
15	A. A shorter lateral, I don't know. Again, that's		
16	probably an answer for the geologist and engineer, but I know		
17	they don't like short laterals, either.		
18	Q. Does COG have plans to drill horizontals in the west		
19	half of Section 6?		
20	A. I believe there is a plan to drill another one,		
21	later down the road.		
22	MR. BRUCE: That's all I have, Mr. Examiner.		
23	EXAMINER WARNELL: David?		
24	EXAMINER BROOKS: I don't think I really have any		
25	questions, except on your list of the take-off, it doesn't		

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Page 113 really matter, but I never found Gustav Johnson on the list 1 2 anywhere. You talked about him. 3 THE WITNESS: On the --4 EXAMINER WARNELL: Which exhibit are you --5 EXAMINER BROOKS: Which exhibit is it? 6 THE WITNESS: Is that 4? 7 EXAMINER BROOKS: Yeah, Number -- Number 3. 8 THE WITNESS: Oh, he's -- Exhibit Number 3? 9 EXAMINER BROOKS: Yeah. 10 THE WITNESS: He is at the top of the list for the 11 Arabian 6 Number 8. 12 EXAMINER BROOKS: Okay, my mistake. Thank you. 13 That's all I have. EXAMINER WARNELL: Well, I can't remember which 14 15 exhibit it was we looked at, but there were some short 16 horizontals, 80-acre horizontals, it looked like to me somewhere. 17 18 THE WITNESS: Yes, sir, I believe that we acquired 19 those from -- I don't believe that we drilled those. 20 EXAMINER WARNELL: I'm still a little bit confused 21 about the Monday meeting, Mr. Dirks. 22 THE WITNESS: Yes, sir. 23 EXAMINER WARNELL: There were two people there from Concho? 24 25 THE WITNESS: Initially. When the talk turned to it

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1 being an issue --

2 EXAMINER WARNELL: This -- this was in your -excuse me -- this was in your office, right? 3 4 THE WITNESS: Yes, sir. Yes, sir. When the talk 5 turned to it being a question of vertical versus horizontal, 6 then I asked the geologist and engineer to join us. 7 EXAMINER WARNELL: And the geologist and engineer being? 8 THE WITNESS: Mr. Ramon Reyes, and Mr. T.J. Midkiff. 9 10 EXAMINER WARNELL: I have no further questions. Mr. Examiner, there is one thing I would 11 MR. BRUCE: 12 like to point out on their Exhibit 5, and I believe this has 13 been argued before in front of the Division, but the publication notices don't name specific unlocatable interest 14 15 owners. 16 EXAMINER BROOKS: Yeah. And you know I have an opinion about that, but of course I'm not the supreme court. 17 I would -- is that -- that's on COG's notices, you are 18 saying? 19 20 MR. BRUCE: Yes. EXAMINER BROOKS: Well, of course I don't know who 21 is the decision is going to be in favor of this time in this 22 23 case, but if it were in favor of COG, I would recommend that 24 we require them to renotice and reset it because I -- the OCD rules don't specify how you notice by publication, but the 25

Page 115 State of New Mexico judicial rules do, and they require that 1 you name the people you are citing. So that would be what I 2 3 would recommend, if in the event we do go that way. And so perhaps that's the best way to do this. I don't want to 4 5 delay things any more than necessary. Perhaps we should 6 reset it and have it republished so they be considered in the 7 meantime. It will take about four weeks, and then so be 8 ready to issue an order after that procedure has been 9 accomplished.

10 MR. FELDEWERT: Just so I'm clear, Mr. Examiner, 11 your point would be that you believe the Division should 12 require notice of publication to all of the parties for which 13 we do not have an address?

14 EXAMINER BROOKS: Yes.

15 MR. FELDEWERT: And list them in the --

EXAMINER BROOKS: I think they should be listed by name in the -- in the notice published in the newspaper. This is the way you would have to do it if you were citing by publication under the New Mexico Rules of Civil Procedure. That's what I think.

21 MR. FELDEWERT: You would agree with me, though, 22 that that has never been a requirement for non-standard units 23 by the Division in the past.

24 EXAMINER BROOKS: Well, it has been by me in some 25 cases. And I -- I don't know if other people have required

Page 116 Mr. Bruce has regularly done it in his cases. 1 it. 2 MR. FELDEWERT: I'm just trying to clarify -- we 3 have no problem doing it, Mr. Examiner. 4 EXAMINER BROOKS: Well, you know, I don't know what 5 happened, but, you know, I said I'm not the supreme court, 6 but, you know, there is what the -- what has been said in the Johnson case and the other case on notice, which I for some 7 8 reason can't remember the name, but if somebody doesn't get 9 notice that's entitled to the notice, then the proceeding is void as to that party. 10 11 Well, the supreme court has never ruled on what 12 constitutes getting notice in the publication scenario, but I'm not sure -- I don't feel really at all confident that 13 they would hold that a party who has gotten notice because of 14 15 something published in the newspaper and that party is not even named in the notice. That doesn't seem particularly 16 logical to me. And this is not -- I didn't make up this 17 opinion for this case. Your partner, Ms. Munds-Dry, is very 18 19 well -- very well aware that I have taken that position before. 20 21 MR. FELDEWERT: I understand. Like I said, we have no problem doing it, Mr. Hearing Examiner. 22 23 EXAMINER BROOKS: Okay. 24 EXAMINER WARNELL: You want to reset republication. 25 EXAMINER BROOKS: Is the case completed? Is that

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Page 117 1 all we have to present? 2 MR. FELDEWERT: We have two more witnesses. EXAMINER BROOKS: I thought you had two more 3 witnesses. I was afraid you had more witnesses. 4 EXAMINER WARNELL: No, no, no. We are not afraid of 5 6 that at all. What I'm concerned with is -- is, as I told the 7 attorneys the other day in an e-mail, we would take a lunch break from 11:45 to 1:30. 8 9 EXAMINER BROOKS: Yeah. 10 EXAMINER WARNELL: Do we want to go and start with your number two witness, or do you want to just go for lunch 11 12 now? MR. FELDEWERT: I'm anticipating, Mr. Examiner, we 13 might be able to be finish by 12:30. 14 15 EXAMINER WARNELL: Well --MR. FELDEWERT: Our geologist, that's going to be 16 pretty quick. 17 18 EXAMINER BROOKS: By 12:30? 19 EXAMINER WARNELL: This geologist? 20 EXAMINER BROOKS: Well, we are committed to the 21 11:45, and the question is, how do you want to use the time between now and then? 22 MR. FELDEWERT: Why don't we put our geologist on 23 the stand. 24 25 EXAMINER BROOKS: We are glad to do that.

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Page 118 1 MR. FELDEWERT: In that case we would call Mr. Raymond Reyes. 2 RAMON G. REYES 3 (Having been sworn, testified as follows:) 4 5 DIRECT EXAMINATION BY MR. FELDEWERT: 6 7 Q. Would you please state your full name for the record? 8 Ramon G. Reyes. 9 Α. 10 Q. Have you previously testified before this Division? 11 I have. 12 Α. And by whom are you employed and in what capacity? 13 Q. I work for COG Concho Resources. I'm a geologist 14 Α. 15 for the shelf team. 16 Q. Have your credentials as a drilling geologist been accepted and made a matter of public record? 17 Yes, they have. 18 Α. 19 Are you familiar with the application filed in this Ο. 20 case? 21 Α. Yes, I am. Have you conducted a geologic study of the area that 22 Q. is the subject of this application? 23 Yes, I have. 24 Α. 25 MR. FELDEWERT: I tender Mr. Reyes as an expert

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witness in petroleum geology. 1

2

4

MR. BRUCE: No objection.

EXAMINER WARNELL: So recognized. 3

Would you turn to COG Exhibit Number 10, please. Q. Exhibit Number 10, which we already talked 5 Α. Yes. 6 about a little bit. It's just a regional map of the area in 7 question that we are talking about. Just real briefly, it's 8 labeled, "Township and Range." We are focused in Section 6 9 of 19/26. It's highlighted in yellow. We'll zoom into that area in just a little bit, but to give you a reference point 10 of where we are at and what I will be speaking about. 11

To your right-hand corner you see multiple colored 12 dots, that's the Dayton Field. That's been a Yeso producer 13 for many years. There is a smaller Yeso field called the 14 Penasco Draw to your record to the west. As you go farther 15 south there is Dagger Draw, which, for many years it tends to 16 be a Cisco Canyon producing field, and just recently there 17 have been some Paddock wells either drilled or converted into 18 19 Paddock wells from these wells. And, most recently, down in the Cemetery, you go to the bottom of the map, is where the 20 most recent activity for drilling Paddock wells has been done 21 22 by multiple operators, Mewbourne probably being one of the busiest down there. And the majority of those wells down 23 24 there have been -- have been horizontal wells. And does that include the full section horizontals 25 Q.

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Page 120 of the Paddock? 1 That is correct. 2 Α. 3 ο. Okay. Has COG drilled horizontal wells in the Paddock in the Dagger Draw Cemetery? 4 No, we have not. 5 Α. 6 Q. Do you operate horizontal wells in this area in the 7 Paddock? 8 Α. Yes, we do. And do you have staff currently with the company who 9 Q. were involved in drilling those wells? 10 That is correct. 11 Α. Q. Do you have plans to drill other horizontal wells in 12 13 the Paddock on this area shown in Exhibit Number 10? Yes, we do. 14 Α. 15 Q. Anything else about this map? 16 Α. I think that covers it. I was hoping to be quick. Let's turn to what's marked as COG Number 11. 17 Ο. The next exhibit is pretty much the same exhibit 18 Α. 19 except it has a structure map. Like my counter partner 20 showed a while ago, this structure -- the contour lines, when they bunch up together, that's obviously you are in the 21 Delaware Basin, and that pretty much identifies the southern 22 23 limit for the Paddock production. 24 The northern -- northern edges of the Yeso have yet 25 to be determined. There are some scattering of wells up to

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Page 121 1 the north, most of them not very -- very prolific. They are pretty poor producers from the Paddock. 2 3 Do you see any geologic boundaries or faults or 0. pitching out that would prevent horizontal development in 4 5 that area? 6 Α. No, sir, they don't. If you look at this map, as it 7 was told by Meera -- I can't pronounce her last name --8 MS. RAMOUTAR: Ram-tar. 9 -- shows a trend along the shelf edge all the way Α. 10 from 18/26, going south into 19/25 down to Cemetery. So it's all pretty much the same -- the same interval we will be 11 12 talking about, and I will demonstrate the cross section. 13 ο. Let's turn to COG Exhibit Number 12. Identify that and review that for the Examiner. 14 15 Again, using this regional map that we have been Α. looking at, what I've got here is a line of cross section. 16 17 Starting from the south, I picked two vertical wells that were -- that are sort of in the middle of all the horizontal 18 activity, and then there is two subsequent wells as we go 19 farther north to tie in to the wells or the field up to the 20 21 north so I can show some continuity and shows we are talking 22 about the same reservoir. 23 Q. Same reservoir between the area that is the subject of the applications and the Dagger Draw Cemetery area? 24 25 Α. That is correct.

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Q. Anything else about this map?

A. That's it.

1

2

Q. Let's turn to COG Exhibit Number 13. Identify that
and explain that to the Examiners.

5 Α. Exhibit Number 13 is a cross section that I identified on the exhibit beforehand. The well to the -- on 6 7 the left -- and I don't have my glasses, so I'm going to have a little trouble with this -- but the two wells on the left, 8 9 like I said, are in the Cemetery area. And the subsequent two wells are the two wells in the middle are the ones that 10 11 tie in to the two wells on the right, showing, identifying the horizon that we are talking about. 12

13 This is a stratigraphic cross section that's hung on 14 the top of the Paddock or the top of the Yeso -- that's what 15 we would call it. Right above that is the Glorieta 16 highlighted in yellow. And then I have highlighted in green 17 the Paddock interval that we have identified which is roughly 18 the one-third of the upper part of the Yeso section, and the 19 bottom two-thirds being the Blinebry.

Some people here, as we come around the bend, people start calling it Bone Spring, other nomenclature, because over there it's a ramp, and it's slow -- it's slowly undulating, as you see on the structure map, so the Blinebry kind of tends to get a little more silty, and it's a little more -- it's a whole different creature than you see at the

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top, other than the silts are more predominant as you go
 closer to the shelf edge.

How thick is the Paddock zone in this general area? 3 Ο. The Paddock zone is roughly 5- to 600 feet thick. 4 Α. 5 Just like my counterpart mentioned -- we pretty much agree on 6 the geology -- it's all contiguous; it's all the same. 7 Again, I have testified before, this is a heterogeneous carbonate zone. It's poorly developed. As Mr. Bruce had 8 mentioned that it's been overseen for many years by the 9 people who had ownership in the Dagger Draw. 10

We use pretty low cutoffs, like three percent porosity cutoffs, and the rest of this area is .00 nothing, so pretty hard -- it was pretty easy not to bypass this -this zone. The Paddock zone, though, is better -- is better identifiable as far as porosity. It has a better porosity profile overall, so it's one of those targets that you will probably go for first because of what it is.

Q. Would you then turn to COG Exhibit Number 14 and identify it and explain to the examiner what it adds to the discussion?

A. Okay. Again, all I'm trying to establish is we are talking about the same horizon that Cimarex is trying to -proposing to drill their vertical wells into the Paddock, which again is the green zone.

25

The cross section is identical to the one before,

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with the exception of on the second well, there is where it
 says, "Lateral Interval," and it's identified in the Noose
 Federal Number 1.

What I did is, there is roughly about 18 horizontal 4 5 wells within a mile or two from this well. That bracket represents, roughly, the -- I picked the well that had the 6 shallowest horizontal lateral on it, and the bottom of the 7 8 bracket is the deepest lateral horizontal in that -- in that 9 area. So roughly that spot -- that spacing is pretty tight, so I would just say that everybody is chasing pretty much the 10 same interval within that Paddock Formation. 11

Q. If I could then have you flip back to COG Exhibit
Number 12, which is the cross section map with the red dots
on it.

15 A. Okay.

16 Q. Can you just tell us, Mr. Reyes, what conclusions 17 you have drawn as a result of your analysis?

A. Again, my point being, the Paddock that we are
talking about from the Dayton Field all the way to Cemetery
Field is the same producing reservoir that we are talking
about that's also included in Section 6.

The proposed horizontals in Section 6 are within the same lateral interval that have been successful in the Cemetery area. Of course, COG and Cimarex are targeting the same interval under the same acreage. And I'm going to -- as

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Page 125 far as the horizontal proposals and how they constitute to be 1 2 better economic development wells, I'm going to defer that to our engineer who will be the next witness. And there is 3 really no geologic impediment, you know, faulting or -- or, 4 you know, your zone thinning out or anything like that that 5 would not tell us that the zone we are going to be chasing in 6 7 that Section 6 would not be there. 8 In your opinion, would the granting of the COG's Q. 9 horizontal well proposal be in the best interest of 10 conservation and prevention of waste and protection of 11 correlative rights? 12 Α. Yes. 13 Were COG Exhibits 10 through 14 prepared by you or Q. 14 compiled under your direct supervision? 15 Yes, they were. Α. 16 MR. FELDEWERT: At this time, Mr. Examiner, I move the admission of COG's Exhibits 10 through 14. 17 18 MR. BRUCE: No objection. 19 EXAMINER WARNELL: Exhibits 10 through 14 are admitted. 20 21 (Exhibits COG 10 through 14 admitted.) 22 EXAMINER WARNELL: Mr. Bruce? 23 CROSS-EXAMINATION BY MR. BRUCE: 24 Yes, just a few questions. Mr. Reyes, could you 25 Q.

Page 126 turn to your Exhibit 10, please. 1 2 Α. Okay. Looking down in the Cemetery area, there are a 3 Ο. number of 80-acre units and maybe even some 120-acre vertical 4 wells drilled down there, correct? 5 That is correct. 6 Α. 7 And, as a matter of fact, Mewbourne continues to Q. 8 drill on that type of basis quite often, do they not? 9 Apparently so. Α. 10 Ο. Have they been successful doing so? 11 Α. They have. You mention that this is, like you said, there is 12 Q. really no geologic disagreement here. It's a heterogeneous 13 14 reservoir? (Nodding.) 15 Α. 16 Does the reservoir vary -- you know, we had the big Q. area-wide map which I think people started using at these 17 hearings off and on over the last year -- is there a 18 reservoir variability from township to township to township? 19 20 Yes, absolutely. It's lenticular. It's tight. Α. 21 It's a carbonate, so absolutely. So what you have is some porosity lenses or, like 22 Q. 23 you said, it's lenticular? Yes, sir. 24 Α. Certain zones that you just have to access one 25 Q.

Page 127 1 way? 2 Α. Yes, sir. Just in looking at your Exhibit 14, you had the 3 Q. lateral interval. And that is the -- roughly the lateral 4 5 interval that you would intend to drill in your wells? 6 Α. Pretty close, within that green -- that green 7 horizon, yes, sir. 8 Q. You know, you say the reservoir is 5- to 600 feet Does COG intend to drill additional laterals say in 9 thick. the east half east half or west half east half of Section 6 10 to access these deeper intervals? 11 Multiple laterals? 12 Α. 13 Ο. Well, yeah. Another single lateral well to a deeper depth than the initial lateral? 14 15 Α. We're not there yet, but that's an option. MR. BRUCE: That's all I have, Mr. Examiner. 16 EXAMINER WARNELL: Mr. Brooks? 17 18 EXAMINER BROOKS: Are you going to drill pilot holes with these? 19 20 THE WITNESS: Probably. These are not very deep. The target interval is roughly 26 hundred feet. We would 21 like to see a pilot hole just because you like to land it --22 well, this is a pretty thick interval, but, you know, we like 23 to start and hit it where, you know, you give it your best 24 25 shot.

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Page 128 EXAMINER BROOKS: Well, looking at your Exhibit 1 2 Number -- I guess -- are the numbers before or after the 3 exhibit? EXAMINER WARNELL: Before. 4 EXAMINER BROOKS: Okay. Exhibit Number 13, your 5 cross section. 6 7 THE WITNESS: Yes, sir. 8 EXAMINER BROOKS: Are you suggesting that this whole interval that you have outlined in green is you expect to be 9 productive? 10 11 THE WITNESS: You know, for the most part, it is productive. I mean, it's -- like I said, we use, you know, 12 13 three percent porosity cutoffs. You know, part of the -part of the reason this works is because you have to have --14 you like to have, you know, a thickness, overall thickness to 15 16 make up for the difference. EXAMINER BROOKS: If I understood the young lady --17 I won't attempt to pronounce her name. I apologize -- but 18 the young lady's presentation, she had an exhibit with a 19 20 number of colored bands that were extremely different in thickness in different wells in her cross section. And here 21 I sigh see you've got a large green band that's about the 22 23 same thickness all the way across. 24 THE WITNESS: Yes, sir. 25 EXAMINER BROOKS: Is this a difference in

Page 129 interpretation of the geologic data? 1 THE WITNESS: I think it's just a different 2 3 interpretation on what you target as your pay zone. EXAMINER BROOKS: You are confident that the pay 4 zone you have targeted is, from the available evidence, 5 appears to be continuous across this area? 6 7 THE WITNESS: Yes, sir. 8 EXAMINER BROOKS: Okay. That's all I have. EXAMINER WARNELL: Mr. Reyes, let's just stay on 9 that Number 13 for a second. 10 11 THE WITNESS: Okay. 12 EXAMINER WARNELL: The red bands there, I quess, is 13 that the completion interval on these wells, so only three of these wells are completed in the Paddock or Yeso? 14 15 THE WITNESS: Yes, sir. Again, I was picking wells 16 that were deep enough to be able to add to the cross section. You know, some of these wells -- some of these wells are 17 18 fairly old, so getting log data put on there is pretty tough. Also, the red band doesn't constitute that the whole interval 19 20 was perforated the way it is. Sometimes, you know, public 21 data gives you the upper perf and the bottom perf, so not knowing -- you know, and there could be six perfs, or it 22 could be, you know, multiple perfs. So that just kind of --23 all that does, all that illustrates is the area that was 24 25 produced.

Page 130 1 EXAMINER WARNELL: Okay. 2 THE WITNESS: Perforated. EXAMINER WARNELL: That's what I thought. Now, then 3 4 on Number 14 where you have your lateral interval there --5 THE WITNESS: Yes, sir. 6 EXAMINER WARNELL: -- near the top third of the Paddock --7 8 THE WITNESS: Yes, sir. EXAMINER WARNELL: -- that's, I think, kind of what 9 Mr. Brooks was asking, that's where your horizontal or your 10 11 lateral is going to be? 12 THE WITNESS: Somewhere --EXAMINER WARNELL: Somewhere in that bracket? 13 14 THE WITNESS: Yes, sir. 15 EXAMINER WARNELL: Not in the whole Paddock, but in 16 that little lateral interval? THE WITNESS: It will be, yes, sir, within 100 feet 17 of that, I mean, or less. 18 19 EXAMINER WARNELL: Is this a single lateral or multiple lateral? 20 THE WITNESS: This is a single lateral, yes, sir, in 21 the paddock, yes, sir. 22 23 EXAMINER WARNELL: Now, if we could go back just for a minute to Exhibit 10. 24 25 THE WITNESS: Yes, sir.

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	Page 131
1	EXAMINER WARNELL: And Section 6.
2	THE WITNESS: Yes, sir.
3	EXAMINER WARNELL: It's all yellow.
4	THE WITNESS: Yes, sir.
5	EXAMINER WARNELL: It's identified as Concho
6	acreage.
7	THE WITNESS: Yes, sir.
8	EXAMINER WARNELL: What's going on in the west half
9	of Section 6?
10	THE WITNESS: As far as what, sir?
11	EXAMINER WARNELL: As far as anything. When I look
12	at this, and I think, well, here's two operators that are
13	wanting to squeeze two horizontals or four verticals into the
14	east half of Section 6, what's going on in the west half?
15	THE WITNESS: Well, we also have plans to drill
16	vertical wells there I mean horizontal wells.
17	EXAMINER WARNELL: Horizontal.
18	THE WITNESS: Yes, sir, absolutely.
19	EXAMINER WARNELL: It looks like maybe there is one
20	well in the west half. Do you see that there?
21	THE WITNESS: Yes, sir.
22	EXAMINER WARNELL: Do you know anything about that
23	well?
24	THE WITNESS: Not right now, no, sir.
25	EXAMINER WARNELL: All right. I have no further

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Page 132 1 questions. Thank you, Mr. Reyes. 2 MR. FELDEWERT: I have no questions. 3 EXAMINER WARNELL: Okay. EXAMINER BROOKS: Probably good to take our lunch 4 5 recess since we have only five more minutes to the time. 6 MR. FELDEWERT: What time do you want to return? 7 EXAMINER WARNELL: 1:30. 8 EXAMINER BROOKS: 1:30. 9 MR. FELDEWERT: 1:30, okay. 10 (Lunch was recess taken at 11:40. The hearing 11 12 reconvened at 1:34 as follows:) 13 EXAMINER WARNELL: Okay. Then let's go back on the 14 15 record with our sixth witness, and I believe, Mr. Feldewert, this is your third witness. 16 MR. FELDEWERT: Yes, sir. We'll call Mr. Midkiff to 17 18 the stand. T. J. MIDKIFF 19 20 (Having been sworn, testified as follows:) 21 DIRECT EXAMINATION BY MR. FELDEWERT: 22 23 Would you state your full name for the record, Q. please. 24 25 A. T.J. Midkiff.

1	Q.	Page 133 By whom are you employed and in what capacity?
2	<u>е</u> . А.	Concho Resources as a reservoir engineer for the
3	shelf.	Conche Resources as a reservoir engineer for the
4	Q.	How long have you been with Concho?
5	Α.	A year now.
6	Q.	Have you previously testified before this
7	Division	?
8	Α.	Yes, I have.
9	Q.	Were your credentials as a petroleum engineer
10	accepted	and made a matter of public record?
11	Α.	Yes, sir.
12	Q.	Are you familiar with the applications filed in this
13	case?	
14	A.	Yes, sir.
15	Q.	Have you conducted a study of the area that is the
16	subject	of the application?
17	Α.	Yes, sir I have.
18		MR. FELDEWERT: I would tender Mr. Midkiff as an
19	expert w	itness in petroleum engineer.
20		MR. BRUCE: No objection.
21		EXAMINER WARNELL: So recognized.
22	Q.	Mr. Midkiff, if you could turn to what was marked as
23	COG Exhi	bit Number 1, which is our first exhibit in the book.
24	Have you	had a chance to examine the rate of success for
25	vertical	well development in the area that is depicted here

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1 on COG's Exhibit Number 1?

2

25

A. Yes, sir, I have.

3 Q. Why don't you briefly summarize for the examiners4 what you have concluded?

Well, when I first started looking at this acreage 5 Ά. in the development opportunities that we had, I first wanted 6 7 to start with looking at completions that were local to the 8 area. There's been both vertical completions and horizontal 9 completions, and there's been vertical completions 10 immediately offsetting the acreage. And the majority of the development of the area was there in the Dayton Field just to 11 the northeast, and for a period of time they were able to 12 13 make economic vertical completions, it appears.

But as they began stepping out away from that area, and I guess down under the direction where this acreage is that we are talking about today, even with wells that were sand fracked, they still had no success, and, as you can see, defendant stalled.

19 EXAMINER BROOKS: Are you looking at a particular20 exhibit?

21 EXAMINER WARNELL: Number 1.

22 THE WITNESS: Exhibit Number 1.

23 EXAMINER WARNELL: The first.

24 EXAMINER BROOKS: Thank you.

Q. And, in particular, Mr. Midkiff, did you take a look

Page 135 at some wells in the nine section area around the Section 6 1 2 at issue here? Yes, sir. My first step was to try to gather all of 3 Α. the Paddock wells that were local to the acreage that we are 4 talking about. There were five wells that I identified that 5 were within a mile of this acreage or within the offsetting 6 sections to this acreage, and that was completed in the 7 8 Paddock. And I -- I did prepare an analysis on that. 9 0. You did? 10 Α. Yes, sir. Let's turn to what's been marked as Concho Exhibit 11 Ο. 12Number 15. You can -- Mr. Examiner, I put a little map up in 13 Α. the corner of that plot so you can see the half section we 14 15 are talking about, and then the locations of the wells that had Paddock completions. And the curves that you see on this 16 plot are -- those are the old curves from each of those 17 wells. The bold green line running through the middle is the 18 average of those wells. And I forecasted it -- this is 19 normalized -- and I forecasted each of these wells from big 20 production, and again that green line running through the 21 22 middle is the average curve. 23 EXAMINER WARNELL: These other vertical? THE WITNESS: Yes, sir, these are vertical Paddock 24 25 completions.

Page 136 1 EXAMINER BROOKS: What exhibit number? 2 MR. FELDEWERT: 15? 3 EXAMINER BROOKS: 15, thank you. Now, were these five wells in the immediate area of 4 Ο. 5 this section at issue, were they subject to more modern 6 completion technologies? 7 Α. These wells were sand fracked. 8 0. And this is the production that resulted from these efforts? 9 10 Α. Yes, sir. Did you -- you said the green line then was the 11 Q. 12 average recovery from these wells? Yes, sir. 13 Α. Did you then utilize that average recovery to 14 Q. 15 examine the economics of Cimarex's proposed vertical wells in the southeast quarter? 16 17 Α. I did. And you know, initially -- so obviously you are going to start with well performance and determine an 18 ultimate recovery that would be expected from that well. 19 If 20 you take this green line and you forecast it to, you know, approximately a barrel a day there, that gives you right 21 22 around 6 MBO. One of these wells -- a couple of these wells -- well, several of them were left producing making 23 less than a barrel a day. Some of that drug out to about 11 24 25 MBO, so that's why I called the range, you know, 6 to 11 MBO.

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Page 137 1 For my economic analysis, I will take a number in the middle 2 of that, and we'll go with that.

3 Q. Is your economic analysis set forth initially on COG4 Exhibit Number 16?

5 A. Yes, sir.

Q. Why don't you explain that to the Examiners, what7 you did.

A. There is two proposals in this area, and the first one that we will look at is this proposal by Cimarex to drill at least four vertical wells. And these are the wells in relation to how Cimarex has staked them.

So based on what's currently been proposed, there would be four surface locations required. According to the AFE that Cimarex sent, the drilling costs for a vertical well is \$1.377 million. So four times 1.377 is \$5.508 million. And based on the data that I showed you previously, the estimated ultimate recovery per well is 12 and a half MBOE.

Now I took nine and a half MBO, and then 18.1
million cubic feet of gas and put that into equivalent oil,
and it's 12 and a half MBOE.

Q. Let me stop you there. This 9.48 shown on there -A. Yes, sir.

23 Q. -- where did that come from?

A. That is based off the previous plot. Like I said,
the average EUR was anywhere from 6 to 11, and I just took a

1 number right in the middle of that.

Q. And I interrupted you. Continue, please.

3 A. And one of the most fundamental economic indicators that oil companies use is development costs, essentially what 4 5 do you have to pay per barrel of oil to get it out of the 6 Based on this AFE cost and the reserves that we have around. 7 seen in this area, the development cost is approximately \$110 8 per BOE. Currently oil prices are around \$85 a barrel, so 9 you see you will have a hard time making money at that type 10 of development cost. And as well, if you take 12 and a half 11 MBOE and multiply it by four locations, you will see you have an ultimate recovery based on this development of 50 MBOE. 12 13 0. Now, is this analysis one of the reasons why Cimarex

14 -- I'm sorry -- why Concho indicated it would not 15 participate in Cimarex's proposed vertical well development

16 plan?

2

17 A. Absolutely.

Q. Having done this analysis then of their vertical well development plan for the southeast quarter, what did you do next?

A. As I stated earlier, I feel the most practical thing to do when looking at verticals and horizontals on a piece of acreage is to look at the closest development that's applicable that's similar to that type of development, and there is horizontals just beside this area that we alluded to

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Page 139 earlier, and I did do the same type of analysis using these 1 2 horizontals. Let me stop you right there. Are you looking at 3 Ο. Concho Exhibit 17? 4 5 Α. I did, yes, I'm sorry. 6 Ο. You are over to the next exhibit? 7 Α. Yes. 8 0. Which is Concho Exhibit 17? Yes. So what I did was pool all of the -- and all 9 Α. 10 of the wells that are highlighted there in green, those are 11 horizontal wells that we have production on just to the south of the acreage. You can see the acreage there in yellow. 12 And I created a, I guess, a normalized curve almost on these 13 wells, and that's one of them. 14 15 Q. Now, there was questions about Mewbourne wells. Are the Mewbourne wells on here? 16 17 Α. Yes. The two northern most wells that you see, the 18 one going from Section 25 and 24, and there is one in Section 19 24, those are the two Mewbourne wells you were talking about earlier. 20 21 Q. So you included them in your analysis? 22 Yes, I did. Α. 23 Q. Anything else about this Exhibit 17? No, sir. 24 Α. 25 Okay. You then said you created a curve, correct? Q.

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Page 140 Yes, sir. 1 Α. 2 Is that comprised of Concho Exhibit 18? Q. 3 Α. Yes, sir. Why don't you explain your colors on there, 4 Q. 5 please? 6 Α. Well, this is the oil curves from each of those 7 horizontals. And the two bolded -- the red and the blue bold 8 curves, those are the Mewbourne wells. And what I'm trying 9 to indicate with those two curves is that, as you move 10 further north toward the acreage we are talking about here, 11 well performance doesn't change. It's just as good as what we are doing further to the south, and it almost fits exactly 12 13 with the production that we have seen further south. 14 And just for the sake of putting what I consider to 15 be a conservative curve on there to say, for argument's case, 16 I put a 230 MBO curve on there to show what that would look like. And that is the economics that I will use for the -- I 17 18 mean, that is the reserves I will use for the economic case for this. 19 20 Q. You said the red and blue lines were the Mewbourne Are they actually indicating a better curve than the 21 wells. 230 MBO curve? 22 23 Α. In my opinion, yes, sir. But you went ahead and went with the more 24 Q. 25 conservative curve?

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1 A. Yes, sir.

Q. Okay. What did you then do with this information?
A. Well, I did the same type of analysis I did for the
vertical wells, and that's on the following slide.

5 Q. COG Exhibit 19?

6 A. Yes.

Q. This relates to COG's proposed horizontaldevelopment?

9 A. Yes, sir.

10 Q. Okay.

Well, going through the same list of indicators that 11 Α. we looked at earlier, doing the horizontal development, it 12 13 would require two surface locations. COG's drilling and 14 completion cost per horizontal as on the AFE was \$2.844 15 million. That gives a total development cost of \$5.688 16 million. The estimated ultimate recovery based on the performance that we have seen so far, and based on that curve 17 that I showed you a second ago, you use 230 MBO and 582 18 million cubic feet to come out with 327 MBOE equivalent. 19

And if you break this down on a unit cost, like I did with the verticals, and compare what does it cost to get a barrel of oil out of the ground, versus, you know, what does it cost to get one barrel of oil out of the ground, you get a development cost of approximately \$8.70, compared to an oil price of \$85 a barrel, and it seems there is a much

Page 142 better opportunity to make money there and be successful. 1 2 ο. For purposes of this case, did you do a side-by-side 3 comparison then of the analysis --Α. I did. 4 -- for these two competing development plans? 5 0. I did. One thing to point out is that ultimate 6 Α. 7 recovery for these two wells is estimated to be 654 MBOE, 8 so --9 Ο. Anything else about that? 10 That's it. I'm sorry. Α. Ο. Then let's move to Concho Exhibit Number 20. 11 Is 12 this your side-by-side comparison of the competing development plans for the southeast quarter? 13 Yes, sir, it is. And you start off by looking at 14 Α. 15 the first two columns there for the vertical versus the horizontal. Those are the numbers we just talked about. 16 The total development cost would be approximately \$5.5 million 17 18 for the vertical and \$5.6 million -- a little over 5.6 for the horizontal case. 19 20 The ultimate recovery, though, as you can see, is 21 almost 12 times higher with the horizontal case as it is with 22 the vertical case. So to normalize that and show what that 23 meant to an interest owner that was just in the southeast quarter, assuming that now they were part of a full section 24 25 lateral there, state those numbers in -- you know, just work

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in hundred percent numbers to make it easy to understand,
divide those numbers in two. So what you are looking at is,
once you net that out, \$5.5 million per development on the
vertical case, and \$2.8 million for development on the
horizontal case.

6 And I guess your equivalent value there would be 50 7 MBO in the vertical case, and taking half of the 654 MBO, you 8 would get 327 MBO. So a much greater value, not only do you 9 spend less, but you also recover much more oil with the 10 horizontals.

11 Q. Now -- I'm sorry, go ahead.

Α. One thing, it's important to note that how strong we 12 13 feel about this is you can see down there at the bottom, we have already elected non-consent on verticals in this area. 14 15 We do not believe in them. Based on previous well performance in the area, we're not -- we don't think that 16 there is any amount of something different we can do to 17 18 change vertical success. And essentially when you break it down on development costs and see how much cheaper it is to 19 20 develop the acreage with a horizontal well, we feel very strongly about it. And it offers a much better opportunity 21 for, again, economic success and continued development. 22

There's been -- people have tried to step out away from that Dayton Field and drill vertical wells. It doesn't work, so they stopped drilling. Concho feels strongly we can

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Page 144 make horizontal wells work and continue development out here. 1 2 Now, this analysis that you just did was focused on Q. 3 the southeast quarter? Yes, sir. 4 Α. 5 Ο. And focused on the existing development plans, correct? 6 7 Α. Yes. The four verticals? 8 Ο. Yes, sir. 9 Α. 10 Q. Versus the two horizontals? 11 Α. Yes, sir. 12 Q. Now, when you look at -- let me ask you this. Has Cimarex's wells been staked? 13 I believe so, yes. 14 Α. So do you understand the pattern of staking those 15 Ο. four wells? 16 Yes, sir. 17 Α. 18 Q. What does that pattern and location of those staked wells indicate to you? 19 It appears that they intend, I guess, if they are 20 Α. successful, to go to ten-acre spacing, similar as they have 21 in other areas of the Yeso. 22 23 Did you -- that would be a full development Q. 24 scenario? 25 Α. Yes.

Page 145 Ο. Did you examine the economics of this full 1 development scenario focusing first on the southeast 2 3 quarter? Yes, sir, I did. Α. 4 Does that start at COG Exhibit 21? 5 Ο. Yes, sir. 6 Α. 7 Why don't you explain that to the Examiners and how Q. it differs from the prior ones? 8 What this is -- and again, I'm trying to look at 9 Α. 10 what that means to everybody involved -- full development in this quarter section on ten-acre space -- ten-acre spacing 11 would require 16 vertical locations, and the interest owners 12 13 would have an interest in four, 40-acre proration units. And I will explain why I think that's important here in just a 14 15 second. But the total development costs for 16 vertical 16 wells, if you do the math, 16 times the \$1.377 million, that 17 18 gives you \$22 million total development cost, and 16 times the 12.5 MBOE will give you the 200 MBOE ultimate recovery 19 20 for the quarter section. So you have expanded your analysis then to full 21 Q. 22 development scenario using the same numbers that we previously went through? 23 24 Α. Yes. 25 Q. Did you then compare the Cimarex full development

Page 146 1 scenario with a -- for the southeast quarter -- with a full 2 development scenario using horizontal wells?

3 A. Yes, sir.

Q. Does that start the next exhibit?

5 A. Yes, sir.

4

Q. Why don't you turn to COG Exhibit 22 and explain7 that to the Examiners.

8 A. Okay. This chart has just had a row added to it 9 there at the bottom to show you how it relates to the 10 previous slide. Concho would need four vertical locations, 11 and that would expand all the way to the north half of the 12 half section there, and that would give the interest owners 13 interest in eight 40-acre proration units.

14 And one of the reasons I consider that important is, 15 in a reservoir that's this heterogeneous where, you know, you 16 look at laterals that have been drilled in this -- even to the south here that were shorter than the full section, some 17 18 were good and some were not so good. So I hate to use the world geologic risk because there is really not a structural 19 20 or any of that type of risk, but as both geologists have testified to, it's extremely heterogeneous, and it really 21 depends on what you can get out there, and what you can put a 22 23 frac plant in and get hydrocarbons to your wellbore.

And I think being able to take that across four proration units versus two proration units gives you a much

Page 147 better opportunity to be more successful. Looking at the 1 numbers I've got on here, you get four times the \$2.8 million 2 AFE that Concho sent out as \$11.376 million total development 3 cost, and the ultimate recovery for four horizontal wells is 4 approximately 1.308 million barrels of oil equivalent. 5 Then did you do a -- focusing now on the southeast 6 Q. 7 quarter on this full development scenario -- did you then do 8 a comparison that accounted for the fact that only 50 percent of the horizontal well costs and recovery would be associated 9 with the working interest owners in the southeast quarter? 10 11 Α. Yes, sir. Is that the next exhibit? 12 0. That's the next exhibit. 13 Α. ړ Let's turn to COG Exhibit 23. 14 0. This is the same type of analysis that we talked 15 Α. 16 about earlier with the development cost and the ultimate recovery, looking at those side by side, and theoretically 17 netting those out to say, what would that mean to the 18 interest owners proportionately. And the net development 19 20 cost for the vertical case is \$22 million, whereas for the horizontal well case it's \$5.6 million. In the ultimate 21 recovery, I guess the value that those owners would have for 22 23 the vertical case would be 200 MBO, versus 654 MBO for the horizontal case. 24 25 And it's important to note that the horizontal cases

Page 148 1 requires a fourth of the capital and will also recover three 2 times as many reserves. So essentially you've got a 12 times 3 better chance of being successful in this area using 4 horizontal development.

5 Ο. What is your conclusion with respect to the waste? 6 Α. Well, if you break this down and look at -- most of 7 the people that I have seen discuss -- and I hate to dive off 8 into this, but essentially ten acres is what most people are 9 looking at right now in the ten-acre development in the Yeso. 10 And it appears to me that you are getting better recovery out of the horizontals. 11

And we've got a slide that will break that down for you here in a second, but it appears to me that you not only perf 40 acres, you are going to make more oil drilling horizontal wells because of the fact you are able to put more frac points out there and intersect more of that heterogeneous -- more of those lenses that are out there.

Q. Now, we focused on the southeast quarter, first thewell proposals as they currently exist.

20 A. Yes, sir.

Q. And then we focused on the full development scenariofor the southeast quarter.

23 A. Yes, sir.

Q. Did you then look at the economics associated with these -- this area if you examine the east half of

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1 Section 6?

2 A. Yes, sir.

Q. Does that start then on what's been marked as COG4 Exhibit Number 24?

5 A. Yes, sir, it does.

Q. Why don't you turn to that and explain to the
Examiners -- I think it's basically the same analysis,
correct?

9 A. It is.

Q. Explain how you expanded it out and utilized it to
 draw your conclusions.

A. Well, the decision we make in this quarter section will impact development in other parts of the section, so I felt like it was important to, you know, even though we've looked at it on the quarter section, let's look at what it means in the entire half section today.

17 But again, going through the same type of analysis, for the vertical development for the entire half section, it 18 19 would require 32 surface locations, \$1.377 million in fees, with a total cost of just over \$44 million. And that would 20 give you ultimate recovery total for the entire half section 21 22 of 400 MBOE, utilizing the same type of math we did earlier, 23 multiplying the vertical production that we have seen in the area out by the number of wells to develop the acreage. 24 25 Q. So you use the same numbers you went through

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Page 150 initially from --1 2 Α. Yes, sir. 3 Ο. -- And AFEs and applied them to the different 4 scenarios? 5 Α. Yes, sir. 6 ο. Did you then examine the economics associated with 7 the full development scenario for the east half using horizontals. 8 9 Α. Yes, sir. 10 0. Okay. Is that the next slide? Yes, sir. And this will look familiar. You have 11 Α. 12 seen some of these numbers before. Four surface locations 13 required, \$2.844 million, given a total development cost of \$11.376 million to develop the entire half section, will give 14 15 you an ultimate recovery for the entire half section of 1.3 million barrels, and -- I'm sorry. Go ahead. 16 17 Q. Well, okay. And then did you finish it out by doing 18 your side-by-side comparison? 19 Α. Absolutely, yes, sir. 20 Q. Is that COG Exhibit 26? 21 Yes, sir. The main columns to look at here, in my Α. opinion, are the total development cost. Again you see, if 22 we are going to develop this vertically, it would require \$44 23 24 million, whereas, with the horizontal we can develop the entire half section with \$11 million, and again, recover 1.3 25

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Page 151 1 million barrels with a horizontal well, versus 400,000 2 barrels with a vertical well. So you get the same -- same 3 type of ratio there.

And I believe, you know, one of the most important issues that we have is that the horizontals, now that we are looking at this across the entire section, is that the horizontals will recover three times as much oil, which obviously one of the -- the State's interest is the prevention of waste, and that's a pretty big difference there between vertical and horizontal.

11 Q. And then your column also indicates the number of 12 locations that -- surface locations, would it not --

13 A. Yes, sir.

Q. -- that would be required for vertical developmentversus horizontal development?

A. I think we would all agree it's getting harder and harder to get permits, and having to get four permits versus get maybe a little easier.

20 Q. So can you summarize then your conclusions for the 21 Examiners after reviewing this and going through this 22 analysis.

A. The horizontal development, in my opinion, will offer the best opportunity, again, for continued development in this area. I don't think you will see a vertical well

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Page 152 1 drilled and then a program abandoned. I think we have a high 2 chance of being successful here. And I also think it's in 3 the best interest of the State and the prevention of waste to 4 use horizontals and to better complete the reservoir to 5 better drain it.

Q. You reference the fact that you wanted to go to a
slide that would explain why you see better recovery rates
and economics for horizontal wells in the Paddock than you do
the vertical wells?

10 A. Yes, sir.

11 Q. Has that been marked as COG 27?

12 A. Yes, it has.

13 Q. Why don't you just then explain to the Examiners why 14 it's important to your analysis?

15 If you can imagine in this reservoir, the way that Α. we typically think about it is, as has been mentioned by both 16 sides now, lenticular, almost compartmentalized, highly 17 18 heterogeneous, so with a vertical completion you really only get one frac point put out into the reservoir per well. And 19 so if you start breaking this down and you look at, well, 20 what's the benefit of horizontals, why do I drain more with a 21 horizontal, because that's what we have seen so far in this 22 23 area, even if you look at the vertical wells down around the horizontal wells, you have seen increased recoveries with 24 those wells. And so you get -- you get more frac points put 25

Page 153 out into the reservoir, therefore, connecting more of the 1 2 reservoir together and allowing more hydrocarbons into the 3 wellbore. Q. So, Mr. Midkiff, based on your analysis, will 4 horizontal well development in the east half of Section 6 5 result in less surface disturbance than vertical 6 7 development? 8 Α. Yes, sir. In your opinion, will horizontal well development in 9 0. the east half of Section 6 offer the best opportunity for 10 economic success for the working interest owners? 11 12 Α. Absolutely. 13 In your opinion, will horizontal development in the Ο. east half of Section 6 recover more hydrocarbons than 14 15 vertical development preventing waste? Yes, sir. 16 Α. So, in your opinion, is the granting of COG's 17 Q. application in the best interest of conservation, the 18 19 prevention of waste, and protection of correlative rights? 20 Α. Yes, sir. Were COG Exhibits 15 through 27 prepared by you or 21 Q. 22 compiled under your direction and supervision? Yes, sir. 23 Α. MR. FELDEWERT: Mr. Examiner, I offer the admission 24 25 of Exhibits 15 through 27.

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1	MR. BRUCE: No objection.
2	EXAMINER WARNELL: Exhibits 15 through 27 are
3	admitted.
4	(Exhibits COG 15 through 27 admitted.)
5	MR. FELDEWERT: And that concludes my examination of
6	this witness.
7	EXAMINER WARNELL: Mr. Bruce?
8	CROSS-EXAMINATION
9	BY MR. BRUCE:
10	Q. Mr. Midkiff, could you turn to Exhibit COG
11	Exhibit 1?
12	A. Exhibit 1?
13	Q. Yes, sir.
14	A. Yes.
15	Q. The question on this, those wells in the northeast
16	quadrant of this plat
17	A. Yes, sir.
18	Q who was the primary operator of those wells?
19	A. You know, I believe it was Yates. Kind of talking
20	off the top of my head, so I'm not sure.
21	EXAMINER WARNELL: Is that what you referred to as
22	the Dayton Field.
23	THE WITNESS: Yes, sir.
24	Q. Go to Exhibit 10. I know it's not one of your
25	exhibits, but I wanted to ask you a question. From the

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Page 155 Section 6, what we are here for today --1 2 Α. Yes, sir. -- where is the nearest horizontal well that COG has 3 Ο. 4 drilled? Not that it operates, but that COG has drilled. 5 Α. Has drilled next to this acreage, it would probably 6 be the horizontal -- the Hatfields and McCoys that I quess 7 the Cimarex engineer mentioned earlier. Over in 17/30? 8 Q. Yes, sir -- well, it's hard to say that that's where 9 Α. 10 Concho has drilled because the people that drilled those wells were Cimarex -- I mean, for Marbob, many of those 11 12 people are on staff now, so you can say Concho drilled them, but, you know, I guess it was Marbob that drilled them. 13 14 Now, let's qo to your Exhibit -- oh, and what are --Q. 15 have you calculated the EURs on the Hatfield and McCoy 16 horizontals? 17 Α. No, sir. Those are not my wells. I don't have 18 those with me. Let's go to your Exhibit 15. First of all, in your 19 Ο. 20 heading you mention six wells. I only see five wells spotted on that plat in the upper right-hand corner. 21 Where do I mention six wells? 22 Α. 23 In the heading. 19 South 26, Section 6 Offset Q. Paddock Completions? 24 25 Α. That's, that is Section 6.

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		Page 156
1	Q.	Okay.
2	Α.	I'm sorry, it needed a comma. Never good with that.
3	Q.	And in looking at these wells, now there are two
4	wells up	in Section 32. Now, you are aware that Cimarex is
5	drilling	some vertical Yeso wells up in Section 32, are you
6	not?	
7	Α.	Yes, sir.
8	Q.	Those two wells that you have there are not these
9	Cimarex v	wells?
10	Α.	No, sir.
11	Q.	Of these five wells on this plat, when were they
12	drilled?	
13	Α.	Many of these wells were drilled between 1970 and
14	1990. I	don't have the exact actually, I could tell you
15	the exact	t dates here if you would like.
16	Q.	That's close enough, 1970 to 1990. Because I notice
17	that on y	your normalized production chart, it looks like all
18	of these	wells had at least ten years of production?
19	Α.	Yes, sir.
20	Q.	Now, if you moved over to and you said the if
21	you look	at the chart, the peak rate
22	Α.	Yes, sir.
23	Q.	for these wells was, you know, anywhere from five
24	to 25 bai	rrels of oil per day?
25	Α.	Yes, sir.

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Page 157 Q. If you looked at 1970 to 1990 vintage wells over in 2 17 South 29 East or 17 South 30 East, wouldn't you see the 3 some type of rates?

A. Well, I honestly can't speak on that because I have not looked at those wells.

Q. Okay. Really, what is the relevance of showing
these -- these old and poor Yeso wells when even your own
other witnesses agree that the Yeso was bypassed for years
because it wasn't economic until recently with the better
completion techniques?

11 Α. Well, I don't believe it's relevant to ignore the 12 data points that we have that are immediately offsetting the 13 section that we are talking about. These wells were sand fracked, which I consider that to be a sufficient completion. 14 15 You look at, you know, over time, they were sand fracking 20 16 years ago the same way they are sand fracking today. You see in certain areas it has gotten better, but that's doesn't 17 necessarily mean you got a bad completion back then. 18

19 Q. What size were the fracs back then? What were the 20 volumes?

A. Anywhere from 10,000 pounds of sand up to around
200,000 pounds of sand. Just on these wells. That's all I'm
referring to.

Q. That's fine. That's fine. And let's go to your Exhibit 16. Are you aware of any Yeso well drilled by --

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Page 158 vertical Yeso well drilled by Cimarex that has an EUR of only 1 9,500 barrels of oil? 2 3 Α. That is not what that was supposed to describe. That was supposed to describe the immediate offsetting 4 5 Paddock development to this acreage. I don't know how Cimarex's production would be any different in this area. 6 Would any sentient reservoir engineer recommend to 7 0. 8 his management to drill a well for only 12,500 barrels of 9 recovery? 10 Α. I think that's why you see there was never a second one drilled to offset one of these wells. 11 Of course, all of your numbers here depend on -- you 12 Q. 13 entire analysis depends on 12,500 EUR MBOE or 12,000 -- or 12.5 MBOE ultimate recoveries for the vertical wells, 14 right? 15 16 Α. That number I have actually, once you step out Yes. away from that Dayton Field -- because I think we all agree 17 18 we are not in the same reservoir they had in that Dayton Field, because even back then they were completing wells the 19 20 same way these wells were being completed. Production, stepping out from there, is consistent in that area. 21 It's sort of -- that's sort of ultimate recovery. 22 Let's move on to your Exhibit 17. Now you picked 23 0. seven wells. 24 25 Α. Yes, sir.

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Page 159 How come you didn't use the well that extends from 1 Ο. Section 18 down into Section 19? 2 3 Α. That is a well that we -- that was drilled by Mewbourne, and they are just becoming public data on that, 4 5 and right now it looks like it's all water on that well. 6 ο. And that well is directly between the wells you use 7 and the wells we are talking about here today, aren't they? 8 Α. It is, yes, sir. 9 ο. How come you didn't use the wells in Section 30? 10 Well, my -- my main focus was to use the longer Α. horizontals. Any of the half section laterals, the 11 12 performance is so random that I feel like it's necessary to 13 be able to drill a full mile lateral, and that's why I wanted 14 to do the comparison on the longer laterals. 15 Ο. When were those Section 30 wells completed? Within the last few years. 16 Α. You do have production data on them? 17 Q. 18 Α. Yes, we do. I don't have that with me. You can't tell me what EURs are? 19 0. 20 Α. Not off the top of my head, no, sir. 21 Has COG drilled -- on Exhibit 19, the EUR is 327 Q. 22 MBOE. Has COG drilled a horizontal well within the last year that has that type of recovery? 23 24 Well, the wells on the previous plot, we anticipate Α. 25 each of those wells having recoveries in that area, in that

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1 range, at least.

2

3

Q. That's not the question.

A. What is the question? I'm sorry.

Q. Has COG drilled a horizontal well within the last
year that has that type of estimated ultimate recovery?

A. I anticipate yes, but I don't know because I haven't
looked at our entire database. We've got a lot of wells in
the Yeso.

9 Q. Let's turn to Exhibit 20, please. Your comment in 10 the middle of the page that COG has already elected to go 11 non-consent on vertical development in the immediate area, 12 are you talking about Cimarex wells?

13 A. Yes, sir.

14 Q. Those wells haven't even been completed yet, have 15 they?

A. Those wells have already been spud, and theelections were already due for those wells.

Q. You say the wells are uneconomic. How do you know?
A. Well, vertical development is what I'm calling
uneconomic.

Q. You say, "The wells," you are talking about the
Cimarex wells that have not even been completed, "The wells
are uneconomic," on what do you base that statement?
A. That was, I guess, just a misinterpretation. I
guess I wasn't clear there. What I mean is vertical wells

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1 are uneconomic.

Now, again Mr. Feldewert asked you the question --2 Q. and I'm just glancing at Exhibit 23 -- somewhere along the 3 4 line here he asked you if it was best to develop the reservoir in the interest of the working interest owners, 5 6 something to that effect, and you said yes. Well, that's -- everybody that's paying money is an 7 Α. 8 interest owner, so --9 But that was anticipating my next question. Q. 10 Wouldn't you agree that it would be best to develop the best amount of reserves not only for the working interest owners, 11 but for the royalty, overriding royalty interest owners? 12 I believe that's what horizontal development does 13 Α. yes, sir. 14 But you would agree you should look after the 15 Ο. interest of everyone? 16 17 Α. Yes, sir. Just a couple of more, Mr. Midkiff. I know this is 18 Q. 19 a schematic, your exhibit -- your final exhibit, Exhibit 27. 20 Α. Yes, sir. And I just want to know which way to tip it. Are 21 Q. each of these quarter guarter sections? 22 23 Α. Yes, sir. I'm sorry, that's what I'm trying to 24 represent. Each one of those is a 40-acre proration unit. 25 Ο. Okay. And upper 160 then would be showing two

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Page 162 1 vertical wells -- I mean two horizontal wells? 2 Α. Yes, sir. How many frac stages do you anticipate in your 3 Q. proposed wells? 4 5 Α. Anywhere -- that's something that our completion 6 engineers put together. It's typically anywhere from 15 to 7 20 stages. 8 And do you have any idea of the cost per stage? Q. No, sir, not off the top of my head. 9 Α. Do you have any idea of how many pounds of sand you 10 Ο. are going to use per well? 11 12 Α. No, sir, not off the top of my head. And I presume then you don't know how much fluid you 13 Q. 14 are going to use? 15 Α. I would anticipate we'd do something similar to the 16 Dagger Draw wells. 17 Q. You were here today for the testimony of Mr. Hammond, were you not? 18 19 Α. Yes, sir. 20 And you sat up with Mr. Feldewert and looked at the Q. 21 engineering exhibits? Yes, sir. 22 Α. 23 Ο. I don't think you need to look at the exhibits, but 24 if you want them, I can give them to you. Looking at your 25 Miranda Federal Lease and the Hatfield Lease, Mr. Hammond

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Page 163 1 pointed out that several horizontal wells were drilled, and 2 then shortly thereafter COG started drilling vertical wells. 3 Why is that?

4 Α. COG has not abandoned its horizontal plan in this There is probably a rhyme or reason for why the 5 area. 6 horizontals and the verticals were drilled. It was not 7 simply poor performance on the part of the wells that caused 8 them to drill vertical wells. We operate, I think, between 9 15 hundred and 2000 vertical wells. That's how we got our 10 start was drilling vertical wells.

11 EXAMINER WARNELL: Mr. Bruce, which exhibit are you
12 looking at?

MR. BRUCE: I was looking at Cimarex Exhibits 11 and
14 12, Mr. Examiner.

15 And if you, for instance, on Exhibit 11, if you turn Ο. to the second page, Mr. Hammond testified to this, you can 16 see up in the northwest corner of the exhibit, COG drilled a 17 couple of horizontal wells last summer, last fall, and then 18 19 after that they immediately started drilling vertical wells. 20 And I think you see the same thing on Exhibit 12. They 21 drilled a horizontal well last summer, and then thereafter started drilling vertical wells offsetting that horizontal 22 23 well.

EXAMINER BROOKS: Where was this occurring, Mr.Bruce?

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Page 164 MR. BRUCE: What time frame? 1 2 EXAMINER BROOKS: No. Where? This is in 17 South 30 East. 3 MR. BRUCE: EXAMINER BROOKS: Okay. Thank you. 4 5 MR. BRUCE: And 17 South 29 East. MR. FELDEWERT: Bottom right, it's 25 to 30 miles. 6 7 Ο. And then Cimarex Exhibit 14, on your -- for some reason I have a hard time pronouncing this -- on your GJ Coop 8 9 wells, COG's GJ Coop wells versus Cimarex's Darner wells, can you give me an explanation why Cimarex is getting five to six 10 times the recoveries on the vertical wells greater than COG? 11 12 Α. You know, you are looking at a specific area. I have actually done a comparison of Cimarex's development 13 versus Concho's development, and I would not agree with that 14 assessment. But maybe in that area reservoir that leads to 15 that assumption, but I do not agree with that. 16 17 Q. But you have no data to dispute it here today? I actually do have the data, if you would like to 18 Α. 19 take a look at it. So COG has not stopped drilling vertical 20 Q. No. wells? 21 No, sir. 22 Α. Is it fair to say that about 98, 99 percent of the 23 Q. 24 wells being drilled by COG are vertical wells? 25 At this time, yes, sir. Α.

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Page 165 MR. BRUCE: That's all I have, Mr. Examiner. 1 2 EXAMINER WARNELL: Mr. Brooks? EXAMINER BROOKS: I know you are drilling a lot of 3 vertical wells in area northeast of this, right? 4 5 THE WITNESS: Yes, sir. EXAMINER BROOKS: What's the difference between the 6 7 area where you are drilling the vertical wells up along this -- the first exhibit with the big map -- where you are 8 9 drilling the vertical wells, it's up along here in 17 South, 28, 29, 30 East? 10 THE WITNESS: Yes, sir. 11 12 EXAMINER BROOKS: What's the difference between that and the area down in 19 South 26 East? 13 THE WITNESS: 14 They are much shallower down here 15 around this area we are talking about right now, and the main 16 difference is, I guess the one that matters is well performance. You saw wells that even up there in the main 17 part of the shelf where you were talking about, 17/30 --18 19 EXAMINER BROOKS: Yeah. 20 THE WITNESS: -- for a while they put acid only on those wells and were still making good completions. 21 It seems 22 you probably have a little bit better reservoir quality, and I hate to say that, but the wells have performed differently 23 24 in that area. You look at vertical wells down in this area that were even sand fracked and had more than acid put on 25

Page 166 them, and there is wells down here in this area that had 3-, 1 400,000 pounds of sand pumped into them, you could see the 2 operator was testing, trying to find something that would 3 work, and they simply couldn't do it in this area vertically, 4 5 that's why you saw the vertical development stall. 6 EXAMINER BROOKS: You are saying the Yeso is 7 shallower in which area? THE WITNESS: Down here in the Dagger Draw area. 8 9 EXAMINER BROOKS: 2- to 3,000? 10 THE WITNESS: It's, I would say, anywhere from 25 hundred feet to 3,000 feet, in that range. 11 EXAMINER BROOKS: What depths is it in 17 South? 12 13 THE WITNESS: Anywhere from 4,000 to 7,000 feet. It 14 gets deeper as you go across. 15 EXAMINER BROOKS: It gets deeper as you go east? 16 THE WITNESS: Yes, sir. 17 EXAMINER BROOKS: Okay. Thank you. EXAMINER WARNELL: Mr. Midkiff, you mentioned 18 something about APD, and it was easier to get four approved 19 than 32? 20 21 THE WITNESS: Just by sheer number standpoint, yes, 22 sir. EXAMINER WARNELL: Why would you say that? What's 23 the problem with getting an APD out there? 24 THE WITNESS: It's -- it's just everybody is 25

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Page 167 drilling right now, and I guess everybody is swamped, so 1 2 it's -- it's not really a problem, but it's -- you know, it takes time to get an APD, and having to only get four would 3 obviously require less time than having to get 32. 4 5 EXAMINER BROOKS: This is fee land, is it not? 6 EXAMINER WARNELL: Fee land. 7 EXAMINER BROOKS: Section 6 is fee land. EXAMINER WARNELL: It's all fee land. 8 9 EXAMINER BROOKS: So you don't have to get your APD 10 processed through the Bureau of Land Management. 11 EXAMINER WARNELL: Which makes a big difference on 12 turnaround. 13 THE WITNESS: Yes. Yes, sir. That's what happens 14 when an engineer starts talking land up here. 15 EXAMINER WARNELL: All right. I have a couple of other questions here. Just one second. So we don't have the 16 sand dunes problem out there, and lizards or anything with 17 prairie chicken? 18 19 THE WITNESS: I would not be the one --20 EXAMINER WARNELL: Would the BLM be fee land, that's 21 a different -- a different deal. Did you, Mr. Midkiff, or 22 perhaps it was another witness, say something about developing, at a later date, the west half of Section 6? 23 24 THE WITNESS: Concho owns an interest in most of the 25 area out there, and if we are successful here, we absolutely

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1 intend to continue development.

2 EXAMINER WARNELL: But you feel that you would want to start in the east half rather than the west half? 3 THE WITNESS: Yes, sir. These are locations that we 4 5 have had for a while, and we felt it was important whenever 6 we -- to develop this area horizontally versus vertically, 7 not only -- I mean, it meant more better recovery for us, but better recovery for the State. I mean, we felt like it was 8 9 an important issue. 10 EXAMINER WARNELL: I have no further questions. Do you have closing statements? 11 12 MR. FELDEWERT: I just have a couple of additional 13 questions just so I'm clear and the record is clear. 14 REDIRECT EXAMINATION BY MR. FELDEWERT: 15 If I could have you turn to Exhibit Number 20. 16 Ο. This 17 is your comparison of the development plans focusing on the 18 data that you have from the immediate area, correct? Yes, sir. 19 Α. 20 Q. In fact, I think the first sentence there towards 21 the middle says -- references the immediate area? Yes, sir. 22 Α. That was your focus of your analysis? 23 Q. 24 Α. Yes, sir. 25 So to be accurate here, what we should do is cross Q.

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Page 169 1 out the word "the," and write in "vertical," correct? Say "vertical"? 2 Yes, vertical wells are uneconomic, yes, sir. 3 Α. All right. Then you mentioned, if we go to Exhibit 4 Ο. Number 17, that this identifies the horizontal wells which 5 utilized particularly the full section of long laterals? 6 Yes, sir. 7 Α. 8 Isn't it a fact that COG is actually a working Q. 9 interest owner in those Mewbourne wells shown in green in 10 there in Sections 24 and 25, right? Α. Yes, sir. 11 Okay. And then finally, you mentioned that, if I 12 Ο. look at this map up in the right-hand corner, there is the 13 Dayton Field? 14 Α. Yes, sir. 15 16 Q. And you mentioned something I wasn't previously aware of, and that is that I guess the Dayton Field 17 previously was operated by Yates Petroleum? 18 Α. I don't know if I want to -- I remember seeing their 19 20 name on several of those wells, I believe, as far as them being a major developer in that area, but I'm not sure. 21 So you are unsure? 22 Q. Yes, sir. 23 Α. But this is an area that's subject to your 24 Q. memorandum of development with Yates? 25

Page 170 1 Α. Yes. 2 Ο. And then as reflected in Exhibit Number 9, Yates has indicated by letter to your company that they are in full 3 support of your horizontal development program --4 Yes, sir. 5 Α. 6 Ο. -- as we step out from the Dayton Field area? 7 Α. Yes, sir. 8 0. Okay. All right. 9 MR. FELDEWERT: That's all the questions I have. MR. BRUCE: Mr. Examiner, if I could, I would like 10 to put my engineer back up for a brief rebuttal. 11 12 EXAMINER WARNELL: Step down. I think that's a good idea. 13 14 FLOYD HAMMOND 15 (Having been previously sworn, testified as follows:) 16 DIRECT EXAMINATION REBUTTAL 17 BY MR. BRUCE: Mr. Hammond, first turn to Exhibit 15 which states 18 Q. 19 that the vertical wells will get a 12,500 estimated ultimate 20 recovery. Yes, sir. 21 Α. 22 Ο. If you recommended drilling those wells to the Cimarex management, what would be your job status? 23 24 Α. I think I would need a new resume. 25 Q. Do you agree with those numbers?

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Page 171 1 Α. I do not. What type of recovery is Cimarex seeing in its 2 Q. vertical wells? 3 Α. You know, we have PhiH's in the Dragonfly area --4 5 The Dragonfly area, explain where that is. Q. 17/29, the Pier Marquette log that was Exhibit 6 Α. 7 Number 17, we are seeing PhiH's in that area anywhere from 8 two to about 12. Based on our petrophysical calculations, 9 the EURs associated with those wells range anywhere from 10 about 65 to 70 MBO up to over 200 MBO. We drilled the Oklahoma in Section 32 --11 12 Q. Immediately to the north of Section 6? 13 Α. Immediately to the north and east of Section 6 where 14 we encountered a PhiH of 13. You know, the nice thing about 15 petrophysics, it still is physics. It works the same 16 regardless of area as long as there is not a major mineralogy change. 17 Originally, we were looking at 150 MBOE per well 18 based on -- on our recent results. We are expecting that 19 20 that is pessimistic. 21 So you would anticipate a minimum of 150,000 barrels Q. 22 recovery --Yes, sir. 23 Α. -- from a vertical well --24 0. 25 Yes, sir. Α.

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Page 172 -- in this area? So then if you turn to Exhibit 16, 1 0. I take it you wouldn't agree that Cimarex is only going to 2 recover 50,000 barrels in the quarter section, southeast 3 4 quarter? 5 Α. No, sir. 6 If you turn to Exhibit 21 where it shows under a, Ο. 7 quote unquote, full development scheme, which I think is four 8 wells per quarter quarter section, you are going to get only 200,000 barrels recovery, what is your estimate of what the 9 vertical recovery would be from the southeast quarter of 10 11 Section 6? That would be 2.4 million barrels. 12 Α. 13 Q. Greater than the horizontal recovery? Yes, sir. 14 Α. And then if you looked at the -- and you can look at 15 Q. 16 these maybe together, Exhibits 24 and 25, the development costs and ultimate recoveries, what you are looking at is, in 17 18 just the southeast quarter, based on your testimony, you 19 would be looking at estimated ultimates of 2.4 million 20 barrels versus 650,000 barrels under COG's scheme, correct? 21 Α. I'm sorry, which exhibits? 24 and 25. 22 Ο. 23 Α. That would be correct. And on an east half basis, what would those numbers 24 Q. be for both COG and Cimarex? 25

Page 173 COG is showing 1.3 million barrels. We believe that 1 Α. 2 those would be about 1.4 million barrels, based on vertical -- 4.8, sorry. 3 4 Q. 4.8. So 2.4 for the southeast guarter and another 5 2.4 for the northeast guarter? 6 Α. Yes. 7 Q. So what you are looking at is, on a vertical 8 development scheme, you are looking at obtaining 4.8 million 9 barrels vertically, correct? Yes, sir. 10 Α. Versus the 1.3 under COG's horizontal development 11 0. 12 scheme? Yes, sir. 13 Α. Do you think the royalty and overriding royalty 14 Ο. 15 interest owners would be happier with 4.8 million recovery or 1.3 million recovery? 16 17 I think they would be happier with the vertical Α. 18 development. And that would also -- the additional oil would 19 Ο. 20 benefit the working interest owners, would it not? 21 Α. It would. 22 Now, there is a development cost that Mr. Midkiff Ο. put down that's, I don't know, in excess of 100 barrels, \$100 23 per barrel of oil. 24 25 Α. Yes.

Page 174 Q. Have you calculated what you think the vertical 1 recovery cost per barrel would be? 2 Α. \$9.18 current MBOE. 3 Q. So roughly virtually identical to the horizontal 4 5 recovery cost? Strike that. \$9.18 per barrel of oil equivalent. 6 Α. Of oil equivalent. Virtually identical to COG's 7 Q. calculation for its recovery? 8 Yes, sir. 9 Α. But you would have three and a half to four times 10 Q. 11 estimated ultimate recovery? Α. Yes, sir. 12 Just one final question. On Exhibit 27, what --Ο. 13 Mr. Midkiff said COG would use 15 to 20 frac stages. 14 Do you 15 have an idea on some of the costs of those fracs? 16 Α. You know, typically it's about a dollar per pound frac cost. Obviously I don't know what size stages that they 17 Their AFE shows \$950,000 for a stimulation, so I would use. 18 19 would expect that these would be approximately 60,000 pounds stages, if it resembles this --20 What size does Cimarex use in its vertical wells? 21 Q. Presently we are using about 5- to 600,000 pounds 22 Α. per stage. 23 24 MR. BRUCE: That's all I have, Mr. Examiner. 25

Page 175 CROSS-EXAMINATION (REBUTTAL) 1 2 BY MR. FELDEWERT: Mr. Hammond --3 Q. 4 EXAMINER WARNELL: Go ahead. Mr. Hammond, would you turn back to Concho Exhibit 5 Ο. 6 15, please. Yes, sir. 7 Α. 8 I understand you don't agree with these numbers. Q. Is 9 that what your testimony is. 10 I agree with them from a statistical standpoint Α. based on the stimulations that were done. These are 11 obviously very old wells. 12 13 Ο. So you are not saying that these numbers are phony? 14 In fact, this is actual --15 Α. I'm saying that they are statistically valid numbers. 16 17 Q. This is actual production data, isn't it? 18 Α. It is. 19 ο. And you don't have any reason to dispute the production data on it? 20 21 Α. The only reason I would have to dispute it is if you took the same analysis and had applied it to the area further 22 to the northeast, COG and Cimarex, either one would have 23 never gotten in the --24 25 So this is actual production data from Paddock wells Q.

Page 176 1 surrounding the area at issue, correct? 2 Α. Yes, sir. Okay. And you would agree that this was actual 3 Q. production after -- after they had done some sand fracs on 4 those wells. Correct? 5 These are actually very small sand fracs. 6 Α. Yes. 7 Ο. Have you conducted any analysis of the production 8 data for wells in the immediate area at issue here? 9 You know, we have looked at the Dayton Field to the Α. 10 north. Q. I'm asking if you have -- you don't have any 11 12 analysis, do you, to present here today? No, sir. 13 Α. 14 Q. Okay. In fact, therefore, your projections that you just laid out here in response to Mr. Bruce's questions are 15 16 not based on any production data in the immediate area, are they? 17 They are based on petrophysical analysis tying 18 Α. No. it to data elsewhere in the trend. 19 20 Q. It's a hypothetical. It's what you are hoping. 21 Α. It's physics. Physics is the same, no matter where 22 you go. But no hard production data to offer to your 23 Q. analysis? 24 Not a direct offset, no, there have been no modern 25 Α.

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Page 177 1 completions of vertical wells in this immediate area. 2 MR. FELDEWERT: Okay. That's all the questions I 3 have. 4 EXAMINER WARNELL: Anything? 5 EXAMINER BROOKS: No questions. 6 EXAMINER WARNELL: No questions here, either. Closing? 7 8 MR. FELDEWERT: I don't see the need for a closing. 9 MR. BRUCE: I had a few things to comment on, 10 Mr. Examiner. We'll be brief, as Mr. Carr always says. He never liked the word "short." 11 12 EXAMINER WARNELL: No, he never did. MR. BRUCE: Although I didn't plan to, I think I 13 14 have to address Mr. Feldewert's motion to dismiss for failure 15 to make a good-faith effort to obtain voluntary pooling. I 16 don't think there is really any issue on the Kansas well; COG got its interest just a few weeks ago, according to 17 Mr. Dirk's testimony. And the record shows that Cimarex had 18 19 contacted the other interest owner, David Arrington, and had 20 spoken with him. 21 But on the Colorado wells, Cimarex sent proposals in 22 April. Mr. Dirks said that COG had been negotiating with 23 Yates for a year prior to that time about their development agreement and that Yates gave COG the well proposals that 24 25 Cimarex sent. Despite that fact, COG, and Yates, for that

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matter, Mr. Tresner called Yates, but COG and Yates never contacted Cimarex for two plus months. And now COG complains, "Well, they never contacted us." The fact of the matter is, Cimarex didn't know for about three months that -or two or three months -- that COG owned the interest. And as Mr. Tresner testified, it's normal for a company to respond to a well proposal.

8 I think there has to be some recognition, at least a 9 mutual agreement. As it's been said before, both companies 10 are big boys in the business, and neither of them are 11 shrinking violets, obviously. I think they are -- both 12 companies had an obligation to negotiate.

And, really, when they did finally meet on Monday, the terms were, "Yeah, let's make a deal on horizontal development." Well, if the parties aren't willing to back off on either their vertical or horizontal, I don't think there is much more you can do insofar as negotiating. We think there's been a good-faith effort made to obtain voluntary pooling.

And I would also refer, Mr. Examiner, to a prior
order in a prior fight between COG and Cimarex.
EXAMINER BROOKS: There have been several.

23 MR. BRUCE: This is over in Chaves County concerning 24 some counter-proposals. As in this case, both sides each 25 controlled about half of the working interest in the well

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1 unit.

2 The difference was, if you turn to Page 4, Finding 3 20, COG began evaluating the prospect first. It sent well proposals first. It obtained a signed surface use agreement 4 5 first, and it obtained APDs first. And if you turn to 6 Finding 21, "In the absence of other compelling factors, the 7 operator shift should be awarded to the operator who 8 originally developed the prospect and sought to obtain voluntary agreements." In that case it was COG. 9 In this case it's Cimarex, and we think Cimarex should be awarded 10 operations. 11

12 Now, in this case there is the difference of vertical versus horizontal development. Frankly, obviously 13 14 there is a big difference of opinion, but the fact of the 15 matter is, I think this would be a good setup to see who is 16 better. You could grant Cimarex's applications. It could 17 drill its vertical wells and you would see how it turned out. COG owns interest in the west half of the section, 18 19 northeast quarter of the section, they could drill offset

verticals. We'll see who is proved right, but I think the only way you get to that is by granting Cimarex the right to drill its wells vertically, which, as Mr. Hammond just testified, will result in about three and a half to four times the ultimate recovery than from horizontal wells. We would ask that you grant Cimarex's applications.

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1 Thank you.

2 EXAMINER WARNELL: All right. Thank you. MR. FELDEWERT: I just have one response. 3 EXAMINER WARNELL: Yes, sir, Mr. Feldewert. 4 5 MR. FELDEWERT: There are a lot of big boys in this 6 particular business. We have Yates. We have Myco. We have 7 Abo. We have David Arrington. We have Oxy. We have Cimarex, and we have Concho, all involved in this acreage 8 9 that's at issue. And every single one of them, except Cimarex, wants to see this developed on a horizontal basis, 10 and I think the reasons are clear because of the data we 11 12 presented to you about this area, not something 25, 30 miles away, but the hard data from this area would support it. 13 And I think the fact that you have all of the 14 15 working interest owners, except Cimarex, wanting horizontal development, and the fact that you had the data from the area 16 17 supporting horizontal development are a lot of the compelling 18 factors that require this Division to conclude that the best 19 thing for the working interest owners in this southeast quarter is to develop this acreage on a horizontal basis, and 20 21 we ask that you allow that. EXAMINER BROOKS: What is the working interest 22 23 percentage controlled by each group? 2.4 MR. FELDEWERT: If you look over in our Exhibit --25 MR. BRUCE: It was roughly half and half,

Page 181 Mr. Examiner. 1 2 EXAMINER BROOKS: That's the way I kind of 3 remembered it, but I didn't remember it for sure. MR. FELDEWERT: Well, let's look at the actual 4 5 record here because that's not right. If you look at COG's 6 Exhibit Number 6, there's your interest owner breakdown in 7 southeast quarter based on the title information in the record. 8 9 EXAMINER BROOKS: Okay. Well, here it says, 33.33 10 open. 11 MR. FELDEWERT: In the 120, yes, which translates to 12 25 percent open in the southeast quarter. 13 EXAMINER BROOKS: What do you mean by open? 14 MR. FELDEWERT: That is the interest that is not 15 leased. 16 EXAMINER BROOKS: Those are owned by these people that are identified on Exhibit --17 18 MR. FELDEWERT: If you look at Exhibit Number 8. 19 EXAMINER BROOKS: Yeah, that was where I was trying to find this stuff. 20 21 EXAMINER BROOKS: So all of that is -- all that area 22 is -- that's 33 and a third. That's a third of 23 three-quarters, so it's -- a third of three-quarters is 24 one-quarter of the total. 25 MR. FELDEWERT: So if you look down -- one of the

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Page 182 things we did here, if you look down at the bottom of that 1 Exhibit Number 6, you have the breakout of the southeast 2 3 quarter. 4 EXAMINER BROOKS: So you've got -- I don't add very 5 quickly, but you've got something like 46 percent Cimarex --6 and -- no, you've got a total -- Cimarex -- no -- COG, you've 7 got the COG, Arrington, Yates group and Oxy adds to 50 8 percent. Right? 9 MR. FELDEWERT: Correct. 10 EXAMINER BROOKS: And then Cimarex has 25 percent, and the unleased mineral owners have 25 percent. 11 12 MR. BRUCE: Mr. Examiner --13 MR. FELDEWERT: You can look at it however you want. MR. BRUCE: Mr. Examiner, Mr. Tresner's testimony is 14 15 that that open acreage is not open, and it's leased by Cimarex. 16 EXAMINER BROOKS: I didn't recall that testimony, 17 but that's why I wanted to refresh my recollection because I 18 didn't recall what exactly the situation was. 19 MR. BRUCE: And it's in Exhibit 1 of Cimarex. 20 And 21 then we will be providing our title take-off, as Mr. Warnell 22 requested. EXAMINER BROOKS: Well, of course, and we have had 23 this issue of noticed unleased mineral owners, but we don't 24 25 need to notice the unleased mineral owners if there aren't

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Page 183 I mean, if you can provide them with a copy of the 1 any. lease, it would be unnecessary for them to notice these 2 people, because if there are leases, then they are not 3 unleased. 4 5 MR. BRUCE: But Cimarex claimed --6 EXAMINER BROOKS: Besides, if you found them and 7 leased them, then they are not unlocatable. 8 MR. BRUCE: Cimarex's testimony is that it owns 50 percent in 120 acre, plus Oxy Y-1 signed its JOA. 9 MR. FELDEWERT: I suggest that's what they claim, 10 but they provided no backup. We have backup for the 11 12 percentages that are shown on here. 13 MR. BRUCE: We will provide that backup as requested 14 by the Hearing Examiner. 15 EXAMINER BROOKS: Well, we're going to be -- because 16 of this notice issue, I'm going to recommend the Hearing 17 Examiner continue this to September 29. And of course it would be helpful if the parties would work together on 18 19 reconciling the notice issues so we don't do things that are 20 unnecessary. 21 MR. BRUCE: That's fine. EXAMINER WARNELL: I think that's good advice, too, 22 23 David. Thank you. 24 EXAMINER BROOKS: I'm not going to -- well, I won't qo any further. 25

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Page 184 EXAMINER WARNELL: I think that we also, sometime 1 here this afternoon, we talked about Section 30 EURs and 2 production numbers, I think you said that you could provide 3 4 those. 5 MR. MIDKIFF: Which wells? I'm sorry, sir. 6 EXAMINER WARNELL: When we were talking, somebody 7 asked about production or EUR numbers for Section 30, and I 8 believe you testified that you could provide those. 9 MR. MIDKIFF: Which Section 30? I'm sorry. EXAMINER WARNELL: Well, you're not nearly as sorry 10 as I am. 11 12 MR. BRUCE: 19/26. 13 EXAMINER WARNELL: Yes, 19/26. Thank you. 14 MR. MIDKIFF: Yes, sir. 15 EXAMINER WARNELL: Those two short laterals. 16 MR. MIDKIFF: I will provide it. If we can do that. And we are 17 EXAMINER WARNELL: going to reset and republish, and we'll put the final on that 18 19 on the September 29 hearing. Does that meet with everybody's approval? And I would be less than honest with you if I told 20 21 you this was all crystal clear to me. And I know that I got 22 the testimony that I will be reviewing at great length trying to sort things out, but I would appreciate it, it would be a 23 lot of help to me if both attorneys could provide kind of a 24 summary of their arguments. 25

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Page 185 1 MR. BRUCE: Okay. 2 EXAMINER WARNELL: That would help me. MR. FELDEWERT: Certainly. 3 4 MR. BRUCE: Time frame, Mr. Examiner? 5 EXAMINER WARNELL: Well, we are going to be back 6 here in four weeks, and -- but I'm hoping that we can get the 7 testimony probably in about two weeks. 8 MR. BRUCE: I may not be in town on the 15th. Could 9 we at least delay it until the following Monday or so. EXAMINER WARNELL: Sure, I don't -- yes, I don't 10 think we are going to put an absolute drop-dead time line on 11 12 it, or do we need to do that, Mr. Brooks? EXAMINER BROOKS: We don't, but of course lawyers 13 14 are like hearings --15 EXAMINER WARNELL: Are you getting this stare right 16 here? EXAMINER BROOKS: Well, lawyers are like Hearing 17 18 Examiners in the sense that they tend to put what has a deadline ahead of what doesn't have a deadline. 19 20 EXAMINER WARNELL: So they are like that. 21 MR. FELDEWERT: I would suggest, if you want a 22 summary of arguments, maybe we can just do a mutual 23 submission date. MR. BRUCE: Why don't you and I just talk about 24 that. 25

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1	MR. FELDEWERT: That's fine.
2	EXAMINER WARNELL: But it will be sometime from the
3	15th to the 29th.
4	MR. BRUCE: Yeah.
5	EXAMINER WARNELL: Sometime in that time frame, I
6	think that's great.
7	EXAMINER WARNELL: All right then. Thank you very
8	much for the enlightenment for the day, not only the
9	afternoon, but the whole day. Thank you. With that, this
10	docket is concluded. This case is continued or these
11	cases, all six of them.
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16	i the hareby certify that the foregoing to
17	a complete record of the proceedings in the Exominer hearing of Case No.
18	LICENT OF BOY 1810 CUT
19	Oil Conservation Division
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1	Page 187 REPORTER'S CERTIFICATE
2	
3	I, IRENE DELGADO, New Mexico CCR 253, DO HEREBY
4	CERTIFY THAT ON September 1, 2011, proceedings in the
5	above-captioned case were taken before me and that I did
6	report in stenographic shorthand the proceedings set forth
7	herein, and the foregoing pages are a true and correct
8	transcription to the best of my ability.
9	I FURTHER CERTIFY that I am neither employed by nor
10	related to nor contracted with any of the parties or
11	attorneys in this case and that I have no interest whatsoever
12	in the final disposition of this case in any court.
13	
14	WITNESS MY HAND this day of September
15	2011.
16	
17 18	
19	Irene Delgado, CCR 253 Expires: 12-31-2011
20	Expires: 12-31-2011
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