|    |                                   | Page 2 |
|----|-----------------------------------|--------|
| 1  | APPEARANCES                       |        |
| 2  | INDEX                             |        |
| 3  | CASE NOS. 15493 and 15494 CALLED  |        |
| 4  | APPLICANT'S CASE                  |        |
| 5  | WITNESSES:                        |        |
| 7  | STUART DIRKS                      |        |
| 8  | EXAMINATION BY MS. KESSLER:       | 5      |
| 9  | EXAMINATION BY EXAMINER McMILLAN: | 11     |
| 10 | GREG CLARK                        |        |
| 11 | EXAMINATION BY MS. KESSLER:       | 14     |
| 12 | EXAMINATION BY EXAMINER McMILLAN: | 18     |
| 13 |                                   |        |
| 14 |                                   |        |
| 15 |                                   |        |
| 16 |                                   |        |
| 17 |                                   |        |
| 18 |                                   |        |
| 20 |                                   |        |
| 21 |                                   |        |
| 22 |                                   |        |
| 23 |                                   |        |
| 24 |                                   |        |
| 25 |                                   |        |
|    |                                   |        |

|    |               |         |             | Page 3   |
|----|---------------|---------|-------------|----------|
| 1  |               | EXHIBIT | INDEX       |          |
| 2  | EXHIBIT       |         | 1ST MENTION | ADMITTED |
| 3  | COMPANY EXHIE | BIT 1   | 6           | 11       |
| 4  | COMPANY EXHIE | BIT 2   | 6           | 11       |
| 5  | COMPANY EXHIE | BIT 3   | 7           | 11       |
| 6  | COMPANY EXHIE | BIT 4   | 8           | 11       |
| 7  | COMPANY EXHIE | BIT 5   | 9           | 11       |
| 8  | COMPANY EXHIE | BIT 6   | 9           | 11       |
| 9  | COMPANY EXHIE | BIT 7   | 9           | 11       |
| 10 | COMPANY EXHIE | BIT 8   | 9           | 11       |
| 11 | COMPANY EXHIE | BIT 9   | 11          | 11       |
| 12 | COMPANY EXHIE | BIT 10  | 11          | 11       |
| 13 | COMPANY EXHIE | BIT 11  | 11          | 11       |
| 14 | COMPANY EXHIE | BIT 12  | 15          | 18       |
| 15 | COMPANY EXHIE | BIT 13  | 15          | 18       |
| 16 | COMPANY EXHIE | BIT 14  | 16          | 18       |
| 17 | COMPANY EXHIE | BIT 15  | 16          | 18       |
| 18 |               |         |             |          |
| 19 |               |         |             |          |
| 20 |               |         |             |          |
| 21 |               |         |             |          |
| 22 |               |         |             |          |
| 23 |               |         |             |          |
| 24 |               |         |             |          |
| 25 |               |         |             |          |
|    |               |         |             |          |

## PAUL BACA PROFESSIONAL COURT REPORTERS 500 FOURTH STREET NW - SUITE 105, ALBUQUERQUE, NM 87102

- 1 EXAMINATION
- 2 BY MS. KESSLER:
- 3 Q. Would you please state your name for the record
- 4 and tell the examiners by whom you are employed.
- 5 A. My name is Stuart Dirks. I'm employed by COG
- 6 Operating as a landman.
- 7 Q. Have you previously testified before the
- 8 Division?
- 9 A. Yes, I have.
- 10 O. Were your credentials as a petroleum landman
- 11 accepted and made a matter of record?
- 12 A. Yes, they were.
- Q. Are you familiar with the applications filed in
- 14 these consolidated cases?
- 15 A. Yes, I am.
- 16 Q. Are you familiar with the status of the lands in
- 17 the subject area?
- 18 A. Yes, I am.
- MS. KESSLER: Mr. Examiner, I would tender
- 20 Mr. Dirks as an expert witness in petroleum land matters.
- 21 EXAMINER McMILLAN: So qualified.
- 22 Q. (BY MS. KESSLER) Mr. Dirks, can you briefly
- 23 please state what COG seeks under these consolidated
- 24 applications.
- 25 A. We seek the formation of two 160-acre

- 1 non-standard spacing and proration units to be dedicated
- to our proposed Clydesdale 1 Fee No. 5H and No. 7H wells,
- 3 and we seek to pool all the uncommitted interests in the
- 4 Yeso formation in our proposed units.
- 5 Q. Would your please turn to Exhibit 1 and identify
- 6 this exhibit for the examiners.
- 7 A. Exhibit 1 is our C-102 for the Clydesdale 5H.
- 8 Q. And what lands are within the proposed
- 9 non-standard unit area?
- 10 A. The north half of the south half of Section 1 of
- 11 Township 19 South, Range 25 East.
- 12 Q. And that's in Eddy County?
- 13 A. Yes.
- Q. And if you could turn to Exhibit 2 and identify
- 15 this exhibit, please.
- 16 A. This is our C-102 for our Clydesdale 7H well.
- 17 Q. What lands are within that proposed non-standard
- 18 unit area?
- 19 A. The south half of the south half of Section 2 of
- 20 19 South 25 East in Eddy County.
- 21 Q. Has the Division identified a pool and pool code
- 22 for each of these wells?
- A. Yes, they have.
- Q. What is that pool?
- 25 A. It is on the C-102: Penasco Draw San

- 1 Andres-Yeso. And the, uh, pool code is in there.
- 2 0. Is that --
- 3 A. 50270.
- 4 O. And that's for both wells, correct?
- 5 A. Yes.
- 6 O. Is that pool governed by Division statewide
- 7 rules?
- 8 A. Yes, it is.
- 9 Q. Will the completed interval for each of the
- 10 sells comply with setback requirements?
- 11 A. Yes, they will.
- 12 O. And are the spacing that's -- both comprised of
- 13 fee acreage?
- 14 A. Yes, they are.
- Q. And does Exhibit 3 contain a Lease Tract Map
- 16 which identifies COG's interests and the parties you seek
- 17 to pool for the 5H well?
- 18 A. Yes, it is.
- 19 Q. What type of interest do you see to pool?
- 20 A. We seek to pool all the uncommitted interests,
- 21 which are comprised of leasehold interests, unleased
- 22 mineral interests, nonparticipating royalty interests, and
- 23 unmarketable title.
- 24 Q. For Exhibit 3 are the parties whom you seek to
- 25 pool not bolded?

- 1 A. That's correct.
- Q. Okay. So the parties with whom you have reached
- 3 an agreement are in bold?
- 4 A. Correct. Well, with the exception of R. R.
- 5 Eagle (phonetic) Company. We came to an agreement with
- 6 them yesterday evening. I think that was too late to get
- 7 it on the exhibit.
- 8 O. And is Exhibit 4 a Lease Tract Map for the 7H
- 9 well identified as the parties COG seeks to pool for the
- 10 7H well?
- 11 A. Yes, it is.
- 12 Q. Why type of interests do you seek to pool for
- 13 the 7H well?
- 14 A. The same as the 5H. We seek to pool uncommitted
- 15 interests. We also have uncommitted leasehold interests
- 16 here, unleased mineral interests, nonparticipating oil
- 17 interests, and unmarketable title.
- 18 Q. And once again the parties whom you seek to pool
- 19 are not bolded, correct?
- 20 A. That's correct.
- 21 Q. Did each of the working-interest owners receive
- 22 a well proposal for each of the two wells?
- 23 A. Yes, they did.
- Q. And did the well proposal letters include an
- 25 AFE?

- 1 A. Yes, they did.
- Q. Are the well proposal letters sent to working
- 3 interest owners included as Exhibit 5 and 6?
- 4 A. Yes, they are.
- 5 O. And did you also send the proposal to the
- 6 nonparticipating royalty interest owners for the 5H and
- 7 7H?
- 8 A. Yes, we did.
- 9 Q. And is an example copy of each of those letters
- included as Exhibits 7 and 8 respectively?
- 11 A. Yes, they are.
- 12 Q. In addition to sending these proposal letters,
- 13 what other effort did you undertake to reach an agreement
- 14 with the parties that you seek to pool?
- 15 A. Lots of phone calls, lots of emails, and then
- 16 word of mouth, family members identifying other family
- members.
- 18 Q. Okay. And you mentioned that you took -- the
- 19 well proposal letters contain an AFE; is that correct?
- 20 A. Yes, they did.
- 21 O. Are the costs reflected on those AFEs consistent
- 22 with what COG has incurred with similar horizontal wells
- 23 in that area?
- A. Yes, they are.
- 25 Q. And do your well proposal letters identify the

- 1 owner having administrative costs for drilling and
- 2 producing the wells?
- 3 A. Yes, they do.
- 4 O. What are those costs?
- 5 A. \$5,450 a month drilling, \$545 a month producing.
- 6 O. Are those overhead rates consistent with what
- 7 other operators in the area are charging for similar
- 8 wells?
- 9 A. Yes.
- 10 Q. Do you ask that those administrative costs be
- 11 incorporated into an Order resulting from this hearing?
- 12 A. Yes.
- Q. Do you ask that the costs be adjusted in
- 14 accordance with the appropriate accounting procedures?
- 15 A. Yes, we do.
- Q. With respect to uncommitted cost-bearing
- 17 interest owners, do you request that the Division impose a
- 18 200 percent risk penalty?
- 19 A. Yes.
- Q. Did COG identify the offset operators or lessees
- 21 of record surrounding the two proposed non-standard
- 22 spacing units?
- A. Yes, we did.
- 24 O. And were those offsets included in Notice of
- 25 this hearing?

- 1 A. Yes, they were.
- Q. Is Exhibit 9 an affidavit prepared by my office
- 3 with attached letters, providing notice of this hearing to
- 4 the parties to be pooled and the offset parties?
- 5 A. Yes.
- 6 O. Were all of the parties whom you seek to pool
- 7 locatable?
- 8 A. No, they were not.
- 9 O. All right. Are Exhibits 10 and 11 Affidavits of
- 10 Publication for the 5H well and the 7H well, respectively?
- 11 A. Yes, they are.
- 12 Q. Were Exhibits 1 through 8 prepared by you or
- 13 compiled under your direction on supervision?
- 14 A. Yes, they were.
- 15 MS. KESSLER: Mr. Examiner, I would move
- 16 admission of Exhibits 1 through 11, which include my
- 17 affidavit.
- 18 EXAMINER McMILLAN: Exhibits 1 through 11
- 19 may now be accepted as part of the record.
- 20 MS. KESSLER: That completes my examination
- 21 of this witness.
- 22 EXAMINATION
- 23 BY EXAMINER McMILLAN:
- Q. Okay. Are there any the depth severances?
- A. No, sir, there are not.

- 1 Q. Is this for both wells, both applications?
- 2 A. That's correct.
- Q. Okay. Now, the pool is the Penasco Draw San
- 4 Andres-Yeso, correct?
- 5 A. Yes.
- 6 O. So your application says you're pooling all
- 7 mineral interests, all interests in the Yeso Formation.
- 8 A. Yes, sir.
- 9 O. What about the San Andres?
- 10 A. We are not at this time planning to produce out
- 11 of the San Andres.
- 12 EXAMINER McMILLAN: I'll have to ask the
- 13 geologist to explain, because it's nonrespective.
- 14 MS. KESSLER: Mr. Examiner, I believe that
- 15 the parties to be pooled are within the Yeso Formation,
- 16 which is where the well will be drilled.
- 17 EXAMINER McMILLAN: But the pool is
- 18 comprised of both San Andres and the Yeso Formation.
- 19 THE WITNESS: Mr. Examiner, the interest is
- 20 the same. There is no depth severance within that pool.
- 21 EXAMINER McMILLAN: Okay. So
- 22 essentially -- okay. Then -- okay.
- Q. And the well is proposed, right?
- 24 A. Yes, sir.
- 25 Q. And the project area is going to be standard,

- 1 it's going to be orthodox, right?
- 2 A. I'm sorry?
- Q. The project area will be orthodox, correct?
- 4 A. That's right. Yes, sir.
- 5 Q. Okay. So what day, by the way, is May 10th? Is
- 6 it within the 10 working days?
- 7 MS. KESSLER: Yes. Today is the 26th, so
- 8 it was within the 10 business days, yes.
- 9 EXAMINER BROOKS: That was when it was
- 10 published?
- MS. KESSLER: Yes.
- 12 EXAMINER McMILLAN: I want to make sure we
- don't have to continue the case.
- 14 EXAMINER BROOKS: Yes, it would -- let's
- 15 see. What was the day of the week? I've forgotten.
- 16 It would have been a Tuesday.
- 17 So Wednesday, Thursday, Friday, Monday,
- 18 Tuesday, Wednesday, Thursday, Friday, Monday, Tuesday.
- 19 EXAMINER McMILLAN: Okay. Tuesday is it.
- 20 EXAMINER BROOKS: It should be ten working
- 21 days. Unless there is a holiday, 10 business days is the
- 22 equivalent to 14 regular days.
- 23 EXAMINER McMILLAN: All right. I have no
- 24 questions. Thank you very much.
- THE WITNESS: Thank you.

## PAUL BACA PROFESSIONAL COURT REPORTERS 500 FOURTH STREET NW - SUITE 105, ALBUQUERQUE, NM 87102

- 1 MS. KESSLER: I will call my next witness.
- 2 GREG CLARK,
- 3 having been preiously sworn, testified as follows:
- 4 EXAMINATION
- 5 BY MS. KESSLER:
- 6 O. Please state your name for the record and tell
- 7 the examiners by whom you are employed and in what
- 8 capacity.
- 9 A. My name is Greg Clark. I'm employed by COG
- 10 Operating, LLC, as a petroleum geologist.
- 11 Q. Have you previously testified before the
- 12 Division?
- 13 A. Yes, I have.
- Q. Were your credentials as a petroleum geologist
- 15 accepted and made a matter of the record?
- 16 A. Yes, they were.
- 17 Q. Are you familiar with the applications filed in
- 18 these consolidated cases?
- 19 A. I am.
- 20 Q. Have you conducted a geologic study of the lands
- 21 that are the subject of this hearing?
- 22 A. Yes.
- 23 MS. KESSLER: Mr. Examiner, I will tender
- 24 Mr. Clark as an expert petroleum geologist.
- 25 EXAMINER McMILLAN: So qualified.

- 1 Q. (BY MS. KESSLER) Mr. Clark, what is the
- 2 targeted interval for these two wells?
- 3 A. The targeted interval will be the Paddock member
- 4 of the Yeso Formation.
- 5 O. Have you prepared a structure map and cross
- 6 section of the target field for the examiners?
- 7 A. I have.
- 8 O. Please turn to Exhibit 12 and identify this
- 9 exhibit.
- 10 A. This is a Regional Base Map depicting the two
- 11 wells, which are the Clydesdale 1 Fee No. 5H and No. 7H in
- 12 which we would like to drill. You will see that our
- 13 acreage is outlined in yellow. You will see that the
- 14 wells that we are asking to pool are in red with the
- 15 surface hole location being a square and the bottom hole
- 16 location being a circle. You will also see that the
- 17 current procedures are depicted by red as a Paddock
- 18 producer or blue as a Blinebry producer.
- 19 O. What is Exhibit 13?
- 20 A. Exhibit 13 is a regional map of the top of the
- 21 Paddock subsea structure. The contouring interval is 25
- 22 feet. Again you will see the locations in which we are
- 23 requesting to drill depicted in red. You will see in the
- 24 structure map that there's an overall trend of dip,
- 25 regional dip that goes from the northwest to the southeast

- 1 basinward. The purpose of this map is to show that
- 2 there's no major faulting, major folding or any geologic
- 3 impediments that would keep us from developing this area
- 4 using full-section horizontal wells.
- 5 Q. Is Exhibit 14 a locator map with line of section
- 6 drawn on it?
- 7 A. Yes, it is.
- 8 O. Do you consider the wells on the line A and
- 9 A-prime representative of wells in this area?
- 10 A. I do.
- 11 Q. Turning to Exhibit 15, will you please identify
- 12 this exhibit and walk us through it.
- 13 A. Yes. As depicted on the previous exhibit this
- is the actual cross section that goes from A to A-prime,
- 15 from a southeast to northwest direction. You will see
- 16 that this cross section is a stratographic cross section
- 17 which has been flattened on top of the Paddock. The
- 18 purpose of this is to a -- take out the structural
- 19 components so we can show the stratographic relationship
- 20 of the wells throughout the field area that also encompass
- 21 the area in which we are requesting to drill the
- 22 Clydesdale 1 Fee No. 5- and No. 7H.
- 23 You will see that the landing interval is
- 24 depicted in red.
- 25 You will see in yellow is the Glorieta

- 1 Formation, in green is the Paddock Formation, and below
- 2 that is the Blinebry Formation.
- 3 The well on the very right of the cross
- 4 section is a pilot well that we drilled in order to drill
- 5 the Pinto horizontal well, and the other three wells are
- 6 deep marrow (phonetic) gas wells that have not yet been
- 7 completed or recompleted into the Paddock Formation.
- 8 The Tract 1 on the logs is the gamma ray
- 9 and the Tract 2 are the porosity curves, and the overall
- 10 purpose, and what you can see out of this, is that there
- 11 is no major thickening or thinning within the Paddock.
- 12 You will see that the log characteristics
- are very similar, and that we feel, based off of this,
- 14 that we will be able to drill this well without any major
- 15 pinch-outs or change in rock character that would make
- 16 everything pretty uniform within this area in which we
- 17 intend to drill the Clydesdale 1 Fee 5H and 7H.
- 18 Q. Mr. Clark, what conclusions have you drawn based
- 19 on the geologic study of this area?
- 20 A. There are no geologic impediments from
- 21 developing this area using full-section horizontal wells.
- 22 This area can be efficiently and economically developed
- 23 using horizontal wells, and the non-standard units will
- 24 contribute more or less equally on average to the total
- 25 production of the well.

- 1 Q. As Mr. Dirks mentioned, the completed interval
- 2 for each of these two wells will comply with the
- 3 Division's statewide 330-foot setback; is that correct?
- 4 A. Yes, that is correct.
- 5 Q. Is the granting of COG's application in the best
- 6 interests of conservation, prevention of waste, and the
- 7 protection of correlative rights?
- 8 A. Yes.
- 9 Q. Were Exhibits 12 through 15 prepared by you or
- 10 compiled under your direction?
- 11 A. Yes, they were.
- 12 MS. KESSLER: Mr. Chairman, I would move
- 13 the admission of Exhibits 12 through 15.
- 14 EXAMINER McMILLAN: Exhibits 12 through 15
- 15 will now be accepted as part of the record.
- 16 MS. KESSLER: That concludes my
- 17 presentation.
- 18 EXAMINER McMILLAN I've got a question for
- 19 you on Exhibit 12.
- 20 EXAMINATION
- 21 BY EXAMINER McMILLAN:
- 22 Q. Exhibit 12.
- 23 A. Okay.
- Q. 12 and 14 are the same thing.
- 25 But I'm just curious: In terms of

- 1 reserves, looking I guess at the south half of the north
- 2 half, those are east-west wells, and the Section 6, that's
- 3 the north/south wells.
- 4 Is there any difference in reserves?
- 5 A. From the north/south v. the east/west we are not
- 6 seeing any difference in reserves. SH max is in a
- 7 northwest to southeast direction, so as long as we're
- 8 staying either oblique or perpendicular to SH max, we feel
- 9 that the wells will perform similarly, and that's what we
- 10 have seen as a result of the production from the wells
- 11 that currently exist.
- 12 Q. Okay. I'm just curious. I'm doing a quick look
- 13 at 15. Is the very top the Paddock perspective, too?
- 14 A. Yes.
- 15 Q. Okay. So that would just be another well
- 16 you've drilled in there?
- 17 A. Drilling at the very top of the Paddock?
- 18 Q. Yeah.
- 19 A. At this time we don't feel we would need another
- 20 well in order to effectively produce our reserves within
- 21 the Paddock Formation in the current interval in which we
- 22 intend to land the well.
- EXAMINER McMILLAN: Okay.
- 24 EXAMINER BROOKS: No questions.
- 25 THE SPECIAL MASTER: Okay. I have no

|    | Page 20  |
|----|--|
| 1  | further questions. Thank you.                              |
| 2  | THE WITNESS: All right. Thank you.                         |
| 3  | EXAMINER McMILLAN: Case No. 15493 and Case                 |
| 4  | No. 15494 may now be taken under advisement.               |
| 5  | And we are going to take a five-minute                     |
| 6  | break, because Will Jones is going to be here for the next |
| 7  | case. We will come back at 10 till.                        |
| 8  | (Time noted: 8:41 a.m.)                                    |
| 9  |  |
| 10 |  |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 |  |
| 15 |  |
| 16 |  |
| 17 |  |
| 18 |  |
| 19 |  |
| 20 |  |
| 21 |  |
| 22 |  |
| 23 |  |
| 24 |  |
| 25 |  |
| 1  |  |

|    |  |           |          |                            | Page 21                   |  |  |
|----|--|-----------|----------|----------------------------|---------------------------|--|--|
| 1  | STATE OF NEW MEXICO  | )         |          |                            |                           |  |  |
| 2  |  | )         | SS       |                            |                           |  |  |
| 3  | COUNTY OF TAOS   | )         |          |                            |                           |  |  |
| 4  |  |           |          |                            |                           |  |  |
| 5  |  |           |          |                            |                           |  |  |
| 6  |  |           |          |                            |                           |  |  |
| 7  | RE   | PORTER'S  | S CERTIF | ICATE                      |                           |  |  |
| 8  |  |           |          |                            | co Reporter               |  |  |
| 9  | CCR No. 122, DO HEREBY CERTIFY that on Thursday, May 26, 2016, the proceedings in the above-captioned matter were taken before me, that I did report in stenographic |           |          |                            |                           |  |  |
| 10 | shorthand the proceed foreoing pages are a   | edings se | et forth | herein, ar                 | nd the                    |  |  |
| 11 | best of my ability a   |           |          |                            | -                         |  |  |
| 12 | I FURTHER nor related to nor c   |           |          |                            | employed by cepted by the |  |  |
| 13 | rules) any of the parties or attorneys in this case, and that I have no interest whatsoever in the final   |           |          |                            |                           |  |  |
| 14 | disposition of this  | case in   | any cou  | rt.                        |                           |  |  |
| 15 |  |           |          |                            |                           |  |  |
| 16 |  |           |          |                            |                           |  |  |
| 17 |  |           |          |                            |                           |  |  |
| 18 |  |           |          |                            |                           |  |  |
| 19 |  |           |          | CFARLANE, (<br>urt Reporte |                           |  |  |
| 20 |  |           |          | : 12/31/20                 |                           |  |  |
| 21 |  |           |          |                            |                           |  |  |
| 22 |  |           |          |                            |                           |  |  |
| 23 |  |           |          |                            |                           |  |  |
| 24 |  |           |          |                            |                           |  |  |
| 25 |  |           |          |                            |                           |  |  |
|    |  |           |          |                            |                           |  |  |