

STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

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

ORIGINAL

CASE 15367
(cont'd from
9/17/15)

APPLICATION OF ENCANA OIL & GAS (USA) INC.
FOR APPROVAL OF THE NORTH ALAMITO UNIT,
CREATION OF A NEW POOL FOR HORIZONTAL
DEVELOPMENT WITHIN THE UNIT AREA, and FOR
ALLOWANCE OF 330 FOOT SETBACKS FROM THE
EXTERIOR OF THE PROPOSED UNIT, SAN JUAN AND
SANDOVAL COUNTIES, NEW MEXICO.

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

OCTOBER 1, 2015

Santa Fe, New Mexico

BEFORE: WILLIAM V. JONES, CHIEF EXAMINER
MICHAEL McMILLAN, EXAMINER
GABRIEL WADE, LEGAL EXAMINER

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This matter came on for hearing before the
New Mexico Oil Conservation Division, William V. Jones,
Chief Examiner, Michael McMillan, Examiner, and Gabriel
Wade, Legal Examiner, on October 1, 2015, at the New
Mexico Energy, Minerals, and Natural Resources
Department, Wendell Chino Building, 1220 South St.
Francis Drive, Porter Hall, Room 102, Santa Fe, New
Mexico.

REPORTED BY: ELLEN H. ALLANIC
NEW MEXICO CCR 100
CALIFORNIA CSR 8670
PAUL BACA COURT REPORTERS
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A P P E A R A N C E S

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I N D E X

CASE NUMBER 15367 CALLED

ENCANA OIL AND GAS (USA), INC., CASE-IN-CHIEF:

WITNESS MONA L. BINION

	Direct	Redirect	Further
By Mr. Feldewert	5		

EXAMINATION

Examiner Jones	16
Examiner McMillan	27
Examiner Wade	29

WITNESS CHRIS CASSLE

	Direct	Redirect	Further
By Mr. Feldewert	30		

EXAMINATION

Examiner Jones	37, 42
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Reporter's Certificate

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E X H I B I T I N D E X
Exhibits Offered and Admitted

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1 (Time noted 11:15 a.m.)

2 EXAMINER JONES: Back on the record.

3 Let's call case No. 15367, the Application
4 of Encana Oil & Gas (USA), Inc., for Approval of the
5 North Alamito Unit, Creation of a New Pool For
6 Horizontal development within the unit area, and for
7 allowance of 330 Foot Setbacks from the Exterior of the
8 Proposed Unit, San Juan and Sandoval Counties, New
9 Mexico.

10 Call for appearances.

11 MR. FELDEWERT: May it please the Examiner,
12 Michael Feldewert with the Santa Fe Office of Holland
13 and Hart, appearing on behalf of the applicant. I have
14 two witnesses here today.

15 MR. HALL: Scott Hall, Montgomery and
16 Andrews Law Firm, Santa Fe, appearing on behalf of WPX
17 Energy. I'll have no witnesses today.

18 EXAMINER JONES: Any other appearances?

19 (No response.)

20 EXAMINER JONES: Mr. Hall, is WPX
21 opposing --

22 MR. HALL: No.

23 MR. FELDEWERT: Call the first witness --

24 EXAMINER JONES: Yes. Please swear in the
25 witnesses.

1 (WHEREUPON, the presenting witnesses
2 were administered the oath.)

3 EXAMINER JONES: Hold on a second. Yes,
4 sir.

5 UNIDENTIFIED MALE VOICE: Is this --

6 THE COURT REPORTER: Sir, I am the court
7 reporter. You're speaking far away from me, and I need
8 you to speak louder for the record. Also, please state
9 your name so I can identify on the record who's
10 speaking.

11 MR. BEGAY: My name is Lorenzo Begay. And I
12 come from Bisti. And I come here to sit in and listen
13 on behalf of The Good Times Unit.

14 EXAMINER JONES: Which unit?

15 EXAMINER WADE: It's the Good Times Unit, so
16 that's case No. 15368. And right now we're on case
17 No. 15367.

18 EXAMINER JONES: Thank you, Mr. Begay.
19 Okay. Mr. Feldewert, go ahead.

20 MONA L. BINION
21 having been first duly sworn, was examined and testified
22 as follows:

23 DIRECT EXAMINATION

24 BY MR. FELDEWERT:

25 Q. Would you please state your name, identify by

1 whom you are employed and in what capacity.

2 A. Mona Binion, I am employed by Encana Oil and Gas,
3 and my capacity is land negotiator for San Juan Basin.

4 Q. And how long have you been involved with the San
5 Juan Basin?

6 A. Since Encana in the San Juan Basin since Encana
7 began its activity there. And it is approximately three
8 years.

9 Q. Okay. And you've had previous experience in the
10 San Juan Basin with other companies, correct?

11 A. Yes, I have.

12 Q. And Ms. Binion, you also previously testified
13 before this Division and had your credentials as an
14 expert in petroleum land matters accepted and made a
15 matter of public record?

16 A. Yes, I have.

17 Q. Are you familiar with the application filed in
18 this case?

19 A. Yes, I am.

20 Q. And are you familiar with the status of the lands
21 in the subject area?

22 A. Yes, I am.

23 MR. FELDEWERT: I would tender Ms. Binion as
24 an expert witness in petroleum land matters.

25 EXAMINER JONES: Any objection?

1 MR. HALL: No objection.

2 EXAMINER JONES: She is so qualified.

3 Q. Please turn to what has been marked as Encana
4 Exhibit 1, first identify it and then explain what the
5 company is seeking under this application.

6 A. Exhibit 1 is a map which represents the proposed
7 North Alamito Unit area. It is outlined in the center
8 of the map in bold black. And also represented on the
9 map are the existing oil pools in the area surrounding
10 and within the proposed North Alamito Unit.

11 What Encana is seeking in this area is to receive
12 approval from the OCD for the unit, for the North
13 Alamito Unit, and to create a new horizontal oil pool
14 within the unit boundaries, allowing for 330-foot
15 setbacks toward the exterior boundaries of the unit.

16 Q. Ms. Binion, on this map, do you also identify
17 some of the existing units that have been either
18 approved or the subject of hearings before the Division?

19 A. Yes. The various colors represent the status of
20 the unit applications that have been filed with the
21 Division or the outlines of proposed units that haven't
22 been filed yet.

23 So it was -- they are just for reference
24 purposes. I am not sure if the case numbers have been
25 correctly identified on here. But they are for

1 reference purposes, to show the relationship of those
2 versus their application.

3 Q. Okay. And, then, if I turn to what has been
4 marked as Encana Exhibit 2, is this a copy of the unit
5 agreement for the proposed unitized area?

6 A. Yes, it is.

7 Q. And does Exhibit A to this unit agreement
8 identify and outline the proposed unit area as well as
9 the leases and tracts that are involved?

10 A. Yes, it does.

11 Q. And does it identify the percentage of ownership
12 on an acreage basis?

13 A. Exhibit B to the unit shows the ownership on a
14 tract level of all the leases and lands within the unit
15 area. And it is limited to just the unitized interval.

16 Q. Okay. And then, flipping back to Exhibit A, in
17 the bottom right-hand corner, it does provide the
18 Examiner with a breakdown of the federal lands, the
19 state lands, the patented lands, and then the allottee
20 lands, correct?

21 A. Yes, it does.

22 Q. And if I'm reading this correctly, the federal
23 lands comprise 86 percent of the proposed unitized area?

24 A. Yes, they do.

25 Q. Okay. And does this agreement then follow the

1 federal form?

2 A. Yes, it does, with modification to limit it only
3 to horizontal drilling and to limit it to the specific
4 unitized interval of the Mancos.

5 Q. Will this particular unitized area under this
6 form also be treated as a single participating area?

7 A. Yes, it will.

8 Q. And with respect to the effective date of this
9 federal unit, it has an effective date of December of
10 2012; is that correct?

11 A. Yes, it does.

12 Q. Is that to accommodate existing wells?

13 A. Yes, it is.

14 Q. So there are some existing horizontal wells
15 within this unitized area?

16 A. Yes, there are.

17 Q. And does -- to finish this out then, Exhibit to
18 this unit agreement, the very last page, then also
19 identifies the unitized interval; is that correct?

20 A. Yes. Exhibit C is the type log, and on this
21 visual it just depicts the same interval that is
22 described in the unit agreement in paragraph 3.

23 Q. And it is the same type log, and that's for the
24 well that is identified in paragraph 3?

25 A. Correct.

1 Q. All right. Have you visited with the BLM, the
2 Federal Indian Minerals Office and the New Mexico State
3 Land Office about this unit?

4 A. Yes, we have.

5 Q. And if I turn to what has been marked as Encana
6 Exhibit - let's wait one minute.

7 If I turn now to what has been marked as Encana
8 Exhibit 3, is this the preliminary approval letter from
9 the State Land Office?

10 A. Yes, it is.

11 Q. And one of the things I want to point out,
12 Ms. Binion, only because of some questions earlier
13 today, if I look at the second page of this preliminary
14 approval letter from the New Mexico State Land Office,
15 paragraph 4, it falls under the requirements to get
16 final approval from the State Land Office?

17 A. Yes, it does.

18 Q. And paragraph 4 lists an order from the Division
19 approving this unit as a pre-condition for final
20 approval from the New Mexico State Land Office; is that
21 correct?

22 A. That's correct.

23 Q. And is that one of the reasons, then, you're
24 here?

25 A. Yes, it is.

1 Q. Is Encana Exhibit 4 the preliminary approval
2 letter from the Bureau of Land Management?

3 A. Yes, it is.

4 Q. And was that copied to the Federal Indian
5 Minerals Office?

6 A. Yes, it was.

7 Q. And have you also received verbal approval from
8 the Federal Indian Minerals Office that they, likewise,
9 approve this unit?

10 A. Yes.

11 Q. How many working interest owners are involved in
12 this particular unit?

13 A. We have nine dedicated -- we have now identified
14 working interest owners in this unit area in addition to
15 Encana.

16 Q. Okay. And are you engaged in discussions with
17 these working interest owners for this voluntary unit?

18 A. Yes. We are communicating with them for either
19 their commitment or some arrangement to satisfy their
20 approval to join the unit.

21 Q. Okay. If I then turn to what has been marked as
22 Encana Exhibit 5, does this depict the current
23 development plan for this unitized area?

24 A. Yes. This is identified as the preliminary plan
25 to develop -- to fully develop the unit with grids

1 showing -- for well pattern.

2 Q. Okay. And is the company required under the unit
3 agreement to submit annual development plans to the
4 authorized officer for the Bureau of Land Management?

5 A. Yes. The unit agreement, I think our paragraph
6 10, requires that annual plans of development be filed
7 with the Bureau of Land Management and the State Land
8 Office for approval.

9 Q. Has Encana drilled the initial horizontal
10 development well for this particular unit?

11 A. Yes. Encana has drilled what is now called the
12 Lybrook H26, 01H.

13 Q. And if I look in Exhibit 5, is that on the
14 right-hand side of the unit in the north half of section
15 26?

16 A. Yes, it is.

17 Q. And if I look at paragraph 9 of the unit
18 agreement, which is Exhibit 2, and paragraph 9 is
19 actually on -- well, it starts on the second page of the
20 unit agreement that is marked as Exhibit 2, down towards
21 the bottom, and it identifies that well as the initial
22 unit development well?

23 A. Yes, it does.

24 Q. And under this agreement, does the BLM also then
25 treat six other existing horizontal wells immediately as

1 unit wells upon final approval of this unit agreement?

2 A. Yes, they do.

3 Q. Okay. All right.

4 And if I flip back to where we started, Exhibit
5 No. 1, which is the map of the unit area in black, and
6 it shows all the various pools and units around this,
7 what pools are involved with respect to the acreage that
8 at issue here with the North Alamito Unit?

9 A. In the interior of the North Alamito outline, we
10 have the Alamito Gallup Pool, we have the Lybrook Gallup
11 Pool, and we have the Basin Mancos.

12 Q. And both the Lybrook and the Alamito Gallup
13 pools, those are subject to the statewide 330-foot
14 setbacks; is that correct?

15 A. Yes, they are.

16 Q. Whereas the remaining acreage in the Basin Mancos
17 Gas Pool is currently subject to 660-foot setbacks?

18 A. Yes, it is.

19 Q. To bring some uniformity to this area, do you
20 seek to create a horizontal oil pool for this particular
21 unit acreage that will allow for 330-foot setbacks?

22 A. Yes, we are.

23 Q. And will that allow the company to orient their
24 wells within this unit for an efficient well pattern?

25 A. Yes, it will.

1 Q. But the completed interval for those wells under
2 your proposal will remain at least 330 feet from the
3 outer boundary of the unit area, correct?

4 A. Yes.

5 Q. All right. And on that particular point, in
6 preparation for this hearing, did the company identify
7 and provide notice to the offsetting acreage
8 that outside issue that is in the Basin Mancos Gas Pool
9 and is currently subject to 660 foot setbacks?

10 A. Yes. We notified working interest owners and
11 operators in the Basin Mancos offsetting the --

12 Q. And did you include those offsetting interest
13 owners with a copy of the notice of this hearing?

14 A. Yes, we did.

15 Q. In addition to that, did the company also provide
16 notice to all of the -- notice of this hearing to all
17 the working interest owners within the unit?

18 A. Yes, we did.

19 Q. Did you provide notice to the Indian allottees
20 involved with this particular unit?

21 A. Yes, we did.

22 Q. And finally are there overriding royalty
23 interests within this unitized area?

24 A. There are overriding royalty interests.

25 Q. And did you locate and provide notice of this

1 hearing to those overriding royalty interests?

2 A. We provided notice to all the overriding royalty
3 interests on the best address that we had of record.

4 Q. And did that notice that you provided to these
5 interest owners, did it also provide them a copy of the
6 proposed unit agreement?

7 A. Yes, it did.

8 Q. And if I turn then to what has been marked as
9 Encana Exhibit 6, is this an affidavit with attached
10 letters providing notice of this hearing and a copy of
11 the unit agreement to these parties?

12 A. Yes, it is.

13 Q. And, finally, then, if I turn to what has been
14 marked as Encana Exhibit 7, did the company also provide
15 notice of this hearing in this application by
16 publication in the Farmington Times?

17 A. Yes.

18 Q. And is Exhibit 7 an affidavit of publication of
19 that notice?

20 A. It is an affidavit, yes.

21 Q. Ms. Binion, were Encana Exhibits 1 through 5
22 prepared by you or compiled under your direction and
23 supervision?

24 A. Yes, they were.

25 MR. FELDEWERT: Mr. Examiner, I move the

1 admission into evidence of Exhibits 1 through 7, which
2 include the two notice affidavits.

3 EXAMINER JONES: Any objection?

4 MR. HALL: No objection.

5 EXAMINER JONES: Exhibits 1 through 7 are
6 admitted.

7 (Encana Oil and Gas (USA), Inc., Exhibits 1
8 through 7 were offered and admitted.)

9 MR. FELDEWERT: And that concludes my
10 examination of this witness.

11 MR. HALL: I'll have no questions.

12 EXAMINER McMILLAN: You go ahead and start.

13 EXAMINATION BY EXAMINER JONES

14 EXAMINER JONES: I noticed in the
15 application it said northeast of 35, and in the actual
16 agreement here, it says northwest of 35. But the
17 application that was filed to the OCD was a long time
18 ago. That's really not a big deal, right?

19 THE WITNESS: The noticed parties that were
20 determined were determined based on the northwest
21 quarter of section 35 being in the unit.

22 EXAMINER JONES: Okay.

23 THE WITNESS: That is what is in the unit
24 agreement, the exhibits attached to the unit agreement.

25 The northeast of 35 is an unleased federal

1 tract.

2 EXAMINER JONES: Okay.

3 THE WITNESS: And the BLM is okay with us
4 not including that in the unit. The northwest of 35 is
5 owned by Encana.

6 EXAMINER JONES: Okay. Are all of the
7 allottees, lessors?

8 THE WITNESS: Yes, sir. The allottees that
9 were noticed are all owners under existing BIA leases
10 that fall within the boundaries of that unit.

11 EXAMINER JONES: So they not only own
12 whatever they own on the surface, but we are talking
13 about what they own mineral-wise?

14 THE WITNESS: Correct. We did not look to
15 see if there's severed ownership of the surface. We
16 only noticed the mineral owners.

17 EXAMINER JONES: And you said there's some
18 horizontals here already in this unit?

19 THE WITNESS: I'm sorry?

20 EXAMINER JONES: Are there some horizontal
21 wells already drilled?

22 THE WITNESS: Yes. There are seven
23 horizontal wells existing in this unit boundary.

24 EXAMINER JONES: Are those wells that have
25 already been completed?

1 THE WITNESS: Yes.

2 EXAMINER JONES: And how far back do they
3 go? I guess I missed the effective date.

4 THE WITNESS: December 1st of 2012 is the
5 effective date that has been included in this proposed
6 unit agreement. That predates the spudding of the first
7 well.

8 EXAMINER JONES: 12/1 of 12?

9 THE WITNESS: Correct.

10 EXAMINER JONES: What about verticals before
11 that date? This doesn't include verticals --

12 THE WITNESS: Correct, we haven't addressed
13 verticals in this.

14 EXAMINER JONES: So they will be basically
15 on their own properties within whatever area we've got
16 here.

17 THE WITNESS: Right, subject to the existing
18 pools that they were drilled under, those rules.

19 EXAMINER JONES: And for this case you
20 notified all the overrides; is that correct?

21 MR. FELDEWERT: Yes, sir.

22 EXAMINER JONES: So the lessors are parties
23 to the agreement and the lessees were signatories and
24 the working interests were signatories of the agreement?

25 THE WITNESS: Well, they will be signatories

1 of the agreement. We've just made the initial contacts
2 to get their conceptual approval of the unit area. The
3 actual written, you know, signatures from the parties
4 will go once all of the documents have been approved by
5 all of the agencies, that everyone is on board with the
6 terms of this unit.

7 EXAMINER JONES: Okay. Are you proposing
8 any attribute for that pool, like the sizes, the depth
9 allowable, any of that stuff? It's all statewide --

10 THE WITNESS: Do you mean spacing unit size?

11 EXAMINER JONES: Yes.

12 THE WITNESS: We haven't identified this in
13 the application, any spacing unit size. So I would
14 assume it would default to the statewide.

15 EXAMINER JONES: But you wouldn't be opposed
16 to us making the spacing equal to what the well
17 penetrated --

18 MR. FELDEWERT: I think --

19 EXAMINER JONES: -- for what each well
20 penetrates?

21 MR. FELDEWERT: Well, that would be correct.
22 If you'll --

23 EXAMINER JONES: In other words, the
24 developed project area, if we created a new horizontal
25 pool, we could call the spacing unit size the size that

1 the V-12 penetrates.

2 MR. FELDEWERT: If you look at Exhibit 1 --
3 this might help. If you look at Exhibit 1, you will see
4 that there is, just to the bottom left-hand portion of
5 the North Alamito Unit, is WPX's West Alamito Unit.

6 This is very similar in terms of the relief
7 requested, in which you fairly recently issued an order
8 addressing that, and, in particular, addressing how the
9 filing is to occur --

10 EXAMINER JONES: Okay.

11 MR. FELDEWERT: For purposes of the C-102.

12 EXAMINER JONES: Okay.

13 MR. FELDEWERT: So I think some of those
14 questions will be answered by that particular order.

15 EXAMINER JONES: Thank you.

16 This agreement, as far as holding lands
17 outside of the unit after the unit is formed, what kind
18 of segregation clauses did the feds include here or the
19 state?

20 THE WITNESS: It is the unitization
21 segregation, Code of Federal Regulations rules we would
22 be following. It is nothing different.

23 It is nothing different. It is nothing
24 unique to any other unit.

25 EXAMINER JONES: So it is kind of like an

1 exploratory unit. Basically it's styled on an
2 exploratory unit, but it just has some existing wells in
3 it already?

4 THE WITNESS: Yes.

5 EXAMINER JONES: And the State Land Office
6 and the BLM use the same form?

7 THE WITNESS: No. I think the BLM has a
8 form, but I was told by the State Land Office that the
9 State Land Office unit form is much closer resembling
10 this BLM form of the unit rather than the divided type
11 of BLM type of unit.

12 EXAMINER JONES: So it is like a state form?

13 THE WITNESS: Correct. It is undivided, one
14 single project area and one single participating area.

15 EXAMINER JONES: And you covered this, I am
16 sure, but drilling requirements and plan of
17 developments, is that the six-month -- within six
18 months, spud your first well -- you already have wells
19 that are qualified?

20 THE WITNESS: Correct. The agreement reads
21 that within six months from approval of the unit we are
22 to file a paying-well determination on that first well.

23 EXAMINER JONES: Okay.

24 THE WITNESS: If that well does not qualify
25 as a paying well, then we have to submit a paying-well

1 determination on the next successive well that was
2 drilled, until we qualify one of the wells as a paying
3 well. If no wells qualify, then we are required within
4 a year after that last determination to drill a new
5 well. So we have to continue applying for something
6 until we have proven there is paying quantity production
7 within the unit boundary.

8 EXAMINER JONES: Okay. And did the BLM
9 retain the rights to track the unit if they feel that
10 the plan of development is not being followed or --
11 these are non-contractible otherwise; is that correct?

12 THE WITNESS: Correct. It is my
13 understanding the Code of Federal Regulations gives the
14 BLM the authority to terminate the unit if in their
15 determination the unit is not being adequately
16 developed. There is no contraction language within the
17 unit agreement, so it would fall back on their authority
18 into the CFR.

19 EXAMINER JONES: But the unit agreement
20 includes language that all federal and state regulations
21 governing oil and gas should be followed.

22 THE WITNESS: Yes.

23 EXAMINER JONES: The top and the bottom of
24 unitized interval here that's specified in the unit
25 agreement, is that the exact same as the Basin Mancos

1 language?

2 THE WITNESS: Yes. It is my understanding
3 geologically what has been defined is the top and the
4 bottom of the Mancos, so it includes the entire Mancos
5 interval.

6 EXAMINER JONES: Like 120 feet below the
7 Mesa Verde and then the base of the Greenhorn?

8 THE WITNESS: Correct.

9 MR. FELDEWERT: If you look at paragraph 3
10 of the unit agreement, it spells out the language. And,
11 actually, it's bold so it's easy to find. But, roughly,
12 what you just articulated.

13 EXAMINER JONES: Okay.

14 From a land standpoint, why did you pick
15 these lands to -- you work as a team, so you got
16 together; and why are you unitizing this area, this
17 particular area?

18 THE WITNESS: It's to facilitate the uniform
19 and common development of the area in a format or in a
20 direction orientation -- that's the word I should use --
21 an orientation that best suits the most optimum
22 development of those reserves.

23 Our team has expressed that the transverse
24 orientation has proven to be so far the best setup to be
25 able to optimize recovery of reserves. It is

1 facilitated by providing unitization tool to be able to
2 locate wells, bottom holes, surface locations in that
3 pattern.

4 And so from the land side, we combined the
5 maximum number of acres that we could locate in this
6 area, that was generally contiguous, owned by Encana,
7 you know, that we could propose wells and develop,
8 because we are operator of those lands and have the duty
9 developing those lands for ourself and our partners.

10 EXAMINER JONES: But you ended up with some
11 allottee leases on the west. And the state lease, where
12 is it located -- or is it one lease?

13 THE WITNESS: I think there are a couple of
14 leases. If you look on Exhibit B, the state leases are
15 all identified in one area together.

16 EXAMINER JONES: Okay. There they are.

17 THE WITNESS: There's one in --

18 EXAMINER JONES: 19 and 20.

19 THE WITNESS: Section 36 and 32. Section 36
20 of 23 North, 8 West. And Section 32 of 23 North, 7
21 West.

22 EXAMINER JONES: So, basically, those state
23 leases needed to be included to make a reasonably
24 contiguous shape?

25 THE WITNESS: Correct.

1 EXAMINER JONES: This is 100 percent
2 voluntary, correct?

3 THE WITNESS: Yes.

4 EXAMINER JONES: So tell us what that means.
5 Does it mean that each separately owned tract that you
6 talk about has to get together, and that tract, the
7 owners of that tract vote on joining the unit or not?
8 Or does every owner within every tract have to join,
9 otherwise, the tracts that don't have 100 percent
10 joinder within the tract is excluded from the unit?

11 THE WITNESS: Correct. The BLM requires
12 100 percent joinder of all operating rights, owners, and
13 record title holders within a tract. And a tract is
14 defined as a lease. So if you have multiple ownerships
15 within one lease, you know, oil and gas lease, it is
16 still considered one tract.

17 You may have an owner that only has a one
18 percent interest in a 40-acre tract out of a 2,000-acre
19 lease. Denial of their joinder from that one tract will
20 exclude the entire tract from being fully committed.

21 So, yes, it requires 100 percent joinder for
22 each individual tract.

23 EXAMINER JONES: Okay.

24 THE WITNESS: And one tract that would be
25 missing a joinder would be considered an uncommitted

1 tract. You have to have joinder of a minimum of 85
2 percent of the acreage in your total unit.

3 So you have to have that 100 committal of
4 tracts that add up to a minimum of 85 percent of the
5 total acreage in the unit in order to meet what the BLM
6 considers minimum effective control.

7 EXAMINER JONES: And that is for preliminary
8 approval or is that --

9 THE WITNESS: That is for final approval.
10 Because at the time of preliminary approval, you haven't
11 had as much contact with all of the owners yet, because
12 you want to make sure that your outline is acceptable to
13 the BLM and the state. Otherwise, you adjust all of
14 that and then out to the owners and say, BLM is okay
15 with this and here is what our plan is.

16 And then you start soliciting your joinders.
17 And you hold and continue to solicit joinders until you
18 reach 85 percent or greater effective control than is
19 appropriate for submittal.

20 What we are attempting to do in these units
21 is get 100 percent. We are not interested in 85
22 percent. We would like to see an undivided 100 percent
23 committal. And so far the units we have formed we've
24 reached 100 percent in all cases.

25 I guess we didn't reach it in Gallup Canyon.

1 But we were well over 85 percent.

2 EXAMINER JONES: But even if you ended up
3 with a hole in the unit, you can still drill wells if
4 you are the operator of that well unit, and you could
5 propose the well and use the state's compulsory pooling
6 if they decide not to join?

7 THE WITNESS: It's doable. It becomes more
8 of a challenge, because then you have different rules
9 that you are following from one tract to another.

10 So that's -- we shoot for 100 percent
11 because that is the maximum flexibility to be able to
12 develop the entire area in one, you know, one -- under
13 one agreement. But, yes, it is most definitely doable.

14 EXAMINER JONES: I don't have any more. Any
15 questions?

16 EXAMINATION BY EXAMINER McMILLAN

17 EXAMINER McMILLAN: Have the wells that have
18 been drilled, have they been deemed economic by BLM?

19 THE WITNESS: We haven't submitted them for
20 review as an economic well. So we are waiting for the
21 unit agreement to be finalized.

22 The BLM doesn't review the wells for that
23 purpose, except to qualify them under those BLM terms --
24 I mean under those unit terms. So we haven't submitted
25 it yet.

1 But we have looked at the production
2 history. And just, you know, general back of the
3 envelope review indicates that we should be able to make
4 paying quantity status with at least one if not all of
5 the wells.

6 EXAMINER JONES: Did you receive any
7 feedback from our Aztec office as far as paperwork they
8 are going to be needing to do -- well, to your people
9 and them are going to need to be doing for basically a
10 service request to include these seven wells in the unit
11 and go back to the 12/1/12 starting date?

12 THE WITNESS: We have not had any feedback
13 from the Aztec office. I did speak to them previously
14 and asked if there was anything specific that we needed
15 to do or request or provide. And I was just advised
16 that that was being taken under consideration in the
17 Santa Fe Office.

18 So I haven't been given any specific
19 direction.

20 EXAMINER JONES: But your regulatory people
21 at Encana, they would be working with them?

22 THE WITNESS: Yes.

23 EXAMINER JONES: To hopefully get everything
24 done.

25 EXAMINATION BY EXAMINER WADE

1 EXAMINER WADE: I probably missed this, but
2 the effective date that you are requesting for the
3 formation of the pool will be backdated to 12/1/12?

4 THE WITNESS: We haven't asked for a
5 retroactive backdating of the actual pool to my
6 knowledge. It is just the unit agreement, which is the
7 contractual arrangement among the owners of the property
8 inside the unit area. We're agreeing to backdate our
9 arrangement, not the pool.

10 Right?

11 MR. FELDEWERT: Correct.

12 EXAMINER JONES: These three units are going
13 to be similar that you're presenting.

14 MR. FELDEWERT: Yes, sir.

15 I tried to consolidate them, but it just
16 didn't work. To consolidate the presentation was just
17 too difficult.

18 EXAMINER JONES: The allocation tract is
19 always on an acres basis and nobody ever argues that
20 they got better Mancos than others?

21 THE WITNESS: That is dictated by the unit
22 agreement, which is a BLM standard agreement. And
23 because these are not secondary recovery units, then we
24 treat all tracts equally as far as value.

25 I mean, we do have -- you'll have -- on

1 occasion, some people will say, I think my tract might
2 be better. I don't know if I want to include it.

3 So they have that choice, because they think
4 it shouldn't be mixed up with other tracts that they
5 think are not as valuable.

6 We do not have this case in these three
7 units right now. No one has objected to that.

8 EXAMINER JONES: Thank you very much.

9 THE WITNESS: Okay.

10 MR. FELDEWERT: Call your next witness.

11 CHRIS CASSLE

12 having been first duly sworn, was examined and testified
13 as follows:

14 DIRECT EXAMINATION

15 BY MR. FELDEWERT:

16 Q. Could you please state your name and identify by
17 whom you're employed and in what capacity.

18 A. My name is Chris Cassle. I'm a geologist with
19 Encana.

20 Q. And, Mr. Cassle, have you previously testified
21 before this Division?

22 A. I have not.

23 Q. Would you please outline your education
24 background.

25 A. Yes. I completed my bachelor of science in

1 geology in 2002 at Ohio University, my master's of
2 science and geology in 2005 also at Ohio University.

3 Following my master's, I worked for two years as
4 an environmental consultant in Denver at Environmental
5 Resources Management.

6 Following those two years, I went back to school
7 and completed four years of my Ph.D. at Colorado State
8 University, in which I am still currently enrolled. I
9 am just writing a dissertation now.

10 And then at the end of my four years at CSU, I
11 began my full-time employment at Encana in the fall of
12 2010, where for the first three years I worked on our
13 Piceance Basin team, working on the Mesa Verde there in
14 the Williams Fork Formation.

15 And since April of 2014, I have been working on
16 the San Juan Basin team at Encana.

17 Q. The San Juan Basin team at Encana, that includes
18 a portion of the basin within New Mexico, correct?

19 A. Correct.

20 Q. Are you a member of any professional affiliations
21 or associations?

22 A. I am. I have been a member of the Geological
23 Society of America since 2002, as well as the Society
24 for Sedimentary Geology, SEPM. And I am also a full
25 member of the American Association of Petroleum

1 Geologists for, I think, the last seven years.

2 Q. Are you familiar with the application filed in
3 this case?

4 A. I am.

5 Q. Have you conducted a geologic study of the lands
6 that are the subject of this application?

7 A. I have.

8 MR. FELDEWERT: I would tender Mr. Cassle as
9 an expert witness in petroleum geology.

10 EXAMINER JONES: Yeah, I worked the
11 Piceance for ten years, Williams Fork, Cosack Corkroom,
12 Cameo Coals. And he's definitely qualified as an
13 expert.

14 Q. Mr. Cassle, are you familiar with the Verizon as
15 being unitized for the proposed unit?

16 A. I am.

17 Q. And if I turn to what has been marked as Encana
18 Exhibit 8, is this the same type log that is attached as
19 Exhibit C to the unit agreement?

20 A. Yes.

21 Q. And it identifies the unitized interval, correct?

22 A. Yes, it does.

23 Q. Okay. Does this proposed unitized interval
24 extend across the acreage that Encana seeks to unitize?

25 A. Yes, it does.

1 Q. And have you prepared a structure map and cross
2 sections to show that?

3 A. I have.

4 Q. If I first turn to what's been marked as Encana
5 Exhibit No. 9, is this your structure map for this
6 proposed unit?

7 A. Yes, it is.

8 Q. Would you please explain to us what you observe
9 -- what is shown on here and then what you observe with
10 respect to the structure for this interval.

11 A. Yes. This is a subSea structural grid of the top
12 of the Mancos with a contour interval of 20 feet, which
13 shows a gentle dip of two to three degrees to the
14 northeast. It also highlights that there are no
15 perceived structural complications or faulting.

16 And overlaying on the map also are two cross
17 sections to exhibit the continuity of the geology across
18 the area, a northwest to southeast cross section, which
19 is A to A Prime, and a southwest to northeast cross
20 section, which is B to B Prime.

21 The proposed unit outline is outlined with red.
22 And the location of the type log is on the A to A Prime
23 line in the southeast marked by a green hexagon.

24 Q. And to the right of the unitized area, just below
25 the furthest eastern acreage?

1 A. Yes.

2 Q. With that in mind, would you then turn to what
3 has been marked as Encana Exhibit 10. Does this
4 correspond with your A to A Prime cross section?

5 A. Yes. It's --

6 Q. And before we go into that, just so the Examiners
7 know, in Exhibit No. 10 there's a smaller version of the
8 cross section, correct?

9 A. That's correct.

10 Q. And then behind it, if they are interested, they
11 could pull out a much larger map; is that right?

12 A. That's correct.

13 Q. Okay. Would you please walk us through this
14 structural cross section A to A Prime and tell us what
15 it shows.

16 A. Yes. So A to A Prime is the cross section that
17 extends from the northwest corner down to the southeast
18 corner. And each of the log tracts start with gamma ray
19 in the left-hand tract, highlighted to show the
20 difference between shalier units and sandier units,
21 sandier being the yellower.

22 The center tract is our resistivity tract,
23 highlighting hydrocarbons presence. And then the
24 right-hand tract are porosity tracts.

25 The cross section exhibits that there is a

1 continuous thickness and geological properties across
2 the unit area.

3 Q. Mr. Cassle, if I look at the second well from the
4 right-hand side, at the top of that, your gamma ray log,
5 do you see all that funny looking yellow?

6 A. Yes.

7 Q. What's happening there?

8 A. That signature looks like it's sandier than the
9 other logs. But it actually was logged behind pipe, so
10 the signature is slightly different. They encased that
11 portion of the log.

12 Q. And for this particular cross section, you were
13 able to identify four wells that actually penetrate the
14 entire unitized interval, correct?

15 A. That is correct.

16 Q. Now, this was your northwest to southeast cross
17 section?

18 A. That is correct.

19 Q. If I then turn to what's been marked as Encana
20 Exhibit 11, is this your southwest to northeast cross
21 section?

22 A. That is correct, with B being the southwest
23 corner and B Prime being the northeast.

24 Q. And is this set up in the same fashion as it is
25 for Exhibit No. 10?

1 A. Yes, it is.

2 Q. And does it -- does it likewise show the same
3 conclusion you reached after examining Exhibit No. 10?

4 A. Yes. There's still consistent thickness and
5 geological attributes across the proposed area.

6 Q. Are you, Mr. Cassle, familiar with the technical
7 and reservoir characteristics of the hydrocarbons that
8 you expect to produce from Mancos formation in the
9 unitized area?

10 A. Yes, I am.

11 Q. Are the pressure gradients from this area --
12 despite the fact that we have three different pools, are
13 the pressure gradients generally the same?

14 A. Yes, they are uniform across the area.

15 Q. Is there any issue of incompatibility of fluids?

16 A. There is not.

17 Q. And what do you observe with respect to the API
18 gravity of the oil produced in this unitized area?

19 A. The API gravity is consistently between 39 and
20 40 degrees API.

21 Q. Okay. Based on your analysis, are there any
22 faults or pinch-outs or any other geologic impediments
23 that will prevent this acreage from being efficiently
24 developed as in under a unit plan using horizontal
25 wells?

1 A. No, there aren't.

2 Q. In your opinion, will approval of this
3 application be in the best interests of conservation,
4 prevention of waste, and protection of correlative
5 rights?

6 A. Yes, it will.

7 Q. Were Encana Exhibits 8 through 11 prepared by you
8 or compiled under your direction and supervision?

9 A. Yes, they were.

10 MR. FELDEWERT: Mr. Examiner, I would move
11 the admission into evidence of Encana Exhibits 8 through
12 11.

13 EXAMINER JONES: Any objection?

14 MR. HALL: No objection.

15 EXAMINER JONES: Exhibits 8 through 11 are
16 admitted.

17 (Encana Oil and Gas (USA), Inc., Exhibits 8
18 through 11 were offered and admitted.)

19 MR. FELDEWERT: And that concludes my
20 examination of this witness.

21 EXAMINER McMILLAN: I don't have any
22 questions.

23 EXAMINATION BY EXAMINER JONES

24 EXAMINER JONES: It looks like you got some
25 porosity up in the lower Mesa Verde, too, but that is

1 not a target, you are not ever looking at the lower part
2 of the --

3 THE WITNESS: No. We don't go that shallow.
4 Our primary target is at the base of the Gallup for now.
5 And we are currently evaluating uphole targets as well.

6 EXAMINER JONES: Okay. So 40 gravity, is it
7 sweet?

8 THE WITNESS: Light sweet.

9 EXAMINER JONES: You got a little bit H2S in
10 it but not much --

11 THE WITNESS: Well, no. I don't know what
12 the H2S content is in it.

13 EXAMINER JONES: It is considered light
14 crude?

15 THE WITNESS: Light crude, yes.

16 EXAMINER JONES: But you want to create
17 common facilities out here and be able to build a
18 pipeline to those facilities or truck away or put it to
19 a railroad, the oil...

20 THE WITNESS: I can't comment on that
21 because I'm not involved in those discussions.

22 EXAMINER JONES: As far as drill density
23 goes, do you have a plan already for that?

24 THE WITNESS: After we have drilled a few
25 wells, we will look into spacing. But I think our

1 standard spacing initially is like 1,320 between
2 laterals.

3 EXAMINER JONES: Okay. Does it make a lot
4 of water?

5 THE WITNESS: I honestly don't know what the
6 water production out of the wells is. They do make
7 water. I just don't know the volume of water.

8 EXAMINER JONES: As a geologist, do you look
9 at the freshwater depths out here? Are they protected
10 by surface casing strings adequately?

11 THE WITNESS: We have a water team that
12 focuses on that for us. But, yes, we do have to case
13 off any freshwater sources, which are well above the
14 target interval.

15 EXAMINER JONES: So you're going to frac
16 them with nitrogen frac jobs?

17 THE WITNESS: That is what we have done so
18 far.

19 EXAMINER JONES: And the gas hookups, are
20 they pretty prompt, get your gas hooked up pretty
21 quickly?

22 THE WITNESS: We try to turn the wells
23 around as fast as we possibly can, so yes.

24 EXAMINER JONES: And as far as the well
25 length and direction that you would drill, can you talk

1 about?

2 THE WITNESS: I can a little. Well length
3 is basically what we are limited to by our drilling
4 engineers.

5 EXAMINER JONES: Okay.

6 THE WITNESS: Whatever the rig can give us
7 is how long we can drill them. In some cases we would
8 like to drill longer laterals, but we just don't have
9 the horsepower on the rigs to do it.

10 And the formation, it's inner-bedded shales
11 and sandy units, so it can be difficult once you get too
12 far away from the vertical section.

13 As far as orientation, we've done several
14 tests on north, south, east, west versus the transverse
15 orientation, which is northwest to southeast,
16 perpendicular to the maximum stress direction, and we've
17 seen better performance in those wells.

18 EXAMINER JONES: In which direction?

19 THE WITNESS: In the northwest to southeast
20 transverse wells.

21 EXAMINER JONES: Okay. That's cretaceous
22 seaway direction, isn't it?

23 THE WITNESS: Right. This is perpendicular
24 in the structural stress in the basin. So we drill
25 perpendicular to that, with the hopes of the fractures

1 extending further by using the stress in the basin to
2 help the fracture.

3 EXAMINER JONES: Okay. But, basically, the
4 reservoir and the geology is continuous throughout this
5 proposed unitized area?

6 THE WITNESS: It is, yes.

7 EXAMINER JONES: Anybody else have
8 questions?

9 EXAMINER WADE: No questions.

10 EXAMINER McMILLAN: The question I got is I
11 am looking at exhibit at system 10 and 11 --

12 THE WITNESS: Okay.

13 EXAMINER McMILLAN: Do you have a common
14 well between the two?

15 THE WITNESS: Within the two cross sections,
16 I do not know. No, there aren't a common well between
17 the two.

18 EXAMINER McMILLAN: Excuse me.

19 THE WITNESS: There aren't a common well
20 between the two. There are two points that are fairly
21 close together, the Federal L1 and then the Federal LB6.

22 MR. FELDEWERT: So, Mr. Examiner, if you
23 look at Exhibit No. 9, that will show you the cross
24 section line.

25 EXAMINER McMILLAN: Okay. So I guess the

1 question is relating 10 to 11, is your objective,
2 though -- what is your objective, is it the Juana Lopez
3 or is it the Carlile?

4 THE WITNESS: No. It would be around where
5 the base Gallup line is, our primary objective.

6 FURTHER EXAMINATION BY EXAMINER JONES

7 EXAMINER JONES: So you're not really
8 drilling in any of those sands that were traditionally
9 harvested with vertical wells; is that right?

10 THE WITNESS: Some of those vertical wells
11 have been completed in what we're targeting for our
12 horizontals. And there's a perf in that interval.

13 But we are trying to hit the base of what is
14 called the Gallup and then fracture up through that
15 sequence.

16 EXAMINER JONES: Your surface disturbances
17 will be reduced by forming this unit; is that correct?

18 THE WITNESS: I do not know. We will try to
19 do as many multi-well pads as possible to reduce the
20 number of pads necessary for sure.

21 EXAMINER JONES: So it will reduce your
22 surface --

23 THE WITNESS: Yes. These won't be one-well
24 pads. There may be individual cases in the corners of
25 the unit. But most of them in the heart of the unit

1 will be mutt-well pads.

2 EXAMINER JONES: You can drill this more
3 efficiently by forming this unit then on a lease basis?

4 THE WITNESS: Yes. We would have a very
5 hard time drilling these wells transversely. We
6 wouldn't be able to get the maximum orientation if we
7 were held -- if we didn't have the unit in place.

8 EXAMINER JONES: Okay. So part of the
9 problem is the spacing?

10 THE WITNESS: I'm not sure if spacing is
11 part of it; I think that the limitations of the land,
12 which Mona could talk to more than I.

13 But we couldn't cross certain lease
14 boundaries and drill with our transverse orientation
15 across the entire unit or across that entire area
16 without the unit.

17 EXAMINER JONES: Thank you very much.

18 THE WITNESS: You're welcome.

19 MR. FELDEWERT: I hope you will be able to
20 take this case under advisement.

21 EXAMINER JONES: Yes, sir.

22 We will take Case No. 15367 under
23 advisement.

24 Let's break for lunch and come back at the foregoing is
25 (Time noted 12:05 p.m.) complete record of the proceedings in
the Examiner hearing of Case No. _____

heard by me or _____ Examiner

1 STATE OF NEW MEXICO)
 2) ss.
 3 COUNTY OF BERNALILLO)
 4
 5
 6

7 REPORTER'S CERTIFICATE

8
 9 I, ELLEN H. ALLANIC, New Mexico Reporter CCR
 10 No. 100, DO HEREBY CERTIFY that on Thursday, October 1,
 11 2015, the proceedings in the above-captioned matter were
 12 taken before me, that I did report in stenographic
 13 shorthand the proceedings set forth herein, and the
 14 foregoing pages are a true and correct transcription to
 15 the best of my ability and control.

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 17 I FURTHER CERTIFY that I am neither employed by
 18 nor related to nor contracted with (unless excepted by
 19 the rules) any of the parties or attorneys in this case,
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 21 disposition of this case in any court.

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