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## 1 DIRECT EXAMINATION

- 2 BY MR. FELDEWERT:
- 3 Q. Would you please state your name, identify by
- 4 whom you're employed and in what capacity?
- 5 A. My name is Paul Brooke. I work for Enduring
- 6 Resources, LLC as a senior landman.
- 7 Q. How long have you been employed by Enduring
- 8 Resources?
- 9 A. In various capacities, for about ten years.
- 10 Q. And have you been -- have your responsibilities
- 11 since -- when was their initial acquisition in the San
- 12 Juan Basin?
- 13 A. It closed June 30th, 2017.
- Q. Okay. And then since that time, have you been
- involved in development projects with respect to the oil
- 16 and gas properties in the San Juan Basin?
- 17 A. I have, yes.
- 18 Q. Have you previously testified before the Oil
- 19 Conservation Division?
- 20 A. I have not.
- 21 Q. Would you please outline your educational
- 22 background?
- 23 A. I have a Bachelor of Science degree from the
- 24 University of Wyoming and a juris doctorate from the
- 25 University of Wyoming.

- 1 Q. When did you get your law degree?
- 2 A. May of 1980.
- 3 Q. And since getting your law degree in 1980, what
- 4 has been your work history?
- 5 A. I have had somewhat of a checkered history, not
- 6 unusual in the industry. I've worked for Dome
- 7 Petroleum, Axon Resources, Snyder Oil Company, Aspect
- 8 Resources and Enduring.
- 9 Q. When you worked for Dome, did that -- did that
- 10 work involve New Mexico properties?
- 11 A. Yes, it did. I worked the San Juan Basin
- 12 exclusively.
- Okay. Are you a member of any professional
- 14 associations?
- 15 A. I belong to the Rocky Mountain Mineral Law
- 16 Foundation.
- 17 O. And how long have you been a member of that
- 18 organization?
- 19 A. About as long as I've been a landman.
- 20 Q. Okay. Are you familiar with the unit that is
- 21 the subject of the application filed in this case?
- 22 A. Yes, I am.
- Q. And are you familiar with the status of the
- 24 lands in the subject area?
- 25 A. Yes, I am.

- 1 MR. FELDEWERT: I would tender Mr. Brooke
- 2 as an expert witness in petroleum land matters.
- 3 EXAMINER McMILLAN: So qualified.
- 4 I've made a lot of contributions to the
- 5 University of Wyoming lately.
- THE WITNESS: We thank you, sir.
- 7 (Laughter.)
- 8 O. (BY MR. FELDEWERT) Now, what does the company
- 9 seek under this particular application, Mr. Brooke?
- 10 A. We hope to unitize for drilling in the
- 11 Fruitland Formation a combination of BLM, allotted
- 12 Indian and State of New Mexico leases.
- 13 Q. If I turn to what's been marked as Enduring
- 14 Exhibit Number 1 --
- 15 A. Yes, sir.
- 16 Q. -- is that the Exhibit A to the proposed unit
- 17 agreement that we will be reviewing shortly?
- 18 A. That's correct. Yes, it is.
- 19 Q. And I turned to this because -- does this
- 20 identify for the examiner the tracts of land involved in
- 21 the proposed unit area?
- 22 A. Yes, sir, it does.
- 23 Q. It shows that there are 23 tracts of land?
- A. Correct.
- Q. At the bottom of this page, does it break out

- 1 for the examiner the percentage of federal lands, the
- 2 state lands and the Indian-allotted lands?
- 3 A. Yes, it does.
- 4 Q. And basically the Indian-allotted lands and the
- 5 federal lands comprise the majority of this unit?
- 6 A. That's correct.
- 7 O. Okay. Then if I turn to what's been marked as
- 8 Enduring Exhibit Number 2, does this exhibit contain a
- 9 complete copy of the proposed unit agreement with all
- 10 exhibits?
- 11 A. Yes, it does.
- 12 O. And does this follow the form that is utilized
- 13 by the BLM and the State when you have federal, state
- 14 and allottee lands involved?
- 15 A. Yes, it does.
- 16 Q. With respect to this particular unit agreement,
- does it apply to both vertical and horizontal wells?
- 18 A. Yes, it does.
- 19 Q. Are there any existing producing wells in the
- 20 Fruitland Formation that you seek to unitize?
- 21 A. There are not.
- 22 Q. As we page through this unit agreement, for
- 23 example, does it treat the proposed unit area as a
- 24 single participating area?
- 25 A. Yes, that's correct.

- 1 O. Does it provide for contraction of the unitized
- 2 area if development does not proceed as required by the
- 3 unit agreement?
- A. Yes, it does, particularly in provision 2E.
- 5 Q. Now, we've already looked at the Exhibit A to
- 6 the unit agreements. That contained the unit outline.
- 7 If I flip back and go to what's been marked as Exhibit
- 8 Number B, does this provide an ownership breakdown of
- 9 the 23 tracts of land that are involved?
- 10 A. Yes, it does.
- 11 Q. What ownership percentage does Enduring either
- 12 hold or control in this proposed unit?
- 13 A. Something slightly in excess of 98 percent.
- 14 Q. Now, you mention that there is no existing well
- in the Fruitland. Are these leases currently held by
- 16 production?
- 17 A. One of the BLM leases is HBP. The remainder of
- 18 the leases are not.
- 19 Q. Are there leases with upcoming expiration
- 20 dates?
- 21 A. There are -- from memory, I think our earliest
- 22 expiration on an allotted lease is December 13th of
- 23 2018.
- Q. So December of this year?
- 25 A. Correct.

- Q. Okay. So that's why you're here trying to get
- 2 this approved so you can start your drilling?
- 3 A. That's right.
- 4 Q. All right. Are there unleased tracts?
- 5 A. There are four unleased tracts. One is a BLM
- 6 tract in the southeast quarter of Section 32, and three
- 7 are allotted Indian tracts.
- 8 Q. Have you visited with the BLM about how they're
- 9 going to address the unleased BLM tract?
- 10 A. To the extent that is possible in the current
- 11 situation.
- 12 Q. And how are they going to handle the -- how is
- 13 the BLM going to handle the unleased tract?
- 14 A. We will account for costs and revenue, costs
- 15 being absorbed by the participating working interest,
- 16 revenue being escrowed. And that this lease, when and
- if issued by the BLM, will commit the successful lessee
- 18 to this unit.
- 19 Q. That'll be part of the requirements for --
- 20 restrictions, then, on leasing that will require them to
- 21 commit to the unit?
- 22 A. Correct.
- 23 Q. You said there were three unleased allottee
- 24 tracts?
- 25 A. That is correct.

- 1 Q. Those are being handled by FIMO, right?
- 2 A. Right.
- 3 Q. Federal Indian Management Office?
- 4 A. I believe that's correct.
- 5 Q. How is FIMO going to handle those particular
- 6 leases?
- 7 A. FIMO has represented that those three tracts --
- 8 they're 160 acres each -- will be on an immediately
- 9 forthcoming parcel list.
- 10 Q. Okay. And is there going to be restrictions
- 11 that will subject them to the less successful --
- 12 A. Like the BLM, those tracts will be committed to
- 13 the unit.
- 14 Q. All right. Then if I continue on, I see an
- 15 Exhibit C. Does that contain the type log that
- 16 identifies -- it's kind of a pullout. Does that
- 17 identify the unitized Fruitland Formation?
- 18 A. Yes, it does.
- 19 Q. And is this the type log that is referenced in
- 20 the unit agreement to identify the unitized interval?
- 21 A. That's correct.
- 22 Q. And if I look at the top of that exhibit, does
- 23 it provide the examiner with the location of this
- 24 reference type log with respect to the unit boundary?
- 25 A. Yes, it does.

- 1 Q. Then finally, Exhibit D. Does Exhibit D
- 2 contain the participation percentage for each of the 23
- 3 tracts?
- A. That is correct.
- 5 Q. Now, you had discussions with the BLM about
- 6 your proposed unit and your development plan?
- 7 A. Yes, we have. We've been through their
- 8 standard area and depth protocol.
- 9 Q. And did those discussions include FIMO?
- 10 A. They did.
- 11 Q. Now, when this was first filed, the application
- 12 was requesting unit approval for all depths, correct?
- 13 A. That is correct.
- Q. But that has now been changed to only the
- 15 Fruitland Formation?
- 16 A. That is also correct.
- 17 And after the area and depth was completed,
- 18 with the all-depth type agreement being submitted, as we
- 19 sought the logical determination letter from BLM and
- 20 FIMO, they came back and said they were in agreement
- 21 with the unit, but they wanted the current undivided
- 22 type form unit agreement limited to the Fruitland
- 23 Formation only.
- Q. So now, for the examiner, a pre-hearing
- 25 statement that was filed in this matter noted that the

- 1 unitized interval has been changed only to include the
- 2 Fruitland Formation?
- 3 A. That is correct.
- Q. As identified on the type log, Exhibit C?
- 5 A. Yes, sir.
- 6 Q. All right. Then if I look at Enduring Exhibit
- 7 Number 3, does that contain the BLM preliminary approval
- 8 letter for this unit?
- 9 A. Yes, it does.
- 10 Q. And I note that it's signed by both the field
- 11 manager for the BLM and then the director of FIMO,
- 12 correct?
- 13 A. That is correct.
- Q. What are the requirements in this letter and in
- 15 the proposed unit agreement for the initial obligation
- 16 well?
- 17 A. We must drill a horizontal lateral well, per
- 18 the terms of the unit agreement, within six months of
- 19 unit approval.
- Q. And you have some leases expiring?
- 21 A. We do.
- 22 Q. So you're going to be drilling fairly soon,
- 23 right?
- 24 A. Yes. We have that on our drilling schedule
- 25 currently for either late November or early December of

- 1 this year.
- Q. Okay. Given that there were Indian allotted
- 3 lands involved, did the company take the additional step
- 4 of holding a town hall meeting to discuss the proposed
- 5 unit with the allottee owners?
- A. Yes, we did.
- 7 Q. Where and when did that take place?
- 8 A. That was held Tuesday morning at 9:00 a.m. at
- 9 the School of Energy at San Juan College in Farmington.
- 10 Q. And during that meeting, was there any
- opposition to the proposed unit expressed by any of the
- 12 allottee owners?
- 13 A. No, there was none.
- 14 Q. Now, you also met with the State Land Office
- 15 with respect to this unit?
- 16 A. Yes, we did.
- 17 Q. If I turn to what's been marked as Enduring
- 18 Exhibit Number 4, is this the State Land Office's
- 19 preliminary approval letter?
- 20 A. Yes, it is.
- 21 Q. And it reflects, does it not, that part of
- 22 their approval is contingent upon an order from the Oil
- 23 Conservation Division?
- 24 A. That's correct.
- Q. Which is why we're here today?

- 1 A. Yes, sir.
- Q. All right. What's the status of the approval
- 3 by the remaining working interest owners in this
- 4 voluntary unit that are shown on Exhibit B to the unit
- 5 agreement?
- 6 A. You'll note in Tract 2 that Hilcorp is a
- 7 working interest owner. Hilcorp has committed to join
- 8 the unit as a committed working interest owner.
- 9 Although I do not have the ratification and joinder
- 10 instrument in hand, they will join, I have every reason
- 11 to believe, and I have written evidence of that.
- 12 In Tract 20, under an allotted lease,
- 13 you'll see that the most shallow and most deep depths
- 14 are shown to be owned by a company called K-E-L. Since
- 15 this Exhibit B was drafted, I have acquired through
- 16 purchase those shallow and deep rights from KEL, and
- 17 that assignment has been submitted to FIMO for approval.
- 18 So once that's approved, Enduring and Hilcorp will be
- 19 the only working interest owners.
- 20 Q. Now, when I go through there, Exhibit B, I see
- 21 some references to WPX.
- 22 A. That's correct.
- Q. What's the circumstance there?
- 24 A. WPX was the assignor of these existing leases
- 25 into Enduring pursuant to our acquisition under a

- 1 purchase and sale agreement which closed in March. We
- 2 continue to represent WPX until all of the assignments
- 3 of FIMO leases, BLM operating rights and BLM record
- 4 title has been approved, at which point in time then, we
- 5 will revise the exhibit to be show Enduring Resources as
- 6 the owner of record.
- 7 Q. So at this point, WPX is still, in some
- 8 circumstances, a record title owner?
- 9 A. As of my last inquiry, the BLM had not approved
- 10 the record title interest under one lease only.
- 11 Otherwise, FIMO had approved all of the assignments from
- 12 WPX into Enduring, and the BLM had approved all
- 13 operating rights assignments from WPX into Enduring.
- 14 Q. Have you visited with WPX about ratifying the
- unit agreement as the record title owner if needed?
- 16 A. Yes, I have.
- 17 Q. Have they agreed to do it?
- 18 A. They will do so willingly.
- 19 Q. I notice that there were a few overriding
- 20 royalty interest owners listed on Exhibit B. What's the
- 21 circumstance with respect to them?
- 22 A. There are two. In Tract 2, you'll see XTO with
- 23 an override of 7.5 percent against a single lease. They
- 24 have been contacted. I have every reason to believe
- 25 that they will ratify, but I don't have that in writing

- 1 yet.
- 2 And then in Tract 20, you'll see an
- 3 organization called Skikis, LLC with a 3.33 percent
- 4 override. Skikis's interest pursuant to the conveyance
- 5 under which they gained that override committed them to
- 6 unitization and pooling. And, furthermore, I have
- 7 reached out to Skikis personally and expressed my
- 8 interest in a formal ratification and joinder just to
- 9 wrap up all the loose ends, and they have agreed to
- 10 provide me with that instrument.
- 11 Q. Now, when I look at -- when I look at Enduring
- 12 Exhibit Number 1, I see that the unit boundary contains
- 13 a little -- I'll call it a dogleg, I guess, to the
- 14 north. Do you see that?
- 15 A. Yes, it does.
- 16 Q. What's the circumstance there? Why do we have
- 17 this dogleg?
- 18 A. We have this dogleg because these are leases
- 19 owned by Enduring and because we reached out to the
- 20 offsetting owners in the east half of Section 19 and in
- 21 Section 20 to join the unit and they refused.
- Q. And who are they?
- 23 A. That was Dugan and Encana.
- Q. Okay. In preparing for the case here today,
- 25 did the company provide notice of this proposed unit

- 1 boundary and this hearing to the operators in this -- in
- 2 the acreage offsetting this dogleg to the north?
- 3 A. Yes, we did.
- 4 Q. That would be Dugan and Encana?
- 5 A. Yes.
- 6 Q. If I then turn to what's been marked as
- 7 Enduring Exhibit Number 5, this contains an affidavit
- 8 prepared by my office with attached letters providing
- 9 notice of this hearing, correct?
- 10 A. Yes, correct.
- 11 Q. If I go to the third page of this exhibit, we
- 12 see a list of six parties, BLM, FIMO and the State Land
- 13 Office, right?
- 14 A. Correct.
- 15 Q. We've already talked about them.
- We see Skikis. That was the overriding
- interest owner that you talked about?
- 18 A. That's correct.
- 19 Q. That you believe is subject to a contractual
- 20 obligation to join the unit?
- 21 A. Yes.
- 22 Q. Then we see Dugan and Encana being noticed as
- 23 offsetting owners for the dogleg?
- 24 A. Correct.
- 25 Q. Then we have numerous pages of names. What do

- 1 they represent?
- 2 A. These represent either the allottees, if they
- 3 are still living, and/or their various heirs and
- 4 successors.
- 5 Q. And if I look in the left-hand corner on the
- 6 fourth page of this exhibit --
- 7 A. Yes.
- 8 Q. -- a page of a number of names, I see a
- 9 six-digit code. Do you see that?
- 10 A. Yes, that's correct.
- 11 Q. What does that represent?
- 12 A. That represents part of the official FIMO lease
- 13 number. So those six digits will tie back to each one
- 14 of the lease tracts in Exhibit B.
- 15 Q. So then as I flipped through this long list of
- 16 names here, is it organized by the six-digit code that
- 17 you see up in the left-hand corner?
- 18 A. Yes, it is.
- 19 O. Then in addition to sending out notice by
- 20 registered mail to the addresses of record that FIMO
- 21 had, did the company then also provide notice by
- 22 publication in the local newspaper of this proposed unit
- 23 and this hearing here today?
- 24 A. Yes, we did.
- 25 Q. If I turn to what's been marked as Enduring

- 1 Exhibit Number 6, is that an Affidavit of Publication
- 2 reflecting this public notice of this unit and this
- 3 hearing?
- 4 A. Yes, that's correct.
- 5 Q. Were Enduring Exhibits 1 through 4 compiled or
- 6 prepared under your supervision?
- 7 A. Yes, they were.
- 8 MR. FELDEWERT: Mr. Examiner, I'd move
- 9 admission into evidence of Enduring Exhibits 1 through
- 10 6, which includes my notice affidavit and the Affidavit
- 11 of Publication.
- 12 EXAMINER McMILLAN: Exhibits 1 through 6
- 13 may now be accepted as part of the record.
- 14 (Enduring Resources, LLC Exhibit Numbers 1
- through 6 are offered and admitted into
- 16 evidence.)
- MR. FELDEWERT: That concludes my
- 18 examination of this witness.
- 19 CROSS-EXAMINATION
- 20 BY EXAMINER McMILLAN:
- 21 Q. My question is your map. What has been --
- 22 looking at the unleased acreage? You said there are
- 23 five tracts or four?
- A. Four, sir, one BLM tract in the southeast
- 25 quarter of Section 32 and three allottee tracts in

- 1 Sections 29, 30 and 25.
- Q. When you told the State Land Office about the
- 3 unleased acreage, did they -- what was their take on it?
- A. They were interested, of course, as to what
- 5 provisions would be made and how those tracts would
- 6 share in costs and revenue and whether there were any
- 7 efforts underway to get those tracts leased.
- Q. And then were they satisfied with your plan of
- 9 development for that acreage, because there has been
- 10 unit cases where the acreage has been contracted out
- 11 because it's unleased?
- 12 A. I understand. Yes, they were satisfied.
- 13 Q. And so the Skikis, they have an override --
- 14 A. Yes.
- 15 Q. -- on the one tract, and it'll be spread out
- 16 through the entire unit --
- 17 A. That's correct.
- 18 Q. -- on a per-acreage basis?
- 19 A. (Indicating.)
- 20 EXAMINER McMILLAN: Go ahead, David.
- 21 CROSS-EXAMINATION
- 22 BY EXAMINER BROOKS:
- 23 Q. You said this was -- the 98 percent working
- interest was held by Enduring, 98-plus?
- 25 A. Yes, sir.

- 1 Q. Now, is there any other outstanding interest
- 2 other than these unleased tracts that you've identified?
- 3 A. Just that small interest in Hilcorp, and that's
- 4 all, sir.
- 5 Q. Okay. And that is to be assigned to you? Did
- 6 I understand?
- 7 A. No. The KEL interest in Tract 20 will be
- 8 assigned to us. Hilcorp is going to maintain their
- 9 interest and join as a working interest owner.
- 10 Q. So their interest will be committed to --
- 11 A. They will have the difference between 100
- 12 percent and 98-point-something percent.
- 13 Q. Thank you. That's all I have.
- 14 A. Yes, sir.
- 15 MR. FELDEWERT: If there are no further
- 16 questions, we'll call our next witness.
- 17 THE WITNESS: Thank you, Examiners.
- 18 EXAMINER BROOKS: Thank you.
- 19 ROBERT GERMAN,
- 20 after having been previously sworn under oath, was
- 21 questioned and testified as follows:
- 22 DIRECT EXAMINATION
- 23 BY MR. FELDEWERT:
- Q. Would you please state your name, identify by
- whom you're employed and in what capacity?

- A. My name is Robert German, G-E-R-M-A-N, and I'm
- 2 a senior geologist, manager of geologic sciences for
- 3 Enduring Resources, LLC.
- 4 Q. And how long have you been with Enduring
- 5 Resources in that capacity?
- A. I've been employed full time for about 11
- 7 years.
- Q. Okay. Have you previously testified before
- 9 this Division?
- 10 A. No, I have not.
- 11 Q. Would you outline your educational background?
- 12 A. I have a BS in geology from Duke University,
- 13 1973. In 1976, I got a Master's of Science in Geology
- 14 from the University of Canterbury, Christchurch, New
- 15 Zealand. In 1991, I got a Master's in Environmental
- 16 Science from the Colorado School of Mines.
- 17 Q. Following your Master's in Environmental
- 18 Science in 1991, what did you do after that?
- 19 A. I worked as an environmental consultant for
- 20 Walsh Environmental for about 12 years. I then was an
- 21 independent consultant in geology and environmental
- 22 science, and then I was hired on full time by Enduring.
- 23 Q. I believe the testimony was that Enduring
- 24 acquired their initial assets in the San Juan Basin
- 25 sometime in 2017; is that right?

- 1 A. That's correct.
- 2 Q. And since the time that Enduring acquired those
- 3 assets in the San Juan Basin, have you been involved in
- 4 evaluating those assets for the company?
- 5 A. I have.
- Q. And analyzing the opportunities for the company
- 7 in that area?
- 8 A. Yes, I have.
- 9 Q. Are you a member of any professional
- 10 affiliations or associations?
- 11 A. Yes. I'm a member of the American Association
- of Petroleum Geologists, AAPG; RMAG, Rocky Mountain
- 13 Association of Geologists; Houston Geologic Society;
- 14 Four Corners Geologic Society.
- 15 Q. And with respect to the AAPG, how long have you
- 16 been a member of that group?
- 17 A. Probably since 1979.
- 18 Q. Okay. And when did you join the Four Corners
- 19 Geologic Society?
- 20 A. About two years ago.
- Q. Okay. Are you familiar with the proposed unit
- 22 that is the subject of this case?
- 23 A. I am.
- Q. And have you conducted a geologic study of the
- 25 lands that are the subject of this proposed unit?

- 1 A. I have.
- 2 MR. FELDEWERT: I would tender Mr. German
- 3 as an expert witness in petroleum geology.
- 4 EXAMINER McMILLAN: So qualified.
- 5 Q. (BY MR. FELDEWERT) If I turn to what's been
- 6 marked as Enduring Exhibit Number 2, which is the unit
- 7 agreement, and if I go about halfway through, I get to
- 8 the tab that pulls out, kind of easy to get to. It's
- 9 Exhibit Number C -- or Exhibit C to the unit agreement.
- 10 Is that correct?
- 11 A. Yes, it is.
- 12 Q. Does this identify, on the right-hand side, the
- 13 formation that Enduring seeks to unitize?
- 14 A. It does.
- 15 Q. And in your opinion, does this proposed
- 16 unitized formation extend across the acreage that the
- 17 company seeks to include within the unit?
- 18 A. It does.
- 19 Q. If I go to what's been marked as Enduring
- 20 Exhibit 7, is this a structure map that you have
- 21 created?
- 22 A. It is.
- Q. And I see that it depicts in red the proposed
- 24 unit outline?
- 25 A. That's correct.

- 1 Q. Would you tell us how you constructed this
- 2 structure map and what it shows?
- 3 A. I looked at all the available data that I had
- 4 in the area and mapped the top of the basal coal in the
- 5 Fruitland Formation. That's the target interval, and
- 6 this is a structure map on that. It shows that the
- 7 formation -- the target dips gently to the northeast
- 8 into the basin. And I have also outlined on here two
- 9 cross sections, north-south and east-west.
- 10 Q. Now, I see a little arrow here within the unit
- 11 boundary. Do you see that?
- 12 A. Yes, Section 28.
- 13 Q. What does that depict? What is that?
- 14 A. That is the location of the initial well.
- 15 Q. And the target of that will be the basal coal?
- 16 A. That is correct.
- 17 O. Now, you mentioned that you used all the
- 18 available data points that you had to create this
- 19 structure map?
- 20 A. That's right.
- Q. Why did they choose the -- and then if I look
- 22 to the north up there, just to the north of the unit in
- 23 Section 20, I see the type well, right?
- 24 A. That's right.
- 25 Q. That's the one we just looked at on Exhibit C?

- 1 A. Yes, it is.
- Q. Why was that log utilized?
- 3 A. That well was close to the unit, and it had the
- 4 best, most complete suite of logs, your modern suite of
- 5 logs of all the wells.
- 6 O. How many wells actually penetrate the Fruitland
- 7 Formation within the proposed unit area?
- 8 A. Only one.
- 9 Q. And that's over in Section 25?
- 10 A. That's correct.
- 11 O. And that was utilized in one of your cross
- 12 sections that you --
- 13 A. Yes, it is. It's on B, B prime.
- 0. Before we get to that, what do you note about
- 15 the structure in this area?
- 16 A. Gently dipping to the northeast. I was not
- 17 able to identify any faults or any discontinuities.
- 18 Q. Do you see any geologic impediments that would
- 19 prevent this acreage from being efficiently and
- 20 effectively developed under a unit plan?
- 21 A. I don't.
- Q. All right. Let's talk about your two
- 23 cross-section lines. I see one from south to north; is
- 24 that right?
- 25 A. That's right. South is on the left-hand side,

- 1 and north would be on the right-hand side. The type
- 2 well would be the middle well.
- 3 Q. All right. So I think you jumped ahead of me
- 4 here. You're on Exhibit Number 8; is that right?
- 5 A. Yes.
- 6 Q. Okay. First off, when I look at the wells that
- 7 you chose here for your Exhibit Number 8, why did you
- 8 choose those three wells?
- 9 A. Well, these are wells that -- I just went
- 10 across the unit. I had relatively little control out
- 11 there, and I think they were decent -- decent wells that
- 12 showed the basal coal.
- Q. And if I look back at Exhibit Number 7, did you
- 14 actually use the two wells to the north that are fairly
- 15 close to the unit? Right?
- 16 A. I didn't use those wells, but they look very
- 17 similar to the type well.
- 18 Q. Okay. Okay. All right. And this cross
- 19 section we see in Exhibit 8, that utilizes the type log
- 20 well and then the two other wells that you show,
- 21 correct?
- 22 A. Yes, that's right.
- Q. And what do you observe about this unitized
- 24 interval as you go north to south?
- A. As I go north to south, it's consistent like

- 1 the coal wells that I examined.
- Q. Okay. Then we have a little more data when you
- 3 go east to west, right?
- 4 A. That's correct.
- 5 Q. So when I go to what's been marked as Enduring
- 6 Exhibit Number 9, again did you utilize the type log
- 7 that's referenced in the unit agreement?
- 8 A. I did. It's the well -- the fourth well from
- 9 the left-hand side is an annotated type well in
- 10 intersection with the north-south cross section.
- 11 Q. Okay. And then you pointed out there is one
- 12 well within the unitized area that penetrates the
- 13 Fruitland -- does this log utilize that well?
- 14 A. Yes, it does. That would be the second well
- 15 from the left, the Sun Oil well.
- 16 Q. And have you also observed here as you move
- 17 from east to west the presence of the coal that you seek
- 18 to target?
- 19 A. Yes. And that's annotated in red. It says,
- 20 "Target Coal." And it's found in all the wells.
- Q. Okay. And in your opinion, does the -- based
- 22 on the data that you have available, does this targeted
- 23 coal exist throughout the proposed unit area?
- 24 A. It does.
- 25 Q. And in your opinion, will approval of this

- 1 application to unitize this area be in the best interest
- 2 of conservation, the prevention of waste and the
- 3 protection of correlative rights?
- 4 A. Yes, it will.
- 5 Q. Were Enduring Exhibits 7 through 9 compiled by
- 6 you or prepared under your direction and supervision?
- 7 A. Yes, they were.
- MR. FELDEWERT: Mr. Examiner, I'd move
- 9 admission into evidence of Enduring Exhibits 7 through
- 10 9.
- 11 EXAMINER McMILLAN: Exhibits 7 through 9
- 12 may now be accepted as part of the record.
- 13 (Enduring Resources, LLC Exhibit Numbers 7
- through 9 are offered and admitted into
- 15 evidence.)
- 16 MR. FELDEWERT: That concludes my
- 17 examination of this witness.
- 18 CROSS-EXAMINATION
- 19 BY EXAMINER McMILLAN:
- 20 Q. For clarity purposes, I just want to make sure
- 21 I'm clear on this. This relates back to your type log
- 22 and to the unit description for the unitized interval.
- 23 I just want to make sure you're getting all of the
- 24 Fruitland. And the Fruitland is going to go from the
- 25 top of the Fruitland to top of the Pictured Cliffs,

- 1 right?
- 2 A. That's correct.
- 3 Q. And that's what this says?
- 4 A. That's what it says.
- 5 Q. I just want to make sure there are no depth
- 6 severances.
- 7 Okay. And I guess -- and you have to go
- 8 horizontal wells. Are you going to drill any
- 9 multilaterals out of this?
- 10 A. We're going to push it as far as we can, 500
- 11 feet longer if possible. We're going to see how it
- does, and then we'll have to go from there.
- 13 O. So short radius?
- 14 A. 500 feet. It's not very far, but it's not very
- 15 deep.
- Q. Because Hilcorp's drilling some more -- they've
- 17 proposed multilaterals in the coal, essentially the
- 18 Colorado.
- 19 A. Considerably deeper.
- 20 Q. Oh, okay.
- 21 CROSS-EXAMINATION
- 22 BY EXAMINER BROOKS:
- Q. I wanted to ask you about this depth scale.
- 24 Where is that measured from? The 500 feet -- the target
- zone is shown a little less than 500 feet from where, on

- 1 Exhibit 9?
- 2 A. This cross section is hung on the Pictured
- 3 Cliffs Sandstone.
- 4 Q. Okay.
- 5 A. And so the target might be about 700 feet
- 6 measured depth, if that's what you're asking.
- 7 Q. Now, how is that -- I mean, I'm a little
- 8 unclear on this because these numbers, I just want to
- 9 know what they represent. When you say a depth of 450
- 10 to 500 feet, where --
- 11 A. Oh, I see what you're saying.
- 12 O. Below what?
- 13 A. Yeah. The zero -- zero point on the scale on
- 14 the right-hand side is referenced to where the cross
- 15 section is hung, which is the base of the target
- 16 interval at the top of Pictured Cliffs. That makes
- 17 zero. So each tick mark is 100 feet. So, for example,
- 18 the type well would be about 700-and-some feet deep at
- 19 that location.
- 20 Q. 700 from ground level?
- 21 A. Yes.
- 22 Q. Okay. Thank you.
- MR. FELDEWERT: Mr. Examiner, if there are
- 24 no more questions, I would ask this case be taken under
- 25 advisement.

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                    EXAMINER McMILLAN: Okay. Case Number
 1
     16398 shall be taken under advisement.
 2
                    Thank you very much.
 3
                    THE WITNESS: Thank you.
 4
                    MR. FELDEWERT: Thank you.
 5
                    (Case Number 16398 concludes, 3:05 p.m.)
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