1	STATE OF NEW MEXICO
2	ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
3	OIL CONSERVATION DIVISION
4	CASE 10099 and CASE 10100
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6	
7	EXAMINER HEARING
8	
9	IN THE MATTER OF:
10	Application of Samuel Gary Jr. and Associates,
11	Inc., for a Horizontal Directional Drilling Project and Special Operating Rules Therefore,
12	Sandoval County, New Mexico.
13	Application of Samuel Gary Jr. and Associates, Inc., for a Gas Reinjection/Pressure Maintenance
14	Project and Special Rules Therefore, Sandoval County, New Mexico.
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17	TRANSCRIPT OF PROCEEDINGS
18	
19	BEFORE: JIM MORROW, EXAMINER
20	
21	STATE LAND OFFICE BUILDING
22	SANTA FE, NEW MEXICO
23	October 3, 1990
24	
25	ORIGINAL

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- 1 EXAMINER MORROW: We'll call Case 10099
- 2 again.
- MR. STOVALL: Application of Samuel Gary,
- 4 Jr. & Associates, Inc., for a horizontal directional
- 5 drilling pilot project and special operating rules
- 6 therefore, Sandoval County, New Mexico.
- 7 EXAMINER MORROW: Call for appearances.
- MR. BRUCE: Mr. Examiner, Jim Bruce from
- 9 the Hinkle Law Firm representing the Applicant. I
- 10 have one witness to be sworn. And this could probably
- 11 be heard together with the next case, 10100.
- 12 EXAMINER MORROW: All right. We'll call
- 13 Case 10100.
- MR. STOVALL: Application of Samuel Gary,
- 15 Jr. & Associates, Inc., for a gas reinjection pressure
- 16 maintenance project and special rules therefore,
- 17 Sandoval County, New Mexico. Okay. Mr. Bruce, your
- 18 witness was not sworn at the last hearing?
- MR. BRUCE: Yes, he was. He testified.
- 20 MR. STOVALL: Okay. Well, let the record
- 21 reflect that he was previously sworn in this case and
- 22 continues under oath.
- MR. BRUCE: Mr. Examiner, preliminarily,
- 24 Case 10099 was heard on September 17th but was
- 25 continued to this docket because a publication notice

- 1 had not been completed. I don't really have much
- 2 testimony from Mr. Schuster, my witness, regarding
- 3 Case 10099, but he'll been glad to answer any
- 4 questions you want.
- One problem that Mr. Stovall has brought up
- 6 is that the case originally sought a well location 934
- 7 feet from the south line and 1975 feet from the west
- 8 line. At the last hearing my client wanted to change
- 9 the 934-foot figure to, I believe it was, 400 feet or
- 10 something like that.
- 11 MR. STOVALL: 450.
- 12 MR. BRUCE: 450 feet from the south line.
- 13 The 1975 figure remained the same. Unfortunately,
- 14 they were subsequently told and I found out late last
- 15 week that the BLM, because of certain time constraints
- 16 in connection with the San Ysidro Shallow Unit, would
- 17 not allow them to change that to repermit the well,
- 18 and therefore the Applicant is back at the original
- 19 well location which they have to commence, I believe,
- 20 by October 15th. They did get an extension on that.
- 21 Mr. Schuster can testify they do have
- 22 problems, well, not a problem, but they've contracted
- 23 for a rig and they would hope to start soon. That is
- 24 the problem with the case as it sits. We're not sure
- 25 how the case was advertised at this point.

- 1 MR. STOVALL: To summarize the advertizing
- 2 difficulty, I believe the original problem with the
- 3 case is that it didn't get in the paper in Sandoval
- 4 County.
- 5 MR. BRUCE: That's correct.
- 6 MR. STOVALL: At the last hearing the
- 7 change of location was requested, and it was indicated
- 8 they would readvertise it with the 450-foot location.
- 9 That advertisement has gone out for the
- 10 October 17th docket. The question we have is whether
- ll or not the 934-foot location was ever advertised. So
- 12 we need to research that and determine whether we can
- 13 take it under advisement in this hearing.
- I tried to locate that yesterday to
- 15 determine if we ever got the 934 in the paper. We'll
- 16 attempt to make that determination and get an answer
- 17 for you, and we can proceed at this point with
- 18 whatever it is you want to add to the case, and we'll
- 19 figure out what to do from there.
- MR. BRUCE: Okay.
- 21 RICHARD STEPHEN SHUSTER P.E.
- 22 The witness herein, after having been previously duly
- 23 sworn upon his oath, was examined and testified
- 24 further as follows:

## 1 FURTHER EXAMINATION

- 2 BY MR. BRUCE:
- 3 Q. Just for the record, would you please
- 4 restate your name and city of residence?
- 5 A. My name is Richard Shuster, and I reside at
- 6 24 Flora Way, Golden, Colorado.
- 7 Q. The record, as noted, reflected that you
- 8 were previously sworn in. Are you familiar with the
- 9 engineering matters related in these two cases?
- 10 A. Yes, I am.
- 11 Q. Now, just briefly in Case 10099, you
- 12 testified regarding the drilling of the unit's initial
- 13 horizontal well in Section 11, is that correct?
- 14 A. Yes, sir.
- Once again for the record, would you just
- 16 briefly describe how the well will be drilled?
- 17 A. The well's current surface location is 934
- 18 from the south line, 1975 feet from the west line,
- 19 Section 11, 20 North, 3 West.
- We're planning to drill the well vertically
- 21 to a depth of approximately 3500 feet. At that point
- 22 it will kickoff in a north/northwesterly direction,
- 23 about 15 degrees azimuth, and build at 12, 13 degrees
- 24 per 100 feet to an angle of about 80 degrees, the
- 25 angle at which we will penetrate the Mancos

- 1 formation.
- Our horizontal or almost horizontal portion
- 3 of the wellbore, right now it's scheduled at about
- 4 2000 in length, based on where we are with the
- 5 bottom-hole location. It could be less, it could be
- 6 a little bit more, but right now our estimate is it
- 7 will be about 2000 foot in length.
- 8 Q. If permitted to do so by the OCD, what is
- 9 the schedule date for commencing this initial well?
- 10 A. The rig is mobilizing now and will be
- ll available to spud on a Saturday, maybe Friday
- 12 afternoon.
- 13 Q. Now, regarding Case 10100 to a certain
- 14 extent, are there plans to drill a second unit well
- 15 this year?
- 16 A. Yes. And if the wells are successful, we
- 17 will continue the drilling program.
- 18 Q. And as currently envisioned, you would like
- 19 to commence the second well as soon as possible after
- 20 the first well is completed, is that correct?
- 21 A. That's correct.
- Q. What is the reason for that?
- A. One of the largest reasons is riq
- 24 availability. With the price as high as it is, many
- 25 people are trying to get their wells drilled and take

- 1 advantage of high prices and flush production. So rig
- 2 availability, not just in this area but everywhere, is
- 3 a real problem in drilling programs.
- 4 Q. Are there any additional wells currently
- 5 permitted by the BLM?
- A. Yes. We have three wells being drilled,
- 7 Section 6, 20 North, 2 West; Sections 12 and 13, 20
- 8 North, 3 West.
- 9 Q. Regarding subsequent wells within the unit,
- 10 might some of them be drilled at nonstandard surface
- ll locations?
- 12 A. On the surface, yes, based on our geologic
- 13 interpretation. Occasionally we will need to move one
- 14 way or the other outside the standard location in
- 15 order to penetrate the Mancos formation at an optimum
- 16 point in the reservoir as perceived by our geologist.
- 17 Although the surface location might not be standard,
- 18 the bottom-hole location will conform with the 660
- 19 setbacks as specified, and that will be monitored very
- 20 closely.
- 21 Q. Now, regarding these three wells you
- 22 mentioned, I refer you to Exhibit A and would you
- 23 describe that exhibit for the Examiner?
- 24 A. Exhibit A is essentially the same exhibit
- 25 as we presented last time for the well in Section 11.

- 1 These are the three wells, Section 6, 12 and 13, and
- 2 they are virtually the same.
- 3 Our goal is to drill vertically to
- 4 approximately 400 above the top of the Mancos and then
- 5 start our directional activities. In each case, based
- 6 on the geological interpretation, the direction is
- 7 approximately 15 degrees north/northwest to encounter
- 8 the optimum fracture. All three wells virtually have
- 9 the same design. The formation across the area we're
- 10 drilling is virtually the same, and we see no reason
- 11 to change our design at this point.
- MR. STOVALL: Mr. Bruce, may I interrupt
- 13 for just a second here on a procedural question?
- 14 MR. BRUCE: Sure.
- MR. STOVALL: The evidence that he's
- 16 presenting right now, is that in 10099 or 10100?
- MR. BRUCE: Let me explain, if I could make
- 18 a brief statement. This has more to do with 10100.
- 19 These wells that Mr. Shuster is referring to aren't
- 20 officially part of the application for 10100. We're
- 21 just showing what we would like to do.
- 22 I think at the last hearing we put on
- 23 evidence with the landman, Mr. Ambler, plus Mr.
- 24 Shuster whereby we said we would like to get an
- 25 administrative procedure in place for future

- 1 horizontal wells, and we're just presenting this as
- 2 part of the information on what we plan to do in the
- 3 future. And, if possible, we would like to
- 4 subsequently apply administratively for approval of
- 5 these horizontal wells.
- 6 MR. STOVALL: If I'm not mistaken, I saw in
- 7 the advertising that went out for the October 17th
- 8 docket, additional applications for Samuel Gary, is
- 9 that correct?
- MR. BRUCE: That is correct. I put those
- 11 on the docket, Mr. Stovall, just in case we didn't get
- 12 the administrative approval we were seeking, and I'm
- 13 trying to make sure we get approval for a subsequent
- 14 well in a timely fashion.
- MR. STOVALL: Okay. My reason for
- 16 expressing concern, you're operating in tight time
- 17 frames, and I want to keep it as simple as possible
- 18 for the Examiners. You have two Examiners on this
- 19 case already, and you want an order out possibly
- 20 before we can take the case under advisement.
- 21 MR. BRUCE: For 10099.
- MR. STOVALL: Okay. You're saying that is
- 23 just simply the single wellbore?
- MR. BRUCE: That's the single well, 10099.
- MR. STOVALL: And as far as you're

- 1 concerned now--
- 2 MR. BRUCE: I think we're okay on the
- 3 advertisement for Case 10100.
- 4 MR. STOVALL: As far as testimony in 10099
- 5 with respect to justification for that wellbore--
- 6 MR. BRUCE: That was essentially presented
- 7 at the last hearing and it's completed.
- 8 MR. STOVALL: Okay. I'll let you go ahead,
- 9 then. I'll have some additional questions as they
- 10 come to mind here, but I wanted to know where you were
- ll going with it.
- MR. BRUCE: This is presented more for
- 13 information purposes on these three wells, just on
- 14 future plans by the operator.
- 15 Q. (BY MR. BRUCE) Of the wells that are
- 16 permitted, and even any future wells in the unit, Mr.
- 17 Shuster, do the drilling procedures conform to
- 18 conventional horizontal procedures?
- 19 A. Yes, they do. As I stated last time, we're
- 20 not going to reinvent the wheel as we drill these. We
- 21 have experienced directional people on location to
- 22 make sure that the wells are done according to our
- 23 plans.
- Q. You will comply with any Division
- 25 requirements that will ensure the location of the

- 1 wellbore?
- 2 A. Yes. Our plans are 30-foot measurements,
- 3 directional surveys. If we find we're moving in a
- 4 direction that could put us close to a lease line,
- 5 there will be measurements taken more often than 30
- 6 feet to ensure we know where our bottom-hole location
- 7 is at all times.
- 8 Q. Now, the Applicant has requested several
- 9 items. First, permission to dedicate up to two
- 10 320-acre units to one well. What is the reason for
- 11 this?
- 12 A. As Mr. Ambler discussed at the last
- 13 hearing, it's needed because of unitization. There's
- 14 no need to worry about impairing correlative rights.
- 15 The unit allows us to treat the 18,000 acres as one
- 16 tract.
- 17 In addition, the horizontal wells require
- 18 change from standard rules to permit the wells to be
- 19 drilled in a proper manner. As a result, special
- 20 rules regarding spacing unit size and setback limits,
- 21 give the needed flexibility to properly develop the
- 22 unit.
- 23 Q. And besides the 320-acre units, you also
- 24 require that a well be considered orthodox as long as
- 25 it's no closer than 660 feet to the outer boundary of

- 1 the unit, is that correct?
- 2 A. Right.
- 3 Q. Now, why was the Mancos formation chosen
- 4 for the horizontal drilling program?
- 5 A. The Mancos formation has two very nice
- 6 attributes for horizontal drilling. One, it's a very
- 7 thick stand or very thick zone, 4- to 600 feet. It
- 8 also has a high-degree fracturing which, in reviewing
- 9 production in the area, it's very evident that some
- 10 wells with a very nice fracture system will produce
- 11 100-, 200,000 barrels. Those wells that do not have a
- 12 developed fracture system or matrix porosity in the
- 13 area may be 4- to 5,000 barrels and a small amount of
- 14 gas.
- By drilling horizontally, we can intersect
- 16 more of the Mancos reservoir, drain more fractures,
- 17 and potentially encounter more of the matrix porosity
- 18 zones that appear here and there within the Mancos.
- 19 Q. Now, you touched on it at the last hearing
- 20 but why does the operator request an unrestricted
- 21 allowable while completing the wells?
- 22 A. In a new project like this, we need to find
- 23 out what the wells will do on a horizontal basis. As
- 24 stated it's a pilot project, and we need to get as
- 25 much data as we could. As I asked Mr. Bruce, three or

- 1 four years would be nice to get the data an engineer
- 2 would need to evaluate it, but we're asking for as
- 3 much time as we can get to fully evaluate the
- 4 potential of the Mancos in a horizontal setting.
- 5 Q. Regarding an administrative procedure to
- 6 obtain approval for additional horizontal wells, what
- 7 is the main purpose of this request?
- 8 A. Rig availability has to be at the top. If
- 9 we lose a rig, there's no telling when we can get it
- 10 back in today's market. Since we have no correlative
- ll rights to worry about, we're in real good shape with
- 12 that type of a situation.
- Q. Okay. And do well economics and tool
- 14 availability also count?
- 15 A. Yes, the horizontal plays, as I'm sure
- 16 you're hearing more of, are becoming more and more a
- 17 thing to do. There are so many tools available for
- 18 horizontal drilling purposes or even directional
- 19 purposes, and just the physical availability of the
- 20 tools to do the job right is a serious concern of
- 21 ours. And by continuing the drilling program, it will
- 22 ensure that we keep the tools on location where we
- 23 have control over where they're going.
- Q. For this reason you would request expedited
- 25 approval of the administrative procedure, is that

- 1 correct?
- 2 A. Yes, we would.
- 3 Q. Now, there are currently a number of
- 4 vertical wells, normal vertical wells within the unit
- 5 completed in the Mancos formation, are there not?
- 6 A. Yes, there are.
- 7 Q. What are the Applicant's plans for these
- 8 wells?
- 9 A. Currently there's 13 wells on production in
- 10 this unit. Our plans are to let them produce as we
- ll continue this drilling program. We would request
- 12 permission to simultaneously dedicate the wells to the
- 13 units. None of the wells that we're drilling into are
- 14 prolific producers and, based on another case, the gas
- 15 reinjection plan that we will be talking on
- 16 eventually, we would like to keep the wellbores
- 17 available for disposal of the gas that will be
- 18 produced in the horizontal wells.
- 19 Q. Now, as to the wells, the simultaneous
- 20 dedication, would the operator shut in one of the two
- 21 wells on a unit until simultaneous dedication approval
- 22 is obtained?
- 23 A. Yes, we would.
- Q. Now you mentioned the gas injection.
- MR. BRUCE: We weren't planning to go into

- 1 that much, but if I could first, Mr. Examiner, this
- 2 case originally envisioned, 10100, a gas reinjection
- 3 project. In my prehearing statement I requested that
- 4 that portion of the case be dismissed. The reason for
- 5 that is we would like as prompt approval of the
- 6 special operating rules as possible, and prompt
- 7 consideration of those rules.
- 8 Q. Now, Mr. Shuster, the operator does plan on
- 9 pursuing the gas reinjection project, does it not?
- 10 A. Yes, it does.
- 11 Q. And you are preparing the appropriate forms
- 12 for submission to the OCD?
- 13 A. Right. The forms are being prepared. We
- 14 are trying to arrange a time where we can have the
- 15 state representative out on the well for the
- 16 injectivity test to be completed and submitted with
- 17 the form.
- 18 Q. In your opinion, are the granting of these
- 19 applications in the interests of conservation and the
- 20 prevention of waste?
- 21 A. Yes, it is.
- Q. Was Exhibit A prepared by you or under your
- 23 direction?
- A. Yes, it was.
- 25 MR. BRUCE: Mr. Examiner, I would move the

- l admission of Exhibit A.
- 2 EXAMINER MORROW: Exhibit A is admitted.
- 3 MR. BRUCE: I would also like to
- 4 incorporate the land testimony from Case 10099 which
- 5 was taken at the September 17th hearing in this
- 6 matter.
- 7 EXAMINER MORROW: It will be done.
- 8 MR. BRUCE: I have nothing further at this
- 9 point, Mr. Examiner. Before I turn over the witness,
- 10 I would request permission to submit a proposed order
- 11 to the Examiner within the next day or two.
- 12 EXAMINER MORROW: We welcome that.
- 13 EXAMINATION
- 14 BY EXAMINER MORROW:
- 15 Q. Mr. Shuster, what would you consider
- 16 development of a 640-acre unit? This 640 that you
- 17 propose to assign to a horizontal well, how would you
- 18 develop that 640 with the horizontal well?
- 19 A. Basically, my recommendation is as shown in
- 20 the horizontal wells. We are drilling on a
- 21 320-spacing unit. At this time we really don't know
- 22 what a horizontal well in this area will drain. We've
- 23 seen what the vertical wells will do, most of which
- 24 have encountered limited fracture systems and porosity
- 25 systems and have not been prolific producers. There

- l are a few that have the nice porosity back-up to the
- 2 fracture system and are well in excess of what one
- 3 would consider a marginal well.
- 4 By drilling on 640 acres and testing and
- 5 seeing what the potential is, we then have the ability
- 6 to come back and downspace if we need, but right now
- 7 just drill it as if it would be 320, evaluate the well
- 8 on a 640 or one-well-per-section basis.
- 9 Q. What I was getting at is whether or not you
- 10 plan to configure the well so that portions of it
- ll would be located in each of the 320s that you would
- 12 assign to it, whether or not you can do that?
- 13 A. Yes.
- 14 Q. You would plan to do that?
- MR. BRUCE: If I could interrupt, Mr.
- 16 Examiner, some of the wells may be like that, is that
- 17 correct?
- 18 THE WITNESS: Right.
- 19 MR. BRUCE: But not all of them?
- THE WITNESS: Right. We're looking more in
- 21 our development for encountering the optimum fracture
- 22 system and, in some cases, we will--the development
- 23 will be based and requested upon the nature of the
- 24 fracture system we're targeting.
- 25 O. (BY EXAMINER MORROW) The administrative

- 1 exception rules that you're requesting, how would you
- 2 propose that those be written? I know you're going to
- 3 submit a draft order, but how do you envision that
- 4 those would be handled by the OCD? Would notice be
- 5 required, and--
- 6 A. I would like to defer, if I could, that
- 7 question to Mr. Bruce.
- 8 EXAMINER MORROW: There are some
- 9 administrative exception rules in the Basin Fruitland
- 10 Coal Field. Are you familiar with those?
- 11 MR. BRUCE: I'm afraid so, Mr. Examiner.
- 12 EXAMINER MORROW: Would you anticipate
- 13 something similar to those?
- 14 MR. BRUCE: What we would like, Mr.
- 15 Examiner, is at least four wells on the interior of
- 16 the unit where we can do it without notice and
- 17 hearing. It is a 100-percent committed unit, as Mr.
- 18 Ambler has testified.
- As to units on the exterior, as to well
- 20 units on the exterior of the San Ysidro Shallow Unit,
- 21 we understand and I believe Mr. Ambler testified to
- 22 that effect, that notice and possibly hearing may be
- 23 required to protect any offsets outside the unit.
- O. (BY EXAMINER MORROW) Mr. Shuster, do you
- 25 think the current wells in the field are draining the

- 1 320 at this time?
- 2 A. No, sir, I do not.
- 3 Q. And the 13 wells I believe that you said
- 4 are producing now, is that all the wells that there
- 5 are in the field, or in the unit?
- 6 A. No. There are 13 producing wells and
- 7 probably, I believe, about 10 or 12 plugged and
- 8 abandoned wells. Some wells did produce a small
- 9 amount of oil before they were plugged.
- 10 Q. Does this unit enclose all the field or are
- ll there other portions of the field that aren't in the
- 12 unit?
- 13 A. In reviewing it, it enclosed the entire
- 14 field.
- MR. BRUCE: If I may, I think the pool is
- 16 larger than the unit.
- MR. STOVALL: That's correct, and I think
- 18 the exhibit was submitted in the previous hearing and
- 19 in 10099 it shows that. The unit, if I understand and
- 20 am not mistaken, is fully contained within the pool--
- 21 MR. BRUCE: That's correct.
- 22 MR. STOVALL: -- and it's not coterminous
- 23 with the pool.
- MR. BRUCE: That is correct.
- 25 EXAMINER MORROW: It's your memory that

- 1 there's a map in there that shows where the pool is
- 2 and where--
- MR. STOVALL: Yes. I've forgotten which
- 4 exhibit number it is, but it was submitted in Case
- 5 10099, I believe. Is that not correct, Mr. Bruce?
- 6 MR. BRUCE: There is Exhibit 3 in Case
- 7 10099 which outlines the unit and which also indicates
- 8 which wells are or were completed in the Mancos within
- 9 the unit. And if--I believe the special pool rules
- 10 were submitted as an exhibit which give the extent of
- 11 the Rio Puerco Mancos Pool.
- MR. STOVALL: In fact to summarize it, all
- 13 of the unit is within the pool boundaries? There's no
- 14 part of a unit that goes outside the--
- 15 MR. BRUCE: That is correct.
- MR. STOVALL: We're talking about a
- 17 subdivision basically within it.
- 18 EXAMINER MORROW: So the rule changes that
- 19 you've proposed, would they apply to the entire field
- 20 or only to this portion of the field?
- 21 THE WITNESS: The entire field? I'm a
- 22 little confused as to exactly what -- The land
- 23 portions, the land--
- MR. BRUCE: Well, we would only have it
- 25 apply to the unit.

- EXAMINER MORROW: And how long do you think
- 2 the unrestricted allowable would be needed? You said
- 3 as long as possible, but how long is that?
- THE WITNESS: 60 days, I think. I think we
- 5 can get a very good answer in 60 days towards the
- 6 development for future drilling.
- 7 MR. STOVALL: A follow-up question on that.
- 8 EXAMINATION
- 9 BY MR. STOVALL:
- 10 Q. Based on the producing history of wells in
- 11 that pool, do you think you can produce over and above
- 12 a 320 depth bracket allowable with a horizontal well?
- 13 A. We'll be encountering so much more zone and
- 14 the potential for additional fracture systems and
- 15 matrix porosity development, I think the chance
- 16 definitely does exist.
- 17 Q. In other words, you're an optimist, right?
- 18 A. Well, yeah. An engineering optimist is
- 19 kind of an oxymoron. But, no, in reviewing this
- 20 horizontal play with the Austin Chalk in Texas or the
- 21 Niobrara play in Southeastern Wyoming, or the Bakken
- 22 play in the North Dakota area, this play is probably
- 23 one of the better ones that is available--this
- 24 specific pool. There are other Mancos/Gallup areas
- 25 that people are trying this in.

- 1 We've got the formation, we've got the
- 2 pressure, we've got the productive capability, and by
- 3 drilling horizontally we can basically--if you'll
- 4 stack a couple of reservoirs on top of each other, by
- 5 cutting an additional hypotenuse of a triangle amount
- 6 of a section and looking at how the other horizontal
- 7 plays have compared with the vertical well and the
- 8 horizontal well, yes, I think there is a chance that
- 9 we can substantially increase our productive capable
- 10 of a single wellbore.
- 11 EXAMINER MORROW: Do you know if gas is
- 12 being sold from or would be--well, you're going to
- 13 reinject it. Scratch that question.
- 14 THE WITNESS: In answer to your "almost
- 15 question," there is no gas market out here so
- 16 therefore well be reinjecting it.
- 17 EXAMINER MORROW: Mike, do you have some
- 18 questions? You rassled with this earlier.
- MR. STOGNER: Yes.
- 20 EXAMINATION
- 21 BY MR. STOGNER:
- Q. Who will be the unit operator?
- A. Sam Gary, Jr. & Associates, will be the
- 24 operator of record.
- Q. Are there some present wells operating out

- 1 there at this time in the unit area?
- 2 A. Yes, there are.
- 3 Q. Who are they operated by?
- A. I believe the official name is Gary
- 5 Williams Oil Producer, and they're the same company.
- 6 I'm not sure exactly how the name changes come through
- 7 on the forms.
- Q. Then how will the forms been submitted?
- 9 Under Samuel Gary or the Gary Williams Company?
- 10 A. Most likely--it will be Sam Gary, Jr. &
- ll Associates.
- 12 Q. Those present wells will be changed at some
- 13 later date?
- 14 A. Right.
- 15 Q. I believe there is a stipulation, is it
- 16 Rule 2 or Rule 4 that require only one well per
- 17 proration unit? Would some of these existing wells be
- 18 within a proration unit that covers a horizontal well,
- 19 and, if so, will these vertical wells be plugged back?
- 20 temporarily abandoned? How do you propose to meet
- 21 that special stipulation in the special rules?
- 22 A. Most likely the wells will be plugged
- 23 unless we feel the wellbore will be required for a qas
- 24 injection program that will be in place here.
- Q. So, as far as two producing wells, you do

- 1 not anticipate any of that being the case?
- 2 A. No, sir.
- 3 MR. STOGNER: I have no other questions.
- 4 FURTHER EXAMINATION
- 5 BY MR. STOVALL:
- 6 Q. Let me go back and follow up a little bit
- 7 with what Mike was asking.
- The existing vertical wells in the pool,
- 9 will they be unit wells or will they continue to be
- 10 operated on the--
- 11 A. The unit wells, the way the unit is set up
- 12 is based on horizontal completions so, no, they will
- 13 not be unit wells.
- 14 Q. If they continue to produce, then, it will
- 15 be on a tract proration unit basis?
- 16 A. Right.
- 17 Q. If I remember from the last hearing on the
- 18 horizontal, at least the initial horizontal well that
- 19 you're proposing, you are proposing a 640-acre
- 20 drillbore, is that correct? Participating area?
- 21 Maybe we'll call it that. The cost will be borne by
- 22 the 640 acres, and production will be allocated in the
- 23 same manner?
- 24 A. I believe that was the testimony Mr. Ambler
- 25 had given.

- Q. I'm not sure I'm entirely clear what you're
- 2 looking for as far as additional wells. What type of
- 3 drilling blocks? I assume no less than 320?
- A. Right.
- 5 Q. Are you seeking the ability to make them
- 6 larger if you determine that's necessary?
- 7 A. Yes, sir. I apologize for having to defer
- 8 so many of the land-type questions on the allowables
- 9 to Mr. Bruce, but--
- 10 Q. I understand, and I quess I'm sorry Mr.
- 11 Ambler is not here, perhaps, to answer some of these
- 12 questions. Let me explain. The concern we've got, if
- 13 you drill a horizontal well within a 320-acre standard
- 14 proration unit, yet under the sense of the unit
- 15 operations you've created a 640-acre intrasharing
- 16 unit, so to speak, there is the concern about the
- 17 waste issue that the oil underlying the additional 320
- 18 acres may not get produced. What would be your
- 19 initial response to that?
- 20 A. I think at that point in time we could come
- 21 back and request permission to drill that second well
- 22 to recover the reserves that would be lost by the
- 23 single wellbore.
- Just on a technical basis I don't know what
- 25 the filing requirements are for spacing changes, but

- 1 at the point in time where we have the substantial or
- 2 enough history to determine the ultimate recovery of
- 3 the first wellbore, we can then determine the amount
- 4 of a section it will drain, and we can see what type
- 5 of a loss we will be looking at, if any, on the
- 6 remaining 320 acres. Now, that's just a technical
- 7 issue that has nothing relative to what the orders for
- 8 spacing units would say.
- 9 Q. What I'm coming to, for example, in this
- 10 first well I assume you have permitted it with the
- ll BLM, is that correct?
- 12 A. Yes, sir.
- Q. And on the acreage dedication plat, what
- 14 did you show as the acreage dedication on that well?
- 15 A. I would have to defer that to Mr. Bruce.
- MR. STOVALL: Do you have that available?
- MR. BRUCE: We will get that for you.
- 18 Q. Where I'm coming from, you have a certain
- 19 advantage in unit operations as you have some
- 20 flexibility because of the creation of participating
- 21 areas you can ensure the protection of correlative
- 22 rights across a wide area by creating these
- 23 participating areas and sharing, so the correlative
- 24 rights issue is minimized.
- I could see, for example, that you could

- 1 dedicate in the proration-unit sense, a proration unit
- 2 being that tract of land from which the oil is being
- 3 produced and to which production limitations apply and
- 4 have a different participation in it, which in some
- 5 ways occurs in a lot of units. Is that what you would
- 6 anticipate might happen?
- 7 A. It sounds like a logical solution to what
- 8 we're looking at.
- 9 Q. I'm sort of offering it as an alternative,
- 10 more in terms of trying to get an explanation.
- 11 A. Right.
- 12 Q. Let's get simpler now.
- 13 A. Please.
- 14 Q. I'm making my common mistake of getting too
- 15 far into this. In terms of establishing
- 16 administrative process for the approval of wells, what
- 17 would be your response to a process that would provide
- 18 for an administrative approval of a well which was
- 19 drilled entirely within a legal drilling window, based
- 20 on--is this a 660 setback in this pool?
- 21 MR. BRUCE: Yes, it is. The current pool
- 22 rules provide for a 660 setback.
- 23 Q. --which was the surface location and of the
- 24 horizontal well all within that 660 window. Is that
- 25 acceptable or do you need more flexibility than that,

- 1 or are you able to address the issue?
- 2 MR. BRUCE: I think, if I may just be
- 3 allowed to speak, I think that's acceptable. The only
- 4 thing that I might point out is that some of these
- 5 wells, and I think this is what Mr. Morrow was getting
- 6 at, is that some of these wells may start off in
- 7 one-half section and drip north/northwest into another
- 8 section. So if you're saying only administrative
- 9 approval for a 320-acre unit, we would like to make it
- 10 as broad as possible.
- 11 EXAMINER MORROW: I believe you requested a
- 12 change to 640, so your question probably applies to
- 13 640, I believe?
- MR. STOVALL: Well, I quess that's what I'm
- 15 trying to ask. I'm trying to formulate exactly what
- 16 it is you're requesting in terms of the ability to
- 17 administratively approve it.
- MR. BRUCE: Well, I think the formation or
- 19 the application said 320 or 640 at the operator's
- 20 option. So some of these wells may, indeed, be
- 21 dedicated to a 320-acre unit.
- Q. (BY MR. STOVALL) If you get this
- 23 flexibility, again we're getting into the land
- 24 questions and please feel free to tell me if you don't
- 25 know the answer--don't speculate too wildly--the

- 1 protection of correlative rights really becomes a
- 2 certain point of issue but again that's dealt with by
- 3 the participating areas.
- 4 Would you anticipate that to be a common
- 5 participating area? How are you doing that in order
- 6 to gain this flexibility? What protection are you
- 7 going to give all around as far as developing
- 8 participating areas, participation in the wells, and
- 9 in relation to other wells that have been developed in
- 10 a similar manner? Does either of you have the
- 11 knowledge or understanding of that?
- MR. BRUCE: I'm not sure I-- Are you
- 13 saying drilling a well that is located entirely on one
- 14 320 but dedicating 640 acres to it, what protection is
- 15 there?
- 16 MR. STOVALL: For example, if the first
- 17 well is drilled and 640 acres dedicated to it, in
- 18 terms of a drilling block even a proration unit, then
- 19 the next well is drilled, if it's adjacent, that's one
- 20 issue. Should it be the same drilling block as the
- 21 first? The participating area, I think that's the
- 22 common language of the Unit Agreement, as the first,
- 23 and incorporated into that expands the participating
- 24 area and provide for participation on that basis as
- 25 opposed to, say, a noncontiquous tract developed with

- 1 a horizontal well? How would you deal with the
- 2 participation in that? Are you been able to respond,
- 3 or is it in the Unit Agreement?
- 4 MR. BRUCE: I believe there's something in
- 5 the Unit Agreement regarding participating areas.
- 6 MR. STOVALL: My purpose here in asking you
- 7 this is to make sure we have an order that's not
- 8 inconsistent with your Unit Agreement; hopefully quite
- 9 consistent with it.
- MR. BRUCE: Under the Unit Agreement which
- ll was submitted as Exhibit No. 2 in Case 10099 on
- 12 September 17th, paragraphs 10 and 11, or Sections 10
- 13 and 11 talk about participation, participating areas.
- 14 And the participating area, as I read it, is to be
- 15 that part of the unit or that part of, say--well, I
- 16 suppose of the unit that is regarded as reasonably
- 17 proved to be productive. I don't know how these
- 18 things work in practice, but it should officially
- 19 include an area that would be reasonably drained by a
- 20 well that is drilled.
- 21 MR. STOVALL: Taking that one step further,
- 22 under unit operations there may be one or more
- 23 participating areas. If you start out with an initial
- 24 exploratory well and step out, it's not uncommon to
- 25 expand the existing participating area to include

- 1 those. If you do a distance step out from an existing
- 2 participating area, you may form a second
- 3 participating area.
- 4 Have you discussed that? Are you in a
- 5 position that either of you could respond?
- Where are the wells going to be drilled?
- 7 Maybe that's the easiest way to get to it. (Pause)
- 8 Where was the first well?
- 9 MR. BRUCE: In Section 11. And then Mr.
- 10 Shuster talked about the next three wells that have
- ll been permitted with the BLM are in Section 6, to the
- 12 east, and then Sections 12 and 13.
- MR. STOVALL: So actually they would be
- 14 kind of a next area step out except for Section 6?
- 15 MR. BRUCE: Yes, and I'm not sure which is
- 16 to be the second well. Do you?
- 17 THE WITNESS: No, I don't.
- MR. STOVALL: Okay. I won't ask you to
- 19 answer questions that you can't. What I'm concerned
- 20 with is making sure of any administrative approval
- 21 that would approve, particularly that horizontal well
- 22 and the 640 doesn't have the potential for a waste.
- MR. BRUCE: And Mr. Ambler did testify in
- 24 the last hearing. He was open to suggestion to
- 25 whatever limitations the Division may impose that seem

- 1 reasonable to it, the operator will abide by.
- MR. STOVALL: Mr. Bruce, a quick question
- 3 on the notice issue. In Case 10099, I assume you
- 4 provided notice of some form written on--I think you
- 5 gave us something. Basically, though, we're talking
- 6 all unit participants, right? as being those that
- 7 would be the only people entitled to notice, isn't
- 8 that correct, since 10099, the horizontal well, is the
- 9 middle of a unit?
- MR. BRUCE: Well, we did not give notice
- ll because they were all aware that the initial well--you
- 12 know, of all the plans.
- MR. STOVALL: I'm just trying to solve this
- 14 location/notice problem for you, if we can.
- Let me ask you this: Have all the working
- 16 interest owners in the unit and the single royalty
- 17 owner been advised pursuant to the Unit Agreement of
- 18 the current state of the Applicant's intention to
- 19 drill the well from the 934 location?
- MR. BRUCE: Yes, they have. And if you
- 21 want, I will get a letter to this effect and submit it
- 22 post haste.
- Exhibit No. 2 in Case 10099 is a letter
- 24 from the BLM to Samuel Gary, Jr. & Associates, which
- 25 approves the unit and which also provided for a

- 1 horizontal well. It does not give the footage
- 2 location, but it does say it will be in the southeast
- 3 of the southwest of Section 11.
- The Unit Agreement itself, which was signed
- 5 by all the working interest owners, did provide for a
- 6 horizontal well, and they were all notified of the
- 7 well location. The reason for moving it back was just
- 8 the BLM requirement that they commence the well by
- 9 October 15th, and the BLM said there was not time to
- 10 permit a new location at 450 feet from the south line
- 11 before the October 15th date arrived; and, therefore,
- 12 they said drill, or so goes the unit.
- 13 EXAMINER MORROW: What we were discussing
- 14 is whether or not you would be willing to proceed at
- 15 your own risk at this time, subject to curing the
- 16 notice problems and getting final approval at a later
- 17 date?
- 18 MR. BRUCE: I think we would.
- MR. STOVALL: Because the only people
- 20 entitled to notice are people who are in the unit.
- 21 The only correlative rights issue involved, as I see
- 22 it, is the working interest owners in the section
- 23 surrounding Section 11 who, while they're unit
- 24 members, will not be participating in this first
- 25 well. Would that be a fairly correct assessment of

- 1 that?
- MR. BRUCE: Yes.
- MR. STOVALL: And that kind of gets me back
- 4 to where I was going before, that as you step out,
- 5 then those become less of a concern because they can
- 6 be brought into the participating area and they share
- 7 in all the glories and benefits and risks and hazards
- 8 of that participation.
- 9 MR. BRUCE: Hopefully, yes.
- MR. STOVALL: So the correlative rights
- ll issue gets resolved by inclusion into the
- 12 participating unit, and then we're only concerned with
- 13 our resources being developed.
- 14 MR. BRUCE: We'll take care of that notice,
- 15 and let me get in touch with you in a day to make sure
- 16 I'm doing the right thing according to your thoughts.
- 17 EXAMINER MORROW: The witness may be
- 18 excused.
- 19 MR. BRUCE: Thank you for accepting our
- 20 confused testimony.
- 21 EXAMINER MORROW: We'll take both Cases
- 22 10099 and 10100 under advisement, except that
- 23 10099----
- 24 MR. STOVALL: I recommend, Mr. Examiner,
- 25 that we leave the record open for the moment to

1	clarify the notice issues.
2	EXAMINER MORROW: Is that 10099, or
3	MR. STOVALL: Do we have a problem with
4	10100?
5	EXAMINER MORROW: I don't believe we do.
6	MR. STOVALL: Okay. We could take 10100
7	under advisement, and leave 10099 open until we
8	clarify the notice requirement.
9	EXAMINER STOGNER: Do you have that
10	correct, Ms. Court Reporter?
11	COURT REPORTER: Yes, I do.
12	(Thereupon, the proceedings concluded.)
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1	CERTIFICATE OF REPORTER
2	
3	STATE OF NEW MEXICO )
4	) ss. COUNTY OF SANTA FE )
5	
6	I, Carla Diane Rodriguez, Certified
7	Shorthand Reporter and Notary Public, HEREBY CERTIFY
8	that the foregoing transcript of proceedings before
9	the Oil Conservation Division was reported by me; that
L 0	I caused my notes to be transcribed under my personal
11	supervision; and that the foregoing is a true and
L 2	accurate record of the proceedings.
L 3	I FURTHER CERTIFY that I am not a relative
L 4	or employee of any of the parties or attorneys
L 5	involved in this matter and that I have no personal
L 6	interest in the final disposition of this matter.
l 7	WITNESS MY HAND AND SEAL October 15, 1990.
L 8	Carla Cara Collins
L 9	CARLA DIANE RODRIGUEZ  CSR No. 91
2 0	CSR No. 91 $\bigcirc$
21	My commission expires: May 25, 1991
2 2	
2 3	I do heroby certify that the voicens $z_{ij}(z)$ a continue in the label who which the $z_{ij}(z)$
2 <b>4</b>	the Essa intrinsing of Case 1 10099 . + 10100
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	Oil corservation Division

1	STATE OF NEW MEXICO
2	ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
3	OIL CONSERVATION DIVISION
4	CASE 10,100
5	
6	EXAMINER HEARING
7	
8	
9	IN THE MATTER OF:
10	
11	In the matter of Case 10,100 being reopened pursuant to the provisions of Division Order
12	Number R-9390, which Order promulgated special operating rules and regulations for the San Isidro
13	(Shallow) Unit in Sandoval County
14	ORIGINAL
15	ONIGITAL
16	TRANSCRIPT OF PROCEEDINGS
17	
18	
19	BEFORE: DAVID R. CATANACH, EXAMINER
20	
21	JAN 2 1993
22	OIL CONSERVATION DIVISION
23	STATE LAND OFFICE BUILDING
24	SANTA FE, NEW MEXICO
25	January 7, 1993

1	APPEARANCES
2	
3	FOR THE DIVISION:
4	ROBERT G. STOVALL
5	Attorney at Law Legal Counsel to the Division
6	State Land Office Building Santa Fe, New Mexico 87504
7	
8	FOR ENERGY DEVELOPMENT CORPORATION:
9	HINKLE, COX, EATON, COFFIELD & HENSLEY
10	Attorneys at Law By: JAMES G. BRUCE 218 Montezuma
11	P.O. Box 2068
12	Santa Fe, New Mexico 87504-2068
13	* * *
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1	WHEREUPON, the following proceedings were had
2	at 2:07 p.m.:
3	EXAMINER CATANACH: At this time we'll go
4	ahead and call Case 10,100.
5	MR. STOVALL: In the matter of Case 10,100
6	being reopened pursuant to the provisions of Division
7	Order Number R-9390, which Order promulgated special
8	operating rules and regulations for the San Isidro
9	(Shallow) unit in Sandoval County.
10	EXAMINER CATANACH: Are there appearances?
11	MR. BRUCE: Mr. Examiner, Jim Bruce from the
12	Hinkle law firm in Santa Fe, representing Energy
13	Development Corporation, the operator of the unit.
14	I have one witness to be sworn.
15	MR. STOVALL: Looks like that's it.
16	MARION TEBBS,
17	the witness herein, after having been first duly sworn
18	upon his oath, was examined and testified as follows:
19	DIRECT EXAMINATION
20	BY MR. BRUCE:
21	Q. Would you please state your name and city of
22	residence?
23	A. Marion Tebbs. I live in the Woodlands,
24	Texas, near Houston.
25	Q. And what is your occupation and who are you

1 employed by? 2 I'm a senior reservoir engineer for the 3 Energy Development Company in Houston. 4 Have you previously testified before the 5 Division? Α. No, I haven't. 7 Would you please outline your educational and Q. 8 work background for the Examiner? 9 Α. Okay, I received a bachelor of science degree in petroleum engineering from Texas A&M University in 10 1959, and I've been continuously employed in the 11 12 industry since that time, for the last three years as a 13 senior reservoir engineer with the Energy Development 14 Corporation and working mostly in west Texas and New Mexico and north Louisiana. 15 16 Okay. And are you familiar with the 0. 17 engineering matters pertaining to this unit? Yes, sir, I am. 18 Α. And have you previously studied engineering 19 0. matters with respect to production from the Mancos in 20 this area? 21 22 Α. Yes. 23 MR. BRUCE: Mr. Examiner, I would move the --24 or I would tender Mr. Tebbs as an expert petroleum 25 engineer.

1 EXAMINER CATANACH: He is so qualified. 2 Q. (By Mr. Bruce) First off, Mr. Tebbs, 3 approximately when did Energy Development Corporation, or EDC, become operator of the San Isidro (Shallow) unit? 5 I believe it was the first of October or November. I'm not sure which. October, I think. 7 And they succeeded Veteran Exploration? 8 0. 9 Veteran, that's correct. Α. Does EDC request that the operating rules for 10 0. the unit be made permanent? 11 A. 12 Yes. 13 And in your opinion, are they necessary in 0. 14 order to accommodate the horizontal drilling in the Mancos which has been done to date and which hopefully 15 will be done in the future in the unit? 16 17 Yes, sir. A. 18 Would you please refer to Exhibit 1 and Q. 19 briefly go over its contents for the Examiner? 20 This is a map of the San Isidro unit with the 21 outline of the unit in light gray shading, and the 22 participating areas of the wells that have been drilled 23 are shown in yellow, outlined in yellow. 24 Q. Those are the producing wells outlined in 25 yellow?

1	A. Those are the That's correct.
2	Q. And besides those producing wells let's go
3	in Section 15 there's the San Isidro 15-7A; is that
4	correct?
5	A. That's right.
6	Q. And then to the northeast in Section 11
7	A there's the San Isidro unit 12-10.
8	Q. Okay. In the 12-10 are two horizontal lines.
9	Briefly, what is
10	A. The first One of the horizontal lines was
11	the original wellbore, and then they came back about a
12	year or so later and sidetracked the well in a slightly
13	different direction.
14	Q. And the I think the easternmost wellbore
15	was the original?
16	A. The original, correct. The east was the
17	original, and now the other one is the current
18	wellbore.
19	Q. Okay.
20	A. Right.
21	Q. And then there's the 7-3 well in Sections 6
22	and 7?
23	A. That's correct.
24	Q. And to date now, that's the only well that
25	has crossed section lines; is that correct?

1 A. That's right. That's the only one that's crossed section lines. 2 3 And in Section 11 there is a well, and in Section 5 there is a horizontal well indicated. 5 is the status of those two wells? 6 Α. Neither of those wells are producing. well in Section 11, it's my understanding, never did 7 produce, had mechanical problems and never did produce. 8 The well in Section 5 has been temporarily 9 abandoned since it didn't -- it found the zone it was 10 looking for, but they weren't able to stay in the zone 11 12 long enough to establish production, so it's been temporarily abandoned. 13 Okay, and just for information purposes, up 14 Q. on the east side of the map, there's a well in Section 15 35. What do you know about that well, even though 16 17 that's outside the unit? Α. Right. As far as I know, that well was 1.8 drilled by Bum Bright [phonetic] and is a productive 19 well and, it's my understanding, makes something on the 20 order of 100 to 150 barrels of oil a day. 21 22 But that's really about all I know about it. 23 Q. Okay. Now, what are EDC's future plans as operator of this unit? 24

We'd like to drill probably four wells out

25

Α.

1 there this year, and maybe as early -- starting as 2 early as late February or March, depending on the weather conditions. Probably in March, we would start. 3 Now, in prior hearings which you weren't 5 involved in, there was some testimony presented about where these wells are drilled. They're drilled along 6 7 the maximum flexure line; is that correct? 8 Correct, that's correct. The flex line 9 generally follows -- I guess it would be a northeast/ 10 southwest trend across this unit. And as a result, because of the need to drill 11 Q. along that line -- or perpendicular to that line, I 12 13 believe; is that correct? 14 Α. Perpendicular is the way feel is the right 15 way to go. 16 There has been a well drilled parallel to it, 17 and it has produced, but we feel like perpendicular is 18 the best way to go. 19 Q. And as a result, in your opinion, are the 20 operating rules which allow drilling across section 21 lines or drilling across half section lines necessary 22 in order to properly develop this unit? 23 A. Yes, I believe they are, because we don't 24 know -- In order to cross the maximum number of 25 fractures in the optimum position, we feel like that

1 section lines are maybe not the best way to go. Q. Okay. And so because of the geology or --2 it's kind of hard to know -- It's kind of hard to stay 3 4 within like a half section? Yes, that's right, that's right. 5 Α. Now, briefly what does Exhibit 2 contain? 6 Q. Exhibit 2 is a summary of the production 7 Α. history of all the wells that are inside the San Isidro 8 unit. 9 It shows both the tabulated production, and I 10 believe there is a plot of that production for each 11 well. In fact, I believe the tabular production 12 follows the plot in each case. 13 And this includes both the vertical and the 14 Q. horizontal wells? 15 That's right. 16 Α. And that's merely presented to show what's 17 Q. happened in the unit to date? 18 That's right. 19 Α. Okay. In your opinion, is making the rules, 20 Q. these special operating rules, permanent in the 21 interests of conservation and the prevention of waste? 22 23 A. I believe so, yes. And were Exhibits 1 and 2 compiled from 24 0. 25 records maintained by EDC in the regular course of

1	business?
2	A. Yes, they were.
3	MR. BRUCE: Mr. Examiner, at this time I
4	would move the admission of EDC Exhibits 1 and 2.
5	EXAMINER CATANACH: Exhibits 1 and 2 will be
6	admitted as evidence.
7	EXAMINATION
8	BY MR. STOVALL:
9	Q. A couple questions. The 7-3 well and the
10	What is it? Is that the 12-10?
11	A. 12-10, yes.
12	Q. 12-10. Do you believe they successfully
13	cross that flexure line and got some fracture benefit?
14	A. Yes, sir, I do.
15	Q. And what about the well in Section 15?
16	A. In Section 15
17	Q. Is that the one that's parallel?
18	A. It's more parallel to the fractures, and the
19	operator at that time had a theory that you by going
20	parallel to the fractures, you can maybe stay in the
21	good fractured area for a different approach to it.
22	And it's been a fairly good well; it just
23	hasn't been an exceptionally good well.
24	But that well probably didn't cross It
25	probably stayed more or less in the fracture or in the

hingeline or the maximum flexure line, rather than 1 2 crossing it. If I interpret -- I mean, based upon wellbore 3 geology, if you actually took the well in 11 you could just go the other direction; it looks like you'd 5 probably do a little better, wouldn't it? 6 7 The well in Section 11? Α. Yeah, the one that --8 0. 9 Α. Yes, I would think so. Which would be another -- The reason I ask 10 Q. that is because that would be -- tend to take you 11 12 across the section line again, wouldn't it? 13 Α. That's right. And we may very well do that. 14 Or even up here in Section 5 that may turn out to be the best way also, just to go in the opposite 15 16 direction there. 17 And neither of those wells have we really, you know, made a final decision on what to do with 18 But yes, that would be correct. 19 20 MR. BRUCE: For your information, Mr. Examiner, I looked for a copy of an exhibit -- I think 21 22 it was presented in either Case 10,099 or 10,100 -which had Veteran's flexure line on there, and I 23 24 couldn't find it in my files but I believe there is one 25 of those maps in that file, in one of those files.

MR. STOVALL: I remember seeing that. 1 (By Mr. Stovall) Now, I guess -- The point 2 0. I'm really getting to is, I take it EDC is now the 3 operator of this? 5 Α. Yes, sir, we are. You would continue to try to develop this 6 Q. with horizontal wells? 7 Α. Right, that's our intent. 8 9 Like I say, we will probably start toward the 10 end of February, the first part of March, and maybe continue, maybe quarterly or so, to get a well in there 11 12 and try to evaluate them as we go. 13 But we intend to use the horizontal wells, because I feel like you have a better chance of 14 15 encountering fractures than you do with a vertical 16 well. Now, if you encounter good fractures with a 17 vertical well, that's great, but your chances are just much slimmer. 18 19 And most of these wells, particularly the 20 ones that haven't produced very well, I think are just in between fractured trends. 21 I remember one question came up is, what's 22 Q. 23 the prospects for the area up around Sections 4 and 5, 24 the northwest corner of the section, of the unit?

Are we talking inside the unit now?

25

Α.

1	Q. Inside the unit, yeah. It's over there to
2	the northwest of
3	A. We do have plans. We feel like There's
4	like two parts to this fold. As the fold goes down,
5	then it also comes back up, and that we're looking here
6	on this where the current wells are, or sort of in
7	the upper part of the fold, if you will.
8	And at the down part of the fold it may be in
9	those sections that you're talking about, 3, 36, down
LO	through that area.
L1	And so we do plan a well for that area,
L2	probably later in the year.
L3	Q. When you say 3 and 36, you're talking up
L4	in
15	A. Well, even up in that next township, say run
L6	from Section 3 up through 36, or maybe more like 31,
L7	from 3 across through 31, would be another flexure
L8	trend through there.
L9	MR. BRUCE: I think he's pointing from the
20	Section 3 which is 20 North, 3 West.
21	THE WITNESS: Right.
22	MR. STOVALL: 20 North Okay.
23	Q. (By Mr. Stovall) I was looking out towards 4
24	and 5 and, say, 7, 8 and 9 of 20 North, 3 West.
25	A. I don't know I do know that our map or

I've seen -- I know we have seismic data that comes down through 8 and 9. I'm not particularly sure about 4 and 5. I do know there's seismic data that comes down through 8 and 9 and 3 and down through that area.

1.1

And we feel like the fracture trend does extend in that area, is in that area. We just don't have the well control there that we have up in the other part.

- Q. Is the BLM satisfied with your development plans up to this point?
- A. As far as I know. Like I said, we've only had the unit for a couple of months, and so we haven't changed anything. So if there were any problems with that, I haven't heard about it.
- Q. Are you familiar with the five previous cases? Have you reviewed those at all?
- A. Just briefly. I know that the temporary rules were established for 640-acre units or 320-acre units or 480-acre, I believe it is, and that they could go across section lines. And the only one that did is the 7-3, but that's about all.

I do know there's a limiting gas/oil ratio,
like 500 to 1. I believe you have your allowable based
on a barrel per acre, you know, your unit size for
first 60 days in which you're practically unrestricted

gas volumes and so forth. 1 Well, let me ask you more specifically, is 2 0. the ownership other than EDC, or the nature of the 3 ownership pretty much the same as it was at that time? 4 5 The questions came up about correlative rights and opportunities of various parties in this 6 unitized area. 7 Other than the fact that there have been some 8 changes in operatorship, are there any --9 redistributions of ownership, I guess would be --10 MR. BRUCE: Mr. Stovall, I can present you 11 with some data on that. 12 In Case Number -- I believe it was 10,100 --13 an operating agreement -- I mean, excuse me, a unit 14 agreement was submitted which contained a tabulation 15 Exhibit A -- or Exhibit B, excuse me, indicating the 16 ownership. 17 Of that ownership, there are three or four 18 primary parties, one being Gary Williams. I forget the 19 exact name, Gary Williams Oil Company or something. 20 MR. STOVALL: Right, I know who you mean. 21 22 MR. BRUCE: Excuse me, it's now called just the Gary Williams Company. 23 There was Ottowa Energy, Tallis Properties 24 25 Limited Partnership, and one other party.

Of the three I've just named, Veteran 1 Exploration acquired three-fourths of their interest in 2 return for drilling these various wells. 3 interest, virtually all of it has since been conveyed 5 to EDC. The other -- Excuse me, the fourth party that 6 had a major interest was Energy Development 7 Corporation. As a result, Energy Development 8 Corporation owns well over half of the land in the unit 9 now, holds the leasehold interests. 10 MR. STOVALL: I guess the context of my 11 12 question, if you'll remember at that time, one of the issues I was concerned about is whether it's a divided 13 14 or undivided unit and the opportunity to share and 15 participate as you start crossing these lines. 16 And I assume from what you're saying that 17 that picture probably has not changed drastically, 18 or --MR. BRUCE: No. 19 20 MR. STOVALL: -- maybe has become more favorable? 21 MR. BRUCE: It hasn't changed. 22 I mean, there's variations in ownership that overrides from 23 24 section to section, or half section to half section. 25 The main thing is the working interest has

become concentrated primarily in EDC, although there 1 are some minor working interest owners at that point. 2 But in essence, what has happened is, these 3 wells were drilled on the units indicated on Exhibit 1, and only the Johnson 7-3 well has a participating area 5 approved by the BLM. The BLM did not approve 6 participating areas for the areas based upon their 7 quidelines. 8 9 MR. STOVALL: Because they were 10 noncommercial? 11 MR. BRUCE: They were -- Well, I mean, 12 they're producing in commercial quantities by the normal legal standard, but BLM doesn't believe they'll 13 14 pay out, so participating areas were not formed. 15 So royalty -- overriding royalty-interest 16 owners are being paid on a lease basis in those wells. 17 MR. STOVALL: Okay, I'm through, unless I 18 think of something else. 19 **EXAMINATION** 20 BY EXAMINER CATANACH: The circumstances for which the original pool 21 Q. 22 rules were promulgated have not changed; is that your 23 opinion? 24 Α. That's right. 25 Q. Have you had any experience in your brief

1 time as operator as to why these rules don't work or 2 should be amended or --Well, only insofar as in drilling the 3 horizontal wells where you would be crossing section 5 lines as long as you're in a fracture trend. would be the only thing I can think of. 6 7 MR. STOVALL: But that exists now; you're not recommending a change; is that correct? 8 9 THE WITNESS: Oh, no, no, I can't think of 10 anything that I've seen that I would change. (By Examiner Catanach) It's your opinion 11 Q. 12 that everything is still needed, all the rules that were instituted are still needed? 13 14 Α. Yes, yeah. 15 And you said you intend to drill four wells Q. 16 this year? 17 A. I believe we're planning four wells, yes, 18 sir, for the year, with the first one being sometime in 19 the first quarter. 20 Q. I wonder if it might not be prudent, to give 21 you a chance to get a little experience in the unit, to continue the temporary rules for a period of time. 22 23 Would that serve any purpose? 24 MR. BRUCE: From my viewpoint, Mr. Examiner, 25 I mean, we have no objection to that, as long as we

1 don't have to come back for another hearing, if they 2 need to be made permanent. EXAMINER CATANACH: Well, that would be the 3 4 whole point of making them temporary for another period, is to give you time to gain some experience. 5 MR. STOVALL: I wonder, Mr. Examiner, I think 6 there's some -- I think what you're talking about if I 7 understand it, is that EDC has just now taken this over 8 and doesn't have any direct experience working under 9 the rules of drilling wells under them. 10 Another -- although I'm not sure that that's 11 12 going to change much, because you've been involved in the wells since the beginning; is that right? 13 THE WITNESS: Yes, sir, we have. Not as 14 15 operator, but we've been closely following them, you 16 know. 17 MR. STOVALL: You've got some money in there too. 18 19 THE WITNESS: Right, we had about 30 percent of it, so we were watching it pretty closely anyway. 20 MR. STOVALL: Some value in it, and it might 21 not necessarily require a hearing, is to have some 22 special attention update as far as the wells drilled 23 under the rules, and in establishment of units for the 24 25 sake of developing some sort of -- something that could

1 be used in the future if we run across a similar situation. If there could be some reporting, not 2 necessarily in a hearing context but in a reporting 3 context, but in a --4 MR. BRUCE: 5 Sure. MR. STOVALL: -- reporting context, and the 6 Division could always reopen it if it felt --7 MR. BRUCE: I would point out that as far as 8 9 spacing goes, obviously the spacing rules in allowing the crossing of half-section lines and sections lines 10 has been used. 11 I think the other key ingredient of these 12 rules was to allow administrative approval for the 13 14 horizontal wells, and that was used for at least three of the wells. 15 I think the 11-14, the well in Section 11, 16 17 and I think the original drilling of the well in Section 12, I think we had hearings on those cases, 18 19 because those were the original wells, and we didn't 20 have everything in place at that point. But the other wells have been approved administratively, was the 21 22 other most useful feature of these operating rules. MR. STOVALL: What about the -- Isn't there a 23 provision in there that provides for -- that does not 24

set a single standard proration unit, but gives some

25

1	flexibility on that?
2	MR. BRUCE: Yeah, it allows 320-, 480- or
3	640-acre units, providing they're comprised of
4	governmental quarter sections.
5	MR. STOVALL: Contiguous and all that sort of
6	thing?
7	MR. BRUCE: Contiguous, quarter sections.
8	THE WITNESS: And I think that's what we have
9	in 7-3. I believe that's a 480
10	MR. STOVALL: That's correct, and I remember
11	that is the case upon which that It took some time
12	to develop these rules. It took about three hearings,
13	if I remember correctly, to develop the rules on this.
14	MR. BRUCE: Yeah, that's correct.
15	MR. STOVALL: And I'd like to have a
16	mechanism to track the experience with it as it matures
17	and have some way to say, Okay, this example has worked
18	and it's a base upon which we can build.
19	THE WITNESS: So far as I can tell, the rules
20	have worked, you know. I don't think that's been a
21	problem.
22	MR. STOVALL: But I think if we could somehow
23	figure out a mechanism to get some continued
24	information in as you drill these next four wells.
25	What are the spacing units, and

1	MR. BRUCE: We could provide that and refer
2	to this case file and submit it to the Division. We
3	have no problem with that.
4	MR. STOVALL: I think, Mr. Examiner, that
5	might work as well, and then we could take the
6	opportunity to say, Okay, we're going to reopen it on
7	our own initiative, but Or the operator could at the
8	time, but
9	I think I heard you say, Mr. Bruce, that
10	you'd just as soon not have to come back next year just
11	as a routine matter; is that correct?
12	MR. BRUCE: That's correct.
13	EXAMINER CATANACH: Okay, we'll think of
14	something.
15	Is there anything further, Mr. Bruce?
16	MR. BRUCE: No, sir.
17	EXAMINER CATANACH: There being nothing
18	further, Case 10,100 will be taken under advisement.
19	(Thereupon, these proceedings were concluded
20	at 2:31 p.m.)
21	* * *
22	I do hereby certs. That the foregoing is a complete record of the proceedings in
23	the Examiner hearing of Case No. 1000.
24	Junil Catarle, Examiner
25	Oil Conservation Division

1	CERTIFICATE OF REPORTER
2	
3	STATE OF NEW MEXICO )
4	) ss. COUNTY OF SANTA FE )
5	
6	I, Steven T. Brenner, Certified Court
7	Reporter and Notary Public, HEREBY CERTIFY that the
8	foregoing transcript of proceedings before the Oil
9	Conservation Division was reported by me; that I
10	transcribed my notes; and that the foregoing is a true
11	and accurate record of the proceedings.
12	I FURTHER CERTIFY that I am not a relative or
13	employee of any of the parties or attorneys involved in
14	this matter and that I have no personal interest in the
15	final disposition of this matter.
16	WITNESS MY HAND AND SEAL January 11, 1993.
17	And the second of the second o
18	
19	STEVEN T. BRENNER CCR No. 7
20	Mr. gammingian auminosa. Oababan 14, 1004
21	My commission expires: October 14, 1994
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23	
24	
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