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

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

CASE NO. 20253

APPLICATION OF SEGURO OIL AND GAS CA FOR APPROVAL OF THE EXPANSION OF THE UNITIZED INTERVAL IN THE WEST SQUARE LAKE UNIT.

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

June 27, 2019

Santa Fe, New Mexico

BEFORE: LEONARD LOWE, CHIEF EXAMINER MICHAEL MCMILLAN, TECHNICAL EXAMINER DAVID K. BROOKS, LEGAL EXAMINER

This matter came on for hearing before the New Mexico Oil Conservation Division, Leonard Lowe, Chief Examiner; Michael McMillan, Technical Examiner; and David K. Brooks, Legal Examiner, on Thursday, June 27, 2019, at the New Mexico Energy, Minerals and Natural Resources Department, Wendell Chino Building, 1220 South St. Francis Drive, Porter Hall, Room 102, Santa Fe, New Mexico.

REPORTED BY: Mary C. Hankins, CCR, RPR New Mexico CCR #20 Paul Baca Professional Court Reporters 500 4th Street, Northwest, Suite 105 Albuquerque, New Mexico 87102 (505) 843-9241

Page 2 1 APPEARANCES 2 FOR APPLICANT SEGURO OIL AND GAS, LLC: 3 GARY W. LARSON, ESQ. HINKLE SHANOR, LLP 218 Montezuma Avenue 4 Santa Fe, New Mexico 87501 5 (505) 982-4554 glarson@hinklelawfirm.com 6 7 FOR INTERESTED PARTY NEW MEXICO STATE LAND OFFICE: 8 ANDREA ANTILLON, ESQ. NEW MEXICO STATE LAND OFFICE 9 OFFICE OF GENERAL COUNSEL 310 Old Santa Fe Trail Santa Fe, New Mexico 87501 10 (505) 827-5702 aantillon@slo.state.nm.us 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

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Page 4 (8:24 a.m.) 1 2 EXAMINER LOWE: And we will commence now. Just going down the list, we will call Case Number 3 20253, Seguro Oil and Gas for approval of the expansion 4 of the unitized interval of the West Square Lake Unit. 5 Call for appearances. 6 7 MR. LARSON: Good morning, Mr. Examiner. 8 Gary Larson, with the Santa Fe office of Hinkle Shanor, 9 for the Applicant, Seguro Oil and Gas. I have three witnesses. 10 11 MS. ANTILLON: Andrea Antillon for the 12 State Land Office. I'm entering an appearance orally at this time. I don't have any witnesses, and I don't even 13 have a statement today. I'm just entering to preserve 14 our interest because it deals with a state and Fed unit. 15 16 EXAMINER LOWE: Okay. Could I have the witnesses stand and be sworn in, please? 17 18 (Mr. Tettleton, Mr. Bradley and Mr. Pearson 19 sworn.) 20 MR. LARSON: May I proceed? 21 EXAMINER LOWE: Yes, sir. 22 VAN T. TETTLETON, 23 after having been first duly sworn under oath, was 24 questioned and testified as follows: 25

	Page 5
1	DIRECT EXAMINATION
2	BY MR. LARSON:
3	Q. Good morning, Mr. Tettleton.
4	A. Hello.
5	Q. Would you state your full name for the record?
6	A. Van Thomas Tettleton.
7	Q. And where do you reside?
8	A. Midland, Texas.
9	Q. And what is your position with Seguro Oil and
10	Gas?
11	A. Landman.
12	Q. And are you familiar with the land matters that
13	pertain to the amendment of the West Square Lake Unit
14	and unit operating agreement?
15	A. Yes.
16	Q. And are you also familiar with Seguro's
17	application requesting the vertical expansion of the
18	unitized interval in the unit?
19	A. Yes.
20	Q. Have you previously testified at a Division
21	hearing?
22	A. No.
23	Q. And given that, would you summarize your
24	educational background and professional experience in
25	the oil and gas business?

Page 6 Yes, sir. I attended the University of Texas Α. 1 2 at Austin and began my career as a landman in 1997 doing field land work for shale companies, then went to work 3 on for an oil company as a landman, and most recently, I 4 handle all the land matters for Roden Oil Company, 5 Shelmar E & P and Seguro Oil and Gas. 6 7 MR. LARSON: Mr. Examiner, I tender 8 Mr. Tettleton as an expert in petroleum land matters. 9 MS. ANTILLON: No objection. 10 EXAMINER LOWE: So qualified. 11 MR. LARSON: Thank you. 12 0. (BY MR. LARSON) Would you identify the document 13 marked as Exhibit 1? OCD Order Number R-7375, dated October 12th, 14 Α. 1983. 15 16 Does the order approve the West Square Lake Q. Unit as a voluntary unit? 17 18 Yes, it does. Α. 19 And did Seguro's predecessor propose the Q. 20 unitization for the purpose of instituting a secondary 21 recovery project in the Grayburg and San Andres-22 Lovington Sand Formations? 23 Yes, sir. Α. 24 And does the unit agreement have a depth 0. 25 severance in the San Andres?

Page 7 1 Α. Yes. 2 And does Seguro know why its predecessor put 0. 3 this depth severance in the unit agreement? 4 Α. No. 5 So what Seguro is now requesting is Division Q. approval of a vertical expansion of the unitized 6 7 interval that eliminates the depth severance in the San 8 Andres? 9 Α. Yes. 10 And when was the unit agreement executed? Q. 11 November 15th, 1983. Α. 12 Q. And after the unit agreement was executed in 13 late 1983, did the BLM and the State Land Office both 14 approve the agreement? 15 Α. Yes. 16 And what is the total acreage in the West Q. 17 Square Lake Unit? 18 It's 3,320. Α. 19 Q. 20 [sic] acres? 20 Α. Yes. (The court reporter requested clarification 21 22 of the number.) 23 MR. LARSON: I'll let him say it. 24 THE WITNESS: 3,320 acres. 25 (BY MR. LARSON) And how many leases are there Q.

Page 8 1 within the unit? 2 Α. There are ten total. Five are federal. Five 3 are state. 4 And what are the percentages of mineral Q. interests within the unit? 5 Approximately 83.14 percent federal and 16.86 6 Α. 7 percent state. 8 And how many West Square Lake Unit wells does Q. 9 Seguro currently operate? 10 Thirty-seven producers and one injector. Α. 11 And what is the unitized interval as identified 0. 12 in the unit agreement? 13 It's approximately 2,818 feet to 3,150 feet. Α. 14 And at this point, let's fast-forward to 2017. Q. 15 Would you identify the document marked as Exhibit 2? 16 Α. September 30, 2017, amendment to the unit 17 agreement. 18 And is Exhibit 2 a true and correct copy of ο. 19 that amendment? 20 Yes, it is. Α. 21 And does the amendment name Seguro Oil and Gas Q. 22 as the successor operator of the West Square Lake Unit? 23 Α. Yes. 24 And would you next identify the document marked 0. 25 as Exhibit 3?

Page 9 April 23rd, 2019, Amendment and Ratification of 1 Α. 2 Unit Agreement and Unit Operating Agreement. 3 Q. And is Exhibit 3 a true and correct copy of 4 this amendment? 5 Α. Yes. 6 And what is the purpose of the 2019 amendment Q. 7 of the operating agreements? 8 Α. To include the entire San Andres Formation in the unitized interval. 9 10 And have 100 percent of the working interests 0. executed the amendment? 11 12 Α. Yes. 13 0. And has Seguro requested BLM approval of the 14 amendment? 15 Α. Yes. 16 And what is the status of that request for Q. 17 approval? 18 I believe that they indicated by email that Α. 19 they intended to grant us preliminary approval, but they 20 wanted to confer with the State Land Office first. 21 Q. And has Seguro also requested State Land Office 22 preliminary approval of the amendment? 23 Α. Yes. 24 0. And has a Seguro representative met with the 25 State Land Office?

Page 10

1	A. Yes.	
2	Q. And at this point, is the State Land Office	
3	looking at the allocation formula for primary production	
4	from the requested expanded interval of the expanded	
5	area of the unitized interval?	
6	A. Yes.	
7	Q. And how is production currently allocated?	
8	A. It's by tract participation, and the formula is	
9	one-third based on surface acres as to each individual	
10	tract, one-third by production from each individual	
11	tract between July 1st, 1982 and December 31st, 1982,	
12	and one-third based on cumulative production with each	
13	individual tract prior to January 1st, 1960 [sic].	
14	Q. And is that the allocation set forth in the	
15	unit agreement?	
16	A. Yes.	
17	Q. And does Seguro intend to utilize that	
18	allocation when it commences primary production in the	
19	expanded area of the unitized interval?	
20	A. Yes, sir.	
21	Q. And is Seguro willing to revisit that	
22	allocation with the BLM and the State Land Office after	
23	primary production and expanded area has commenced?	
24	A. Yes.	
25	Q. And in your opinion, will the proposed	
1		

Page 11 expansion of the unitized interval benefit both the BLM 1 2 and the State Land Office? 3 Α. Yes. And in your opinion, will the proposed vertical 4 Q. 5 expansion of the unitized interval serve the interest of 6 conservation and prevention of waste and the protect 7 correlative rights? 8 Α. Yes. 9 MR. LARSON: Mr. Examiner, move the admission of Exhibits 1 through 3. 10 11 MS. ANTILLON: No objection. (Sequro Oil and Gas, LLC Exhibit Numbers 1, 12 13 2 and 3 are offered into evidence.) 14 MR. LARSON: And I'll pass the witness. EXAMINER LOWE: Mr. Brooks, any questions? 15 16 EXAMINER BROOKS: No. I don't have any questions. 17 18 CROSS-EXAMINATION 19 BY EXAMINER McMILLAN: 20 Q. Okay. So -- okay. So when this was approved, 21 you said there was a depth severance? 22 Α. Yes. 23 And it's 2,815 to 3,150? Q. 24 Α. Approximately 2,818 to 31 --25 Q. 2,818.

Page 12 1 Α. Yes, sir. 2 And were there any terms of land? Was there 0. 3 any justification for it? 4 Α. Not that I'm aware of. 5 So it's your opinion they just arbitrarily Q. 6 picked it? 7 Α. Probably based on the fact that the Lovington 8 Sand was the lowest producing depth in the area, maybe, but I would have to defer that. 9 10 Okay. So it's a geologic question? 0. 11 Α. Yes. Yeah. 12 Q. Okay. And so there are ten tracts in there, 13 right, five BLM, five State Land Office, and it's 14 crudely 17 percent state and then 83 BLM? Yes, sir. It's 25 tracts in the unit, though. 15 Α. 16 But when I was -- what I was saying is there are five -there are five federal leases and five state leases. 17 The way the unit was divided up was into 25 tracts. 18 19 And on your exhibits, do you show the BLM Q. 20 preliminary approval and the State preliminary approval 21 letters? 22 Α. No, sir. 23 MR. LARSON: We don't have those yet. 24 (BY EXAMINER McMILLAN) Okay. But wasn't your 0. 25 testimony saying that you had preliminary approval?

Page 13 Well, only -- it is my understanding that they 1 Α. 2 were going to give us preliminary approval, and they said so by an email. So it's kind of a preliminary to a 3 preliminary but that they wanted to confer with the 4 State Land Office first. We have not received it from 5 the State Land Office yet either. 6 7 ο. Okay. But you're saying you do have an email 8 that --9 Well, they emailed Mr. Larson, and he showed me Α. the email. 10 11 Well --0. 12 MR. LARSON: I can clarify that. I'll give 13 you the quick chronology. EXAMINER McMILLAN: Yeah. I think that's 14 kind of important. 15 16 MR. LARSON: Yeah. We met with Ms. Khalsa and other representatives of the State Land Office on 17 18 Tuesday. They had a concern, as he has testified, about 19 the allocation of production from the expanded area. 20 When I returned to the office, I had an email from James Glover at the BLM who -- I've been communicating with 21 22 Mr. Glover for months, and he indicated that they were 23 ready to give us preliminary approval. About two 24 minutes later, he sent me an email back and said he'd 25 gotten a call from Ms. Khalsa and that the two agencies

Page 14 want to confer about the allocation. So at this point, 1 2 we do not have official preliminary approval from the 3 BLM. And what I propose, Mr. McMillan is that --4 5 I think this issue will be resolved fairly quickly, and once I do receive -- assuming I do receive those 6 7 approvals, I'll supplement the record immediately. 8 EXAMINER McMILLAN: Okay. 9 MR. LARSON: I do have one follow-up. 10 REDIRECT EXAMINATION 11 BY MR. LARSON: 12 Q. When Seguro's predecessor requested the 13 unitization, did it propose the unitization for the 14 purpose of instituting a secondary recovery project? 15 Α. Yes. MR. LARSON: That's all I have for this 16 17 witness. EXAMINER LOWE: We accept the exhibits that 18 were displayed this morning, 1, 2 and 3. 19 20 MR. LARSON: Yes. MS. ANTILLON: State Land Office has no 21 22 objections. 23 (Sequro Oil and Gas, LLC Exhibit Numbers 1 24 2 and 3 are admitted into evidence.) 25

	Page 15
1	JACK C. BRADLEY,
2	after having been previously sworn under oath, was
3	questioned and testified as follows:
4	DIRECT EXAMINATION
5	BY MR. LARSON:
б	Q. Good morning, Mr. Bradley.
7	A. Good morning.
8	Q. Could you state your full name for the record?
9	A. Jack Clark Bradley.
10	Q. And where do you reside?
11	A. Midland, Texas.
12	Q. And have you been retained by Seguro as a
13	consulting geologist?
14	A. Yes, I have.
15	Q. And are you familiar with the geological
16	aspects of the Seguro's proposed vertical expansion of
17	the unitized interval in the West Square Lake Unit?
18	A. Yes.
19	Q. Have you previously testified at a Division
20	hearing?
21	A. No.
22	Q. Given that, would you summarize your
23	educational background and professional experience in
24	the oil and gas business?
25	A. As a senior in high school in 2004, I began

Page 16 working as a geological technician for R K Ford in 1 2 Midland, Texas. Through that time, I began college and graduated at Sul Ross State University in 2009 with a 3 Bachelor of Science in geology. Soon after, in 2010, I 4 5 took a position with Red Mountain Resources as a geologist and director of its development. I've served 6 7 in that capacity since. And also in 2016, I created my 8 own company and began work as an independent petroleum 9 geologist. 10 MR. LARSON: Mr. Examiner, I tender Mr. Bradley as an expert petroleum geologist. 11 12 EXAMINER LOWE: He is so qualified. 13 MS. ANTILLON: No objection from the State Land Office. 14 EXAMINER McMILLAN: 15 Thanks. 16 (BY MR. LARSON) Mr. Bradley, would you identify Q. the document marked as Exhibit 4? 17 Yes, sir. This is a type log that I used to 18 Α. 19 display the existing West Square Lake unitized interval, 20 as well as our proposed expanded unitized interval. 21 Q. Did you prepare this exhibit? Α. 22 Yes. 23 Would you identify the document marked as 0. Exhibit 5? 24 25 This is simply a cross-section locator Α. Yes.

1 map that I prepared for the next exhibit just simply to 2 identify the location of the wells on the cross section 3 in that map here.

Q. That segues us into the next exhibit, Number 6.
5 Would you identify this?

This is the cross section that I prepared that 6 Α. 7 shows the wells surrounding the -- the key wells 8 surrounding the West Square Lake Unit that we key off of 9 that either shows production that has positive core results, favorable log characteristics or mud log shows 10 11 that lends itself to the middle San Andres, the 12 upper-middle San Andres and lower San Andres being productive within the West Square Lake Unit. 13

14 Q. Are those intervals continuous across the unit?
15 A. Yes.

Q. And have you looked at the recent horizontal
development of the San Andres residual oil zone, which
we'll call the ROZ, that has taken place on the
Northwest Shelf and the Central Basin Platform?
A. Yes.
Q. And does the ROZ within the West Square Lake

Q. And does the ROZ within the West Square Lake
 Unit exhibit similar characteristics?

A. Yes, it does.

Q. Would you next identify the document marked as
Exhibit 7?

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Page 18 This is a structure contour map on the top of 1 Α. 2 the San Andres Formation. 3 Q. And did you prepare this exhibit? 4 Α. I did, along with another consulting geologist 5 for Seguro. And what is this map intended to depict? 6 Q. 7 Α. We think it depicts an advantageous structural 8 node that extends across the bulk of the area of the West Square Lake Unit. 9 Would you identify the document marked as 10 Q. Exhibit 8? 11 12 Α. This is a net isopach map of the Middle San Andres interval. 13 14 0. And did you also prepare this map? 15 Α. I did, along with another consulting geologist 16 for Seguro. 17 Q. And just so the examiner's clear, when you're 18 referring to the middle and the lower-middle San Andres, 19 those are intervals within the proposed expanded area? 20 Yes, they are. Α. 21 And what is Exhibit 8 intended to depict? Q. 22 This is a net porosity map, and the porosity Α. 23 cutoff we used was 4 percent. And we feel it shows a 24 large portion of what we consider to be net pay present 25 over the West Square Lake Unit.

Page 19 So in your opinion, the middle San Andres 1 0. 2 interval is productive across the entire unit? 3 Α. Yes. 4 Would you identify the document marked as Q. Exhibit 9? 5 This is a net isopach map on the lower-middle 6 Α. 7 San Andres interval. 8 Q. And did you also prepare this exhibit? Yes, along with another consulting geologist 9 Α. for Sequro. 10 11 And similar to Exhibit 8, does it indicate 0. 12 productive net pay across the unit? 13 Α. Yes. 14 And what is the first step Seguro will take to 0. 15 develop the expanded area of the unitized interval? 16 Α. We plan to drill three initial test wells to the base of the San Andres and collect data via ELOGs, 17 mud logs, sidewall cores through the entire existing 18 19 West Square Lake Unit and the expanded unitized interval 20 with the idea of establishing production in the middle San Andres and the lower-middle San Andres. 21 22 0. And at this point, there's not a lot of current 23 data, is there, in terms of vertical wells being drilled in the area? 24 25 Not on the West Square Lake Unit. Immediately Α.

Page 20 south, yes, but not immediately within the boundaries of 1 2 the West Square Lake Unit. 3 Q. And these three initial wells, will they all be 4 producers? 5 We fully intend and expect for them establish Α. 6 commercial production. 7 ο. Okay. And what interval is Seguro targeting 8 for production? 9 We plan to collect data throughout the entire Α. interval. Our primary objective will be the middle San 10 Andres and lower-middle San Andres. 11 12 Q. And does Seguro also intend to collect data from the ROZ? 13 14 Α. Yes. Absolutely. 15 And in your opinion, will Seguro's development Q. 16 of the expanded area of the unitized interval result in the economic recovery of oil? 17 18 Α. Yes. 19 And in your opinion, will the expansion of the Q. 20 unitized interval allow Seguro to recover hydrocarbons 21 that would not otherwise be recovered? 22 Α. Yes. 23 And in your opinion, will the granting of 0. 24 Seguro's application serve the interest of conservation 25 and the prevention of waste and protect correlative

Page 21 rights? 1 2 Α. Yes. 3 MR. LARSON: Mr. Examiner, I move the admission of Exhibits 4 through 9. 4 5 MS. ANTILLON: No objection. EXAMINER LOWE: Exhibits 4 through 9 are 6 7 accepted. 8 (Seguro Oil and Gas, LLC Exhibit Numbers 4 through 9 are offered and admitted into 9 evidence.) 10 11 MR. LARSON: And I will pass the witness. 12 MS. ANTILLON: No questions. 13 CROSS-EXAMINATION BY EXAMINER LOWE: 14 15 ο. Looking at your exhibits that you submitted --16 Α. Yes, sir. -- I don't know if it was just the printer 17 Q. 18 quality on your end or -- basically the -- what 19 you've -- what you've submitted, especially Exhibits 4 and 6, are unclear. They don't give enough information 20 21 for us -- for myself to review and to move forward on what is -- what is -- what we can conclude on our side. 22 23 So if you could please resubmit at least -- for sure 4 24 and 6. 25 I have -- in my possession, I have large, clear Α.

Page 22 copies of those exhibits. 1 2 MR. LARSON: Yeah. I tried to reduce them 3 to 8-1/2-by-11. I can produce larger copies. EXAMINER LOWE: Either a larger copy or at 4 least the -- the -- the informative information on your 5 specific exhibit, too. At least pull that portion up. 6 7 I know they can get pretty big. I know that. But, I 8 mean, for the information you want to present, at least 9 a clearer copy so that we can --10 MR. LARSON: I'll submit to you a new 11 Number 4 and a new Number 6. 12 EXAMINER LOWE: Yeah. And if you can -- if you do submit it electronically, you can just email it 13 to all of us. 14 I'm not sure if you want it. 15 16 EXAMINER McMILLAN: Email it to "Hearings." 17 EXAMINER LOWE: Email it to the "OCD 18 Hearings." 19 MR. LARSON: I'll cc both of you. 20 EXAMINER McMILLAN: Yeah. Don't -- don't 21 do that. 22 EXAMINER LOWE: Just email it and just 23 identify it with the case number -- just -- just the 24 case number, and if you want to put the -- any more 25 information pertaining to that, that would be great.

Page 23 But from there on, we can maneuver it to what we have 1 2 got to do with it on our side. But we've just got to verify and see clearer information to distinguish what 3 we've got to do from our side. 4 MR. LARSON: Understood. I'll do that. 5 6 (BY EXAMINER LOWE) Okay. You mentioned earlier Q. 7 you collect data from the ROZ. What specifically is the 8 ROZ? It's stands for residual oil zone. It's a 9 Α. transitional zone. It is typically found in the lower 10 San Andres. 11 12 0. Okay. I just wanted to clarify that on my 13 side. Yes, sir. 14 Α. 15 That's all the questions I have. Q. 16 EXAMINER LOWE: Michael? 17 CROSS-EXAMINATION 18 BY EXAMINER McMILLAN: 19 Q. You know, I always say this at hearings. Don't 20 put too much information on exhibits. I always say 21 that. Once again, the trend continues. This is what I want to see. I want to see an exhibit for (A) -- I want 22 23 to see an exhibit that shows the current unitized 24 interval and then I want to see an Exhibit 4A that shows 25 the whole thing. I cannot stand when applicants put

Page 24 more than one thing on an exhibit. It makes it harder 1 2 for us to determine. 3 Α. Yes, sir. EXAMINER McMILLAN: I've told everybody 4 5 that, and you guys don't listen. There is no excuse for 6 that. I'm looking at everyone. 7 (Laughter.) 8 Q. (BY EXAMINER McMILLAN) And the next thing is 9 can you clarify -- okay. You need to clarify exactly where the lower and the middle and the residual zone is 10 11 on these wells. 12 Now, are you going to flood the lower and the middle? 13 14 Α. Yes, we will. 15 And then you would -- are you going to Q. 16 horizontally drill the residuals? 17 Yes, sir. Α. 18 That's the plan? Q. 19 Α. Yes, sir. That would also be -- we're planning 20 for the high volumes of water that are typically associated with ROZ zone to be our makeup and fill-up 21 water for the waterflooding of the shallower zones. 22 23 Okay. Now, I asked the landman this question. 0. 24 The initial interval was 2,818 to 3,150? 25 Yes, sir. Α.

Page 25 1 And was that because you were trying to get the Q. 2 Lovington Sand? Was that their objection? Is that the 3 reason there was a depth severance initially? That interval was chosen -- 2,818 marks the top 4 Α. 5 of the Loco Hills, and 3,150 is 15 to 20 feet below the Lovington Sand. And that was the original unitized 6 7 interval they were trying to get unitized. 8 Q. For clarity purposes, they were trying to flood the Lovington Sand? 9 Loco Hills, Metex and Premier and Lovington 10 Α. 11 Sand. That interval covers those. 12 0. Okay. So they were trying to -- that interval? Yes, sir. 13 Α. 14 Okay. And I'm going back to Exhibit 5. Q. 15 Looking at Section 9, those horizontal wells, are those 16 Yeso or San Andres wells? 17 All of the horizontal wells in this area are Α. 18 Yeso. 19 Oh, so there haven't been any horizontal San Q. 20 Andres wells in there? Not in this immediate area. 21 Α. 22 Q. Okay. All right. 23 EXAMINER McMILLAN: Anything else? 24 EXAMINER LOWE: No. 25 Mr. Brooks, any questions?

Page 26 EXAMINER BROOKS: No questions. 1 2 EXAMINER LOWE: Okay. MR. LARSON: Mr. McMillan, just so I'm 3 clear, you would want a new Exhibit 4 that is the 4 current unitized interval and a 4A which is the 5 6 proposed? 7 EXAMINER McMILLAN: Yes. It makes us easier for us to determine. Like I said, I don't like 8 people putting too much information on exhibits. It's 9 10 too hard for me to figure out. 11 MR. LARSON: we will do that. 12 EXAMINER McMILLAN: And you're certainly going to have to include State Land Office, since they 13 made appearance, in any exhibits. Make sure they get a 14 copy of them. 15 MR. LARSON: of course. 16 17 EXAMINER McMILLAN: Thank you. 18 MR. LARSON: That's all, Mr. Bradley. 19 ROSS E. PEARSON, 20 after having been previously sworn under oath, was 21 questioned and testified as follows: 22 DIRECT EXAMINATION BY MR. LARSON: 23 24 Good morning, Mr. Pearson. ο. 25 Good morning. Α.

Page 27 1 Please state your full name for the record. Q. 2 Α. Ross Eric Pearson. 3 Q. And where do you reside? 4 Α. Dallas, Texas. 5 Now, you've been retained by Seguro as a Q. 6 consultant petroleum engineer? 7 Α. That is correct. 8 Q. And are you familiar with the matters addressed in Seguro's application? 9 10 Α. Yes. 11 And are you a registered professional engineer? Q. 12 Α. Yes, in the state of Texas. 13 And do you have prior experience with San 0. 14 Andres wells in New Mexico? I've got about 25 years of experience in the 15 Α. 16 San Andres in the Permian Basin. In the last four years, I've been handling the production of reservoir 17 engineering in the Tomtom and the Tomahawk Field, San 18 19 Andres, for Cross Border Resources/Red Mountain 20 Resources. 21 And have you previously testified at a Division Q. 22 hearing? 23 Yes, I have. Α. 24 And at those herrings, were you qualified as an Q. 25 expert in petroleum engineering?

Page 28 1 Α. Yes, I was. 2 MR. LARSON: Mr. Examiner, I request that Mr. Pearson be qualified today as an expert in petroleum 3 4 engineering. 5 No objection. MS. ANTILLON: EXAMINER LOWE: No objection? 6 7 He is so qualified. MR. LARSON: 8 Thank you. 9 (BY MR. LARSON) With regard to the three 0. 10 initial development wells that Mr. Bradley addressed, what data will Seguro collect for purposes of its 11 12 potential development of the West Square Lake Unit? It's actually -- it's really good that Apache 13 Α. actually drilled a brand-new well through the unit to 14 complete in the Yeso. So they participated with getting 15 16 the logs and the mud logs, and there were very favorable shows through the middle and lower-middle San Andres, 17 18 and that triggered off the mapping and everything else. And this is a real opportunity to just complete -- I 19 20 mean, most -- most fields are flooded in the Grayburg and the San Andres, and I think the issue is that the 21 22 old wells that were drilled in the 1940s, they just made 23 commercial wells at that point, and they never went 24 through the whole section. So we've got an opportunity 25 with the middle and the lower-middle to bolt on the San

Andres and continue with reestablishing the waterflood
 in the unit. So these three wells will be excellent
 candidates for that, in my opinion.

Q. And in conjunction with your analysis, the development prospects for the expanded area of the unitized interval, have you looked at production data from offset San Andres wells?

A. Yes. To the south is the Burch Keeley Field, and there is also -- there is a well -- the Siete Oil and Gas Falcon Federal is mentioned in the cross section. They did get, you know, pretty commercial oil considering it wasn't fractured stimulated out of the middle San Andres.

14 And based on your analysis of those offset 0. 15 wells and your experience in the San Andres, do you 16 anticipate that the three initial wells in the expanded area of the unitized area will be productive in the 17 18 middle and lower-middle San Andres intervals? 19 I -- you know, with the amount of net pay Α. Yes. we're working with here, you know, typical, we could 20

21 probably expect somewhere between 40,000 and 80,000 MBO 22 on a primary, and, of course, we can probably bolt on 23 the 40- and 80,000 barrels of secondary reserves in 24 these wells through the middle and lower-middle San

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Andres.

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Page 30 And does Seguro have approved BLM APDs for the 1 Q. three initial wells? 2 3 Α. Yes. All three of them have been approved. And what are the estimated drilling and 4 Q. 5 completion costs for those wells? Basically the AFE estimate's around \$850,000. 6 Α. 7 I would consider, once we get the logs, we may want to -- it may be an additional 100,000 depending on the 8 size of the fracture stimulation. 9 And in your opinion, are those well costs 10 0. 11 reasonable? 12 Α. Yes. 13 Q. And have you come up with a figure for total 14 historical oil production from the West Square Lake Unit? 15 Yes. Basically about 4.8 million barrels from 16 Α. 17 the lower Grayburg and just the Lovington Sand and the San Andres section. 18 19 And that's from primary production and partial 0. 20 waterflood? 21 Exactly. The issue at hand is that, you know, Α. 22 that amount of volume of oil, our records -- it's very difficult because, you know, it goes all the way back 23 into the 1960s. We're estimating maybe 1 million 24 barrels of water was reinjected, so we're not anywhere 25

near fill-up on the reservoir. And looking at some vintage maps, it looks like there were maybe three, four or five spot patterns and that was it and maybe a little half of a peripheral flood. So there just wasn't even enough injectors in place in the '60s. And currently right now, there is only one injector. So --

Q. And is Seguro's long-term intention more to
extensively waterflood both the existing and expanded
unitized intervals?

10 I mean, we should -- you know, if we Α. Yes. 11 complete and get the patterns put in with the new wellbores that will bolt on with the San Andres wells, 12 there is the potential for recovering, you know, 13 3 million barrels out of, you know, the existing 14 interval by properly getting it flooded. And then, of 15 16 course, you know, we'll also have the additional middle and lower-middle San Andres, you know, something on the 17 18 order of say -- if you count 40 locations on 40-acre 19 spacing, you're looking at somewhere of 1.6 million in 20 primary and 3.2 million on secondary. So there's a lot 21 of plus side to this project. 22 0. And do you agree with Mr. Bradley that the ROZ

23 is a potential source of water for the expanded 24 waterflood operations?

A. Yes. The one drill-stem test that was

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Page 32 mentioned that was in the ROZ, they picked up two 1 barrels of oil and 250 feet of sulfur water, which, you 2 know -- I don't know what that would be in feet, but 3 that's a fairly good drill-stem test in that interval. 4 And typically your ROZ wells are -- you know, they're 5 typical 2,000 barrels of water a day. And considering 6 7 we're going to need 3-1/2 million barrels of water, this 8 could be an excellent opportunity to repressurize the 9 original Grayburg section. 10 And in your opinion, will Seguro's development 0. 11 of the expanded area of the unitized area be profitable? 12 Α. I think so, very much so. 13 And in your opinion, will the proposed vertical 0. 14 expansion of the unitized interval serve the interest of 15 conservation and the prevention of waste and protect 16 correlative rights? 17 Α. Absolutely. MR. LARSON: I will pass the witness. 18 19 MS. ANTILLON: No questions. 20 EXAMINER BROOKS: No questions. 21 CROSS-EXAMINATION 22 BY EXAMINER LOWE: 23 You referenced 40 -- is that 40,000 barrels and 0. 24 80,000 barrels? That's a range, 40,000 to 80,000 barrels. 25 Α. Ι

Page 33 mean, the -- the wells down to the south that I 1 mentioned that we looked at, the Burch Keely, some of 2 those are 150- to 200,000 barrels. And, you know, the 3 hard part -- we all know the San Andres. The logs don't 4 5 tell us permeability, so -- but I think that's a conservative fair number to use. 6 7 ο. Okay. Okay. You mentioned -- was it \$85,000 8 for the cost pertaining to --9 Α. 850,000. 10 \$850,000. Q. Yes, with the potential of maybe an additional 11 Α. 12 \$100,000 if we need a larger fracture stimulation. 13 Q. Okay. EXAMINER LOWE: Michael? 14 15 CROSS-EXAMINATION 16 BY EXAMINER McMILLAN: 17 Q. Where are you getting your figures from? Τ 18 don't see any -- I don't see any supporting evidence for 19 what you've just said. Where's the AFE? Where's --20 We can provide the AFE. Α. 21 Yeah. I mean, I think the OCD needs exhibits Q. 22 that you can -- that backs up your statements. I don't 23 see any exhibits for your 40- to 80,000 barrels of oil. 24 Α. We've got it. We can provide it. 25 You should have provided it. Q.

Page 34 I'm sorry. I mean, I just --1 Α. 2 There is really no excuse for not providing Q. 3 that at hearing. We really have no way of telling whether or not -- based on your testimony, whether or 4 not it's correct. 5 Okay. I apologize. I mean, that's something 6 Α. 7 we can easily provide to you. I mean, 40- to 80,000 8 barrels is very typical for San Andres. 9 0. We don't see that. We have no way of knowing 10 that. 11 Α. Okay. 12 Q. Yeah. Did you use decline curves? 13 14 We used offset wells in the area. Α. Okay. We'd like to see that. 15 Q. 16 Α. Okay. 17 And you said that they flooded with a million Q. barrels of water. Where is that information? 18 It's very spotty. We'll provide -- I mean --19 Α. 20 Okay. And I realize we're dealing with some 0. 21 1940s wells. 22 Α. Onion skins --23 And some of the operators that you've named Q. were dishonest. 24 25 Α. Correct.

Page 35 1 So we need -- we really need more 0. 2 information --3 Α. Okay. 4 -- than what you came up here and presented. Q. 5 That's not a problem. Α. And you'll certainly supply the State Land 6 Q. 7 Office with that information, too. 8 Α. Absolutely. 9 EXAMINER McMILLAN: Do you have any objections to that? 10 11 MS. ANTILLON: No. 12 EXAMINER McMILLAN: Okay. 13 EXAMINER LOWE: At this time we'll take a five-minute break to discuss what --14 EXAMINER McMILLAN: Our future actions. 15 16 EXAMINER LOWE: Yeah, our future actions. 17 (Recess, 9:11 a.m. to 9:15 a.m.) 18 EXAMINER LOWE: We'll go back on the 19 record. 20 From what Michael indicated and what we've all noticed on our end, this case will probably be taken 21 22 under advisement. What we'll probably do is request these exhibits to be submitted to our office by July 23 24 8th, 2019 so that we can fully solidify the conclusion 25 of this case once it's taken under advisement.

Page 36 The State Land Office also 1 MS. ANTILLON: 2 is concerned that they don't have preliminary approval from either BLM or the State Land Office, so we would 3 want to make it subject to that as well. 4 5 EXAMINER LOWE: Okay. EXAMINER BROOKS: All exhibits that are 6 7 sent to the OCD will be shared with the State Land 8 Office's attorney. 9 MR. LARSON: of course. And it's my understanding I'll submit it on the OCD Hearings email 10 11 address. 12 EXAMINER LOWE: Yes. 13 MR. LARSON: And at the point in time we hopefully do get preliminary approval from the BLM and 14 State Land Office, I'll immediately submit that as well. 15 16 EXAMINER McMILLAN: Okay. I do have one -if you guys are going to drill a new well, the OCD wants 17 to make sure that we get a copy of all the logs, 18 19 including the mud logs. And certainly the State Land 20 Office will get a copy of that, too. 21 Is that okay? 22 EXAMINER LOWE: That's fine. 23 And we appreciate if it's earlier than that 24 time date, but that's the maximum time table. 25 I anticipate we will get it to MR. LARSON:

Page 37 you well before. 1 EXAMINER LOWE: Because a lot of stuff that 2 we come across, things tend to get lost when we're 3 waiting around for certain things, and you'll be calling 4 in a couple of months to find out where things are at, 5 so the earlier the better --6 7 MR. LARSON: understood. 8 EXAMINER LOWE: -- as we proceed. 9 So that concludes your --10 MR. LARSON: Yes, it does. 11 EXAMINER LOWE: So Case Number 20253 will 12 be taken under advisement once additional exhibits are 13 submitted to the OCD. 14 Thank you, Mr. Examiner. MR. LARSON: EXAMINER LOWE: Thanks. 15 16 (Case Number 20253 concludes, 9:18 a.m.) 17 18 19 20 21 22 23 24 25

Page 38 1 STATE OF NEW MEXICO 2 COUNTY OF BERNALILLO 3 CERTIFICATE OF COURT REPORTER 4 5 I, MARY C. HANKINS, Certified Court Reporter, New Mexico Certified Court Reporter No. 20, 6 7 and Registered Professional Reporter, do hereby certify 8 that I reported the foregoing proceedings in 9 stenographic shorthand and that the foregoing pages are a true and correct transcript of those proceedings that 10 were reduced to printed form by me to the best of my 11 12 ability. 13 I FURTHER CERTIFY that the Reporter's Record of the proceedings truly and accurately reflects 14 the exhibits, if any, offered by the respective parties. 15 16 I FURTHER CERTIFY that I am neither employed by nor related to any of the parties or 17 18 attorneys in this case and that I have no interest in 19 the final disposition of this case. 20 DATED THIS 15th day of July 2019. 21 22 MARY C. HANKINS, CCR, RPR 23 Certified Court Reporter New Mexico CCR No. 20 Date of CCR Expiration: 12/31/2019 24 Paul Baca Professional Court Reporters 25