

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

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

APPLICATION OF HILCORP ENERGY COMPANY CASE NO. 16403
TO AMEND THE WELL DENSITY AND LOCATION
REQUIREMENTS AND ADMINISTRATIVE EXCEPTIONS
OF THE SPECIAL RULES FOR THE BLANCO-MESAVERDE
GAS POOL, RIO ARRIBA AND SAN JUAN COUNTIES,
NEW MEXICO.

REPORTER'S TRANSCRIPT OF PROCEEDINGS

COMMISSIONER HEARING

September 13, 2018

Santa Fe, New Mexico

BEFORE: HEATHER RILEY, CHAIRWOMAN
ED MARTIN, COMMISSIONER
DR. ROBERT S. BALCH, COMMISSIONER
BILL BRANCARD, ESQ.

This matter came on for hearing before the
New Mexico Oil Conservation Commission on Thursday,
September 13, 2018, 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

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

APPEARANCES

FOR APPLICANT HILCORP ENERGY COMPANY:

JAMES G. BRUCE, ESQ.
Post Office Box 1056
Santa Fe, New Mexico 87504
(505) 982-2043
jamesbruc@aol.com

and

MICHAEL H. FELDEWERT, ESQ.
ADAM G. RANKIN, ESQ.
HOLLAND & HART, LLP
110 North Guadalupe, Suite 1
Santa Fe, New Mexico 87501
(505) 988-4421
mfeldewert@hollandhart.com
agrarkin@hollandhart.com

FOR INTERESTED PARTIES LOGOS RESOURCES II, LLC AND LOGOS OPERATING, LLC:

J. SCOTT HALL, ESQ.
MONTGOMERY & ANDREWS LAW FIRM
325 Paseo de Peralta
Santa Fe, New Mexico 87501
(505) 982-3873
shall@montand.com

FOR INTERESTED PARTY ENDURING RESOURCES:

MICHAEL H. FELDEWERT, ESQ.
HOLLAND & HART, LLP
110 North Guadalupe, Suite 1
Santa Fe, New Mexico 87501
(505) 988-4421
mfeldewert@hollandhart.com

FOR INTERESTED PARTY SAN JUAN CITIZENS ALLIANCE:

GABRIEL PACYNIAK, ESQ.
JON ANDERSON, Law Student
UNIVERSITY OF NEW MEXICO SCHOOL OF LAW

1	INDEX	
2		PAGE
3	Case Number 16403 Called	5
4	Public Comment:	
5	By Ms. Feibelman	9
	By Ms. Homann	14
6	By Mr. Mumley	16
	By Mr. Toledo	17
7	By Ms. Fisher	18
	By Ms. Seamster	22
8	By Dr. Morgan	118
	By Mr. Otter	121
9	By Ms. Bezold	122
	By Ms. Waters	125
10	By Mr. Vietel	129
11	Lunch Recess	24
12	Motion for Intervention, Motion to Strike Intervention	26
13	Executive Session/Finding of the Commission	42/43
14		
15	Hilcorp Energy Company's Case-in-Chief:	
16	Witnesses:	
17	Charles Creekmore:	
18	Direct Examination by Mr. Bruce	46
	Cross-Examination by Chairwoman Riley	58
19	Cross-Examination by Commissioner Balch	58
	Cross-Examination by MR. Brancard	59
20	Redirect Examination by Mr. Bruce	60
	Recross Examination by Mr. Brancard	61
21		
22	Charles Creekmore (Re-called):	
23	Direct Examination by Mr. Bruce	111
24	Andrew Sparks:	
25	Direct Examination by Mr. Bruce	62
	Cross-Examination by Commissioner Balch	75

1	INDEX (Cont'd)	
2		PAGE
3	Hilcorp Energy Company's Case-in-Chief (Cont'd)	
4	Witnesses (Cont'd):	
5	Michelle M. Sivadon:	
6	Direct Examination by Mr. Bruce	79
	Cross-Examination by Chairwoman Riley	101
7	Cross-Examination by Commissioner Balch	103
	Recross Examination by Chairwoman Riley	107
8	Cross-Examination by Mr. Brancard	108, 109
	Recross Examination by Commissioner Balch	109, 110
9		
10	Comment by Mr. Hall	113
11	Comment by Mr. Anderson	117
12	(See "Public Comment" on page 3 of this index for last of public comments on pages 118 through 129.)	
13		
14	Executive Session/Finding of the Commission	130
15	Other Business/Statement of the Commission by Commissioner Balch	134
16	Proceedings Conclude	136
17	Certificate of Court Reporter	137
18		
19	EXHIBITS OFFERED AND ADMITTED	
20	Hilcorp Energy Company Exhibit Numbers 1 through 6	57/58
21		
22	Hilcorp Energy Company Exhibit Number 1, Pages 10 through 20	74
23	Hilcorp Energy Company Exhibit Numbers 1, Pages 21 through 35	100/101
24		
25	LOGOS Resources II, LLC and LOGOS Operating, LLC Exhibit Number 1	113/114

1 (11:41 a.m.)

2 CHAIRWOMAN RILEY: With it being so close
3 to the noon hour, I think now is a good time for us to
4 break for lunch. So why don't we all plan on being back
5 here at 1:00, and we'll start our next case, 16403,
6 Hilcorp's application.

7 MS. FEIBELMAN: You know, many members of
8 the public have traveled quite a distance to be here,
9 representing organizations throughout the state. I,
10 unfortunately, will have to go pick up my child after
11 this. If you could at least allow for public comment so
12 people who have been waiting here since before 9:00 a.m.
13 can have our say before dispensing [sic] for lunch. I
14 think 15 minutes would probably do it for anyone who is
15 still here.

16 CHAIRWOMAN RILEY: Well, we have processes
17 that we have to go through, and I think our next -- our
18 next decision will be on the motion to intervene from
19 San Juan Alliance.

20 COMMISSIONER BALCH: We can't take public
21 content before hearing the case.

22 MS. FEIBELMAN: Well, why not use the 15
23 minutes to get started since we're been here since
24 early. You know, it just seems like we could have lunch
25 at 12:30 or something else. But, you know, we've been

1 waiting here since before 9:00. You didn't start on
2 time. You know, this is the public's time, and it's
3 difficult to get here, and we'd appreciate some time on
4 this.

5 COMMISSIONER BALCH: We certainly
6 appreciate your concerns. It was pretty clearly listed
7 on the docket where this case would be and that it would
8 not be the first thing heard.

9 MS. FEIBELMAN: Okay. I'm sorry.

10 MR. PACYNIAK: The public hearing notice
11 only had two issues on the docket. At least one --

12 MR. BRANCARD: Right, but there is an
13 agenda for the hearing -- for the meeting which lists
14 all the matters to be taken up by the Commission.
15 That's also on the website.

16 Madam Chair, we have several preliminary
17 motions to consider in this case that may take up some
18 time --

19 CHAIRWOMAN RILEY: Uh-huh.

20 MR. BRANCARD: -- and I think they're
21 pretty important issues for the Commission to hear from
22 the parties on and to deliberate on. So unless the
23 parties want to offer anything -- I don't know. Is
24 Mr. Bruce here?

25 Mr. Feldewert, are you representing Hilcorp

1 at this moment?

2 MR. FELDEWERT: Both Mr. Bruce and my law
3 firm are representing Hilcorp.

4 I am certainly prepared to address the
5 motions when you want to hear them. Mr. Bruce will be
6 presenting the witnesses, along with Mr. Rankin.

7 COMMISSIONER BALCH: It's usually our
8 policy to hear the public comment towards the end of the
9 hearing. So one thing that we might be able to do for
10 your particular case is if you would put something into
11 writing and present it to us, then we could look at it
12 at the appropriate time.

13 MS. FEIBELMAN: But are you going to be
14 making a decision today?

15 COMMISSIONER BALCH: We don't even know if
16 we will get to deliberations today. It could be several
17 hours. Irregardless, at the end of today, we would have
18 a time period for public comment, even if the hearing is
19 going to be continued to the next day or next week or
20 next month. We always have, at the end of every day or
21 every period, a time for public comment.

22 MR. PACYNIAK: Can we ask if -- this is
23 Gabe Pacyniak from the UNM Natural Resources
24 Environmental Law Clinic on behalf of the San Juan
25 Citizens Alliance. We'd ask if the parties would

1 oppose -- understanding that there is a process that the
2 Commission follows, if the parties would oppose having
3 15 minutes now to hear public statements, recognizing
4 that we'll follow the rest of the process after the
5 break?

6 MR. BRANCARD: We assume you're not opposed
7 to it.

8 MS. FEIBELMAN: No. We would support that.

9 MR. BRANCARD: Mr. Feldewert?

10 MR. FELDEWERT: I leave it up to the
11 discretion of the Commission. I know how you normally
12 operate and when you normally take public comment. I
13 think that's pretty clear, and also that you had your
14 agenda published for everybody to see. So I leave it up
15 to your discretion.

16 COMMISSIONER BALCH: How many people are on
17 the comment sheet?

18 (The court reporter requested the speaker
19 identify herself.)

20 MS. FEIBELMAN: Sure. Camilla Feibelman.
21 I'm the director of the Rio Grande Chapter of the Sierra
22 Club.

23 UNIDENTIFIED SPEAKER: There are ten people
24 on the public comment sheet.

25 COMMISSIONER BALCH: Out of those ten

1 people, who won't be able to stick around for the rest
2 of the day?

3 UNIDENTIFIED SPEAKER: Some of them, I
4 think, already left.

5 CHAIRWOMAN RILEY: Was that three or four?

6 COMMISSIONER BALCH: Four. That would be
7 up to 20 minutes for public comment.

8 COMMISSIONER MARTIN: I don't care, either
9 way.

10 CHAIRWOMAN RILEY: Okay. If there aren't
11 any objections from the attorneys, then we can entertain
12 taking public comment from those that are not able to
13 stay until later. But if you are able to stay, let's
14 keep those until later and stay with the process if we
15 could.

16 So if you would like to start. Please
17 state your name and where you're from.

18 MS. FEIBELMAN: Sure. Okay.

19 My name is Camilla Feibelman. I'm the
20 director of the Rio Grande Chapter of the Sierra Club,
21 and I represent over 10,000 members throughout the state
22 and West Texas. I'm here to express concern about
23 Hilcorp's proposal and to read letters from two of our
24 members in the Four Corners area. These are members of
25 the Sierra Club and also of the San Juan Citizens

1 Alliance.

2 From Janet Rees from Bloomfield, New
3 Mexico, "Subject: Hilcorp Energy Company application,
4 Case 16403.

5 "I ask that you delay making a decision
6 about Hilcorp Energy Company's application case to cut
7 drilling spacing from 80 acres to 40 acres for Mesaverde
8 wells in San Juan and Rio Arriba Counties and that you
9 provide adequate time and opportunity for public comment
10 on this proposal and for impact assessments to be made.
11 Because the area immediately affected consists of these
12 two counties, it would be appropriate to hold a public
13 comment session in Farmington, New Mexico announced far
14 enough in advance to give interested parties the
15 opportunity to participate.

16 "I only became aware of Hilcorp's proposal
17 in an article published on September 9th, 2018 in the
18 "Daily Times" article titled "Hilcorp: Change gas well
19 density rule." The article states, quote: "The agenda
20 does not include a public comment period, and only
21 people involved in the case or interveners are permitted
22 to speak during the hearing." I find this lack of
23 provision for public input unacceptable.

24 "I am making my request as a citizen of San
25 Juan County, New Mexico, who engages in recreation on

1 public lands in our county, who has been an active
2 member of Four Corners Air Quality Group from its
3 inception, and who is a wildlife advocate.

4 "Potential negative impacts should be
5 assessed before you reach a decision including impacts
6 affecting our air, water, public health, society,
7 wildlife, and landscape. The proposal will directly
8 impact many area ranchers, tribal members, as well as
9 other residents.

10 "The trend to more frequent and persistent
11 droughts in the West is cause for alarm and should be
12 factored into our decision-making for an industry that
13 needs water. The United States Drought Monitor still
14 shows the Four Corners in exceptional drought on their
15 September 6th, 2018, map. This drought with its
16 accompanying water restrictions has impacted our area
17 for several months now with no signs of abating.

18 "I ask that you provide well-advertised and
19 convenient opportunities for the public to comment
20 including a session in Farmington and that you make
21 needed impact assessments before reaching a decision on
22 Case 16403."

23 And then from Shirley McNall, a resident of
24 Aztec, New Mexico, she writes:

25 "According to the September 13th, 2018

1 NMOCD agenda, there is no public comment period."

2 Today, I'm recognizing that you're adding that, so I'll
3 skip that part.

4 "The hearing is being held in Santa Fe. I
5 believe that hearings to address this issue should be
6 conducted in the impacted areas of San Juan and Rio
7 Arriba Counties. Where is the transparency and regard
8 for the impacted people under the current environmental
9 conditions?

10 "Yes, I stated "impacted people." Those of
11 us who live near gas wells are subjected to toxic
12 emissions from these facilities 24 hours every day.
13 There are a reported 35,000 or more oil and gas wells in
14 the San Juan Basin Area in San Juan County, Rio Arriba
15 Counties [sic] in New Mexico and in La Plata County,
16 Colorado. Toxic emissions have no boundaries. Many of
17 these 35,000 gas wells are Blanco-Mesaverde Formation
18 wells.

19 "My family and I live in the San Juan Basin
20 in San Juan County, New Mexico. Our home is in the
21 small town of Aztec, New Mexico. We live in the east
22 side of town. Our neighborhood is adjacent to BLM
23 lands. A recent survey was conducted by a reliable
24 organization that mapped 25 gas wells within a mile
25 radius of our Aztec home. Some of these nearby gas

1 wells are Hilcorp-owned Mesaverde Formation wells. Nine
2 active gas wells are within less than a half mile from
3 our home. We are consistently exposed to toxic
4 emissions including neurotoxic and potentially deadly
5 hydrogen sulfide. A recent memo from BLM stated that
6 there are gas wells that contain 1,500 ppm hydrogen
7 sulfide near our home. A BLM map shows more than 325
8 hydrogen sulfide contaminated wells within the San Juan
9 Basin. The map is several years old. Hydrogen sulfide
10 presence in the gas wells in our area should be a
11 serious consideration in this decision.

12 "I'm sure you're well aware of the methane
13 hot spot cloud that hovers over our area. As far as I
14 know, not much has been done to mitigate the methane
15 emitted by the oil and gas facilities even though claims
16 have been made that methane has been reduced. The
17 proposed Hilcorp production will add to the methane
18 emissions in our area.

19 "Our area has been designated as an Extreme
20 Drought Area where water is in very short supply. We're
21 under serious water restrictions in Aztec and
22 Farmington. Our Aztec neighborhood irrigation ditch is
23 dry this week because the State Engineer ordered ditch
24 rotation for all of the irrigation ditches in San Juan
25 County. Workovers and drilling of wells require massive

1 amounts of precious water.

2 "Please take more time to study the Hilcorp
3 proposal. I'm not aware of any recent Environmental
4 Studies that should be required" -- that are required
5 "by your agency. I believe that too much is at stake
6 for the environment and health and welfare of the
7 impacted people under the current environmental
8 conditions. Your agency should not make such a hasty,
9 nontransparent and drastic decision at this time."

10 And I'll leave you a copy my --

11 CHAIRWOMAN RILEY: Yes.

12 MS. FEIBELMAN: Thank you so much.

13 CHAIRWOMAN RILEY: Who would like to go
14 next?

15 Please state your name and where you're
16 from.

17 MS. HOMANN: My name is Melissa Homann.
18 I'm from Albuquerque, New Mexico. And I get very
19 emotional about this, and I apologize ahead of time.
20 I'm trying to read the statement.

21 I really appreciate this time to speak and
22 that you took the opportunity to change the schedule.

23 I deeply hope you reconsider the go-ahead
24 for Hilcorp Energy's application for additional wells in
25 northern New Mexico, San Juan Rio, Rio Arriba

1 Counties (crying). I apologize. This application
2 process, please, needs to be reassessed and given more
3 planning time.

4 I attended the Sandoval County Commissioner
5 ordinance meeting for many months on regulating the
6 hydraulic fracturing where I listened to concerned
7 citizens, Native Americans, scientists, geologists, and
8 healthcare workers testifying.

9 I witnessed clear data showing -- even
10 presented with hearing sound machines -- the health and
11 environmental effects on the air, water, sacred lands
12 fracking causes. This is hydraulic fracking.

13 There is also a Pennsylvania study that
14 came out in 2017 in "Science Advances." This study
15 analyzes the records of more than 1.1 million births in
16 Pennsylvania from 2004 to 2013, comparing infants born
17 to mothers living at different distances from active
18 fracking sites and those born both before and after
19 fracking was initiated at each site. And the study
20 concludes the development of hydraulic fracking has
21 unhealthy impacts for in utero exposure within 1
22 kilometer of fracking sites, which include greater
23 incidence of low-birth babies and, therefore, will be
24 high risk of poor birth outcomes.

25 I beg you to please re-assess and give more

1 planning time.

2 Thank you so much. I'm sorry I'm
3 emotional.

4 CHAIRWOMAN RILEY: That's okay. Thank you
5 for your input.

6 MR. MUMLEY: My name is Joe Mumley. I'm
7 from Albuquerque also. This (indicating) is my wife.

8 Basically, I've been going to the Sandoval
9 County ordinance hearings on fracking for the last 16
10 months, and I've gotten quite an education from the
11 public portion of the meetings. The scientists,
12 hydrologists, former oil company workers gave me the
13 education. I didn't learn anything from the
14 representatives from oil and gas. They said there was
15 no danger to the health and to the water aquifers of the
16 Rio Grande Basin.

17 So, you know, basically -- I don't know --
18 I can get very emotional, too. My whole life has been
19 one of regulations by some agency not being followed,
20 from the -- you know, the death of the anthracite coal
21 business in Scranton, when I was a child, to my family's
22 coal company, to my father going to New Jersey working
23 for Johns-Manville asbestos company, where the company
24 knew that 10,000 people would die of cancer, and they
25 all died, and they didn't tell anyone. So going to the

1 Sandoval County hearings has brought this back up for
2 me.

3 And hearing that you're going to double the
4 number of fracking wells by this company just is
5 amazing. I'm hearing reports that half the world now is
6 running out of water, the UNM report about Southeast
7 Asia, 2 billion refugees by 2100, possibly the end of
8 that civilization.

9 So I don't have anything more to say, and
10 thank you for your time.

11 CHAIRWOMAN RILEY: Thank you, sir.

12 MR. TOLEDO: Hi. I'm Derrick Toledo with
13 the Sierra Club. I'm from the Jemez Pueblo, and I'm
14 here today because my people need me to be here. Let me
15 tell you about why I'm here to speak out today.

16 I want to speak out against the application
17 of increasing the number of wells and wells based in the
18 Four Corners area. The overall cumulative effect will
19 have various lasting impacts on New Mexicans, Native
20 people in the area, people downstream and even ranchers
21 in the area. These companies that are in there, these
22 extraction companies, don't have a one-year-old daughter
23 who still has her whole life to live in this polluted
24 area. They don't have a grandma who has been diagnosed
25 with cancer for ten years and walks around with an

1 oxygen tank, except for this past year. She's a lot
2 more -- she's gone into a worse condition. So the way I
3 see it now, there is only -- just to put it in terms
4 of -- for people of public comment, there is only one
5 land mine out there? But this application -- let's put
6 more land mines out there, and let's put them in closer
7 proximity. Let's see what happens. Let's play with
8 fire.

9 Like I said, I wanted to give my comment.
10 My people need me to be here. I'm probably the only
11 Native here, so that's my input today. I just wanted to
12 make sure -- our opinion needs a voice.

13 Thanks.

14 CHAIRWOMAN RILEY: Thank you.

15 MS. FISHER: I have a comment, but I don't
16 have a very strong voice. May I come up closer to
17 you-all?

18 CHAIRWOMAN RILEY: Certainly.

19 MS. FISHER: I start out strong, and then
20 I've been told I just peter out and people can't hear
21 me, so thank you.

22 First of all, thank you so much for
23 changing the standard procedure and hearing us today. I
24 appreciate that.

25 My name is Lynne Fisher, and I'm here in

1 Santa Fe as a citizen. And I understand that the
2 Commission is here to regulate the industry and to
3 basically enforce the regulations that you enact, and I
4 take an inference there that it also means that you are
5 here to protect the public and the environment. They
6 kind of go hand in hand. The regulations are there to
7 do that for us.

8 With that in mind, I wanted to share a bit
9 of an article that I read. I won't read the whole
10 thing, but it's from DeSmog. It's a May 30th, 2018,
11 article that they did, and there are a couple of key
12 paragraphs that I wanted to share with you. And this is
13 about Hilcorp.

14 "Hilcorp sums up its business philosophy in
15 three words: 'Acquire and exploit.' It has gained a
16 reputation for buying up oil and gas fields that have
17 fallen out of major oil firms' focus and reinvigorating
18 the fields in part by slashing operating costs and
19 fostering a rules-be-damned corporate culture."

20 And then it goes on to talk about a number
21 of different states that Hilcorp has been operating in
22 in the past, and this isn't the distant past. This is
23 the recent past.

24 "Hilcorp's track record in Alaska, where it
25 has operated only since 2012, is riddled with spills,

1 accidents, and intentional violations of state law.

2 "Investigative reporting by Inside Climate
3 News and the Revelator discovered that state regulators
4 grew frustrated with Hilcorp to a highly unusual degree.
5 'The disregard for regulatory compliance is endemic to
6 Hilcorp's approach to its Alaska operations and
7 virtually assured the occurrence of this violation,'
8 the chair of Alaska's Alaska Oil and Gas Conservation
9 Commission wrote to the company in November of 2015.
10 Inside Climate News found 'Hilcorp's conduct is
11 inexcusable.'

12 "'Hilcorp's history of noncompliance and
13 its failure to take the rudimentary measure of entering
14 AOGCC's requirements in its regulatory tracking system
15 preclude any claims that Hilcorp has acted in good
16 faith,' said a 2016 state decision, 'fining the
17 company'" -- sorry -- "'has not [sic] acted in good
18 faith...fining the company for failing to file required
19 reports.'

20 "In Ohio, the oil and gas firm is suspected
21 of causing over 75 earthquakes due to fracking
22 operations which inject fluids" -- you know all of that.
23 "Hilcorp's Louisiana track record includes seven oil
24 spills in one year, totaling over 22,000 gallons of
25 crude.

1 "The feds fined Hilcorp for five Clean Air
2 Act violations in Pennsylvania between 2014 and 2015.
3 The following year, the U.S. Pipeline and Hazardous
4 Materials Safety Administration discovered an array of
5 safety violations, 'including failure to inspect and
6 test gas pipeline main valves and relief valves, failure
7 to follow control room management procedures and failure
8 to accurately report pipeline flow data.'

9 "'Every other company seems to get it but
10 Hilcorp,' Scott Eustis, coastal wetland specialist for
11 the Gulf Restoration Network, told the Revelator after
12 Hilcorp leased up land used by oystermen after its
13 illegal dredging methods damaged oyster beds. 'They are
14 a company whose business model is to rip and run, and
15 their acquisition of oyster leases is a plan to
16 pollute.'"

17 Thank you for letting me read all that.

18 So it seems to me that your job is to make
19 sure that we have good actors in this industry in this
20 state. And so I would ask you at the very least to
21 delay and do more research and investigation on
22 Hilcorp's activities currently in this state and also
23 the impacts environmentally that it would have in our
24 state with double drilling.

25 Beyond that, I actually would prefer that

1 you just deny this application, but if you can't do
2 that, then I hope you will take time to deliberate it
3 and also allow for more public input. When I watch
4 these hearings, I'm really struck by the fact that, you
5 know, if commissions only hear from legal people
6 involved in the industry and only industry people, you
7 get a very narrow perspective on the industry, becomes
8 numbers and legal issues. So hearing from the public I
9 think is a really important key factor because this
10 industry is more than just rigs and numbers and legal
11 issues. It involves people and land and water and air,
12 and we all need to work to make sure we have good actors
13 here, too.

14 Thank you.

15 CHAIRWOMAN RILEY: Thank you.

16 Is there anybody else that needs to speak
17 right now?

18 MS. SEAMSTER: Madam Chair, I am not on the
19 list, and I do not have a comment prepared, but I do
20 have documents from the Health Impact Assessment
21 Committee, which is in San Juan County partially. Their
22 chapter runs over three different counties.

23 MR. BRANCARD: Would you identify yourself?

24 MS. SEAMSTER: Yes. I'm Theresa Seamster.

25 CHAIRWOMAN RILEY: One thing that we didn't

1 talk about earlier is that we do have time limits, and
2 everybody's doing a good job. You're not getting too
3 lengthy, but we need to limit it to three minutes per
4 speaker.

5 MS. SEAMSTER: I don't even need that. I
6 just have documents and I'm just wondering if I could
7 have permission to share those with you. I did leave
8 them as part of the record up in Florene's office.

9 MR. BRANCARD: Okay.

10 MS. SEAMSTER: So if you already have them,
11 that's fine. Otherwise, I have hard copies for you.

12 MR. BRANCARD: I think we've gotten a
13 number of public comments already with Ms. Davidson.
14 And that's Florene over there.

15 MS. SEAMSTER: Thank you, Florene.

16 CHAIRWOMAN RILEY: All right. Thank you.

17 Okay. Well, should we go ahead and break
18 for lunch and come back, and we can take care of
19 business in this case? We're off the record.

20 COMMISSIONER MARTIN: What time do we come
21 back?

22 CHAIRWOMAN RILEY: Let's come back at 1:20,
23 an hour and 15.

24 (Recess, 12:06 p.m. to 1:22 p.m.)

25 CHAIRWOMAN RILEY: Let's get started back

1 up. It is 1:22, and we're going to hear the next case,
2 Case Number 16403, application of Hilcorp. So if the
3 attorneys want to come up, we're going to talk first
4 about the motion to intervene by San Juan Citizens
5 Alliance, is the first matter.

6 MR. BRANCARD: I think we have a motion to
7 strike the intervention.

8 MR. FELDEWERT: Correct. Correct.

9 CHAIRWOMAN RILEY: Okay.

10 MR. FELDEWERT: And we probably need to
11 have our entry of appearances on the record. I know we
12 kind of got out of turn.

13 CHAIRWOMAN RILEY: Yeah. It was a little
14 confusing following that record. So identify the
15 parties and counsel representing the parties first.

16 MR. FELDEWERT: Sure. So, Madam Chair,
17 members of the Commission, Michael Feldewert and Adam
18 Rankin, from the Santa Fe office of Holland & Hart,
19 appearing on behalf of the Applicant, Hilcorp Energy
20 Company, as well as Mr. Jim Bruce who will be presenting
21 the witnesses here today.

22 CHAIRWOMAN RILEY: Okay. Thank you.

23 MR. ANDERSON: Madam Chair, Commissioners,
24 My name is Jon Anderson. I'm a clinical law student at
25 the University of New Mexico School of Law, practicing

1 under the supervision of professional Gabriel Pacyniak,
2 my supervising attorney, and we are representing San
3 Juan Citizens Alliance who has filed a notice of
4 intervention and motion for continuance in Case Number
5 16403.

6 CHAIRWOMAN RILEY: Thank you.

7 MR. HALL: And, Madam Chair, Scott Hall, of
8 Santa Fe, appearing on behalf of LOGOS Resources II, LLC
9 and LOGOS Operating, LLC.

10 CHAIRWOMAN RILEY: Okay. Thank you.

11 MR. FELDEWERT: And, Madam Chair, members
12 of the Commission, Michael Feldewert, of the Santa Fe
13 office of Holland & Hart, appearing on behalf of
14 Enduring Resources, who is an operator in the San Juan
15 Basin -- a substantial operator now in the San Juan
16 Basin and has acreage offsetting the acreage held by
17 Hilcorp. They have acreage within this pool. And they
18 are here authorizing me to inform you that they are in
19 full support of Hilcorp's application, and they are also
20 in full support of the motion to strike the intervention
21 that was filed by the San Juan Citizens Alliance.

22 CHAIRWOMAN RILEY: Thank you.

23 MR. BRANCARD: Did you file a notice of
24 appearance for them?

25 MR. FELDEWERT: Yes.

1 MR. BRANCARD: Okay.

2 CHAIRWOMAN RILEY: As a matter of process,
3 who goes first, Mr. Brancard?

4 MR. BRANCARD: Well, I think the motion is
5 what we would be considering today. If the notice was
6 unopposed, we wouldn't consider it, so we'll consider
7 the motion to strike.

8 CHAIRWOMAN RILEY: Motion to strike?

9 MR. BRANCARD: Yeah.

10 MR. FELDEWERT: If I may approach before I
11 start my argument, I have two handouts.

12 CHAIRWOMAN RILEY: Yes.

13 MR. FELDEWERT: Madam Chair, members of the
14 Commission, the first handout that I've provided you is
15 just some of the statutes and regulations that are at
16 issue. I also have provided to you with their notice of
17 intervention that I will be referencing during the
18 argument here today.

19 Madam Chair, members of the Commission,
20 only a proper party can intervene and request a
21 continuance in matters like this. So the threshold
22 question here is whether the San Juan Citizens Alliance
23 is a proper party to this adjudicatory proceeding. And
24 I've provided in the handout to you the Division
25 regulations which define up there at the top on the

1 first page, 19.15.4.10, who the parties to an
2 adjudicatory proceeding like this are. It includes the
3 applicant, and it includes persons to whom a statute,
4 rule or order requires notice and then a person who
5 properly intervenes in this case.

6 If you'll take a look at the next page of
7 this handout, it provides the Division's regulation on
8 notice requirements for specific adjudications, which is
9 what we have here, and 19.15.4.12A(4) provides who is to
10 be provided notice when you have a request like this
11 affecting a specific pool like we have here, the
12 Blanco-Mesaverde Pool. And you'll see that per the
13 Division's regulation the Division-designated operators
14 and pool and then the Division-designated operators of
15 wells within the same formation as the pool and within a
16 mile of the well are parties to whom notice is to be
17 provided of this application and, therefore, afforded
18 party status in these type of proceedings. Any other
19 group, person, organization must properly seek to
20 intervene, and you have to file a timely motion, and
21 you've got to demonstrate standing in that notice to
22 intervene.

23 And if you look at the first page,
24 19.15.4.11, it identifies what you do if you want to
25 properly intervene, and it reflects that you have to

1 file a notice at least one business day before the date
2 of the filing of the pre-hearing statement. So it's got
3 to be timely.

4 And then secondly -- this regulation makes
5 it very clear -- that you've got to demonstrate the
6 nature of your interest, thereby affording -- indicating
7 why you believe you have standing to be a party in an
8 adjudicatory proceeding like this.

9 So then I look at what the San Juan
10 Citizens Alliance filed, and they acknowledge that they
11 filed their notice of intervention too late. It's
12 untimely. And they offered no justification for that
13 late filing other than to suggest to you that this
14 application is a matter of great public importance and,
15 therefore, untimely filing should be excused and
16 accepted.

17 Now, you're going to find out and see today
18 and as you probably know, the Commission's management of
19 this particular pool, the Blanco-Mesaverde Gas Pool, is
20 a pool that started in 1949. That's when this
21 Commission -- prior Commission created this pool and
22 established the initial well density. Hilcorp's
23 application constitutes the fourth time that this agency
24 has been asked to examine the data on geology, drainage,
25 reservoir characteristics and other complex information

1 to determine if the existing wells' spacing are adequate
2 to drain this reservoir. And in all prior cases -- all
3 prior cases, only operators have appeared before this
4 Commission as parties because this is a downhole
5 reservoir management issue. It is not a matter of great
6 public importance. It's important to operators, but
7 there are no implications here to the general public.

8 What has happened here is the San Juan
9 Citizens Alliance has improperly injected surface
10 concerns into this downhole technical reservoir
11 management case in an attempt to create or suggest that
12 this is a matter of great public importance. But this
13 application doesn't give rise to surface concerns, and
14 so this excuse, that this is a matter of great public
15 importance, does not hold water and is not a
16 justification for filing their notice late. And if this
17 type of subjective allegation is enough to excuse a late
18 motion to intervene, then you may as well just strike
19 that requirement out of the rule.

20 Second, not only does it have to be timely,
21 but you also have to demonstrate a basis for
22 intervention. And what have they offered to
23 substantiate the right to intervene as a party? And
24 that's the second handout. And I've discussed [sic]
25 some handwritten notes for pagination at the bottom.

1 That's my effort just to give us some page numbers.

2 That's why it looks a little wonky.

3 But I look at page 2 of their notice of
4 intervention, and this is the pleading that they're
5 required to file to demonstrate why they believe they
6 have standing to become a party in this case. And
7 here's what they offer you, a bunch of maybes. They
8 say, Well, if you allow this application to go forward,
9 it could increase the production of nondomestic waste,
10 and it could thereby impact public health and
11 environment. And then they suggest on the next page
12 that they're the San Juan Citizens Alliance, and they
13 are uniquely situated to address public health and
14 environmental impacts from oil and gas wells and
15 nondomestic waste. This type of speculation, this type
16 of conjecture does not establish injury in fact to
17 confer standing as a matter of law. And I don't want to
18 bore you. I could talk to Mr. Brancard. As he knows,
19 there are cases out there talking about this requirement
20 of standing, injury in fact. Justice Bosson gave us a
21 nice opinion in ACLU versus The City of Albuquerque,
22 where he denied the ACLU's standing to challenge a DWI
23 forfeiture that was passed by the City of Albuquerque
24 precisely because the injury-in-fact allegation was too
25 speculative; it was too tenuous to afford any kind of

1 standing. And the same is true here.

2 The Commission, under this application, is
3 not considering or approving applications to drill at
4 specific locations. It's not addressing how nondomestic
5 waste should be handled. This application does not
6 address how oil and gas wells should be permitted on
7 federal and state lands and what should be required to
8 permit a well on federal and state lands. That's not
9 what this is about.

10 All you're doing here is continuing
11 oversight of this reservoir to ensure that it is being
12 efficiently and effectively trained, and that effort
13 started in 1949. You met again in 1974 when you looked
14 at the geology and the reservoir information to
15 determine at that time whether additional wells were
16 necessary. You did it again in 1998. The Commission
17 came back again and looked at updated evidence of
18 geology and reservoir information to determine whether
19 increased wells were required to efficiently and
20 effectively drain this reservoir. And now we are here
21 20 years later, 20 years from 1998, with additional
22 information on drainage and geology to determine whether
23 the existing well density is sufficient to properly
24 drain this reservoir.

25 Now, the San Juan Citizens Alliance nor any

1 other similar group have ever participated in
2 underground management issues, and they do not allege
3 any particular expertise or any particular understanding
4 of these underground management issues. They merely
5 allege -- and I say tenuously -- an ability to address
6 concerns about nondomestic waste and concerns about the
7 impact of oil and gas wells on the surface estate, but
8 they're not at issue here. There are other forms to
9 address those types of issues when you want to talk
10 about well locations or the handling of nondomestic
11 waste. But this is about reservoir management,
12 underground reservoir management.

13 What has the last 20 years of production
14 shown about the current well density and spacing? Is
15 additional density needed to efficiently and effectively
16 drain the Blanco-Mesaverde Pool and thereby avoid the
17 waste of oil and gas in that pool, which is your primary
18 duty under the Oil and Gas Act, to make sure that there
19 are sufficient take points in a pool to ensure that it
20 is efficiently and effectively drained. That's all this
21 is about.

22 Surface impacts are addressed when you file
23 applications to drill at a specific site. All operators
24 must follow the BLM, the State Land Office, the OCD
25 requirements when permitting specific wells for

1 recompletion or drilling. All operators must follow the
2 Surface Owners Protection Act for fee and state lands.
3 That's the statute that was enacted by the legislature
4 to address some of their surface concerns. That's why
5 it's called the Surface Owners Protection Act. All
6 operators must follow regulations addressing the
7 disposition of nondomestic oil-field waste. All
8 operators must follow regulations dealing with the
9 surface equipment and air emission standards. None of
10 these requirements are impacted or otherwise at issue
11 under this application.

12 The only other basis they offer for
13 intervention is that they have a unique ability to
14 ensure that due process rights under the New Mexico
15 Rules Act are protected. I don't see how the San Juan
16 Citizens Alliance is uniquely situated to address due
17 process rights. That's no different than any other
18 grazing lessee or a rancher or any other member of the
19 public.

20 But more importantly, this is an
21 adjudicatory matter filed under 19.15.4. This is not an
22 application for statewide rulemaking filed under
23 19.15.3, so this New Mexico Rules Act doesn't even apply
24 here. So that basis doesn't hold any water.

25 This motion to intervene should be denied.

1 It's untimely, no good reason. It fails to allege a
2 proper basis for intervention. The surface issues they
3 desire to pursue here today in the context of this
4 hearing have nothing to do with the reservoir management
5 oversight that this body started in 1949 and is
6 continuing here today.

7 And this hearing should not be continued,
8 and it should not be spent on witnesses that are --
9 whether they're grazing lessees or ranchers or surface
10 landowners or other people to discuss completion
11 techniques, to discuss methane emissions, lost of -- I
12 saw loss of grazing forage, erosion of well pads,
13 noxious gases or handling of nondomestic waste. Other
14 forms exist to express their viewpoints on these issues.

15 And this hearing to address the continued
16 management of this underground reservoir using what we
17 now have, 20 years of additional production data,
18 additional reservoir data, additional examination of the
19 geology -- this is not the forum to air those types of
20 issues, so we ask that their notice of intervention be
21 stricken.

22 CHAIRWOMAN RILEY: Thank you.

23 Mr. Anderson.

24 MR. ANDERSON: Madam Chair, may I approach
25 the bench?

1 CHAIRWOMAN RILEY: Yes.

2 MR. ANDERSON: I have here an excerpt,
3 specifically Section 70-2-12, of the New Mexico Oil and
4 Gas Act that I'll be referencing for your convenience,
5 Madam Chair.

6 Madam Chair, the San Juan Citizens Alliance
7 respectfully requests that you approve our notice of
8 intervention in this matter. In accordance with Rule
9 19.15.4.11(A), San Juan Citizens Alliance has standing
10 due to San Juan Citizens Alliance's interest in the
11 protection of public health and the environment.

12 In our pre-hearing statement, Madam Chair,
13 we noted Sonia Grant and Mike Eisenfeld as two members
14 of the ISCA who wish to speak at the hearing.
15 Unfortunately, Mr. Eisenfeld had a family emergency last
16 night, and he is currently out of state and could not
17 attend. However, we do have Sonia Grant here, and I
18 would like to request permission to allow Sonia Grant to
19 speak as to what San Juan Citizens Alliance provides in
20 terms of the protection of public health and the
21 environment.

22 MR. BRANCARD: I think we're just dealing
23 with arguments from attorneys at this point.

24 MR. ANDERSON: Okay. So we don't have the
25 ability to --

1 MR. BRANCARD: I mean, there will be a
2 public comment portion later, but I think if you can
3 just summarize what your client's interest is, that
4 would be good.

5 MR. ANDERSON: Yes, sir. And our concern
6 here -- or the basis for our argument is essentially --
7 you know, right now we're asking for the right to inform
8 the Commission in its consideration of this application.
9 San Juan Citizens Alliance has the ability to inform the
10 Commission on -- specifically in reference to 70-2-12 of
11 the Oil and Gas Act on some considerations that you are
12 authorized to make.

13 San Juan Citizens Alliance was created more
14 than 30 years ago in the interest of advocating for the
15 people in the San Juan Basin, including Rio Arriba and
16 San Juan Counties, to advocate for clean water, fresh
17 air and healthy lands for the communities in the area.
18 In the last three years alone, they have provided more
19 than 1,300 pages of comments related to oil and gas
20 operations in the San Juan Basin to various agencies,
21 and we believe this uniquely positions them -- or
22 provides them the ability to inform this Commission on
23 considerations that you are authorized to take into
24 account in accordance with the oil and gas regulations.

25 Specifically, 70-2-12B of the Oil and Gas

1 Act authorizes this Commission to make rules and orders
2 that, one, protect public health and the environment;
3 two, prevent injury to neighboring properties; and,
4 three, protect groundwater.

5 It is our position that a by right doubling
6 of the number of wells allowed in the Blanco-Mesaverde
7 Gas Pool, which is what this amendment to the special
8 rule would effectively do, would likely result in
9 negative effects on public health, injury to properties
10 in the counties in question and possibly have negative
11 effects on groundwater. And as I stated before, these
12 are all issues that the Commission is authorized to
13 consider under the Oil and Gas Act, and we ask that you
14 do.

15 And, therefore, for the aforementioned
16 reasons, we believe we do have standing in this matter.

17 I'd also like to address the due process
18 concerns. Should Hilcorp's application be approved,
19 interested parties will no longer have the ability to
20 provide testimony to the Commission as to how, for
21 example, an increase in well density in a particular GPU
22 within the gas pool may lead to any of the
23 aforementioned issues.

24 As it stands now, amendments occur to the
25 special rule of a GPU by GPU basis, and what this

1 amendment would do, if accepted by this Commission, is
2 it would -- it would -- exceptions would no longer be by
3 GPU, meaning there would be a by right doubling of
4 wells, and that wouldn't provide for any public comments
5 as to how a particular GPU may be adversely affected in
6 any of the ways I mentioned previously by an increase in
7 not only well density but spacing as well or changes to
8 the spacing rules.

9 In the alternative, should this Commission
10 find that SJCA does not have standing, we ask that
11 intervention be granted in accordance with Rule
12 19.15.4.11C, which provides that intervention may be
13 granted when the intervenor can contribute substantially
14 to the protection of public health and the environment.

15 As I stated earlier, SJCA has a unique
16 understanding of how oil and gas development has often
17 negatively affected the people of the San Juan Basin
18 through more than 30 years of advocacy on this topic.

19 Moreover, I would like to address the
20 redressability issue brought in the response -- or the
21 motion to strike our notice of intervention. This
22 application is absolutely, as this Commission knows,
23 redressable by the Commission. Not only can the
24 Commission vote to deny this application, but the
25 Commission could decide to proceed with this application

1 process through the rulemaking procedures outlined in
2 the New Mexico Rules Act. That would do a number of
3 things, including providing more opportunities for
4 public comment and to express their concerns in the
5 number of issues that I previously mentioned that you
6 are authorized to consider when considering applications
7 for spacing or density increases in a particular GPU in
8 the Blanco-Mesaverde.

9 I would also like to note that Hilcorp has
10 not claimed that they ever suffered any harm due to the
11 lack of timeliness in our motion.

12 In May of 2018, Hilcorp filed a
13 substantially similar application, which was Case Number
14 16193. While the rule that they were attempting to
15 amend was different, it, in effect, would have the same
16 affect in that it would take away the public notice
17 requirements for increases in well density and spacing
18 in a particular GPU, and that's the same thing that
19 would happen here if this application is approved.

20 Prior to the hearing, Hilcorp withdrew that
21 application, and we believe that this put Hilcorp on
22 notice that SJCA was an interested party in the matter,
23 and surely they anticipated our notice of intervention
24 in the present matter. And ultimately this did not
25 harm -- the lack of timeliness did not harm them in any

1 way.

2 At the Chair's discretion, we respectfully
3 ask that you grant SJCA's intervention in this matter.

4 CHAIRWOMAN RILEY: Mr. Feldewert.

5 MR. FELDEWERT: I can note for the
6 Commission that in Case Number 162069 [sic], which was
7 the last time, in 1998, when this reservoir was
8 addressed, the body made the determination that
9 testimony should only be related to parties dealing with
10 downhole technical issues, geology, reservoir data,
11 reservoir management. Okay? Clearly, they're not here
12 to present anything like.

13 They're suggesting that they should be
14 given party status because they -- and I'm using words I
15 thought I heard. They possibly are concerned that
16 perhaps there may be some negative effect on public
17 health and environment once we get to the surface,
18 dealing with specific APDs, nondomestic waste, lack of
19 grazing, 4H, things of that nature. Those issues are
20 not the subject of this hearing. There are other forms
21 to address that. This hearing is solely about the
22 continued management of this reservoir which started in
23 1949 with the input from people with knowledgeable --
24 with knowledge about the geology and about the
25 reservoir, and it's related solely to the issue of what

1 is necessary -- what is needed in terms of the density
2 to efficiently and effectively drain the reservoir.
3 That's it. And they have alleged no basis showing any
4 kind of standing to be involved in that type of case.

5 MR. BRANCARD: Is the Commission ready to
6 decide or go into executive session?

7 COMMISSIONER BALCH: I would like to
8 deliberate in executive session.

9 CHAIRWOMAN RILEY: I would like executive
10 session.

11 COMMISSIONER BALCH: I would move that we
12 go into excessive session to deliberate the motion.

13 COMMISSIONER MARTIN: Second.

14 CHAIRWOMAN RILEY: So moved.

15 MR. ANDERSON: Madam Chair, I do have two
16 more points I wanted to briefly make before we go into
17 executive session.

18 CHAIRWOMAN RILEY: Mr. Brancard, is that --

19 MR. BRANCARD: I wish you had jumped up
20 quicker.

21 Very, very short.

22 MR. ANDERSON: Yes, sir.

23 And I appreciate it, Madam Chair.

24 And one thing that we wanted -- that SJCA
25 should mention was the specific harm to landowners who

1 are SJCA members that we referenced in our motions,
2 particularly a gentleman by the name of Don Schreiber,
3 who is a rancher in Rio Arriba County, who we referenced
4 and counsel referenced in his statements about erosion
5 concerns and other concerns and harms to his land in Rio
6 Arriba County. And we believe in terms of the issue of
7 the question of standing that -- and other members of
8 the SJCA community have been specifically harmed, and
9 that harm is redressable by this Commission, which is
10 why if this motion for intervention -- or this request
11 for intervention is approved, we are going to follow
12 that with a motion for continuance in the interest of
13 bringing these affected parties into a hearing so that
14 they can better inform the Commission on specific harms
15 that they have already sustained and harms that an
16 increase in well density may create.

17 Thank you.

18 CHAIRWOMAN RILEY: If everyone would please
19 go back out in the hallway.

20 (Executive session, 1:48 p.m. to 2:06
21 p.m.)

22 CHAIRWOMAN RILEY: Is there a motion to go
23 back on the record?

24 COMMISSIONER MARTIN: I so move.

25 COMMISSIONER BALCH: And seconded.

1 CHAIRWOMAN RILEY: We are back on the
2 record, Mary.

3 Just to be clear, we deliberated just on
4 the matter before us, which happens to be the motion to
5 strike the notice of intervention, and we've come to a
6 conclusion. I'll let Mr. Brancard elaborate on that.

7 MR. BRANCARD: Thank you, Madam Chair.

8 The Commission has considered the notice of
9 intervention, the motion to strike intervention and the
10 response and the oral arguments today. There were two
11 concerns raised with the notice of intervention, both
12 timeliness and, in fact, whether the intervention meets
13 the Commission's standards for intervention in this
14 case.

15 The Commission has the ability to strike a
16 notice of intervention if there is a failure to show
17 that the intervenor has standing, and then there is a
18 way to get around that, which is the intervenor can show
19 that their participation will contribute substantially
20 to the prevention of waste, protection of correlative
21 rights or protection of public health and the
22 environment.

23 The Commission finds that the notice fails
24 to show that the intervenor has standing in the
25 particular issues in this matter, which relate to the

1 reservoir and the management of the pool at issue here,
2 and that the Commission finds that the intervenor's
3 participation will not contribute substantially to the
4 prevention of waste, protection of correlative rights or
5 protection of public health or the environment.

6 The Commission will allow any witnesses to
7 provide public comment in this matter. In fact, the
8 Commission will allow the option of witnesses to provide
9 public comment under oath if you want to. However, that
10 will subject you to being questioned by any of the
11 parties, if that is what you want to do.

12 So at some point today, there will be a
13 public comment period?

14 CHAIRWOMAN RILEY: Yes.

15 So the motion to strike intervention is
16 granted.

17 MR. ANDERSON: Thank you for your time,
18 Commissioners.

19 CHAIRWOMAN RILEY: Thank you.

20 So next we need to hear the actual
21 application of Hilcorp Energy to amend the well density
22 and location requirements and administrative exceptions
23 of the special rules for the Blanco-Mesaverde Gas Pool,
24 Rio Arriba and San Juan Counties in New Mexico.

25 Would the parties and attorneys please

1 announce?

2 MR. BRUCE: Madam Chair, Jim Bruce of
3 Santa Fe representing Hilcorp. And I have three
4 witnesses.

5 MR. RANKIN: Madam Chair, Commissioners,
6 Adam Rankin, of the Santa Fe office of Holland & Hart,
7 also here and on behalf of the Applicant, Hilcorp.

8 MR. HALL: Madam Chair, Scott Hall, on
9 behalf of LOGOS Resources II, LLC and LOGOS Operating,
10 LLC. We have no witnesses, and there is really no need
11 to pass the witnesses to me. If I have a question, I'll
12 let you know.

13 CHAIRWOMAN RILEY: Okay. Thank you.

14 MR. BRUCE: Just very briefly before I
15 begin, there is one additional exhibit, and this goes
16 with Exhibit 5 in your booklet of exhibits. It's an
17 Affidavit of Publication in the Espanola newspaper. It
18 was not received until yesterday, which is why it was
19 not provided to you until now.

20 And if I could get the witnesses sworn in,
21 please, Madam Chair.

22 CHAIRWOMAN RILEY: Yes.

23 (Mr. Creekmore, Ms. Sivadon and Mr. Sparks
24 sworn.)

25

1 CHARLES CREEKMORE,
2 after having been first duly sworn under oath, was
3 questioned and testified as follows:

4 DIRECT EXAMINATION

5 BY MR. BRUCE:

6 Q. Would you please state your name for the
7 record?

8 A. Charles Creekmore.

9 Q. And where do you reside?

10 A. I reside in the Woodlands, Texas, a suburb of
11 Houston.

12 Q. And who do you work for and in what capacity?

13 A. I work for Hilcorp Energy Company --

14 Q. And what's your --

15 A. -- and I'm a landman with them.

16 Q. Have you previously testified before the Oil
17 Conservation Division?

18 A. Yes, I have.

19 Q. And were your credentials as an expert
20 petroleum landman accepted as a matter of record?

21 A. Yes, they were.

22 Q. Have you previously testified before the full
23 Commission?

24 A. Yes, I have.

25 Q. And were your credentials as an expert

1 **petroleum landman accepted as a matter of record?**

2 A. Yes, they were.

3 **Q. And are you familiar with the land matters**
4 **involved in this --**

5 A. Yes, I am.

6 **Q. Mr. Creekmore, you have the exhibit booklet**
7 **there. The first two pages of Exhibit 1 are just cover**
8 **sheets.**

9 A. Yes. One's a cover sheet to the notebook we
10 had and then the second one. They're the same, one and
11 two.

12 **Q. Why don't you turn to page 3 and give a summary**
13 **of the Blanco-Mesaverde Gas Pool and what you seek here**
14 **today?**

15 A. Well, the Blanco-Mesaverde Gas Pool was
16 established in 1949, and it currently allows for four
17 wells per oil and gas spacing unit, two wells per each
18 quarter section. However, since 2008, multiple
19 operators have come forward asking for pilot projects to
20 amend the well spacing and requirements in the
21 Blanco-Mesaverde Pool in the San Juan Basin. All of
22 these requests have been approved. Hilcorp Energy
23 Company is a Houston-based, privately held exploration
24 and production company, and we're here seeking a full
25 pool-wide revision of the Blanco-Mesaverde Pool and

1 their density rules.

2 And based on the geological and engineering
3 analysis, including volumetric studies, recovery
4 efficiency calculations and a thorough review of the
5 aforementioned pilot projects, Hilcorp seeks approval to
6 allow for up to eight wells per gas spacing unit with no
7 more than four wells per quarter section. Hilcorp does
8 not seek to alter the current setbacks, which are 660
9 feet from the exterior boundaries, and the current
10 setback was approved in 1998 when the well density was
11 increased from two wells to four wells. At that time
12 the setback requirements were decreased from 790 feet to
13 660 feet.

14 **Q. Okay. And currently the well unit -- the**
15 **spacing in this pool is 320 acres, correct?**

16 A. Yes.

17 **Q. Would you move on to Exhibit 4 and discuss**
18 **briefly what testimony you will be presenting today?**

19 A. There will be three of us testifying today
20 giving you land, geologic and reservoir engineering.
21 I'll give an overview of our operations in the San Juan
22 Basin, especially in the Blanco-Mesaverde Pool and the
23 Mesaverde Formation. I'll give a brief history of the
24 Blanco-Mesaverde pool rules and setbacks and previously
25 increased density projects.

1 We have Andrew Sparks who will give you a
2 geological background, again a Mesaverde Basin overview,
3 paleogeography and depositional models. He'll go over
4 several type logs and cross sections. There is
5 heterogeneity and compartmentalization of the Mesaverde
6 sands.

7 And then we'll have Michelle Sivadon, our
8 senior reservoir engineer, and she'll go over also the
9 Mesaverde Basin overview and then recovery efficiencies,
10 increased well-density hearings and the well
11 performances that we got approved and that we've
12 recompleted in those wells. And then she'll go over
13 offset well interference or actually a lack thereof and
14 a focus area example and analogs.

15 **Q. What is on page 5 of Exhibit 1?**

16 A. Page 5 is the New Mexico side of the
17 Blanco-Mesaverde Pool or the -- the New Mexico side of
18 the Mesaverde. It's the Blanco-Mesaverde of New Mexico,
19 and these are the outer boundaries of the pool.

20 **Q. This pool does not cover the entire San Juan**
21 **Basin?**

22 A. No, it does not. It's not a basinwide pool.

23 **Q. Okay. And what is shown on page 6?**

24 A. Page 6 shows you Hilcorp's involvement within
25 the Blanco-Mesaverde Pool. These are all units that

1 Hilcorp operates in and around the Blanco-Mesaverde
2 Pool.

3 Q. And these are all considered, quote, unquote,
4 "federal units"; is that correct?

5 A. Yes. These are all federal units.

6 Q. The bulk of the land in there is federal land?

7 A. Yes.

8 Q. And what is on page 7?

9 A. Page 7 includes not only our federal units but
10 also federal units operated by other companies. So you
11 can see a great amount of the Blanco-Mesaverde Pool is
12 covered by federal units.

13 Q. And move on to page 8.

14 A. Page 8 is a progression history of the
15 Blanco-Mesaverde Pool. If you look over to the right,
16 it shows you the outer boundaries, including where it
17 goes up into Colorado. And there's been a natural
18 progression since 1949 of increased density. When the
19 pool was first established, there was one well per 320
20 acres, and then based on information that operators
21 gleaned in 1974, they came back and asked for two wells
22 per 320 acres. And then after more data was gained in
23 1998, the current rules were established, and that's
24 when they approved four wells per 320 on 80-acre density
25 or two wells per quarter section. Also, even with the

1 increased density, setbacks were reduced at that time
2 from 790 feet to the current 660 feet.

3 Interestingly, Brent Smolik [phonetic], in
4 his testimony at that hearing said, "Sometime in the
5 future, someone will be back before you asking for
6 permission to drill additional wells beyond the four
7 wells per GPU."

8 And then I'll go over some pilot programs
9 on the next page, but we're here today seeking the eight
10 wells per 320 and no more than four wells per quarter
11 section and then to maintain the 660 setbacks.

12 **Q. And technical witnesses will present evidence**
13 **justifying the number of wells?**

14 A. Yes. We'll have geologic and engineering.
15 Yes, that's correct.

16 **Q. And in 1998, the change to the current status,**
17 **who was the applicant in that case?**

18 A. ConocoPhillips -- no. Burlington. I'm sorry.
19 Burlington was the applicant in that case.

20 **Q. Which is now part of ConocoPhillips?**

21 A. Yeah. Well, which became part of
22 ConocoPhillips, and now it's part of Hilcorp.

23 **Q. So every 20 or 25 years, there's been a change**
24 **in the number of wells in the pool?**

25 A. That's correct.

1 **Q. As the operators acquired more data?**

2 A. Yes.

3 **Q. What does page 9 show?**

4 A. Page 9, the upper area, shows two pilot
5 projects that were approved. Again, ConocoPhillips came
6 and asked for -- in 2008, in the 27-5 unit, in Section 8
7 of that unit, they wanted to determine in that one
8 section what 20-acre spacing would do and were approved
9 for a pilot project there. An that's Case 1388, Order
10 Number R-12864. And you can see it's in the lower,
11 right-hand corner on the plat over on the right side.

12 **Q. And then the next one is the Rosa Unit?**

13 A. Yes, the Rosa Unit, and it's the larger one in
14 the northeast quarter of the Blanco-Mesaverde in
15 New Mexico. In that pilot, Williams Production Company
16 came. I'm not sure if they came to the Commission or
17 the Division, but they had a pilot approved in 2009 for
18 26 sections where they had 20 40-acre spacing wells
19 approved, and that was Case Number 14291, Order R-13123.
20 And then they followed that up with a unitwide expansion
21 in 2011 where they had 96 sections approved, and that's
22 Case Number 14586, R-13123-A.

23 **Q. And more recently, what has Hilcorp done within**
24 **the pool?**

25 A. Well, Hilcorp has come to the Division asking

1 for 62 wells' increased density, and this has been since
2 January of 2018, and asking for a fifth well or three
3 wells per quarter section. And also last week, we came
4 with five additional wells to the Division asking for
5 approval of increased density.

6 What we did was we identified areas not
7 adequately being draped at current spacing regulations
8 and the fifth well, as I said, in the 320 or the third
9 well in the quarter section.

10 **Q. Go ahead. Go ahead.**

11 A. And then there have been no rejections or no
12 oppositions on the cases that we brought that have
13 actually been ruled on. And we focused -- our present
14 focus is on utilizing existing infrastructure to limit
15 our environmental footprint, and they're more economic
16 to find a Dakota well and to go uphole where it doesn't
17 have Mesaverde production. However, based on the
18 continued success, we are not -- we will probably come
19 back and drill new wells once we exhaust the Dakota
20 wells that are available. You'll hear more testimony
21 about that later on from our engineer.

22 **Q. Okay. So the green spots, the new Mesaverde**
23 **completions, those were all recompletions, correct?**

24 A. Yes, they were. And these are where they're
25 located so they're not isolated. They're across the

1 entire pool and trying to give us more comprehensive
2 information on the pool, which you'll hear testimony
3 about that from our engineer.

4 **Q. Okay.**

5 MR. BRUCE: Now, Mr. Creekmore and
6 Commissioners, in your booklet, I think there is a green
7 tab which are the notice exhibits.

8 **Q. (BY MR. BRUCE) And, Mr. Creekmore, starting**
9 **with Exhibit 2, was notice of this application given**
10 **pursuant to OCD regulations?**

11 A. Yes, it was.

12 **Q. And who was entitled to notice?**

13 A. The operators of wells in the Blanco-Mesaverde
14 Gas Pool.

15 **Q. And is Exhibit 2 a list of the operators in the**
16 **pool with their addresses?**

17 A. Yes.

18 **Q. And was -- is this a list of operators from the**
19 **OCD's records?**

20 A. Yes. We acquired these from the OCD.

21 MR. BRUCE: And, Commissioners, this was on
22 a spreadsheet which my computer would not print up
23 correctly, but you'll see pages 1A through 1C, 2A
24 through 2C and 3A through 3C, which, each one of them,
25 if you follow them, has the operator with the address,

1 et cetera, but it didn't print out well on my computer.

2 Q. (BY MR. BRUCE) Is Exhibit 3 a copy of the
3 certified letter sent by Holland & Hart to all of the
4 interest owners?

5 A. Yes.

6 Q. And was that letter prepared and sent at your
7 direction?

8 A. Yes, it was.

9 Q. And what is Exhibit 4?

10 A. Exhibit 4 -- Holland & Hart uses a computer
11 program that tracks all of the certified mailings, and
12 this is a listing from the program of the mailings for
13 this case. It lists the certified mailing number, the
14 addressee's name and address and the delivery status.

15 MR. BRUCE: Again, Commissioners, my
16 computer wouldn't print it our well, but all of the data
17 is there.

18 Q. (BY MR. BRUCE) Were all of the letters marked
19 as delivered?

20 A. No.

21 Q. As a result, was notice of the application
22 published to provide constructive notice?

23 A. Yes, it was.

24 Q. And is that Exhibit 5?

25 A. Yes.

1 MR. BRUCE: And, Commissioners, the
2 additional publication affidavit from the "Rio Grande
3 Sun" should go along with the marked Exhibit 5, which is
4 the Affidavit of Publication from the Farmington
5 newspaper.

6 Q. (BY MR. BRUCE) Mr. Creekmore, under Division
7 rules, were the -- let me take a step back.

8 How long have you been working the San Juan
9 Basin, Mr. Creekmore?

10 A. I've been working the San Juan Basin 11 years
11 since August.

12 Q. Okay. And you have a general idea of the type
13 of surface ownership and mineral ownership out there?

14 A. Yes.

15 Q. Who are the biggest surface and mineral owners
16 out here?

17 A. Well, the BLM and the State Land Office.

18 Q. And then there is some fee land, too?

19 A. There is some fee land.

20 Q. And were the BLM and the land office required
21 under Division rules to be given notice of this hearing?

22 A. No, they were not.

23 Q. Did you request me to send a letter to the BLM
24 and the land office informing them of this application?

25 A. Yes.

1 Q. And is that marked as Exhibit 6?

2 A. Yes.

3 Q. And those were, again, prepared and sent at
4 your direction?

5 A. Yes, they were.

6 Q. Were pages 1 through 9 of Exhibit 1 and
7 Exhibits 2 through 6 prepared by you or under your
8 supervision or compiled from company business records?

9 A. Yes.

10 Q. And in your opinion, is the granting of this
11 application in the interest of conservation and the
12 prevention of waste?

13 A. Yes.

14 MR. BRUCE: Madam Chair, I move the
15 admission of pages 1 through 9 of Exhibit 1 and Exhibits
16 2 through 6.

17 CHAIRWOMAN RILEY: I'm not sure we got 6.
18 Did you guys get 6?

19 MR. BRANCARD: I'm not finding it.

20 MR. BRUCE: Whoops. I apologize.

21 Again, I'd ask that those exhibits be
22 admitted into the record.

23 CHAIRWOMAN RILEY: Exhibits 1 through 6 are
24 admitted into the record.

25 (Hilcorp Energy Company Exhibit Numbers 1

1 through 6 are offered and admitted into
2 evidence.)

3 MR. BRUCE: And I have no further questions
4 of this witness.

5 CHAIRWOMAN RILEY: Do you have any
6 questions?

7 COMMISSIONER MARTIN: I do not.

8 CROSS-EXAMINATION

9 BY CHAIRWOMAN RILEY:

10 Q. I do have one. Did the BLM or State Land
11 Office give an opinion on this?

12 A. No. They didn't come back with any problems.
13 They've been very supportive of our increased density,
14 and I even sent the BLM a copy of this (indicating) at
15 Dave Mankiewicz's request, and he didn't call me back
16 with any questions.

17 Q. Thank you.

18 CHAIRWOMAN RILEY: Dr. Balch?

19 CROSS-EXAMINATION

20 BY COMMISSIONER BALCH:

21 Q. On page 9 of your exhibit, I presume the
22 geologist engineer will talk about the results of these
23 pilot studies?

24 A. Yes. Yes. That's part of our presentation to
25 you today.

1 **Q. Great. Thanks.**

2 CHAIRWOMAN RILEY: Mr. Brancard?

3 CROSS-EXAMINATION

4 BY MR. BRANCARD:

5 **Q. Oh, I was just curious. I think you said this**
6 **pool goes into Colorado.**

7 A. Yes, it does.

8 **Q. What's the well density in Colorado?**

9 A. It's been a while since I've worked Colorado.
10 I'm not sure.

11 COMMISSIONER BALCH: Is that a number you
12 could get relatively quickly, give it to us later in the
13 hearing?

14 THE WITNESS: Well, I can try and find out.
15 Yes.

16 MR. BRUCE: We will do that.

17 COMMISSIONER BALCH: We want the
18 information.

19 **Q. (BY MR. BRANCARD) Okay. And your Exhibit 3, if**
20 **you could look at that, which appears to be the letter**
21 **sent out to all operators --**

22 A. Sorry. I was looking at the wrong Exhibit 3.
23 Yeah, I believe it is. Let me check real quick.

24 **Q. It is informing the operators that there is a**
25 **hearing on September 6th before the Division. Was**

1 **there --**

2 A. This was initially scheduled for September 6th.

3 **Q. Was there any follow-up to let them know that**
4 **the hearing was actually September 13th before the**
5 **Commission?**

6 MR. RANKIN: Mr. Brancard, when we
7 initially filed the application with the Division, we
8 asked that it be considered for the Commission docket,
9 and Director Riley set it for a Commission hearing on
10 October 15 -- September 13th, and it was noticed on the
11 Division's website at that time.

12 MR. BRANCARD: But the operators were not
13 personally informed that the hearing was the 13th in
14 front of the Commission?

15 MR. RANKIN: There was not a follow-up
16 notice relating to the change in the date from the
17 September 6th docket date. I would have to check the
18 record of September 6th.

19 MR. BRANCARD: That's all I have.

20 CHAIRWOMAN RILEY: Is everybody done? Can
21 this witness can be excused?

22 MR. BRUCE: No. I have further
23 questions -- one question of Mr. Creekmore.

24 REDIRECT EXAMINATION

25 BY MR. BRUCE:

1 **Q. No operator currently is objecting to this**
2 **application?**

3 A. I have not heard any objections.

4 MR. BRANCARD: I did have one more
5 question.

6 RE CROSS EXAMINATION

7 BY MR. BRANCARD:

8 **Q. So the notice was sent to all operators in**
9 **the --**

10 MR. RANKIN: Mr. Brancard, I can follow up
11 with that. Between Mr. Creekmore and myself, it was
12 decided that it was easier to just identify all
13 operators in District 3, in other words, in the San Juan
14 Basin. So we didn't limit notice in any way to just
15 those within the pool but provided notice to all
16 operators under the Division records in the entire
17 northwest in District 3.

18 MR. BRANCARD: Okay. Because you're
19 supposed to do operators in the pool and operators
20 within one mile of the pool.

21 MR. RANKIN: Right. So he covered --

22 MR. BRANCARD: And I assume that 12.4A does
23 not apply to this situation, which requires and says
24 when you're changing the amount of acreage to be
25 dedicated to a well, you have to notify owners of

1 interest in the mineral estate.

2 MR. BRUCE: The well spacing is 320 acres,
3 and that is not changing. Sometime during the hearing
4 you'll hear about downspacing. It's not downspacing.
5 It's infill drilling. So the spacing itself remains the
6 same.

7 MR. BRANCARD: Okay.

8 CHAIRWOMAN RILEY: Okay.

9 MR. BRUCE: We'll call our geologist now.

10 ANDREW SPARKS,
11 after having been previously sworn under oath, was
12 questioned and testified as follows:

13 DIRECT EXAMINATION

14 BY MR. BRUCE:

15 Q. Will you please state your name and city of
16 residence for the record?

17 A. Sure. Andrew Sparks, Sugarland, Texas, a
18 suburb of Houston.

19 Q. And who do you work for and in what capacity?

20 A. I'm a geologist at Hilcorp Energy Company.

21 Q. Have you previously testified before the Oil
22 Conservation Division as a petroleum geologist?

23 A. Yes, I have.

24 Q. And were your credentials as an expert accepted
25 as a matter of record?

1 A. Yes, they were.

2 **Q. Have you previously testified before the full**
3 **Commission?**

4 A. I have not.

5 **Q. Would you summarize your educational and**
6 **employment background for the Commission?**

7 A. Yes. I got my Bachelor of Arts in Geology at
8 Franklin & Marshall College, a liberal arts school
9 outside of Philadelphia. I got my Master's in Geology
10 from the University of Kansas, at which time I went to
11 work for Chevron. And I worked for the large operator
12 for just over five years, at which point I left to start
13 my MBA at Fuqua School of Business at Duke University.
14 And I joined Hilcorp in July of 2017 where I have been
15 since, working the San Juan Basin.

16 **Q. And are you familiar with the geology involved**
17 **in the Blanco-Mesaverde Gas Pool?**

18 A. Yes, I am.

19 **Q. And have you prepared a geologic study of that**
20 **pool?**

21 A. Yes.

22 MR. BRUCE: Madam Chair, I'd submit my
23 witness as an expert in petroleum geology.

24 CHAIRWOMAN RILEY: I assume there are no
25 objections?

1 He is accepted as an expert witness.

2 Q. (BY MR. BRUCE) Mr. Sparks, could you start with
3 page 10 of Exhibit 1? And I won't interfere too much.
4 I'll just let you roll through the pages. Why don't you
5 start?

6 A. Sure. I will focus on pages 10 through 20, and
7 I'll start with a very broad overview of the basin and
8 the history -- the geologic history of the basin, and
9 then I will start focusing in on specific wells and some
10 of the stratigraphy.

11 So on page 10, what you can see on the left
12 is the San Juan Basin, as you know, located in northern
13 New Mexico and southern Colorado, which we are here
14 discussing today. It is flanked by several tectonic
15 uplifts which control and have a significant influence
16 on the natural fracturing network that helps control
17 production as well.

18 On the right-hand side is a structure map
19 laid on the top of the Mesaverde. And what you can see
20 here is there is no significant faulting. It is a very
21 simple structure. But what you cannot see from this
22 image is the ubiquitous fracturing that occurs
23 throughout the reservoir.

24 So if we then move to slide 11, we'll take
25 that structure map and we'll look at it from the side,

1 so a cross-sectional view of this gas-centered basin.
2 This is just a schematic of the different sands that are
3 produced in the San Juan Basin starting with the Dakota
4 at the base, moving into the Mancos and the Mesaverde
5 sandstone, which we are here discussing today, all the
6 way up to the Fruitland Coal, the shallowest formation
7 of the basin. And what you can see here is that the
8 sands are flanked on each side by water, so hydrodynamic
9 influence impacts this basin as well.

10 Moving to slide 12, if we take a step back
11 in time and think about what was happening in the world
12 at the time that these sands were deposited in the Late
13 Cretaceous, so somewhere on the magnitude of 85 million
14 years ago, we have a temperate climate, meaning there
15 are no polar ice caps. We have a fluctuating sea level,
16 and we have the Western Interior Seaway that connects
17 the Arctic Ocean with the Gulf of Mexico to the south.

18 If we zoom in to kind of the more local
19 area, you can see where the San Juan Basin lies at that
20 time of the Late Cretaceous. You get a lot of sediments
21 coming off of the mountain building to the west, and so
22 you do get a lot of sand influence. You get fluvial
23 rivers. You get shallow marine deposition. And what I
24 will show in the logs in future pages speak to that.

25 So speaking of sea level, if we look at

1 page 13, this is just a schematic log of what the sea
2 level -- relative sea level was doing at the time of the
3 Mesaverde because that is significant in terms of the
4 stratigraphic complexity and variability that we see in
5 the Mesaverde in terms of production.

6 So as a geologist, I typically work from
7 the bottom up. So at Point Lookout, you have sea level
8 falling, but you'll still have a shallow marine type of
9 environment that moves into the low-stand system of the
10 Menefee sands. You'll see a lot of fluvial deposition
11 on a cross-cutting relationship, a lot of stratigraphic
12 pinch-outs and variability. And then as sea level
13 starts to rise again, you're back into that shallow
14 marine type of depositional environment that you can see
15 on the logs of the Cliffhouse. So it's just a very
16 generic overview of the basin and the mechanics on the
17 Mesaverde Group.

18 So to kind of put that discussion into a
19 picture, if we look at slide 14, we can talk about
20 those -- what those environments and deposition actually
21 look like. So beginning at the top, starting at the top
22 Point Lookout, you'll see that the Point Lookout was
23 deposited in a shallow marine type of environment. You
24 would expect your sands to be a little blockier, a
25 little more continuous, a little thicker, and that's

1 something that you do see on most logs. However, you do
2 still get some fluvial influence. There is some level
3 of complexity, and then also it's not taking into
4 account the fracturing that is so extensive and so
5 well-known in the basin.

6 **Q. Before you begin, again, Point Lookout is the**
7 **deepest zone in the Mesaverde?**

8 A. Yes. Yes. That's correct.

9 As you move up into the shallower Menefee
10 Formation, you'll see that sea level has fallen, and so
11 you'll get this coastal plain type of deposition. You
12 get swamps. You'll get coal formation. You'll get
13 fluvial environments. This type of environment is very
14 significant in the production of hydrocarbons because of
15 the compartmentalization that comes along with it. You
16 don't get extensive sand deposition. You don't get
17 homogeneous rock. So you do get a significant amount of
18 compartmentalization.

19 And then lastly, the uppermost member of
20 the Cliffhouse, again deposited in a time of shallow
21 marine environment, very similar to the Point Lookout.
22 So you have blocky sands, a little bit more continuous,
23 but still quite a bit of stratigraphy and fracturing
24 exists in the Cliffhouse.

25 So staying at the time of the Late

1 Cretaceous, I just wanted to point out a few basins that
2 Ms. Sivadon will also speak to in her testimony in terms
3 of some analogous reservoirs. We have the San Juan
4 Basin as the southernmost basin where we look at the
5 Mesaverde. It is a shallow marine fluvial environment,
6 just like I've discussed, and it has very low, very
7 tight permeabilities with extensive natural fracturing.

8 As you move north into the Piceance of
9 Colorado, you look at the Williams Fork Formation of the
10 Mesaverde, again very similar, fluvial environment, very
11 tight rock, extensive natural fracturing, and even to
12 the extent that the well permeability restricts fluid
13 movement and production logs show good contribution from
14 tight sands that weren't completed in the past. So a
15 few things pointed out from papers that Ms. Sivadon will
16 cite later.

17 And then lastly, as you move north up to
18 the Green River Basin, again part of the Mesaverde
19 Group, the Almond Formation, is a shallow marine fluvial
20 environment, again very tight permeabilities as well.
21 So there are several analogs that exist that corroborate
22 what we are seeing in the Mesaverde of the San Juan
23 Basin.

24 So if we start actually focusing then on
25 the Mesaverde as we look at it today, we'll look at the

1 type log.

2 **Q. Is that page 16?**

3 **A.** Sorry. Yes, page 16.

4 On the top left, we have a map. The
5 outline -- the light gray outline is what we call the
6 Mesaverde productive limits, and we reference that
7 internally at Hilcorp to show where you get Mesaverde
8 production. There will be some production outside of
9 this limits, but most of the production is within the
10 productive limit.

11 This type log comes from the San Juan 29-7
12 unit, 129 M, and that's denoted by the red star on the
13 map kind of right in the middle of the pool. And two
14 things -- you know, most of what I want to point out
15 here is the log. You have gamma ray on the left, which
16 denotes sand from shale, so anything that's very sandy
17 is colored in yellow. And then you have resistivity on
18 the right. So higher resistivities are to the right,
19 and those are typically indications of hydrocarbons.

20 So you have the Mancos Formation underlying
21 the Mesaverde. And the Point Lookout, as I explained
22 previously, you see some of that blocky signature with
23 high resistivity. However, in the Lower Point Lookout,
24 it's still part of what we produce in the Mesaverde, and
25 you see how that is not very blocky sand. Those are

1 laminated sands and shales, and those cannot be traced
2 over long distances.

3 Moving uphole, the Menefee Formation, again
4 during that low span, a lot of fluvial environment, a
5 lot of cross-cutting relationships and
6 compartmentalization. You see a very erratic gamma-ray
7 response, very typical of that, you know, coastal plain
8 type of environment, and you can get some coal and some
9 swamp deposits.

10 And then lastly, the Cliffhouse and Upper
11 Cliffhouse. The Cliffhouse has that blocky signature
12 that we would expect being in a shallow marine
13 environment, lots of yellow there colored in the gamma
14 ray and high resistivity values, and then rattier or
15 kind of more shaley influence as you move uphole into
16 the Lewis Formation, which directly overlies the
17 Mesaverde.

18 So on page 17, what I have outlined here is
19 the Mesaverde productive units and deposits representing
20 all of the current and historic take points of the
21 Mesaverde. You will see the Rosa Unit and the 29-5 --
22 or the Conoco pilot project, and we will look then at
23 the green -- simultaneous dedication wells are the
24 density wells we brought to hearing so far this year
25 ago. We'll look at two cross sections, A to A prime,

1 which goes from north to south through the pilot areas,
2 and then section B to B prime, which goes northwest to
3 southeast, going right down the middle of our density
4 wells -- density hearing wells.

5 **Q. Before you move on, obviously, there is a large**
6 **number of wells in this pool, but in the San Juan Basin,**
7 **how many wells are there approximately that have been**
8 **drilled in the San Juan Basin in all formations?**

9 A. Roughly over 40,000.

10 **Q. Go ahead.**

11 A. So if we turn to slide 18, we'll look at A to A
12 prime, which is that north-to-south line through the
13 pilot unit, through the Rosa Unit and the Conoco pilot
14 area, project area. And this cross section is flattened
15 on the top of the Menafee, so it is not meant to show
16 structural influence. It is strictly looking at the
17 stratigraphy.

18 What I have here are a series of logs.
19 Gamma ray is the left track. Resistivity is the right.
20 And it's colored such that higher resistivities would be
21 bright values. Lower resistivity values would be
22 purples and blues, darker colors.

23 Things to point out here really are the
24 package is as a whole, so the Cliffhouse, the Menefee,
25 the Point Lookout are quite continuous. You can trace

1 them across along distances, which is not unexpected.
2 However, what I think, you know, is not necessarily
3 clear is that the sand lenses and the sand bodies within
4 those packages are very discontinuous and very
5 stratigraphically compartmentalized. You cannot trace
6 individual sand lenses across long distances, and that
7 has a significant location and production.

8 And so I've tried to point that out in the
9 Menefee section where I have those brown what I call
10 shazams, and you can see I've tried tracing individual
11 sand bodies across distances. Some you see in one well.
12 Some you see in multiple wells. And there are likely
13 sand bodies that exist between the wells that are not
14 captured in these logs.

15 Furthermore, even on those more continuous,
16 more blocky sands, the Cliffhouse and the Point Lookout,
17 the uppermost and lowermost members of the Mesaverde,
18 you can just look at the resistivity signature and see
19 how those change in space. So if you look at the first
20 well on the left, the Cliffhouse, you have dark purples
21 and blues, resistivity values, and as you move south,
22 you definitely pick up some reds and yellows back to the
23 blues again in the southernmost well. You see a very
24 similar signature in the Point Lookout as well.

25 So if we move to slide 19, this is the

1 slide -- this is the cross section that spans the pool
2 from northwest to southeast. Again, the story is very
3 much the same, flattened on the Menefee. You have gamma
4 ray and resistivity values in the logs, and you see a
5 lot of compartmentalization, a lot of variability,
6 especially in the Menefee, but you can still see it in
7 the Cliffhouse and the Point Lookout as well. So this
8 cross section goes right down the middle of where most
9 of our density wells, hearing wells have occurred.

10 And then lastly, those were broad cross
11 sections across the basin. You can get a look at the
12 finer scale on slide 20. I have the 27-5 infill project
13 that Conoco undertook in 2008, a 20-acre well, and you
14 can see where that location is on the top right of this
15 image, denoted by the white star, and the cross section
16 goes from southwest to northeast.

17 And so even at a fine scale basically
18 across one section or one-and-a-half sections, you still
19 see significant heterogeneity. You see various
20 signatures. You see multiple lenses that pinch out.
21 Some are more continuous. Some are not. But it does
22 make production quite a challenge, and that is not even
23 including a fracture network, which are not visible on
24 the logs as well. So you can also see things like the
25 thickness variability, so the Menefee changes in

1 thickness for roughly 30 feet. And the Point Lookout
2 reservoir quality is quite drastic as well, how that
3 changes.

4 Q. From a geologic standpoint, will four wells per
5 320 acres capture all reserves?

6 A. No.

7 Q. And were pages 10 through 20 of Exhibit 1
8 prepared by you or under your supervision?

9 A. Yes.

10 Q. And in your opinion, is the granting of this
11 application in the interest of conservation and the
12 prevention of waste of the hydrocarbons?

13 A. Yes.

14 MR. BRUCE: Madam Chair, I move the
15 admission of pages 10 through 20 of Exhibit 1.

16 CHAIRWOMAN RILEY: Pages 10 through 20 of
17 Exhibit 1 are accepted into the record.

18 (Hilcorp Energy Company Exhibit Number 1,
19 pages 10 through 20, are offered and
20 admitted into evidence.)

21 MR. BRUCE: I have no further questions of
22 the witness.

23 CHAIRWOMAN RILEY: Okay. Commissioners?

24 COMMISSIONER MARTIN: No questions.

25 CHAIRWOMAN RILEY: Dr. Balch?

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

CROSS-EXAMINATION

BY COMMISSIONER BALCH:

Q. I have a few questions. Thank you for your testimony.

Some of the pilot studies, particularly the single-well -- single-well studies or single-spacing unit studies were looking to add one additional well. How well did that do overall in targeting the stratum resources in those spacing units?

A. It did very well. And I also know that Ms. Sivadon, the reservoir engineer who will follow me, will speak directly to the results, the production and the initial rates and our kind of internal matrix as to how well they've done. But from a stratigraphic perspective, they have picked up additional lenses and helped produce some of the sands that were already encountered by other wells.

Q. So from your point of view as a geologist, are you going to recommend blanket 40 acres or targeted infills?

A. Probably for now, targeted infills. The whole point of this, though, at the beginning is to look at recompletion opportunities, so not necessarily drill new wells right away. Go in and look at wells that have

1 been completed deeper that allow us to complete uphole.

2 Yeah. That is our main focus.

3 **Q. How many wells in that category?**

4 A. Ms. Sivadon will show a map, but there are
5 almost 2,000 wells in that category that are operated by
6 all -- that includes all operators.

7 **Q. So 2,000 of the new wells that could occur**
8 **under this are already going to be dealing with**
9 **wellbores that --**

10 A. Correct. There is existing infrastructure that
11 allows you to do that.

12 **Q. Do you have any idea about the spacing in**
13 **Colorado?**

14 A. I do not, no. No. I have been focusing mainly
15 in New Mexico.

16 **Q. Looking at your cross sections, A, A prime and**
17 **B, B prime, a number of wells showed compartments that**
18 **were only seen in that well.**

19 A. Uh-huh.

20 **Q. So that gives you an indication that -- I think**
21 **you mentioned that there could be other compartments in**
22 **between that were not seen as well?**

23 A. Right.

24 **Q. Based off of production, do you get any feel**
25 **idea of the size of some of these compartments?**

1 A. That is a good question. I don't have the
2 answer to that right now. In terms of their lateral
3 extents, I would say it's variable. You know, the cross
4 sections I show A to A prime, B to B prime span tens of
5 miles, so there obviously would be quite a bit of
6 significant variability. However, this last one look,
7 when you at the 27-5 pilot, I show four wells within
8 hundreds of feet, and you still see a very similar
9 signature, how some lenses come and go, which makes
10 it --

11 **Q. Even at 20 acres?**

12 A. Even at 20 acres, yeah.

13 **Q. Which kind of brings me to my next question.**
14 **Going forward, after you're done with your already**
15 **existing wells infill program --**

16 A. Uh-huh.

17 **Q. -- is there a horizontal potential in the**
18 **Mesaverde?**

19 A. Yup, there is. We have talked about it, and we
20 are evaluating that as we speak: Where would we put
21 that, how long would it be. You know, all of those kind
22 of technical questions about a horizontal well are being
23 discussed.

24 **Q. It looks like on Exhibit [sic] 20 -- I'm having**
25 **a hard time reading that figure, but it looks like some**

1 of those might have short laterals or several wellbores
2 from -- deviated wellbores from a single point?

3 A. Correct. Yeah. They're deviated wellbores.
4 None of those are horizontals. Yeah. So they share --
5 multiple wells share a pad.

6 Q. If you're doing infill wells -- I'm sorry.
7 Mr. Creekmore mentioned trying to minimize the surface
8 footprint.

9 A. Uh-huh.

10 Q. So more infill wells, are you more likely to
11 use an existing pad deviated to some of those other
12 40-acre spots?

13 A. We absolutely will when that's appropriate. I
14 mean, that makes economic sense for the operator, to use
15 existing pads. When you start creating new pads, that
16 is creating an immense economic burden on the project,
17 so we will always utilize existing pads when we can.
18 There will be instances where that's not possible, but
19 we will always do that because it's in our best
20 interest, and it minimizes the footprint when we can.

21 Q. And it minimizes surface --

22 A. Exactly. Minimizes the footprint. Yes, sir.

23 Q. Great. Those are my questions. Thank you.

24 CHAIRWOMAN RILEY: I don't have any
25 questions.

1 MR. BRANCARD: No questions.

2 CHAIRWOMAN RILEY: Thank you.

3 Do you have any follow-up?

4 MR. BRUCE: No, no follow-up.

5 CHAIRWOMAN RILEY: Okay. Thank you.

6 THE WITNESS: Thank you.

7 MICHELLE M. SIVADON,

8 after having been previously sworn under oath, was
9 questioned and testified as follows:

10 DIRECT EXAMINATION

11 BY MR. BRUCE:

12 Q. Will you please state your name and city of
13 residence for the record?

14 A. Yes, sir. Michelle Marie Sivadon, Spring,
15 Texas, a suburb of Houston, Texas.

16 Q. Who do you work for and in what capacity?

17 A. I work for Hilcorp Energy Company as a senior
18 reservoir engineer working the San Juan Basin.

19 Q. Have you previously testified before the
20 Division?

21 A. Yes, I have.

22 Q. And were your credentials as an expert
23 reservoir engineer accepted as a matter of record?

24 A. Yes, they were.

25 Q. Have you previously testified before the

1 **Commission?**

2 A. No, I have not.

3 **Q. Would you please summarize your educational and**
4 **employment background for the Commission?**

5 A. Yes, sir. I graduated with a Bachelor of
6 Science in Petroleum Engineering from Texas A&M
7 University in August of 1993. From there, I went to
8 work for UniCal in Lafayette, Louisiana, and subsequent
9 to that, I also worked for Anadarko Petroleum,
10 Burlington Resources, who later became ConocoPhillips.
11 And then I've been with Hilcorp Energy Company for the
12 last 11-and-a-half years.

13 I have served in drilling, production and
14 reservoir engineering roles, as well as asset team lead
15 roles. I also hold my professional engineering license
16 in both the states of Texas and Louisiana.

17 **Q. Are you familiar with the reservoir engineering**
18 **matters pertaining to this pool?**

19 A. Yes, I am.

20 **Q. And have you prepared a study that you're about**
21 **to present before the Commission?**

22 A. Yes, sir.

23 MR. BRUCE: Madam Chair, I'd present
24 Ms. Sivadon as an expert petroleum -- excuse me --
25 reservoir engineer.

1 CHAIRWOMAN RILEY: Let the record show that
2 she is accepted as an expert witness, please.

3 Q. (BY MR. BRUCE) And, again, just like with
4 Mr. Sparks, I'm not going to interfere too much. You're
5 responsible for the rest of Exhibit 1, correct?

6 A. Yes, sir, pages 21 through 35.

7 Q. Okay. Why don't you start with page 21 and
8 explain it to the Commissioners?

9 A. Yes, sir.

10 So on page 21, this is a copy of an exhibit
11 that Williams Production Company provided in Case Number
12 14586 in January of 2011 where they were requesting
13 40-acre spacing within the Mesaverde across the entire
14 Rosa Unit. This was also a follow-up to the 2009
15 hearing where they were filing approval for the 20
16 40-acre spacing pilot wells.

17 What is shown on this particular exhibit is
18 what is referred to as DFIT. DFIT is an acronym for
19 diagnostic fracture injectivity tests. And so multiple
20 DFITs were taken within the 20 wellbores, the 40-acre
21 pilots that were drilled, and they were taken within
22 four different zones of the Mesaverde. As Mr. Sparks
23 said, we refer to it as three different members of the
24 Mesaverde, that being the Cliffhouse, the Menefee and
25 the Point Lookout. Williams Production Company elected

1 to break down the Point Lookout into the Upper Point
2 Lookout or the cleaner, blockier sand section of the
3 Point Lookout -- or the Point Lookout -- pardon me --
4 that Mr. Sparks referred to, and then the Lower Point
5 Lookout being the shalier section of it.

6 So attempts were made in all four of those
7 sand members of the Mesaverde within all 20 wells. The
8 mechanics of the DFIT is actually -- fluid is pumped
9 from the surface into each of these formations until we
10 reach injection pressures or fracture pressures. Once
11 that fracture pressure is initiated, the pumps are
12 stopped, and then the pressure fall-off is monitored
13 afterwards. That pressure fall-off -- then conventional
14 reservoir engineering techniques called pressure
15 transient analysis is used to estimate the closure
16 stress of the fracture, and, therefore, an estimate can
17 be made of the actual reservoir pressure for each of the
18 sand members within the Mesaverde.

19 In this particular case, the way Williams
20 Production Company handled this is they would shoot one
21 perforation, as an example, into the Menefee. They
22 would set a bridge plug with a bottom-hole pressure
23 gauge underneath that bridge plug. They would pump
24 fluid into the Menefee, achieve the breakdown, and then
25 the pumps were stopped at the surface, and then the

1 bridge plug was set isolating that perforation from any
2 hydrostatic or pressure above the bridge plug. And the
3 pressure fall-off within that Menefee perforation was
4 monitored for four days.

5 Upon four days, then the bottom-hole
6 pressure gauges were actually retrieved back to the
7 surface. An analysis was done by Halliburton to
8 calculate the fracture closure stress and then the
9 estimate of the reservoir pressure.

10 The key observation of all these data
11 points that are shown on here in bars: All the Menefee
12 pressure points are in blue; the Cliffhouse is in
13 maroon; the Upper Point Lookout in green; and the Lower
14 Point Lookout in yellow. As you can see, there is a
15 fair amount of variability in pressures between each of
16 the wells within each of those sand members.

17 Particularly within the Lower Point
18 Lookout, which is the shalier section of the Point
19 Lookout, we see a lot more variation in reservoir
20 pressures calculated there. It could be due to the fact
21 that it is shalier, and it hasn't been as efficiently
22 drained as the blockier sands. But even with the
23 blockier sands, we're still seeing variability within
24 the reservoir pressures that are calculated from the
25 DFITs.

1 The Menefee, we don't see as much
2 variability, but I think that points towards the even
3 tighter permeability due to the fluvial depositional
4 environment that Mr. Sparks testified to, and it hasn't
5 been as efficiently drained because it hasn't been as
6 efficiently stimulated. And you'll see in a subsequent
7 page that I'll go through here that Hilcorp specifically
8 is doing some work just on the Menefee to figure out how
9 better to efficiently drain it and complete it from a
10 fracture stimulation standpoint.

11 So all the DFITs support the geologic
12 testimony that Mr. Sparks previously presented, but
13 there is a fair amount of variability within the members
14 of the Mesaverde interval.

15 On page 22 are some statistics that
16 Mr. Sparks and I have gathered on the Mesaverde within
17 the San Juan Basin. First production, according to
18 public data that we were able to look at, is 1951. We
19 are calculating original gas in place across the entire
20 Mesaverde to be a little over 55 TCF. The way that's
21 broken down within the three primary members is: The
22 Cliffhouse contains 8-1/2 TCF; the Menefee, 34 TCF; and
23 the Point Lookout, being the remaining, just under 13
24 TCF.

25 Cumulative gas produced in the Mesaverde up

1 until late last year is 15.2 TCF, and that calculates to
2 be only a 28 percent recovery efficiency. That is very
3 low, especially considering we are talking about a
4 depletion drive gas reservoir. In order to really
5 consider it be optimally developed and efficiently
6 developed, one would expect a recovery efficiency of
7 about 80 percent. We are estimating that we are
8 ultimately going to recover, through current and
9 historic take points, 19.1 TCF, and that gets the
10 recovery efficiency up to 35 percent. While it does
11 move it up, it is still well below the 80 percent.

12 Going up to an 80 percent recovery
13 efficiency and then subtracting what we are estimating
14 we'll ultimately recover with this current and historic
15 take points, there is an additional 25 TCF within the
16 Mesaverde pool that does not have any take points to
17 capture that 25 TCF. That 25 TCF is going to take
18 additional take points initially with using existing
19 well stock, and then at some point in the future
20 drilling infills to capture that 25 TCF.

21 The productive area of the Mesaverde covers
22 1.3 million acres or a little over 2,060 sections, and
23 there are 9,840 completions within the Mesaverde.

24 Moving on to page 23, this is a map showing
25 how the 25 TCF is spread out across the basin. Each of

1 these colors are by section. We have values calculated
2 for every section that has Mesaverde production. The
3 remaining recoverable, as I said, is the 25 TCF. The
4 cooler colors are lower values. The warmer colors are
5 higher values. When I say lower values, they're lower
6 relative to the higher values. We still have -- as you
7 can see, the second darkest shade of blue that we have
8 here still has 1 to 5 bcf per section remaining, and
9 that is very economic to target with a zone, an existing
10 well and/or a drill well.

11 We also have layered on here with all the
12 dots. These are the Mesaverde wells, the 9,840
13 completions that I refer to on the previous page. What
14 you can note here is that there are many sections that
15 do have remaining recoverable gas in place that don't
16 have any Mesaverde take points. So, again, initially we
17 would be looking at Dakota-only completions to evaluate
18 adding Mesaverde to those wellbores, and where we don't
19 have that capability, then we would be looking forward
20 to drill wells to capture those reserves.

21 We also have numerous sections that have
22 high remaining recoverable gas in place that have
23 multiple Mesaverde take points already in them. That
24 lends itself towards trying to figure out, you know, is
25 there something to be done differently with completion

1 techniques to make those wellbores more efficient and
2 the amount of reserves that they drain in those
3 particular sections.

4 So another way to look at this is on page
5 24. We've turned the map on you here a little bit 90
6 degrees to the right. North is more up and to the
7 right. And what we have mapped here by colors, the
8 original gas in place values by section, and then the
9 vertical bars represent recovery efficiencies by section
10 for the Mesaverde. Again, cooler colors are lower
11 values for the original gas in place. Warmer colors are
12 higher values. And then the height of that vertical bar
13 represents the recovery efficiency. So the taller that
14 vertical 3-D bar, the higher the recovery efficiency.

15 General trends that we're seeing here are
16 lower original gas-in-place values by section towards
17 the north but also higher recovery efficiencies. As we
18 move towards the south, we're seeing higher original
19 gas-in-place volumes, but we're seeing lower recovery
20 efficiencies. So that's where we see the biggest
21 potential for adding Mesaverde to Dakota-only
22 completions and then at some point in the future
23 drilling infills.

24 The analysis that we've done is captured on
25 page 25 as far as we've been using volumetrics to guide

1 us as to where we need additional Mesaverde take points.
2 This exhibit would be familiar to the Division, as it is
3 an exhibit that we have shown at all 62 applications
4 that we've brought forward so far for density
5 exceptions. That was through July 12th. We actually
6 showed another five last week.

7 So our analysis consists of calculating
8 volumetrics at three different reference areas, at a
9 quarter section, a section and a nine-section level.
10 And what we focus in on on this particular table is the
11 column in the middle labeled "CTD/RF." That stands for
12 cum to date and the calculated recovery efficiency. If
13 you'll note, all three areas that we're looking at, we
14 see the average of the 62 wells we brought forward so
15 far, their calculated recovery efficiency is in the
16 mid-30s. Again, to keep that in perspective, if it were
17 to optimally developed, it would be much closer to 80
18 percent for a depletion drive gas reservoir.

19 Moving over to the column on the far right
20 is what we're estimating we'll ultimately recover with
21 current and historic take points and with those
22 corresponding recovery factors where efficiencies are.
23 And you can see even with just forecasting the current
24 take points out into the future, we are calculating that
25 we're going to get recovery efficiencies only up into

1 the upper 40s, so much lower than what it should be to
2 be efficiently developed. So all this points and lends
3 itself towards is there is lots of gas remaining out
4 there that is stranded that requires additional take
5 points to capture.

6 So on page 26, I have a summary of the 22
7 wells that we've executed so far of the 62 applications
8 that we brought through July 12th. We have not executed
9 all 62 because of frac crew limited availability. There
10 is very limited crew availability in the San Juan Basin
11 in particular, and we do also have capital budget
12 constraints within which we need to live.

13 So we have executed 22 thus far. In the
14 first column, I have the well name. The second column
15 is the max 24-hour Mesaverde allocated rate, and then
16 the third column is the 30-day average Mesaverde
17 allocated rate.

18 I do want to highlight that on the table on
19 the right towards the top, I have two wells with an
20 asterisk next to their name, the Hardy 4E and the San
21 Juan 28-7 Unit 133G. Those wells are noted because in
22 those particular wells, as I mentioned earlier, the
23 Menefee does not appear to be efficiently drained. It
24 is tighter. Based on depositional environment, we would
25 expect it to be tighter, and we also saw that with the

1 pressure information. Those two particular wells
2 targeted just the Menefee where we are experimenting
3 with fracture-stimulation design, trying to figure out
4 how best to recover the reserves out of the Menefee.

5 So I'll also note that on the box on the
6 bottom, the yellow box where I have some averages
7 calculated, I did not include those two wells when
8 calculating the average because we only targeted one
9 member of the Mesaverde in those two particular wells.
10 We do have plans for later this year or early next year.
11 We will go back and add the rest of the Mesaverde
12 section to those two particular wells.

13 But of the 20 remaining wells, the average
14 max 24-hour rate is 615 mcf a day, and the average first
15 30-day Mesaverde allocated rate for those wells, the 20
16 wells, is 509 mcf a day. The point behind that being
17 those are very economic rates that we are seeing from
18 our Mesaverde zone-out projects.

19 **Q. And, Ms. Sivadon, you mentioned Hilcorp has**
20 **presented over 60 cases for infill drilling, but not all**
21 **of those wells have been recompleted, correct?**

22 A. Correct.

23 **Q. What are the constraints on that?**

24 A. Those constraints are the frac crew
25 availability in the San Juan. We currently only have

1 one crew available in the San Juan Basin with which to
2 frac, and we are having to coordinate with other
3 operators on the frac crew schedule. And then it is
4 also our internal capital budget constraints that we
5 have.

6 Moving on to page 27, the real significance
7 behind the rates I just talked about on page 26 is when
8 we compare it to Mesaverde allocated rates throughout
9 the entire basin that are on the current spacing. So
10 this graph is the initial Mesaverde allocated rate
11 plotted along the x-axis or the horizontal axis, and
12 then -- pardon me. That's the date. On the y-axis or
13 the vertical axis is actually the Mesaverde initial
14 daily rate. And I'm showing you here all Mesaverde
15 completions brought on since January 1st of 1990 through
16 2017.

17 If you'll please note, in the middle of
18 this graph, there is a green dot with a text box and an
19 arrow pointing to it. The average daily rate -- excuse
20 me -- for those Mesaverde completions is 502 mcf a day.
21 What I have plotted over to the far right and in the
22 maroonish and blue colors, those are the 22 -- or pardon
23 me -- the 20 Mesaverde wells that we have brought for
24 density hearings so far this year that we've actually
25 executed on and to highlight that the average initial

1 rate of those wells is 615 mcf a day, and the average
2 30-day rate for those is 509 mcf a day. So you can see
3 from this graph that those rates compare very well with
4 the 502 that we see from the 1990-on completions, which
5 those are predominantly 80-acre spacing wells and even
6 some of them are 160-acre spacing wells. So we're
7 seeing very similar rates with the third well in a
8 quarter section and the fifth well in a 320 compared to
9 the current 80-acre spacing rules.

10 **Q. And when you say 80-acre spacing, you mean four**
11 **wells per 320?**

12 **A. Yes, sir. Yes, sir.**

13 So to further talk about how the rates
14 relate to reserves, on page 28, we have two graphs over
15 on the left showing two of the wells that we have
16 brought to simultane- -- or excuse me -- well-density-
17 exception hearing, and what we're looking at in each --
18 for each of these wells are all the Mesaverde offsets
19 within nine sections of each of these wells. So in the
20 graph on the top is the San Juan 28-5 Unit 62E, and what
21 you're seeing here is the Mesaverde allocated rate along
22 the x-axis or horizontal axis and then the Mesaverde
23 estimated ultimate recovery in millions of cubic feet
24 along the y-axis or the vertical axis. And you're
25 seeing the same on the graph below for the 28-6 Unit

1 1365. That is all the Mesaverde offsets within the nine
2 sections of the 136F.

3 The take-away from these two graphs, based
4 on the R-squared value and the linear relationship that
5 we're showing with a straight line here is there is a
6 very strong correlation between the Mesaverde initial
7 rate and what we can expect to ultimately recover from
8 that Mesaverde completion.

9 With that being said, what I showed you on
10 the previous slides with the 2018 wells that we've done
11 so far this year where we have very economic rates, I'm
12 going to expect that we're going to achieve very
13 economic reserves on each of those projects as well.
14 It's still too early to say for sure what the reserves
15 will be for each of those projects, but based on these
16 correlations, we would expect to achieve economic
17 results in the way of reserves.

18 **Q. So based on the data at this point, will an**
19 **additional well merely accelerate production, or will it**
20 **recover additional reserves?**

21 A. It is going to primarily recover additional
22 reserves.

23 **Q. Go ahead and move on.**

24 A. Okay. Starting on pages 29 -- pardon me --
25 through 32, these are updates -- pardon me -- of

1 exhibits that were shown by Williams Production Company
2 at the January 2011 hearing requesting a 40-acre spacing
3 within the Mesaverde across the entire Rosa Unit. What
4 these plots show are the daily production by month for
5 the initial Mesaverde well that was in this particular
6 section where a 40-acre pilot well was drilled. So
7 along the x-axis or horizontal axis is the date and
8 years, and the y-axis or the vertical axis is the daily
9 gas rate for the Mesaverde.

10 So the first slide on page 29 is the Rosa
11 Unit No. 169 Com. You can see it's Mesaverde daily gas
12 rate over time. When this was shown in 2011, Williams
13 Production Company had data through late 2010. I have
14 updated all these plots to include data through early
15 2018. What we have noted then vertically along the
16 horizontal axis are the dates as each Mesaverde
17 subsequent well was brought on in that same section,
18 which if you were to see any signs of subsurface
19 interference, you would expect to see it as these
20 individual wells are brought on in the same section as
21 the parent well. But what we are seeing is what
22 Williams pointed out in 2011 and what we're seeing
23 updating the data through 2018 is there is no change or
24 significant change in the decline rate over time, so
25 that would suggest that we are not seeing subsurface

1 interference with the 40-acre spacing pilot wells.

2 So it's the case for the Rosa Unit No. 169
3 Com, shown on page 29. The same can be said for the
4 Rosa Unit No. 075, on page 30. On page 31, the same
5 results for the Rosa Unit No. 129, and on page 32, again
6 the same for the Rosa Unit No. 035X. And no significant
7 change in decline rate over time, as those Mesaverde
8 wells were brought on in the same actual -- not this
9 section but the same GPU.

10 Moving on to page 33, again, this is the
11 remaining recoverable gas in place, the 25 TCF that
12 would get us up to an 80 percent recovery efficiency
13 within the Mesaverde. Again, cooler colors are lower
14 values. The warmer colors are higher values. And what
15 what we have layered on here this time is not the
16 Mesaverde completions but the Dakota-only completions
17 within the Mesaverde productive limit.

18 As Mr. Sparks said earlier, we have just
19 under 1,960 historic and current Dakota-only completions
20 within the Mesaverde productive limit. Of those 1,960,
21 just under 1,300 of those are currently standing Dakota
22 wells. That's the amount of well stock that all
23 operators would have to work with initially to add the
24 Mesaverde to and help increase the recovery efficiency.
25 Again, once we get through those 1,300 wells as a group

1 of operators, then it will take infill drilling to
2 continue to drain the stranded reserves.

3 By focusing first, though, on the
4 Dakota-only completions, again we're using our current
5 infrastructure, and we're minimizing the footprint at
6 the surface. And it also helps us out as an operator on
7 our capital expenditures.

8 Then noted to the lower right is a circle
9 that we're calling the area of focus. This is an area
10 that, as you'll see, is poor as far as values of
11 remaining recoverable gas in place, and I'm going to go
12 into a little bit more detail of this specific area on
13 the next page as far as what we see as remains
14 potential. Albeit, you know, I just said that it has
15 poorer remaining recoverable gas in place values, but
16 when you start actually looking at the numbers, there is
17 still significant work to be done in this area.

18 So on page 34, this area is what we
19 internally refer to as Area 8 within Hilcorp. We are
20 calculating the Mesaverde estimated ultimate recovery
21 efficiency to be 42 percent. That is just with current
22 and historic Mesaverde take points and assumes no future
23 development. What we have layered in here as green dots
24 are Dakota-only completions where we would have the
25 opportunity to add the Mesaverde to them, and what we

1 have noted as colors by section, those are the
2 corresponding recovery efficiencies for this particular
3 area. Those green dots number 102, I just wanted to
4 mentioned. They're Dakota-only production, with no
5 Mesaverde production. We have actually looked at all
6 102 wells, and they do meet and/or exceed Hilcorp's
7 internal economic hurdles for adding the Mesaverde to.
8 With that proposed development, after executing those
9 102 wells, we're talking about we're only going to bump
10 the recovery efficiency from 42 to 43 percent. So,
11 hence, the comment that at some point, once we work
12 through all the existing wells, it is going to take
13 additional drilling to tap into the stranded reserves.

14 The numbers that I'm highlighting to you on
15 this particular slide have been reviewed and approved by
16 a third-party reserve auditor, so these are all SEC
17 compliant calculations that I'm showing on here.

18 This particular area, Area 8, is about
19 200,000 acres. And just to put it in perspective, the
20 Mesaverde does cover approximately 1.3-, 1.4-million
21 acres, so one would expect that there are lots and lots
22 of existing wellbores out there in which we could add
23 the Mesaverde and considering what we're just seeing in
24 this one area of Area 8.

25 On the last page, page 35, Mr. Sparks, in

1 his testimony, pointed out some similar basins from a
2 paleo standpoint during the Cretaceous period where
3 there is Mesaverde production, and this is a summary of
4 their similarities between these various basins.

5 Starting on the far left with the San Juan
6 Mesaverde, you know, as he testified, we're talking
7 about shallow marine and fluvial depositional
8 environments. We're looking at permeability averages of
9 .02 to .4 millidarcy, which is very tight. There is
10 abundant natural fracturing, and we're currently
11 experiencing low recovery efficiencies, as the numbers I
12 just walked through indicate.

13 The current rules are at 80-acre well
14 spacing, with 660-foot setbacks, and we are seeking and
15 asking for 40-acre well density spacing across the
16 entire Blanco-Mesaverde Pool.

17 As we looked at on Mr. Sparks' map, we have
18 the Piceance Basin in Colorado to the north of us where
19 the Williams Fort Formation is part of the Mesaverde.
20 It also is a fluvial depositional environment. It has
21 very low permeability, which does restrict the fluid
22 movement and does dictate and determine well density
23 spacing. It has a very similar permeability range, on
24 the same order of magnitude, from .01 to .5 millidarcy.
25 It also has extensive natural fracturing and, as cited

1 from some papers, production logs should get
2 contribution from tight sands that weren't usually
3 completed in the past.

4 Of note in the Piceance Basin, the
5 Mesaverde is actually down to 10-acre well spacing on
6 100-foot setbacks.

7 When we move further up to the north and to
8 the right on this particular page, we have the Green
9 River Basin in which the Almond Formation is part of the
10 Mesaverde Group there. It also is shallow marine and
11 fluvial depositional environments, same permeability
12 ranges of .01 to 50 millidarcies. And Ultra Petroleum
13 recently received approval from the Wyoming Oil and Gas
14 Commission to go down to 5-acre spacing within the
15 Mesaverde. And so those are very analogous to what
16 we're asking for here in the San Juan Basin. It's not
17 unheard of for the Mesaverde to be on denser spacing
18 than the current 80-acre spacing in the San Juan Basin.

19 **Q. Just a few concluding questions: Based on what**
20 **you've testified about, in order to adequately produce**
21 **the Mesaverde reserves, are additional or recompletions**
22 **needed in the pool?**

23 A. Yes, they are.

24 **Q. And if this is approved, it doesn't necessarily**
25 **mean that there will be an additional four wells per**

1 half section, does it?

2 A. It does not. Correct.

3 Q. Rec Completions or drilling wells are based on
4 economics?

5 A. Correct.

6 Q. And each operator has its own scheme of things?

7 A. Yes.

8 Each operator -- I've worked for four
9 different operators myself. Each operator has their own
10 set of economic hurdles that their projects have to meet
11 in order to get approved.

12 Q. So assuming this application is approved, it
13 could take years or even decades for total development?

14 A. That is correct.

15 Q. Were pages 21 through 35 either prepared by you
16 or under your supervision?

17 A. Yes, they were.

18 Q. And in your opinion, is the granting of this
19 application in the interest of conservation and the
20 prevention of waste?

21 A. Yes, it is.

22 MR. BRUCE: Madam Chair, I'd move the
23 admission of pages 21 through 35 of Exhibit 1.

24 CHAIRWOMAN RILEY: Said exhibits are
25 accepted into the record.

1 (Hilcorp Energy Company Exhibit Number 1,
2 pages 21 through 35, is offered and
3 admitted into evidence.)

4 MR. BRUCE: And I have no further questions
5 of this witness.

6 COMMISSIONER MARTIN: Go ahead.

7 CHAIRWOMAN RILEY: I have a couple.

8 CROSS-EXAMINATION

9 BY CHAIRWOMAN RILEY:

10 Q. On page 26, where you're discussing the
11 recompletes --

12 A. Yes, ma'am.

13 Q. -- and you have your 20-well average, 30-day
14 rate, what's the time frame that you were looking at
15 that you did these recompletes, and when was the 30-day
16 average taken out of that time frame. Does that make
17 sense?

18 A. The 30-day is over the first 30 days that each
19 well is brought on line.

20 Q. It's still within the initial production,
21 basically?

22 A. Yes, ma'am. Yes, ma'am.

23 Q. Your first month?

24 A. Correct.

25 Q. Okay. Thank you.

1 And I had a question on page 29 so I
2 understand your slide. Is the red-line production here
3 just for the Rosa Unit Com No. 169 --

4 A. Yes, it is.

5 Q. -- and then it shows as those wells are coming
6 on line, the effect to the one well? It's not
7 cumulative production of all the wells?

8 A. Correct. It's just for that individual well.

9 Q. Okay. Thank you.

10 On the Dakota recompletes, are you keeping
11 the Dakota open, or are you plugging back the Dakota?

12 A. We are keeping the Dakota open and commingling.

13 Q. Okay. And have you-all done anything on the
14 1,960 block? I know not all those are yours, right?

15 A. Right.

16 Q. I know there are multiple operators.

17 A. Yes, ma'am.

18 Q. But those that belong to Hilcorp, have you done
19 any analysis on your existing wellbore and whether or
20 not you've seen as adequate for recomplete?

21 A. We do that on a case-by-case basis before we go
22 forward with it and proposing it to management to go
23 forward with that. So we do look at that before
24 proposing it.

25 Q. So in those areas where you may not be able to

1 about a 6-1/2-pound-per-gallon equivalent, and at depths
2 of about 5,000 feet -- I'm trying to do the mental math
3 here quick.

4 I look to Mr. Pipin to help me out with
5 initial pressures on the calculator.

6 MR. PIPIN: What do you want me to do?

7 THE WITNESS: 6.5 times .052 times 5,500.

8 MR. PIPIN: Okay. 6.5 --

9 THE WITNESS: Times .052 times 5,500.

10 MR. PIPIN: Sorry. Let's start again.

11 THE WITNESS: 6.5 times .052 times 5,500.
12 1,859.

13 Q. (BY COMMISSIONER BALCH) So when you look at
14 your -- your -- your 40-well trials, the infills --
15 targeted infills, it looks like the average pressure was
16 somewhere close to that range, maybe a little bit lower.
17 And it didn't look like there was a significant number
18 of wells that were completely completed pockets.

19 A. Right.

20 Q. I think that bolsters your argument for
21 compartmentalization.

22 A. Yes, sir, it does.

23 Q. I think the average may be around 1,200, plus
24 or minus.

25 So you said the recovery should be about 80

1 **percent. That's an additional 25 TCF of gas. Is this**
2 **going to add to premium reserves if you start to acquire**
3 **that additional gas?**

4 A. Yes, sir, it will.

5 **Q. And in terms of that 25 TCF, what are you**
6 **looking at at getting out of the Mesaverde with this**
7 **spacing application?**

8 A. We haven't calculated that exact number yet, so
9 that would have to be some follow-up on that.

10 **Q. Order of magnitude or ballpark?**

11 A. I would say tens of TCF -- maybe several TCF,
12 maybe up to ten TCF.

13 **Q. Maybe up to ten.**

14 **Which I think there is about 2,000 TCF of**
15 **reserves in the U.S., maybe a little more now since I've**
16 **looked at it.**

17 A. Okay.

18 **Q. That's a substantial number of added reserves.**

19 A. Yes, sir.

20 **Q. For your hydraulic fracturing, what fluids are**
21 **being used?**

22 A. We have used both slick foam, which is slick
23 water combined with nitrogen, and we have also used gel
24 foam, which is linear gel combined with nitrogen foam.

25 **Q. And are you able to do those with produced**

1 water and brackish water?

2 A. Yes, we are.

3 Q. And what percentage of your hydraulic
4 fracturing is done with water that is otherwise not
5 potable?

6 A. I can't answer to that specifically, as I'm not
7 in the day-to-day operations details.

8 Q. But typically you're going by industry standard
9 practices that allows up to 100,000 TDS water, right?

10 A. Yes, sir.

11 Q. Okay. So you're not necessarily going to the
12 local river or well or something like that for water.
13 You're going to your water production from other wells?

14 A. Initially, yes.

15 Q. One thing we're always really conscious of is
16 the surface footprint and the amount of operations that
17 occur at the surface because that does cause disruption,
18 noise pollution --

19 A. Right.

20 Q. -- et cetera. If you down space significantly,
21 does that impact the ability later on to go horizontal?

22 A. No, sir, it doesn't, because even with
23 downspacing, there is still the potential to have some
24 untapped reserves in some loves [sic; phonetic] that it
25 may be best to tap into that with horizontals. And in

1 some places, it may not make sense to go down to 40-acre
2 spacing. It may be more efficient for us to drill
3 horizontals. So it's evaluated on a case-by-case basis.

4 Q. So aside from those bigger areas where you may
5 want to put in a horizontal, from your existing pads or
6 existing Dakota pads also, I mean, how far out can you
7 reach with a deviated well to 5,500 feet? How many of
8 those additional 40-acre spots could you hit without
9 putting a new pad on the surface?

10 A. I haven't calculated that number yet.

11 Q. It sounds like your company strategy is not to
12 make new pads.

13 A. That is correct.

14 Q. So you would do those first?

15 A. Right.

16 Q. And then the last resort is a new pad?

17 A. Yes, sir. Yes, sir.

18 Q. And then a new drill, for that matter?

19 A. Right. Right.

20 Q. Thank you.

21 A. Yes, sir.

22 RE CROSS EXAMINATION

23 BY CHAIRWOMAN RILEY:

24 Q. One other question and that's to pipeline
25 capacity. And, one, are you concerned about it in the

1 area where you'll be doing this?

2 And number two, have you guys done any
3 research in terms of pressures within the pipeline,
4 whether lower pressure in the pipeline would help your
5 recovery of existing wells?

6 A. Yes, ma'am. We have several pipe projects
7 going on currently, which is surface modeling where we
8 can model adding additional compression to see what kind
9 of results we can get from a rate perspective. We have
10 several projects identified where we can fit in
11 additional compressions to help lower those surface
12 gathering system pressures so that we can even extend
13 the life of current wells even further. And Hilcorp
14 just recently announced that we are acquiring Williams
15 Midstream Assets in the San Juan Basin where we will be
16 able to do more of those types of projects.

17 So in sum, no, we are not concerned about
18 pipeline constraints. We feel like we have it pretty
19 well modeled, and we know that we can put in additional
20 compression to help us with that.

21 CHAIRWOMAN RILEY: I'm done.

22 Mr. Brancard, do you have any questions?

23 MR. BRANCARD: Sure.

24 CROSS-EXAMINATION

25 BY MR. BRANCARD:

1 **Q. Do you know the acreage of the number of**
2 **sections in the pool?**

3 A. Within the pool, I don't have exact number of
4 sections. I know there are 2,061 within what kind we
5 call the Mesaverde productive limit, but I can't answer
6 to just within the pool.

7 **Q. 2,061 sections?**

8 A. Yes, sir.

9 MR. BRUCE: That's on page 22,
10 Mr. Brancard.

11 THE WITNESS: And that is within what we
12 internally refer to as the Mesaverde productive limits.
13 That would also include sections up in Colorado.

14 RE CROSS EXAMINATION

15 BY COMMISSIONER BALCH:

16 **Q. You gave up potentially 8,000 new locations,**
17 **1,275 of which would probably be from Dakota wells --**

18 A. Right.

19 **Q. -- and another good portion of the remainder**
20 **that could be reached from existing pads?**

21 A. Correct.

22 **Q. With some portion left that would be --**

23 A. Yes, sir.

24 CONTINUED CROSS-EXAMINATION

25 BY MR. BRANCARD:

1 witness, Dr. Balch, I would like to recall Mr. Creekmore
2 to discuss the Colorado question.

3 CHAIRWOMAN RILEY: Yes, that's fine.

4 THE WITNESS: Thank you.

5 CHARLES CREEKMORE,
6 after having been previously sworn under oath, was
7 re-called, questioned and testified as follows:

8 DIRECT EXAMINATION

9 BY MR. BRUCE:

10 Q. Mr. Creekmore, Dr. Balch asked you about the
11 Colorado side of the Mesaverde Gas Pool. Do you have an
12 answer for that?

13 A. Well, I contacted two people, our attorney, Tom
14 Dugan, who was on the road, and he couldn't quote --
15 Colorado's on field rules, Ignacio Blanco Field, and
16 they're not on pool rules necessarily. And I asked
17 Mr. Dugan how much activity is going on in the Mesaverde
18 in Colorado, and his reply was "none."

19 And then I contacted our landman that works
20 primarily in Colorado. My area has no activity in
21 Colorado. And in the past, I've just done Fruitland
22 Coal-type operations, but that's been four years ago.
23 The best -- our landman said 1979, the Ignacio Blanco
24 Field, which is 112, had -- this is 112-46. It had
25 320-acre spacing with two wells for PC, Fruitland Coal

1 and Mesaverde, and four wells for the Dakota. They lump
2 their formations together under the field rules, unlike
3 what we do in New Mexico.

4 And then he found in October of 2002, under
5 Ignacio Blanco 112-168, the Mesaverde was increased four
6 wells per 320, but that was only one township, 3211, and
7 that's on the border between New Mexico and Colorado.
8 So that's -- that's the best I could come up with to
9 answer your question.

10 Q. And I put in front of you page 23 of Exhibit 1.
11 Really, virtually all of the Colorado portion of the
12 Mesaverde reservoir has been pretty well developed and
13 has fewer remaining reserves than the New Mexico side?

14 A. Yes. And it's not an area of our concentration
15 either.

16 Q. Okay. And then one final question, a question
17 about how many wells. Not the 62 you got approval for,
18 but how many Mesaverde wells has Hilcorp worked on to
19 date?

20 A. I believe it's around -- over 50.

21 Q. Okay. So as opposed to the 20 or so that have
22 been in the infill, you've also worked on additional
23 wells?

24 A. Right. And I think in my previous testimony --
25 on page 9 at the bottom, all of our concentration is

1 south of the New Mexico-Colorado border.

2 **Q. Thank you, Mr. Creekmore.**

3 A. Again, that was hurried information that I
4 gathered this afternoon.

5 COMMISSIONER BALCH: I get it. It sounds
6 like we're comparing apples and helicopters. Thank you
7 for what you gave us.

8 MR. BRUCE: But that concludes our
9 presentation, Madam Chair.

10 CHAIRWOMAN RILEY: Thank you.

11 MR. BRUCE: And with that, we request that
12 this matter be taken under advisement.

13 MR. HALL: Before we do that --

14 CHAIRWOMAN RILEY: Yes, Mr. Hall.

15 MR. HALL: -- a comment on behalf of LOGOS.

16 LOGOS Resources owns substantial lease
17 assets within the Blanco-Mesaverde Pool, and LOGOS
18 currently operates approximately 570 Mesaverde wells
19 that need more penetrations. We stand in support of the
20 application today. And if I might provide a letter from
21 LOGOS' president, Jay Paul McWilliams, which is labeled
22 as Exhibit 1, and I ask that be made part of the record.

23 CHAIRWOMAN RILEY: Thank you.

24 MR. BRANCARD: That's okay.

25 (LOGOS Resources II, LLC and LOGOS

1 Operating, LLC Exhibit Number 1 is offered
2 and admitted into evidence.)

3 MR. BRANCARD: I guess -- I guess one final
4 question for counsel. On what standard do you want --
5 does the Commission evaluate this application? On what
6 basis would the Commission approve this?

7 MR. BRUCE: I'm not quite sure of the
8 question, Mr. Brancard, but, I mean, obviously,
9 prevention of waste, and reserves will go unrecovered
10 and will be wasted underground in the event that
11 additional recompletions or drilling does not occur.

12 COMMISSIONER BALCH: I suppose I would
13 bring up correlative rights.

14 MR. BRUCE: And correlative rights
15 also isopach -- I do not think there will be an
16 impairment of correlative rights as to any offsets of
17 any of these wells because the Commission or the
18 Division previously approved 660-foot setbacks, and
19 those are being retained, so that should be sufficient
20 to protect the correlative rights of all the operators.

21 COMMISSIONER BALCH: I think I'm thinking
22 more of the right of the producers to produce the
23 assets --

24 MR. BRUCE: Yeah.

25 COMMISSIONER BALCH: -- the minerals that

1 they own.

2 MR. BRUCE: Recover their fair share of the
3 reserves.

4 COMMISSIONER BALCH: Right.

5 MR. BRUCE: Absolutely.

6 MR. BRANCARD: In the current order, there
7 is this whole sort of system of going back and forth
8 between quarter sections on your drilling plan. You've
9 kind of eliminated that.

10 MR. BRUCE: And perhaps Mr. Rankin could
11 confirm, since he was the one who was initially in this.
12 But really they're asking for four wells per quarter
13 section, eight per half section.

14 MR. RANKIN: Mr. Brancard, to address your
15 question about the sequencing of the -- of the infill
16 wells, yes. I think once we exceed the four wells, the
17 idea is that it made no further sense to abide by or
18 impose any strict sequencing at that point because
19 you're simply just filling in, and it should be left to
20 the operator to identify where within each spacing unit
21 is best to locate each subsequent infill well.

22 If you're going to limit us to a sequencing
23 where each spacing unit's going to be highly variable in
24 terms of where specific Dakota wells may be located or
25 where they've identified unrecovered reserves or where

1 those lenses are, then it sort of defeats the purpose of
2 having that freedom to identify those locations.

3 So the thought was that we would eliminate
4 that sequencing for wells beyond -- you know, entirely
5 so that they have the freedom to identify those
6 locations where they would be best completed to target
7 the unrecovered reserves using existing infrastructure,
8 as Ms. Sivadon pointed out initially, and then being
9 able to go back in and do new wells on existing pads or
10 new drills as necessary.

11 MR. BRANCARD: So now if you had nothing,
12 if you had a spacing unit that had no wells in it, you
13 could drill the first four wells in one quarter section
14 before you drilled anything in the other quarter section
15 under your proposal?

16 MR. RANKIN: The way it's proposed, that's
17 true. That's is true the way it's proposed. And it may
18 be more efficient to do it that way because then with
19 advanced petroleum technologies, they could have one pad
20 and they could drill directly to a target at those other
21 locations. So, you know, part of the reason to do away
22 with that was just to give the operator the flexibility,
23 you know, modern drilling techniques and using existing
24 resources just to do it.

25 CHAIRWOMAN RILEY: Do we want to open up

1 for public comment at this time?

2 COMMISSIONER BALCH: We could take a break.
3 It's only been three hours.

4 CHAIRWOMAN RILEY: Okay. So why don't we
5 take a ten-minute break.

6 MR. BRANCARD: Sure.

7 CHAIRWOMAN RILEY: Be back here at five
8 till, and then we'll be ready for public comment.

9 (Recess, 3:42 p.m. to 3:56 p.m.)

10 CHAIRWOMAN RILEY: Ready to start up again?
11 Show of hands. This is your opportunity to have public
12 comment. We have one, two, three, four.

13 Okay. And then do we still have a witness?

14 MR. ANDERSON: Madam Chair, that was by
15 comment, just a brief statement, if I may.

16 CHAIRWOMAN RILEY: Right now? Before
17 everybody?

18 MR. ANDERSON: That would be great, if
19 appropriate, Madam Chair.

20 CHAIRWOMAN RILEY: Okay.

21 MR. ANDERSON: Madam Chair, Commissioners,
22 thank you for this opportunity.

23 While San Juan Citizens Alliance does
24 believe intervention was warranted in this matter, we
25 would like to thank you for the opportunity to testify

1 at the end of this hearing. However, our client does
2 decline this opportunity, as they believe that
3 appropriate weight will not be given to their testimony,
4 as intervention was denied. Had intervention and
5 ultimately a continuance been accepted or been granted,
6 SJCA would have been able to provide requisite expert
7 testimony to better inform this Commission on our
8 concerns and the concerns to the San Juan Basin.

9 That is all I have. Thank you.

10 CHAIRWOMAN RILEY: Thank you.

11 So then there are three others. If we
12 could limit the comment period to, say, five minutes
13 each, and I'll leave it up to you-all who wants to go
14 first.

15 Ma'am, would you like to go?

16 DR. MORGAN: Good afternoon. I'm Dr. Marie
17 Morgan. I'm a private citizen and a resident of
18 Santa Fe.

19 If I may continue the tradition I saw here,
20 I have my Bachelor of Arts from the University of
21 California at Berkeley in History. I have a Master of
22 Arts in Human Values from San Francisco Theological
23 Seminary, and my doctorate is from the Jesuit School of
24 Theology at Berkeley.

25 Okay. Here's what I learned yesterday

1 about more drilling in New Mexico. A Colorado radio
2 show in southern California -- I'm sorry -- in South
3 Carolina expressed concern over whether burning fossil
4 fuels is causing climate change. The guest speaker on
5 the show said, "Hold it. Time out. Enough. We here,
6 where we sit, are about to be hit with a 9-foot storm
7 surge of about this high (indicating) and 30 to 40
8 inches of rain." You remember Santa Fe recently had a
9 lot of trouble with 3 inches of rain. "The time for
10 debate is over," he said. "We are at a tipping point.
11 It is now all about what can we do quickly to reduce the
12 destruction we are bringing down upon ourselves."

13 Now, we know that New Mexico's looming
14 disaster is just the opposite of the East Coast, but it
15 is no less threatening to our way of life. We do not
16 have enough water. As a private citizen and rancher,
17 Ms. Riley, you know without irrigation, that an owner
18 and her cows cannot survive. We have no snowpack. The
19 Rio Grande is already drying up. Water tables are
20 dropping precipitously and will continue to do so, and
21 yet in the face of this, this company, Hilcorp, wants to
22 double the number of wells. This company has
23 demonstrated a total disregard for regulatory compliance
24 in other states. You surely know that they have
25 repeatedly been fined in other states for failure to

1 inspect and test pipeline valves, for failure to report
2 pipeline flow data, and the list goes on.

3 We all know, for example, that methane
4 leaks are a serious problem in the industry and
5 particularly in our region, yet this company admits that
6 the only goal -- and this is in writing -- is to acquire
7 and exploit. Their business model seems to be that
8 fines are no deterrence to that goal. They show no
9 regard for the people of New Mexico or for the planet.
10 Their irresponsible practices should be minimized in our
11 state.

12 I would also like to address the assumption
13 that I heard voiced just a few minutes ago that
14 resources should not be left in the ground if it is
15 economical to remove them. The elephant in the room is
16 that if we recover all the known oil and gas resources,
17 the earth's average temperature will increase another 10
18 to 15 degrees Fahrenheit, which as you know would render
19 all human civilization as we have known it no longer
20 viable.

21 Now, most of us regular folk can do very
22 little personally to slow the planet's healing --
23 heating -- excuse me -- but you here have a great deal
24 of power to finally say: No. Time out. Enough.

25 So today I urge this Commission to reject

1 the application to amend, to take a stand and to say:

2 No. Time out. Enough drilling.

3 Thank you.

4 MR. OTTER: Madam Chair and counselors, my
5 name is John Otter. I have a Master of Science in
6 Engineering Sciences.

7 There are two threats to the existence of
8 all of humankind and other life. One is nuclear
9 weapons, which a war with the explosion -- of them would
10 do us all in. The other is global warming. Global
11 warming is somewhat insidious in that it is contributed
12 to by individuals and legislative bodies large and
13 small. Global warming is increasing. It is
14 uncomfortably close to an amount which, we are told, is
15 not possible to recover from and will irreversibly kill
16 all human beings and life.

17 So it is the responsibility of all
18 individuals and legislative bodies to exercise their
19 ability to control this global warming. The oil and gas
20 wells contribute to global warming. They emit global
21 warming glasses -- gases, one of which is methane, which
22 is a potent global-warming gas, and we need to limit
23 those emissions.

24 The application for more wells needs to be
25 delayed until there is a critical need for energy from

1 that source, which I understand not to be the case
2 currently. In that delay interim, our efforts to
3 generate energy from nonpolluting sources such as solar,
4 wind, et al. is continuing, and there are instructions
5 and planned efforts to increase that. And those
6 increases in energy will hopefully enable this body to
7 further delay the approval of this application hopefully
8 indefinitely and fully exercise the responsibility not
9 to contribute to the increase in global warming, which
10 threatens the existence of all humankind, a rather
11 important matter.

12 So I urge you to delay this application and
13 fulfill your responsibility not to contribute to global
14 warming and the threat to the existence of humankind.

15 Thank you.

16 CHAIRWOMAN RILEY: Thank you.

17 You want to go next?

18 MS. BEZOLD: My name is Bobbe Bezold
19 [phonetic]. I am an artist and mother, grandmother. My
20 granddaughter's turning one in a few days, and she's the
21 main reason I'm here. And I've been a citizen of
22 New Mexico for -- I've been living in New Mexico for,
23 oh, 37 years, longer than anywhere else.

24 And I look at you folks (indicating) and
25 you folks (indicating), and I wonder who is benefiting

1 from more drilling? Who is going to benefit? These
2 guys (indicating) are going to benefit from more
3 drilling. The people of New Mexico will not benefit.
4 The people of New Mexico, we have long been a sacrifice
5 zone. And that is a term that was coined by the federal
6 government and by companies like this one. The
7 Southwest is a sacrifice zone. People don't live there.
8 Animals don't live there. There are not many plants.
9 You know, we don't need to worry about it. There are no
10 rivers, you know, and the water. There are no people
11 that are going to be affected by this. But, in fact,
12 there are countless people. My granddaughter will not
13 experience New Mexico as I have. And your children and
14 your grandchildren and their children will not
15 experience the Southwest as we have.

16 I am appalled at you people (indicating).
17 I am appalled at your irresponsibility and that -- for
18 example, we were not given enough notice about public
19 testimony. I only found out about this three days ago.
20 Other people had a little bit more notice than I did.
21 But that is not okay. We still operate in a democratic
22 republic, and I expect you to respect that.

23 And I also expect you, as people who have
24 children who live in New Mexico, to think about the
25 thousands of new wells -- not four -- thousands of new

1 wells that this company is going to drill. And there
2 will be no stopping them once they start.

3 So please think about your children, your
4 grandchildren, the land, the water, the air, and the
5 people who live near what they're proposing and in what
6 they're proposing. These things destroy communities.
7 It's been well proven that crime rates go up, that women
8 are raped; there is the higher incidence of crime. And
9 they do not contribute to jobs for the New Mexican
10 people. They don't. The people that come in to work
11 these wells come in from all across the country.
12 They're not people from New Mexico by and large, and
13 they're temporary. They have no vested interest in
14 New Mexico. And you as New Mexicans, I expect you to
15 have a vested interest in and love this place and love
16 the land and love the water and love the air. It's
17 beautiful out here. Look at the air. Look at this
18 incredible day that we have.

19 And the people of North Carolina are facing
20 the largest hurricane in the history of the United
21 States, and the reason for that, as John pointed out, is
22 climate change, and this process contributes directly to
23 climate change. We have the largest plume of methane
24 coming from New Mexico. It can be seen from outer
25 space. And that is a direct contributor to climate

1 change. And my daughter, my granddaughter and their
2 children will feel the effects of it. We're feeling the
3 effects of it now. I am a gardener and also a small
4 farmer, and I see it. And I'm sure you-all see it. We
5 had the hottest summer in June and July than we have
6 ever had.

7 So please, please do the right thing. Do
8 not approve these wells. And if you must do something
9 in favor of these folks (indicating), then delay them.
10 Give the public more time to comment about this, please.

11 Thank you.

12 CHAIRWOMAN RILEY: Thank you.

13 MS. WATERS: My name is Caren Waters. I'm
14 a social works student. I'm graduating this May. I
15 also -- I've been in New Mexico for 30 years. This is
16 my home. I moved here from Chicago because of the
17 beautiful scenery, the clean air, which I had never
18 experienced in Chicago, the blue skies, the fact that
19 you can see all the stars at night. This is -- was a
20 wonderful, wonderful thing about New Mexico that I
21 loved, and now I'm greatly concerned. I'm also a
22 farmer, and I'm greatly concerned because of the water
23 issue.

24 I became concerned about the water issue
25 six months ago when, in the "Alibi," there was a tiny,

1 little article that said that water is going to become a
2 major issue in the next six months, and the amount of
3 water available to us could be cut in half. So I
4 started doing research, and I'm shocked. I am shocked.
5 I found out -- if you look -- and you can go online.
6 You can Google it. The top six users of water in
7 Albuquerque are golf courses, over 7 billion gallons of
8 water used by golf courses in 2016. That's number one.
9 So I really started to panic when I saw that because I
10 can see that our mind-set is not where it's supposed to
11 be. We're not thinking about the people of New Mexico.
12 We don't care about the people. What happened where
13 we've lost our values?

14 The other thing I heard is that we have a
15 contract with Texas to provide a certain amount of water
16 to Texas, and we're not providing that water. And it's
17 been kind of a joke for a while because we're supposed
18 to actually be paying penalties for this water that
19 we're not providing. Well, suddenly this year, the
20 federal government has decided to step in and pressure
21 us into providing that water for Texas. So if you'll
22 notice, we're not able to put water on reserve any more
23 for New Mexico. All the extra goes to Texas. So we've
24 had all these wonderful rains this summer because we've
25 moved out of El Nino to El Nina, so the rains have come,

1 but we're still not stockpiling water. We're not seeing
2 it in the Rio Grande. The Rio Grande is dry.

3 So it takes thousands of gallons of water
4 to do fracking, and we have no water. So what are you
5 talking about? It makes no sense. You take that water,
6 those thousands of gallons of water, and you inject
7 chemicals into it, so we can't even re-use the water.

8 How do you sleep at night? How do you do
9 this for a living? You must make a hell of a lot of
10 money. But you know what? You can't eat it or drink
11 it. And one day when there is no water and we're all
12 dying, you're going to have all that money and the
13 beautiful houses, but I'll be damned -- you know, your
14 children will be dying. Our children and
15 grandchildren -- I wanted to escape. I wanted to go --
16 I thought of going to Wisconsin. I'm going to move to
17 Wisconsin, when I was first panicking. Guess what?
18 They don't have the snows and the rains. So I thought,
19 you know what? I'm going to stay here, and I'm going to
20 get educated, and I'm going to fight.

21 So I am educating you and begging you
22 that -- you know, the gentleman who first talked about
23 due process, how about our due process? How about
24 New Mexico's due process? How about, number one, the
25 meeting was supposed to be on the 6th? Was everybody

1 notified that it wasn't going to be on the 6th? I got
2 notice yesterday from Food & Water Watch. That gave me
3 how much time to prepare? But I made a point of being
4 here because I am going to fight. So let's follow our
5 due process. Let's put this -- let's table this until
6 everybody can show up.

7 I was at the Sandoval County Ordinance
8 Meeting, and it was done right. And there were so many
9 people there, hundreds of people there, that got to talk
10 and talked about how this was going to affect them.
11 Native American people were there, and they got to
12 speak. And what, we had one -- because this is being
13 rushed through.

14 What is the hurry? What about the people?
15 Does anybody care about New Mexicans? Is it all about a
16 buck and how you're going to squeeze all that energy out
17 of rocks? Is that what it's about for you really? What
18 about the people dying and have cancer? What about the
19 one person who was here, the Native American, talking
20 about his grandmother with cancer? Do you care about
21 that at all and how that's changing?

22 That's all I have to say.

23 CHAIRWOMAN RILEY: Do we have any more
24 public comment?

25 MR. VIETEL: Yes. My name is Richard

1 Vietel [phonetic]. I'm a Santa Fe resident. I used to
2 live in Colorado, Ignacio, Colorado. I had a ranch, a
3 quarter section there, and I had two wells on my
4 property, which were producing pretty well. And they
5 had to come in and frac the wells to get up to where
6 they wanted to. I had one of the only wells in the area
7 that was producing -- or, rather, that had good water
8 quality. I would say within two years, you'd drive up
9 on my property and you'd just smell gas. My water was
10 tested. It didn't show -- it didn't show that it was
11 deterioration from the gas wells, but I ask you: Where
12 did all that smell come from? You'd walk in my house
13 and it smelled like gas. I eventually had to move.
14 And, unfortunately, the people that live in that area
15 have to live with that.

16 I'm asking also for a continuance. I think
17 people need to look at this and research this a little
18 bit more carefully because it's a big decision. It's
19 going to impact a lot of people. I know a lot of the
20 owners up there, and I know what it's like to get two
21 more wells on a piece of property that's already covered
22 with wells. I'd like you to consider more time so more
23 people can have their voices.

24 Thank you.

25 CHAIRWOMAN RILEY: I think that's everybody

1 for public comment.

2 So at this point, it's time for
3 deliberation, right? Do you want to go into closed
4 session?

5 COMMISSIONER MARTIN: I move we go into
6 closed session.

7 COMMISSIONER BALCH: I will second the
8 motion.

9 CHAIRWOMAN RILEY: So moved.

10 (Executive session, 4:17 p.m. to 4:58 p.m.)

11 CHAIRWOMAN RILEY: We're back on the
12 record, and just to make note that we deliberated just
13 specifically about this case while you-all were out.

14 COMMISSIONER BALCH: I move to go back into
15 regular session.

16 COMMISSIONER MARTIN: I second.

17 CHAIRWOMAN RILEY: We're now back in
18 regular session.

19 So we have a number of things that we want
20 to share with you-all, the most important of which is we
21 feel like we did not notice it. And so we would like to
22 continue this to another date to ensure that we have
23 proper notice. We have a date figured out of November
24 19th that we could continue this to.

25 But we have some other things we want to

1 talk about, one of which is -- and I'm just going to say
2 this out loud, and it's probably my fault for not having
3 corrected both. But when we have public comment, we
4 have to make sure that it's addressed to us. It
5 shouldn't go out to the audience. It should go to the
6 Commission. That's neither here nor there.

7 And so is there anything else for this case
8 we want to talk about?

9 MR. BRANCARD: Yes. Just to clarify, the
10 hearing is being continued. So that means that all the
11 evidence presented today, all the people who spoke,
12 that's all part of the record going forward. So people
13 don't need to come back and give the same testimony.

14 At this point, you know, there were no
15 other technical parties opposing your application, and
16 so I think the Commission finds that there is a certain
17 degree of evidence here supporting some change in the
18 pooling here. I mean, what you're asking for, if I
19 understand this pool order -- which you never gave us a
20 copy of the pool order -- is that what you're asking for
21 is an increase in the number of infill wells per spacing
22 unit from three to seven, correct? Because you've tried
23 to make it clear that you're not changing the per-well
24 acreage amount.

25 MR. BRUCE: Correct. The spacing unit

1 remains at 320 acres.

2 MR. BRANCARD: So you're proposing three
3 infill wells, go to seven infill wells. That's a pretty
4 dramatic change. And I think the Commission thinks
5 there is some evidence to support a change, but whether
6 it supports that degree of change, we will be -- they
7 will be considering going forward at the next hearing.
8 So there is availability for parties to continue to try
9 to participate in the next hearing, including the
10 Applicant, if it wishes to supplement its testimony.

11 MR. RANKIN: Mr. Brancard, just for
12 clarification as to the notice issue, how would you like
13 us to perfect the notice in advance of that November
14 19th date?

15 MR. BRANCARD: Well, you need to get the
16 date of the hearing, work with the Commission clerk for
17 the actual date, and then you need to renotice that
18 hearing to everyone that needs to get notice.

19 MR. RANKIN: To the operators that --

20 MR. BRANCARD: Well, the operators --
21 obviously, that's where the deficiency was, and also
22 newspaper notice, which is required here.

23 MR. RANKIN: Okay. So even though the
24 notice to the newspaper did identify the September 13th
25 date in both counties, you would like us to renotice in

1 the newspaper for both counties?

2 MR. BRANCARD: Yes. Yes. And I think we
3 would prefer you notify the government land managers.

4 COMMISSIONER BALCH: Yeah.

5 MR. BRANCARD: That's all I have at this
6 point, and I think we're done with this case.

7 CHAIRWOMAN RILEY: Leave it open?

8 COMMISSIONER BALCH: Yeah. Just continue
9 it for the November date.

10 MR. RANKIN: Mr. Brancard, just another
11 question. If the Applicant wishes to bring in
12 additional evidence in support of the increase in infill
13 wells to seven -- and I haven't looked at the
14 calendar -- would you like us to pre-file those
15 exhibits?

16 MR. BRANCARD: Yes. I think we will have,
17 again, the same pre-filing deadlines for that date.

18 COMMISSIONER BALCH: Well, if I may say,
19 Mr. Brancard, during our deliberations, we were pretty
20 interested in what the impact of adding two additional
21 wells per section would be per -- per -- per half
22 section would be, because that would then open up all
23 the Dakota wells for recompletion, and then that
24 information, in a few years, could give us enough
25 information that we need to go further. So that might

1 be an intermediate step that we would investigate in the
2 November 19th rehearing.

3 MR. ANDERSON: Madam Chair, if I may, does
4 this continuation until November enable San Juan
5 Citizens Alliance to file another notice of intervention
6 should they so choose, or is it prohibited from doing
7 so?

8 COMMISSIONER BALCH: Yes. Please find
9 standing.

10 MR. ANDERSON: Yes, Commissioner. Thank
11 you.

12 CHAIRWOMAN RILEY: Okay. We're going to
13 move to other business now. Dr. Balch has a couple of
14 things he would like to address before everybody leaves.
15 If you wouldn't mind, please stay.

16 Thank you.

17 COMMISSIONER BALCH: There were a number of
18 comments particularly from the public but also during
19 the hearing that the Commission would like to put on the
20 record, not necessarily for this case but just in
21 general.

22 The first one is that now, after a number
23 of years of regulatory changes, nearly all hydraulic
24 fracturing in New Mexico uses brine water from other oil
25 and gas production wells, not fresh water.

1 The second point is natural gas is an
2 important bridge fuel between coal and renewables. We
3 have gone, in the last seven or eight years, in the U.S.
4 from 50 percent coal power to 30 percent coal power by
5 switching plants to natural gas. Every plant that is
6 natural gas has half the CO2 emissions than a coal plant
7 does. This is a positive environmental impact of
8 natural gas production.

9 Oil and gas are also an immense benefit to
10 the state of New Mexico in more than one way. Right off
11 the bat, it's about 30 percent of all revenue to the
12 state from direct taxes, not counting the taxes paid by
13 people that have jobs in the industry. Also more than
14 half of all New Mexico education, public education,
15 universities, public schools, et cetera, is funded by
16 natural gas and oil revenues. So it's not a small
17 impact of oil and gas to the state.

18 Finally, the Commission is constrained by
19 the Oil and Gas Act. Rulemaking on surface issues and
20 environmental issues, when we make them -- and we have
21 several times in the past -- is the appropriate time to
22 bring a lot of issues that were raised today to the
23 Commission. If you don't like the Oil and Gas Act, we
24 can't change the Oil and Gas Act. Only the legislature
25 can change it. So if you really don't like it, go and

1 pressure your legislators to make the changes that you
2 want to see made.

3 Thank you.

4 MR. BRANCARD: Just an update on other
5 matters. We have a number of litigation matters that
6 are moving forward very, very slowly, in particular the
7 appeal of the horizontal drilling well rule, and we'll
8 probably be hearing from the Court of Appeals on how
9 they want us to deal with that case. The other cases
10 that we have, nothing to report at this point.

11 COMMISSIONER MARTIN: Thanks.

12 CHAIRWOMAN RILEY: Our next meeting is
13 October 11th.

14 MS. DAVIDSON: Uh-huh.

15 CHAIRWOMAN RILEY: All right. With that, I
16 don't know of anything else we need to discuss, so do I
17 have a motion to adjourn?

18 COMMISSIONER MARTIN: So move.

19 COMMISSIONER BALCH: And second.

20 CHAIRWOMAN RILEY: All right. This meeting
21 is now adjourned.

22 Thank you, everybody.

23 (Case Number 16403 concludes, 5:07 p.m.)

24

25

1 STATE OF NEW MEXICO
2 COUNTY OF BERNALILLO

3

4 CERTIFICATE OF COURT REPORTER

5 I, MARY C. HANKINS, Certified Court
6 Reporter, New Mexico Certified Court Reporter No. 20,
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
10 a true and correct transcript of those proceedings that
11 were reduced to printed form by me to the best of my
12 ability.

13 I FURTHER CERTIFY that the Reporter's
14 Record of the proceedings truly and accurately reflects
15 the exhibits, if any, offered by the respective parties.

16 I FURTHER CERTIFY that I am neither
17 employed by nor related to any of the parties or
18 attorneys in this case and that I have no interest in
19 the final disposition of this case.

20 DATED THIS 17th day of October 2018.

21

22

23 MARY C. HANKINS, CCR, RPR
24 Certified Court Reporter
New Mexico CCR No. 20
Date of CCR Expiration: 12/31/2018
Paul Baca Professional Court Reporters

25