CASE 7335: C & E OPERATORS, INC. FOR AMENDMENT TO DIVISION ORDER NO. R-5459, SAN JUAN COUNTY, NEW MEXICO

Case Mo.

7335

Application

Transcripts.

Small Exhibits

ETC



STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

October 1, 1981

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MCXICO 87501 (505) 827-2434

Mr. Thomas Kellahin Kellahin & Kellahin Attorneys at Law Post Office Box 1769 Santa Fe, New Mexico Re: CASE NO. ORDER NO. R-5459-A

Applicant:

C & E Operators, Inc.

Dear Sir:

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

JOE D. RAMEY

JDR/fd

Director

Copy of order also sent to:

Hobbs OCD Artesia OCD Aztec OCD

Other

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARIMENT OIL CONSERVATION DIVISION

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

> CASE NO. 7335 Order No. R-5459 A

APPLICATION OF C & E OPERATORS, INC. FOR AMENDMENT TO DIVISION ORDER NO. R-5459, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on August 26, 1981, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant C & E Operators, Inc., seeks the amendment of Division Order No. R-5459 by amending the location of the Northwest-Southeast trending line as described in Exhibit A of said Order No. R-5459 pertaining to Township 30 North, Range 11 West, as follows: Section 6: West and South; Section 8: West and South; Sections 9, 10, and 11: South; and Section 13: West and South.
- (3) That the proposed amendment will permit the applicant to more efficiently and effectively develop its acreage in Section 8; Township 30 North, Range 11 West, NMPM, San Juan County, New Mexico.
 - (4) That the application should be approved.

IT IS THEREFORE ORDERED:

(1) That effective September 1, 1981, that portion of Exhibit "A" to Division Order No. R-5459 covering Township 30 North, Range 11 West, NMPM, San Juan County, New Mexico, is hereby amended to read in its entirety as follows:

CASE NO. 7335 Order No. R-5459-A

> "Township 30 North, Range 11 West, NMPM Section 6: West and South Section 8: West and South Section 9, 10, and 11: South Section 13: South"

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

JOE D. RAMEY Director

SEAL

Legal Counsel to the Division

For the Applicant:

W. Thomas Kellahin, Esq. KELLAHIN & KELLAHIN 500 Don Gaspar Santa Fe, New Mexico 87501

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1 testified before the Oil Conservation Division and had your 2 qualifications as an engineer accepted and made a matter of record? Yes, sir. MR. KELLAHIN: We tender Mr. Kendrick as an expert petroleum engineer. MR. STAMETS: He is considered qualified Mr. Kendrick, I will ask you to turn to what we've marked as Applicant Exhibit Number One, which is 10 the plat, and identify for us what C&E Operators, Inc., is 11 12 seeking to accomplish. C&E Operators, Incorporated, is requesting 13 an amendment to Exhibit A of Case -- excuse me, of Order 14 15 R-5459, which sets out a dividing line between -- or defining 16 line at the edge of the Blanco Mesaverde Pool and unnamed, 17 or named, Chacra Pool. 18 The intent of the case is to move the line from the north and east boundaries of Section 8 of Town-19 ship 30 North, Range 11 West, to the west and south boundaries 20 of Section 8 of Township 30 North, Range 11 West. 21 And Exhibit One is a plat of that town-22 23 ship showing the present position of the line, the requested

position of the line, and the trace of two cross sections.

It does not show all of the Mesaverde wells drilled in that

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1	<u></u> 1	
2	section, but only those that are shown on the cross section.	
3	Q. Do I understand correctly that the alter-	
4	ation of the dividing line will allow the entire section 8	
5	for this township to be placed north and east of the line in-	
6	stead of currently where it is south and west of the line?	 21.4
7	A. That is correct.	
8	Q. Section 8 is the only affected acreage?	
9	A. Yes, Section 8 is the only affected	0.643
10	n Arrange en transfer de la	0.50
11	Q. Currently Section 8 lies south and west	
12	of this line described in Division Order 5459?	
13	A. Yes.	y* *
14	Q. And as it currently now stands, Section	
15	8 is subject to what provision of the Blanco Mesaverde Pool	
16	vertical limits rule?	
17	A. Section 8, as it currently exists south	
18	and west of the line, the top of the Mesaverde formation for	
19	the Blanco Mesaverde Pool would be 750 feet below the Huerfanito)
20	Bentonite shale marker as set out in that order.	
21	Q All right, and if	
22	A. What we propose to do is to raise the	
23	upper limit of the Blanco MesaVerde Pool in Section 8 up to	
24	the Huerfanito Bentonite marker.	
25	Q In your opinion are the wells located in	

1 Section 8 that penetrate the Blanco Mesaverde Pool characterized by the kinds of wells that are now classified north and cast of this line? A. Yes. Would you turn to the first cross section that you prepared and I believe that's Exhibit number Two, 7 is that the A-A' cross section? ĨŨ All right, sir, and would you --11 Cross section A-A' from west to east is 12 from a well in the northeast quarter of Section 7 to a well 13 in the northwest quarter of Section 8, to a well in the north-14 east quarter of Section 8, to two wells in the north half of 15 Section 9, each of those wells being on adjacent quarter acre, 40 excuse me, quarter section tracts. 17 The portion that we're interested in to-18 day to be characterized by a kick on the log at approximately 19 2910 feet, shown on the second well in the cross section, the 20 second well from the left --21 Would you also locate for us the Huer-22 fanito Bentonite marker on that log? 23 On that log the Huerfanito Bentonite 24 marker would be at about 2854 feet. And that line correlates and carries

2 across the entire cross section? Yes. Okay. The purpose of this cross section is to 6 show that the wells in Section 8 have a similar geologic 7 identity on the electric logs as those in Section 9 and should 8 thus be treated similarly. Q All right, sir, let's go to cross section 10 B-B' and look at those wells. 11 Cross Section B-B' extends from a well 12 in the southwest quarter of Section 17, skipping the northwest 13 quarter of Section 17, for lack of a log, then two wells on 14 adjacent quarter section tracts in the west half of Section 15 8, to a well in the southeast quarter of Section 5. 16 These show different characteristics 17 in this upper portion of the Mesaverde formation immediately 18 below the Huerfanito Bentonite marker, showing that the wells 19 in Section 8 are similar in character to the well in the 20 southeast of Section 5, but dissimilar to the well down in 21 Section 17. 22 How many wells are going to be affected 23 by a change in designation, moving this section north and 24 east of the line? Currently there are threewells drilled

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in the Mesaverde formation in this section and the well in the south -- excuse me, one of the wells has a 160-acre non-standard drilling tract, so that the 160 acres not drilled in the southeast quarter is a non-standard -- or will be available for a non-standard drill tract which has not yet been drilled.

Q Is the entire ownership with regards to what normally would have been classified as a Chacra zone and the Blanco Mesaverde, is that zone ownership the same regardless of what you do with the vertical limits of the Blanco Mesaverde Pool?

A. It is within the three wells that have been drilled. I'm not aware of the acreage ownership in the other quarter section.

Q. My point is whether any existing equities are going to be disturbed if the wells in this section are relocated and subject to a different pool limit.

A. Not to my knowledge.

Q. All right, sir, would you turn to Exhibit
Number Three, is it?

A. Number Four.

Q. Your perforations. Exhibit Number Four, and identify that for me?

A. Exhibit Number Four shows the location of the perforations in the three wells that have been drilled

8 and the two wells in the north half of Section 9, that are perforated in this top kick on the log.

The Fee No. 8 Well has three perforations in that interval. The Fee No. 9-Y has two perforations in that interval, and the Fee No. 9-A apparently has eight perforations in that interval, but it indicates that those three wells have similar geologic characteristics and should be treated similarly.

Q. Why is the applicant seeking to do this,
Mr. Kendrick?

A. In the process of completing these wells the field engineer determined that the well in Section 8 had some gas to be salvaged in that portion of the reservoir and perforated it before he realized he had crossed this line on paper, which didn't show in the field.

And therefor, he completed a well unknowingly in two different pools as a commingled interval. That's the well in the northeast quarter of Section 8 where he perforated three holes in the upper section.

Q. Are any of these wells commingled or multiple completion wells?

A.)Yes, these wells are all multiple completion wells, I think.

All right, sir, if you'll turn to Exhibit

Number Five and describe that for us.

A. Exhibit Number Five is the printout in its entirety showing our desired change to Exhibit A of Order R-5459 for that portion dealing with Township 30 North, Range 11 West.

I might explain that our staying along the section line seemed to be in character with the rest of Exhibit A.

In your opinion will approval of the application be in the best interest of conservation, the prevention of waste, and the protection of correlative rights?

A. Yes.

And your exhibits One through Five were prepared by you or compiled under your direction and supervision?

A. Yes, sir.

MR. KELLAHIN: That concludes my examination of Mr. Kendrick. We tender Exhibits One through Five.

MR. STAMETS: These exhibits will be admitted.

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2		CROSS EXAMINATION			
3	BY MR. STAMETS:				
4	Q.	Mr. Kendrick, do you be	lieve that what		
5	you've proposed here	e will permit the more eff	ficient production		
6	of the three wells a	and also the acreage which	n has not yet		
7	been drilled?				
8	А.	Yes.			
9	Q. A.	And that will help preven	ent waste?		
10	A.	Yes, I think it will can	use production		
11	from a zone that mid	ght not otherwise be produ	uced.		
12	t e e <u>t</u> e e e e e e e e e e e e e e e e e e e	MR. STAMETS: Anything	further? Any		
13	other questions?				
14			and the second s		
15	QUESTIONS BY MR. CHA	AVEZ:			
16	Q.	What is the nearest wel	l completed in		
17	what would be called	d the Chacra formation or	the upper sand		
18	section shown on the on the log? Where is the nearest				
19	well to these wells located completed in that				
20	A.	To the best of my recol	lection, it's		
21	in Section 4 of Township 29 North, Range 11 West.				
22	Q	And what's the distance	?		
23	А.	It's some five miles so	uth.		
24	Q.	Okay. To the best of y	our knowledge		
25	would a single comp	letion in this upper zone	be economical		

12 or say in conjunction with a multiple completion where this zone was separated, would that be a profitable venture? 3 That would not be a profitable venture to try to complete the Chacra zone as a separate zone in this well -- in any of these three wells. MR. CHAVEZ: I have no further questions. MR. STAMETS: Any other questions of the witness? He may be excused. Anything further in this case? 10 If there is nothing further, the hearing 11 will be taken under advisement. 12 13 14 (Hearing concluded -) 15 16 17 18 19 21

CERTIFICATE

I, SALLY W. BOYD, C.S.R., DO HEREPY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sacrey W. Boyd CSE

Examiner

i do hereby certify that the foregoing is a complete record of the proceedings in the Examiner nearly 126 No. 7335 neard by me on 19.8/

Oll Conservation Division

SALLY W. BOYD, C.S.R. Rt. 1 Box 193-B Santa Fe, New Mexico 87501 Phone (505) 455-7409

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CASE 7335

Santa Fe, New Mexico 87501

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION STATE LAND OFFICE BLDG. SAWYA PB, NEW MEXICO 26 August 1981 EXAMINER HEARING IN THE MATTER OF: Application of C&E Operators, Inc., for amendment to Division Order No. R-5459, San Juan County, New Mexico. BEFORE: Richard L. Stamets TRANSCRIPT OF HEARING APPEARANCES For the Oil Conservation W. Perry Pearce, Esq. Legal Counsel to the Division Division: State Land Office Bldg. Santa Fe, New Mexico 87501 W. Thomas Kellahin, Esq. For the Applicant: KELLAHIN & KELLAHIN 500 Don Gaspar

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14	Applicant Exhibit One, Plat		4	
15	Applicant Exhibit Two, Cross Section		6	
16	Applicant Exhibit Three, Cross Section	a a difficili se	7	
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testified before the Oil Conservation Division and had your qualifications as an engineer accepted and made a matter of record?

A. Yes, sir.

MR. KELLAHIN: We tender Mr. Kendrick as an expert petroleum engineer.

MR. STAMETS: He is considered qualified.

Q Mr. Kendrick, I will ask you to turn to
what we've marked as Applicant Exhibit Number One, which is
the plat, and identify for us what C&E Operators, Inc., is
seeking to accomplish.

A C&E Operators, Incorporated, is requesting an amendment to Exhibit A of Case -- excuse me, of Order R-5459, which sets out a dividing line between -- or defining line at the edge of the Blanco Mesaverde Pool and unnamed, or named, Chacra Pool.

The intent of the case is to move the line from the north and east boundaries of Section 8 of Township 30 North, Range 11 West, to the west and south boundaries of Section 8 of Township 30 North, Range 11 West.

And Exhibit One is a plat of that township showing the present position of the line, the requested
position of the line, and the trace of two cross sections.

It does not show all of the Mesaverde wells drilled in that

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2	section, but only those that are shown on the cross section.
3	Q Do I understand correctly that the alter-
4	ation of the dividing line will allow the entire section 8
5	for this township to be placed north and east of the line in-
6	stead of currently where it is south and west of the line?
7	A Chat is correct.
8	Q Section 8 is the only affected acreage?
9	A Yes, Section 8 is the only affected
TŪ	acreage.
11	Q Currently Section 8 lies south and west
12	of this line described in Division Order 5459?
13	A. Yes.
14	Q. And as it currently now stands, Section
15	8 is subject to what provision of the Blanco Mesaverde Pool
16	vertical limits rule?
17	A Section 8, as it currently exists south
18	and west of the line, the top of the Mesaverde formation for
19	the Blanco Mesaverde Pool would be 750 feet below the Huerfan to
20	Bentonite shale marker as set out in that order.
21	Q All right, and if
22	A What we propose to do is to raise the
23	upper limit of the Blanco MesaVerde Pool in Section 8 up to
24	the Huerfanito Bentonite marker.
25	Q In your opinion are the wells located in

1 Section 8 that penetrate the Blanco Mesaverde Pool character-2 ized by the kinds of wells that are now classified north and east of this line? À. Yes. Would you turn to the first cross section that you prepared and I believe that's Exhibit Number Two, is that the A-A' cross section? 9 Yes. 10 All right, sir, and would you --11 Cross section A-A' from west to east is A. 12 from a well in the northeast quarter of Section 7 to a well 13 in the northwest quarter of Section 8, to a well in the north-14 east quarter of Section 8, to two wells in the north half of 15 Section 9, each of those wells being on adjacent quarter acre, 16 excuse me, quarter section tracts. 17 The portion that we're interested in to-18 day to be characterized by a kick on the log at approximately 19 2910 feet, shown on the second well in the cross section, the 20 second well from the left --21 Would you also locate for us the Huer-22 fanito Bentonite marker on that log? 23 On that log the Huerfanito Bentonite marker would be at about 2854 feet. And that line correlates and carries

1 2 across the entire cross section? Yes. Okay. The purpose of this cross section is to show that the wells in Section 8 have a similar geologic 7 identity on the electric logs as those in Section 9 and should thus be treated similarly. All right, sir, let's go to cross section B-B' and look at those wells. 11 Cross Section B-B' extends from a well in the southwest quarter of Section 17, skipping the northwest quarter of Section 17, for lack of a log, then two wells on adjacent quarter section tracts in the west half of Section 8, to a well in the southeast quarter of Section 5. These show different characteristics in this upper portion of the Mesaverde formation immediately below the Huerfanito Bentonite marker, showing that the wells in Section 8 are similar in character to the well in the southeast of Section 5, but dissimilar to the well down in Section 17.

How many wells are going to be affected by a change in designation, moving this section north and east of the line?

Currently there are three wells drilled

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adjacent to cash other here in the northeast quarter of Section 8 and the two wells in the north half of Section 9, that are perforated in this top kick on the log. treated similarly. 12 Mr. Kendrick? 13 14 15 16 17 paper, which didn't show in the field. 18 19 20 21 22 Q. multiple completion wells? 24

The Fee No. 8 Well has three perforations in that interval. The Fee No. 9-Y has two perforations in that interval, and the Fee No. 9-A apparently has eight perforations in that interval, but it indicates that those three

wells have similar geologic characteristics and should be

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In the process of completing these wells the field engineer determined that the well in Section 8 had some gas to be salvaged in that portion of the reservoir and perforated it before he realized he had crossed this line on

And therefor, he completed a well unknowingly in two different pools as a commingled interval. That's the well in the northeast quarter of Section 8 where he perforated three holes in the upper section.

Are any of these wells commingled or

)Yes, these wells are all multiple com-A. pletion wells, I think.

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1 11 CROSS EXAMINATION 3 BY MR. STAMETS: α Mr. Kendrick, do you believe that what you've proposed here will permit the more efficient production 6 of the three wells and also the acreage which has not yet 7 been drilled? Yes. 9 And that will help prevent waste? Ω 10 Yes, I think it will cause production 11 from a zone that might not otherwise be produced. 12 MR. STAMETS: Anything further? Any 13 other questions? 14 15 QUESTIONS BY MR. CHAVEZ: 16 What is the nearest well completed in 17 what would be called the Chacra formation or the upper sand 18 section shown on the -- on the log? Where is the nearest 19 well to these wells located completed in that --20 To the best of my recollection, it's 21 in Section 4 of Township 29 North, Range 11 West. 22 And what's the distance? 23 It's some five miles south. 24 Okay. To the best of your knowledge

would a single completion in this upper zone be economical

or say in con	unction with a mu	ltiple completion wh	ere this
zone was separ	cated, would that	be a profitable vent	ure?
A.	That would	not be a profitable	venture
to try to comp	plete the Chacra z	one as a separate zo	ne in this
well in any	of these three w	ells.	
	MR. CHAVEZ	: I have no further	questions.
	MR. STAMET	S: Any other questi	ons of the
witness? He n	may be excused.		
		urther in this case?	
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CERTIFICATE

I, SALLY W. BOYD, C.S.R., DO HEREPY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Saley W. Boyd CSC

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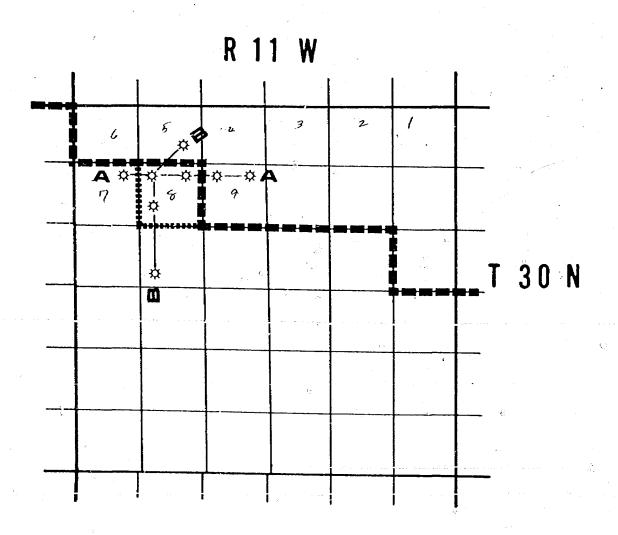
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that the foregoing is I do he a complete record of the proceedings in the Examiner hearing of Case No. neard by me on___ , Examiner

Oil Conservation Division



	Boundary	as defined in Ore	der R-5459 Exhibit A
102002323423	Proposed	alignment of bour	OIL CONSERVATION DIVISION
			EXHIBIT NO.
			CASE NO. 7335
			Submitted by CSE Open
	· · · · · · · · · · · · · · · · · · ·		Hearing Date 6/26/8)

PERFORATIONS

Fee #8

H-8-30N-11W

2830, 36 & 41 3986-92 & 96 4002 & 22

Fee #9Y

D-9-30N-11W

2906 & 10 3795, 3800 & 06 4026 & 28

Fee #9A B-9-30N-11W

2902-09 & 11 3797 & 99 3839 4002, 10, 12, 40 & 42

> BEFORE EXAMINER STAMETS OIL CONSERVATION DIVISION EXHIBIT NO. 4 Submitted by CS E Hearing Date_

The proposed revision of Exhibit A of Order R-5459 would cause that portion pertaining to Township 30 North, Range 11 to read in its entirety as follows:

TOWNSHIP 30 NORTH, RANGE 11 WEST, NMPM Sections 6 and 8: West and South Sections 9, 10, and 11: South Section 13: West and South

BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION
EXHIBIT NO.

CASE NO.

Submitted by
Hearing Date

State | St

BLANCO-MESAVERDE POOL (Vertical Limits Redefined) Rio Arriba and San Juan Counties, New Mexico

Order No. R-3459, Redefining the Vertical Limits of the Blanco-Mesaverde Pool, Rio Arriba and San Juan Counties, New Mexico, August 1, 1977.

In the Matter of the ilearing Called by the Oil Conservation Commission of New Mexico on Its Own Motion to Consider Redefinition of the Vertical Limits of the Blanco-Mesaverde Pool, Rio Arriba and San Juan Counties, New Mexico.

CASE NO. 5693 Order No. R-5459

ORDER OF THE COMMISSION

BY THE COMMISSION: This cause came on for hearing at 9 a.m. on March 23, 1977, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 14th day of June, 1977, the Commission, a quorum being present, having considered the testimony bresented and the exhibits received at said hearing, and being fully advised in the premises.

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the Blanco-Mesaverde Pool, located in Rio Arriba and San Juan Counties, New Mexico, was created by Commission Order No. 799, dated February 25, 1949.
- (3) That Section (2) of said Order No. 799 defined the vertical limits of said Blanco-Mesaverde Pool as the "4200-5100 feet productive horizon where the productive sands are contained between the top of the Cliff House Sand and the base of the Point Lookout Sand of the Mesaverde."
- (4) That said definition of the vertical limits of said Blanco-Mésaverde Pool has proved inadequate for the following reasons:
- A. The definition does not take into account variations in surface elevations and formation dip which can cause the "Mesaverde" productive horizon to occur above or below the 4200 feet to 5100 feet interval.
- B. The definition does not adequately take into account the transgressive, regressive, gradational nature of formations composing the "Mesaverde" productive horizon.
- (5) That because of the imprecise nature of said vertical limits definition, Mesaverde productive zones above or below the 4200 foot to 5100 foot interval in any particular well might not be completed in said well.

- (6) That failure to complete such zones could result in waste of gas in the ground.
- (7) That the current infill drilling program within said Blanco-Mesaverde Pool has increased the need for a more precise definition of the vertical limits of such pool.
- (8) That in December, 1976, the Commission appointed an inclustry-government study committee to examine the problem and report its findings to the Commission.
- (9) That, based on geological evidence, the study committee recommended that the vertical limits of said Blanco-Mesaverde Pool be redefined as that interval from the Huerfanito bentonite marker to a point 500 feet below the top Point Lockout formation.
- (10) That the Induction-Electrical Log of the El Paso Natural Gas Company Johnston State Well No. 1 located in Unit A of Section 32, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico, should be the type log for said Blanco-Mesaverde Pool.
- (11) That the Huerfanito bentonite marker and the top of the Point Lookout formation are found at depths of 3755 feet and 5100 feet, respectively, on said type log.
- (12) That such definition should permit maximum development of productive horizons within the Blanco-Mesaverde Pool, thereby preventing waste.
- (13) That there are several Chacra Sand gas pools developed along the Southwest flank of the Blanco-Mesaverde Pool which have been separately drilled and developed which would be included within the revised definition of the vertical limits of the Blanco-Mesaverde Pool.
 - (14) That such pools are completed in porous Chacra sands.
- (15) That such porous Chacra sands lie South and West of a line generally running from the Northwest corner in Traversing one generally running from the Northwest conter of Township 31 North, Range 13 West, NPM, San Juan County, New Mexico, to the Southwest Corner of Township 24 North, Range 1 East, NMPM, Rio Arriba County, New Mexico, as more fully described on Exhibit "A" of this order.
- (16) That to protect the correlative rights of the owners in said Chacra pools, the top vertical limit of said Blanco-Mesaverde Pool should be lowered to a point 750 feet below the Huerfanito bentonite marker within the area South and West of the line defined in Finding No. (15) above and Exhibit "A".
- (17) That there are 4 wells North and East of the line defined in Finding No. 15 above and Exhibit A which may be producing from fractured shale or siltstone zones equivalent to said Chacra sands and which may or may not be connected to other producing zones in said Blanco-Mesaverde Pool.
- (18) That to protect the correlative rights of the owners of said four wells, the effective date of any redefinition of the vertical limits of said Blanco-Mesaverde Pool should be delayed to provide such owners with the opportunity to bring a case for an exception before the Commission.
- (19) That with the safeguards provided in Finding No. (16) and No. (18) above, the proposed redefinition of the vertical limits of the Blanco-Mesaverde Pool will not violate correlative

(BLANCO-MESAVERDE (VERTICAL LIMITS REDEFINED)

(20) That to prevent waste, the vertical limits of said Blanco-Mesaverde Pool should be redefined in accordance with the study committee recommendation as adjusted to protect Chacra gas pools as set out in Finding No. (14) above.

IT IS THEREFORE ORDERED:
(1) That effective August 1, 1977, the vertical limits of the Blanco-Mesaverde Pool, Rio Arriba and San Juan Counties, New Mexico, as previously described and defined by the Commission are hereby redefined as follows:

- A. That North and East of a line generally running from the Northwest corner of Township 31 North, Range 13 West, San Juan County, New Mexico, to the Southwest corner of Township 24 North, Range 1 East, NMPM, Rio Arriba County, New Mexico, as fully described on Exhibit "A" attached to this order, and incorporated herein by reference the vertical limits of the Blanco-Mesaverde Pool shall be from the Huerfanito bentonite marker to a point 500 feet below the top of the Point Lookout Sandstone.
- B. That South and West of the line described under A above, the vertical limits of the Blanco-Mesaverde Pool shall be from a point 750 feet below said Huerfanito bentonite marker to a point 500 feet below the top of the Point Lookout Sandstone.
- (2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

EXHIBIT "A" COMMISSION ORDER NO. R-5459

This exhibit defines the Northwest-Southeast trending line that divides the Blanco-Mesaverde Pool, Rio Arriba and San Juan Counties. New Mexico for purposes of defining the vertical limits for said pool. Said line traverses the South side or west side of the sections listed below:

TOWNSHIP 31 NORTH, RANGE 14 WEST, NMPM Section 12: South

TOWNSHIP 31 NORTH, RANGE 13 WEST, NMPM Sections 7 and 8: South Section 16: West and South Sections 15 and 14: South Section 24: West and South

TOWNSHIP 31 NORTH, RANGE 12 WEST, NMPM Section 19: South Section 29: West and South Sections 28 and 27: South Section 35: West and South Section 36: South

TOWNSHIP 30 NORTH, RANGE 11 WEST, NMPM Section 6: West and South Section 5: South Section 9: West and South Sections 10 and 11: South Section 13: West and South

TOWNSHIP 30 NORTH, RANGE 10 WEST, NMPM Section 18: South Section 20: West and South Sections 21 and 22: South Section 26: West and South Section 25: South

TOWNSHIP 30 NORTH, RANGE 9 WEST, NMPM Section 31: West and South Section 32: South

TOWNSHIP 29 NORTH, RANGE 9 WEST, NMPM Section 4: West and South Section 3: South Section 11: West and South Section 12: South

TOWNSHIP 29 NORTH, RANGE 8 WEST, NMPM Section 18: West and South Section 21: West and South Section 22: South Section 26: West and South Section 26: West and South Section 26: South

Section 18: West Section 17: South Section 21: West Section 22: South Section 26: West Section 25: South

TOWNSHIP 29 NORTH, RANGE 7 WEST, NMPM Section 31: West and South Sections 32 through 36: South

TOWNSHIP 28 NORTH, RANGE 6 WEST, NMPM Sections 7, 18, 19, 30, and 31: West

TOWNSHIP 27 NORTH, RANGE 6 WEST, NMPM Section 6: West Section 7: West and South Sections 8 and 9: South Section 15: West and South Section 14: South Section 24: West Section 24: West Section 25: West and South Section 25: West and South

TOWNSHIP 27 NORTH, RANGE 5 WEST, NMPM Section 31: West and South Sections 32 through 36: South

TOWNSHIP 27 NORTH, RANGE 4 WEST, NMPM Sections 31 through 36: South

TOWNSHIF 27 NORTH, HANGE 3 WEST, NMPM Sections 31 and 32: South

TOWNSHIP 26 NORTH, RANGE 3 WEST, NMPM Section 4: West and South Sections 3 and 2: South Section 12: West and South

TOWNSHIP 26 NORTH, RANGE 2 WEST, NMPM Sections 7 and 8: South Sections 16 and 22: West and South Section 26: West Section 35: West and South

TOWNSHIP 25 NORTH, RANGE 2 WEST, NMPM Section 1: West and South

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM Section 7: West
Section 18 and 20: West and South
Section 28: West
Section 33: West and South

TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM Section 3: West Sections 10 and 14: West and South Section 24: West Section 25: West and South

TOWNSHIP 24 NORTH, RANGE 1 EAST, NMPM Section 31: West

- CASE 7335: Application of C & E Operators, Inc. for amendment to Division Order No. R-5459, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Division Order No. R-5459 by amending the location of the Northwest-Southeast trending line as described in Exhibit A of said Order No. R-5459 pertaining to Tourship 30 North, Range 11 Yest, as follows: Section 6: West and South; Section 8: West and South; Sections 9, 10, and 11: South; and Section 13: Hest and South.
- CASE 7336: Application of C.A.E. Operators, Inc. for three triple completions, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to triply complete the following wells in Township 30 North, Range 11 Nest, to produce gas from the Farmer-Fruitland Pool, the Aztec-Pictured Cliffs Pool, and the Blanco Mesaverde Pool through separate strings of tubing: Aztec Wells Nos. 8 in Unit N of Section 8 and 9 in Unit M of Section 9; and Fee Well No. 8 in Unit C of Section 8.
- Application of Beartooth Oil & Gas Company for downhole commingling, Rio Arriba County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the downhole commingling of Ojito Gallup-Dakota and Blanco Mesaverde production in the wellhore of its Minel Federal Well No. I located in Unit E of Section 7, Township 25 North, Range 3 West. Applicant further seeks the establishment of an administrative procedure for approval of downhole commingling of Gallup-Dakota and Mesaverde production in the W/2 of Sections 6 and 7, Township 25 North, Range 3 West.
- CASE 7338: Application of Beartooth Oil & Gas Company for downhole commingling, San Juan County, New Mexico.

 Applicant, in the above-styled cause, seeks approval for the downhole commingling of Fruitland and Farmington production in the wellbore of its Elledge Federal 34 Well No. 11 located in Unit D of Section 34. Township 29 North, Range 11 West.
- CASE 7339: Application of Doyle Hartman for compulsory pooling, unorthodox well location, and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Jalmat Pool underlying the S/2 of Section 17. Township 24 South, Range 37 East, to be simultaneously dedicated to his Late Thomas Well No. I located in Unit M of said Section 17, and to two proposed wells, one to be drilled at an orthodox location in Unit J and the other at an unorthodox location 2310 feet from the South line and 330 feet from the West line, both in said Section 17. Also to be considered will be the cost of drilling and completing said wells and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the wells, and a charge for risk involved in drilling said wells.
- CASE 7340: Application of Doyle Hartman for directional drilling and unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause seeks authority to directionally drill his City of Jal Well No. 1, the surface location of which is 1635 feet from the South line and 1210 feet from the West line of Section 20, Township 25 South, Range 37 East, Jalmat Pool, to top the Jalmat at a bottom hole location 660 feet from the South and West Lines at a vertical depth of 2800 feet and to bottom said well at an unorthodox location 330 feet from the South and West lines at a vertical depth of 3500 feet.
- CASE 7317: (Continued from July 29, 1981, Examiner Hearing)

Application of Four Cerners Gas Producers Association for designation of a tight formation, San Juan and Rio Arriba Counties, New Mexico. Applicant, in the above-styled cause, seeks the designation of the Dakota formation underlying Townships 30 and 31 North, Ranges 2 thru 7 West, containing 270,260 acres, more or less, as a tight formation pursuant to Section 107 of the Natural Gas Policy Act and 18 CFR Section 271.701-705.

CASE 7129: (Continued from August 12, 1981, Examiner Hearing)

Application of Koch Exploration Company for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Dakota formation underlying the N/2 of Section 28, Township 28 North, Range 8 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 7169: (Continued from August 12, 1981, Examiner Hearing)

Application of Koch Exploration Company for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Dakota formation underlying the S/2 of Section 22, Township 28 North, Range 8 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

Jason Kellahin

W. Thomas Kellahin

Keren Aubrey

Keren Aubrey

Keren Aubrey

Kellahin

Kellahin

Son Gaspar Avenue
Post Office Box 1769

Sunta Fe, New Mexico 87501

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July 28, 1981

Mr. Joe D. Ramey Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87501

RE: C & E Operators

JUL 30 1981
OIL CONSERVATION DIVISION SANTA FE

Telephone 982-4285

Area Code 505

Case 7335

Dear Joe:

Please set the enclosed application for hearing on August 26, 1981.

ry truly yours

W. Thomas Kellahin

WTK:jm

cc: Mr. Al Kendrick

STATE OF NEW MEXICO

DEPARTMENT OF ENERGY AND MINERALISTICS

OIL CONSERVATION DIVISION

OIL CONSCILATION DATES

IN THE MATTER OF THE APPLICATION OF C & E OPERATORS, INC., FOR AMENDMENT TO DIVISION ORDER R-5459, VERTICAL LIMITS OF THE BLANCO-MESAVERDE POOL, SAN JUAN COUNTY, NEW MEXICO

Case_7335

APPLICATION

Comes now C & E Operators, Inc., by and through its attorneys, Kellahin & Kellahin, and applies to the New Mexico Oil Conservation Division for an Amendment to Division Order R-5459 so that Section 8, T30N, R11W, NMPM, San Juan County, New Mexico lies North and East of the line described in Exhibit A of said Order and in support thereof would show:

- 1. Applicant is the operator of Mesaverde wells located in Section 8, T30N, R11W, NMPM, San Juan County New Mexico.
- 2. That said Section 8 currently lies South and West of the line described in Exhibit A of Order R-5459 and is subject to the vertical limits of the Blanco Mesaverde Pool being 750 feet below the Huerfanito bentonite marker to a point 500 feet below the top of the Point Lookout Sandstone.
- 3. That said Section 8 does not contain Chacra sand development typical of those areas South and West of the subject line and should more properly be included with lands North and East of the subject line and subject to the Blanco Mesaverde Pool Limits as described for that area which are 500 below the Huerfanito bentonite marker to a point 500 feet below the top of the Point Lookout Sandstone.
- 4. Applicant proposes that the location of the Northwest-Southeast trending line as described in Exhibit A of Order

R-5459 as to Township 30 North, Range 11 West, NMPM be redescribed as follows:

> Section 6: West and South Section 8: West and South

Section 9: South Section 10: South Section 11: South

Section 13: West and South

5. Approval of this application will be in the best interests of conservation, the prevention of waste and the protection of correlative rights.

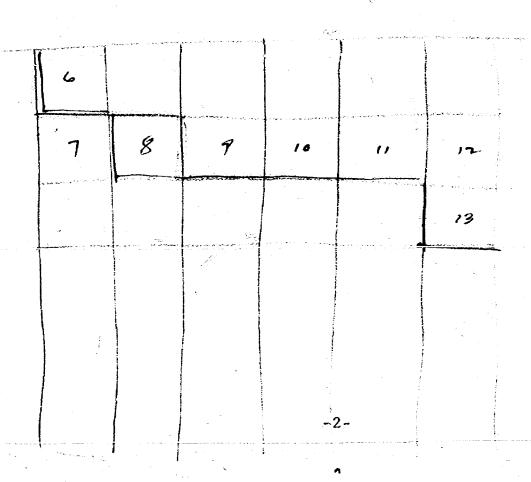
WHEREFORE, applicant prays that this application be set for an examiner hearing and that after notice and hearing the application be granted as requested.

KELLAHIN & KELLAHIN

W. Thomas Kellahin P.O. Box 1769

Santa Fe, New Mexico 87501 (505) 982-4285

ATTORNEYS FOR APPLICANT



STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

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

CASE NO.	7335	
Order No.	R5459 A	·.

Application of C & E Operators, Inc. for amendment to Division Order No. R-5459, San Juan County, New Mexico.

ORDER OF THE DIVISION

Obu

BY THE DIVISION:

FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant Case C&E Operators, Inc., seeks the amendment of Division Order No. R-5459

seeks the amendment of Division Order No. R-545 by amending the location of the Northwest-Southeast trending line as described in Exhibit A of said Order No. R-5459 pertaining to Township 30 North, Range 11 West, as follows: Section 6: West and South; Section 8: West and South; Sections 9, 10, and 11: South; and Section 13: West and South.

(3) That the proposed amendment will permit the oppliant to more officiently and edectively developed, it's acreage in Sexion 8, Voonship 30 North, Range !!—
West, NMPM, San Juan County, New Mexico.

(4) That the application should be opproved.

LIV I w VECTOVORE OB, WEED ! District of whice September 1, 1981 Who to Spisson Dission Order No N 5459 & owering Voronish, 30 North Bange 11 300 to 1000, San June 6 aunts Mon Mario, in hereby amonded to wead in the endirette as follows: Voorsho 30 North, Range 11 West, NND9 Section 6 1 2 cho V and South. Sections West and South Section 7, 10, and 11. South Section 3 South

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